

Lenze 9b



# DŠI-NŠŘ řŠNØZ YZÚZŇă

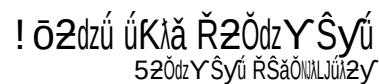
Эрлп. к а / ! õŠØŠť ĚŠI-NŠŘ řŠNØZ YZÚZŇ



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[illegible]

[illegible]



## Notations and conventions

/ 2y0Šyú2yā I-úŠ dzāŠŘ Iy'úKlā R20dzYŠyú ú2 ŘlāúIy3dzlāK 0Šú0ŠŠyŘlāttŠúŠyú úēLJŠā 2f Iyř2úY I-ú2y0

|                                             |                                                                                   |                                                                                                                                                                                                           |
|---------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| b0zYŠú0 y2úI-ú2y'                           |                                                                                   |                                                                                                                                                                                                           |
| 5Š0IY I-f āŠLJ I-f I-ú2ú                    | t2Iyú                                                                             | DŠyŠú I-f ē āK20y' I-ā I-ŘŠ0IY I-f LJ2Iyú<br>9Ě I-YLJtŠY m hon'pc                                                                                                                                         |
| <sup>2</sup> I-úIy3ā                        |                                                                                   |                                                                                                                                                                                                           |
| $\frac{!}{!} [ \text{ } ^2 \text{ I-úIy3ā}$ | $! [ \text{ }$                                                                    | ! úŠ dzāŠŘ Iy'9y3lāK I-yŘ ClŠy0K                                                                                                                                                                          |
| $\frac{!}{!} w \text{ } 0 \text{ I-úIy3ā}$  | $! w$                                                                             |                                                                                                                                                                                                           |
| 0Šēú                                        |                                                                                   |                                                                                                                                                                                                           |
| 9y3IyŠŠúIy3 022fā                           | b b                                                                               | {2fú0 I-úŠ<br>9Ě I-YLJtŠY b9y3IyŠŠú b9 ! { , {úI-úŠú                                                                                                                                                      |
| L02yā                                       |                                                                                   |                                                                                                                                                                                                           |
| t I-ēŠ úŠtŠúŠy0Š                            |  | wŠtŠúŠy0Š ú2 I-y2úKŠú LJ I-ēŠ 0lúK I-ŘŘlāú2y I-f Iyř2úY I-ú2y0<br>9Ě I-YLJtŠY  mc I' āŠŠ LJ I-ēŠ mc                      |
| 520dzYŠyú I-ú2yúŠtŠúŠy0Š                    |  | wŠtŠúŠy0Š ú2 2úKŠú Ř20dzYŠyú I-ú2y' 0lúK I-ŘŘlāú2y I-f Iyř2úY I-ú2y0<br>9Ě I-YLJtŠY  95YĚĚ I' āŠŠ Ř20dzYŠyú I-ú2y' 95YĚĚ |

## Layout of the safety instructions

**⚠ DANGER!**

LyŘl0I-úŠā I-y'ŠēúúŠYŠtē K I-Ī I-úŘ2dzā ālúdz I-ú2y0 Cl-łtdzúŠ ú2 02YLJtē 0lúK úKlā IyāúNdz0ú2y 0lātt úŠādzfú  
Iy'āŠ0ŠúŠ ANúúSLJ I-ú I-0fŠ Iy2dzúē I-yŘ Š0ŠyŘŠ I-úK

**⚠ WARNING!**

LyŘl0I-úŠā I-y'ŠēúúŠYŠtē K I-Ī I-úŘ2dzā ālúdz I-ú2y0 Cl-łtdzúŠ ú2 02YLJtē 0lúK úKlā IyāúNdz0ú2y Y I-ē úŠādzfú  
Iy'āŠ0ŠúŠ ANúúSLJ I-ú I-0fŠ Iy2dzúē I-yŘ Š0ŠyŘŠ I-úK

**⚠ CAUTION!**

LyŘl0I-úŠā I- K I-Ī I-úŘ2dzā ālúdz I-ú2y0 Cl-łtdzúŠ ú2 02YLJtē 0lúK úKlā IyāúNdz0ú2y Y I-ē úŠādzfú Iy'ā0EK ú2  
YŠŘlādzY Iy2dzúē

**NOTICE**

LyŘl0I-úŠā I- Y I-úŠú I-f K I-Ī I-úŘ Cl-łtdzúŠ ú2 02YLJtē 0lúK úKlā IyāúNdz0ú2y Y I-ē úŠādzfú Iy'Y I-úŠú I-f  
Ř I-Y I-ēŠ





Identification of the products

Gearbox product name

| Gearbox type   | Product series |   | Type | Rated torque Nm | Product      |
|----------------|----------------|---|------|-----------------|--------------|
| .Š0Št 3ŠI-üö2Ě | Эрлл           | π | .    | пр              | Эрллπ . пр   |
|                |                |   |      | ммл             | Эрллπ . ммл  |
|                |                |   |      | нпл             | Эрллπ . нпл  |
|                |                |   |      | прл             | Эрллπ . прл  |
|                |                |   |      | слл             | Эрллπ . слл  |
|                |                |   |      | унл             | Эрллπ . унл  |
|                |                |   |      | мрлл            | Эрллπ . мрлл |
|                |                |   |      | нтлл            | Эрллπ . нтлл |
|                |                |   |      | полл            | Эрллπ . полл |

Servo motor product name

|                   |                   | Motor |                                  |               |                 |   |
|-------------------|-------------------|-------|----------------------------------|---------------|-----------------|---|
| 9ĚI-YŁfŠ          |                   | a / ! | мл                               | L             | пл              | π |
| Meaning           | Variant           |       |                                  |               |                 |   |
| tN2RdzÖü T I-YŁfŠ |                   | a / ! | мл<br>мо<br>мп<br>мт<br>мф<br>нм |               |                 |   |
| {λİŠ              |                   |       |                                  |               |                 |   |
| h0ŠNŁf tŠy3üK     |                   |       |                                  |               |                 |   |
| wŁüŠŘ äŁİŠŠŘ      | üŁY Ě млл         |       |                                  |               |                 |   |
| a I-iyä 02üŁI-3Š  | o Ě плл ±ŁtpnŁtcp |       |                                  |               |                 |   |
|                   |                   |       |                                  | L<br>000<br>. | MC<br>000<br>ПН | π |



## Features

ΦKŠ T2ff2Øλy3 ƒλ3dzNŠ LJN2ØλŘŠă I-y2ØŠNØλŠØ 2ƒ úKŠ ŠtSYŠyúă I-yŘ Ö2yyŠÖúλ2yă 2y'úKŠ LJN2ŘdzÖúΦ  
ΦKŠNŲ LJ2ăλúλ2y2 ăλĪŠ I-yŘ I-LJLJŠI·NŲI-yÖŠ YI·ë ØI·NŲΦ

### Ventilation

óŘŠLŠyŘĪy3 2y'úKŠ Y2dzYúλy3 LJ2ăλúλ2yŲ

### Oil filler plug

óŘŠLŠyŘĪy3 2y'úKŠ Y2dzYúλy3 LJ2ăλúλ2yŲ

### Remove oil control plug

óŘŠLŠyŘĪy3 2y'úKŠ Y2dzYúλy3 LJ2ăλúλ2yŲ

### Oil drain plug

óŘŠLŠyŘĪy3 2y'úKŠ Y2dzYúλy3 LJ2ăλúλ2yŲ

### Housing type

### Torque plate mounting

### Output shaft

### Output flange

### Torque plate mounting

### Motor connection

Power

Brake

### Motor connection

Feedback

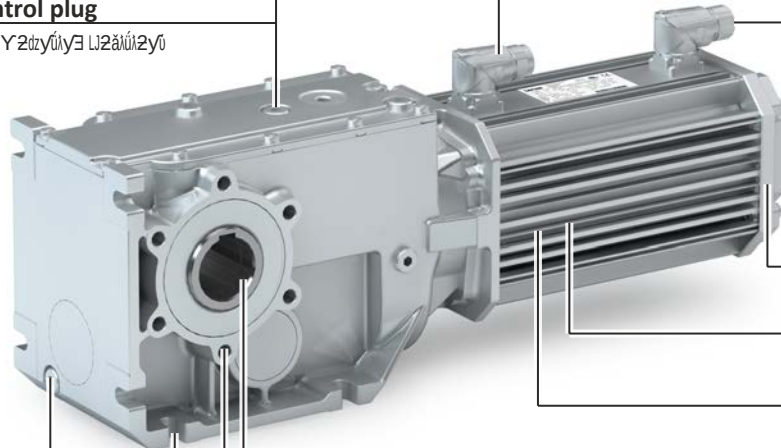
Temperature monitoring

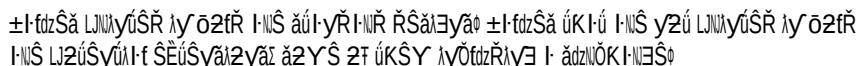
Cooling

Feedback

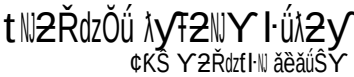
Temperature monitoring

Permanent magnet brake





## МЛ

[illegible]



## Designs

## Gearbox designs

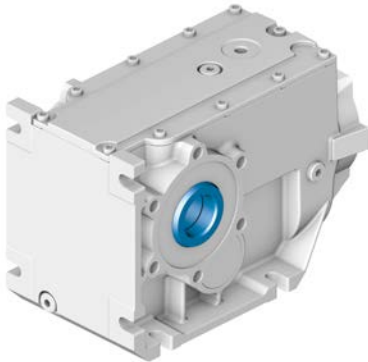


tfſi-ăſ zōăſſŵſ ūkſ i-ŵi-ŵſ ɛſi-ŵŵzɛ ʀſăſyăH

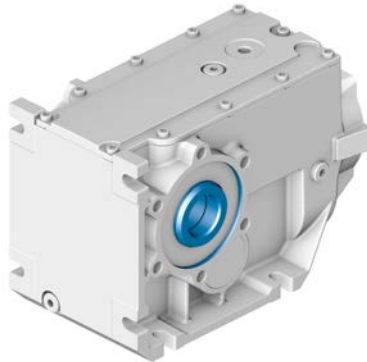
► [ÇKŞ YzŘdzfI-NJ äëăŮŜY](#)  мл

**g500-B45 ... B4300**

**Hollow shaft, with foot**



2 λÚK2dzú ŒŜyúNŒyƎ ó I .wú

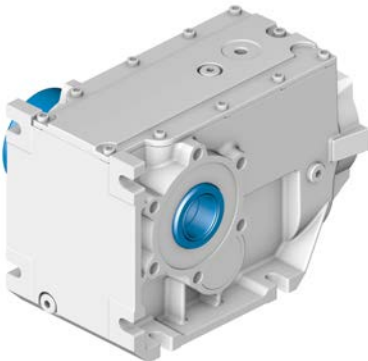
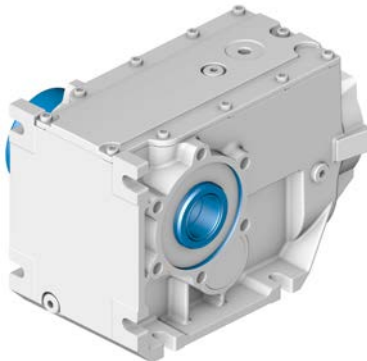


2 λύκ ὅσιν ἔστιν ὁ ἰσχυρὸς



CfI-yEŠ ØłúK ůKlŹdzEK KZfŠă ó I !Yú

**Hollow shaft with shrink disc, with foot**

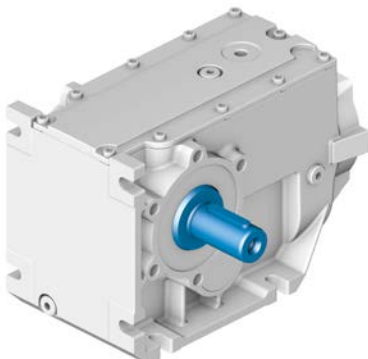
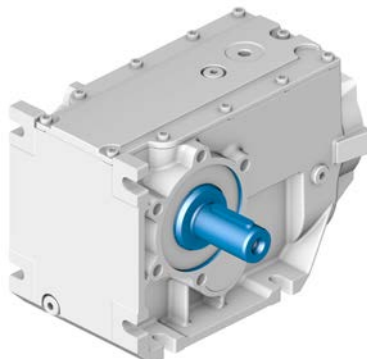

$$^2 \lambda \dot{u} K \dot{z} \dot{z} \dot{u} \ddot{O} \hat{S} y \dot{u} \dot{N} \dot{z} y \exists \acute{o} \{ . w \dot{u}$$


2 λúK ŒŜyúNŁyƎ ó{ ! wú

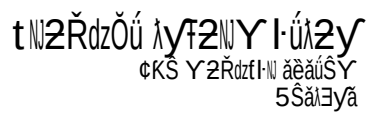


CfI·yEŠ øłúK ũKŨZdzEK KZfŠă ó{ ! Yú

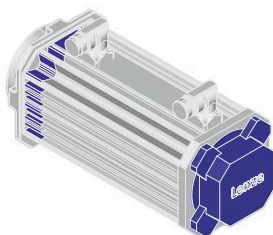
**Solid shaft, with foot**


$$^2 \lambda \dot{u} K \dot{z} \dot{z} \dot{u} \ddot{O} \hat{S} y \dot{u} \dot{N} \dot{A} y \exists \circ \pm . w \dot{u}$$

$$^2 \lambda u_K \partial_{\hat{S}} y_u \Delta y_E \circ \pm! w_u$$

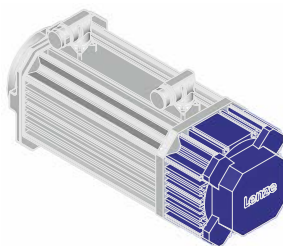

CfI·yEŠ ØłúK ũKŪ2dzEK K2fŠă ó±! Yú



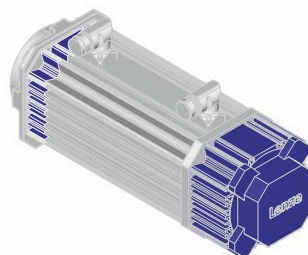
ĈŜNUYλy1·t ōzĚ



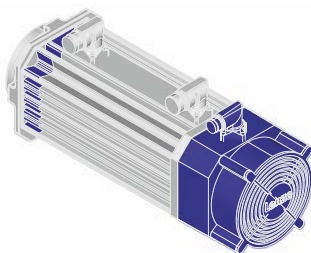
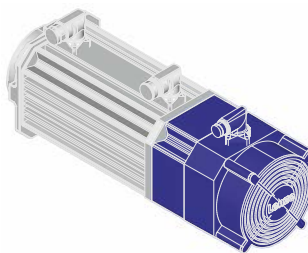
wŜăzťŦŜŨ I-yŘ ōŨI-lŜ



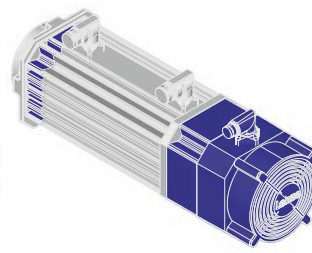
! ōă2fdzŭŜ Øl·fdzŜklyŏNŖSYŖyŭl·f  
Ŝyŏ2RŜNŭ



! oă2fdzúŜ Øl·fdzŜklyŎŬŜYŜyŭl·f  
ŜyŎ2RŜŬ l·yŔ ōŬl·ŭŜ


$$w\hat{S}a_2t\hat{0}\hat{S}_{N1} \cdot y\check{R} \bar{o}_{N1} \cdot \imath\hat{S}$$


!ōă2fdzŮŠ Øl-fdzŠklyŮŃŠYŠyŮl-f  
ŠyŮ2ŘŠŃ



! oã2fdzûŠ Øl-fdzŠklyŎNUŠYŠyúlf  
ŠyŎ2RŠNJ l-yR ōNJ-lŠ



c2 1J5R40Z0S úKŠ ydzY0S1W 2T R11TŠ1WŠyú 0Š1W12Yyāz úKŠ 3S11W02EŠā 01y11-tāz 0S 21WŠ1WŠR 01úK 02Y01yŠR  
 Y2dzYú1y1 Lj2ā1ú12Yā1

- 
- A 3D exploded view of a robotic arm assembly. The components are labeled as follows:
- M1 [A]**: Motor at the top of the vertical column.
  - M2 [D]**: Motor at the end of the horizontal arm.
  - M3 [B]**: Motor at the base of the vertical column.
  - M4 [C]**: Motor on the side of the vertical column.
  - M5 [E]**: Motor on the side of the horizontal arm.
  - M6 [F]**: Motor on the side of the vertical column, near the base.

LT ūKŠ 3ŠI-ŪŠR̄ Y2ú2Ū lā N2ŪI-ŪŠR̄ Iy2 I- R̄IŦTŠNŠyŪ Y2dyŷyŷ Lj2āŷŷy2y  
 aH 000 a c 0. 000CŪZ ūKŠ R̄ŠTŷYŠR̄ Lj2āŷŷy2y 2y ūKŠ 3ŠI-ŪŠR̄ Y2ú2Ū I-ŪŠ  
 ŪŠŪI-IyŠR̄



tN2ŘdzÖú λyř2NŸI·úλ2y  
 cKS Y2ŘdzřI·N äëäúSŸ  
 a 2dzŸúλy3 Lj2äúú2yă

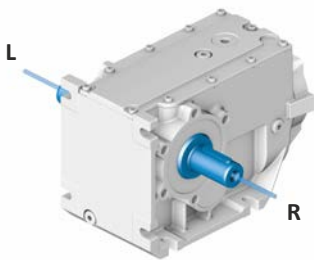
Positions of the terminal boxes/connectors

| Terminal box | ICN connector |
|--------------|---------------|
|              |               |

Position of the solid shaft



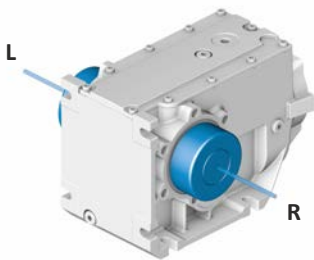
52dzöřSřŸyŘSŘ 2dzúLjdzú äKI·řú ž2dzNŸI·ř b[řwř



Position of the hollow shaft with shrink disc



hdzúLjdzú řřI·y3S I·yŘ äKŸŸŸŸŸ Řřäö I·NŸ y2ú Lj2ääüöřS ŸyúKS äI·YŠ Lj2äüú2y

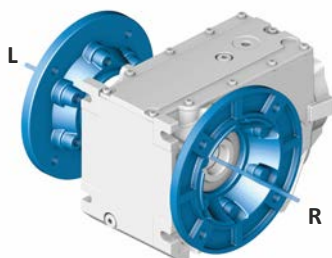




## Position of the output flange

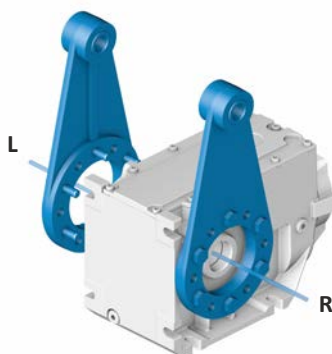


hđzúLđzú Tfl-y3Š 2y 02úK äλŘŠä ħ[bwħ

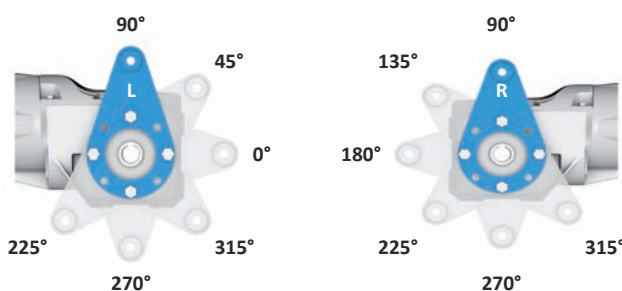


## Position of the torque plate on the threaded pitch circle

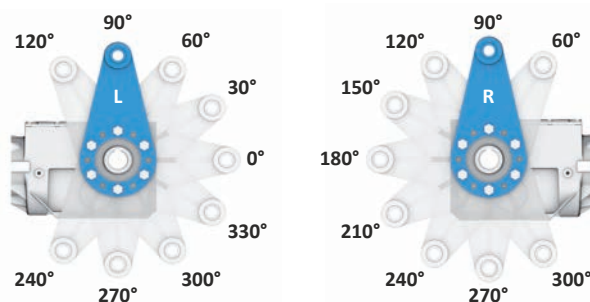
t2áúλ2y2T úKŠ ú2NljdzŠ LjTl-úŠ



!y3tŠ 2T úKŠ ú2NljdzŠ LjTl-úŠ  
 Эрлггг . нр 000 . ммг



Эрлггг . нггг 000 . мрлг

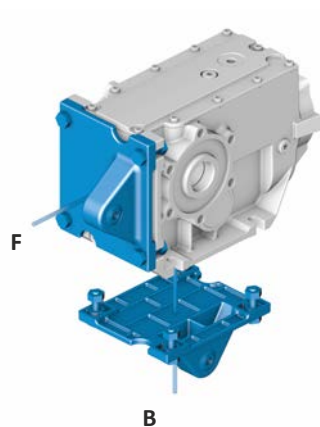




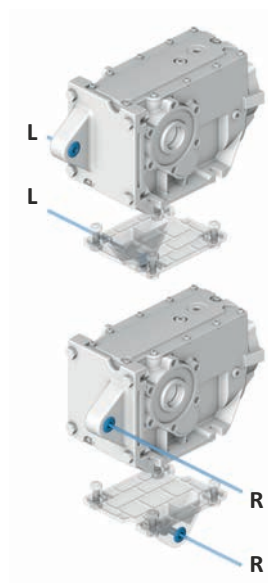
tN2ŘdzŮú λyƒ2NŸI·úλ2y  
 cKS Y2ŘdzƒI·N äëäúŠY  
 a 2dzŸúλy3 LJ2äúú2yă

## Position of the torque plate on the housing foot

t2äúú2y2ƒ úKS ú2NljdzŠ LJƒI·úŠ



t2äúú2y2ƒ úKS NdzööŠN ödzƒŠN 2yúKS ú2NljdzŠ LJƒI·úŠ





## Information on project planning

### Safety instructions

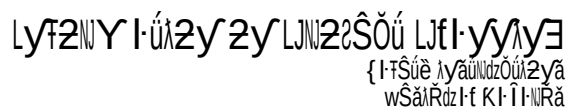
#### Basic safety instructions

5láúS3I-I-NŕlyY úKŠ T2ff20lyY 0I-áI0 áI-TSúè lyáúndz0úá2yá I-yŕ áI-TSúè lyf2WYI-úá2y2y I-e tŠI-R ú2 áS0ŠúS  
 LJŠúá2yI-f ly2dzNè I-yŕ ŖI-YI-3S ú2 LJN2LJŠúúèH

- hytè dzāŠ úKŠ LJN2Ŗdz0ú I-ā ŖNúS0úŠŖ
- bS0ŠNú 02YŶlāā2yúKŠ LJN2Ŗdz0ú lyúKŠ Š0Šyú 2Ŧ 0lāā0fŠ ŖI-YI-3S
- bS0ŠNú Y2ŖlŦtè úKŠ LJN2Ŗdz0ú úŠ0KYl0I-ftè
- bS0ŠNú 02YŶlāā2yúKŠ LJN2Ŗdz0ú 0ŠT2NúS I-āāSY0fè KI-ā 0ŠŠY02YlŦfŠúŠŖ
- bS0ŠNú 2LJŠNúI-úŠ úKŠ LJN2Ŗdz0ú 0lúK2dzú úKŠ NÚŠljdzNúŠŖ 020ŠNúā
- /2yYŠ0úKŖlā02yYŠ0ú I-ft LJf23I-ftŠ 02yYŠ0úá2yá 2yŦè lyŖŠŠYŠNúāIŠŖ 02yŖlúá2yŦ
- hytè NÚSY20Š úKŠ LJN2Ŗdz0ú ŦNú2Y úKŠ lyáúI-ftI-úá2ylyúKŠ ŖŠŠYŠNúāIŠŖ áúI-úŠ
- 0KŠ LJN2Ŗdz0ú 0I-y 0 ŖŠLJŠŶŖlyY 2yúKŠNú ŖŠ3NúSŠ 2Ŧ LJN2úŠ0úá2y 0 KI-0Š 0l0ŠŶ Y20I-0fŠ 2Nú N2úI-I-úlyY LJI-Núā ŖdzNúlyY 2Nú I-ŦúŠNú 2LJŠNúI-úá2y {dzNŦI-0Šā 0I-y 0Š K2ú
- h0āŠNú0Š I-ft āLJŠ0lŦl0I-úá2yá 2Ŧ úKŠ 02NúNúSāLJ2yŖlyY Ŗ20dzYŠyúI-úá2y ādzLJLŦlŠŖ 0Klā lā úKŠ 02yŖlúá2yŦ2Nú āI-TS I-yŕ úNú2dz0fŠŦŦNúSŠ 2LJŠNúI-úá2yI-yŕ úKŠ I-0KlŠ0ŠYŠyú 2Ŧ úKŠ āLJŠ0lŦlŠŖ LJN2Ŗdz0ú ŦŠI-údzNúSā
- 0KŠ LJN20ŠŖdzNúI-f y2úŠā I-yŕ 0Nú0dzlú ŖŠúI-lŦā 3l0ŠŶlyúKŠ I-āā20lI-úŠŖ Ŗ20dzYŠyúI-úá2y I-NúS ādz3Sāúá2yá I-yŕ úKŠNú úNúI-yāŦŠNúI-0lŦlúè ú2 úKŠ NÚSāLJŠ0úá0Š I-LJLŦl0I-úá2yKI-ā ú2 0Š 0KŠ0lŖŠŖ 0KŠ YI-ydzŦI-0údzNúS 2Ŧ úKŠ LJN2Ŗdz0ú Ŗ2Šā y2ú úI-lŖŠ NÚSāLJ2yā0lŦlúè Ŧ2Nú úKŠ ādzlúI-0lŦlúè 2Ŧ úKŠ LJN20Šāā I-yŕ 0Nú0dzlú LJN2LJ2āI-ftā
- !ft 02Nú l 0lúK I-yŕ 2yúKŠ LJN2Ŗdz0ú YI-è 2yŦè 0Š 0I-NúNúŠŖ 2dzú 0è ljdzI-ŦlŦlŠŖ LJŠúā2yYŠŦ  
 L9/ слопн I-yŕ /9b9l9/ I 5 oyn ŖŠŦlyŠ úKŠ ljdzI-ŦlŦl0I-úá2yá 2Ŧ úKŠāS LJŠúā2yāY
  - 0KŠè I-NúS ŦI-YŦlŦI-Nú 0lúK lyáúI-ftlŦlyY Y2dzYúlyY 02YŶlāā2ylyY I-yŕ 2LJŠNúI-úlyY úKŠ LJN2Ŗdz0ú
  - 0KŠè KI-0Š úKŠ 02NúNúSāLJ2yŖlyY ljdzI-ŦlŦl0I-úá2yá Ŧ2Nú úKŠNú 02NúŦ
  - 0KŠè ly20 I-yŕ 0I-yI-LJLŦè I-ft NÚSdzŦI-úá2yá Ŧ2Nú úKŠ NÚS0Šyúá2y 2Ŧ I-00lŖŠyúā ŖNúS0úá0Šā I-yŕ ŦI-0ā I-LJLŦl0I-0fŠ I-ú úKŠ LJŦI-0Š 2Ŧ dzāŠ

#### Application as directed

- 0KŠ LJN2Ŗdz0ú lā I-LJN2ŦŠāā2yI-f ŠljdzLJYŠyú lyúŠyŖŠŖ Ŧ2Nú dzāŠ 0è úNúI-ŖŠā ŖLJŠ0lŦl0 LJN2ŦŠāā2yá 2Nú lyŖdzāúNè I-yŕ y2ú Ŧ2Nú āI-TS ú2 úKŠ 3ŠYŠNúI-f LJdz0Ŧl0 L9/ сллрл 0L9± мсм-лр-лр6
- 02 LJNúŠ0Šyú LJŠúā2yI-f ly2dzNè I-yŕ ŖI-YI-3S ú2 LJN2LJŠúúè KI3KŠNúŦŠ0ŠŦ āI-TSúè I-yŕ LJN2úŠ0úá2y āèāúSYā Ydzāú 0Š dzāŠŖH
- !ft úNúI-yāLJ2Nú Ŧ20lā Ydzāú 0Š NÚSY20ŠŖ
- a2dzYúŠŖ ŠèŠ 02Ŧúā 2yúKŠ Y2ú2Nú I-NúS y2ú ādzlúI-0fŠ Ŧ2Nú úNúI-yāLJ2NúlyY 3ŠI-NúŠŖ Y2ú2Núā
- 0KŠ LJN2Ŗdz0ú YI-è 2yŦè 0Š 2LJŠNúI-úŠŖ dzYŖŠNú úKŠ āLJŠ0lŦlŠŖ 2LJŠNúI-úlyY 02yŖlúá2yá I-yŕ lyúKŠ āLJŠ0lŦlŠŖ Y2dzYúlyY LJ2ālúá2yā
- 0KŠ LJN2Ŗdz0ú YI-è 2yŦè 0Š 2LJŠNúI-úŠŖ 2yúKŠ ly0ŠNúúŠNú
- . dzlŦŦlŦy 0NúI-lŖŠā Ydzāú y2ú 0Š dzāŠŖ I-ā āI-TSúè 0NúI-lŖŠā
- 0KŠ LJN2Ŗdz0ú Ydzāú y2ú 0Š 2LJŠNúI-úŠŖ lyLJNú0I-úŠ I-NúŠI-ā ŖLJ2úŠyúI-ftè ŠÈLŦf2āl0Š I-úY2āLJKŠNúSā I-yŕ lyI-NúŠI-ā 0lúK KI-NúYŦdzŦ 3I-āŠā 2lŦā ŖI-0lŖā I-yŕ NúI-ŖlŦI-úá2y



- LyáulftšŘ úšYŁJšWl-úđzłŲš āšYāzłŲā I-łłš Yz Ƨdzff ŁJłŲzúšŲŲŲāzYƧŲzłŲ ŲKš Yl-ŲKłYšŲ
  - ŁƧYšŲšāāI-łŲāē flYłú ŲKš Yl-ĒłYdzY ŲđzłŲŲšYŲŲ tI-łŲlYšŲšŲłŲšŲ ŲKš łYŲšŲŲšŲ āz ŲKl-ú łú Ųłff Ųš āŲłŲŲKšŘ 2Ƨ I-ŲŲšŲ āzYš āšŲŲYŘā 2Ƨ 2ŁJšŲl-úāzY ŲłŲK Ł 5 ŁŲl-ŲšŘš ŠāŁJšŲl-ftē łƧ ŲKšŲš łā I-łŲāł 2Ƨ ŲfŲŲłYŲŲ
  - ŁYŲšŲŲl-ŲšŘ 2ŲšŲf2I-Ř ŁJłŲzúšŲŲŲāzYŘ2šā Yzú ŁJłŲšŲšYŲ 2ŲšŲf2I-ŘłYŲ dzYŘšŲ I-ft ŲzYŘłŲāzYāŲ
- ŲKš Ƨdzāšā I-łłš Yz YzúžłŲ ŁJłŲzúšŲŲāzYŲŲ
  - łāš I- ŲđzłŲŲšYŲŲŘšŁJšŘšYŲ YzúžłŲ ŁJłŲzúšŲŲāzY āŲłŲŲKŲ
  - łāš ŲKš ŲdzłŲŲłYŲ ŲšYŁJšWl-úđzłŲš āšYāzłŲāŲ



## Gearbox protection

- 9ÈÖŠääλØŠ ØλöNVI·úλ2y I·ÖÖŠfŠNVI·úλ2yã I·yŘ NŠšä2yI·yÖŠã Øλff ŘI·YI·EŠ úKŠ EŠI·NÖ2Èø
  - 52 y2ú 2LJŠNVI·úŠ úKŠ EŠI·NÖ2È I·ú ØλöNVI·úλ2y I·ÖÖŠfŠNVI·úλ2yã ħ н Э öhl Ykãʰú 2f úKŠ YI·ÖKIyŠø
  - 52 y2ú 2LJŠNVI·úŠ úKŠ EŠI·NÖ2È IyúKŠ NŠšä2yI·yÖŠ NVI·yEŠ 2f úKŠ YI·ÖKIyŠø
- 9ÈÖŠääλØŠ ú2NVIjdzŠã Øλff ŘI·YI·EŠ úKŠ EŠI·NÖ2ÈŠãø
  - 52 y2ú ŠÈÖŠŠŘ úKŠ 2dzúLJdzú ú2NVIjdzŠã äLJŠÖλfI·ŠŘ 2yúKŠ yI·YŠLJfI·úŠø
- 9ÈÖŠääλØŠ IyLJdzú äLJŠŠŘã fŠI·Ř ú2 IyÖNŠI·ãŠŘ úŠY·LJŠNVI·údzNŠãø
  - 52 y2ú ŠÈÖŠŠŘ úKŠ IyLJdzú äLJŠŠŘã äLJŠÖλfI·ŠŘ 2yúKŠ yI·YŠLJfI·úŠø
- !Ø2λŘ ŠÈÖŠääλØŠ fI·úŠNVI·f f2NÖŠã 2yúKŠ EŠI·NÖ2È äKI·fúø
  - !Ø3YúKŠ äKI·fúã 2f úKŠ EŠI·NÖ2È I·yŘ ŘNλØŠY·YI·ÖKIyŠ ŠÈI·Öúfè ØλúK ŠI·ÖK 2úKŠø
- a I·ÖKIyŠ ŠfŠYŠyúã ØI·yöŠ ŘI·YI·EŠŘ öè I·fI·ÓĴ 2f fdzöNλÖI·yúø
  - a2dzúú úKŠ EŠI·NÖ2È 2yfè IyúKŠ Y2dzúúIy3 LJ2äλúλ2y IyŘλÖI·úŠŘ 2yúKŠ yI·YŠLJfI·úŠø
  - ² KŠYÖKI·y3Iy3 úKŠ fdzöNλÖI·yú dzãŠ úKŠ fdzöNλÖI·yú üèLJŠ I·yŘ IjdzI·yúúüè äLJŠÖλfI·ŠŘ 2yúKŠ yI·YŠLJfI·úŠø



## General information

### NOTICE

C2N ESINÖ2ESÄ ØLÜK K2ff2Ø AKI-TÜ I-YR ÅKNLYL RläI

2öäSNÖS ÜKS T2ff2ØLY NŠIjdzANUSYŠYÜÄ T2N ÜKS YI-ÖKLYS ÅKI-TÜY

- ▶ CÄÜ Ü2fŠN I-yÖS Kc
- ▶ a I-ÜŠN I-f ÈIŠfR ÅÜNŠYÜK WŠ Ж осл a t I
- ▶ a 2Rdzfdzä 2T ŠfI-ÄÜÖLÜÈ I-LJLJN2EΦ нмлллл a t I
- ▶ {dzNFI-ÖS N2dzEKYŠÄä wI Ж mp >Y
- ▶ b2 NI-RÄI-EZ I-ÈI-f T2NÖSÄ I-YR T2NÖSÄ RdzS Ü2 ÅÜNŠÄÄKN2ÜI-ÜL2Y/LJŠNYLÄÄLÖfS

### Thermal power limit

ΦKS ÜKS NY I-f LJ2ØŠN ØLYÜZ RŠfLYŠR ÖÈ ÜKS KS I-Ü ÖI-fI-yÖS TLYÜÄ ÜKS LJŠNYLÄÄLÖfS Ö2YÜLYØ2dzä ESINÖ2E LJ2ØŠN LÜ Ä I-TŠÖÜŠR ÖÈ

- ÜKS ÖKdzNLYLY T2ÄÄSÄ LYÜKS fdzÖNÄÖI-YÜ ΦKSÄS I-NŠ RŠÜŠNYLYŠR ÖÈ ÜKS Y2dzYÜLY LJ2ÄLÜL2Y I-YR ÜKS ÖNÖdzYTŠNŠYÜI-f ÄLJŠŠR 2T ÜKS ESINÄ
- ÜKS T2I-R I-YR ÜKS ÄLJŠŠR ÄLJŠÖÜNdzYΦ
- ÜKS I-YÖIŠYÜ Ö2YRÄÜL2YÄY ÜSYLJŠNI-ÜdzNŠ I-NÜ ÖNÖdzfI-ÜL2Y LYLJdzÜ 2N RläÄLJ I-ÜL2Y 2T KS I-Ü ØLI- ÅKI-TÜÄ I-YR ÜKS T2dzYR I-ÜL2YÄY

### NOTICE

! ÜKS NY I-f ÖKSÖI ØLÜK ÜKS 5NÄÖS {2fdzÜL2Y5ŠÄLYŠN Ö5{5Ü 2N Ö2YÜI-ÖÜLY È2dzN [ŠYfS NŠLJNŠÄSYÜI-ÜLÖS Ä NŠIjdzANUSR LT

- ▶ ÜKS LYLJdzÜ ÄLJŠŠR Y<sub>m</sub> 5 мрлл NLYY Ä T I-fŠYÖŠf2Ø LYÖI-ÄS 2T ÜKS ESINÖ2E NI-ÜL2Ä ENÖŠYLYÜKS T2ff2ØLY
- ▶ ÜKS RÜNÄÖS ÄLJŠŠRÄ YŠYÜL2YŠR LYÜKS T2ff2ØLY ØLff ÖS ŠEÖŠŠRŠR I-Ä I- TdzYÜL2Y 2T ÜKS Y2dzYÜLY LJ2ÄLÜL2Y C2N I- ÅK2NÜ LJŠNÄ2R 2T ÜLYS dzLJ Ü2 p YLY o<sub>max</sub> KÄKŠN ÄLJŠŠRÄ I-NŠ LJŠNYLÄÄLÖfS
- ▶ ÜKS I-YÖIŠYÜ ÜSYLJŠNI-ÜdzNŠ Ä LJNŠR2YLYI-YÜÈ I-Ö2ØS бол c/Φ

| Gearboxes              | Ratio i |
|------------------------|---------|
| Эрллл . мрлл ΦΦ . полл | Ж рл    |

| Motor          | Mounting position M1 | Mounting position M3, M5, M6 | Mounting position M2, M4 |
|----------------|----------------------|------------------------------|--------------------------|
| a / ! мл ΦΦ мп | пллл NLYY            | орлл NLYY                    | оллл NLYY                |
| a / {мт ΦΦ нм  | оллл NLYY            | нслл NLYY                    | мрлл NLYY                |

### Possible ways of extending the application area

- {KI-TÜ ÄŠI-ØLY NLYY YI-RŠ 2T CY a YI-ÜŠN I-fk±LÜ2YÖ2LJÜL2YÜ
- WŠRdzØLY ÜKS fdzÖNÄÖI-YÜ I-Y2dzYÜ ÖI-TÜŠN Ö2YÄdzTÜI-ÜL2Y ØLÜK [ŠYfSÜ
- /22fLY ÜKS ESINÜŠR Y2Ü2N ÖÈ I-NÜ Ö2YÖSÖÜL2Y2YÜKS YI-ÖKLYSÄÄÜSY

[illegible]

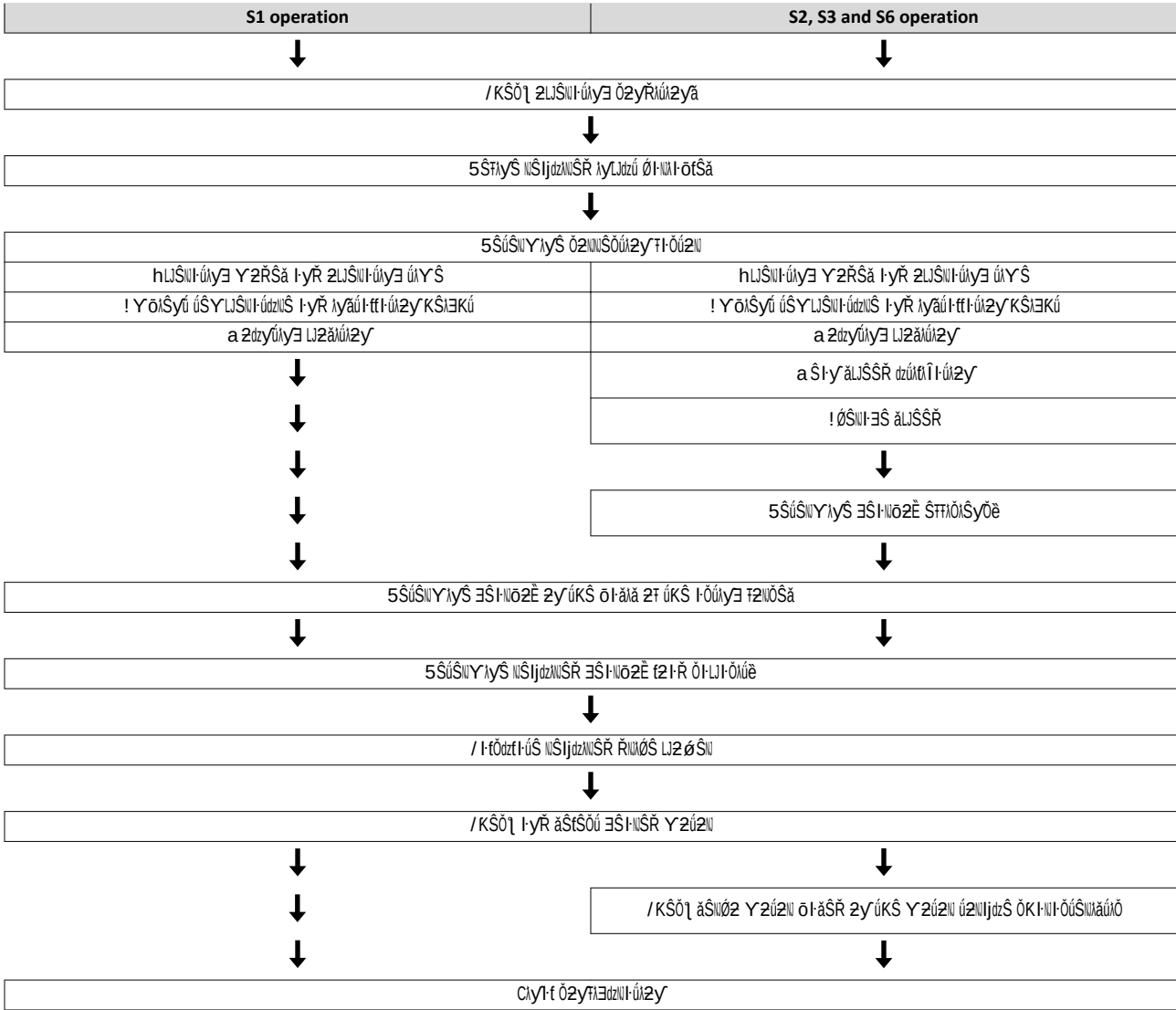
ϕKŜ RĭYŜyăł2yĭvĚ lă ädzłúĭ-ôfŜ Ƨ2W ūKŜ 2LJŜWĭ-úĭvĚ Y2ŘŜă {mŹ {hŹ {o ĭyŘ {c



LŦ ŘlŸŠyāi2yly3 LjUz0ŠāāŠā I-NŦ Ō2YŁfŠÈ 2Nj NjŠl-ŌK fŸYłú f2lŘāš ŁfŠlřāš NjŠřŠNj ū2 è2dzNj  
[ŠyŦŠ ōNjYŌK 2řřlŌŠ



Workflow



Check operating conditions

| Check                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------|
| ! LJLJN2ŐI-tā<br>/2yT2N YŮŠā<br>{dzLJLJĚ Ő2Ů I-ĚŠ<br>5ŠĚNŠŠ 2y LJN2úŠŮú2y<br>! YŏiŠyŮ ůŠY LJŠN I-údzNŠ<br>{dzNŮ I-ŮŠ LJN2úŠŮú2y |

- ▶ {ŮI-yŘ I-NŘā IyŘ 2LJŠN I-úly3 Ő2yŘāú2yā} no
- ▶ {dzNŮ I-ŮŠ IyŘ Ő2NŮ2ā2y LJN2úŠŮú2y} HΦ



## Define required input variables

| Necessary input variables                      | Note                                                      | Symbol       | Unit   |
|------------------------------------------------|-----------------------------------------------------------|--------------|--------|
| hLŠWf-ÚlyY ůYŠKŘf-ě                            |                                                           | .5           | K      |
| aŠfYŠLŠŠŘ dZůMfI-Ú2Y2Y ůKŠ ŠŠfWŠŘ Y2Ů2W        | wŠfI-ÚlyY ů2 ůKŠ f2f-Ř ŠLŠŠŘ y <sub>f</sub>               |              | ššš    |
| !YůfŠyŮ ůSYLŠWf-ŮdzWŠ                          |                                                           | $\phi_{\pm}$ | c/     |
| {LŮŠ f-ŮůŮdzŘŠ !YŠf                            |                                                           | I            | Y      |
| wf-ŘLIf f2WŮŠ                                  |                                                           | $C_{WfR}$    | Wf-ŮŠŘ |
| !ĚIf f2WŮŠ                                     |                                                           | $C_{fĚ}$     | Wf-ŮŠŘ |
| ŮWf-yŠYŠŠLYŠ ŠfSYŠyŮ f-Ů ůKŠ 2dzŮLdzŮ          | DŠfW ŠKŠŠfŠŠŠ ŠLW2ŮŮŠŮŠ X                                 |              |        |
| 9fŠŠŮŮŮŠ ŘLIfYŠŮŠW 2f ůKŠ ůWf-yŠYŠŠLYŠ ŠfSYŠyŮ |                                                           | $\ddot{R}_2$ | YY     |
| [2f-Ř ů2WfJdzŠ                                 | hyfě ŠŮK {Mz {Hz {Oz fYŘ {c 2LŠWf-ÚlyY Y2ŘŠŠ              | $a_f$        | bY     |
| [2f-Ř ŠLŠŠŘ                                    | hyfě ŠŮK {Mz {Hz {Oz fYŘ {c 2LŠWf-ÚlyY Y2ŘŠŠ              | $y_f$        | WLY    |
| {K2WŮŮLYŠ Yf-ĚLYdzY ů2WfJdzŠ                   | 9YŠWŠYŮě 2fĚ fJdzŮŮ ŠŮ2LŠ 2ŮŮf-Š2Yf-f KŠK ŠŮf-WŮlyY ŘdzŮě | $a_{fYfĚ}$   | bY     |
| wDzyŮLYŠ ŠŮK Yf-ĚLYdzY ů2WfJdzŠ                |                                                           | $\dot{u}_f$  | ššš    |

## Determine correction factor

| Operating modes S1, S2, S3, S6, and operating time |       |                   |            |                   |            |                   |            |
|----------------------------------------------------|-------|-------------------|------------|-------------------|------------|-------------------|------------|
| Operating mode S1                                  |       | Operating mode S2 |            | Operating mode S3 |            | Operating mode S6 |            |
| ED                                                 | $k_f$ | ED                | $k_f$      | ED                | $k_f$      | ED                | $k_f$      |
| %                                                  |       | min               |            | %                 |            | %                 |            |
| млл                                                | мол   | мл                | мол π моп  | мр                | мол π моп  | мр                | мол π мос  |
|                                                    |       | ол                | момр π мон | нр                | моо π мон  | нр                | мол π моп  |
|                                                    |       | сл                | молт π мом | пл                | момр π мон | пл                | моо π мон  |
|                                                    |       | фл                | мол π молр | сл                | молр π мом | сл                | момр π мон |

► hLŠWf-ÚlyY Y2ŘŠŠ 2f ůKŠ Y2Ů2W нрс

| Ambient temperature and installation height |                          |          |          |          |
|---------------------------------------------|--------------------------|----------|----------|----------|
| Ambient temperature                         | Installation height amsl |          |          |          |
|                                             | ≤ 1000 m                 | ≤ 2000 m | ≤ 3000 m | ≤ 4000 m |
|                                             | Correction factor        |          |          |          |
| $T_i$                                       | $k_i$                    | $k_i$    | $k_i$    | $k_i$    |
| Ж нл с/                                     | момр                     | молс     | лффт     | лфyf     |
| ол с/                                       | молт                     | лффф     | лффл     | лфyo     |
| пл с/                                       | молл                     | лффн     | лфyo     | лфтт     |
| рл с/                                       | лффн                     | лфyp     | лфтс     | лфтм     |
| сл с/                                       | лфyo                     | лфтт     | лфтл     | лфср     |

| Mounting position |                   |       |       |       |       |       |
|-------------------|-------------------|-------|-------|-------|-------|-------|
| Gearboxes         | Mounting position |       |       |       |       |       |
|                   | M1                | M2    | M3    | M4    | M5    | M6    |
|                   | Correction factor |       |       |       |       |       |
|                   | $k_g$             | $k_g$ | $k_g$ | $k_g$ | $k_g$ | $k_g$ |
| Эрллл I           | молл              | лфтл  | лфул  | лфул  | молл  | молл  |
| Эрллл{            | молл              | лфтл  | лфул  | лфур  | лфул  | лффл  |
| Эрллл .           | молл              | лфтл  | лфул  | лфул  | лфул  | лфул  |

► {ŠfŠŮŮ2YŮf-ŮfŠŠ pp



Řø 9TtSôúúŃŠ Řłł-YŠúŠN 2T ŃNł-yāYłāłzyŠtŠYŠyú łyYy  
 T₂ !ŘŘłłzyłf t2łŘ łŃŃú2ł  
 ▶ włŘłł t2łŃŃŠ ł-yŘ ł-Ěłł t2łŃŃŠ  po

[illegible]

| Calculation of the required drive power                                                                                                                                                       |                                                                                                |                                    |       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------|-------|
|                                                                                                                                                                                               | Calculation                                                                                    | Result                             | Unit  |
| $h_{dz} \cdot L_{dz} \cdot \dot{u}_{2N} / j_{dzS}$                                                                                                                                            | $a_w \cdot \kappa_a \cdot \kappa_{\phi} \cdot l_{\phi} \cdot \ddot{E} \cdot l_1 \cdot \dot{u}$ | $a_w \cdot \Gamma$                 | bY    |
| $h_{dz} \cdot L_{dz} \cdot \ddot{a}_{LSSR}$                                                                                                                                                   | $\gamma_w \cdot \kappa_{\gamma} \cdot \kappa_{l_9}$                                            | $\gamma_w \cdot \Gamma$            | NLJY  |
| $5 \cdot \ddot{u}_{\phi S} \cdot L_{2\phi S} / \{K2 \cdot \ddot{u}_{\phi} \cdot \gamma_S \cdot \gamma_F \cdot \ddot{E} \cdot \gamma_{dz} \cdot \dot{u}_{2N} / j_{dzS}\}$                      | $t_m \cdot \kappa_{t_w}$                                                                       | $L_m \cdot \Gamma$                 | $l^2$ |
| $h_{dz} \cdot L_{dz} \cdot \dot{u}_{2N} / j_{dzS}$                                                                                                                                            | $a_H \cdot \kappa_a \cdot l_{\phi}$                                                            | $a_H \cdot \Gamma$                 | bY    |
| $h_{dz} \cdot L_{dz} \cdot \ddot{a}_{LSSR}$                                                                                                                                                   | $\gamma_{H\ddot{u}K} \cdot \kappa_{\gamma} \cdot \gamma_l$                                     | $\gamma_{H\ddot{u}K} \cdot \Gamma$ | NLJY  |
| $[2 \cdot F \cdot \ddot{O} \cdot L \cdot \ddot{O} \cdot \ddot{u}_{\phi} \cdot 2 \cdot F \cdot \ddot{u}_{KS} \cdot 3 \cdot S \cdot F \cdot \ddot{u}_{SR} \cdot Y \cdot 2 \cdot \ddot{u}_{2N}]$ | $\ddot{O} \cdot \kappa_l$<br>$\ddot{O} \cdot \kappa_{l_1}$                                     | $\ddot{O} \cdot \Gamma$            |       |
| $\{K2 \cdot \ddot{u}_{\phi} \cdot \gamma_S \cdot \gamma_F \cdot \ddot{E} \cdot \gamma_{dz} \cdot \dot{u}_{2N} / j_{dzS}\}$                                                                    |                                                                                                |                                    |       |
| $y_2 \cdot F \cdot \ddot{u}_{S} \cdot \gamma_F \cdot \ddot{u}_{\phi} \cdot \gamma_3 \cdot f_2 \cdot F$                                                                                        | $a_{HLYF\ddot{E}} \cdot \kappa_a \cdot a_{[LYF\ddot{E}]}$                                      | $a_{HLYF\ddot{E}} \cdot \Gamma$    | bY    |
| $F \cdot \ddot{u} \cdot F \cdot \ddot{u}_{S} \cdot \gamma_F \cdot \ddot{u}_{\phi} \cdot \gamma_3 \cdot f_2 \cdot F$                                                                           | $a_{HLYF\ddot{E}} \cdot \ddot{E} \cdot m \cdot p \cdot \kappa_a \cdot a_{[LYF\ddot{E}]}$       | $a_{HLYF\ddot{E}} \cdot \Gamma$    | bY    |
| $w \cdot \ddot{u}_{\phi 2}$                                                                                                                                                                   |                                                                                                | $\lambda \cdot \Gamma$             |       |

HC



## Operating modes S2, S3, and S6

Check geared servo motor and determine from the selection table

► {ŝtšöúλzγúl·ōfŠă pp

► [č2N1jdzŠ ŎKI-N1-ŎúŠN1ăúłŎă](#)  [нпр](#)

HT

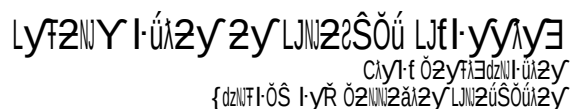


Final configuration

|                       | Screening                                                                                                                                                                                       |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| /2yyŠŮŰł2yŸŤŸŠŸŸł2yŸ  | h dzŰłJ dzŰł äKI·ŤŰ<br>h dzŰłJ dzŰł ŸŸI·yŹŠkŤ22Ű                                                                                                                                                |
| a 2dzŸŰŸyŹ LJ2ăłŰł2yŸ | DŠŤI·NŠŤŸ Y2Ű2Ű<br>/2yyŠŮŰ2ŰkŰŠŰYŸyI·f ō2Ě<br>5ŰŰŰŠŸŸäKI·ŤŰk2dzŰłJ dzŰł ŸŸI·yŹŠ                                                                                                                 |
| tŰ2ŤŤdzŮŰ ŠĚŰŠŸŸł2yŸ  | ¢2ŰŰJ dzŠ LJŤI·ŰŠ<br>{KI·ŤŰ Ő2ŰŠŰ<br>/2yyŠŮŰ2ŰkŰŠŰYŸyI·f ō2Ě<br>.ŰŸI·ŸŠ<br>CŠŠŤŮŤŰŰŰ<br>.Ť2ŰŠŰ<br>¢ŠY LJŠŰŸI·ŰdzŰŠ Y2yŰŰ2ŰŸyŹ<br>{ŠŐ2yŤŸ äKI·ŤŰ ŠŸŤŸ<br>I I·yŤŸŰKŠŠŤ<br>tŰ2ŰŠŮŰł2yŸŐ2ŰŠŰ<br>ŰŰŰ |

a 2ŰŠ ŸyŤ2NŸI·Űł2yI·ō2ŰŰŰ ŰKŠ ŸŸyI·f Ő2yŸłŹdzNŸI·Űł2yŸ

- ¢KŠ Y2ŤŤdzŤI·Ű äăŰŠŸŸ 
- tŰ2ŤŤdzŮŰ ŠĚŰŠŸŸł2yŸ 



±1N12dzā ādzN1f1ōš Ō21-ūy3ā ŠyādzNš ūK1-ū ūKš Y2ū2Nā zLJšN1-ūš Nšf1-ōfē ŠōšY1-ū K1K1 I-1N1 KdzY1R1ā1ūē: 1Y  
2dzūR22N 1Yā1-ff1-ū2Y2N 1YūKš L1N1ŠāšYōš 2f1-ūY2āLJšN1-ūš 1Y1JdzN1ā1ūšāp ! 1Yē Ō2f2N1 T1N2Y ūKš h1w ! [  
/f1-āā1ōh Ō2f2šōš1N2Yō1-ŷōš ŌK2āšYf2N ūKš ū2LJ Ō21-ūp



| Surface and corrosion protection | Corrosivity category | Surface coating                                        | Color                                              | Coating thickness |
|----------------------------------|----------------------|--------------------------------------------------------|----------------------------------------------------|-------------------|
|                                  | DIN EN ISO 12944-2   | Design                                                 |                                                    |                   |
| hY{πD 0LJWYŠŘú                   |                      | • hY t ! w LJWYŷy3 Ő2Łú                                |                                                    | сл 000 фл >Y      |
| hY{π{ 0ăYŁffú                    | /2YŁJŁWŁŃŃŃ Ń2 /m    | • hYπt ! w Ő2Ł Ő2Łú                                    |                                                    | ул 000 ммл >Y     |
| hY{πa 0YŠŘŃđzYú                  | /2YŁJŁWŁŃŃŃ Ń2 /h    | • hY t ! w LJWYŷy3 Ő2Łú                                | • {úŁyŔŁWŔY w ! [ ŁŁМН<br>• hŁJú2yŁŁŁY w ! /ŁŁăăŁŃ | ммл 000 мсл >Y    |
| hY{π[ ŃŁŁWĖŠú                    | /2YŁJŁWŁŃŃŃ Ń2 /o    | • hYπt ! w Ő2Ł Ő2Łú                                    |                                                    | млл 000 нлл >Y    |
| hY{π- [ 0ŠĖŰWŁŁŁŁŁŃŠú            | /2YŁJŁWŁŃŃŃ Ń2 /n    | • hYπ9Ł LJWYŷy3 Ő2Łú ŃŰŃ2 ŰYŠăŰ<br>• hYπt ! w Ő2Ł Ő2Łú |                                                    | мсл 000 нлл >Y    |

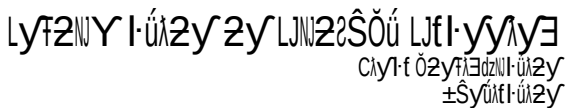
- Эрллт . пр
- Эрллт . ммл
- Эрллт . нпл

[illegible]

ϣKŜ ŜËl-Ōú Ől-fdzŜă Ől-γōŜ t2dzγŘ zγúKŜ γl-γŜlγf l-úŜϣ

| Mounting position |   | M1 (A)           | M2 (D)            | M3 (B)            | M4 (C)            | M5 (E)            | M6 (F)            | M1-M6 (A-F)      | M1, M5, M6 (AEF) |
|-------------------|---|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|------------------|
| DŠH102EŠā         |   |                  |                   |                   |                   |                   |                   |                  |                  |
| Эрллл . пр        | f | л <sup>0</sup> п | л <sup>0</sup> п  | л <sup>0</sup> п  | л <sup>0</sup> п  | л <sup>0</sup> п  | л <sup>0</sup> п  | л <sup>0</sup> п | л                |
| Эрллл . ммл       | f | л <sup>0</sup> о | л <sup>0</sup> с  | л <sup>0</sup> т  | л <sup>0</sup> ф  | л <sup>0</sup> р  | л <sup>0</sup> п  | л                | л <sup>0</sup> р |
| Эрллл . нпл       | f | л <sup>0</sup> ф | м <sup>0</sup> н  | м <sup>0</sup> о  | м <sup>0</sup> у  | м <sup>0</sup> п  | м <sup>0</sup> л  | л                | м <sup>0</sup> п |
| Эрллл . прл       | f | л <sup>0</sup> ф | м <sup>0</sup> с  | м <sup>0</sup> ф  | н <sup>0</sup> о  | м <sup>0</sup> у  | м <sup>0</sup> т  | л                | м <sup>0</sup> у |
| Эрллл . слл       | f | м <sup>0</sup> п | н <sup>0</sup> о  | н <sup>0</sup> т  | о <sup>0</sup> н  | н <sup>0</sup> с  | н <sup>0</sup> с  | л                | л                |
| Эрллл . унл       | f | м <sup>0</sup> ф | н <sup>0</sup> у  | о <sup>0</sup> п  | п <sup>0</sup> н  | о <sup>0</sup> н  | н <sup>0</sup> т  | л                | л                |
| Эрллл . мрлл      | f | о <sup>0</sup> у | р <sup>0</sup> т  | с <sup>0</sup> п  | у <sup>0</sup> п  | р <sup>0</sup> ф  | о <sup>0</sup> ф  | л                | л                |
| Эрллл . нтлл      | f | с <sup>0</sup> л | ф <sup>0</sup> л  | мл <sup>0</sup> л | мн <sup>0</sup> т | у <sup>0</sup> р  | ф <sup>0</sup> р  | л                | л                |
| Эрллл . полл      | f | ф <sup>0</sup> р | мм <sup>0</sup> р | мс <sup>0</sup> р | нм <sup>0</sup> л | мп <sup>0</sup> л | мс <sup>0</sup> л | л                | л                |
| t  Šraú  EŠ       | f | л <sup>0</sup> п |                   |                   |                   |                   |                   |                  |                  |

ол



- Эрллп . ммл . прл  $\lambda \gamma Y 2 d z \gamma \lambda \gamma \exists \cup 2 \dot{\alpha} \lambda \dot{\lambda} 2 \gamma$  а мкркс ó ! 9Cú

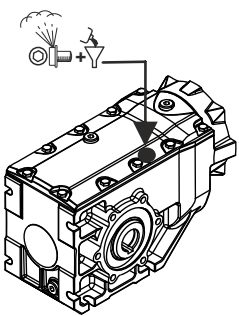
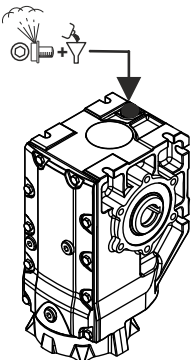
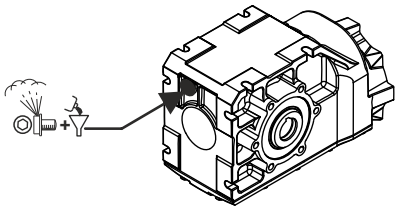
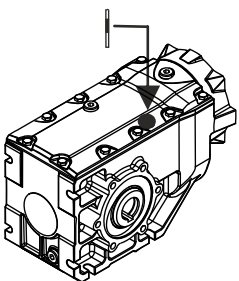
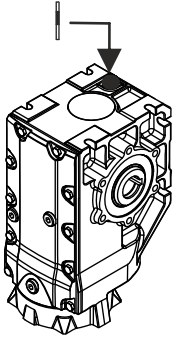
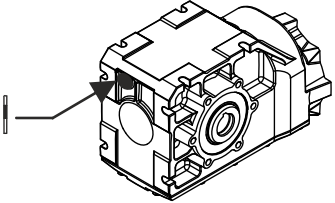
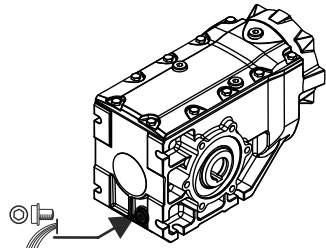
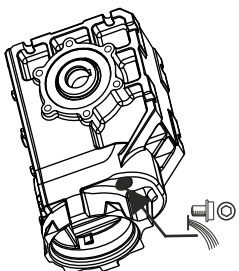
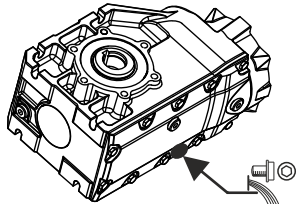


► фKŦ YzŘdzfI·W äëăúŜY  мл

► C2NU 3S1-NU02EŠA šl ŌUK ŠSYNU1-ŪLZY1 I 3I-LJ 2T I-Ū tS1-āu ol Y'Y KI-ā ū2 oS 2āŠNUŠR ū2 ūKS Y1-ŌKIyS  
šI-ft 2Y ūKS Ō2NUŠSāLJ2YR1y3 3S1-NU02E ālRŠφ



g500-B240

| Mounting position M1 (A)                                                            | Mounting position M2 (D)                                                            | Mounting position M3 (B)                                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Հիմնական թափանցանիկ                                                                 |                                                                                     |                                                                                       |
|    |    |    |
| /ԿՏՈՒ                                                                               |                                                                                     |                                                                                       |
|   |   |   |
| 5ՈՒՄ                                                                                |                                                                                     |                                                                                       |
|  |  |  |

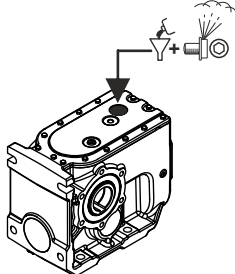
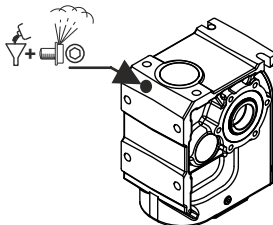
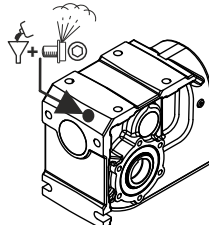
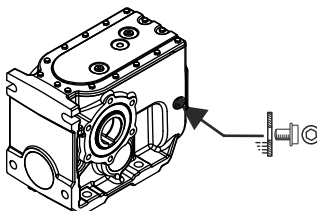
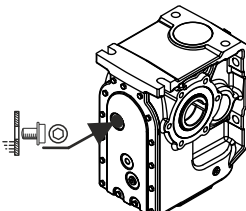
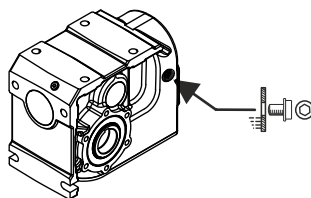
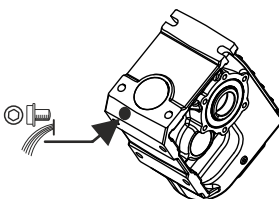
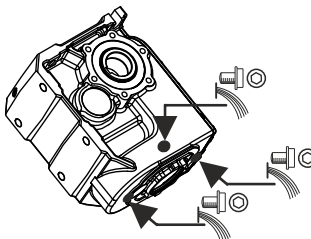
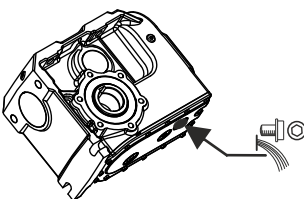


| Mounting position M4 (C) | Mounting position M5 (E) | Mounting position M6 (F) |
|--------------------------|--------------------------|--------------------------|
| Հիմնական թափանցանիշներ   |                          |                          |
|                          |                          |                          |
| /2/մմ2/                  |                          |                          |
|                          |                          |                          |
| 5մմ/կմ                   |                          |                          |
|                          |                          |                          |

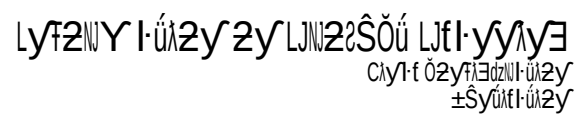
| Mounting position M1 (A)                                                            | Mounting position M2 (D)                                                            | Mounting position M3 (B)                                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|    |    |    |
| /KŠ01                                                                               |                                                                                     |                                                                                       |
|   |   |   |
| 501:1y                                                                              |                                                                                     |                                                                                       |
|  |  |  |



| Mounting position M4 (C) | Mounting position M5 (E)<br>Հիմքի իր թնկալիսն | Mounting position M6 (F) |
|--------------------------|-----------------------------------------------|--------------------------|
|                          |                                               |                          |
| /Զննդ                    |                                               |                          |
|                          |                                               |                          |
| Տնկալ                    |                                               |                          |
|                          |                                               |                          |

| Mounting position M1 (A)                                                            | Mounting position M2 (D)                                                            | Mounting position M3 (B)                                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <p>Сторона 1-й стороны</p>                                                          |                                                                                     |                                                                                       |
|    |    |    |
| <p>Сторона 2-й стороны</p>                                                          |                                                                                     |                                                                                       |
|   |   |   |
| <p>Сторона 3-й стороны</p>                                                          |                                                                                     |                                                                                       |
|  |  |  |

Эрлп . слл  
Эрлп . унл  
Эрлп . мрлл  
Эрлп . нтлл  
Эрлп . полл



Эрлп . слл  
Эрлп . унл  
Эрлп . мрлл  
Эрлп . нтлл  
Эрлп . полл



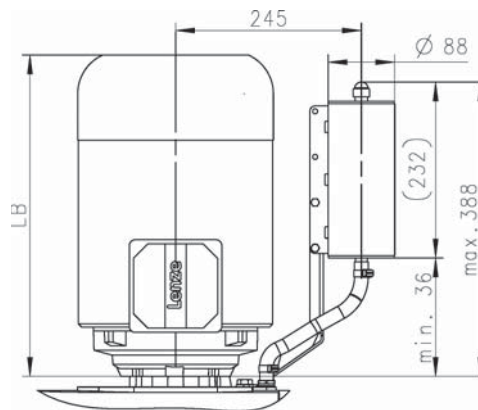
### Gearbox with oil compensation reservoir for mounting position M4 (C)

Ly 2NURŠNU ū2 3dz1-NU1-yŪŠS 1-NUŠta1-tŏŠ fđz0NUŏ1-ŭa2y2T ūKŠ ū22ŭKŠR LJ1-NUŏā ly Y2dzŭyŭly3 LJ2āŭa2y a n ō / ū  
 ōY2ŭ2ŭ2NU āa 2y ūKŠ 3S1-NUŏ2Ē ŐŠNUŏ1ŏ1-ŭa2y ūKŠ ū2LJŭS 1- K1K3K 7afŭy3 tŠŐŠt āā NUŠljdz1NUŠR ly ūKŠ 3S1-NUŏ2Ē  
 ! ā 1-NUŠādzŭt 2T ūKŠ NUŠRdzŏŠR Ő2fđzYŠ 2T 1-NU ly ūKŠ 3S1-NUŏ2Ē ūKāā Y1-ĕ tŠ1-R ū2 2K Šāŏ1-LJly3 7N2Y ūKŠ  
 ŐŠYāŭ1-ŭa2y 1-ŭ K1KŠNU lyLJdzŭ āLJŠŠRāŭ 4KŠ 2K Ő2YLJŠyā1-ŭa2y NUŠāŠNUŐ2NU lyŐNUŠ1-āšā ūKŠ ŠĒLJ1-yāa2y  
 āLJ1-ŐŠ 72NU ūKŠ fđz0NUŏ1-yŭŭ

ckKš 2kf 02Y LjŠyāI-ūāzy NŠāŠN02NW ŌI-y ōš 2NŖŠNŠŖ I-ā I-Y 2dzyūlyā āšū t2N tI-āūŠylyā ū2 ūKš 3ŠI-N02E0

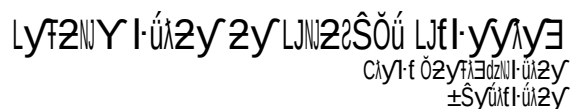
Lf lyadꞑfflōšyŕ ſlj-l-ōš lā l-θ-l-f-l-ōfšē úKš 2lf ōzYlJšýal-úlzY<sup>N</sup>ŠšSšN<sup>O</sup>2ANU ōl-y l-tāz oš Y2dzyūšR 20šN ūKš  
 ŠSl-N<sup>O</sup>oZē K2āš Ō2yyšOūlzYzyysI-l-N<sup>O</sup>oē āēāušY LJfl-N<sup>O</sup>ūā⦶

### Dimensions of the oil compensation reservoir



8800783-00

C2N1 ūKŠ T2ff2d0ly3 3S1-N02EŠā ly Y2dzūly3 LJ2āūū2y a n ō / ūS ØKlØK ŠEØŠŠR ūKŠ āLJSØA7AŠR YlyØ  
lyLJdzū āLJSŠŠR 1-y2M ŠEŁJ1-yā2y N0ŠāŠN02N0 lā N0lJdzN0ŠR RŠLJSyRly3 2y ūKŠ āLJSØA7AŠR 3S1-N0 N1-ūā2y



00



## Mechanical installation

### Important notes

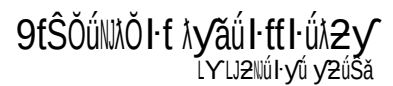
- l-yǎul-ftl ūKŠ LjN2RdzŌŭ l-ŌŌ2Nŕl-yŭ ū2 ūKŠ l-yŧ2Nŕl-yŭ ūKŠ ŌKl-LjŪŠNŭ h{l-yŕl-l-Nŕā l-yŕ 2LjŠNl-úλyŭ Ō2yŕl-úλ2yāh
- {ú-l-yŕl-l-Nŕā l-yŕ 2LjŠNl-úλyŭ Ō2yŕl-úλ2yā no
- KŠ ūŠŌKŷlŌl-ftl ŕl-ú-l l-yŕ ūKŠ ŕl-ú-l NŕŠl-l-Nŕl-yŭ ūKŠ ādzLjLŧē Ō2yŕl-úλ2yā Ōl-y ōŠ ŧ2dzyŕ 2yŭKŠ y-l-YŠLŧl-úŠ l-yŕ l-y ūKlā ŕ2ŌdzYŠyŭl-úλ2y
- !YŏlŠyŭ YŠŕl-l Ɓ ŠāLjŠŌl-ftl ŌKŠYlŌl-ftl l-ŔŔNŕŠāāŭŌŠ 2yŠā Ɓ Yl-ē ŕl-Yl-ŔŠ āKl-ŧŭ āŠl-ftl-yŭ Nŭl-yŭāš ŧl-ŌljdžŠNā l-yŕ Lŧl-āŭŌā
- [ŠyŧŠ 2ŧŧŠNā āLjŠŌl-ftl ādzNŧl-ŌŠ l-yŕ Ō2Nŭ2āλ2y LjN2ŪŠŌŭλ2y l-y ūKlā Ōl-āŠ

### Transport

- 9yādzNŭŠ l-LjLjN2LjNŭl-úŠ Kl-yŕl-yŭ
- a l-lŧŠ ādzNŭŠ ūKl-l-ú l-ftl Ō2YlJ2yŠyŭ LjLl-Nŭā l-NŕŠ āŠŌdzNŭŠŧē Y2dzyŭŠŕ {ŠŌdzNŭŠ 2Nŭ NŭŠY2ŌŠ ŧ22āŠ Ō2YlJ2yŠyŭ LjLl-Nŭā
- hŷŧē dzāŠ āl-ftlŧē ŧĀĒŠŕ ūNl-yāLj2Nŭ l-l-ŕā ōŠŔŔ ŠēŠ ō2ŧŭā 2Nŭ ādzLjLj2Nŭ Lŧl-úŠāŭ
- 52 y2ŭ ŕl-Yl-ŔŠ l-yē Ō2YlJ2yŠyŭā ŕdzNŭl-yŭ ūNl-yāLj2Nŭ
- !Ō2l-ŕ ŠŧŠŌŭ2āŭl-úλŌ ŕlāŌKl-l-NŕŠā 2yŠŧŧŠŌŭNŭ2yŭ Ō2YlJ2yŠyŭā l-yŕ Ō2yŭl-Ōŭā
- !Ō2l-ŕ l-YlJl-Ōŭā
- /KŠŌl ūKŠ Ōl-NŭNŕl-yŭ Ōl-LjLl-Ōlŭē 2ŧ ūKŠ K2lāŭā l-yŕ ŧ2l-ŕ Kl-yŕl-yŭ ŕŠŌŭŌŠā KŠ ōŠl-ŔKŭā Ōl-y ōŠ ŧ2dzyŕ l-y ūKŠ āKlLjLjŭ ŕ2ŌdzYŠyŭā
- {ŠŌdzNŭŠ ūKŠ ŧ2l-ŕ l-Ŕl-l-yāŭ ūλLjLjŭ l-yŕ ŧl-ftl-yŭ ŕ2ŏy
- {ú-l-yŕl-yŭ ōŠyŠl-ŭK ādzāLjŠŕŕŕ ŧ2l-ŕā lā LjN2KlŌlŭŠŕ

### Installation

- KŠ Y2dzyŭl-yŭ ādzNŧl-ŌŠā Ydzāŭ ōŠ Lŧl-yŠŧ ū2Nāλ2yŭ-ftl Nŭl-yŕ ŧNŭŠ ŧNŭY ŌlŌNl-úλ2yā
- KŠ Y2dzyŭl-yŭ l-NŕŠl-ā Ydzāŭ ōŠ ādzlŭŠŕ ū2 l-ŏā2Nŭ ūKŠ ŧ2NŭŌŠā l-yŕ ū2NljdžŠā ŔŠyŠNl-úŠŕ ŕdzNŭl-yŭ 2LjŠNl-úλ2y
- 9yādzNŭŠ l-y dzyKl-yŕŠNŭŠŕ ŌŠyŭl-ftl-úλ2y
- C2Nŭ ŌŠNāλ2yā ōŭK l-ŧl-yŧ ŧŠŠLj l-YlŷlYdzY ŕlāŭl-yŌŠ 2ŧ mŧŧŧ ŧNŭY ūKŠ 2dzŭāŕŠ ŕl-YŧŪŠNŭ 2ŧ ūKŠ ŧl-y Ō2ŌŠNŭ l-y l-yŭl-lŧ ŕNŭŠŌŭλ2y





## Technical data

### Notes regarding the given data

#### Catalog data

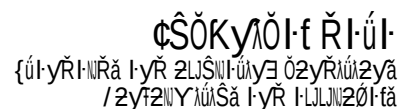
ӨКС Л2ӨСН ӨИ-тдзСәэ үзНljдзСә I-ҮР әлССРә әлСӨлҮлСР лҮүКС ӨзүҮлЭдзНl-үлзү I-НУС Н2дзүРСР ӨИ-тдзСә I-ҮР I-ЛJЛҮтө үзү

- hЛJСНl-үлзү үлҮС ЛJСН Рl-ө I' y KНә óмллᠰ 95ó
- 5дзүө Өfl-ää dzLJ үз мл әӨлүүӨКlзү зЛJСНl-үлзүә ЛJСН K2дзН
- ! YөlСүтү үСҮЛJСНl-үдзНS I' нл c/
- {лүS I-түлүүдзРS Ж мллл Y I-өзӨS YСl-үәSl- tSӨSt
- өКС әStSöүлзү үl-өtSә лҮРлӨl-үS үКС YСӨKl-үлӨl-тө ЛJСНҮлääлөtS Л2ӨСН tSӨStә I-үР үзНljдзСә
- өКС Нl-үлзүә I-ЛJЛҮтө үз үКС зЛJСНl-үлзү YзРS {м өl-ӨӨ үз 9b cллoгптмү

#### NOTICE

лҮӨl-әS зт зүКСН зЛJСНl-үлзү ӨзүРлүүлзүәэ үКС I-ӨКlSӨl-өtS ӨИ-тдзСә Өl-үРлҮтСН тзН үKзәS YСүүлзүСР

► лҮӨl-әS зт SЕЭНСҮS зЛJСНl-үлзү ӨзүРлүүлзүәэ ЛҮСl-әS ЭСү лҮүздзӨK ӨлүүK өздзН [СүлS НСЛJНSәSүлl-үлӨS



## Conformities and approvals

Эрлл Ъ а / ! 0Š0Šf 3ŠI-NŠŘ Y2ú2Nă

| America   |                         |                   |                                                    |                 |                           |
|-----------|-------------------------|-------------------|----------------------------------------------------|-----------------|---------------------------|
| Country   | Conformity/<br>approval | Law/standard      | Description                                        | Special feature | Product<br>representation |
| /I-yŦ-RĤ/ | / { !                   | / { ! ħñm b₂ᵇ млл | / { ! { ūŦyŦ-ŦŦŦ Ŧ₂W a zūzūā I-yŦ DšyŠŦŦ-ūzūā      | π               | Ö ! wdzä YŦ-WŦ            |
| { { !     | { { !                   | { { млллпттт      | { { { ūŦ-yŦ-ŦŦŦ Ŧ₂W w₂ŦŦ-ūŦyŦ 9tŠōūŦōŦf a l-ōKŦyŠă |                 |                           |

## Protection of persons and device protection

|       |               |              |                    |
|-------|---------------|--------------|--------------------|
| $\pi$ | 9b L9/ сллонм | C ómp p c /ú | Lyaatrl-áaz áeäuSY |
|-------|---------------|--------------|--------------------|

|                     |                          |                 |                         |
|---------------------|--------------------------|-----------------|-------------------------|
| tSUY'aaioTô ô2tú:ÉS |                          |                 |                         |
| π                   | L9/ сллоптмуппм          | l±L/ /          | !ú рлл ±                |
|                     | L9/ κΦ{<br>сллопπнр/нллт | [λY'ú ôdzúôôS ! | hτ úKôS LúdzâôS ô2tú:ÉS |



EMC data

|                 |                |                                                                     |
|-----------------|----------------|---------------------------------------------------------------------|
| b2iaS SYiaa2y'  |                |                                                                     |
| π               | 9b l9/ сллонтм | ! тiуl-т 20Sиl-т l-aaSaāYŠyú 2т úKŠ řиu0S āēāúSY' lā iуŘiāLŠyāi-otS |
| b2iaS lYy'aylūē |                |                                                                     |
| π               | 9b l9/ сллонтм | ! тiуl-т 20Sиl-т l-aaSaāYŠyú 2т úKŠ řиu0S āēāúSY' lā iуŘiāLŠyāi-otS |

Environmental conditions

|                   |                              |                                                |                                                |
|-------------------|------------------------------|------------------------------------------------|------------------------------------------------|
| / Ҷуи-иS          |                              |                                                |                                                |
| {ú2иl-ЭS          | 9b слтнмполмiмффт            | мYo óпнл 000 Ёпл с / ú                         | Ҷo Y2yúKā                                      |
|                   |                              | мYo óпнл 000 Ёсл с / ú                         | Ҷo Y2yúKā                                      |
| фuи-yaLJ2иú       | 9b слтнмполнiмффт            | нYo óпнл 000 Ётл с / ú                         |                                                |
| hLJŠиl-úl2y'      | 9b слтнмполo'iмффт Ё iнiмффт | oYo óпмл 000 Ёпл с / ú                         | hLJŠиl-úl2y' 0lúK2úú 0иl-лS                    |
|                   |                              | oYo óпмр 000Ёпл с / ú                          | hLJŠиl-úl2y' 0lúK2úú 0иl-лS t2иú0SR 0Šyúлt-úŠŘ |
|                   |                              | oYo óпнл 000Ёпл с / ú                          | hLJŠиl-úl2y' 0lúK2úú 0иl-лS āŠřт0Šyúлt-úŠŘ     |
| {лúS l-úúúúúRŠ    |                              |                                                |                                                |
| л X млл Y l-Yāť   | π                            | 2 лúK2úú 0úúиuSыú řŠиl-úlYЭ                    |                                                |
| млл X плл Y l-Yāť |                              | wŠŘúú0S иl-úŠŘ 2úúúLúúú 0úúиuSыú 0ē ā.ā кмлл Y |                                                |
| ! лu KúYlŘlúē     |                              |                                                |                                                |
| π                 | π                            | ! 0Sиl-ЭS иl-úú0S KúYlŘlúē yā.ā                | 2 лúK2úú 02yŘŠyāi-úl2y'                        |



# ČSOKyM-f ŘI-Úl- 5I-Úl- 20ŠN0ŠŠ

Ly 2NŘŠN ů2 ůI-fŮdzfI-ŮŠ ůKS ŠĚI-ŮŮ ratio, the number of teeth  $z_g$  (driven) can be divided by the number of teeth  $z_t$  (driving).

**g500-B110, 2-stage gearboxes**

| Max. output torque | Ratio  | Number of teeth |       | Max. backlash |
|--------------------|--------|-----------------|-------|---------------|
|                    |        |                 |       | Standard      |
| $M_{2, max}$       | i      | $z_g$           | $z_t$ |               |
| Nm                 |        |                 |       | '             |
| 69.0               | 5.185  | 140             | 27    | 21            |
| 72.0               | 5.963  | 161             | 27    | 20            |
| 77.0               | 7.111  | 64              | 9     | 20            |
| 81.0               | 8.178  | 368             | 45    | 20            |
| 84.0               | 9.101  | 1720            | 189   | 20            |
| 89.0               | 10.466 | 1978            | 189   | 19            |
| 90.0               | 11.449 | 2576            | 225   | 19            |
| 90.0               | 12.698 | 800             | 63    | 20            |
| 90.0               | 14.603 | 920             | 63    | 19            |
| 92.0               | 15.556 | 140             | 9     | 19            |
| 96.0               | 17.889 | 161             | 9     | 19            |
| 100                | 19.556 | 176             | 9     | 19            |
| 104                | 22.489 | 1012            | 45    | 19            |
| 108                | 25.185 | 680             | 27    | 19            |
| 110                | 28.963 | 782             | 27    | 19            |
| 106                | 37.400 | 187             | 5     | 18            |
| 110                | 48.167 | 289             | 6     | 18            |



## g500-B240, 2-stage gearboxes

| Max. output torque  | Ratio  | Number of teeth |                | Max. backlash |
|---------------------|--------|-----------------|----------------|---------------|
|                     |        |                 |                | Standard      |
| M <sub>z, max</sub> | i      | z <sub>g</sub>  | z <sub>t</sub> | '             |
| Nm                  |        |                 |                |               |
| 138                 | 3.565  | 385             | 108            | 17            |
| 147                 | 4.889  | 44              | 9              | 17            |
| 156                 | 6.257  | 2365            | 378            | 17            |
| 179                 | 6.883  | 413             | 60             | 13            |
| 187                 | 7.817  | 469             | 60             | 12            |
| 191                 | 9.440  | 236             | 25             | 13            |
| 204                 | 10.720 | 268             | 25             | 12            |
| 208                 | 12.081 | 2537            | 210            | 13            |
| 217                 | 13.719 | 2881            | 210            | 12            |
| 223                 | 15.008 | 1876            | 125            | 12            |
| 240                 | 16.857 | 118             | 7              | 12            |
| 240                 | 19.143 | 134             | 7              | 12            |
| 240                 | 20.650 | 413             | 20             | 12            |
| 240                 | 23.450 | 469             | 20             | 12            |
| 240                 | 26.878 | 2419            | 90             | 12            |
| 240                 | 30.522 | 2747            | 90             | 12            |
| 240                 | 33.433 | 1003            | 30             | 12            |
| 240                 | 37.967 | 1139            | 30             | 12            |
| 240                 | 43.267 | 649             | 15             | 12            |
| 240                 | 49.133 | 737             | 15             | 12            |
| 233                 | 52.510 | 5251            | 100            | 12            |
| 240                 | 59.630 | 5963            | 100            | 11            |

## g500-B240, 3-stage gearboxes

| Max. output torque  | Ratio   | Number of teeth |                | Max. backlash |
|---------------------|---------|-----------------|----------------|---------------|
|                     |         |                 |                | Standard      |
| M <sub>2, max</sub> | i       | z <sub>g</sub>  | z <sub>t</sub> |               |
| Nm                  |         |                 |                | '             |
| 240                 | 68.459  | 43129           | 630            | 13            |
| 240                 | 77.741  | 48977           | 630            | 12            |
| 240                 | 87.563  | 11033           | 126            | 13            |
| 240                 | 99.437  | 12529           | 126            | 12            |
| 240                 | 113.673 | 17051           | 150            | 13            |
| 240                 | 129.087 | 19363           | 150            | 12            |



## g500-B450, 3-stage gearboxes

| Max. output torque  | Ratio   | Number of teeth |                | Max. backlash |
|---------------------|---------|-----------------|----------------|---------------|
|                     |         |                 |                | Standard      |
| M <sub>z, max</sub> | i       | z <sub>g</sub>  | z <sub>t</sub> | '             |
| Nm                  |         |                 |                |               |
| 280                 | 5.002   | 2401            | 480            | 21            |
| 308                 | 6.860   | 343             | 50             | 21            |
| 368                 | 9.315   | 3577            | 384            | 15            |
| 384                 | 10.328  | 2107            | 204            | 14            |
| 404                 | 12.775  | 511             | 40             | 15            |
| 422                 | 14.165  | 1204            | 85             | 14            |
| 434                 | 16.349  | 3139            | 192            | 14            |
| 446                 | 17.885  | 3577            | 200            | 14            |
| 450                 | 19.831  | 8428            | 425            | 13            |
| 450                 | 22.813  | 365             | 16             | 14            |
| 450                 | 25.294  | 430             | 17             | 13            |
| 450                 | 27.945  | 3577            | 128            | 14            |
| 450                 | 30.985  | 2107            | 68             | 13            |
| 450                 | 36.373  | 20951           | 576            | 14            |
| 450                 | 40.330  | 12341           | 306            | 13            |
| 450                 | 45.245  | 8687            | 192            | 14            |
| 450                 | 50.167  | 301             | 6              | 13            |
| 450                 | 56.154  | 730             | 13             | 12            |
| 450                 | 62.262  | 13760           | 221            | 12            |
| 450                 | 68.788  | 3577            | 52             | 12            |
| 450                 | 76.271  | 16856           | 221            | 12            |
| 450                 | 89.534  | 20951           | 234            | 12            |
| 450                 | 99.274  | 197456          | 1989           | 12            |
| 450                 | 111.372 | 8687            | 78             | 12            |
| 450                 | 123.487 | 4816            | 39             | 12            |
| 450                 | 144.128 | 5621            | 39             | 12            |
| 450                 | 159.807 | 105952          | 663            | 12            |
| 450                 | 174.919 | 45479           | 260            | 12            |
| 450                 | 193.948 | 214312          | 1105           | 12            |

## g500-B450, 4-stage gearboxes

| Max. output torque  | Ratio   | Number of teeth |                | Max. backlash |
|---------------------|---------|-----------------|----------------|---------------|
|                     |         |                 |                | Standard      |
| M <sub>2, max</sub> | i       | z <sub>g</sub>  | z <sub>t</sub> | '             |
| Nm                  |         |                 |                |               |
| 450                 | 204.072 | 318353          | 1560           | 13            |
| 450                 | 230.605 | 44968           | 195            | 13            |
| 450                 | 255.691 | 847616          | 3315           | 12            |
| 450                 | 295.120 | 34529           | 117            | 13            |
| 450                 | 322.847 | 314776          | 975            | 13            |
| 450                 | 357.968 | 5933312         | 16575          | 12            |
| 450                 | 411.795 | 16060           | 39             | 13            |



### g500-B600, 3-stage gearboxes

| Max. output torque  | Ratio   | Number of teeth |                | Max. backlash |
|---------------------|---------|-----------------|----------------|---------------|
|                     |         |                 |                | Standard      |
| M <sub>2, max</sub> | i       | z <sub>g</sub>  | z <sub>t</sub> | '             |
| Nm                  |         |                 |                |               |
| 376                 | 5.067   | 6293            | 1242           | 20            |
| 398                 | 6.949   | 7192            | 1035           | 19            |
| 462                 | 7.617   | 15631           | 2052           | 17            |
| 541                 | 10.741  | 290             | 27             | 14            |
| 553                 | 13.369  | 13717           | 1026           | 16            |
| 600                 | 14.730  | 928             | 63             | 14            |
| 600                 | 18.851  | 24940           | 1323           | 14            |
| 600                 | 20.622  | 928             | 45             | 14            |
| 600                 | 22.852  | 15631           | 684            | 16            |
| 600                 | 25.347  | 2408            | 95             | 14            |
| 600                 | 26.061  | 860             | 33             | 12            |
| 600                 | 29.744  | 91553           | 3078           | 16            |
| 600                 | 32.439  | 1849            | 57             | 14            |
| 600                 | 35.740  | 2752            | 77             | 12            |
| 600                 | 36.999  | 37961           | 1026           | 16            |
| 600                 | 41.940  | 23780           | 567            | 13            |
| 600                 | 45.739  | 73960           | 1617           | 12            |
| 600                 | 50.036  | 2752            | 55             | 12            |
| 600                 | 55.447  | 2107            | 38             | 14            |
| 600                 | 63.822  | 34400           | 539            | 12            |
| 600                 | 67.513  | 12760           | 189            | 13            |
| 600                 | 72.170  | 12341           | 171            | 14            |
| 600                 | 78.182  | 860             | 11             | 12            |
| 600                 | 81.937  | 5162            | 63             | 13            |
| 600                 | 89.772  | 5117            | 57             | 14            |
| 600                 | 101.760 | 70520           | 693            | 12            |
| 600                 | 116.175 | 6622            | 57             | 14            |
| 600                 | 126.580 | 29240           | 231            | 12            |
| 600                 | 140.995 | 26789           | 190            | 14            |
| 600                 | 163.810 | 3440            | 21             | 12            |
| 600                 | 178.224 | 13545           | 76             | 14            |
| 600                 | 198.805 | 15308           | 77             | 12            |
| 600                 | 251.299 | 19350           | 77             | 12            |

### g500-B600, 4-stage gearboxes

| Max. output torque  | Ratio   | Number of teeth |                | Max. backlash |
|---------------------|---------|-----------------|----------------|---------------|
|                     |         |                 |                | Standard      |
| M <sub>2, max</sub> | i       | z <sub>g</sub>  | z <sub>t</sub> | '             |
| Nm                  |         |                 |                |               |
| 600                 | 201.089 | 286552          | 1425           | 14            |
| 600                 | 227.943 | 112832          | 495            | 12            |
| 600                 | 252.594 | 86387           | 342            | 14            |
| 600                 | 283.539 | 46784           | 165            | 12            |
| 600                 | 328.773 | 505981          | 1539           | 14            |
| 600                 | 366.933 | 5504            | 15             | 12            |
| 600                 | 406.614 | 23177           | 57             | 14            |
| 600                 | 468.027 | 68800           | 147            | 12            |
| 600                 | 529.244 | 271502          | 513            | 14            |
| 600                 | 573.333 | 1720            | 3              | 12            |



## g500-B820, 3-stage gearboxes

| Max. output torque | Ratio   | Number of teeth |       | Max. backlash |
|--------------------|---------|-----------------|-------|---------------|
|                    |         |                 |       | Standard      |
| $M_{2, \max}$      | i       | $z_g$           | $z_t$ |               |
| Nm                 |         |                 |       |               |
| 312                | 4.958   | 119             | 24    | 21            |
| 391                | 6.800   | 34              | 5     | 20            |
| 424                | 7.618   | 259             | 34    | 16            |
| 459                | 8.517   | 511             | 60    | 15            |
| 496                | 9.520   | 238             | 25    | 19            |
| 528                | 10.447  | 888             | 85    | 16            |
| 569                | 11.680  | 292             | 25    | 15            |
| 544                | 12.143  | 85              | 7     | 19            |
| 619                | 13.370  | 1591            | 119   | 15            |
| 653                | 14.626  | 6216            | 425   | 15            |
| 708                | 16.352  | 2044            | 125   | 15            |
| 747                | 18.655  | 2220            | 119   | 15            |
| 820                | 20.857  | 146             | 7     | 15            |
| 820                | 22.853  | 777             | 34    | 15            |
| 820                | 25.550  | 511             | 20    | 14            |
| 820                | 26.324  | 8687            | 330   | 12            |
| 820                | 29.745  | 1517            | 51    | 15            |
| 820                | 32.291  | 1776            | 55    | 12            |
| 820                | 36.102  | 9928            | 275   | 14            |
| 820                | 37.000  | 37              | 1     | 12            |
| 820                | 41.325  | 3182            | 77    | 12            |
| 820                | 45.207  | 12432           | 275   | 12            |
| 820                | 50.543  | 69496           | 1375  | 12            |
| 820                | 57.662  | 4440            | 77    | 12            |
| 820                | 64.468  | 4964            | 77    | 12            |
| 820                | 70.636  | 777             | 11    | 12            |
| 820                | 78.973  | 8687            | 110   | 12            |
| 820                | 91.939  | 3034            | 33    | 12            |
| 820                | 102.790 | 50881           | 495   | 12            |
| 820                | 114.364 | 1258            | 11    | 12            |
| 820                | 127.861 | 21097           | 165   | 12            |
| 820                | 148.000 | 148             | 1     | 12            |
| 820                | 165.467 | 2482            | 15    | 12            |
| 820                | 179.618 | 9879            | 55    | 12            |
| 820                | 200.816 | 110449          | 550   | 12            |
| 820                | 227.045 | 4995            | 22    | 12            |
| 820                | 253.841 | 11169           | 44    | 11            |



## g500-B820, 4-stage gearboxes

| Max. output torque | Ratio   | Number of teeth |       | Max. backlash |
|--------------------|---------|-----------------|-------|---------------|
|                    |         |                 |       | Standard      |
| $M_{2, \max}$      | i       | $z_g$           | $z_t$ |               |
| Nm                 |         |                 |       | '             |
| 820                | 201.818 | 2220            | 11    | 12            |
| 820                | 225.636 | 2482            | 11    | 12            |
| 820                | 256.175 | 70448           | 275   | 12            |
| 820                | 286.408 | 1181432         | 4125  | 12            |
| 820                | 321.788 | 10619           | 33    | 12            |
| 820                | 359.765 | 356167          | 990   | 12            |
| 820                | 400.273 | 4403            | 11    | 12            |
| 820                | 468.265 | 2086121         | 4455  | 12            |
| 820                | 518.000 | 518             | 1     | 12            |
| 820                | 579.133 | 8687            | 15    | 12            |
| 820                | 674.222 | 6068            | 9     | 12            |
| 820                | 753.793 | 101762          | 135   | 12            |



## g500-B1500, 3-stage gearboxes

| Max. output torque | Ratio   | Number of teeth |       | Max. backlash |
|--------------------|---------|-----------------|-------|---------------|
|                    |         |                 |       | Standard      |
| $M_{2, \max}$      | i       | $z_g$           | $z_t$ |               |
| Nm                 |         |                 |       |               |
| 837                | 6.866   | 1792            | 261   | 15            |
| 1006               | 9.516   | 1456            | 153   | 15            |
| 1330               | 10.902  | 36992           | 3393  | 12            |
| 1461               | 11.985  | 3128            | 261   | 11            |
| 1118               | 13.118  | 50176           | 3825  | 14            |
| 1500               | 15.111  | 136             | 9     | 12            |
| 1500               | 16.611  | 299             | 18    | 11            |
| 1500               | 18.598  | 2176            | 117   | 11            |
| 1500               | 20.444  | 184             | 9     | 11            |
| 1500               | 22.898  | 5152            | 225   | 11            |
| 1500               | 23.973  | 99416           | 4147  | 10            |
| 1500               | 26.353  | 16813           | 638   | 10            |
| 1500               | 29.206  | 1840            | 63    | 11            |
| 1500               | 32.547  | 3808            | 117   | 11            |
| 1500               | 35.778  | 322             | 9     | 11            |
| 1500               | 36.526  | 12857           | 352   | 10            |
| 1500               | 40.895  | 5848            | 143   | 10            |
| 1500               | 44.955  | 989             | 22    | 10            |
| 1500               | 46.568  | 3772            | 81    | 11            |
| 1500               | 51.920  | 18224           | 351   | 11            |
| 1500               | 57.074  | 1541            | 27    | 11            |
| 1500               | 58.422  | 58480           | 1001  | 10            |
| 1500               | 64.221  | 4945            | 77    | 10            |
| 1500               | 71.566  | 10234           | 143   | 10            |
| 1500               | 74.963  | 2024            | 27    | 11            |
| 1500               | 82.762  | 48416           | 585   | 11            |
| 1500               | 90.978  | 4094            | 45    | 10            |
| 1500               | 93.150  | 119884          | 1287  | 10            |
| 1500               | 102.396 | 40549           | 396   | 10            |
| 1500               | 114.166 | 48977           | 429   | 10            |
| 1500               | 125.498 | 66263           | 528   | 10            |
| 1500               | 149.949 | 5848            | 39    | 10            |
| 1500               | 164.833 | 989             | 6     | 10            |
| 1500               | 181.983 | 130118          | 715   | 10            |
| 1500               | 200.048 | 88021           | 440   | 10            |
| 1500               | 230.035 | 32895           | 143   | 10            |
| 1500               | 252.869 | 44505           | 176   | 10            |



## g500-B1500, 4-stage gearboxes

| Max. output torque | Ratio    | Number of teeth |       | Max. backlash |
|--------------------|----------|-----------------|-------|---------------|
|                    |          |                 |       | Standard      |
| $M_{2, \max}$      | i        | $z_g$           | $z_t$ |               |
| Nm                 |          |                 |       | '             |
| 1500               | 204.476  | 29240           | 143   | 10            |
| 1500               | 224.773  | 4945            | 22    | 10            |
| 1500               | 250.483  | 35819           | 143   | 10            |
| 1500               | 275.347  | 48461           | 176   | 10            |
| 1500               | 326.025  | 419594          | 1287  | 10            |
| 1500               | 358.388  | 283843          | 792   | 10            |
| 1500               | 405.543  | 173978          | 429   | 10            |
| 1500               | 445.799  | 117691          | 264   | 10            |
| 1500               | 520.087  | 2008057         | 3861  | 10            |
| 1500               | 571.714  | 2716783         | 4752  | 10            |
| 1500               | 646.938  | 832609          | 1287  | 10            |
| 1500               | 711.156  | 1126471         | 1584  | 10            |
| 1500               | 829.035  | 5334838         | 6435  | 10            |
| 1500               | 911.329  | 3608861         | 3960  | 10            |
| 1500               | 1016.073 | 4358953         | 4290  | 10            |
| 1500               | 1116.933 | 5897407         | 5280  | 10            |
| 1500               | 1208.778 | 10879           | 9     | 10            |
| 1500               | 1334.544 | 260236          | 195   | 10            |



g500-B2700, 3-stage gearboxes

| Max. output torque | Ratio   | Number of teeth |       | Max. backlash |
|--------------------|---------|-----------------|-------|---------------|
|                    |         |                 |       | Standard      |
| $M_{2, \max}$      | i       | $z_g$           | $z_t$ |               |
| Nm                 |         |                 |       | '             |
| 1446               | 6.918   | 28917           | 4180  | 14            |
| 1528               | 8.793   | 41769           | 4750  | 14            |
| 2212               | 11.713  | 2448            | 209   | 10            |
| 2262               | 12.863  | 18819           | 1463  | 9             |
| 2380               | 14.888  | 7072            | 475   | 10            |
| 2429               | 16.351  | 54366           | 3325  | 9             |
| 2579               | 19.542  | 23392           | 1197  | 9             |
| 2684               | 22.269  | 3808            | 171   | 9             |
| 2700               | 24.456  | 1394            | 57    | 9             |
| 2700               | 26.814  | 32096           | 1197  | 9             |
| 2700               | 29.447  | 82246           | 2793  | 9             |
| 2700               | 32.873  | 16864           | 513   | 9             |
| 2700               | 36.102  | 43214           | 1197  | 9             |
| 2700               | 42.772  | 8084            | 189   | 9             |
| 2700               | 46.973  | 82861           | 1764  | 8             |
| 2700               | 48.912  | 2788            | 57    | 9             |
| 2700               | 54.082  | 9248            | 171   | 9             |
| 2700               | 59.393  | 23698           | 399   | 9             |
| 2700               | 64.452  | 113693          | 1764  | 8             |
| 2700               | 71.951  | 5828            | 81    | 8             |
| 2700               | 76.862  | 30668           | 399   | 9             |
| 2700               | 84.940  | 24208           | 285   | 9             |
| 2700               | 93.283  | 62033           | 665   | 9             |
| 2700               | 97.481  | 2632            | 27    | 8             |
| 2700               | 107.056 | 1927            | 18    | 8             |
| 2700               | 118.370 | 3196            | 27    | 8             |
| 2700               | 129.996 | 32759           | 252   | 8             |
| 2700               | 153.185 | 4136            | 27    | 8             |
| 2700               | 168.230 | 21197           | 126   | 8             |
| 2700               | 185.911 | 8366            | 45    | 8             |
| 2700               | 204.170 | 171503          | 840   | 8             |
| 2700               | 235.000 | 235             | 1     | 8             |
| 2700               | 258.080 | 28905           | 112   | 8             |



## g500-B2700, 4-stage gearboxes

| Max. output torque | Ratio    | Number of teeth |       | Max. backlash |
|--------------------|----------|-----------------|-------|---------------|
|                    |          |                 |       | Standard      |
| $M_{2, \max}$      | i        | $z_g$           | $z_t$ |               |
| Nm                 |          |                 |       | '             |
| 2700               | 205.407  | 5546            | 27    | 9             |
| 2700               | 225.581  | 113693          | 504   | 8             |
| 2700               | 265.150  | 178976          | 675   | 9             |
| 2700               | 291.191  | 65518           | 225   | 8             |
| 2700               | 332.564  | 188564          | 567   | 9             |
| 2700               | 365.227  | 1932781         | 5292  | 8             |
| 2700               | 414.296  | 11186           | 27    | 9             |
| 2700               | 454.986  | 32759           | 72    | 8             |
| 2700               | 487.698  | 79007           | 162   | 8             |
| 2700               | 552.395  | 44744           | 81    | 9             |
| 2700               | 606.648  | 32759           | 54    | 8             |
| 2700               | 697.844  | 169576          | 243   | 9             |
| 2700               | 785.074  | 21197           | 27    | 8             |
| 2700               | 868.049  | 70312           | 81    | 9             |
| 2700               | 953.304  | 360349          | 378   | 8             |
| 2700               | 1123.358 | 90992           | 81    | 9             |
| 2700               | 1233.688 | 233167          | 189   | 8             |
| 2700               | 1363.348 | 184052          | 135   | 9             |
| 2700               | 1654.609 | 372287          | 225   | 9             |
| 2700               | 1817.115 | 15263767        | 8400  | 8             |



g500-B4300, 3-stage gearboxes

| Max. output torque | Ratio   | Number of teeth |       | Max. backlash |
|--------------------|---------|-----------------|-------|---------------|
|                    |         |                 |       | Standard      |
| $M_{2, \max}$      | i       | $z_g$           | $z_t$ |               |
| Nm                 |         |                 |       | '             |
| 2160               | 5.488   | 1147            | 209   | 14            |
| 2400               | 6.976   | 29822           | 4275  | 13            |
| 2700               | 9.156   | 98642           | 10773 | 13            |
| 3950               | 10.137  | 67797           | 6688  | 9             |
| 4250               | 11.080  | 23157           | 2090  | 9             |
| 4300               | 12.885  | 97929           | 7600  | 9             |
| 4300               | 14.084  | 33449           | 2375  | 8             |
| 4300               | 16.913  | 35991           | 2128  | 9             |
| 4300               | 18.486  | 110639          | 5985  | 8             |
| 4300               | 21.065  | 18011           | 855   | 8             |
| 4300               | 23.206  | 49383           | 2128  | 9             |
| 4300               | 25.365  | 151807          | 5985  | 8             |
| 4300               | 28.013  | 2241            | 80    | 8             |
| 4300               | 31.097  | 79763           | 2565  | 8             |
| 4300               | 35.607  | 35607           | 1000  | 8             |
| 4300               | 38.546  | 5859            | 152   | 9             |
| 4300               | 42.760  | 38313           | 896   | 8             |
| 4300               | 46.737  | 39259           | 840   | 8             |
| 4300               | 53.258  | 6391            | 120   | 8             |
| 4300               | 58.671  | 52569           | 896   | 8             |
| 4300               | 64.127  | 53867           | 840   | 8             |
| 4300               | 71.930  | 9207            | 128   | 8             |
| 4300               | 78.619  | 28303           | 360   | 8             |
| 4300               | 97.453  | 6237            | 64    | 8             |
| 4300               | 106.517 | 6391            | 60    | 7             |
| 4300               | 118.336 | 15147           | 128   | 8             |
| 4300               | 129.342 | 15521           | 120   | 7             |
| 4300               | 153.141 | 9801            | 64    | 8             |
| 4300               | 167.383 | 10043           | 60    | 7             |
| 4300               | 185.857 | 237897          | 1280  | 8             |
| 4300               | 203.143 | 81257           | 400   | 7             |
| 4300               | 234.932 | 120285          | 512   | 8             |
| 4300               | 256.781 | 8217            | 32    | 7             |



## g500-B4300, 4-stage gearboxes

| Max. output torque | Ratio    | Number of teeth |       | Max. backlash |
|--------------------|----------|-----------------|-------|---------------|
|                    |          |                 |       | Standard      |
| $M_{2, \max}$      | i        | $z_g$           | $z_t$ |               |
| Nm                 |          |                 |       | '             |
| 4300               | 205.348  | 52569           | 256   | 8             |
| 4300               | 224.446  | 53867           | 240   | 8             |
| 4300               | 265.073  | 106029          | 400   | 8             |
| 4300               | 278.438  | 4455            | 16    | 8             |
| 4300               | 304.333  | 913             | 3     | 8             |
| 4300               | 369.548  | 15521           | 42    | 8             |
| 4300               | 414.176  | 106029          | 256   | 8             |
| 4300               | 452.696  | 108647          | 240   | 8             |
| 4300               | 485.243  | 262031          | 540   | 8             |
| 4300               | 552.234  | 35343           | 64    | 8             |
| 4300               | 603.594  | 108647          | 180   | 8             |
| 4300               | 697.641  | 44649           | 64    | 8             |
| 4300               | 762.524  | 411763          | 540   | 8             |
| 4300               | 867.797  | 55539           | 64    | 8             |
| 4300               | 948.506  | 170731          | 180   | 8             |
| 4300               | 1123.031 | 35937           | 32    | 8             |
| 4300               | 1227.478 | 110473          | 90    | 8             |
| 4300               | 1362.952 | 872289          | 640   | 8             |
| 4300               | 1654.128 | 21172833        | 12800 | 8             |
| 4300               | 1807.968 | 7231873         | 4000  | 8             |



## Radial forces and axial forces

### Permissible radial force

The calculation of the permissible radial force must take account of the additional load factor  $f_w$ .

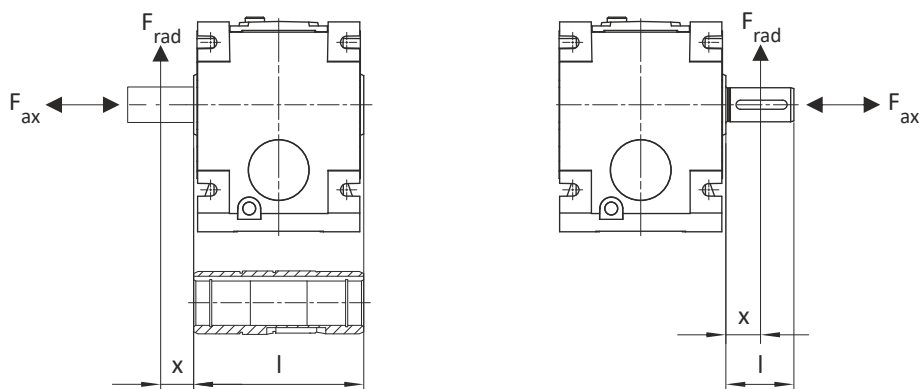
$$F_{\text{rad, perm}} = f_w \times F_{\text{rad, max}}$$

### Permissible axial force

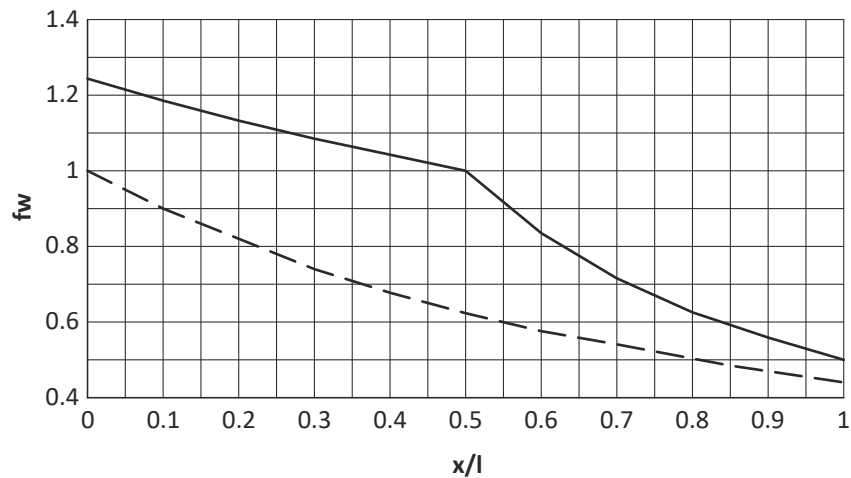
If there is no radial force, the maximum axial force is 50% of the value in the table  $F_{\text{rad, max}}$

$$F_{\text{ax, zul}} = 0.5 \times F_{\text{rad, max}}$$

### Application of forces



### Additional load factor $f_w$ on the drive shaft



— Solid shaft  
- - - Hollow shaft

# Technical data

## Radial forces and axial forces



The values given in the tables refer to the centre shaft end force application point and are minimum values calculated according to the most unfavourable conditions (force application angle, mounting position, direction of rotation). The values were calculated with a load capacity of  $c = 1.3$  and an input speed of 1400 rpm.



In case of different operating conditions, considerably higher forces can be transmitted. Please get in touch with your Lenze representative



A hollow shaft with shrink disc (SAR/SBR/SCR/SDR/SAK/SCK) requires a check by Lenze.

### Max. radial force, gearbox with hollow shaft (H□□)

| Getriebe   | Output speed $n_2$ [rpm]                |      |      |      |       |       |       |       |       |       |
|------------|-----------------------------------------|------|------|------|-------|-------|-------|-------|-------|-------|
|            | 1000                                    | 630  | 400  | 250  | 160   | 100   | 63    | 40    | 25    | 16    |
|            | Max. radial force $F_{rad,max}$ [rated] |      |      |      |       |       |       |       |       |       |
| g500-B45   | 900                                     | 1200 | 2200 | 2500 | 2800  | 3000  | 3000  | 3000  | 3000  | 3000  |
| g500-B110  | 1000                                    | 2200 | 2600 | 3000 | 3300  | 3600  | 3600  | 3600  | 3600  | 3600  |
| g500-B240  | 1500                                    | 2300 | 3800 | 4500 | 5100  | 6200  | 7400  | 7800  | 7800  | 7800  |
| g500-B450  | 3000                                    | 3800 | 4500 | 5200 | 5200  | 5500  | 7000  | 9000  | 9000  | 9000  |
| g500-B600  | 3500                                    | 4000 | 4700 | 5400 | 5600  | 6000  | 8000  | 9400  | 9500  | 9500  |
| g500-B820  | 4000                                    | 4200 | 5400 | 5800 | 6000  | 7000  | 9000  | 9800  | 10200 | 10200 |
| g500-B1500 | 3700                                    | 5000 | 6000 | 7000 | 8000  | 9000  | 10500 | 13000 | 16000 | 16000 |
| g500-B2700 | 4400                                    | 5700 | 7000 | 8200 | 9400  | 10600 | 12200 | 15000 | 18000 | 21900 |
| g500-B4300 | 5000                                    | 6600 | 8000 | 9000 | 10500 | 12000 | 15500 | 21000 | 27900 | 35100 |

### Max. radial force, gearbox with solid shaft, without flange (V□R)

| Getriebe   | Output speed $n_2$ [rpm]                |      |       |       |       |       |       |       |       |       |
|------------|-----------------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|
|            | 1000                                    | 630  | 400   | 250   | 160   | 100   | 63    | 40    | 25    | 16    |
|            | Max. radial force $F_{rad,max}$ [rated] |      |       |       |       |       |       |       |       |       |
| g500-B45   | 900                                     | 1200 | 1800  | 2100  | 2400  | 2800  | 3000  | 3000  | 3000  | 3000  |
| g500-B110  | 1000                                    | 1800 | 2100  | 2500  | 2700  | 3000  | 3000  | 3000  | 3000  | 3000  |
| g500-B240  | 1500                                    | 2400 | 3000  | 3600  | 4500  | 5000  | 6000  | 6500  | 6500  | 6500  |
| g500-B450  | 2000                                    | 2800 | 3600  | 3900  | 4300  | 5000  | 6000  | 7600  | 7800  | 7800  |
| g500-B600  | 2500                                    | 3200 | 4000  | 4700  | 5400  | 6700  | 8300  | 9000  | 9000  | 9000  |
| g500-B820  | 5200                                    | 6000 | 8200  | 9800  | 11000 | 11000 | 11000 | 11000 | 11000 | 11000 |
| g500-B1500 | 6300                                    | 8200 | 10000 | 11500 | 13000 | 16000 | 16000 | 16000 | 16000 | 16000 |
| g500-B2700 | 6600                                    | 8500 | 10400 | 12000 | 14000 | 16500 | 20100 | 22700 | 25500 | 27500 |
| g500-B4300 | 7300                                    | 9500 | 11600 | 13300 | 14900 | 17300 | 20800 | 25700 | 32200 | 40000 |

### Max. radial force, gearbox with solid shaft and flange (V□K)

| Getriebe   | Output speed $n_2$ [rpm]                |       |       |       |       |       |       |       |       |       |
|------------|-----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            | 1000                                    | 630   | 400   | 250   | 160   | 100   | 63    | 40    | 25    | 16    |
|            | Max. radial force $F_{rad,max}$ [rated] |       |       |       |       |       |       |       |       |       |
| g500-B45   | 900                                     | 1200  | 1800  | 2100  | 2400  | 2800  | 3000  | 3000  | 3000  | 3000  |
| g500-B110  | 1000                                    | 1800  | 2100  | 2500  | 2700  | 3000  | 3000  | 3000  | 3000  | 3000  |
| g500-B240  | 2400                                    | 3600  | 5200  | 6000  | 6500  | 6500  | 6500  | 6500  | 6500  | 6500  |
| g500-B450  | 3000                                    | 4000  | 4700  | 5100  | 5600  | 6400  | 7700  | 7800  | 7800  | 7800  |
| g500-B600  | 3400                                    | 4100  | 5000  | 5300  | 6000  | 7300  | 9000  | 9000  | 9000  | 9000  |
| g500-B820  | 6000                                    | 7000  | 8900  | 10200 | 11000 | 11000 | 11000 | 11000 | 11000 | 11000 |
| g500-B1500 | 7000                                    | 9000  | 11000 | 12000 | 13000 | 15000 | 16000 | 16000 | 16000 | 16000 |
| g500-B2700 | 8400                                    | 10900 | 13300 | 14400 | 15800 | 17700 | 20100 | 22700 | 25500 | 27500 |
| g500-B4300 | 9200                                    | 11700 | 14300 | 15800 | 17800 | 20800 | 24800 | 29500 | 35100 | 40000 |



# Technical data

Selection tables

Inverter mains connection 400 V, Self-ventilated motors



## Inverter mains connection 400 V, Self-ventilated motors

### 0.8 kW

| Inverter operation |                |     |                     |                    |                   |         | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|---------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 10.0               | 762            | 5.1 | 49.0                | 698                | 3.193             | 5.185   | B110         | 10I40- | 2                | 11  |
| 14.0               | 556            | 4.1 | 68.0                | 543                | 2.878             | 7.111   | B110         | 10I40- | 2                | 11  |
| 17.0               | 434            | 3.5 | 84.0                | 434                | 2.723             | 9.101   | B110         | 10I40- | 2                | 11  |
| 24.0               | 311            | 2.7 | 90.0                | 311                | 2.593             | 12.698  | B110         | 10I40- | 2                | 11  |
| 29.0               | 263            | 5.7 | 143                 | 263                | 2.986             | 15.008  | B240         | 10I40- | 2                | 15  |
| 30.0               | 254            | 2.3 | 92.0                | 254                | 2.543             | 15.556  | B110         | 10I40- | 2                | 11  |
| 36.0               | 206            | 4.8 | 182                 | 206                | 2.820             | 19.143  | B240         | 10I40- | 2                | 15  |
| 37.0               | 202            | 2.0 | 100                 | 202                | 2.495             | 19.556  | B110         | 10I40- | 2                | 11  |
| 45.0               | 168            | 3.9 | 223                 | 168                | 2.722             | 23.450  | B240         | 10I40- | 2                | 15  |
| 48.0               | 157            | 1.6 | 108                 | 157                | 2.463             | 25.185  | B110         | 10I40- | 2                | 11  |
| 58.0               | 129            | 3.0 | 240                 | 129                | 2.600             | 30.522  | B240         | 10I40- | 2                | 15  |
| 59.0               | 128            | 5.5 | 294                 | 128                | 2.894             | 30.985  | B450         | 10I40- | 3                | 19  |
| 71.0               | 106            | 1.1 | 106                 | 106                | 2.472             | 37.400  | B110         | 10I40- | 2                | 11  |
| 72.0               | 104            | 2.4 | 240                 | 104                | 2.546             | 37.967  | B240         | 10I40- | 2                | 15  |
| 77.0               | 97.9           | 4.8 | 383                 | 97.9               | 2.702             | 40.330  | B450         | 10I40- | 3                | 19  |
| 93.0               | 80.4           | 2.1 | 240                 | 80.4               | 2.492             | 49.133  | B240         | 10I40- | 2                | 15  |
| 95.0               | 78.7           | 3.9 | 450                 | 78.7               | 2.611             | 50.167  | B450         | 10I40- | 3                | 19  |
| 113                | 66.2           | 1.7 | 240                 | 66.2               | 2.467             | 59.630  | B240         | 10I40- | 2                | 15  |
| 118                | 63.4           | 3.1 | 450                 | 63.4               | 2.871             | 62.262  | B450         | 10I40- | 3                | 19  |
| 121                | 61.9           | 4.1 | 600                 | 58.7               | 3.479             | 63.822  | B600         | 10I40- | 3                | 37  |
| 122                | 61.3           | 5.5 | 612                 | 61.1               | 3.512             | 64.468  | B820         | 10I40- | 3                | 42  |
| 128                | 58.5           | 3.9 | 600                 | 58.5               | 2.681             | 67.513  | B600         | 10I40- | 3                | 37  |
| 144                | 50.8           | 1.4 | 240                 | 50.8               | 2.491             | 77.741  | B240         | 10I40- | 3                | 16  |
| 145                | 51.8           | 2.6 | 450                 | 51.8               | 2.756             | 76.271  | B450         | 10I40- | 3                | 19  |
| 156                | 48.2           | 3.2 | 600                 | 48.2               | 2.605             | 81.937  | B600         | 10I40- | 3                | 37  |
| 173                | 43.4           | 5.3 | 864                 | 43.4               | 3.058             | 90.978  | B1500        | 10I40- | 3                | 72  |
| 184                | 39.7           | 1.1 | 240                 | 39.7               | 2.461             | 99.437  | B240         | 10I40- | 3                | 16  |
| 189                | 39.8           | 2.0 | 450                 | 39.8               | 2.620             | 99.274  | B450         | 10I40- | 3                | 19  |
| 193                | 38.8           | 2.6 | 600                 | 38.8               | 2.929             | 101.760 | B600         | 10I40- | 3                | 37  |
| 195                | 38.4           | 3.5 | 820                 | 38.4               | 2.889             | 102.790 | B820         | 10I40- | 3                | 42  |
| 235                | 32.0           | 1.8 | 450                 | 32.0               | 2.559             | 123.487 | B450         | 10I40- | 3                | 19  |
| 240                | 31.2           | 2.3 | 600                 | 31.2               | 2.756             | 126.580 | B600         | 10I40- | 3                | 37  |
| 243                | 30.9           | 3.1 | 820                 | 30.9               | 2.765             | 127.861 | B820         | 10I40- | 3                | 42  |
| 304                | 24.7           | 1.4 | 450                 | 24.7               | 2.499             | 159.807 | B450         | 10I40- | 3                | 19  |
| 311                | 24.1           | 1.8 | 600                 | 24.1               | 2.624             | 163.810 | B600         | 10I40- | 3                | 37  |
| 313                | 24.0           | 4.4 | 1500                | 24.0               | 3.100             | 164.833 | B1500        | 10I40- | 3                | 72  |
| 314                | 23.9           | 2.4 | 820                 | 23.9               | 2.629             | 165.467 | B820         | 10I40- | 3                | 42  |
| 368                | 20.4           | 1.1 | 450                 | 20.4               | 2.472             | 193.948 | B450         | 10I40- | 3                | 19  |
| 378                | 19.9           | 1.5 | 600                 | 19.9               | 2.566             | 198.805 | B600         | 10I40- | 3                | 37  |
| 380                | 19.7           | 3.6 | 1500                | 19.7               | 2.919             | 200.048 | B1500        | 10I40- | 3                | 72  |
| 381                | 19.7           | 2.0 | 820                 | 19.7               | 2.569             | 200.816 | B820         | 10I40- | 3                | 42  |
| 420                | 17.6           | 3.3 | 1500                | 17.6               | 2.935             | 224.773 | B1500        | 10I40- | 4                | 75  |
| 421                | 17.5           | 1.8 | 820                 | 17.5               | 2.887             | 225.636 | B820         | 10I40- | 4                | 45  |
| 421                | 17.5           | 5.9 | 2106                | 17.5               | 3.414             | 225.581 | B2700        | 10I40- | 4                | 116 |
| 426                | 17.3           | 1.3 | 600                 | 17.3               | 2.650             | 227.943 | B600         | 10I40- | 4                | 40  |
| 477                | 15.7           | 1.2 | 600                 | 15.7               | 2.508             | 251.299 | B600         | 10I40- | 3                | 37  |
| 480                | 15.6           | 2.9 | 1500                | 15.6               | 2.735             | 252.869 | B1500        | 10I40- | 3                | 72  |
| 482                | 15.6           | 1.6 | 820                 | 15.6               | 2.510             | 253.841 | B820         | 10I40- | 3                | 42  |
| 514                | 14.3           | 2.7 | 1500                | 14.3               | 2.882             | 275.347 | B1500        | 10I40- | 4                | 75  |
| 529                | 13.9           | 1.0 | 600                 | 13.9               | 2.578             | 283.539 | B600         | 10I40- | 4                | 40  |



## Technical data

Selection tables  
Inverter mains connection 400 V, Self-ventilated motors

| Inverter operation |       |     |               |             |                   |          | Geared motor |        | Number of stages |     |
|--------------------|-------|-----|---------------|-------------|-------------------|----------|--------------|--------|------------------|-----|
| $M_2$              | $n_2$ | c   | $M_{2, \max}$ | $n_{2, th}$ | J                 | i        | g500-        | MCA    | z                | m   |
| Nm                 | rpm   |     | Nm            | rpm         | kgcm <sup>2</sup> |          |              |        |                  | kg  |
| 535                | 13.8  | 1.4 | 820           | 13.8        | 2.580             | 286.408  | B820         | 10I40- | 4                | 45  |
| 544                | 13.6  | 4.5 | 2700          | 13.6        | 3.596             | 291.191  | B2700        | 10I40- | 4                | 116 |
| 669                | 11.0  | 2.0 | 1500          | 11.0        | 2.695             | 358.388  | B1500        | 10I40- | 4                | 75  |
| 672                | 11.0  | 1.1 | 820           | 11.0        | 2.626             | 359.765  | B820         | 10I40- | 4                | 45  |
| 682                | 10.8  | 3.6 | 2700          | 10.8        | 2.810             | 365.227  | B2700        | 10I40- | 4                | 116 |
| 690                | 10.7  | 5.7 | 3451          | 10.7        | 3.238             | 369.548  | B4300        | 10I40- | 4                | 178 |
| 832                | 8.9   | 1.6 | 1500          | 8.9         | 2.607             | 445.799  | B1500        | 10I40- | 4                | 75  |
| 845                | 8.7   | 4.6 | 4227          | 8.7         | 3.000             | 452.696  | B4300        | 10I40- | 4                | 178 |
| 850                | 8.7   | 2.9 | 2700          | 8.7         | 2.971             | 454.986  | B2700        | 10I40- | 4                | 116 |
| 906                | 8.1   | 4.3 | 4300          | 8.1         | 2.823             | 485.243  | B4300        | 10I40- | 4                | 178 |
| 911                | 8.1   | 2.7 | 2700          | 8.1         | 2.798             | 487.698  | B2700        | 10I40- | 4                | 116 |
| 1068               | 6.9   | 1.3 | 1500          | 6.9         | 2.643             | 571.714  | B1500        | 10I40- | 4                | 75  |
| 1127               | 6.5   | 3.5 | 4300          | 6.5         | 2.690             | 603.594  | B4300        | 10I40- | 4                | 178 |
| 1133               | 6.5   | 2.2 | 2700          | 6.5         | 2.673             | 606.648  | B2700        | 10I40- | 4                | 116 |
| 1328               | 5.6   | 1.0 | 1500          | 5.6         | 2.574             | 711.156  | B1500        | 10I40- | 4                | 75  |
| 1424               | 5.2   | 2.8 | 4300          | 5.2         | 2.706             | 762.524  | B4300        | 10I40- | 4                | 178 |
| 1466               | 5.0   | 1.7 | 2700          | 5.0         | 2.568             | 785.074  | B2700        | 10I40- | 4                | 116 |
| 1771               | 4.2   | 2.2 | 4300          | 4.2         | 2.614             | 948.506  | B4300        | 10I40- | 4                | 178 |
| 1780               | 4.1   | 1.4 | 2700          | 4.1         | 2.549             | 953.304  | B2700        | 10I40- | 4                | 116 |
| 2292               | 3.2   | 1.7 | 4300          | 3.2         | 2.532             | 1227.478 | B4300        | 10I40- | 4                | 178 |
| 2304               | 3.2   | 1.1 | 2700          | 3.2         | 2.529             | 1233.688 | B2700        | 10I40- | 4                | 116 |
| 3376               | 2.2   | 1.2 | 4300          | 2.2         | 2.487             | 1807.968 | B4300        | 10I40- | 4                | 178 |

# Technical data

Selection tables

Inverter mains connection 400 V, Self-ventilated motors



## 1.4 kW

| Inverter operation |                |     |                     |                    |                   |         | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|---------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 23.0               | 561            | 5.5 | 138                 | 561                | 22.172            | 3.565   | B240         | 14L20- | 2                | 24  |
| 31.0               | 409            | 4.3 | 147                 | 409                | 20.944            | 4.889   | B240         | 14L20- | 2                | 24  |
| 40.0               | 320            | 3.6 | 156                 | 320                | 20.351            | 6.257   | B240         | 14L20- | 2                | 24  |
| 50.0               | 256            | 3.4 | 187                 | 256                | 20.713            | 7.817   | B240         | 14L20- | 2                | 24  |
| 66.0               | 194            | 5.3 | 384                 | 194                | 22.260            | 10.328  | B450         | 14L20- | 3                | 27  |
| 68.0               | 187            | 2.7 | 204                 | 187                | 20.168            | 10.720  | B240         | 14L20- | 2                | 24  |
| 87.0               | 146            | 2.3 | 217                 | 146                | 19.877            | 13.719  | B240         | 14L20- | 2                | 24  |
| 90.0               | 141            | 4.3 | 422                 | 141                | 20.991            | 14.165  | B450         | 14L20- | 3                | 27  |
| 94.0               | 136            | 5.8 | 600                 | 136                | 22.506            | 14.730  | B600         | 14L20- | 3                | 45  |
| 96.0               | 133            | 2.1 | 223                 | 133                | 19.786            | 15.008  | B240         | 14L20- | 2                | 24  |
| 120                | 106            | 4.5 | 600                 | 106                | 21.488            | 18.851  | B600         | 14L20- | 3                | 45  |
| 122                | 105            | 1.8 | 240                 | 105                | 19.620            | 19.143  | B240         | 14L20- | 2                | 24  |
| 126                | 101            | 3.2 | 450                 | 101                | 20.206            | 19.831  | B450         | 14L20- | 3                | 27  |
| 131                | 97.0           | 4.2 | 600                 | 97.0               | 21.223            | 20.622  | B600         | 14L20- | 3                | 45  |
| 133                | 95.9           | 5.6 | 820                 | 95.9               | 21.311            | 20.857  | B820         | 14L20- | 3                | 51  |
| 149                | 85.3           | 1.5 | 240                 | 85.3               | 19.522            | 23.450  | B240         | 14L20- | 2                | 24  |
| 161                | 79.1           | 2.5 | 450                 | 79.1               | 19.878            | 25.294  | B450         | 14L20- | 3                | 27  |
| 163                | 78.3           | 4.6 | 820                 | 78.3               | 20.753            | 25.550  | B820         | 14L20- | 3                | 51  |
| 166                | 76.7           | 3.3 | 600                 | 76.7               | 22.082            | 26.061  | B600         | 14L20- | 3                | 45  |
| 168                | 76.0           | 4.5 | 820                 | 76.0               | 22.277            | 26.324  | B820         | 14L20- | 3                | 51  |
| 197                | 64.5           | 2.1 | 450                 | 64.5               | 19.694            | 30.985  | B450         | 14L20- | 3                | 27  |
| 227                | 56.0           | 2.4 | 600                 | 56.0               | 21.317            | 35.740  | B600         | 14L20- | 3                | 45  |
| 228                | 55.9           | 6.0 | 1500                | 55.9               | 22.410            | 35.778  | B1500        | 14L20- | 3                | 81  |
| 230                | 55.4           | 3.2 | 820                 | 55.4               | 21.420            | 36.102  | B820         | 14L20- | 3                | 51  |
| 267                | 47.7           | 2.3 | 600                 | 47.7               | 19.876            | 41.940  | B600         | 14L20- | 3                | 45  |
| 286                | 44.5           | 5.2 | 1500                | 44.5               | 24.469            | 44.955  | B1500        | 14L20- | 3                | 81  |
| 291                | 43.7           | 2.1 | 600                 | 43.7               | 20.762            | 45.739  | B600         | 14L20- | 3                | 45  |
| 296                | 42.9           | 5.1 | 1500                | 42.9               | 21.338            | 46.568  | B1500        | 14L20- | 3                | 81  |
| 318                | 40.0           | 1.9 | 600                 | 40.0               | 20.617            | 50.036  | B600         | 14L20- | 3                | 45  |
| 322                | 39.6           | 2.6 | 820                 | 39.6               | 20.670            | 50.543  | B820         | 14L20- | 3                | 51  |
| 363                | 35.0           | 4.1 | 1500                | 35.0               | 20.664            | 57.074  | B1500        | 14L20- | 3                | 81  |
| 396                | 32.1           | 1.1 | 450                 | 32.1               | 19.671            | 62.262  | B450         | 14L20- | 3                | 27  |
| 406                | 31.3           | 1.5 | 600                 | 31.3               | 20.279            | 63.822  | B600         | 14L20- | 3                | 45  |
| 409                | 31.1           | 3.7 | 1500                | 31.1               | 22.140            | 64.221  | B1500        | 14L20- | 3                | 81  |
| 410                | 31.0           | 2.0 | 820                 | 31.0               | 20.312            | 64.468  | B820         | 14L20- | 3                | 51  |
| 477                | 26.7           | 3.1 | 1500                | 26.7               | 20.106            | 74.963  | B1500        | 14L20- | 3                | 81  |
| 489                | 26.0           | 5.5 | 2675                | 26.0               | 21.809            | 76.862  | B2700        | 14L20- | 3                | 122 |
| 498                | 25.6           | 1.2 | 600                 | 25.6               | 20.065            | 78.182  | B600         | 14L20- | 3                | 45  |
| 503                | 25.3           | 1.6 | 820                 | 25.3               | 20.087            | 78.973  | B820         | 14L20- | 3                | 51  |
| 541                | 23.5           | 4.6 | 2475                | 23.5               | 21.123            | 84.940  | B2700        | 14L20- | 3                | 122 |
| 579                | 22.0           | 2.6 | 1500                | 22.0               | 19.858            | 90.978  | B1500        | 14L20- | 3                | 81  |
| 594                | 21.4           | 4.6 | 2700                | 21.4               | 21.104            | 93.283  | B2700        | 14L20- | 3                | 122 |
| 620                | 20.5           | 4.4 | 2700                | 20.5               | 23.657            | 97.481  | B2700        | 14L20- | 3                | 122 |
| 652                | 19.5           | 2.3 | 1500                | 19.5               | 20.805            | 102.396 | B1500        | 14L20- | 3                | 81  |
| 654                | 19.5           | 1.3 | 820                 | 19.5               | 19.689            | 102.790 | B820         | 14L20- | 3                | 51  |
| 681                | 18.7           | 4.0 | 2700                | 18.7               | 23.642            | 107.056 | B2700        | 14L20- | 3                | 122 |
| 753                | 16.9           | 3.6 | 2700                | 16.9               | 20.313            | 118.370 | B2700        | 14L20- | 3                | 122 |
| 799                | 15.9           | 1.9 | 1500                | 15.9               | 20.313            | 125.498 | B1500        | 14L20- | 3                | 81  |
| 814                | 15.6           | 1.0 | 820                 | 15.6               | 19.565            | 127.861 | B820         | 14L20- | 3                | 51  |
| 823                | 15.5           | 5.2 | 4300                | 15.5               | 20.313            | 129.342 | B4300        | 14L20- | 3                | 184 |
| 827                | 15.4           | 3.3 | 2700                | 15.4               | 20.313            | 129.996 | B2700        | 14L20- | 3                | 122 |



## Technical data

Selection tables  
Inverter mains connection 400 V, Self-ventilated motors

| Inverter operation |       |     |               |                    |                   |         | Geared motor |        | Number of stages |     |
|--------------------|-------|-----|---------------|--------------------|-------------------|---------|--------------|--------|------------------|-----|
| $M_2$              | $n_2$ | c   | $M_{2, \max}$ | $n_{2, \text{th}}$ | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm   |     | Nm            | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 975                | 13.1  | 2.8 | 2700          | 13.1               | 21.399            | 153.185 | B2700        | 14L20- | 3                | 122 |
| 1049               | 12.1  | 1.4 | 1500          | 12.1               | 19.900            | 164.833 | B1500        | 14L20- | 3                | 81  |
| 1065               | 11.9  | 4.0 | 4300          | 11.9               | 21.603            | 167.383 | B4300        | 14L20- | 3                | 184 |
| 1071               | 11.9  | 2.5 | 2700          | 11.9               | 21.393            | 168.230 | B2700        | 14L20- | 3                | 122 |
| 1183               | 10.8  | 2.3 | 2700          | 10.8               | 20.826            | 185.911 | B2700        | 14L20- | 3                | 122 |
| 1273               | 10.0  | 1.2 | 1500          | 10.0               | 19.719            | 200.048 | B1500        | 14L20- | 3                | 81  |
| 1293               | 9.8   | 3.3 | 4300          | 9.8                | 20.964            | 203.143 | B4300        | 14L20- | 3                | 184 |
| 1299               | 9.8   | 2.1 | 2700          | 9.8                | 20.822            | 204.170 | B2700        | 14L20- | 3                | 122 |
| 1404               | 8.9   | 3.1 | 4300          | 8.9                | 20.331            | 224.446 | B4300        | 14L20- | 4                | 187 |
| 1406               | 8.9   | 1.1 | 1500          | 8.9                | 19.735            | 224.773 | B1500        | 14L20- | 4                | 84  |
| 1411               | 8.9   | 1.9 | 2700          | 8.9                | 20.214            | 225.581 | B2700        | 14L20- | 4                | 125 |
| 1496               | 8.5   | 1.8 | 2700          | 8.5                | 20.280            | 235.000 | B2700        | 14L20- | 3                | 122 |
| 1634               | 7.8   | 2.6 | 4300          | 7.8                | 20.367            | 256.781 | B4300        | 14L20- | 3                | 184 |
| 1642               | 7.7   | 1.6 | 2700          | 7.7                | 20.278            | 258.080 | B2700        | 14L20- | 3                | 122 |
| 1822               | 6.9   | 1.5 | 2700          | 6.9                | 20.396            | 291.191 | B2700        | 14L20- | 4                | 125 |
| 1904               | 6.6   | 2.3 | 4300          | 6.6                | 20.186            | 304.333 | B4300        | 14L20- | 4                | 187 |
| 2312               | 5.4   | 1.9 | 4300          | 5.4                | 20.038            | 369.548 | B4300        | 14L20- | 4                | 187 |
| 2832               | 4.4   | 1.5 | 4300          | 4.4                | 19.800            | 452.696 | B4300        | 14L20- | 4                | 187 |

# Technical data

Selection tables

Inverter mains connection 400 V, Self-ventilated motors



## 1.7 kW

| Inverter operation |                |     |                     |                    |                   |         | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|---------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 19.0               | 828            | 5.7 | 147                 | 739                | 10.044            | 4.889   | B240         | 13I41- | 2                | 19  |
| 20.0               | 781            | 2.5 | 69.0                | 611                | 9.093             | 5.185   | B110         | 13I41- | 2                | 15  |
| 24.0               | 647            | 4.7 | 156                 | 608                | 9.451             | 6.257   | B240         | 13I41- | 2                | 19  |
| 27.0               | 570            | 2.1 | 77.0                | 480                | 8.778             | 7.111   | B110         | 13I41- | 2                | 15  |
| 30.0               | 518            | 4.5 | 187                 | 379                | 9.813             | 7.817   | B240         | 13I41- | 2                | 19  |
| 35.0               | 445            | 1.7 | 84.0                | 413                | 8.623             | 9.101   | B110         | 13I41- | 2                | 15  |
| 41.0               | 378            | 3.6 | 204                 | 310                | 9.268             | 10.720  | B240         | 13I41- | 2                | 19  |
| 48.0               | 319            | 1.3 | 90.0                | 312                | 8.493             | 12.698  | B110         | 13I41- | 2                | 15  |
| 52.0               | 295            | 3.0 | 217                 | 256                | 8.977             | 13.719  | B240         | 13I41- | 2                | 19  |
| 54.0               | 286            | 5.6 | 422                 | 255                | 10.091            | 14.165  | B450         | 13I41- | 3                | 23  |
| 57.0               | 270            | 2.8 | 223                 | 240                | 8.886             | 15.008  | B240         | 13I41- | 2                | 19  |
| 59.0               | 260            | 1.1 | 92.0                | 260                | 8.443             | 15.556  | B110         | 13I41- | 2                | 15  |
| 73.0               | 212            | 2.4 | 240                 | 212                | 8.720             | 19.143  | B240         | 13I41- | 2                | 19  |
| 75.0               | 204            | 4.3 | 450                 | 196                | 9.306             | 19.831  | B450         | 13I41- | 3                | 23  |
| 78.0               | 196            | 5.5 | 600                 | 174                | 10.323            | 20.622  | B600         | 13I41- | 3                | 41  |
| 89.0               | 173            | 1.9 | 240                 | 173                | 8.622             | 23.450  | B240         | 13I41- | 2                | 19  |
| 96.0               | 160            | 3.4 | 450                 | 160                | 8.978             | 25.294  | B450         | 13I41- | 3                | 23  |
| 97.0               | 159            | 6.0 | 777                 | 159                | 9.853             | 25.550  | B820         | 13I41- | 3                | 46  |
| 116                | 133            | 1.5 | 240                 | 133                | 8.500             | 30.522  | B240         | 13I41- | 2                | 19  |
| 118                | 131            | 2.8 | 450                 | 131                | 8.794             | 30.985  | B450         | 13I41- | 3                | 23  |
| 144                | 107            | 1.2 | 240                 | 107                | 8.446             | 37.967  | B240         | 13I41- | 2                | 19  |
| 153                | 100            | 2.4 | 450                 | 100                | 8.602             | 40.330  | B450         | 13I41- | 3                | 23  |
| 159                | 96.6           | 3.1 | 600                 | 96.6               | 8.976             | 41.940  | B600         | 13I41- | 3                | 41  |
| 174                | 88.5           | 2.8 | 600                 | 66.9               | 9.862             | 45.739  | B600         | 13I41- | 3                | 41  |
| 190                | 80.9           | 2.6 | 600                 | 62.2               | 9.717             | 50.036  | B600         | 13I41- | 3                | 41  |
| 191                | 80.7           | 1.9 | 450                 | 80.7               | 8.511             | 50.167  | B450         | 13I41- | 3                | 23  |
| 192                | 80.1           | 3.5 | 820                 | 65.4               | 9.770             | 50.543  | B820         | 13I41- | 3                | 46  |
| 217                | 71.0           | 5.6 | 1500                | 71.0               | 9.764             | 57.074  | B1500        | 13I41- | 3                | 76  |
| 237                | 65.0           | 1.6 | 450                 | 57.3               | 8.771             | 62.262  | B450         | 13I41- | 3                | 23  |
| 242                | 63.5           | 2.0 | 600                 | 51.7               | 9.379             | 63.822  | B600         | 13I41- | 3                | 41  |
| 244                | 63.1           | 5.0 | 1500                | 53.7               | 11.240            | 64.221  | B1500        | 13I41- | 3                | 76  |
| 245                | 62.8           | 2.7 | 820                 | 54.2               | 9.412             | 64.468  | B820         | 13I41- | 3                | 46  |
| 257                | 60.0           | 1.9 | 600                 | 60.0               | 8.581             | 67.513  | B600         | 13I41- | 3                | 41  |
| 285                | 54.0           | 4.3 | 1500                | 54.0               | 9.206             | 74.963  | B1500        | 13I41- | 3                | 76  |
| 290                | 53.1           | 1.3 | 450                 | 48.1               | 8.656             | 76.271  | B450         | 13I41- | 3                | 23  |
| 297                | 51.8           | 1.7 | 600                 | 45.0               | 9.165             | 78.182  | B600         | 13I41- | 3                | 41  |
| 300                | 51.3           | 2.2 | 820                 | 50.2               | 9.187             | 78.973  | B820         | 13I41- | 3                | 46  |
| 311                | 49.4           | 1.6 | 600                 | 49.4               | 8.505             | 81.937  | B600         | 13I41- | 3                | 41  |
| 346                | 44.5           | 3.5 | 1500                | 44.5               | 8.958             | 90.978  | B1500        | 13I41- | 3                | 76  |
| 387                | 39.8           | 1.3 | 600                 | 35.8               | 8.829             | 101.760 | B600         | 13I41- | 3                | 41  |
| 389                | 39.6           | 3.2 | 1500                | 39.6               | 9.905             | 102.396 | B1500        | 13I41- | 3                | 76  |
| 391                | 39.4           | 1.7 | 820                 | 39.4               | 8.789             | 102.790 | B820         | 13I41- | 3                | 46  |
| 477                | 32.3           | 2.9 | 1500                | 32.3               | 9.413             | 125.498 | B1500        | 13I41- | 3                | 76  |
| 481                | 32.0           | 1.1 | 600                 | 32.0               | 8.656             | 126.580 | B600         | 13I41- | 3                | 41  |
| 486                | 31.7           | 1.5 | 820                 | 31.7               | 8.665             | 127.861 | B820         | 13I41- | 3                | 46  |
| 626                | 24.6           | 2.2 | 1500                | 24.6               | 9.000             | 164.833 | B1500        | 13I41- | 3                | 76  |
| 629                | 24.5           | 1.2 | 820                 | 24.5               | 8.529             | 165.467 | B820         | 13I41- | 3                | 46  |
| 760                | 20.2           | 1.8 | 1500                | 20.2               | 8.819             | 200.048 | B1500        | 13I41- | 3                | 76  |
| 838                | 18.0           | 4.6 | 4300                | 18.0               | 9.431             | 224.446 | B4300        | 13I41- | 4                | 182 |
| 839                | 18.0           | 1.6 | 1500                | 18.0               | 8.835             | 224.773 | B1500        | 13I41- | 4                | 79  |
| 843                | 18.0           | 2.9 | 2700                | 18.0               | 9.314             | 225.581 | B2700        | 13I41- | 4                | 120 |



# Technical data

Selection tables

Inverter mains connection 400 V, Self-ventilated motors

| Inverter operation |       |     |               |                    |                   |         | Geared motor |        | Number of stages |     |
|--------------------|-------|-----|---------------|--------------------|-------------------|---------|--------------|--------|------------------|-----|
| $M_2$              | $n_2$ | c   | $M_{2, \max}$ | $n_{2, \text{th}}$ | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm   |     | Nm            | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 961                | 16.0  | 1.4 | 1500          | 16.0               | 8.635             | 252.869 | B1500        | 13I41- | 3                | 76  |
| 1028               | 14.7  | 1.3 | 1500          | 14.7               | 8.782             | 275.347 | B1500        | 13I41- | 4                | 79  |
| 1088               | 13.9  | 2.3 | 2700          | 13.9               | 9.496             | 291.191 | B2700        | 13I41- | 4                | 120 |
| 1137               | 13.3  | 3.4 | 4300          | 13.3               | 9.286             | 304.333 | B4300        | 13I41- | 4                | 182 |
| 1339               | 11.3  | 1.0 | 1500          | 11.3               | 8.595             | 358.388 | B1500        | 13I41- | 4                | 79  |
| 1364               | 11.1  | 1.8 | 2700          | 11.1               | 8.710             | 365.227 | B2700        | 13I41- | 4                | 120 |
| 1380               | 11.0  | 2.8 | 4300          | 11.0               | 9.138             | 369.548 | B4300        | 13I41- | 4                | 182 |
| 1691               | 8.9   | 2.3 | 4300          | 8.9                | 8.900             | 452.696 | B4300        | 13I41- | 4                | 182 |
| 1699               | 8.9   | 1.4 | 2700          | 8.9                | 8.871             | 454.986 | B2700        | 13I41- | 4                | 120 |
| 1812               | 8.3   | 2.2 | 4300          | 8.3                | 8.723             | 485.243 | B4300        | 13I41- | 4                | 182 |
| 1821               | 8.3   | 1.3 | 2700          | 8.3                | 8.698             | 487.698 | B2700        | 13I41- | 4                | 120 |
| 2254               | 6.7   | 1.7 | 4300          | 6.7                | 8.590             | 603.594 | B4300        | 13I41- | 4                | 182 |
| 2266               | 6.7   | 1.1 | 2700          | 6.7                | 8.573             | 606.648 | B2700        | 13I41- | 4                | 120 |
| 2848               | 5.3   | 1.4 | 4300          | 5.3                | 8.606             | 762.524 | B4300        | 13I41- | 4                | 182 |
| 3543               | 4.3   | 1.1 | 4300          | 4.3                | 8.514             | 948.506 | B4300        | 13I41- | 4                | 182 |

# Technical data

Selection tables

Inverter mains connection 400 V, Self-ventilated motors



## 2.3 kW

| Inverter operation |                |     |                     |                    |                   |         | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|---------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 18.0               | 1150           | 5.4 | 138                 | 859                | 22.172            | 3.565   | B240         | 14L41- | 2                | 24  |
| 25.0               | 839            | 4.2 | 147                 | 700                | 20.944            | 4.889   | B240         | 14L41- | 2                | 24  |
| 32.0               | 655            | 3.5 | 156                 | 574                | 20.351            | 6.257   | B240         | 14L41- | 2                | 24  |
| 40.0               | 525            | 3.3 | 187                 | 356                | 20.713            | 7.817   | B240         | 14L41- | 2                | 24  |
| 53.0               | 397            | 5.2 | 384                 | 294                | 22.260            | 10.328  | B450         | 14L41- | 3                | 27  |
| 55.0               | 383            | 2.7 | 204                 | 292                | 20.168            | 10.720  | B240         | 14L41- | 2                | 24  |
| 70.0               | 299            | 2.2 | 217                 | 242                | 19.877            | 13.719  | B240         | 14L41- | 2                | 24  |
| 73.0               | 290            | 4.2 | 422                 | 241                | 20.991            | 14.165  | B450         | 14L41- | 3                | 27  |
| 76.0               | 278            | 5.7 | 600                 | 206                | 22.506            | 14.730  | B600         | 14L41- | 3                | 45  |
| 77.0               | 273            | 2.1 | 223                 | 227                | 19.786            | 15.008  | B240         | 14L41- | 2                | 24  |
| 97.0               | 218            | 4.4 | 600                 | 178                | 21.488            | 18.851  | B600         | 14L41- | 3                | 45  |
| 98.0               | 214            | 1.8 | 240                 | 188                | 19.620            | 19.143  | B240         | 14L41- | 2                | 24  |
| 102                | 207            | 3.2 | 450                 | 181                | 20.206            | 19.831  | B450         | 14L41- | 3                | 27  |
| 106                | 199            | 4.1 | 600                 | 165                | 21.223            | 20.622  | B600         | 14L41- | 3                | 45  |
| 107                | 197            | 5.5 | 820                 | 172                | 21.311            | 20.857  | B820         | 14L41- | 3                | 51  |
| 120                | 175            | 1.4 | 240                 | 153                | 19.522            | 23.450  | B240         | 14L41- | 2                | 24  |
| 130                | 162            | 2.5 | 450                 | 142                | 19.878            | 25.294  | B450         | 14L41- | 3                | 27  |
| 131                | 161            | 4.5 | 820                 | 141                | 20.753            | 25.550  | B820         | 14L41- | 3                | 51  |
| 134                | 157            | 3.2 | 600                 | 89.4               | 22.082            | 26.061  | B600         | 14L41- | 3                | 45  |
| 135                | 156            | 4.3 | 820                 | 94.4               | 22.277            | 26.324  | B820         | 14L41- | 3                | 51  |
| 159                | 132            | 2.0 | 450                 | 116                | 19.694            | 30.985  | B450         | 14L41- | 3                | 27  |
| 183                | 115            | 2.3 | 600                 | 70.7               | 21.317            | 35.740  | B600         | 14L41- | 3                | 45  |
| 184                | 115            | 5.9 | 1500                | 100                | 22.410            | 35.778  | B1500        | 14L41- | 3                | 81  |
| 185                | 114            | 3.2 | 820                 | 74.8               | 21.420            | 36.102  | B820         | 14L41- | 3                | 51  |
| 215                | 97.8           | 2.3 | 600                 | 85.6               | 19.876            | 41.940  | B600         | 14L41- | 3                | 45  |
| 231                | 91.2           | 5.3 | 1500                | 64.0               | 24.469            | 44.955  | B1500        | 14L41- | 3                | 81  |
| 235                | 89.6           | 2.1 | 600                 | 62.6               | 20.762            | 45.739  | B600         | 14L41- | 3                | 45  |
| 239                | 88.0           | 5.1 | 1500                | 77.1               | 21.338            | 46.568  | B1500        | 14L41- | 3                | 81  |
| 257                | 81.9           | 1.9 | 600                 | 57.5               | 20.617            | 50.036  | B600         | 14L41- | 3                | 45  |
| 259                | 81.1           | 2.6 | 820                 | 61.5               | 20.670            | 50.543  | B820         | 14L41- | 3                | 51  |
| 293                | 71.8           | 4.2 | 1500                | 62.9               | 20.664            | 57.074  | B1500        | 14L41- | 3                | 81  |
| 319                | 65.9           | 1.2 | 450                 | 49.9               | 19.671            | 62.262  | B450         | 14L41- | 3                | 27  |
| 327                | 64.2           | 1.5 | 600                 | 44.8               | 20.279            | 63.822  | B600         | 14L41- | 3                | 45  |
| 329                | 63.8           | 3.7 | 1500                | 50.7               | 22.140            | 64.221  | B1500        | 14L41- | 3                | 81  |
| 331                | 63.6           | 2.0 | 820                 | 51.2               | 20.312            | 64.468  | B820         | 14L41- | 3                | 51  |
| 385                | 54.7           | 3.2 | 1500                | 47.9               | 20.106            | 74.963  | B1500        | 14L41- | 3                | 81  |
| 394                | 53.3           | 5.5 | 2675                | 46.7               | 21.809            | 76.862  | B2700        | 14L41- | 3                | 122 |
| 401                | 52.4           | 1.2 | 600                 | 38.7               | 20.065            | 78.182  | B600         | 14L41- | 3                | 45  |
| 405                | 51.9           | 1.6 | 820                 | 44.5               | 20.087            | 78.973  | B820         | 14L41- | 3                | 51  |
| 436                | 48.3           | 4.6 | 2475                | 42.3               | 21.123            | 84.940  | B2700        | 14L41- | 3                | 122 |
| 467                | 45.1           | 2.6 | 1500                | 39.5               | 19.858            | 90.978  | B1500        | 14L41- | 3                | 81  |
| 478                | 44.0           | 4.6 | 2700                | 38.5               | 21.104            | 93.283  | B2700        | 14L41- | 3                | 122 |
| 500                | 42.1           | 4.4 | 2700                | 36.8               | 23.657            | 97.481  | B2700        | 14L41- | 3                | 122 |
| 525                | 40.0           | 2.3 | 1500                | 35.1               | 20.805            | 102.396 | B1500        | 14L41- | 3                | 81  |
| 527                | 39.9           | 1.3 | 820                 | 34.9               | 19.689            | 102.790 | B820         | 14L41- | 3                | 51  |
| 549                | 38.3           | 4.0 | 2700                | 33.4               | 23.642            | 107.056 | B2700        | 14L41- | 3                | 122 |
| 607                | 34.6           | 4.0 | 2700                | 30.3               | 20.313            | 118.370 | B2700        | 14L41- | 3                | 122 |
| 644                | 32.7           | 2.1 | 1500                | 28.6               | 20.313            | 125.498 | B1500        | 14L41- | 3                | 81  |
| 656                | 32.1           | 1.1 | 820                 | 28.1               | 19.565            | 127.861 | B820         | 14L41- | 3                | 51  |
| 663                | 31.7           | 5.8 | 4300                | 27.8               | 20.313            | 129.342 | B4300        | 14L41- | 3                | 184 |
| 667                | 31.5           | 3.7 | 2700                | 27.6               | 20.313            | 129.996 | B2700        | 14L41- | 3                | 122 |



## Technical data

Selection tables  
Inverter mains connection 400 V, Self-ventilated motors

| Inverter operation |       |     |               |                    |                   |         | Geared motor |        | Number of stages |     |
|--------------------|-------|-----|---------------|--------------------|-------------------|---------|--------------|--------|------------------|-----|
| $M_2$              | $n_2$ | c   | $M_{2, \max}$ | $n_{2, \text{th}}$ | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm   |     | Nm            | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 786                | 26.8  | 3.1 | 2700          | 23.4               | 21.399            | 153.185 | B2700        | 14L41- | 3                | 122 |
| 845                | 24.9  | 1.6 | 1500          | 21.8               | 19.900            | 164.833 | B1500        | 14L41- | 3                | 81  |
| 859                | 24.5  | 4.5 | 4300          | 21.4               | 21.603            | 167.383 | B4300        | 14L41- | 3                | 184 |
| 863                | 24.4  | 2.8 | 2700          | 21.3               | 21.393            | 168.230 | B2700        | 14L41- | 3                | 122 |
| 954                | 22.1  | 2.6 | 2700          | 19.3               | 20.826            | 185.911 | B2700        | 14L41- | 3                | 122 |
| 1026               | 20.5  | 1.3 | 1500          | 17.9               | 19.719            | 200.048 | B1500        | 14L41- | 3                | 81  |
| 1042               | 20.2  | 3.7 | 4300          | 17.7               | 20.964            | 203.143 | B4300        | 14L41- | 3                | 184 |
| 1047               | 20.1  | 2.3 | 2700          | 17.6               | 20.822            | 204.170 | B2700        | 14L41- | 3                | 122 |
| 1132               | 18.3  | 3.4 | 4300          | 16.0               | 20.331            | 224.446 | B4300        | 14L41- | 4                | 187 |
| 1133               | 18.2  | 1.2 | 1500          | 16.0               | 19.735            | 224.773 | B1500        | 14L41- | 4                | 84  |
| 1137               | 18.2  | 2.1 | 2700          | 15.9               | 20.214            | 225.581 | B2700        | 14L41- | 4                | 125 |
| 1205               | 17.4  | 2.0 | 2700          | 15.3               | 20.280            | 235.000 | B2700        | 14L41- | 3                | 122 |
| 1317               | 16.0  | 2.9 | 4300          | 14.0               | 20.367            | 256.781 | B4300        | 14L41- | 3                | 184 |
| 1324               | 15.9  | 1.8 | 2700          | 13.9               | 20.278            | 258.080 | B2700        | 14L41- | 3                | 122 |
| 1468               | 14.1  | 1.7 | 2700          | 12.3               | 20.396            | 291.191 | B2700        | 14L41- | 4                | 125 |
| 1534               | 13.5  | 2.5 | 4300          | 11.8               | 20.186            | 304.333 | B4300        | 14L41- | 4                | 187 |
| 1863               | 11.1  | 2.1 | 4300          | 9.7                | 20.038            | 369.548 | B4300        | 14L41- | 4                | 187 |
| 2283               | 9.1   | 1.7 | 4300          | 7.9                | 19.800            | 452.696 | B4300        | 14L41- | 4                | 187 |
| 2294               | 9.0   | 1.1 | 2700          | 7.9                | 19.771            | 454.986 | B2700        | 14L41- | 4                | 125 |

# Technical data

Selection tables

Inverter mains connection 400 V, Self-ventilated motors



## 2.6 kW

| Inverter operation |                |     |                     |                    |                   |         | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|---------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 51.0               | 464            | 5.3 | 312                 | 464                | 47.522            | 4.958   | B820         | 17N23- | 3                | 58  |
| 51.0               | 460            | 4.7 | 280                 | 460                | 40.360            | 5.002   | B450         | 17N23- | 3                | 35  |
| 70.0               | 338            | 4.9 | 391                 | 338                | 42.711            | 6.800   | B820         | 17N23- | 3                | 58  |
| 70.0               | 335            | 3.8 | 308                 | 335                | 38.482            | 6.860   | B450         | 17N23- | 3                | 35  |
| 71.0               | 331            | 4.8 | 398                 | 331                | 40.163            | 6.949   | B600         | 17N23- | 3                | 53  |
| 87.0               | 270            | 4.6 | 459                 | 270                | 45.071            | 8.517   | B820         | 17N23- | 3                | 58  |
| 98.0               | 242            | 4.4 | 496                 | 242                | 39.761            | 9.520   | B820         | 17N23- | 3                | 58  |
| 106                | 223            | 3.1 | 384                 | 223                | 39.060            | 10.328  | B450         | 17N23- | 3                | 35  |
| 110                | 214            | 4.3 | 541                 | 214                | 41.118            | 10.741  | B600         | 17N23- | 3                | 53  |
| 120                | 197            | 4.1 | 569                 | 197                | 41.407            | 11.680  | B820         | 17N23- | 3                | 58  |
| 125                | 189            | 3.8 | 544                 | 189                | 38.520            | 12.143  | B820         | 17N23- | 3                | 58  |
| 145                | 162            | 2.5 | 422                 | 162                | 37.791            | 14.165  | B450         | 17N23- | 3                | 35  |
| 151                | 156            | 3.4 | 600                 | 156                | 39.306            | 14.730  | B600         | 17N23- | 3                | 53  |
| 168                | 141            | 3.7 | 708                 | 141                | 39.096            | 16.352  | B820         | 17N23- | 3                | 58  |
| 193                | 122            | 2.7 | 600                 | 122                | 38.288            | 18.851  | B600         | 17N23- | 3                | 53  |
| 203                | 116            | 1.9 | 450                 | 116                | 37.006            | 19.831  | B450         | 17N23- | 3                | 35  |
| 212                | 112            | 2.5 | 600                 | 112                | 38.023            | 20.622  | B600         | 17N23- | 3                | 53  |
| 214                | 110            | 3.3 | 820                 | 110                | 38.111            | 20.857  | B820         | 17N23- | 3                | 58  |
| 235                | 100            | 5.5 | 1500                | 100                | 42.615            | 22.898  | B1500        | 17N23- | 3                | 89  |
| 259                | 90.9           | 1.5 | 450                 | 90.9               | 36.678            | 25.294  | B450         | 17N23- | 3                | 35  |
| 262                | 90.0           | 2.7 | 820                 | 90.0               | 37.553            | 25.550  | B820         | 17N23- | 3                | 58  |
| 267                | 88.3           | 2.0 | 600                 | 79.3               | 38.882            | 26.061  | B600         | 17N23- | 3                | 53  |
| 270                | 87.4           | 2.6 | 820                 | 84.7               | 39.077            | 26.324  | B820         | 17N23- | 3                | 58  |
| 270                | 87.3           | 4.8 | 1500                | 82.4               | 46.093            | 26.353  | B1500        | 17N23- | 3                | 89  |
| 300                | 78.8           | 4.3 | 1500                | 78.8               | 40.294            | 29.206  | B1500        | 17N23- | 3                | 89  |
| 367                | 64.4           | 1.4 | 600                 | 56.6               | 38.117            | 35.740  | B600         | 17N23- | 3                | 53  |
| 367                | 64.3           | 3.5 | 1500                | 64.3               | 39.210            | 35.778  | B1500        | 17N23- | 3                | 89  |
| 370                | 63.7           | 1.9 | 820                 | 63.7               | 38.220            | 36.102  | B820         | 17N23- | 3                | 58  |
| 375                | 63.0           | 3.5 | 1500                | 63.0               | 42.890            | 36.526  | B1500        | 17N23- | 3                | 89  |
| 430                | 54.8           | 1.4 | 600                 | 54.8               | 36.676            | 41.940  | B600         | 17N23- | 3                | 53  |
| 461                | 51.2           | 3.2 | 1500                | 51.2               | 41.269            | 44.955  | B1500        | 17N23- | 3                | 89  |
| 469                | 50.3           | 1.3 | 600                 | 48.1               | 37.562            | 45.739  | B600         | 17N23- | 3                | 53  |
| 478                | 49.4           | 3.1 | 1500                | 49.4               | 38.138            | 46.568  | B1500        | 17N23- | 3                | 89  |
| 482                | 49.0           | 5.5 | 2700                | 49.0               | 50.065            | 46.973  | B2700        | 17N23- | 3                | 130 |
| 502                | 47.0           | 5.3 | 2700                | 47.0               | 41.468            | 48.912  | B2700        | 17N23- | 3                | 130 |
| 513                | 46.0           | 1.2 | 600                 | 44.3               | 37.417            | 50.036  | B600         | 17N23- | 3                | 53  |
| 518                | 45.5           | 1.6 | 820                 | 45.5               | 37.470            | 50.543  | B820         | 17N23- | 3                | 58  |
| 555                | 42.5           | 4.8 | 2700                | 42.5               | 37.113            | 54.082  | B2700        | 17N23- | 3                | 130 |
| 585                | 40.3           | 2.5 | 1500                | 40.3               | 37.464            | 57.074  | B1500        | 17N23- | 3                | 89  |
| 609                | 38.7           | 4.4 | 2700                | 38.7               | 37.113            | 59.393  | B2700        | 17N23- | 3                | 130 |
| 659                | 35.8           | 2.2 | 1500                | 35.8               | 38.940            | 64.221  | B1500        | 17N23- | 3                | 89  |
| 661                | 35.7           | 1.2 | 820                 | 35.7               | 37.112            | 64.468  | B820         | 17N23- | 3                | 58  |
| 661                | 35.7           | 4.0 | 2700                | 35.7               | 45.170            | 64.452  | B2700        | 17N23- | 3                | 130 |
| 738                | 32.0           | 3.6 | 2700                | 32.0               | 43.266            | 71.951  | B2700        | 17N23- | 3                | 130 |
| 788                | 29.9           | 3.4 | 2700                | 29.9               | 38.609            | 76.862  | B2700        | 17N23- | 3                | 130 |
| 807                | 29.3           | 5.3 | 4300                | 29.3               | 44.191            | 78.619  | B4300        | 17N23- | 3                | 192 |
| 810                | 29.1           | 1.0 | 820                 | 29.1               | 36.887            | 78.973  | B820         | 17N23- | 3                | 58  |
| 871                | 27.1           | 3.1 | 2700                | 27.1               | 37.923            | 84.940  | B2700        | 17N23- | 3                | 130 |
| 957                | 24.7           | 2.8 | 2700                | 24.7               | 37.904            | 93.283  | B2700        | 17N23- | 3                | 130 |
| 1000               | 23.6           | 2.7 | 2700                | 23.6               | 40.457            | 97.481  | B2700        | 17N23- | 3                | 130 |
| 1050               | 22.5           | 1.4 | 1500                | 22.5               | 37.605            | 102.396 | B1500        | 17N23- | 3                | 89  |



## Technical data

Selection tables  
Inverter mains connection 400 V, Self-ventilated motors

| Inverter operation |       |     |               |                    |                   |         | Geared motor |        | Number of stages |     |
|--------------------|-------|-----|---------------|--------------------|-------------------|---------|--------------|--------|------------------|-----|
| $M_2$              | $n_2$ | c   | $M_{2, \max}$ | $n_{2, \text{th}}$ | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm   |     | Nm            | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 1093               | 21.6  | 3.9 | 4300          | 21.6               | 40.960            | 106.517 | B4300        | 17N23- | 3                | 192 |
| 1098               | 21.5  | 2.4 | 2700          | 21.5               | 40.442            | 107.056 | B2700        | 17N23- | 3                | 130 |
| 1214               | 19.4  | 2.2 | 2700          | 19.4               | 37.113            | 118.370 | B2700        | 17N23- | 3                | 130 |
| 1287               | 18.3  | 1.2 | 1500          | 18.3               | 37.113            | 125.498 | B1500        | 17N23- | 3                | 89  |
| 1327               | 17.8  | 3.2 | 4300          | 17.8               | 37.113            | 129.342 | B4300        | 17N23- | 3                | 192 |
| 1334               | 17.7  | 2.0 | 2700          | 17.7               | 37.113            | 129.996 | B2700        | 17N23- | 3                | 130 |
| 1571               | 15.0  | 1.7 | 2700          | 15.0               | 38.199            | 153.185 | B2700        | 17N23- | 3                | 130 |
| 1717               | 13.7  | 2.5 | 4300          | 13.7               | 38.403            | 167.383 | B4300        | 17N23- | 3                | 192 |
| 1726               | 13.7  | 1.6 | 2700          | 13.7               | 38.193            | 168.230 | B2700        | 17N23- | 3                | 130 |
| 1907               | 12.4  | 1.4 | 2700          | 12.4               | 37.626            | 185.911 | B2700        | 17N23- | 3                | 130 |
| 2084               | 11.3  | 2.1 | 4300          | 11.3               | 37.764            | 203.143 | B4300        | 17N23- | 3                | 192 |
| 2094               | 11.3  | 1.3 | 2700          | 11.3               | 37.622            | 204.170 | B2700        | 17N23- | 3                | 130 |
| 3069               | 7.6   | 1.4 | 4300          | 7.6                | 36.986            | 304.333 | B4300        | 17N23- | 4                | 195 |
| 3727               | 6.2   | 1.2 | 4300          | 6.2                | 36.838            | 369.548 | B4300        | 17N23- | 4                | 195 |

# Technical data

Selection tables

Inverter mains connection 400 V, Self-ventilated motors



## 4 kW

| Inverter operation |                |     |                     |                    |                   |        | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|--------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i      | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |        |              |        |                  | kg  |
| 77.0               | 472            | 3.5 | 312                 | 472                | 83.522            | 4.958  | B820         | 19S23- | 3                | 80  |
| 77.0               | 468            | 3.1 | 280                 | 468                | 76.360            | 5.002  | B450         | 19S23- | 3                | 57  |
| 78.0               | 462            | 4.1 | 376                 | 462                | 78.731            | 5.067  | B600         | 19S23- | 3                | 75  |
| 105                | 344            | 3.2 | 391                 | 344                | 78.711            | 6.800  | B820         | 19S23- | 3                | 80  |
| 106                | 341            | 2.5 | 308                 | 341                | 74.482            | 6.860  | B450         | 19S23- | 3                | 57  |
| 108                | 337            | 3.2 | 398                 | 337                | 76.163            | 6.949  | B600         | 19S23- | 3                | 75  |
| 132                | 275            | 3.0 | 459                 | 270                | 81.071            | 8.517  | B820         | 19S23- | 3                | 80  |
| 147                | 246            | 5.9 | 1006                | 246                | 85.064            | 9.516  | B1500        | 19S23- | 3                | 110 |
| 147                | 246            | 2.9 | 496                 | 246                | 75.761            | 9.520  | B820         | 19S23- | 3                | 80  |
| 160                | 227            | 2.1 | 384                 | 227                | 75.060            | 10.328 | B450         | 19S23- | 3                | 57  |
| 166                | 218            | 2.8 | 541                 | 211                | 77.118            | 10.741 | B600         | 19S23- | 3                | 75  |
| 181                | 200            | 2.7 | 569                 | 200                | 77.407            | 11.680 | B820         | 19S23- | 3                | 80  |
| 188                | 193            | 2.5 | 544                 | 193                | 74.520            | 12.143 | B820         | 19S23- | 3                | 80  |
| 203                | 178            | 4.8 | 1118                | 178                | 79.661            | 13.118 | B1500        | 19S23- | 3                | 110 |
| 219                | 165            | 1.7 | 422                 | 165                | 73.791            | 14.165 | B450         | 19S23- | 3                | 57  |
| 228                | 159            | 2.3 | 600                 | 159                | 75.306            | 14.730 | B600         | 19S23- | 3                | 75  |
| 253                | 143            | 2.4 | 708                 | 143                | 75.096            | 16.352 | B820         | 19S23- | 3                | 80  |
| 257                | 141            | 5.0 | 1500                | 141                | 83.075            | 16.611 | B1500        | 19S23- | 3                | 110 |
| 292                | 124            | 1.8 | 600                 | 124                | 74.288            | 18.851 | B600         | 19S23- | 3                | 75  |
| 317                | 115            | 4.1 | 1500                | 115                | 80.031            | 20.444 | B1500        | 19S23- | 3                | 110 |
| 319                | 114            | 1.6 | 600                 | 114                | 74.023            | 20.622 | B600         | 19S23- | 3                | 75  |
| 323                | 112            | 2.2 | 820                 | 112                | 74.111            | 20.857 | B820         | 19S23- | 3                | 80  |
| 355                | 102            | 3.7 | 1500                | 102                | 78.615            | 22.898 | B1500        | 19S23- | 3                | 110 |
| 396                | 91.6           | 1.8 | 820                 | 91.6               | 73.553            | 25.550 | B820         | 19S23- | 3                | 80  |
| 403                | 89.8           | 1.3 | 600                 | 63.0               | 74.882            | 26.061 | B600         | 19S23- | 3                | 75  |
| 408                | 88.9           | 1.7 | 820                 | 73.4               | 75.077            | 26.324 | B820         | 19S23- | 3                | 80  |
| 408                | 88.8           | 3.2 | 1500                | 74.9               | 82.093            | 26.353 | B1500        | 19S23- | 3                | 110 |
| 415                | 87.3           | 5.6 | 2700                | 87.3               | 84.188            | 26.814 | B2700        | 19S23- | 3                | 152 |
| 452                | 80.1           | 2.9 | 1500                | 80.1               | 76.294            | 29.206 | B1500        | 19S23- | 3                | 110 |
| 456                | 79.5           | 5.1 | 2700                | 79.5               | 83.999            | 29.447 | B2700        | 19S23- | 3                | 152 |
| 509                | 71.2           | 4.6 | 2700                | 71.2               | 81.248            | 32.873 | B2700        | 19S23- | 3                | 152 |
| 554                | 65.4           | 2.3 | 1500                | 65.4               | 75.210            | 35.778 | B1500        | 19S23- | 3                | 110 |
| 559                | 64.8           | 1.3 | 820                 | 52.9               | 74.220            | 36.102 | B820         | 19S23- | 3                | 80  |
| 559                | 64.8           | 4.2 | 2700                | 64.8               | 81.122            | 36.102 | B2700        | 19S23- | 3                | 152 |
| 566                | 64.1           | 2.3 | 1500                | 58.0               | 78.890            | 36.526 | B1500        | 19S23- | 3                | 110 |
| 662                | 54.7           | 4.0 | 2700                | 51.2               | 86.139            | 42.772 | B2700        | 19S23- | 3                | 152 |
| 696                | 52.1           | 2.1 | 1500                | 52.1               | 77.269            | 44.955 | B1500        | 19S23- | 3                | 110 |
| 721                | 50.2           | 2.0 | 1500                | 50.2               | 74.138            | 46.568 | B1500        | 19S23- | 3                | 110 |
| 724                | 50.1           | 5.8 | 4300                | 50.1               | 88.755            | 46.737 | B4300        | 19S23- | 3                | 214 |
| 727                | 49.8           | 3.6 | 2700                | 45.7               | 86.065            | 46.973 | B2700        | 19S23- | 3                | 152 |
| 757                | 47.8           | 3.5 | 2700                | 47.8               | 77.468            | 48.912 | B2700        | 19S23- | 3                | 152 |
| 783                | 46.3           | 1.0 | 820                 | 41.6               | 73.470            | 50.543 | B820         | 19S23- | 3                | 80  |
| 825                | 43.9           | 5.1 | 4300                | 43.9               | 85.583            | 53.258 | B4300        | 19S23- | 3                | 214 |
| 837                | 43.3           | 3.2 | 2700                | 43.3               | 73.113            | 54.082 | B2700        | 19S23- | 3                | 152 |
| 920                | 39.4           | 2.9 | 2700                | 39.4               | 73.113            | 59.393 | B2700        | 19S23- | 3                | 152 |
| 993                | 36.5           | 4.2 | 4300                | 36.5               | 82.598            | 64.127 | B4300        | 19S23- | 3                | 214 |
| 994                | 36.4           | 1.5 | 1500                | 36.4               | 74.940            | 64.221 | B1500        | 19S23- | 3                | 110 |
| 998                | 36.3           | 2.7 | 2700                | 36.3               | 81.170            | 64.452 | B2700        | 19S23- | 3                | 152 |
| 1114               | 32.5           | 2.4 | 2700                | 32.5               | 79.266            | 71.951 | B2700        | 19S23- | 3                | 152 |
| 1217               | 29.8           | 3.5 | 4300                | 29.8               | 80.191            | 78.619 | B4300        | 19S23- | 3                | 214 |
| 1509               | 24.0           | 1.8 | 2700                | 24.0               | 76.457            | 97.481 | B2700        | 19S23- | 3                | 152 |



## Technical data

Selection tables

Inverter mains connection 400 V, Self-ventilated motors

| Inverter operation |       |     |               |                    |                   |         | Geared motor |        | Number of stages |     |
|--------------------|-------|-----|---------------|--------------------|-------------------|---------|--------------|--------|------------------|-----|
| $M_2$              | $n_2$ | c   | $M_{2, \max}$ | $n_{2, \text{th}}$ | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm   |     | Nm            | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 1649               | 22.0  | 2.6 | 4300          | 22.0               | 76.960            | 106.517 | B4300        | 19S23- | 3                | 214 |
| 1658               | 21.9  | 1.6 | 2700          | 21.9               | 76.442            | 107.056 | B2700        | 19S23- | 3                | 152 |
| 1833               | 19.8  | 1.5 | 2700          | 19.8               | 73.113            | 118.370 | B2700        | 19S23- | 3                | 152 |
| 2003               | 18.1  | 2.2 | 4300          | 18.1               | 73.113            | 129.342 | B4300        | 19S23- | 3                | 214 |
| 2013               | 18.0  | 1.3 | 2700          | 18.0               | 73.113            | 129.996 | B2700        | 19S23- | 3                | 152 |

# Technical data

Selection tables

Inverter mains connection 400 V, Self-ventilated motors



## 4.1 kW

| Inverter operation |                |     |                     |                    |                   |        | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|--------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i      | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |        |              |        |                  | kg  |
| 45.0               | 829            | 5.0 | 312                 | 515                | 47.522            | 4.958  | B820         | 17N41- | 3                | 58  |
| 45.0               | 822            | 4.4 | 280                 | 589                | 40.360            | 5.002  | B450         | 17N41- | 3                | 35  |
| 46.0               | 811            | 5.9 | 376                 | 521                | 42.731            | 5.067  | B600         | 17N41- | 3                | 53  |
| 61.0               | 604            | 4.6 | 391                 | 428                | 42.711            | 6.800  | B820         | 17N41- | 3                | 58  |
| 62.0               | 599            | 3.6 | 308                 | 454                | 38.482            | 6.860  | B450         | 17N41- | 3                | 35  |
| 63.0               | 592            | 4.5 | 398                 | 418                | 40.163            | 6.949  | B600         | 17N41- | 3                | 53  |
| 77.0               | 483            | 4.3 | 459                 | 291                | 45.071            | 8.517  | B820         | 17N41- | 3                | 58  |
| 86.0               | 432            | 4.1 | 496                 | 327                | 39.761            | 9.520  | B820         | 17N41- | 3                | 58  |
| 93.0               | 398            | 2.9 | 384                 | 263                | 39.060            | 10.328 | B450         | 17N41- | 3                | 35  |
| 97.0               | 383            | 4.0 | 541                 | 227                | 41.118            | 10.741 | B600         | 17N41- | 3                | 53  |
| 105                | 352            | 3.9 | 569                 | 241                | 41.407            | 11.680 | B820         | 17N41- | 3                | 58  |
| 110                | 339            | 3.6 | 544                 | 256                | 38.520            | 12.143 | B820         | 17N41- | 3                | 58  |
| 128                | 290            | 2.4 | 422                 | 216                | 37.791            | 14.165 | B450         | 17N41- | 3                | 35  |
| 133                | 279            | 3.2 | 600                 | 184                | 39.306            | 14.730 | B600         | 17N41- | 3                | 53  |
| 148                | 251            | 3.4 | 708                 | 190                | 39.096            | 16.352 | B820         | 17N41- | 3                | 58  |
| 170                | 218            | 2.5 | 600                 | 159                | 38.288            | 18.851 | B600         | 17N41- | 3                | 53  |
| 179                | 207            | 1.8 | 450                 | 157                | 37.006            | 19.831 | B450         | 17N41- | 3                | 35  |
| 184                | 201            | 5.8 | 1500                | 143                | 44.031            | 20.444 | B1500        | 17N41- | 3                | 89  |
| 186                | 199            | 2.3 | 600                 | 147                | 38.023            | 20.622 | B600         | 17N41- | 3                | 53  |
| 188                | 197            | 3.1 | 820                 | 149                | 38.111            | 20.857 | B820         | 17N41- | 3                | 58  |
| 207                | 180            | 5.2 | 1500                | 130                | 42.615            | 22.898 | B1500        | 17N41- | 3                | 89  |
| 228                | 163            | 1.4 | 450                 | 123                | 36.678            | 25.294 | B450         | 17N41- | 3                | 35  |
| 231                | 161            | 2.5 | 820                 | 122                | 37.553            | 25.550 | B820         | 17N41- | 3                | 58  |
| 235                | 158            | 1.8 | 600                 | 76.3               | 38.882            | 26.061 | B600         | 17N41- | 3                | 53  |
| 238                | 156            | 2.5 | 820                 | 83.4               | 39.077            | 26.324 | B820         | 17N41- | 3                | 58  |
| 238                | 156            | 4.5 | 1500                | 81.2               | 46.093            | 26.353 | B1500        | 17N41- | 3                | 89  |
| 264                | 141            | 4.1 | 1500                | 107                | 40.294            | 29.206 | B1500        | 17N41- | 3                | 89  |
| 323                | 115            | 1.3 | 600                 | 54.8               | 38.117            | 35.740 | B600         | 17N41- | 3                | 53  |
| 323                | 115            | 3.3 | 1500                | 87.0               | 39.210            | 35.778 | B1500        | 17N41- | 3                | 89  |
| 326                | 114            | 1.8 | 820                 | 63.9               | 38.220            | 36.102 | B820         | 17N41- | 3                | 58  |
| 326                | 114            | 5.9 | 2700                | 86.2               | 45.122            | 36.102 | B2700        | 17N41- | 3                | 130 |
| 330                | 113            | 3.3 | 1500                | 62.9               | 42.890            | 36.526 | B1500        | 17N41- | 3                | 89  |
| 378                | 98.0           | 1.3 | 600                 | 74.2               | 36.676            | 41.940 | B600         | 17N41- | 3                | 53  |
| 386                | 96.1           | 5.7 | 2700                | 55.1               | 50.139            | 42.772 | B2700        | 17N41- | 3                | 130 |
| 406                | 91.4           | 3.0 | 1500                | 56.8               | 41.269            | 44.955 | B1500        | 17N41- | 3                | 89  |
| 413                | 89.9           | 1.2 | 600                 | 46.6               | 37.562            | 45.739 | B600         | 17N41- | 3                | 53  |
| 420                | 88.3           | 2.9 | 1500                | 66.8               | 38.138            | 46.568 | B1500        | 17N41- | 3                | 89  |
| 424                | 87.5           | 5.2 | 2700                | 49.2               | 50.065            | 46.973 | B2700        | 17N41- | 3                | 130 |
| 441                | 84.0           | 5.0 | 2700                | 63.6               | 41.468            | 48.912 | B2700        | 17N41- | 3                | 130 |
| 452                | 82.1           | 1.1 | 600                 | 43.0               | 37.417            | 50.036 | B600         | 17N41- | 3                | 53  |
| 456                | 81.3           | 1.5 | 820                 | 49.2               | 37.470            | 50.543 | B820         | 17N41- | 3                | 58  |
| 488                | 76.0           | 4.5 | 2700                | 57.5               | 37.113            | 54.082 | B2700        | 17N41- | 3                | 130 |
| 515                | 72.0           | 2.4 | 1500                | 54.5               | 37.464            | 57.074 | B1500        | 17N41- | 3                | 89  |
| 536                | 69.2           | 4.1 | 2700                | 52.4               | 37.113            | 59.393 | B2700        | 17N41- | 3                | 130 |
| 580                | 64.0           | 2.1 | 1500                | 45.0               | 38.940            | 64.221 | B1500        | 17N41- | 3                | 89  |
| 582                | 63.8           | 1.1 | 820                 | 39.6               | 37.112            | 64.468 | B820         | 17N41- | 3                | 58  |
| 582                | 63.8           | 3.8 | 2700                | 41.6               | 45.170            | 64.452 | B2700        | 17N41- | 3                | 130 |
| 649                | 57.1           | 3.4 | 2700                | 39.6               | 43.266            | 71.951 | B2700        | 17N41- | 3                | 130 |
| 694                | 53.5           | 3.2 | 2700                | 40.5               | 38.609            | 76.862 | B2700        | 17N41- | 3                | 130 |
| 709                | 52.3           | 4.9 | 4300                | 39.0               | 44.191            | 78.619 | B4300        | 17N41- | 3                | 192 |
| 766                | 48.4           | 2.9 | 2700                | 36.6               | 37.923            | 84.940 | B2700        | 17N41- | 3                | 130 |



## Technical data

Selection tables

Inverter mains connection 400 V, Self-ventilated motors

| Inverter operation |       |     |               |             |                   |         | Geared motor |        | Number of stages |     |
|--------------------|-------|-----|---------------|-------------|-------------------|---------|--------------|--------|------------------|-----|
| $M_2$              | $n_2$ | c   | $M_{2, \max}$ | $n_{2, th}$ | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm   |     | Nm            | rpm         | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 842                | 44.1  | 2.6 | 2700          | 33.4        | 37.904            | 93.283  | B2700        | 17N41- | 3                | 130 |
| 880                | 42.2  | 2.5 | 2700          | 31.9        | 40.457            | 97.481  | B2700        | 17N41- | 3                | 130 |
| 924                | 40.1  | 1.3 | 1500          | 30.4        | 37.605            | 102.396 | B1500        | 17N41- | 3                | 89  |
| 961                | 38.6  | 3.6 | 4300          | 29.2        | 40.960            | 106.517 | B4300        | 17N41- | 3                | 192 |
| 966                | 38.4  | 2.3 | 2700          | 29.1        | 40.442            | 107.056 | B2700        | 17N41- | 3                | 130 |
| 1068               | 34.7  | 2.3 | 2700          | 26.3        | 37.113            | 118.370 | B2700        | 17N41- | 3                | 130 |
| 1132               | 32.7  | 1.2 | 1500          | 24.8        | 37.113            | 125.498 | B1500        | 17N41- | 3                | 89  |
| 1167               | 31.8  | 3.3 | 4300          | 24.1        | 37.113            | 129.342 | B4300        | 17N41- | 3                | 192 |
| 1173               | 31.6  | 2.1 | 2700          | 23.9        | 37.113            | 129.996 | B2700        | 17N41- | 3                | 130 |
| 1382               | 26.8  | 1.8 | 2700          | 20.3        | 38.199            | 153.185 | B2700        | 17N41- | 3                | 130 |
| 1510               | 24.6  | 2.6 | 4300          | 18.6        | 38.403            | 167.383 | B4300        | 17N41- | 3                | 192 |
| 1518               | 24.4  | 1.6 | 2700          | 18.5        | 38.193            | 168.230 | B2700        | 17N41- | 3                | 130 |
| 1678               | 22.1  | 1.5 | 2700          | 16.7        | 37.626            | 185.911 | B2700        | 17N41- | 3                | 130 |
| 1833               | 20.2  | 2.1 | 4300          | 15.3        | 37.764            | 203.143 | B4300        | 17N41- | 3                | 192 |
| 1842               | 20.1  | 1.3 | 2700          | 15.2        | 37.622            | 204.170 | B2700        | 17N41- | 3                | 130 |
| 2700               | 13.5  | 1.4 | 4300          | 10.2        | 36.986            | 304.333 | B4300        | 17N41- | 4                | 195 |
| 3278               | 11.1  | 1.2 | 4300          | 8.4         | 36.838            | 369.548 | B4300        | 17N41- | 4                | 195 |

# Technical data

Selection tables

Inverter mains connection 400 V, Self-ventilated motors



## 5.2 kW

| Inverter operation |                |     |                     |                    |                   |         | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|---------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 57.0               | 837            | 3.9 | 312                 | 491                | 83.522            | 4.958   | B820         | 19S42- | 3                | 80  |
| 57.0               | 830            | 3.5 | 280                 | 490                | 76.360            | 5.002   | B450         | 19S42- | 3                | 57  |
| 58.0               | 819            | 4.6 | 376                 | 483                | 78.731            | 5.067   | B600         | 19S42- | 3                | 75  |
| 78.0               | 610            | 3.6 | 391                 | 360                | 78.711            | 6.800   | B820         | 19S42- | 3                | 80  |
| 78.0               | 605            | 2.8 | 308                 | 357                | 74.482            | 6.860   | B450         | 19S42- | 3                | 57  |
| 79.0               | 597            | 3.6 | 398                 | 352                | 76.163            | 6.949   | B600         | 19S42- | 3                | 75  |
| 97.0               | 487            | 3.4 | 459                 | 276                | 81.071            | 8.517   | B820         | 19S42- | 3                | 80  |
| 109                | 436            | 3.3 | 496                 | 257                | 75.761            | 9.520   | B820         | 19S42- | 3                | 80  |
| 118                | 402            | 2.3 | 384                 | 237                | 75.060            | 10.328  | B450         | 19S42- | 3                | 57  |
| 122                | 386            | 3.2 | 541                 | 216                | 77.118            | 10.741  | B600         | 19S42- | 3                | 75  |
| 133                | 355            | 3.0 | 569                 | 210                | 77.407            | 11.680  | B820         | 19S42- | 3                | 80  |
| 138                | 342            | 2.8 | 544                 | 202                | 74.520            | 12.143  | B820         | 19S42- | 3                | 80  |
| 150                | 316            | 5.3 | 1118                | 187                | 79.661            | 13.118  | B1500        | 19S42- | 3                | 110 |
| 161                | 293            | 1.9 | 422                 | 173                | 73.791            | 14.165  | B450         | 19S42- | 3                | 57  |
| 168                | 282            | 2.6 | 600                 | 166                | 75.306            | 14.730  | B600         | 19S42- | 3                | 75  |
| 186                | 254            | 2.7 | 708                 | 150                | 75.096            | 16.352  | B820         | 19S42- | 3                | 80  |
| 189                | 250            | 5.6 | 1500                | 147                | 83.075            | 16.611  | B1500        | 19S42- | 3                | 110 |
| 215                | 220            | 2.0 | 600                 | 130                | 74.288            | 18.851  | B600         | 19S42- | 3                | 75  |
| 233                | 203            | 4.6 | 1500                | 120                | 80.031            | 20.444  | B1500        | 19S42- | 3                | 110 |
| 235                | 201            | 1.8 | 600                 | 119                | 74.023            | 20.622  | B600         | 19S42- | 3                | 75  |
| 238                | 199            | 2.5 | 820                 | 117                | 74.111            | 20.857  | B820         | 19S42- | 3                | 80  |
| 261                | 181            | 4.1 | 1500                | 107                | 78.615            | 22.898  | B1500        | 19S42- | 3                | 110 |
| 291                | 162            | 2.0 | 820                 | 95.8               | 73.553            | 25.550  | B820         | 19S42- | 3                | 80  |
| 297                | 159            | 1.4 | 600                 | 66.8               | 74.882            | 26.061  | B600         | 19S42- | 3                | 75  |
| 300                | 158            | 2.0 | 820                 | 78.5               | 75.077            | 26.324  | B820         | 19S42- | 3                | 80  |
| 300                | 158            | 3.6 | 1500                | 77.0               | 82.093            | 26.353  | B1500        | 19S42- | 3                | 110 |
| 333                | 142            | 3.2 | 1500                | 83.8               | 76.294            | 29.206  | B1500        | 19S42- | 3                | 110 |
| 336                | 141            | 5.7 | 2700                | 83.2               | 83.999            | 29.447  | B2700        | 19S42- | 3                | 152 |
| 375                | 126            | 5.1 | 2700                | 74.5               | 81.248            | 32.873  | B2700        | 19S42- | 3                | 152 |
| 407                | 116            | 1.1 | 600                 | 49.0               | 74.117            | 35.740  | B600         | 19S42- | 3                | 75  |
| 408                | 116            | 2.6 | 1500                | 68.4               | 75.210            | 35.778  | B1500        | 19S42- | 3                | 110 |
| 412                | 115            | 1.4 | 820                 | 56.1               | 74.220            | 36.102  | B820         | 19S42- | 3                | 80  |
| 412                | 115            | 4.7 | 2700                | 67.8               | 81.122            | 36.102  | B2700        | 19S42- | 3                | 152 |
| 416                | 114            | 2.6 | 1500                | 59.6               | 78.890            | 36.526  | B1500        | 19S42- | 3                | 110 |
| 488                | 97.0           | 4.5 | 2700                | 52.5               | 86.139            | 42.772  | B2700        | 19S42- | 3                | 152 |
| 512                | 92.3           | 2.4 | 1500                | 53.8               | 77.269            | 44.955  | B1500        | 19S42- | 3                | 110 |
| 531                | 89.1           | 2.3 | 1500                | 52.6               | 74.138            | 46.568  | B1500        | 19S42- | 3                | 110 |
| 535                | 88.3           | 4.1 | 2700                | 46.9               | 86.065            | 46.973  | B2700        | 19S42- | 3                | 152 |
| 558                | 84.8           | 3.9 | 2700                | 50.1               | 77.468            | 48.912  | B2700        | 19S42- | 3                | 152 |
| 576                | 82.1           | 1.2 | 820                 | 43.8               | 73.470            | 50.543  | B820         | 19S42- | 3                | 80  |
| 607                | 77.9           | 5.7 | 4300                | 46.0               | 85.583            | 53.258  | B4300        | 19S42- | 3                | 214 |
| 616                | 76.7           | 3.5 | 2700                | 45.3               | 73.113            | 54.082  | B2700        | 19S42- | 3                | 152 |
| 677                | 69.9           | 3.2 | 2700                | 41.2               | 73.113            | 59.393  | B2700        | 19S42- | 3                | 152 |
| 731                | 64.7           | 4.8 | 4300                | 38.2               | 82.598            | 64.127  | B4300        | 19S42- | 3                | 214 |
| 732                | 64.6           | 1.7 | 1500                | 38.1               | 74.940            | 64.221  | B1500        | 19S42- | 3                | 110 |
| 735                | 64.4           | 3.0 | 2700                | 38.0               | 81.170            | 64.452  | B2700        | 19S42- | 3                | 152 |
| 820                | 57.7           | 2.7 | 2700                | 34.0               | 79.266            | 71.951  | B2700        | 19S42- | 3                | 152 |
| 896                | 52.8           | 3.9 | 4300                | 31.1               | 80.191            | 78.619  | B4300        | 19S42- | 3                | 214 |
| 1111               | 42.6           | 2.0 | 2700                | 25.1               | 76.457            | 97.481  | B2700        | 19S42- | 3                | 152 |
| 1167               | 40.5           | 1.0 | 1500                | 23.9               | 73.605            | 102.396 | B1500        | 19S42- | 3                | 110 |
| 1214               | 39.0           | 2.9 | 4300                | 23.0               | 76.960            | 106.517 | B4300        | 19S42- | 3                | 214 |



## Technical data

Selection tables  
Inverter mains connection 400 V, Self-ventilated motors

| Inverter operation |       |     |               |                    |                   |         | Geared motor |        | Number of stages |     |
|--------------------|-------|-----|---------------|--------------------|-------------------|---------|--------------|--------|------------------|-----|
| $M_2$              | $n_2$ | c   | $M_{2, \max}$ | $n_{2, \text{th}}$ | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm   |     | Nm            | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 1220               | 38.8  | 1.8 | 2700          | 22.9               | 76.442            | 107.056 | B2700        | 19S42- | 3                | 152 |
| 1349               | 35.1  | 1.8 | 2700          | 20.7               | 73.113            | 118.370 | B2700        | 19S42- | 3                | 152 |
| 1474               | 32.1  | 2.6 | 4300          | 18.9               | 73.113            | 129.342 | B4300        | 19S42- | 3                | 214 |
| 1482               | 31.9  | 1.6 | 2700          | 18.8               | 73.113            | 129.996 | B2700        | 19S42- | 3                | 152 |

### 6.4 kW

| Inverter operation |       |     |               |                    |                   |        | Geared motor |        | Number of stages |     |
|--------------------|-------|-----|---------------|--------------------|-------------------|--------|--------------|--------|------------------|-----|
| $M_2$              | $n_2$ | c   | $M_{2, \max}$ | $n_{2, \text{th}}$ | J                 | i      | g500-        | MCA    | z                | m   |
| Nm                 | rpm   |     | Nm            | rpm                | kgcm <sup>2</sup> |        |              |        |                  | kg  |
| 160                | 363   | 4.4 | 837           | 293                | 201.952           | 6.866  | B1500        | 21X25- | 3                | 126 |
| 222                | 262   | 3.8 | 1006          | 212                | 193.064           | 9.516  | B1500        | 21X25- | 3                | 126 |
| 280                | 208   | 4.4 | 1461          | 168                | 198.132           | 11.985 | B1500        | 21X25- | 3                | 126 |
| 307                | 190   | 3.1 | 1118          | 154                | 187.661           | 13.118 | B1500        | 21X25- | 3                | 126 |
| 348                | 167   | 5.8 | 2380          | 135                | 209.802           | 14.888 | B2700        | 21X25- | 3                | 167 |
| 382                | 152   | 5.4 | 2429          | 123                | 209.188           | 16.351 | B2700        | 21X25- | 3                | 167 |
| 388                | 150   | 3.3 | 1500          | 121                | 191.075           | 16.611 | B1500        | 21X25- | 3                | 126 |
| 457                | 127   | 4.8 | 2579          | 103                | 199.748           | 19.542 | B2700        | 21X25- | 3                | 167 |
| 478                | 122   | 2.7 | 1500          | 98.5               | 188.031           | 20.444 | B1500        | 21X25- | 3                | 126 |
| 520                | 112   | 4.4 | 2684          | 90.4               | 195.887           | 22.269 | B2700        | 21X25- | 3                | 167 |
| 535                | 109   | 2.4 | 1500          | 87.9               | 186.615           | 22.898 | B1500        | 21X25- | 3                | 126 |
| 571                | 102   | 4.0 | 2700          | 82.3               | 195.613           | 24.456 | B2700        | 21X25- | 3                | 167 |
| 616                | 94.5  | 2.1 | 1500          | 67.2               | 190.093           | 26.353 | B1500        | 21X25- | 3                | 126 |
| 627                | 92.9  | 3.6 | 2700          | 75.1               | 192.188           | 26.814 | B2700        | 21X25- | 3                | 167 |
| 655                | 88.9  | 5.6 | 4300          | 66.7               | 214.200           | 28.013 | B4300        | 21X25- | 3                | 229 |
| 688                | 84.6  | 3.3 | 2700          | 68.4               | 191.999           | 29.447 | B2700        | 21X25- | 3                | 167 |
| 727                | 80.1  | 5.0 | 4300          | 64.8               | 195.889           | 31.097 | B4300        | 21X25- | 3                | 229 |
| 768                | 75.7  | 3.0 | 2700          | 61.3               | 189.248           | 32.873 | B2700        | 21X25- | 3                | 167 |
| 832                | 69.9  | 4.4 | 4300          | 55.2               | 204.646           | 35.607 | B4300        | 21X25- | 3                | 229 |
| 844                | 69.0  | 2.7 | 2700          | 55.8               | 189.122           | 36.102 | B2700        | 21X25- | 3                | 167 |
| 853                | 68.2  | 1.5 | 1500          | 47.4               | 186.890           | 36.526 | B1500        | 21X25- | 3                | 126 |
| 999                | 58.2  | 2.6 | 2700          | 46.5               | 194.139           | 42.772 | B2700        | 21X25- | 3                | 167 |
| 1050               | 55.4  | 1.4 | 1500          | 41.6               | 185.269           | 44.955 | B1500        | 21X25- | 3                | 126 |
| 1092               | 53.3  | 3.8 | 4300          | 43.1               | 196.755           | 46.737 | B4300        | 21X25- | 3                | 229 |
| 1098               | 53.0  | 2.4 | 2700          | 41.4               | 194.065           | 46.973 | B2700        | 21X25- | 3                | 167 |
| 1244               | 46.8  | 3.3 | 4300          | 37.8               | 193.583           | 53.258 | B4300        | 21X25- | 3                | 229 |
| 1498               | 38.8  | 2.8 | 4300          | 31.4               | 190.598           | 64.127 | B4300        | 21X25- | 3                | 229 |
| 1506               | 38.6  | 1.7 | 2700          | 31.2               | 189.170           | 64.452 | B2700        | 21X25- | 3                | 167 |
| 1681               | 34.6  | 1.5 | 2700          | 28.0               | 187.266           | 71.951 | B2700        | 21X25- | 3                | 167 |
| 1837               | 31.7  | 2.3 | 4300          | 25.6               | 188.191           | 78.619 | B4300        | 21X25- | 3                | 229 |

# Technical data

Selection tables

Inverter mains connection 400 V, Self-ventilated motors



## 7.4 kW

| Inverter operation |       |     |               |                    |                   |        | Geared motor |        | Number of stages |     |
|--------------------|-------|-----|---------------|--------------------|-------------------|--------|--------------|--------|------------------|-----|
| $M_2$              | $n_2$ | c   | $M_{2, \max}$ | $n_{2, \text{th}}$ | J                 | i      | g500-        | MCA    | z                | m   |
| Nm                 | rpm   |     | Nm            | rpm                | kgcm <sup>2</sup> |        |              |        |                  | kg  |
| 111                | 606   | 5.4 | 837           | 293                | 201.952           | 6.866  | B1500        | 21X42- | 3                | 126 |
| 154                | 437   | 4.7 | 1006          | 212                | 193.064           | 9.516  | B1500        | 21X42- | 3                | 126 |
| 194                | 347   | 5.4 | 1461          | 168                | 198.132           | 11.985 | B1500        | 21X42- | 3                | 126 |
| 212                | 317   | 3.8 | 1118          | 154                | 187.661           | 13.118 | B1500        | 21X42- | 3                | 126 |
| 268                | 250   | 4.0 | 1500          | 121                | 191.075           | 16.611 | B1500        | 21X42- | 3                | 126 |
| 316                | 213   | 5.8 | 2579          | 103                | 199.748           | 19.542 | B2700        | 21X42- | 3                | 167 |
| 330                | 204   | 3.2 | 1500          | 98.5               | 188.031           | 20.444 | B1500        | 21X42- | 3                | 126 |
| 360                | 187   | 5.3 | 2684          | 90.4               | 195.887           | 22.269 | B2700        | 21X42- | 3                | 167 |
| 370                | 182   | 2.9 | 1500          | 87.9               | 186.615           | 22.898 | B1500        | 21X42- | 3                | 126 |
| 395                | 170   | 4.9 | 2700          | 82.3               | 195.613           | 24.456 | B2700        | 21X42- | 3                | 167 |
| 426                | 158   | 2.5 | 1500          | 70.8               | 190.093           | 26.353 | B1500        | 21X42- | 3                | 126 |
| 433                | 155   | 4.4 | 2700          | 75.1               | 192.188           | 26.814 | B2700        | 21X42- | 3                | 167 |
| 476                | 141   | 4.0 | 2700          | 68.4               | 191.999           | 29.447 | B2700        | 21X42- | 3                | 167 |
| 531                | 127   | 3.6 | 2700          | 61.3               | 189.248           | 32.873 | B2700        | 21X42- | 3                | 167 |
| 575                | 117   | 5.3 | 4300          | 56.5               | 204.646           | 35.607 | B4300        | 21X42- | 3                | 229 |
| 583                | 115   | 3.3 | 2700          | 55.8               | 189.122           | 36.102 | B2700        | 21X42- | 3                | 167 |
| 590                | 114   | 1.8 | 1500          | 53.1               | 186.890           | 36.526 | B1500        | 21X42- | 3                | 126 |
| 691                | 97.3  | 3.2 | 2700          | 47.1               | 194.139           | 42.772 | B2700        | 21X42- | 3                | 167 |
| 726                | 92.5  | 1.7 | 1500          | 44.8               | 185.269           | 44.955 | B1500        | 21X42- | 3                | 126 |
| 755                | 89.0  | 4.6 | 4300          | 43.1               | 196.755           | 46.737 | B4300        | 21X42- | 3                | 229 |
| 759                | 88.6  | 2.9 | 2700          | 42.9               | 194.065           | 46.973 | B2700        | 21X42- | 3                | 167 |
| 860                | 78.1  | 4.0 | 4300          | 37.8               | 193.583           | 53.258 | B4300        | 21X42- | 3                | 229 |
| 1036               | 64.9  | 3.4 | 4300          | 31.4               | 190.598           | 64.127 | B4300        | 21X42- | 3                | 229 |
| 1041               | 64.5  | 2.1 | 2700          | 31.2               | 189.170           | 64.452 | B2700        | 21X42- | 3                | 167 |
| 1162               | 57.8  | 1.9 | 2700          | 28.0               | 187.266           | 71.951 | B2700        | 21X42- | 3                | 167 |
| 1270               | 52.9  | 2.7 | 4300          | 25.6               | 188.191           | 78.619 | B4300        | 21X42- | 3                | 229 |



# Technical data

Selection tables

Inverter mains connection 400 V, Forced ventilated motors

## Inverter mains connection 400 V, Forced ventilated motors

### 2.1 kW

| Inverter operation |                |     |                     |                    |                   |        | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|--------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i      | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |        |              |        |                  | kg  |
| 41.0               | 459            | 3.3 | 138                 | 459                | 22.172            | 3.565  | B240         | 14L16- | 2                | 26  |
| 56.0               | 334            | 2.6 | 147                 | 334                | 20.944            | 4.889  | B240         | 14L16- | 2                | 26  |
| 57.0               | 330            | 5.4 | 283                 | 330                | 30.722            | 4.958  | B820         | 14L16- | 3                | 52  |
| 57.0               | 327            | 4.8 | 280                 | 327                | 23.560            | 5.002  | B450         | 14L16- | 3                | 29  |
| 71.0               | 261            | 2.1 | 156                 | 261                | 20.351            | 6.257  | B240         | 14L16- | 2                | 26  |
| 78.0               | 240            | 4.9 | 388                 | 240                | 25.911            | 6.800  | B820         | 14L16- | 3                | 52  |
| 78.0               | 238            | 3.8 | 308                 | 238                | 21.682            | 6.860  | B450         | 14L16- | 3                | 29  |
| 79.0               | 235            | 4.9 | 396                 | 235                | 23.363            | 6.949  | B600         | 14L16- | 3                | 47  |
| 89.0               | 209            | 2.0 | 187                 | 209                | 20.713            | 7.817  | B240         | 14L16- | 2                | 26  |
| 97.0               | 192            | 4.6 | 459                 | 192                | 28.271            | 8.517  | B820         | 14L16- | 3                | 52  |
| 109                | 172            | 4.4 | 496                 | 172                | 22.961            | 9.520  | B820         | 14L16- | 3                | 52  |
| 118                | 158            | 3.2 | 384                 | 158                | 22.260            | 10.328 | B450         | 14L16- | 3                | 29  |
| 122                | 153            | 1.6 | 204                 | 153                | 20.168            | 10.720 | B240         | 14L16- | 2                | 26  |
| 122                | 152            | 4.3 | 541                 | 152                | 24.318            | 10.741 | B600         | 14L16- | 3                | 47  |
| 133                | 140            | 4.2 | 569                 | 140                | 24.607            | 11.680 | B820         | 14L16- | 3                | 52  |
| 138                | 135            | 3.8 | 544                 | 135                | 21.720            | 12.143 | B820         | 14L16- | 3                | 52  |
| 156                | 119            | 1.4 | 217                 | 119                | 19.877            | 13.719 | B240         | 14L16- | 2                | 26  |
| 161                | 115            | 2.5 | 422                 | 115                | 20.991            | 14.165 | B450         | 14L16- | 3                | 29  |
| 168                | 111            | 3.5 | 600                 | 111                | 22.506            | 14.730 | B600         | 14L16- | 3                | 47  |
| 171                | 109            | 1.3 | 223                 | 109                | 19.786            | 15.008 | B240         | 14L16- | 2                | 26  |
| 186                | 100            | 3.7 | 708                 | 100                | 22.296            | 16.352 | B820         | 14L16- | 3                | 52  |
| 215                | 86.7           | 2.7 | 600                 | 86.7               | 21.488            | 18.851 | B600         | 14L16- | 3                | 47  |
| 218                | 85.4           | 1.1 | 240                 | 85.4               | 19.620            | 19.143 | B240         | 14L16- | 2                | 26  |
| 226                | 82.4           | 1.9 | 450                 | 82.4               | 20.206            | 19.831 | B450         | 14L16- | 3                | 29  |
| 235                | 79.3           | 2.5 | 600                 | 79.3               | 21.223            | 20.622 | B600         | 14L16- | 3                | 47  |
| 238                | 78.4           | 3.4 | 820                 | 78.4               | 21.311            | 20.857 | B820         | 14L16- | 3                | 52  |
| 261                | 71.4           | 5.6 | 1305                | 71.4               | 25.815            | 22.898 | B1500        | 14L16- | 3                | 83  |
| 288                | 64.6           | 1.5 | 450                 | 64.6               | 19.878            | 25.294 | B450         | 14L16- | 3                | 29  |
| 291                | 64.0           | 2.7 | 820                 | 64.0               | 20.753            | 25.550 | B820         | 14L16- | 3                | 52  |
| 297                | 62.7           | 2.0 | 600                 | 62.7               | 22.082            | 26.061 | B600         | 14L16- | 3                | 47  |
| 300                | 62.1           | 2.7 | 820                 | 62.1               | 22.277            | 26.324 | B820         | 14L16- | 3                | 52  |
| 333                | 56.0           | 4.4 | 1500                | 56.0               | 23.494            | 29.206 | B1500        | 14L16- | 3                | 83  |
| 353                | 52.8           | 1.2 | 450                 | 52.8               | 19.694            | 30.985 | B450         | 14L16- | 3                | 29  |
| 407                | 45.7           | 1.4 | 600                 | 45.7               | 21.317            | 35.740 | B600         | 14L16- | 3                | 47  |
| 408                | 45.7           | 3.6 | 1500                | 45.7               | 22.410            | 35.778 | B1500        | 14L16- | 3                | 83  |
| 412                | 45.3           | 1.9 | 820                 | 45.3               | 21.420            | 36.102 | B820         | 14L16- | 3                | 52  |
| 478                | 39.0           | 1.3 | 600                 | 39.0               | 19.876            | 41.940 | B600         | 14L16- | 3                | 47  |
| 512                | 36.4           | 2.9 | 1500                | 36.4               | 24.469            | 44.955 | B1500        | 14L16- | 3                | 83  |
| 521                | 35.7           | 1.2 | 600                 | 35.7               | 20.762            | 45.739 | B600         | 14L16- | 3                | 47  |
| 531                | 35.1           | 2.8 | 1500                | 35.1               | 21.338            | 46.568 | B1500        | 14L16- | 3                | 83  |
| 558                | 33.4           | 4.5 | 2491                | 33.4               | 24.668            | 48.912 | B2700        | 14L16- | 3                | 124 |
| 570                | 32.7           | 1.1 | 600                 | 32.7               | 20.617            | 50.036 | B600         | 14L16- | 3                | 47  |
| 576                | 32.3           | 1.4 | 820                 | 32.3               | 20.670            | 50.543 | B820         | 14L16- | 3                | 52  |
| 616                | 30.2           | 3.8 | 2351                | 30.2               | 20.313            | 54.082 | B2700        | 14L16- | 3                | 124 |
| 651                | 28.6           | 2.3 | 1500                | 28.6               | 20.664            | 57.074 | B1500        | 14L16- | 3                | 83  |
| 677                | 27.5           | 3.8 | 2582                | 27.5               | 20.313            | 59.393 | B2700        | 14L16- | 3                | 124 |
| 731                | 25.5           | 5.9 | 3655                | 25.5               | 29.798            | 64.127 | B4300        | 14L16- | 3                | 186 |
| 732                | 25.5           | 2.1 | 1500                | 25.5               | 22.140            | 64.221 | B1500        | 14L16- | 3                | 83  |
| 735                | 25.4           | 1.1 | 820                 | 25.4               | 20.312            | 64.468 | B820         | 14L16- | 3                | 52  |
| 735                | 25.4           | 3.7 | 2700                | 25.4               | 28.370            | 64.452 | B2700        | 14L16- | 3                | 124 |

# Technical data

Selection tables

Inverter mains connection 400 V, Forced ventilated motors



| Inverter operation |       |     |               |             |                   |         | Geared motor |        | Number of stages |     |
|--------------------|-------|-----|---------------|-------------|-------------------|---------|--------------|--------|------------------|-----|
| $M_2$              | $n_2$ | c   | $M_{2, \max}$ | $n_{2, th}$ | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm   |     | Nm            | rpm         | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 854                | 21.8  | 1.8 | 1500          | 21.8        | 20.106            | 74.963  | B1500        | 14L16- | 3                | 83  |
| 876                | 21.3  | 3.1 | 2675          | 21.3        | 21.809            | 76.862  | B2700        | 14L16- | 3                | 124 |
| 968                | 19.2  | 2.6 | 2475          | 19.2        | 21.123            | 84.940  | B2700        | 14L16- | 3                | 124 |
| 1037               | 18.0  | 1.5 | 1500          | 18.0        | 19.858            | 90.978  | B1500        | 14L16- | 3                | 83  |
| 1063               | 17.5  | 2.5 | 2700          | 17.5        | 21.104            | 93.283  | B2700        | 14L16- | 3                | 124 |
| 1111               | 16.8  | 2.4 | 2700          | 16.8        | 23.657            | 97.481  | B2700        | 14L16- | 3                | 124 |
| 1167               | 16.0  | 1.3 | 1500          | 16.0        | 20.805            | 102.396 | B1500        | 14L16- | 3                | 83  |
| 1214               | 15.3  | 3.5 | 4300          | 15.3        | 24.160            | 106.517 | B4300        | 14L16- | 3                | 186 |
| 1220               | 15.3  | 2.2 | 2700          | 15.3        | 23.642            | 107.056 | B2700        | 14L16- | 3                | 124 |
| 1349               | 13.8  | 2.0 | 2700          | 13.8        | 20.313            | 118.370 | B2700        | 14L16- | 3                | 124 |
| 1430               | 13.0  | 1.1 | 1500          | 13.0        | 20.313            | 125.498 | B1500        | 14L16- | 3                | 83  |
| 1474               | 12.6  | 2.9 | 4300          | 12.6        | 20.313            | 129.342 | B4300        | 14L16- | 3                | 186 |
| 1482               | 12.6  | 1.8 | 2700          | 12.6        | 20.313            | 129.996 | B2700        | 14L16- | 3                | 124 |
| 1746               | 10.7  | 1.6 | 2700          | 10.7        | 21.399            | 153.185 | B2700        | 14L16- | 3                | 124 |
| 1908               | 9.8   | 2.3 | 4300          | 9.8         | 21.603            | 167.383 | B4300        | 14L16- | 3                | 186 |
| 1918               | 9.7   | 1.4 | 2700          | 9.7         | 21.393            | 168.230 | B2700        | 14L16- | 3                | 124 |
| 2119               | 8.8   | 1.3 | 2700          | 8.8         | 20.826            | 185.911 | B2700        | 14L16- | 3                | 124 |
| 2315               | 8.0   | 1.9 | 4300          | 8.0         | 20.964            | 203.143 | B4300        | 14L16- | 3                | 186 |
| 2327               | 8.0   | 1.2 | 2700          | 8.0         | 20.822            | 204.170 | B2700        | 14L16- | 3                | 124 |
| 2515               | 7.3   | 1.7 | 4300          | 7.3         | 20.331            | 224.446 | B4300        | 14L16- | 4                | 189 |
| 2528               | 7.2   | 1.1 | 2700          | 7.2         | 20.214            | 225.581 | B2700        | 14L16- | 4                | 127 |
| 2679               | 7.0   | 1.0 | 2700          | 7.0         | 20.280            | 235.000 | B2700        | 14L16- | 3                | 124 |
| 2927               | 6.4   | 1.5 | 4300          | 6.4         | 20.367            | 256.781 | B4300        | 14L16- | 3                | 186 |
| 3410               | 5.4   | 1.3 | 4300          | 5.4         | 20.186            | 304.333 | B4300        | 14L16- | 4                | 189 |
| 4141               | 4.4   | 1.0 | 4300          | 4.4         | 20.038            | 369.548 | B4300        | 14L16- | 4                | 189 |



# Technical data

Selection tables

Inverter mains connection 400 V, Forced ventilated motors

## 2.2 kW

| Inverter operation |                |     |                     |                    |                   |         | Geared motor |        | Number of stages |    |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|---------|--------------|--------|------------------|----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i       | g500-        | MCA    | z                | m  |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg |
| 21.0               | 957            | 4.9 | 108                 | 844                | 11.272            | 3.565   | B240         | 13I34- | 2                | 21 |
| 29.0               | 698            | 3.8 | 147                 | 687                | 10.044            | 4.889   | B240         | 13I34- | 2                | 21 |
| 30.0               | 682            | 5.1 | 152                 | 606                | 12.660            | 5.002   | B450         | 13I34- | 3                | 24 |
| 31.0               | 658            | 1.7 | 69.0                | 534                | 9.093             | 5.185   | B110         | 13I34- | 2                | 17 |
| 37.0               | 545            | 3.2 | 156                 | 545                | 9.451             | 6.257   | B240         | 13I34- | 2                | 21 |
| 41.0               | 497            | 5.1 | 209                 | 497                | 10.782            | 6.860   | B450         | 13I34- | 3                | 24 |
| 43.0               | 480            | 1.4 | 77.0                | 403                | 8.778             | 7.111   | B110         | 13I34- | 2                | 17 |
| 47.0               | 436            | 3.0 | 187                 | 350                | 9.813             | 7.817   | B240         | 13I34- | 2                | 21 |
| 54.0               | 375            | 1.2 | 84.0                | 341                | 8.623             | 9.101   | B110         | 13I34- | 2                | 17 |
| 57.0               | 358            | 5.1 | 289                 | 358                | 12.061            | 9.520   | B820         | 13I34- | 3                | 47 |
| 62.0               | 330            | 4.7 | 314                 | 289                | 11.360            | 10.328  | B450         | 13I34- | 3                | 24 |
| 64.0               | 318            | 2.4 | 204                 | 286                | 9.268             | 10.720  | B240         | 13I34- | 2                | 21 |
| 73.0               | 281            | 4.7 | 369                 | 281                | 10.820            | 12.143  | B820         | 13I34- | 3                | 47 |
| 82.0               | 249            | 2.0 | 217                 | 238                | 8.977             | 13.719  | B240         | 13I34- | 2                | 21 |
| 85.0               | 241            | 3.8 | 422                 | 237                | 10.091            | 14.165  | B450         | 13I34- | 3                | 24 |
| 90.0               | 227            | 1.9 | 223                 | 221                | 8.886             | 15.008  | B240         | 13I34- | 2                | 21 |
| 98.0               | 209            | 5.1 | 497                 | 209                | 11.396            | 16.352  | B820         | 13I34- | 3                | 47 |
| 113                | 181            | 4.1 | 573                 | 175                | 10.588            | 18.851  | B600         | 13I34- | 3                | 42 |
| 115                | 178            | 1.6 | 240                 | 178                | 8.720             | 19.143  | B240         | 13I34- | 2                | 21 |
| 119                | 172            | 2.9 | 450                 | 172                | 9.306             | 19.831  | B450         | 13I34- | 3                | 24 |
| 123                | 165            | 3.7 | 600                 | 162                | 10.323            | 20.622  | B600         | 13I34- | 3                | 42 |
| 125                | 164            | 4.7 | 634                 | 164                | 10.411            | 20.857  | B820         | 13I34- | 3                | 47 |
| 140                | 145            | 1.3 | 240                 | 145                | 8.622             | 23.450  | B240         | 13I34- | 2                | 21 |
| 151                | 135            | 2.3 | 450                 | 135                | 8.978             | 25.294  | B450         | 13I34- | 3                | 24 |
| 153                | 134            | 4.0 | 777                 | 134                | 9.853             | 25.550  | B820         | 13I34- | 3                | 47 |
| 175                | 117            | 5.1 | 888                 | 117                | 12.594            | 29.206  | B1500        | 13I34- | 3                | 78 |
| 183                | 112            | 1.0 | 240                 | 112                | 8.500             | 30.522  | B240         | 13I34- | 2                | 21 |
| 185                | 110            | 1.9 | 450                 | 110                | 8.794             | 30.985  | B450         | 13I34- | 3                | 24 |
| 241                | 84.6           | 1.6 | 450                 | 84.6               | 8.602             | 40.330  | B450         | 13I34- | 3                | 24 |
| 251                | 81.3           | 2.1 | 600                 | 81.3               | 8.976             | 41.940  | B600         | 13I34- | 3                | 42 |
| 274                | 74.6           | 1.9 | 600                 | 60.5               | 9.862             | 45.739  | B600         | 13I34- | 3                | 42 |
| 279                | 73.2           | 4.6 | 1415                | 73.2               | 10.438            | 46.568  | B1500        | 13I34- | 3                | 78 |
| 299                | 68.2           | 1.7 | 600                 | 54.6               | 9.717             | 50.036  | B600         | 13I34- | 3                | 42 |
| 300                | 68.0           | 1.3 | 450                 | 68.0               | 8.511             | 50.167  | B450         | 13I34- | 3                | 24 |
| 302                | 67.5           | 2.3 | 820                 | 60.3               | 9.770             | 50.543  | B820         | 13I34- | 3                | 47 |
| 342                | 59.7           | 3.8 | 1500                | 59.7               | 9.764             | 57.074  | B1500        | 13I34- | 3                | 78 |
| 373                | 54.8           | 1.0 | 450                 | 48.0               | 8.771             | 62.262  | B450         | 13I34- | 3                | 24 |
| 382                | 53.4           | 1.4 | 600                 | 43.0               | 9.379             | 63.822  | B600         | 13I34- | 3                | 42 |
| 384                | 53.1           | 3.4 | 1500                | 49.8               | 11.240            | 64.221  | B1500        | 13I34- | 3                | 78 |
| 386                | 52.9           | 1.8 | 820                 | 49.1               | 9.412             | 64.468  | B820         | 13I34- | 3                | 47 |
| 404                | 50.5           | 1.3 | 600                 | 50.5               | 8.581             | 67.513  | B600         | 13I34- | 3                | 42 |
| 449                | 45.5           | 2.9 | 1500                | 45.5               | 9.206             | 74.963  | B1500        | 13I34- | 3                | 78 |
| 468                | 43.6           | 1.1 | 600                 | 37.1               | 9.165             | 78.182  | B600         | 13I34- | 3                | 42 |
| 473                | 43.2           | 1.5 | 820                 | 42.4               | 9.187             | 78.973  | B820         | 13I34- | 3                | 47 |
| 490                | 41.6           | 1.1 | 600                 | 41.6               | 8.505             | 81.937  | B600         | 13I34- | 3                | 42 |
| 544                | 37.5           | 2.4 | 1500                | 37.5               | 8.958             | 90.978  | B1500        | 13I34- | 3                | 78 |
| 613                | 33.3           | 2.1 | 1500                | 33.3               | 9.905             | 102.396 | B1500        | 13I34- | 3                | 78 |
| 615                | 33.2           | 1.2 | 820                 | 33.2               | 8.789             | 102.790 | B820         | 13I34- | 3                | 47 |
| 751                | 27.2           | 1.9 | 1500                | 27.2               | 9.413             | 125.498 | B1500        | 13I34- | 3                | 78 |
| 765                | 26.7           | 1.0 | 820                 | 26.7               | 8.665             | 127.861 | B820         | 13I34- | 3                | 47 |
| 986                | 20.7           | 1.5 | 1500                | 20.7               | 9.000             | 164.833 | B1500        | 13I34- | 3                | 78 |

# Technical data

Selection tables

Inverter mains connection 400 V, Forced ventilated motors



| Inverter operation |       |     |               |                    |                   |         | Geared motor |        | Number of stages |     |
|--------------------|-------|-----|---------------|--------------------|-------------------|---------|--------------|--------|------------------|-----|
| $M_2$              | $n_2$ | c   | $M_{2, \max}$ | $n_{2, \text{th}}$ | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm   |     | Nm            | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 1197               | 17.0  | 1.2 | 1500          | 17.0               | 8.819             | 200.048 | B1500        | 13 34- | 3                | 78  |
| 1320               | 15.2  | 3.1 | 4300          | 15.2               | 9.431             | 224.446 | B4300        | 13 34- | 4                | 184 |
| 1322               | 15.2  | 1.1 | 1500          | 15.2               | 8.835             | 224.773 | B1500        | 13 34- | 4                | 81  |
| 1327               | 15.1  | 2.0 | 2700          | 15.1               | 9.314             | 225.581 | B2700        | 13 34- | 4                | 122 |
| 1713               | 11.7  | 1.5 | 2700          | 11.7               | 9.496             | 291.191 | B2700        | 13 34- | 4                | 122 |
| 1790               | 11.2  | 2.3 | 4300          | 11.2               | 9.286             | 304.333 | B4300        | 13 34- | 4                | 184 |
| 2148               | 9.3   | 1.2 | 2700          | 9.3                | 8.710             | 365.227 | B2700        | 13 34- | 4                | 122 |
| 2174               | 9.2   | 1.9 | 4300          | 9.2                | 9.138             | 369.548 | B4300        | 13 34- | 4                | 184 |
| 2663               | 7.5   | 1.6 | 4300          | 7.5                | 8.900             | 452.696 | B4300        | 13 34- | 4                | 184 |
| 2854               | 7.0   | 1.4 | 4300          | 7.0                | 8.723             | 485.243 | B4300        | 13 34- | 4                | 184 |
| 3551               | 5.6   | 1.2 | 4300          | 5.6                | 8.590             | 603.594 | B4300        | 13 34- | 4                | 184 |



# Technical data

Selection tables

Inverter mains connection 400 V, Forced ventilated motors

## 3.8 kW

| Inverter operation |                |     |                     |                    |                   |        | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|--------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i      | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |        |              |        |                  | kg  |
| 101                | 339            | 3.0 | 312                 | 339                | 47.522            | 4.958  | B820         | 17N17- | 3                | 61  |
| 102                | 336            | 2.6 | 280                 | 336                | 40.360            | 5.002  | B450         | 17N17- | 3                | 38  |
| 103                | 332            | 3.5 | 376                 | 332                | 42.731            | 5.067  | B600         | 17N17- | 3                | 56  |
| 139                | 247            | 2.7 | 391                 | 247                | 42.711            | 6.800  | B820         | 17N17- | 3                | 61  |
| 140                | 245            | 2.1 | 308                 | 245                | 38.482            | 6.860  | B450         | 17N17- | 3                | 38  |
| 140                | 245            | 4.8 | 652                 | 245                | 57.952            | 6.866  | B1500        | 17N17- | 3                | 91  |
| 142                | 242            | 2.7 | 398                 | 242                | 40.163            | 6.949  | B600         | 17N17- | 3                | 56  |
| 174                | 197            | 2.5 | 459                 | 197                | 45.071            | 8.517  | B820         | 17N17- | 3                | 61  |
| 187                | 184            | 5.3 | 870                 | 184                | 85.653            | 9.156  | B4300        | 17N17- | 3                | 195 |
| 194                | 177            | 2.5 | 496                 | 177                | 39.761            | 9.520  | B820         | 17N17- | 3                | 61  |
| 194                | 177            | 4.8 | 904                 | 177                | 49.064            | 9.516  | B1500        | 17N17- | 3                | 91  |
| 211                | 163            | 1.8 | 384                 | 163                | 39.060            | 10.328 | B450         | 17N17- | 3                | 38  |
| 219                | 156            | 2.4 | 541                 | 156                | 41.118            | 10.741 | B600         | 17N17- | 3                | 56  |
| 239                | 144            | 2.3 | 569                 | 144                | 41.407            | 11.680 | B820         | 17N17- | 3                | 61  |
| 245                | 140            | 4.8 | 1138                | 140                | 54.132            | 11.985 | B1500        | 17N17- | 3                | 91  |
| 248                | 138            | 2.1 | 544                 | 138                | 38.520            | 12.143 | B820         | 17N17- | 3                | 61  |
| 268                | 128            | 3.9 | 1086                | 128                | 43.661            | 13.118 | B1500        | 17N17- | 3                | 91  |
| 289                | 119            | 1.4 | 422                 | 119                | 37.791            | 14.165 | B450         | 17N17- | 3                | 38  |
| 301                | 114            | 1.9 | 600                 | 114                | 39.306            | 14.730 | B600         | 17N17- | 3                | 56  |
| 334                | 103            | 2.0 | 708                 | 103                | 39.096            | 16.352 | B820         | 17N17- | 3                | 61  |
| 339                | 101            | 4.3 | 1500                | 101                | 47.075            | 16.611 | B1500        | 17N17- | 3                | 91  |
| 378                | 90.9           | 5.3 | 1756                | 90.9               | 74.539            | 18.486 | B4300        | 17N17- | 3                | 195 |
| 385                | 89.1           | 1.5 | 600                 | 89.1               | 38.288            | 18.851 | B600         | 17N17- | 3                | 56  |
| 399                | 86.0           | 5.3 | 1856                | 86.0               | 55.748            | 19.542 | B2700        | 17N17- | 3                | 133 |
| 405                | 84.7           | 1.1 | 450                 | 84.7               | 37.006            | 19.831 | B450         | 17N17- | 3                | 38  |
| 418                | 82.2           | 3.5 | 1500                | 82.2               | 44.031            | 20.444 | B1500        | 17N17- | 3                | 91  |
| 421                | 81.5           | 1.4 | 600                 | 81.5               | 38.023            | 20.622 | B600         | 17N17- | 3                | 56  |
| 426                | 80.5           | 1.9 | 820                 | 80.5               | 38.111            | 20.857 | B820         | 17N17- | 3                | 61  |
| 430                | 79.8           | 4.8 | 2001                | 79.8               | 66.359            | 21.065 | B4300        | 17N17- | 3                | 195 |
| 455                | 75.4           | 4.8 | 2115                | 75.4               | 51.887            | 22.269 | B2700        | 17N17- | 3                | 133 |
| 468                | 73.4           | 3.1 | 1500                | 73.4               | 42.615            | 22.898 | B1500        | 17N17- | 3                | 91  |
| 499                | 68.7           | 4.8 | 2323                | 68.7               | 51.613            | 24.456 | B2700        | 17N17- | 3                | 133 |
| 518                | 66.2           | 4.2 | 2252                | 66.2               | 58.170            | 25.365 | B4300        | 17N17- | 3                | 195 |
| 522                | 65.8           | 1.5 | 820                 | 65.8               | 37.553            | 25.550 | B820         | 17N17- | 3                | 61  |
| 532                | 64.5           | 1.1 | 600                 | 58.1               | 38.882            | 26.061 | B600         | 17N17- | 3                | 56  |
| 538                | 63.8           | 1.5 | 820                 | 63.8               | 39.077            | 26.324 | B820         | 17N17- | 3                | 61  |
| 538                | 63.8           | 2.7 | 1500                | 63.8               | 46.093            | 26.353 | B1500        | 17N17- | 3                | 91  |
| 548                | 62.7           | 4.2 | 2381                | 62.7               | 48.188            | 26.814 | B2700        | 17N17- | 3                | 133 |
| 596                | 57.5           | 2.4 | 1500                | 57.5               | 40.294            | 29.206 | B1500        | 17N17- | 3                | 91  |
| 601                | 57.1           | 4.2 | 2615                | 57.1               | 47.999            | 29.447 | B2700        | 17N17- | 3                | 133 |
| 635                | 54.0           | 3.6 | 2369                | 54.0               | 51.889            | 31.097 | B4300        | 17N17- | 3                | 195 |
| 671                | 51.1           | 3.6 | 2504                | 51.1               | 45.248            | 32.873 | B2700        | 17N17- | 3                | 133 |
| 731                | 47.0           | 2.0 | 1500                | 47.0               | 39.210            | 35.778 | B1500        | 17N17- | 3                | 91  |
| 737                | 46.5           | 1.1 | 820                 | 46.5               | 38.220            | 36.102 | B820         | 17N17- | 3                | 61  |
| 737                | 46.5           | 3.5 | 2700                | 46.5               | 45.122            | 36.102 | B2700        | 17N17- | 3                | 133 |
| 746                | 46.0           | 1.9 | 1500                | 46.0               | 42.890            | 36.526 | B1500        | 17N17- | 3                | 91  |
| 874                | 39.3           | 3.1 | 2700                | 39.3               | 50.139            | 42.772 | B2700        | 17N17- | 3                | 133 |
| 918                | 37.4           | 1.6 | 1500                | 37.4               | 41.269            | 44.955 | B1500        | 17N17- | 3                | 91  |
| 951                | 36.1           | 1.6 | 1500                | 36.1               | 38.138            | 46.568 | B1500        | 17N17- | 3                | 91  |
| 954                | 35.9           | 4.5 | 4300                | 35.9               | 52.755            | 46.737 | B4300        | 17N17- | 3                | 195 |
| 959                | 35.8           | 2.8 | 2700                | 35.8               | 50.065            | 46.973 | B2700        | 17N17- | 3                | 133 |

# Technical data

Selection tables

Inverter mains connection 400 V, Forced ventilated motors



| Inverter operation |       |     |               |                    |                   |         | Geared motor |        | Number of stages |     |
|--------------------|-------|-----|---------------|--------------------|-------------------|---------|--------------|--------|------------------|-----|
| $M_2$              | $n_2$ | c   | $M_{2, \max}$ | $n_{2, \text{th}}$ | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm   |     | Nm            | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 999                | 34.3  | 2.7 | 2700          | 34.3               | 41.468            | 48.912  | B2700        | 17N17- | 3                | 133 |
| 1088               | 31.5  | 4.0 | 4300          | 31.5               | 49.583            | 53.258  | B4300        | 17N17- | 3                | 195 |
| 1104               | 31.1  | 2.4 | 2700          | 31.1               | 37.113            | 54.082  | B2700        | 17N17- | 3                | 133 |
| 1166               | 29.4  | 1.3 | 1500          | 29.4               | 37.464            | 57.074  | B1500        | 17N17- | 3                | 91  |
| 1213               | 28.3  | 2.2 | 2700          | 28.3               | 37.113            | 59.393  | B2700        | 17N17- | 3                | 133 |
| 1310               | 26.2  | 3.3 | 4300          | 26.2               | 46.598            | 64.127  | B4300        | 17N17- | 3                | 195 |
| 1312               | 26.2  | 1.1 | 1500          | 26.2               | 38.940            | 64.221  | B1500        | 17N17- | 3                | 91  |
| 1316               | 26.1  | 2.1 | 2700          | 26.1               | 45.170            | 64.452  | B2700        | 17N17- | 3                | 133 |
| 1469               | 23.3  | 1.8 | 2700          | 23.3               | 43.266            | 71.951  | B2700        | 17N17- | 3                | 133 |
| 1570               | 21.9  | 1.7 | 2700          | 21.9               | 38.609            | 76.862  | B2700        | 17N17- | 3                | 133 |
| 1606               | 21.4  | 2.7 | 4300          | 21.4               | 44.191            | 78.619  | B4300        | 17N17- | 3                | 195 |
| 1735               | 19.8  | 1.6 | 2700          | 19.8               | 37.923            | 84.940  | B2700        | 17N17- | 3                | 133 |
| 1905               | 18.0  | 1.4 | 2700          | 18.0               | 37.904            | 93.283  | B2700        | 17N17- | 3                | 133 |
| 1991               | 17.2  | 1.4 | 2700          | 17.2               | 40.457            | 97.481  | B2700        | 17N17- | 3                | 133 |
| 2175               | 15.8  | 2.0 | 4300          | 15.8               | 40.960            | 106.517 | B4300        | 17N17- | 3                | 195 |
| 2186               | 15.7  | 1.2 | 2700          | 15.7               | 40.442            | 107.056 | B2700        | 17N17- | 3                | 133 |
| 2417               | 14.2  | 1.1 | 2700          | 14.2               | 37.113            | 118.370 | B2700        | 17N17- | 3                | 133 |
| 2641               | 13.0  | 1.6 | 4300          | 13.0               | 37.113            | 129.342 | B4300        | 17N17- | 3                | 195 |
| 2655               | 12.9  | 1.0 | 2700          | 12.9               | 37.113            | 129.996 | B2700        | 17N17- | 3                | 133 |
| 3418               | 10.0  | 1.3 | 4300          | 10.0               | 38.403            | 167.383 | B4300        | 17N17- | 3                | 195 |
| 4149               | 8.3   | 1.0 | 4300          | 8.3                | 37.764            | 203.143 | B4300        | 17N17- | 3                | 195 |



# Technical data

Selection tables

Inverter mains connection 400 V, Forced ventilated motors

## 3.9 kW

| Inverter operation |                |     |                     |                    |                   |        | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|--------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i      | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |        |              |        |                  | kg  |
| 37.0               | 969            | 2.9 | 138                 | 757                | 22.172            | 3.565  | B240         | 14L35- | 2                | 26  |
| 50.0               | 707            | 2.2 | 147                 | 616                | 20.944            | 4.889  | B240         | 14L35- | 2                | 26  |
| 51.0               | 697            | 4.6 | 283                 | 508                | 30.722            | 4.958  | B820         | 14L35- | 3                | 52  |
| 51.0               | 691            | 4.1 | 280                 | 581                | 23.560            | 5.002  | B450         | 14L35- | 3                | 29  |
| 52.0               | 682            | 5.2 | 289                 | 509                | 25.931            | 5.067  | B600         | 14L35- | 3                | 47  |
| 64.0               | 552            | 1.8 | 156                 | 501                | 20.351            | 6.257  | B240         | 14L35- | 2                | 26  |
| 70.0               | 508            | 4.3 | 388                 | 422                | 25.911            | 6.800  | B820         | 14L35- | 3                | 52  |
| 70.0               | 504            | 3.3 | 308                 | 477                | 21.682            | 6.860  | B450         | 14L35- | 3                | 29  |
| 71.0               | 497            | 4.2 | 396                 | 412                | 23.363            | 6.949  | B600         | 14L35- | 3                | 47  |
| 80.0               | 442            | 1.8 | 187                 | 299                | 20.713            | 7.817  | B240         | 14L35- | 2                | 26  |
| 87.0               | 406            | 4.0 | 459                 | 286                | 28.271            | 8.517  | B820         | 14L35- | 3                | 52  |
| 98.0               | 363            | 3.9 | 496                 | 354                | 22.961            | 9.520  | B820         | 14L35- | 3                | 52  |
| 106                | 335            | 2.7 | 384                 | 259                | 22.260            | 10.328 | B450         | 14L35- | 3                | 29  |
| 110                | 322            | 1.4 | 204                 | 227                | 20.168            | 10.720 | B240         | 14L35- | 2                | 26  |
| 110                | 322            | 3.7 | 541                 | 224                | 24.318            | 10.741 | B600         | 14L35- | 3                | 47  |
| 120                | 296            | 3.6 | 569                 | 237                | 24.607            | 11.680 | B820         | 14L35- | 3                | 52  |
| 125                | 285            | 3.3 | 544                 | 285                | 21.720            | 12.143 | B820         | 14L35- | 3                | 52  |
| 135                | 263            | 5.2 | 748                 | 227                | 26.861            | 13.118 | B1500        | 14L35- | 3                | 83  |
| 141                | 252            | 1.2 | 217                 | 185                | 19.877            | 13.719 | B240         | 14L35- | 2                | 26  |
| 145                | 244            | 2.2 | 422                 | 212                | 20.991            | 14.165 | B450         | 14L35- | 3                | 29  |
| 151                | 235            | 3.0 | 600                 | 181                | 22.506            | 14.730 | B600         | 14L35- | 3                | 47  |
| 154                | 230            | 1.1 | 223                 | 174                | 19.786            | 15.008 | B240         | 14L35- | 2                | 26  |
| 168                | 211            | 3.2 | 708                 | 199                | 22.296            | 16.352 | B820         | 14L35- | 3                | 52  |
| 193                | 183            | 2.4 | 600                 | 156                | 21.488            | 18.851 | B600         | 14L35- | 3                | 47  |
| 203                | 174            | 1.7 | 450                 | 157                | 20.206            | 19.831 | B450         | 14L35- | 3                | 29  |
| 210                | 169            | 5.4 | 1165                | 141                | 27.231            | 20.444 | B1500        | 14L35- | 3                | 83  |
| 212                | 168            | 2.2 | 600                 | 145                | 21.223            | 20.622 | B600         | 14L35- | 3                | 47  |
| 214                | 166            | 2.9 | 820                 | 166                | 21.311            | 20.857 | B820         | 14L35- | 3                | 52  |
| 235                | 151            | 4.8 | 1305                | 128                | 25.815            | 22.898 | B1500        | 14L35- | 3                | 83  |
| 259                | 137            | 1.3 | 450                 | 130                | 19.878            | 25.294 | B450         | 14L35- | 3                | 29  |
| 260                | 136            | 5.6 | 1446                | 115                | 41.370            | 25.365 | B4300        | 14L35- | 3                | 186 |
| 262                | 135            | 2.4 | 820                 | 135                | 20.753            | 25.550 | B820         | 14L35- | 3                | 52  |
| 267                | 133            | 1.7 | 600                 | 73.2               | 22.082            | 26.061 | B600         | 14L35- | 3                | 47  |
| 270                | 131            | 2.3 | 820                 | 82.0               | 22.277            | 26.324 | B820         | 14L35- | 3                | 52  |
| 275                | 129            | 5.6 | 1528                | 108                | 31.388            | 26.814 | B2700        | 14L35- | 3                | 124 |
| 300                | 118            | 3.8 | 1500                | 112                | 23.494            | 29.206 | B1500        | 14L35- | 3                | 83  |
| 302                | 117            | 5.6 | 1678                | 98.7               | 31.199            | 29.447 | B2700        | 14L35- | 3                | 124 |
| 318                | 112            | 1.1 | 450                 | 111                | 19.694            | 30.985 | B450         | 14L35- | 3                | 29  |
| 367                | 96.7           | 1.2 | 600                 | 52.9               | 21.317            | 35.740 | B600         | 14L35- | 3                | 47  |
| 367                | 96.6           | 3.1 | 1500                | 95.9               | 22.410            | 35.778 | B1500        | 14L35- | 3                | 83  |
| 370                | 95.7           | 1.7 | 820                 | 61.4               | 21.420            | 36.102 | B820         | 14L35- | 3                | 52  |
| 430                | 82.4           | 1.2 | 600                 | 82.4               | 19.876            | 41.940 | B600         | 14L35- | 3                | 47  |
| 461                | 76.9           | 2.8 | 1500                | 55.9               | 24.469            | 44.955 | B1500        | 14L35- | 3                | 83  |
| 469                | 75.5           | 1.1 | 600                 | 45.0               | 20.762            | 45.739 | B600         | 14L35- | 3                | 47  |
| 478                | 74.2           | 2.7 | 1500                | 74.2               | 21.338            | 46.568 | B1500        | 14L35- | 3                | 83  |
| 502                | 70.6           | 4.3 | 2491                | 70.6               | 24.668            | 48.912 | B2700        | 14L35- | 3                | 124 |
| 513                | 69.0           | 1.0 | 600                 | 41.7               | 20.617            | 50.036 | B600         | 14L35- | 3                | 47  |
| 518                | 68.4           | 1.4 | 820                 | 47.5               | 20.670            | 50.543 | B820         | 14L35- | 3                | 52  |
| 555                | 63.9           | 3.7 | 2351                | 63.9               | 20.313            | 54.082 | B2700        | 14L35- | 3                | 124 |
| 585                | 60.5           | 2.2 | 1500                | 60.5               | 20.664            | 57.074 | B1500        | 14L35- | 3                | 83  |
| 609                | 58.2           | 3.7 | 2582                | 58.2               | 20.313            | 59.393 | B2700        | 14L35- | 3                | 124 |

# Technical data

Selection tables

Inverter mains connection 400 V, Forced ventilated motors



| Inverter operation |       |     |               |             |                   |         | Geared motor |        | Number of stages |     |
|--------------------|-------|-----|---------------|-------------|-------------------|---------|--------------|--------|------------------|-----|
| $M_2$              | $n_2$ | c   | $M_{2, \max}$ | $n_{2, th}$ | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm   |     | Nm            | rpm         | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 658                | 53.9  | 5.6 | 3655          | 45.4        | 29.798            | 64.127  | B4300        | 14L35- | 3                | 186 |
| 659                | 53.8  | 2.0 | 1500          | 44.3        | 22.140            | 64.221  | B1500        | 14L35- | 3                | 83  |
| 661                | 53.6  | 1.1 | 820           | 38.5        | 20.312            | 64.468  | B820         | 14L35- | 3                | 52  |
| 661                | 53.6  | 3.5 | 2700          | 41.0        | 28.370            | 64.452  | B2700        | 14L35- | 3                | 124 |
| 769                | 46.1  | 1.7 | 1500          | 46.1        | 20.106            | 74.963  | B1500        | 14L35- | 3                | 83  |
| 788                | 45.0  | 2.9 | 2675          | 45.0        | 21.809            | 76.862  | B2700        | 14L35- | 3                | 124 |
| 871                | 40.7  | 2.4 | 2475          | 40.7        | 21.123            | 84.940  | B2700        | 14L35- | 3                | 124 |
| 933                | 38.0  | 1.4 | 1500          | 38.0        | 19.858            | 90.978  | B1500        | 14L35- | 3                | 83  |
| 957                | 37.0  | 2.4 | 2700          | 37.0        | 21.104            | 93.283  | B2700        | 14L35- | 3                | 124 |
| 1000               | 35.4  | 2.3 | 2700          | 33.1        | 23.657            | 97.481  | B2700        | 14L35- | 3                | 124 |
| 1050               | 33.7  | 1.2 | 1500          | 29.4        | 20.805            | 102.396 | B1500        | 14L35- | 3                | 83  |
| 1093               | 32.4  | 3.4 | 4300          | 32.4        | 24.160            | 106.517 | B4300        | 14L35- | 3                | 186 |
| 1098               | 32.3  | 2.1 | 2700          | 29.6        | 23.642            | 107.056 | B2700        | 14L35- | 3                | 124 |
| 1214               | 29.2  | 2.1 | 2700          | 29.2        | 20.313            | 118.370 | B2700        | 14L35- | 3                | 124 |
| 1287               | 27.5  | 1.1 | 1500          | 26.4        | 20.313            | 125.498 | B1500        | 14L35- | 3                | 83  |
| 1327               | 26.7  | 3.1 | 4300          | 26.7        | 20.313            | 129.342 | B4300        | 14L35- | 3                | 186 |
| 1334               | 26.6  | 1.9 | 2700          | 26.6        | 20.313            | 129.996 | B2700        | 14L35- | 3                | 124 |
| 1571               | 22.6  | 1.6 | 2700          | 22.6        | 21.399            | 153.185 | B2700        | 14L35- | 3                | 124 |
| 1717               | 20.6  | 2.4 | 4300          | 20.6        | 21.603            | 167.383 | B4300        | 14L35- | 3                | 186 |
| 1726               | 20.5  | 1.5 | 2700          | 20.5        | 21.393            | 168.230 | B2700        | 14L35- | 3                | 124 |
| 1907               | 18.6  | 1.4 | 2700          | 18.6        | 20.826            | 185.911 | B2700        | 14L35- | 3                | 124 |
| 2084               | 17.0  | 2.0 | 4300          | 17.0        | 20.964            | 203.143 | B4300        | 14L35- | 3                | 186 |
| 2094               | 16.9  | 1.2 | 2700          | 16.9        | 20.822            | 204.170 | B2700        | 14L35- | 3                | 124 |
| 2263               | 15.4  | 1.8 | 4300          | 15.4        | 20.331            | 224.446 | B4300        | 14L35- | 4                | 189 |
| 2275               | 15.3  | 1.1 | 2700          | 15.3        | 20.214            | 225.581 | B2700        | 14L35- | 4                | 127 |
| 2411               | 14.7  | 1.1 | 2700          | 14.7        | 20.280            | 235.000 | B2700        | 14L35- | 3                | 124 |
| 2634               | 13.5  | 1.6 | 4300          | 13.5        | 20.367            | 256.781 | B4300        | 14L35- | 3                | 186 |
| 3069               | 11.4  | 1.3 | 4300          | 11.4        | 20.186            | 304.333 | B4300        | 14L35- | 4                | 189 |
| 3727               | 9.3   | 1.1 | 4300          | 9.3         | 20.038            | 369.548 | B4300        | 14L35- | 4                | 189 |



# Technical data

Selection tables

Inverter mains connection 400 V, Forced ventilated motors

## 6.4 kW

| Inverter operation |                |     |                     |                    |                   |        | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|--------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i      | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |        |              |        |                  | kg  |
| 171                | 343            | 1.8 | 312                 | 343                | 83.522            | 4.958  | B820         | 19S17- | 3                | 84  |
| 172                | 340            | 1.6 | 280                 | 340                | 76.360            | 5.002  | B450         | 19S17- | 3                | 60  |
| 175                | 336            | 2.1 | 376                 | 336                | 78.731            | 5.067  | B600         | 19S17- | 3                | 79  |
| 234                | 250            | 1.6 | 391                 | 250                | 78.711            | 6.800  | B820         | 19S17- | 3                | 84  |
| 237                | 248            | 1.3 | 308                 | 248                | 74.482            | 6.860  | B450         | 19S17- | 3                | 60  |
| 237                | 248            | 3.4 | 837                 | 248                | 93.952            | 6.866  | B1500        | 19S17- | 3                | 114 |
| 239                | 246            | 5.8 | 1183                | 246                | 121.215           | 6.918  | B2700        | 19S17- | 3                | 155 |
| 240                | 245            | 1.6 | 398                 | 245                | 76.163            | 6.949  | B600         | 19S17- | 3                | 79  |
| 294                | 200            | 1.5 | 459                 | 200                | 81.071            | 8.517  | B820         | 19S17- | 3                | 84  |
| 303                | 193            | 4.8 | 1503                | 193                | 105.939           | 8.793  | B2700        | 19S17- | 3                | 155 |
| 328                | 179            | 1.5 | 496                 | 179                | 75.761            | 9.520  | B820         | 19S17- | 3                | 84  |
| 328                | 179            | 2.9 | 1006                | 179                | 85.064            | 9.516  | B1500        | 19S17- | 3                | 114 |
| 356                | 165            | 1.0 | 384                 | 165                | 75.060            | 10.328 | B450         | 19S17- | 3                | 60  |
| 370                | 158            | 1.4 | 541                 | 158                | 77.118            | 10.741 | B600         | 19S17- | 3                | 79  |
| 403                | 146            | 1.4 | 569                 | 146                | 77.407            | 11.680 | B820         | 19S17- | 3                | 84  |
| 404                | 145            | 5.3 | 2003                | 145                | 114.531           | 11.713 | B2700        | 19S17- | 3                | 155 |
| 413                | 142            | 3.4 | 1461                | 142                | 90.132            | 11.985 | B1500        | 19S17- | 3                | 114 |
| 419                | 140            | 1.3 | 544                 | 140                | 74.520            | 12.143 | B820         | 19S17- | 3                | 84  |
| 444                | 132            | 4.9 | 2199                | 132                | 113.539           | 12.863 | B2700        | 19S17- | 3                | 155 |
| 452                | 130            | 2.4 | 1118                | 130                | 79.661            | 13.118 | B1500        | 19S17- | 3                | 114 |
| 508                | 115            | 1.1 | 600                 | 115                | 75.306            | 14.730 | B600         | 19S17- | 3                | 79  |
| 513                | 114            | 4.5 | 2380                | 114                | 101.802           | 14.888 | B2700        | 19S17- | 3                | 155 |
| 564                | 104            | 1.2 | 708                 | 104                | 75.096            | 16.352 | B820         | 19S17- | 3                | 84  |
| 564                | 104            | 4.1 | 2429                | 104                | 101.188           | 16.351 | B2700        | 19S17- | 3                | 155 |
| 573                | 102            | 2.5 | 1500                | 102                | 83.075            | 16.611 | B1500        | 19S17- | 3                | 114 |
| 674                | 87.0           | 3.7 | 2579                | 87.0               | 91.748            | 19.542 | B2700        | 19S17- | 3                | 155 |
| 705                | 83.2           | 2.0 | 1500                | 83.2               | 80.031            | 20.444 | B1500        | 19S17- | 3                | 114 |
| 719                | 81.5           | 1.1 | 820                 | 81.5               | 74.111            | 20.857 | B820         | 19S17- | 3                | 84  |
| 726                | 80.7           | 5.7 | 3602                | 80.7               | 102.359           | 21.065 | B4300        | 19S17- | 3                | 217 |
| 768                | 76.3           | 3.4 | 2684                | 76.3               | 87.887            | 22.269 | B2700        | 19S17- | 3                | 155 |
| 790                | 74.2           | 1.8 | 1500                | 74.2               | 78.615            | 22.898 | B1500        | 19S17- | 3                | 114 |
| 843                | 69.5           | 3.1 | 2700                | 69.5               | 87.613            | 24.456 | B2700        | 19S17- | 3                | 155 |
| 875                | 67.0           | 4.7 | 4300                | 67.0               | 94.170            | 25.365 | B4300        | 19S17- | 3                | 217 |
| 909                | 64.5           | 1.6 | 1500                | 58.2               | 82.093            | 26.353 | B1500        | 19S17- | 3                | 114 |
| 925                | 63.4           | 2.8 | 2700                | 63.4               | 84.188            | 26.814 | B2700        | 19S17- | 3                | 155 |
| 966                | 60.7           | 4.3 | 4300                | 60.7               | 106.200           | 28.013 | B4300        | 19S17- | 3                | 217 |
| 1007               | 58.2           | 1.4 | 1500                | 58.2               | 76.294            | 29.206 | B1500        | 19S17- | 3                | 114 |
| 1015               | 57.7           | 2.6 | 2700                | 57.7               | 83.999            | 29.447 | B2700        | 19S17- | 3                | 155 |
| 1072               | 54.7           | 3.9 | 4300                | 54.7               | 87.889            | 31.097 | B4300        | 19S17- | 3                | 217 |
| 1133               | 51.7           | 2.3 | 2700                | 51.7               | 81.248            | 32.873 | B2700        | 19S17- | 3                | 155 |
| 1228               | 47.7           | 3.4 | 4300                | 47.7               | 96.646            | 35.607 | B4300        | 19S17- | 3                | 217 |
| 1234               | 47.5           | 1.2 | 1500                | 47.5               | 75.210            | 35.778 | B1500        | 19S17- | 3                | 114 |
| 1245               | 47.1           | 2.1 | 2700                | 47.1               | 81.122            | 36.102 | B2700        | 19S17- | 3                | 155 |
| 1259               | 46.5           | 1.1 | 1500                | 41.4               | 78.890            | 36.526 | B1500        | 19S17- | 3                | 114 |
| 1475               | 39.7           | 1.8 | 2700                | 39.7               | 86.139            | 42.772 | B2700        | 19S17- | 3                | 155 |
| 1611               | 36.4           | 2.7 | 4300                | 36.4               | 88.755            | 46.737 | B4300        | 19S17- | 3                | 217 |
| 1620               | 36.2           | 1.7 | 2700                | 36.0               | 86.065            | 46.973 | B2700        | 19S17- | 3                | 155 |
| 1686               | 34.8           | 1.6 | 2700                | 34.8               | 77.468            | 48.912 | B2700        | 19S17- | 3                | 155 |
| 1836               | 31.9           | 2.3 | 4300                | 31.9               | 85.583            | 53.258 | B4300        | 19S17- | 3                | 217 |
| 1865               | 31.4           | 1.5 | 2700                | 31.4               | 73.113            | 54.082 | B2700        | 19S17- | 3                | 155 |
| 2048               | 28.6           | 1.3 | 2700                | 28.6               | 73.113            | 59.393 | B2700        | 19S17- | 3                | 155 |

# Technical data

Selection tables

Inverter mains connection 400 V, Forced ventilated motors



| Inverter operation |       |     |               |                    |                   |         | Geared motor |        | Number of stages |     |
|--------------------|-------|-----|---------------|--------------------|-------------------|---------|--------------|--------|------------------|-----|
| $M_2$              | $n_2$ | c   | $M_{2, \max}$ | $n_{2, \text{th}}$ | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm   |     | Nm            | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 2211               | 26.5  | 1.9 | 4300          | 26.5               | 82.598            | 64.127  | B4300        | 19S17- | 3                | 217 |
| 2222               | 26.4  | 1.2 | 2700          | 26.4               | 81.170            | 64.452  | B2700        | 19S17- | 3                | 155 |
| 2481               | 23.6  | 1.1 | 2700          | 23.6               | 79.266            | 71.951  | B2700        | 19S17- | 3                | 155 |
| 2711               | 21.6  | 1.6 | 4300          | 21.6               | 80.191            | 78.619  | B4300        | 19S17- | 3                | 217 |
| 3673               | 16.0  | 1.2 | 4300          | 16.0               | 76.960            | 106.517 | B4300        | 19S17- | 3                | 217 |



# Technical data

Selection tables

Inverter mains connection 400 V, Forced ventilated motors

## 6.9 kW

| Inverter operation |                |     |                     |                    |                   |        | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|--------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i      | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |        |              |        |                  | kg  |
| 89.0               | 702            | 2.6 | 312                 | 449                | 47.522            | 4.958  | B820         | 17N35- | 3                | 61  |
| 90.0               | 696            | 2.3 | 280                 | 517                | 40.360            | 5.002  | B450         | 17N35- | 3                | 38  |
| 91.0               | 687            | 3.1 | 376                 | 457                | 42.731            | 5.067  | B600         | 17N35- | 3                | 56  |
| 123                | 512            | 2.4 | 391                 | 374                | 42.711            | 6.800  | B820         | 17N35- | 3                | 61  |
| 124                | 507            | 1.9 | 308                 | 417                | 38.482            | 6.860  | B450         | 17N35- | 3                | 38  |
| 124                | 507            | 4.3 | 652                 | 308                | 57.952            | 6.866  | B1500        | 17N35- | 3                | 91  |
| 125                | 501            | 2.4 | 398                 | 366                | 40.163            | 6.949  | B600         | 17N35- | 3                | 56  |
| 154                | 409            | 2.3 | 459                 | 252                | 45.071            | 8.517  | B820         | 17N35- | 3                | 61  |
| 165                | 380            | 4.7 | 870                 | 248                | 85.653            | 9.156  | B4300        | 17N35- | 3                | 195 |
| 172                | 366            | 4.3 | 904                 | 256                | 49.064            | 9.516  | B1500        | 17N35- | 3                | 91  |
| 172                | 366            | 2.2 | 496                 | 316                | 39.761            | 9.520  | B820         | 17N35- | 3                | 61  |
| 186                | 337            | 1.6 | 384                 | 211                | 39.060            | 10.328 | B450         | 17N35- | 3                | 38  |
| 194                | 324            | 2.1 | 541                 | 197                | 41.118            | 10.741 | B600         | 17N35- | 3                | 56  |
| 211                | 298            | 2.0 | 569                 | 210                | 41.407            | 11.680 | B820         | 17N35- | 3                | 61  |
| 216                | 290            | 4.3 | 1138                | 176                | 54.132            | 11.985 | B1500        | 17N35- | 3                | 91  |
| 219                | 287            | 1.9 | 544                 | 256                | 38.520            | 12.143 | B820         | 17N35- | 3                | 61  |
| 237                | 265            | 3.5 | 1086                | 209                | 43.661            | 13.118 | B1500        | 17N35- | 3                | 91  |
| 256                | 246            | 1.3 | 422                 | 162                | 37.791            | 14.165 | B450         | 17N35- | 3                | 38  |
| 266                | 236            | 1.7 | 600                 | 152                | 39.306            | 14.730 | B600         | 17N35- | 3                | 56  |
| 295                | 213            | 1.8 | 708                 | 171                | 39.096            | 16.352 | B820         | 17N35- | 3                | 61  |
| 300                | 210            | 3.8 | 1500                | 143                | 47.075            | 16.611 | B1500        | 17N35- | 3                | 91  |
| 334                | 188            | 4.7 | 1756                | 123                | 74.539            | 18.486 | B4300        | 17N35- | 3                | 195 |
| 340                | 185            | 1.3 | 600                 | 120                | 38.288            | 18.851 | B600         | 17N35- | 3                | 56  |
| 353                | 178            | 4.7 | 1856                | 116                | 55.748            | 19.542 | B2700        | 17N35- | 3                | 133 |
| 369                | 170            | 3.1 | 1500                | 126                | 44.031            | 20.444 | B1500        | 17N35- | 3                | 91  |
| 372                | 169            | 1.2 | 600                 | 110                | 38.023            | 20.622 | B600         | 17N35- | 3                | 56  |
| 376                | 167            | 1.7 | 820                 | 144                | 38.111            | 20.857 | B820         | 17N35- | 3                | 61  |
| 380                | 165            | 4.2 | 2001                | 115                | 66.359            | 21.065 | B4300        | 17N35- | 3                | 195 |
| 402                | 156            | 4.2 | 2115                | 109                | 51.887            | 22.269 | B2700        | 17N35- | 3                | 133 |
| 413                | 152            | 2.7 | 1500                | 114                | 42.615            | 22.898 | B1500        | 17N35- | 3                | 91  |
| 441                | 142            | 4.2 | 2323                | 99.4               | 51.613            | 24.456 | B2700        | 17N35- | 3                | 133 |
| 458                | 137            | 3.7 | 2252                | 105                | 58.170            | 25.365 | B4300        | 17N35- | 3                | 195 |
| 461                | 136            | 1.3 | 820                 | 122                | 37.553            | 25.550 | B820         | 17N35- | 3                | 61  |
| 475                | 132            | 1.3 | 820                 | 62.9               | 39.077            | 26.324 | B820         | 17N35- | 3                | 61  |
| 476                | 132            | 2.4 | 1500                | 69.8               | 46.093            | 26.353 | B1500        | 17N35- | 3                | 91  |
| 484                | 130            | 3.7 | 2381                | 99.7               | 48.188            | 26.814 | B2700        | 17N35- | 3                | 133 |
| 527                | 119            | 2.2 | 1500                | 99.5               | 40.294            | 29.206 | B1500        | 17N35- | 3                | 91  |
| 531                | 118            | 3.7 | 2615                | 90.8               | 47.999            | 29.447 | B2700        | 17N35- | 3                | 133 |
| 561                | 112            | 3.2 | 2369                | 90.6               | 51.889            | 31.097 | B4300        | 17N35- | 3                | 195 |
| 593                | 106            | 3.2 | 2504                | 85.7               | 45.248            | 32.873 | B2700        | 17N35- | 3                | 133 |
| 646                | 97.3           | 1.8 | 1500                | 82.5               | 39.210            | 35.778 | B1500        | 17N35- | 3                | 91  |
| 652                | 96.4           | 3.1 | 2700                | 77.8               | 45.122            | 36.102 | B2700        | 17N35- | 3                | 133 |
| 659                | 95.3           | 1.7 | 1500                | 51.5               | 42.890            | 36.526 | B1500        | 17N35- | 3                | 91  |
| 772                | 81.4           | 3.0 | 2700                | 48.1               | 50.139            | 42.772 | B2700        | 17N35- | 3                | 133 |
| 811                | 77.4           | 1.6 | 1500                | 45.2               | 41.269            | 44.955 | B1500        | 17N35- | 3                | 91  |
| 840                | 74.7           | 1.5 | 1500                | 66.8               | 38.138            | 46.568 | B1500        | 17N35- | 3                | 91  |
| 843                | 74.5           | 4.4 | 4300                | 47.8               | 52.755            | 46.737 | B4300        | 17N35- | 3                | 195 |
| 848                | 74.1           | 2.7 | 2700                | 42.9               | 50.065            | 46.973 | B2700        | 17N35- | 3                | 133 |
| 883                | 71.1           | 2.6 | 2700                | 63.6               | 41.468            | 48.912 | B2700        | 17N35- | 3                | 133 |
| 961                | 65.3           | 3.8 | 4300                | 44.7               | 49.583            | 53.258 | B4300        | 17N35- | 3                | 195 |
| 976                | 64.3           | 2.4 | 2700                | 57.5               | 37.113            | 54.082 | B2700        | 17N35- | 3                | 133 |

# Technical data

Selection tables

Inverter mains connection 400 V, Forced ventilated motors



| Inverter operation |       |     |               |             |                   |         | Geared motor |        | Number of stages |     |
|--------------------|-------|-----|---------------|-------------|-------------------|---------|--------------|--------|------------------|-----|
| $M_2$              | $n_2$ | c   | $M_{2, \max}$ | $n_{2, th}$ | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm   |     | Nm            | rpm         | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 1030               | 61.0  | 1.3 | 1500          | 54.5        | 37.464            | 57.074  | B1500        | 17N35- | 3                | 91  |
| 1072               | 58.6  | 2.2 | 2700          | 52.4        | 37.113            | 59.393  | B2700        | 17N35- | 3                | 133 |
| 1157               | 54.3  | 3.2 | 4300          | 40.3        | 46.598            | 64.127  | B4300        | 17N35- | 3                | 195 |
| 1159               | 54.2  | 1.1 | 1500          | 32.6        | 38.940            | 64.221  | B1500        | 17N35- | 3                | 91  |
| 1163               | 54.0  | 2.0 | 2700          | 36.2        | 45.170            | 64.452  | B2700        | 17N35- | 3                | 133 |
| 1299               | 48.4  | 1.8 | 2700          | 33.5        | 43.266            | 71.951  | B2700        | 17N35- | 3                | 133 |
| 1387               | 45.3  | 1.7 | 2700          | 40.5        | 38.609            | 76.862  | B2700        | 17N35- | 3                | 133 |
| 1419               | 44.3  | 2.6 | 4300          | 34.4        | 44.191            | 78.619  | B4300        | 17N35- | 3                | 195 |
| 1533               | 41.0  | 1.5 | 2700          | 36.6        | 37.923            | 84.940  | B2700        | 17N35- | 3                | 133 |
| 1684               | 37.3  | 1.4 | 2700          | 33.4        | 37.904            | 93.283  | B2700        | 17N35- | 3                | 133 |
| 1759               | 35.7  | 1.3 | 2700          | 26.1        | 40.457            | 97.481  | B2700        | 17N35- | 3                | 133 |
| 1922               | 32.7  | 1.9 | 4300          | 28.9        | 40.960            | 106.517 | B4300        | 17N35- | 3                | 195 |
| 1932               | 32.5  | 1.2 | 2700          | 22.8        | 40.442            | 107.056 | B2700        | 17N35- | 3                | 133 |
| 2136               | 29.4  | 1.2 | 2700          | 24.0        | 37.113            | 118.370 | B2700        | 17N35- | 3                | 133 |
| 2334               | 26.9  | 1.8 | 4300          | 24.1        | 37.113            | 129.342 | B4300        | 17N35- | 3                | 195 |
| 2346               | 26.8  | 1.1 | 2700          | 20.9        | 37.113            | 129.996 | B2700        | 17N35- | 3                | 133 |
| 3021               | 20.8  | 1.4 | 4300          | 18.6        | 38.403            | 167.383 | B4300        | 17N35- | 3                | 195 |
| 3666               | 17.1  | 1.1 | 4300          | 15.3        | 37.764            | 203.143 | B4300        | 17N35- | 3                | 195 |



# Technical data

Selection tables

Inverter mains connection 400 V, Forced ventilated motors

## 11 kW

| Inverter operation |                |     |                     |                    |                   |        | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|--------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i      | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |        |              |        |                  | kg  |
| 320                | 312            | 5.9 | 1564                | 312                | 305.776           | 5.488  | B4300        | 21X17- | 3                | 233 |
| 400                | 249            | 2.0 | 837                 | 249                | 201.952           | 6.866  | B1500        | 21X17- | 3                | 129 |
| 403                | 247            | 3.4 | 1446                | 242                | 229.215           | 6.918  | B2700        | 21X17- | 3                | 171 |
| 407                | 245            | 5.3 | 1988                | 245                | 261.324           | 6.976  | B4300        | 21X17- | 3                | 233 |
| 513                | 195            | 2.9 | 1528                | 195                | 213.939           | 8.793  | B2700        | 21X17- | 3                | 171 |
| 534                | 187            | 4.4 | 2479                | 187                | 229.653           | 9.156  | B4300        | 21X17- | 3                | 233 |
| 555                | 180            | 1.7 | 1006                | 180                | 193.064           | 9.516  | B1500        | 21X17- | 3                | 129 |
| 646                | 154            | 5.9 | 3157                | 154                | 274.840           | 11.080 | B4300        | 21X17- | 3                | 233 |
| 683                | 146            | 3.1 | 2212                | 139                | 222.531           | 11.713 | B2700        | 21X17- | 3                | 171 |
| 699                | 143            | 2.0 | 1461                | 143                | 198.132           | 11.985 | B1500        | 21X17- | 3                | 129 |
| 750                | 133            | 2.9 | 2262                | 125                | 221.539           | 12.863 | B2700        | 21X17- | 3                | 171 |
| 765                | 130            | 1.4 | 1118                | 130                | 187.661           | 13.118 | B1500        | 21X17- | 3                | 129 |
| 821                | 121            | 5.0 | 4013                | 121                | 242.177           | 14.084 | B4300        | 21X17- | 3                | 233 |
| 868                | 115            | 2.6 | 2380                | 115                | 209.802           | 14.888 | B2700        | 21X17- | 3                | 171 |
| 954                | 105            | 2.4 | 2429                | 105                | 209.188           | 16.351 | B2700        | 21X17- | 3                | 171 |
| 969                | 103            | 1.5 | 1500                | 103                | 191.075           | 16.611 | B1500        | 21X17- | 3                | 129 |
| 1078               | 92.5           | 3.8 | 4300                | 92.5               | 218.539           | 18.486 | B4300        | 21X17- | 3                | 233 |
| 1140               | 87.5           | 2.2 | 2579                | 87.5               | 199.748           | 19.542 | B2700        | 21X17- | 3                | 171 |
| 1192               | 83.6           | 1.2 | 1500                | 83.6               | 188.031           | 20.444 | B1500        | 21X17- | 3                | 129 |
| 1229               | 81.2           | 3.4 | 4300                | 81.2               | 210.359           | 21.065 | B4300        | 21X17- | 3                | 233 |
| 1299               | 76.8           | 2.0 | 2684                | 76.8               | 195.887           | 22.269 | B2700        | 21X17- | 3                | 171 |
| 1335               | 74.7           | 1.1 | 1500                | 74.7               | 186.615           | 22.898 | B1500        | 21X17- | 3                | 129 |
| 1426               | 69.9           | 1.8 | 2700                | 69.9               | 195.613           | 24.456 | B2700        | 21X17- | 3                | 171 |
| 1479               | 67.4           | 2.8 | 4300                | 67.4               | 202.170           | 25.365 | B4300        | 21X17- | 3                | 233 |
| 1564               | 63.8           | 1.7 | 2700                | 63.8               | 192.188           | 26.814 | B2700        | 21X17- | 3                | 171 |
| 1634               | 61.0           | 2.5 | 4300                | 55.3               | 214.200           | 28.013 | B4300        | 21X17- | 3                | 233 |
| 1717               | 58.1           | 1.5 | 2700                | 58.1               | 191.999           | 29.447 | B2700        | 21X17- | 3                | 171 |
| 1814               | 55.0           | 2.3 | 4300                | 55.0               | 195.889           | 31.097 | B4300        | 21X17- | 3                | 233 |
| 1917               | 52.0           | 1.4 | 2700                | 52.0               | 189.248           | 32.873 | B2700        | 21X17- | 3                | 171 |
| 2077               | 48.0           | 2.0 | 4300                | 45.8               | 204.646           | 35.607 | B4300        | 21X17- | 3                | 233 |
| 2106               | 47.4           | 1.2 | 2700                | 47.4               | 189.122           | 36.102 | B2700        | 21X17- | 3                | 171 |
| 2495               | 40.0           | 1.1 | 2700                | 31.7               | 194.139           | 42.772 | B2700        | 21X17- | 3                | 171 |
| 2726               | 36.6           | 1.6 | 4300                | 35.1               | 196.755           | 46.737 | B4300        | 21X17- | 3                | 233 |
| 3106               | 32.1           | 1.4 | 4300                | 31.3               | 193.583           | 53.258 | B4300        | 21X17- | 3                | 233 |
| 3740               | 26.7           | 1.2 | 4300                | 26.6               | 190.598           | 64.127 | B4300        | 21X17- | 3                | 233 |

# Technical data

Selection tables

Inverter mains connection 400 V, Forced ventilated motors



## 13.2 kW

| Inverter operation |                |     |                     |                    |                   |        | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|--------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i      | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |        |              |        |                  | kg  |
| 170                | 708            | 1.4 | 312                 | 344                | 83.522            | 4.958  | B820         | 19S35- | 3                | 84  |
| 171                | 702            | 1.2 | 280                 | 388                | 76.360            | 5.002  | B450         | 19S35- | 3                | 60  |
| 173                | 693            | 1.6 | 376                 | 369                | 78.731            | 5.067  | B600         | 19S35- | 3                | 79  |
| 188                | 640            | 5.7 | 938                 | 342                | 197.776           | 5.488  | B4300        | 19S35- | 3                | 217 |
| 233                | 516            | 1.3 | 391                 | 281                | 78.711            | 6.800  | B820         | 19S35- | 3                | 84  |
| 235                | 511            | 2.7 | 837                 | 276                | 93.952            | 6.866  | B1500        | 19S35- | 3                | 114 |
| 237                | 507            | 4.6 | 1183                | 259                | 121.215           | 6.918  | B2700        | 19S35- | 3                | 155 |
| 238                | 505            | 1.3 | 398                 | 275                | 76.163            | 6.949  | B600         | 19S35- | 3                | 79  |
| 239                | 503            | 5.2 | 1193                | 293                | 153.324           | 6.976  | B4300        | 19S35- | 3                | 217 |
| 291                | 412            | 1.2 | 459                 | 186                | 81.071            | 8.517  | B820         | 19S35- | 3                | 84  |
| 301                | 399            | 3.8 | 1503                | 217                | 105.939           | 8.793  | B2700        | 19S35- | 3                | 155 |
| 313                | 383            | 4.9 | 1566                | 250                | 121.653           | 9.156  | B4300        | 19S35- | 3                | 217 |
| 325                | 369            | 2.3 | 1006                | 223                | 85.064            | 9.516  | B1500        | 19S35- | 3                | 114 |
| 326                | 369            | 1.2 | 496                 | 232                | 75.761            | 9.520  | B820         | 19S35- | 3                | 84  |
| 367                | 327            | 1.1 | 541                 | 143                | 77.118            | 10.741 | B600         | 19S35- | 3                | 79  |
| 379                | 317            | 5.7 | 1894                | 169                | 166.840           | 11.080 | B4300        | 19S35- | 3                | 217 |
| 399                | 301            | 1.1 | 569                 | 151                | 77.407            | 11.680 | B820         | 19S35- | 3                | 84  |
| 401                | 300            | 4.2 | 2003                | 150                | 114.531           | 11.713 | B2700        | 19S35- | 3                | 155 |
| 410                | 293            | 2.7 | 1461                | 158                | 90.132            | 11.985 | B1500        | 19S35- | 3                | 114 |
| 440                | 273            | 3.9 | 2199                | 134                | 113.539           | 12.863 | B2700        | 19S35- | 3                | 155 |
| 449                | 268            | 1.9 | 1118                | 180                | 79.661            | 13.118 | B1500        | 19S35- | 3                | 114 |
| 482                | 249            | 5.2 | 2408                | 145                | 134.177           | 14.084 | B4300        | 19S35- | 3                | 217 |
| 509                | 236            | 3.5 | 2380                | 126                | 101.802           | 14.888 | B2700        | 19S35- | 3                | 155 |
| 559                | 215            | 3.3 | 2429                | 113                | 101.188           | 16.351 | B2700        | 19S35- | 3                | 155 |
| 568                | 211            | 2.0 | 1500                | 124                | 83.075            | 16.611 | B1500        | 19S35- | 3                | 114 |
| 632                | 190            | 4.9 | 3161                | 124                | 110.539           | 18.486 | B4300        | 19S35- | 3                | 217 |
| 668                | 180            | 2.9 | 2579                | 105                | 91.748            | 19.542 | B2700        | 19S35- | 3                | 155 |
| 699                | 172            | 1.6 | 1500                | 101                | 80.031            | 20.444 | B1500        | 19S35- | 3                | 114 |
| 720                | 167            | 4.5 | 3602                | 116                | 102.359           | 21.065 | B4300        | 19S35- | 3                | 217 |
| 761                | 158            | 2.7 | 2684                | 98.4               | 87.887            | 22.269 | B2700        | 19S35- | 3                | 155 |
| 783                | 153            | 1.4 | 1500                | 89.0               | 78.615            | 22.898 | B1500        | 19S35- | 3                | 114 |
| 836                | 144            | 2.4 | 2700                | 87.8               | 87.613            | 24.456 | B2700        | 19S35- | 3                | 155 |
| 867                | 138            | 3.7 | 4300                | 96.5               | 94.170            | 25.365 | B4300        | 19S35- | 3                | 217 |
| 901                | 133            | 1.3 | 1500                | 51.1               | 82.093            | 26.353 | B1500        | 19S35- | 3                | 114 |
| 917                | 131            | 2.2 | 2700                | 88.7               | 84.188            | 26.814 | B2700        | 19S35- | 3                | 155 |
| 958                | 125            | 3.4 | 4300                | 59.6               | 106.200           | 28.013 | B4300        | 19S35- | 3                | 217 |
| 999                | 120            | 1.1 | 1500                | 72.2               | 76.294            | 29.206 | B1500        | 19S35- | 3                | 114 |
| 1007               | 119            | 2.0 | 2700                | 79.0               | 83.999            | 29.447 | B2700        | 19S35- | 3                | 155 |
| 1063               | 113            | 3.1 | 4300                | 78.7               | 87.889            | 31.097 | B4300        | 19S35- | 3                | 217 |
| 1124               | 107            | 1.8 | 2700                | 73.8               | 81.248            | 32.873 | B2700        | 19S35- | 3                | 155 |
| 1218               | 98.6           | 2.7 | 4300                | 49.2               | 96.646            | 35.607 | B4300        | 19S35- | 3                | 217 |
| 1235               | 97.2           | 1.7 | 2700                | 63.9               | 81.122            | 36.102 | B2700        | 19S35- | 3                | 155 |
| 1463               | 82.1           | 1.6 | 2700                | 38.4               | 86.139            | 42.772 | B2700        | 19S35- | 3                | 155 |
| 1598               | 75.1           | 2.3 | 4300                | 41.4               | 88.755            | 46.737 | B4300        | 19S35- | 3                | 217 |
| 1606               | 74.7           | 1.4 | 2700                | 33.2               | 86.065            | 46.973 | B2700        | 19S35- | 3                | 155 |
| 1673               | 71.8           | 1.4 | 2700                | 50.1               | 77.468            | 48.912 | B2700        | 19S35- | 3                | 155 |
| 1821               | 65.9           | 2.0 | 4300                | 38.5               | 85.583            | 53.258 | B4300        | 19S35- | 3                | 217 |
| 1849               | 64.9           | 1.3 | 2700                | 45.3               | 73.113            | 54.082 | B2700        | 19S35- | 3                | 155 |
| 2031               | 59.1           | 1.1 | 2700                | 41.2               | 73.113            | 59.393 | B2700        | 19S35- | 3                | 155 |
| 2193               | 54.7           | 1.7 | 4300                | 32.7               | 82.598            | 64.127 | B4300        | 19S35- | 3                | 217 |
| 2204               | 54.5           | 1.1 | 2700                | 25.3               | 81.170            | 64.452 | B2700        | 19S35- | 3                | 155 |



# Technical data

Selection tables

Inverter mains connection 400 V, Forced ventilated motors

| Inverter operation |                |     |                     |                    |                   |         | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|---------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i       | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |         |              |        |                  | kg  |
| 2688               | 44.6           | 1.4 | 4300                | 26.7               | 80.191            | 78.619  | B4300        | 19S35- | 3                | 217 |
| 3642               | 33.0           | 1.0 | 4300                | 21.3               | 76.960            | 106.517 | B4300        | 19S35- | 3                | 217 |

## 20.3 kW

| Inverter operation |                |     |                     |                    |                   |        | Geared motor |        | Number of stages |     |
|--------------------|----------------|-----|---------------------|--------------------|-------------------|--------|--------------|--------|------------------|-----|
| M <sub>2</sub>     | n <sub>2</sub> | c   | M <sub>2, max</sub> | n <sub>2, th</sub> | J                 | i      | g500-        | MCA    | z                | m   |
| Nm                 | rpm            |     | Nm                  | rpm                | kgcm <sup>2</sup> |        |              |        |                  | kg  |
| 287                | 641            | 5.2 | 1564                | 335                | 305.776           | 5.488  | B4300        | 21X35- | 3                | 233 |
| 359                | 513            | 1.8 | 837                 | 238                | 201.952           | 6.866  | B1500        | 21X35- | 3                | 129 |
| 361                | 509            | 3.0 | 1446                | 234                | 229.215           | 6.918  | B2700        | 21X35- | 3                | 171 |
| 364                | 505            | 4.6 | 1988                | 286                | 261.324           | 6.976  | B4300        | 21X35- | 3                | 233 |
| 459                | 400            | 2.5 | 1528                | 196                | 213.939           | 8.793  | B2700        | 21X35- | 3                | 171 |
| 478                | 384            | 3.9 | 2479                | 220                | 229.653           | 9.156  | B4300        | 21X35- | 3                | 233 |
| 497                | 370            | 1.5 | 1006                | 185                | 193.064           | 9.516  | B1500        | 21X35- | 3                | 129 |
| 579                | 318            | 5.2 | 3157                | 166                | 274.840           | 11.080 | B4300        | 21X35- | 3                | 233 |
| 612                | 301            | 2.7 | 2212                | 135                | 222.531           | 11.713 | B2700        | 21X35- | 3                | 171 |
| 626                | 294            | 1.8 | 1461                | 136                | 198.132           | 11.985 | B1500        | 21X35- | 3                | 129 |
| 672                | 274            | 2.5 | 2262                | 121                | 221.539           | 12.863 | B2700        | 21X35- | 3                | 171 |
| 685                | 268            | 1.2 | 1118                | 143                | 187.661           | 13.118 | B1500        | 21X35- | 3                | 129 |
| 736                | 250            | 4.4 | 4013                | 140                | 242.177           | 14.084 | B4300        | 21X35- | 3                | 233 |
| 778                | 236            | 2.3 | 2380                | 113                | 209.802           | 14.888 | B2700        | 21X35- | 3                | 171 |
| 854                | 215            | 2.1 | 2429                | 101                | 209.188           | 16.351 | B2700        | 21X35- | 3                | 171 |
| 868                | 212            | 1.3 | 1500                | 97.1               | 191.075           | 16.611 | B1500        | 21X35- | 3                | 129 |
| 966                | 190            | 3.4 | 4300                | 109                | 218.539           | 18.486 | B4300        | 21X35- | 3                | 233 |
| 1021               | 180            | 1.9 | 2579                | 93.4               | 199.748           | 19.542 | B2700        | 21X35- | 3                | 171 |
| 1068               | 172            | 1.1 | 1500                | 80.2               | 188.031           | 20.444 | B1500        | 21X35- | 3                | 129 |
| 1101               | 167            | 2.9 | 4300                | 95.6               | 210.359           | 21.065 | B4300        | 21X35- | 3                | 233 |
| 1163               | 158            | 1.7 | 2684                | 84.9               | 195.887           | 22.269 | B2700        | 21X35- | 3                | 171 |
| 1278               | 144            | 1.6 | 2700                | 73.5               | 195.613           | 24.456 | B2700        | 21X35- | 3                | 171 |
| 1325               | 139            | 2.4 | 4300                | 79.4               | 202.170           | 25.365 | B4300        | 21X35- | 3                | 233 |
| 1401               | 131            | 1.5 | 2700                | 72.0               | 192.188           | 26.814 | B2700        | 21X35- | 3                | 171 |
| 1463               | 126            | 2.2 | 4300                | 53.4               | 214.200           | 28.013 | B4300        | 21X35- | 3                | 233 |
| 1538               | 120            | 1.3 | 2700                | 62.3               | 191.999           | 29.447 | B2700        | 21X35- | 3                | 171 |
| 1625               | 113            | 2.0 | 4300                | 64.8               | 195.889           | 31.097 | B4300        | 21X35- | 3                | 233 |
| 1717               | 107            | 1.2 | 2700                | 59.7               | 189.248           | 32.873 | B2700        | 21X35- | 3                | 171 |
| 1860               | 98.9           | 1.7 | 4300                | 42.3               | 204.646           | 35.607 | B4300        | 21X35- | 3                | 233 |
| 1886               | 97.5           | 1.1 | 2700                | 52.2               | 189.122           | 36.102 | B2700        | 21X35- | 3                | 171 |
| 2235               | 82.3           | 1.0 | 2700                | 31.1               | 194.139           | 42.772 | B2700        | 21X35- | 3                | 171 |
| 2442               | 75.3           | 1.5 | 4300                | 34.2               | 196.755           | 46.737 | B4300        | 21X35- | 3                | 233 |
| 2782               | 66.1           | 1.3 | 4300                | 30.5               | 193.583           | 53.258 | B4300        | 21X35- | 3                | 233 |
| 3350               | 54.9           | 1.1 | 4300                | 26.0               | 190.598           | 64.127 | B4300        | 21X35- | 3                | 233 |



## Dimensions

### Notes on the basic dimensions

| Gearboxes           | Without pre-stage | With pre-stage |
|---------------------|-------------------|----------------|
| g500-B45            | 2-stufig          | -              |
| g500-B110           | 2-stage           | 3-stage        |
| g500-B240           | 2-/3-stage        | 4-stage        |
| g500-B450 ... B4300 | 3-stage           | 4-stage        |

The ratio range of gearboxes with pre-stage is extended via an additional housing with gear stage between the gearbox and motor.

The basic dimensions are shown without pre-stage and are valid up to the following deviating dimensions for gearbox with pre-stage valid:

- Total length "L"
- Center distance "a" (gearbox output shaft – motor shaft)

Deviating dimensions: [► Gearbox with pre-stage](#) [□ 204](#)

#### Example

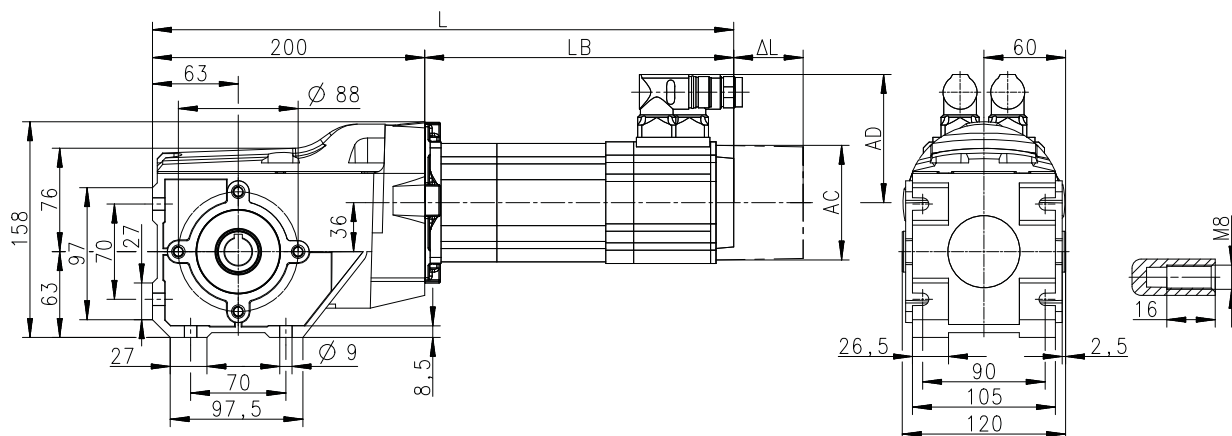
g500-B110 with MCA10

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)

#### Explanation

Geared motor product

[► Designs](#) [□ 12](#)



|                           |     |                                                                                                            |
|---------------------------|-----|------------------------------------------------------------------------------------------------------------|
| <b>Motor</b>              |     | <b>MCA</b>                                                                                                 |
|                           |     | <b>10I40</b>                                                                                               |
| <b>Cooling type</b>       |     | <b>Natural</b>                                                                                             |
| <b>Table content</b>      |     |                                                                                                            |
|                           |     | <b>Explanation</b>                                                                                         |
| Total length              | L   | Total length of the drive with resolver                                                                    |
| Motor length              | LB  | Length of the motor with resolver                                                                          |
| Length of motor options   | Δ L | Additional length (longest design)<br>In detail <a href="#">► Additional lengths</a> <a href="#">□ 205</a> |
| Motor diameter            | AC  | Motor diameter                                                                                             |
| Motor/connection distance | AD  | Distance from motor centre to connector end                                                                |

## NOTICE

For gearboxes with hollow shaft and keyway (H□□), the hole fitting H7 is interrupted in the middle area of the hollow shaft length by a free rotation.

Ensure the double-ended control of the machine shaft in the hollow shaft.

► The specified min. length of the machine shaft must be reached.



## Technical data

### Dimensions

| Gearboxes  | Min. length of the machine shaft |
|------------|----------------------------------|
|            | mm                               |
| g500-B45   | 85                               |
| g500-B110  | 105                              |
| g500-B240  | 127                              |
| g500-B450  | 100                              |
| g500-B600  | 110                              |
| g500-B820  | 120                              |
| g500-B1500 | 135                              |
| g500-B2700 | 155                              |
| g500-B4300 | 190                              |



If the mounting area (foot support) towards the motor is longer than the gearbox foot, some motors collide with the mounting area!

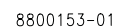
For an accurate check of the geometrical data, Lenze recommends the use of the »Product Finder« at [www.Lenze.com](http://www.Lenze.com).

## Dimensions

### Basic dimensions



Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)

90

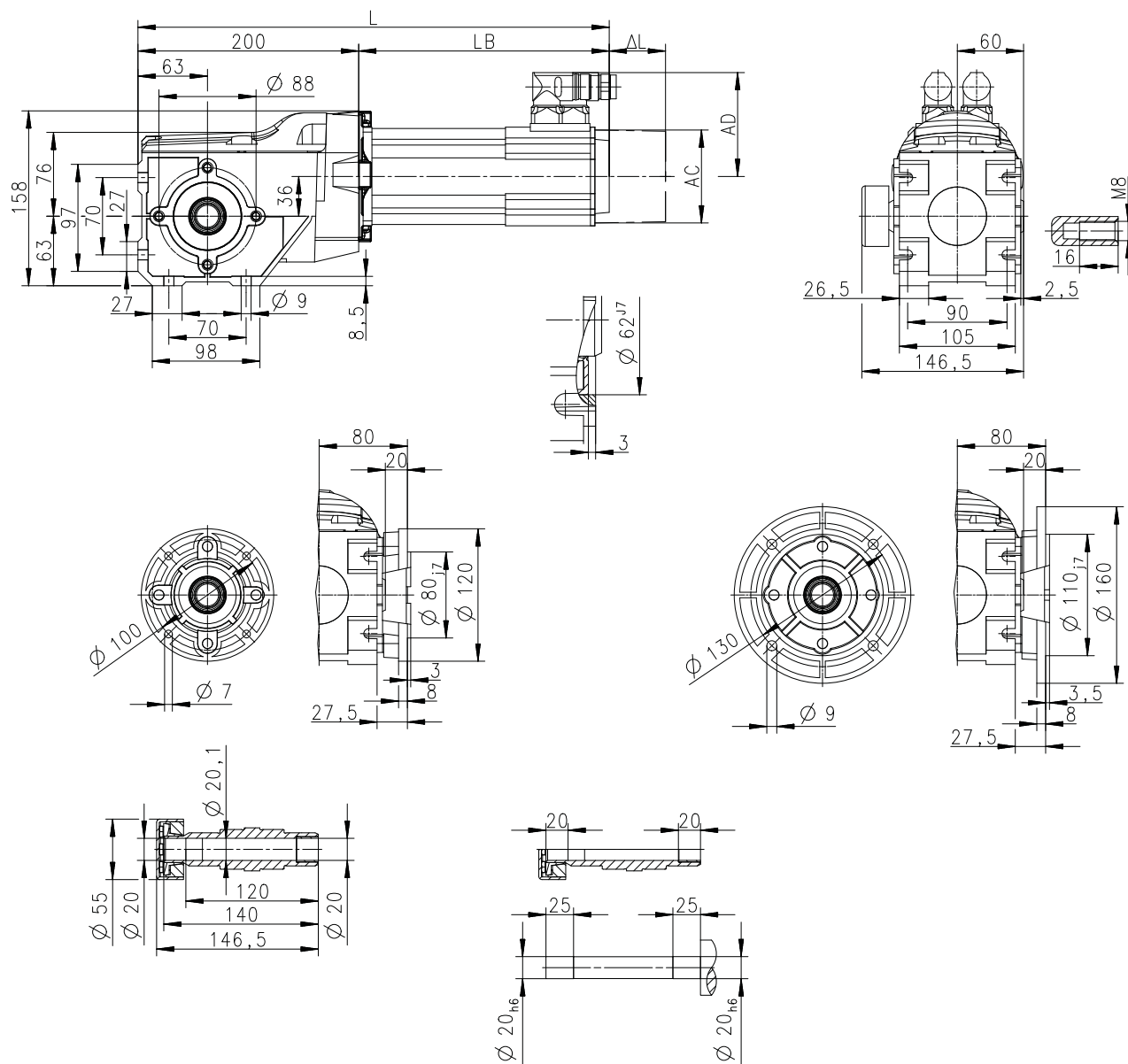


## Technical data

Dimensions  
Basic dimensions

### g500-B110, 2-stage with MCA10

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800221-00

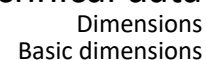
| Motor                     |     |    | MCA     |
|---------------------------|-----|----|---------|
|                           |     |    | 10140-  |
| Cooling type              |     |    | natural |
| Total length              | L   | mm | 459     |
| Motor length              | LB  | mm | 259     |
| Length of motor options   | Δ L | mm | 78      |
| Motor diameter            | AC  | mm | 102     |
| Motor/connection distance | AD  | mm | 90      |

## Dimensions

### Basic dimensions



| Motor                     |     |    | MCA     |
|---------------------------|-----|----|---------|
|                           |     |    | 10I40-  |
| Cooling type              |     |    | natural |
| Total length              | L   | mm | 459     |
| Motor length              | LB  | mm | 259     |
| Length of motor options   | Δ L | mm | 78      |
| Motor diameter            | AC  | mm | 102     |
| Motor/connection distance | AD  | mm | 90      |



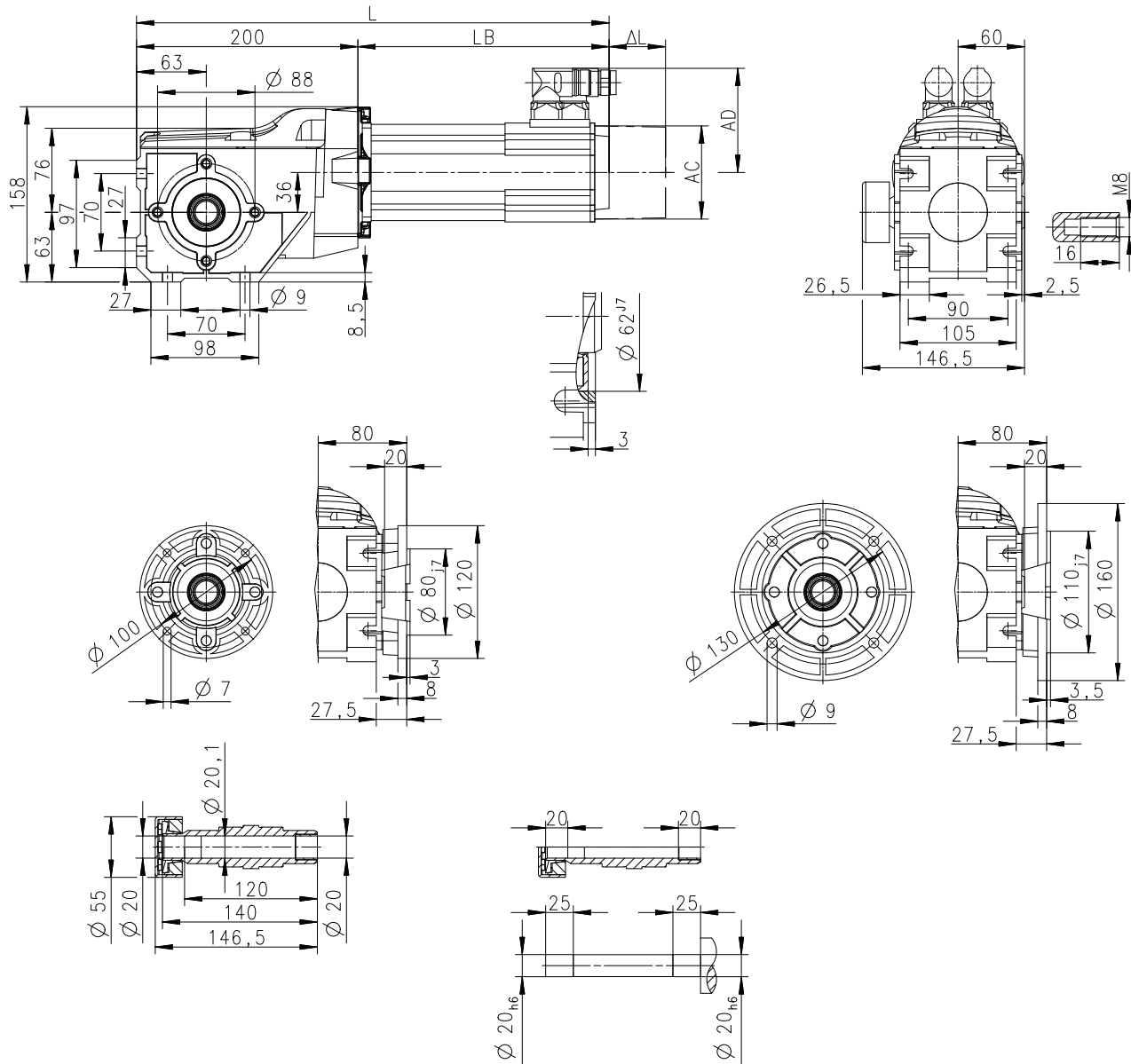
# Technical data

Dimensions  
Basic dimensions



## g500-B110, 2-stage with MCA13

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800221-00

| Motor                     |     |    | MCA    |         |
|---------------------------|-----|----|--------|---------|
|                           |     |    | 13I34- | 13I41-  |
| Cooling type              |     |    | Blower | natural |
| Total length              | L   | mm | 536    | 468     |
| Motor length              | LB  | mm | 336    | 268     |
| Length of motor options   | Δ L | mm | 90     | 90      |
| Motor diameter            | AC  | mm | 130    | 130     |
| Motor/connection distance | AD  | mm | 102    | 102     |

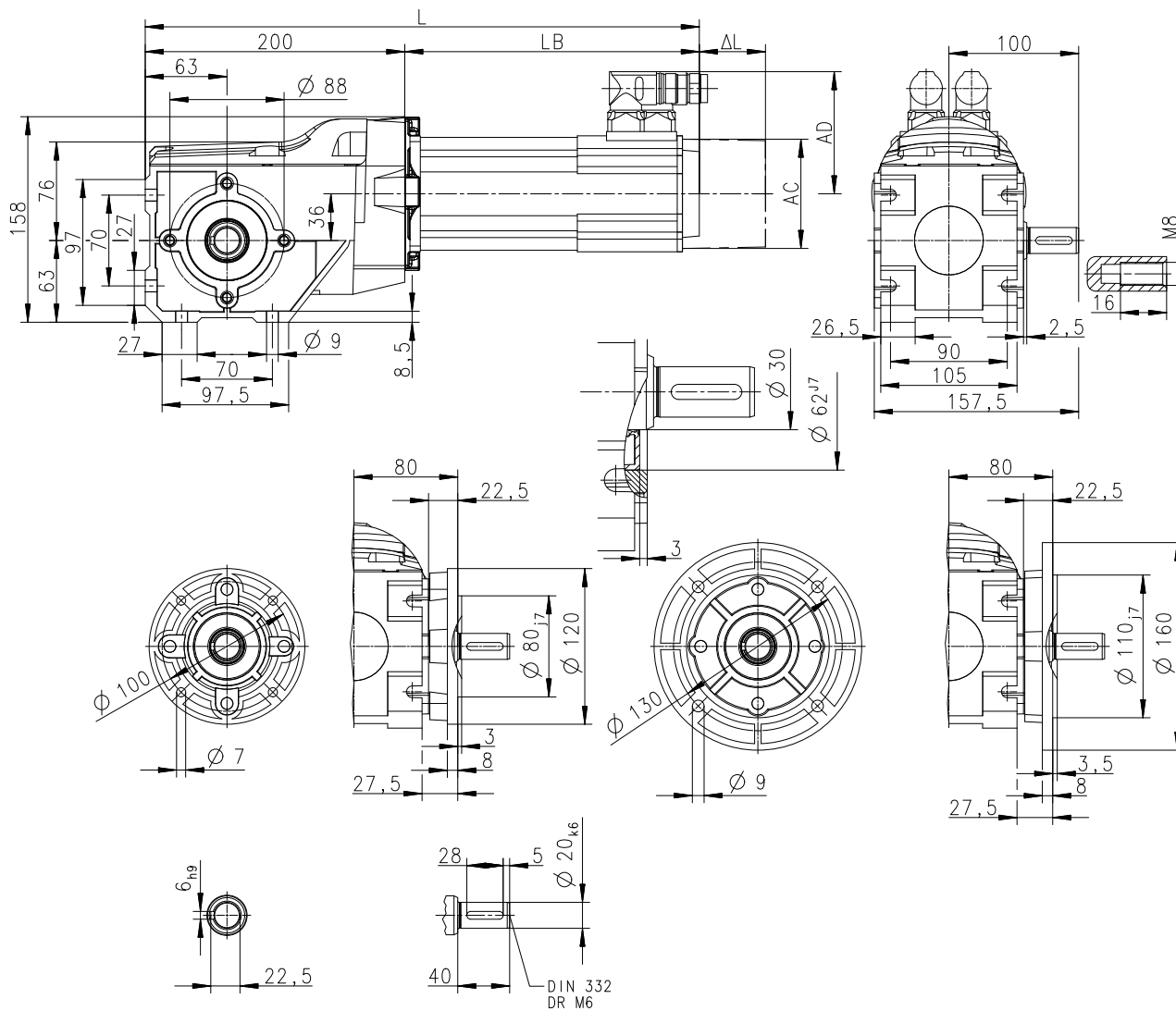


# Technical data

Dimensions  
Basic dimensions

## g500-B110, 2-stage with MCA13

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800154-00

| Motor                     |     |    | MCA    |         |
|---------------------------|-----|----|--------|---------|
|                           |     |    | 13I34- | 13I41-  |
| Cooling type              |     |    | Blower | natural |
| Total length              | L   | mm | 536    | 468     |
| Motor length              | LB  | mm | 336    | 268     |
| Length of motor options   | Δ L | mm | 90     | 90      |
| Motor diameter            | AC  | mm | 130    | 130     |
| Motor/connection distance | AD  | mm | 102    | 102     |

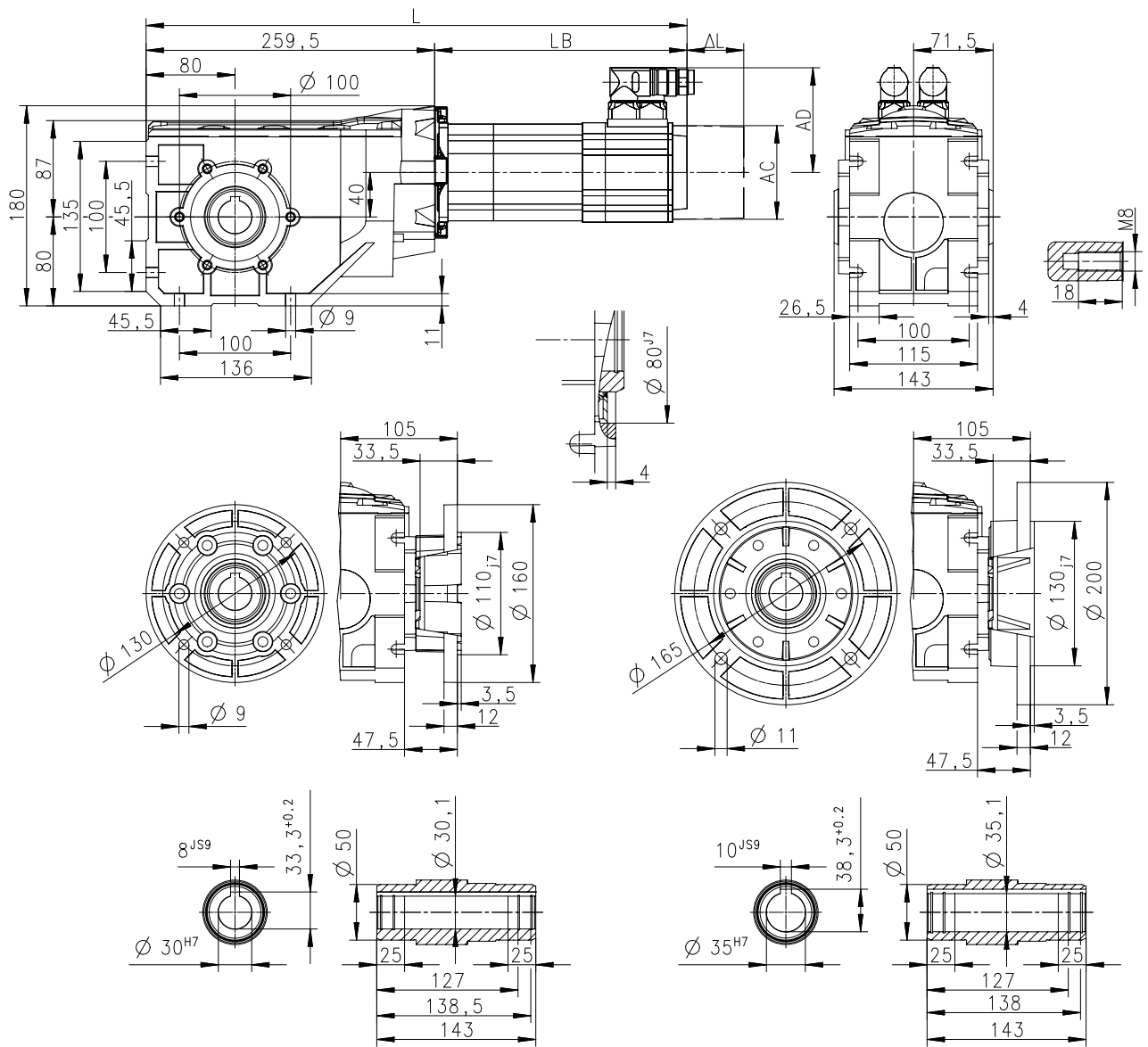
# Technical data

Dimensions  
Basic dimensions



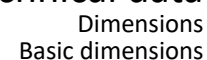
## g500-B240, 2-/3-stage with MCA10

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800161-01

| Motor                     |     |    | MCA     |
|---------------------------|-----|----|---------|
|                           |     |    | 10I40-  |
| Cooling type              |     |    | natural |
| Total length              | L   | mm | 519     |
| Motor length              | LB  | mm | 259     |
| Length of motor options   | Δ L | mm | 78      |
| Motor diameter            | AC  | mm | 102     |
| Motor/connection distance | AD  | mm | 90      |



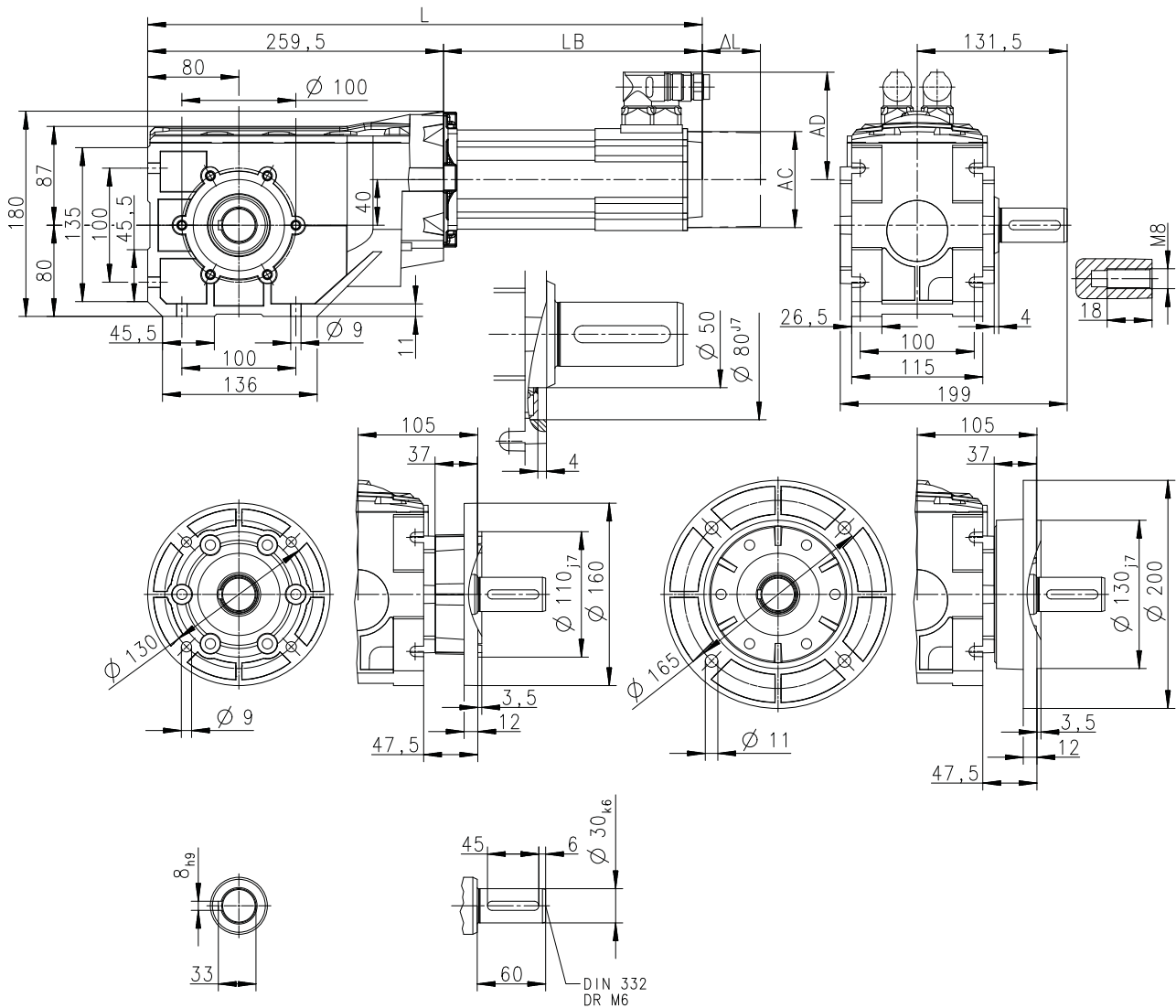
Technical data

Dimensions  
Basic dimensions



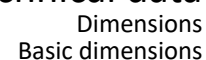
**g500-B240, 2-/3-stage with MCA10**

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800162-00

| Motor                     |     |    | MCA     |
|---------------------------|-----|----|---------|
|                           |     |    | 10140-  |
| Cooling type              |     |    | natural |
| Total length              | L   | mm | 519     |
| Motor length              | LB  | mm | 259     |
| Length of motor options   | Δ L | mm | 78      |
| Motor diameter            | AC  | mm | 102     |
| Motor/connection distance | AD  | mm | 90      |



Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)

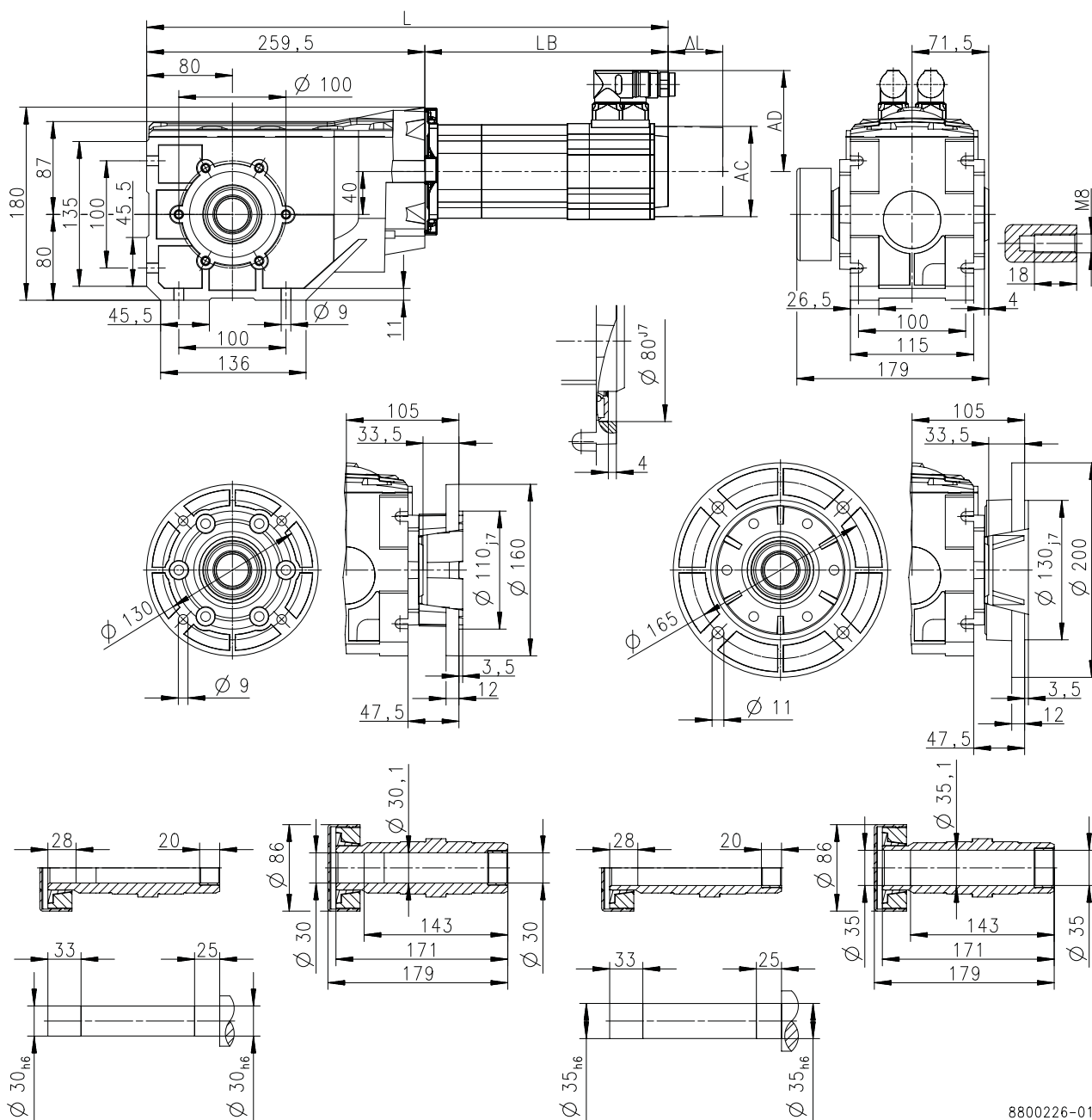
8800161-01

## Dimensions

### Basic dimensions

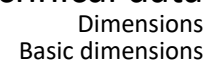


Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



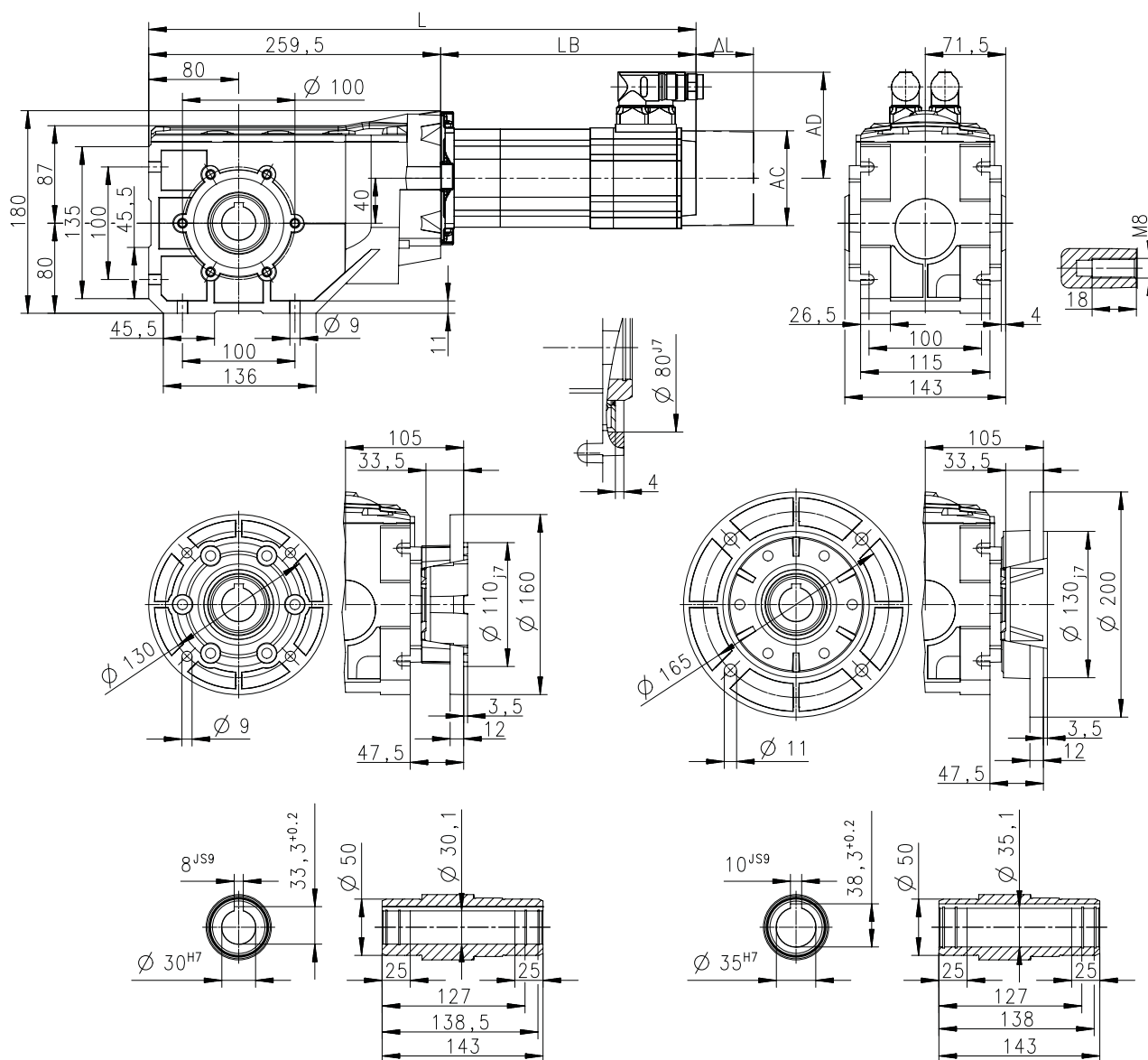
8800226-01

| Motor                     |     |    | MCA    |         |
|---------------------------|-----|----|--------|---------|
|                           |     |    | 13I34- | 13I41-  |
| Cooling type              |     |    | Blower | natural |
| Total length              | L   | mm | 595    | 527     |
| Motor length              | LB  | mm | 336    | 268     |
| Length of motor options   | Δ L | mm | 90     | 90      |
| Motor diameter            | AC  | mm | 130    | 130     |
| Motor/connection distance | AD  | mm | 102    | 102     |





Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800161-01

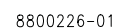
| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 14L16- | 14L20-  | 14L35- | 14L41-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 639    | 577     | 639    | 577     |
| Motor length              | LB  | mm | 380    | 318     | 380    | 318     |
| Length of motor options   | Δ L | mm | 89     | 89      | 89     | 89      |
| Motor diameter            | AC  | mm | 142    | 142     | 142    | 142     |
| Motor/connection distance | AD  | mm | 109    | 109     | 109    | 109     |



## Dimensions

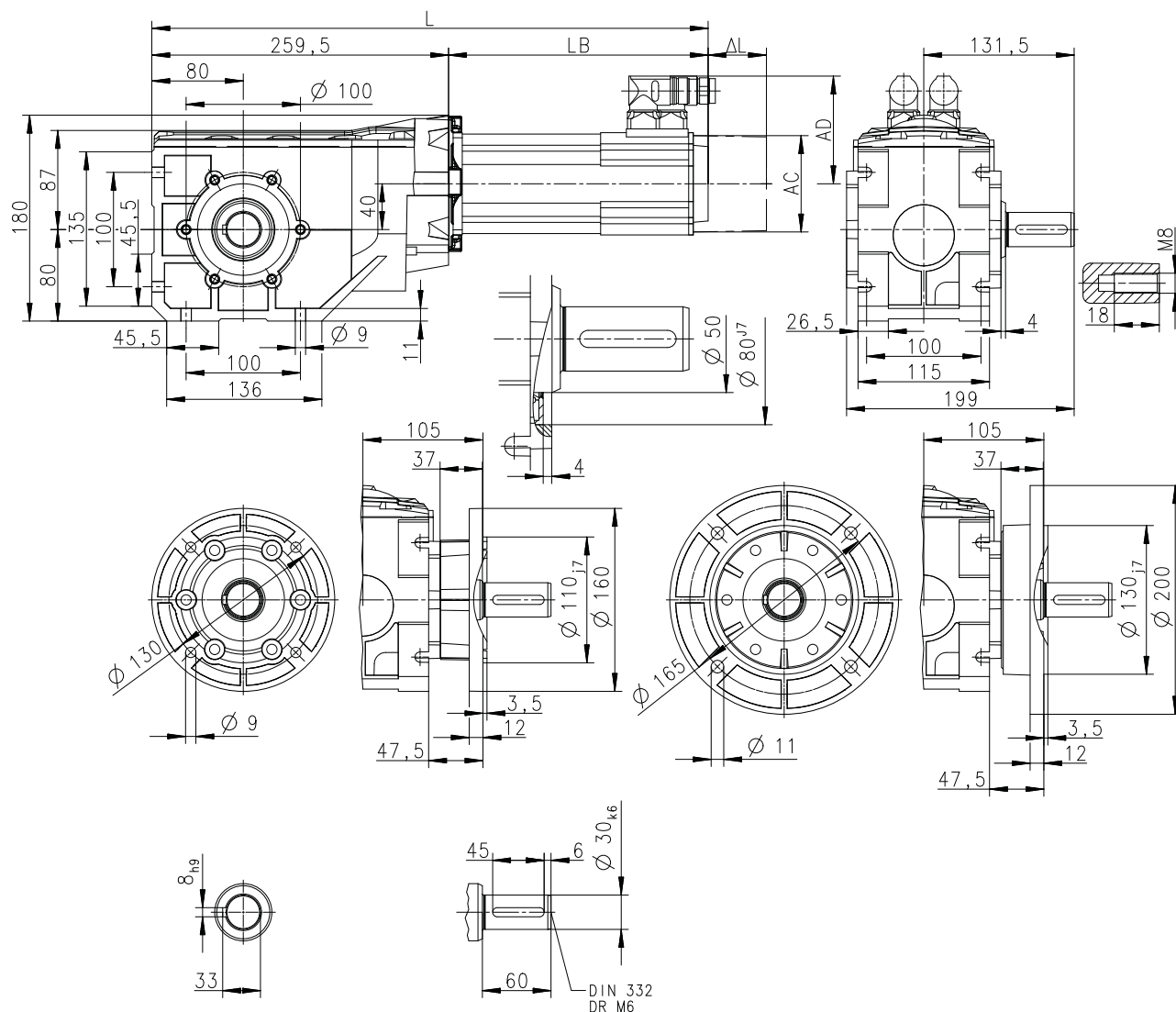
### Basic dimensions

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)

103

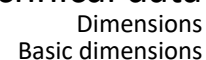


Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800162-00

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 14L16- | 14L20-  | 14L35- | 14L41-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 639    | 577     | 639    | 577     |
| Motor length              | LB  | mm | 380    | 318     | 380    | 318     |
| Length of motor options   | Δ L | mm | 89     | 89      | 89     | 89      |
| Motor diameter            | AC  | mm | 142    | 142     | 142    | 142     |
| Motor/connection distance | AD  | mm | 109    | 109     | 109    | 109     |



Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)

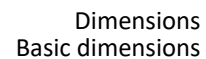
8800169-02

## Dimensions

### Basic dimensions

[illegible]

| Motor                     |     |    | MCA     |
|---------------------------|-----|----|---------|
|                           |     |    | 10I40-  |
| Cooling type              |     |    | natural |
| Total length              | L   | mm | 526     |
| Motor length              | LB  | mm | 259     |
| Length of motor options   | Δ L | mm | 78      |
| Motor diameter            | AC  | mm | 102     |
| Motor/connection distance | AD  | mm | 90      |



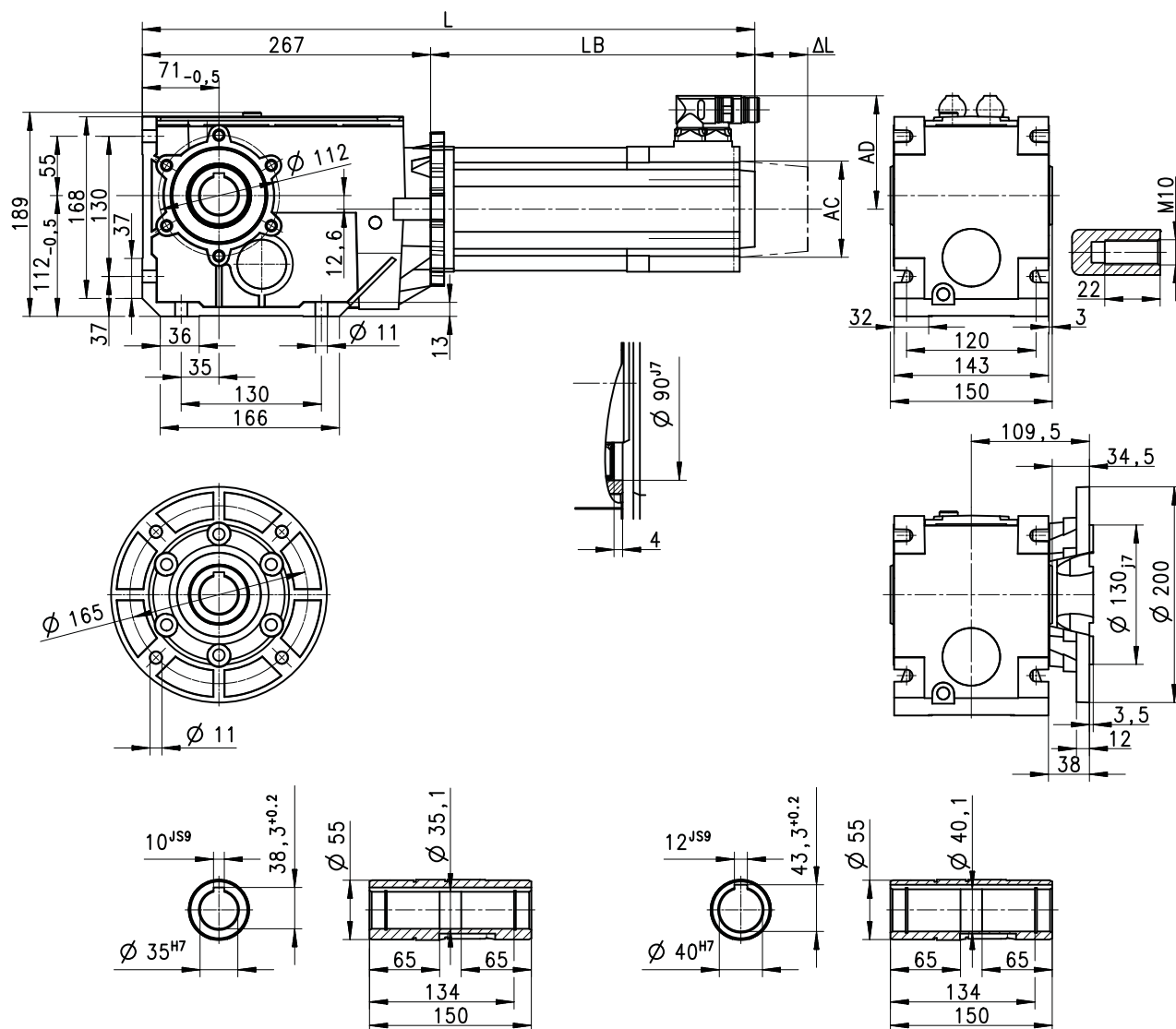
Gearbox version: Solid shaft with foot (VAR/VBR/VAK)

## Dimensions

### Basic dimensions



Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800169-02

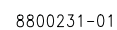
| Motor                     |     |    | MCA    |         |
|---------------------------|-----|----|--------|---------|
|                           |     |    | 13I34- | 13I41-  |
| Cooling type              |     |    | Blower | natural |
| Total length              | L   | mm | 603    | 535     |
| Motor length              | LB  | mm | 336    | 268     |
| Length of motor options   | Δ L | mm | 90     | 90      |
| Motor diameter            | AC  | mm | 130    | 130     |
| Motor/connection distance | AD  | mm | 102    | 102     |



## Dimensions

### Basic dimensions

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)

109

## Dimensions

### Basic dimensions

[illegible]

| Motor                     |     |    | MCA    |         |
|---------------------------|-----|----|--------|---------|
|                           |     |    | 13I34- | 13I41-  |
| Cooling type              |     |    | Blower | natural |
| Total length              | L   | mm | 603    | 535     |
| Motor length              | LB  | mm | 336    | 268     |
| Length of motor options   | Δ L | mm | 90     | 90      |
| Motor diameter            | AC  | mm | 130    | 130     |
| Motor/connection distance | AD  | mm | 102    | 102     |

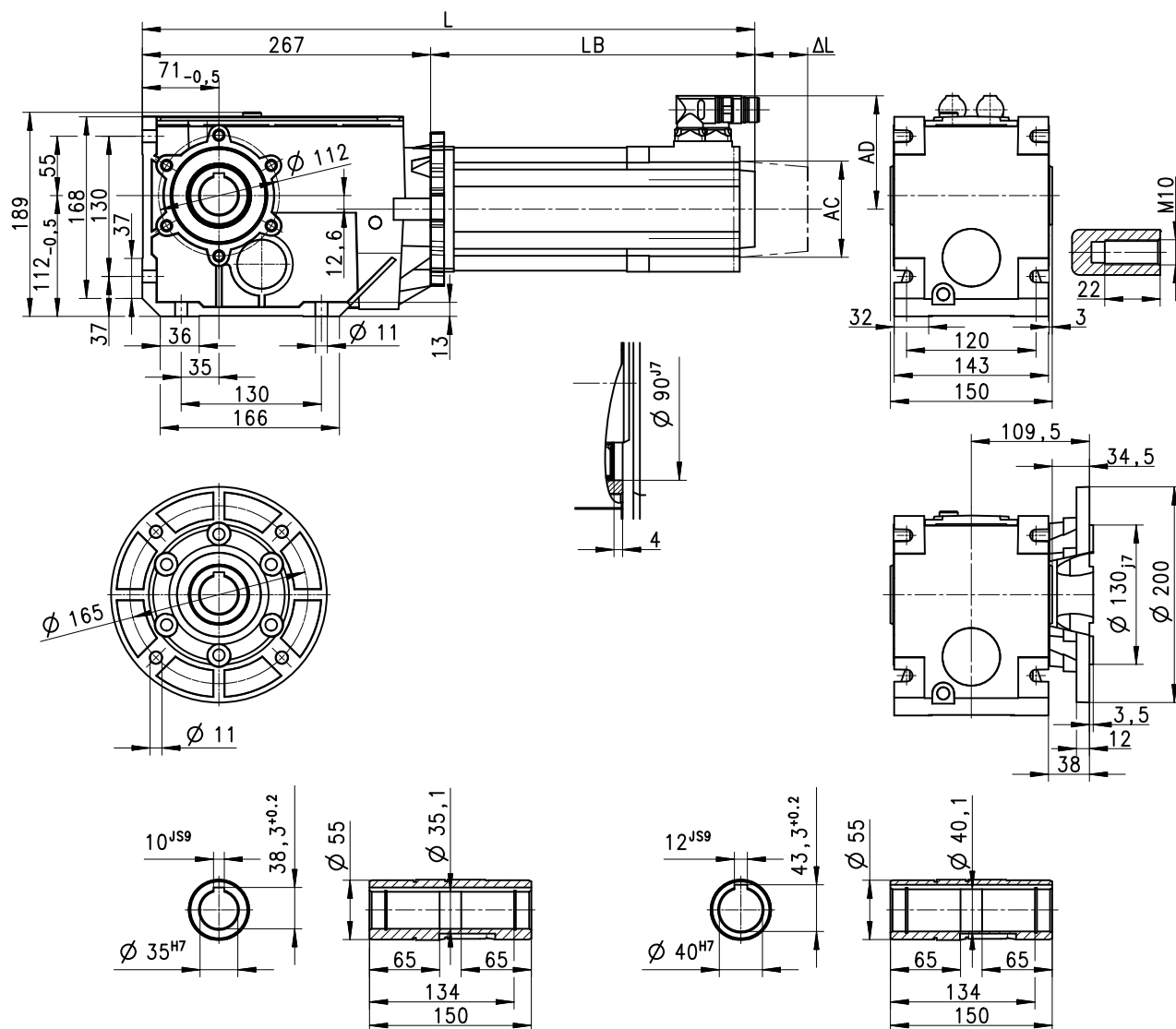


## Technical data

Dimensions  
Basic dimensions

### g500-B450, 3-stage with MCA14

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800169-02

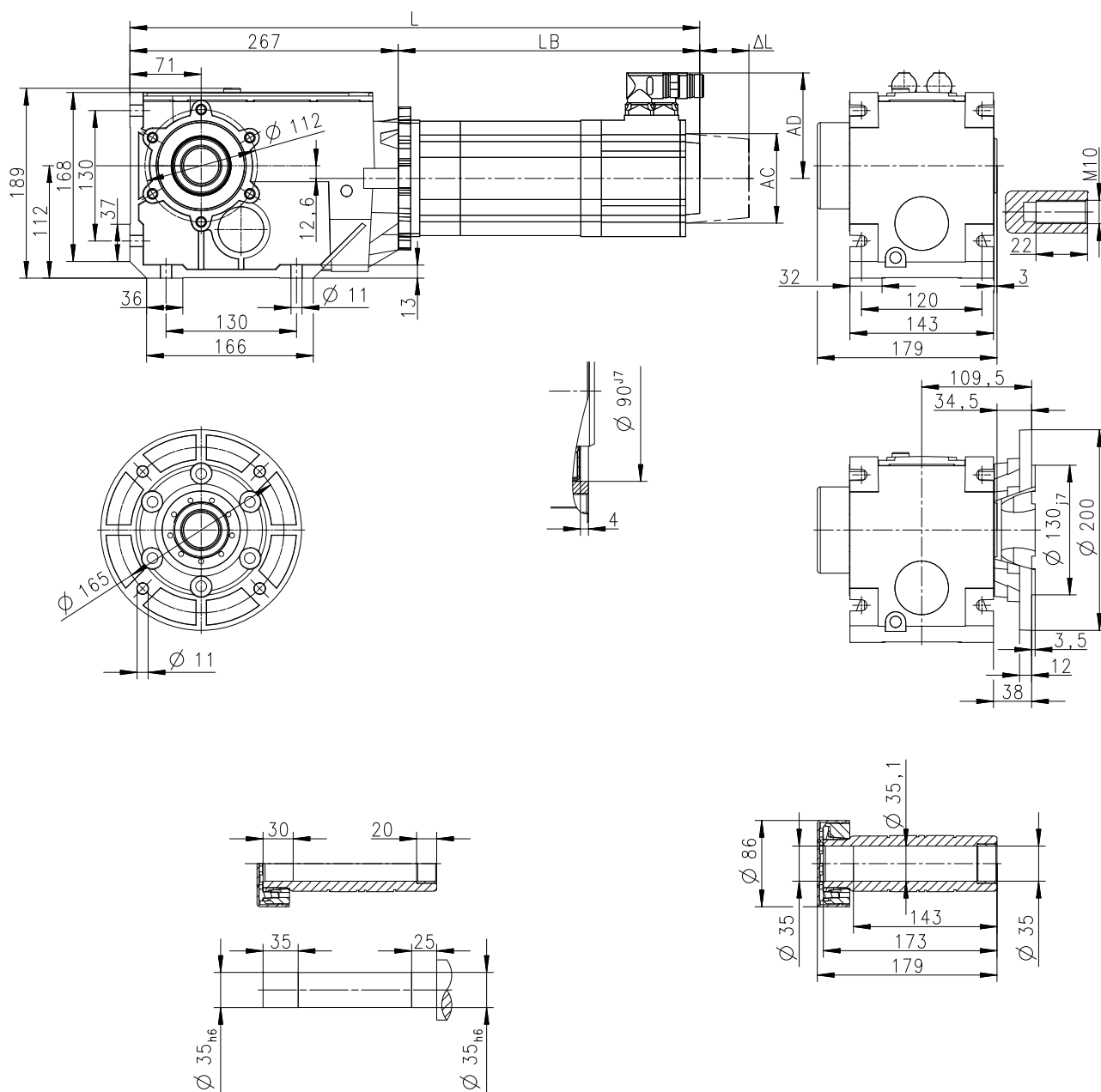
| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 14L16-<br>Blower | 14L20-<br>natural | 14L35-<br>Blower | 14L41-<br>natural |
| Cooling type              |     |    |                  |                   |                  |                   |
| Total length              | L   | mm | 647              | 585               | 647              | 585               |
| Motor length              | LB  | mm | 380              | 318               | 380              | 318               |
| Length of motor options   | Δ L | mm | 89               | 89                | 89               | 89                |
| Motor diameter            | AC  | mm | 142              | 142               | 142              | 142               |
| Motor/connection distance | AD  | mm | 109              | 109               | 109              | 109               |

## Dimensions

### Basic dimensions



Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800231-01

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 14L16- | 14L20-  | 14L35- | 14L41-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 647    | 585     | 647    | 585     |
| Motor length              | LB  | mm | 380    | 318     | 380    | 318     |
| Length of motor options   | Δ L | mm | 89     | 89      | 89     | 89      |
| Motor diameter            | AC  | mm | 142    | 142     | 142    | 142     |
| Motor/connection distance | AD  | mm | 109    | 109     | 109    | 109     |

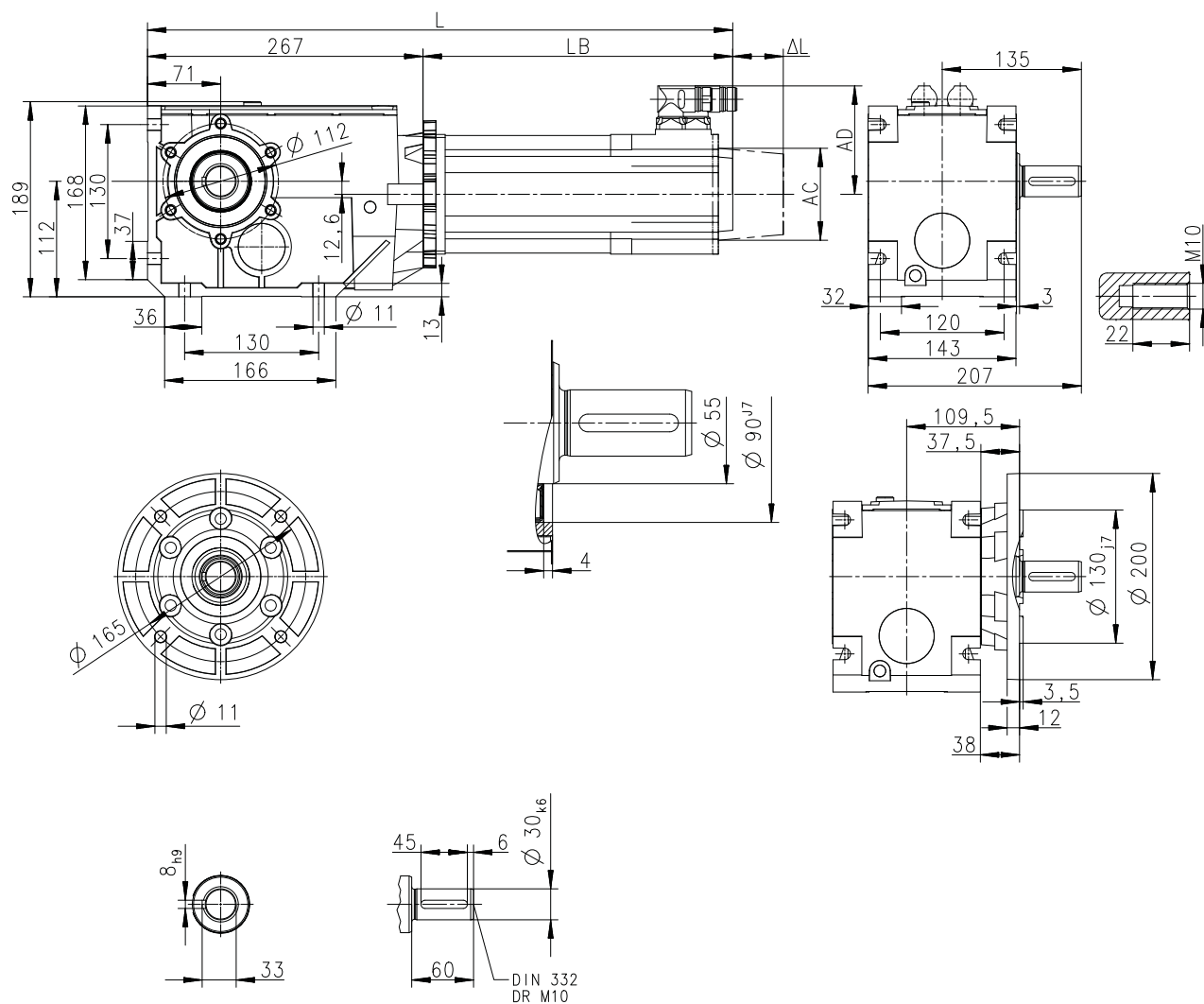


## Technical data

Dimensions  
Basic dimensions

### g500-B450, 3-stage with MCA14

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800170-00

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 14L16- | 14L20-  | 14L35- | 14L41-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 647    | 585     | 647    | 585     |
| Motor length              | LB  | mm | 380    | 318     | 380    | 318     |
| Length of motor options   | Δ L | mm | 89     | 89      | 89     | 89      |
| Motor diameter            | AC  | mm | 142    | 142     | 142    | 142     |
| Motor/connection distance | AD  | mm | 109    | 109     | 109    | 109     |

## Dimensions

### Basic dimensions



Technical drawing of a mechanical component, likely a pump or motor housing, showing multiple views: front, side, top, and cross-sections. Dimensions are provided in millimeters. Key features include a central circular opening with a diameter of 112 mm, a flange with a diameter of 165 mm, and a mounting bracket with a diameter of 11 mm. The drawing includes various tolerances and fit specifications.

**Front View Dimensions:**

- Overall width: 267
- Overall height: 189
- Top flange diameter:  $\phi 112$
- Flange thickness: 12.6
- Mounting bracket diameter:  $\phi 11$
- Mounting bracket thickness: 13
- Mounting bracket width: 36
- Mounting bracket height: 37
- Mounting bracket hole diameter:  $\phi 11$
- Mounting bracket hole position: 130
- Mounting bracket hole diameter:  $\phi 11$
- Mounting bracket hole position: 166
- Mounting bracket hole diameter:  $\phi 11$
- Mounting bracket hole position: 130
- Mounting bracket hole diameter:  $\phi 11$
- Mounting bracket hole position: 166

**Side View Dimensions:**

- Overall width: 150
- Overall height: 120
- Top flange diameter:  $\phi 112$
- Flange thickness: 12.6
- Mounting bracket diameter:  $\phi 11$
- Mounting bracket thickness: 13
- Mounting bracket width: 36
- Mounting bracket height: 37
- Mounting bracket hole diameter:  $\phi 11$
- Mounting bracket hole position: 130
- Mounting bracket hole diameter:  $\phi 11$
- Mounting bracket hole position: 166
- Mounting bracket hole diameter:  $\phi 11$
- Mounting bracket hole position: 130
- Mounting bracket hole diameter:  $\phi 11$
- Mounting bracket hole position: 166

**Top View Dimensions:**

- Overall width: 150
- Overall height: 120
- Top flange diameter:  $\phi 112$
- Flange thickness: 12.6
- Mounting bracket diameter:  $\phi 11$
- Mounting bracket thickness: 13
- Mounting bracket width: 36
- Mounting bracket height: 37
- Mounting bracket hole diameter:  $\phi 11$
- Mounting bracket hole position: 130
- Mounting bracket hole diameter:  $\phi 11$
- Mounting bracket hole position: 166
- Mounting bracket hole diameter:  $\phi 11$
- Mounting bracket hole position: 130
- Mounting bracket hole diameter:  $\phi 11$
- Mounting bracket hole position: 166

**Cross-section Dimensions:**

- Overall width: 150
- Overall height: 120
- Top flange diameter:  $\phi 112$
- Flange thickness: 12.6
- Mounting bracket diameter:  $\phi 11$
- Mounting bracket thickness: 13
- Mounting bracket width: 36
- Mounting bracket height: 37
- Mounting bracket hole diameter:  $\phi 11$
- Mounting bracket hole position: 130
- Mounting bracket hole diameter:  $\phi 11$
- Mounting bracket hole position: 166
- Mounting bracket hole diameter:  $\phi 11$
- Mounting bracket hole position: 130
- Mounting bracket hole diameter:  $\phi 11$
- Mounting bracket hole position: 166

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 17N17- | 17N23-  | 17N35- | 17N41-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 710    | 624     | 710    | 624     |
| Motor length              | LB  | mm | 443    | 357     | 443    | 357     |
| Length of motor options   | Δ L | mm | 90     | 90      | 90     | 90      |
| Motor diameter            | AC  | mm | 165    | 165     | 165    | 165     |
| Motor/connection distance | AD  | mm | 118    | 118     | 118    | 118     |

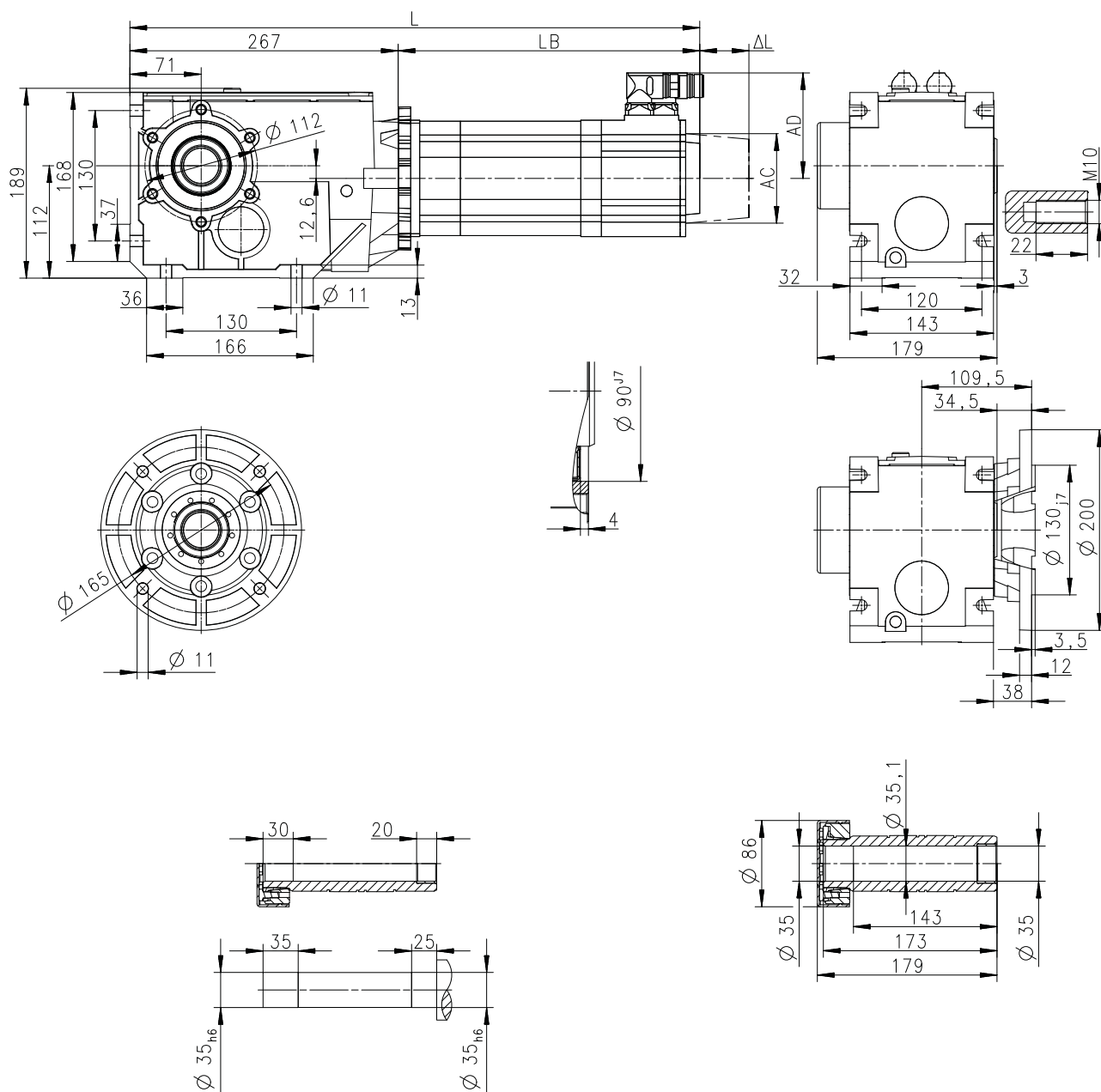


## Technical data

Dimensions  
Basic dimensions

### g500-B450, 3-stage with MCA17

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800231-01

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 17N17-<br>Blower | 17N23-<br>natural | 17N35-<br>Blower | 17N41-<br>natural |
| Total length              | L   | mm | 710              | 624               | 710              | 624               |
| Motor length              | LB  | mm | 443              | 357               | 443              | 357               |
| Length of motor options   | Δ L | mm | 90               | 90                | 90               | 90                |
| Motor diameter            | AC  | mm | 165              | 165               | 165              | 165               |
| Motor/connection distance | AD  | mm | 118              | 118               | 118              | 118               |

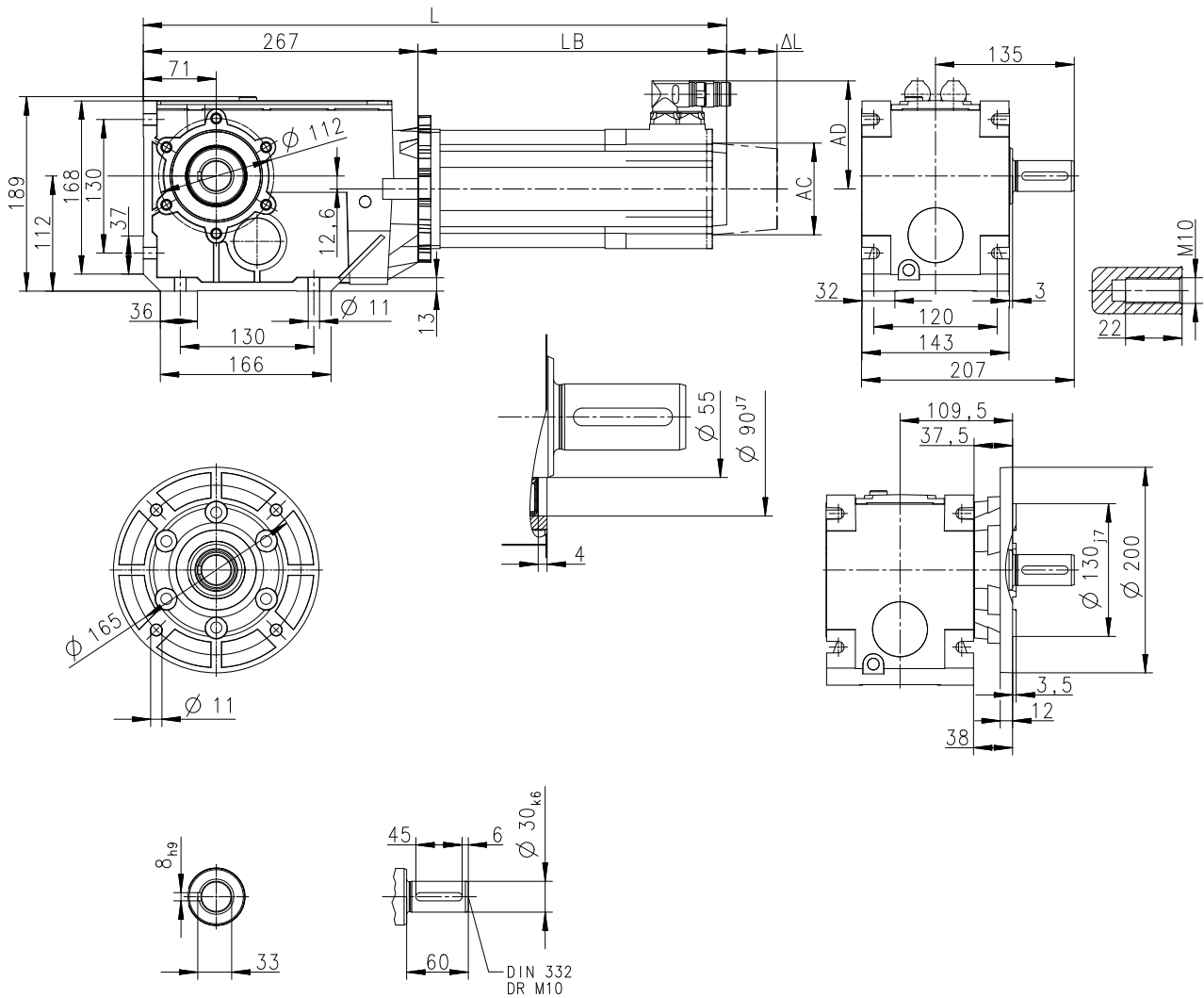
# Technical data

Dimensions  
Basic dimensions



## g500-B450, 3-stage with MCA17

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800170-00

| Motor                     |            |    | MCA    |         |        |         |
|---------------------------|------------|----|--------|---------|--------|---------|
|                           |            |    | 17N17- | 17N23-  | 17N35- | 17N41-  |
| Cooling type              |            |    | Blower | natural | Blower | natural |
| Total length              | L          | mm | 710    | 624     | 710    | 624     |
| Motor length              | LB         | mm | 443    | 357     | 443    | 357     |
| Length of motor options   | $\Delta L$ | mm | 90     | 90      | 90     | 90      |
| Motor diameter            | AC         | mm | 165    | 165     | 165    | 165     |
| Motor/connection distance | AD         | mm | 118    | 118     | 118    | 118     |

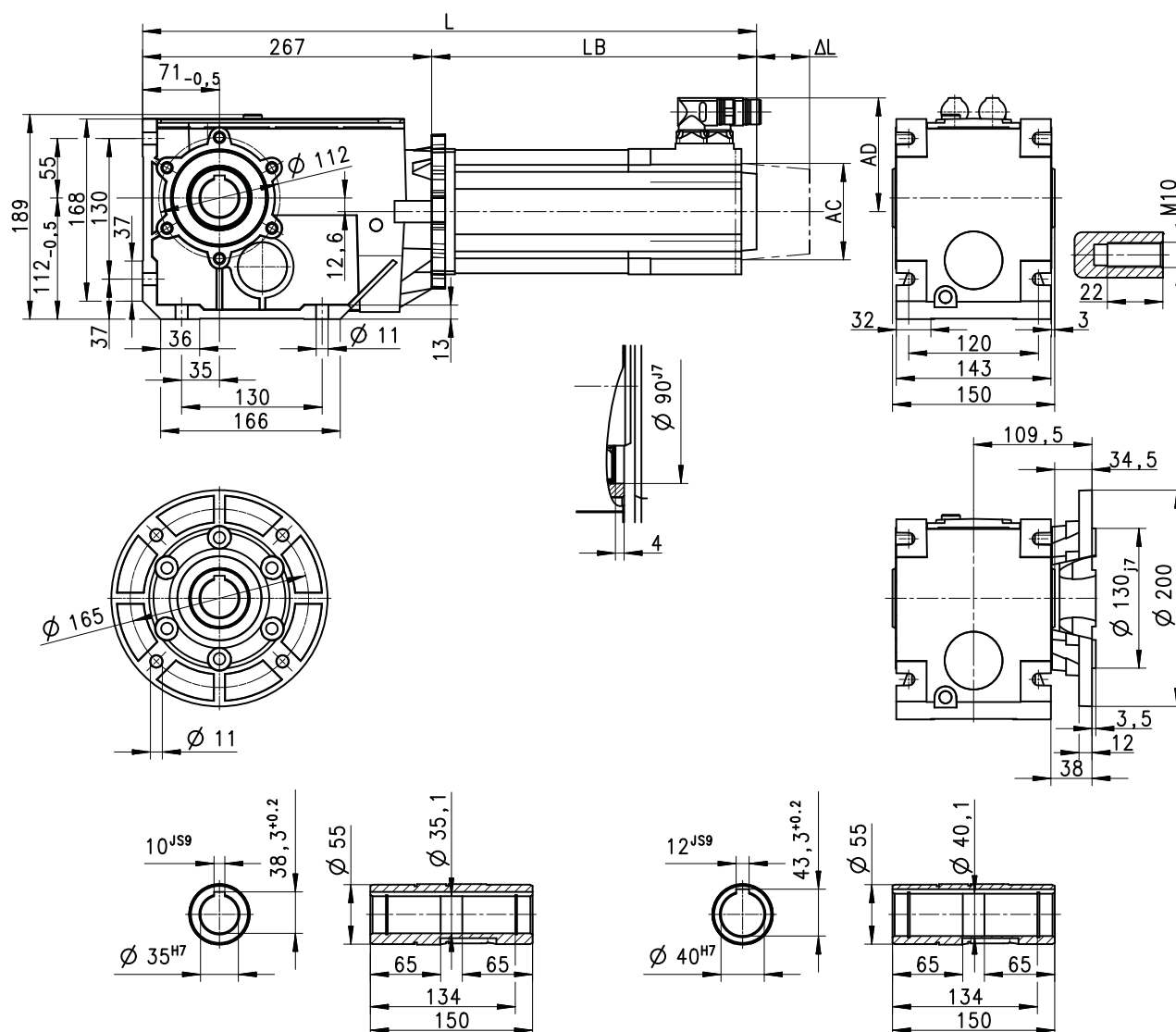


## Technical data

Dimensions  
Basic dimensions

### g500-B450, 3-stage with MCA19

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800169-02

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 19S17-<br>Blower | 19S23-<br>natural | 19S35-<br>Blower | 19S42-<br>natural |
| Total length              | L   | mm | 789              | 692               | 789              | 692               |
| Motor length              | LB  | mm | 522              | 425               | 522              | 425               |
| Length of motor options   | Δ L | mm | 88               | 88                | 88               | 88                |
| Motor diameter            | AC  | mm | 192              | 192               | 192              | 192               |
| Motor/connection distance | AD  | mm | 151              | 151               | 151              | 151               |

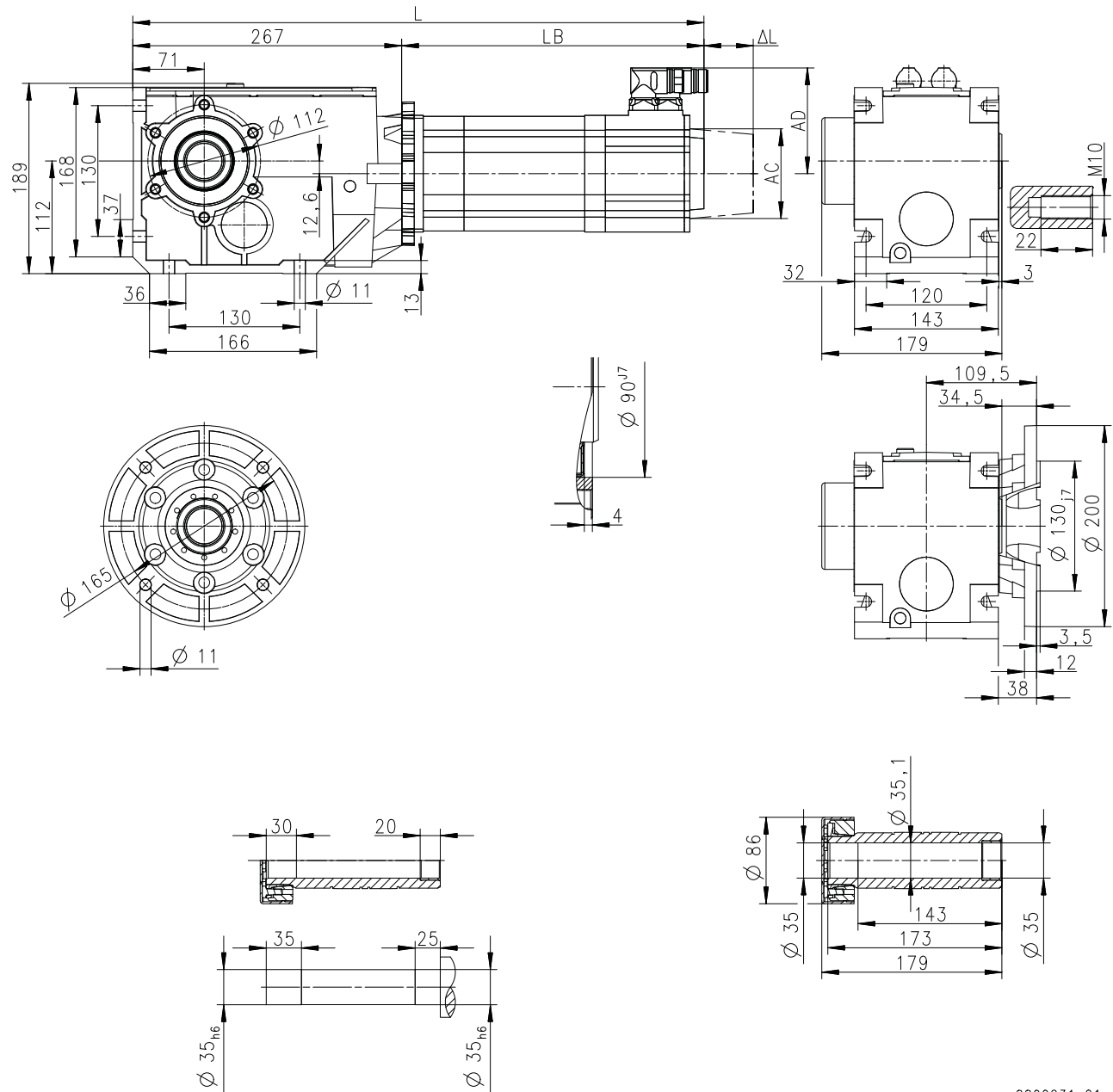
# Technical data

Dimensions  
Basic dimensions



## g500-B450, 3-stage with MCA19

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800231-01

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 19S17-<br>Blower | 19S23-<br>natural | 19S35-<br>Blower | 19S42-<br>natural |
| Total length              | L   | mm | 789              | 692               | 789              | 692               |
| Motor length              | LB  | mm | 522              | 425               | 522              | 425               |
| Length of motor options   | Δ L | mm | 88               | 88                | 88               | 88                |
| Motor diameter            | AC  | mm | 192              | 192               | 192              | 192               |
| Motor/connection distance | AD  | mm | 151              | 151               | 151              | 151               |

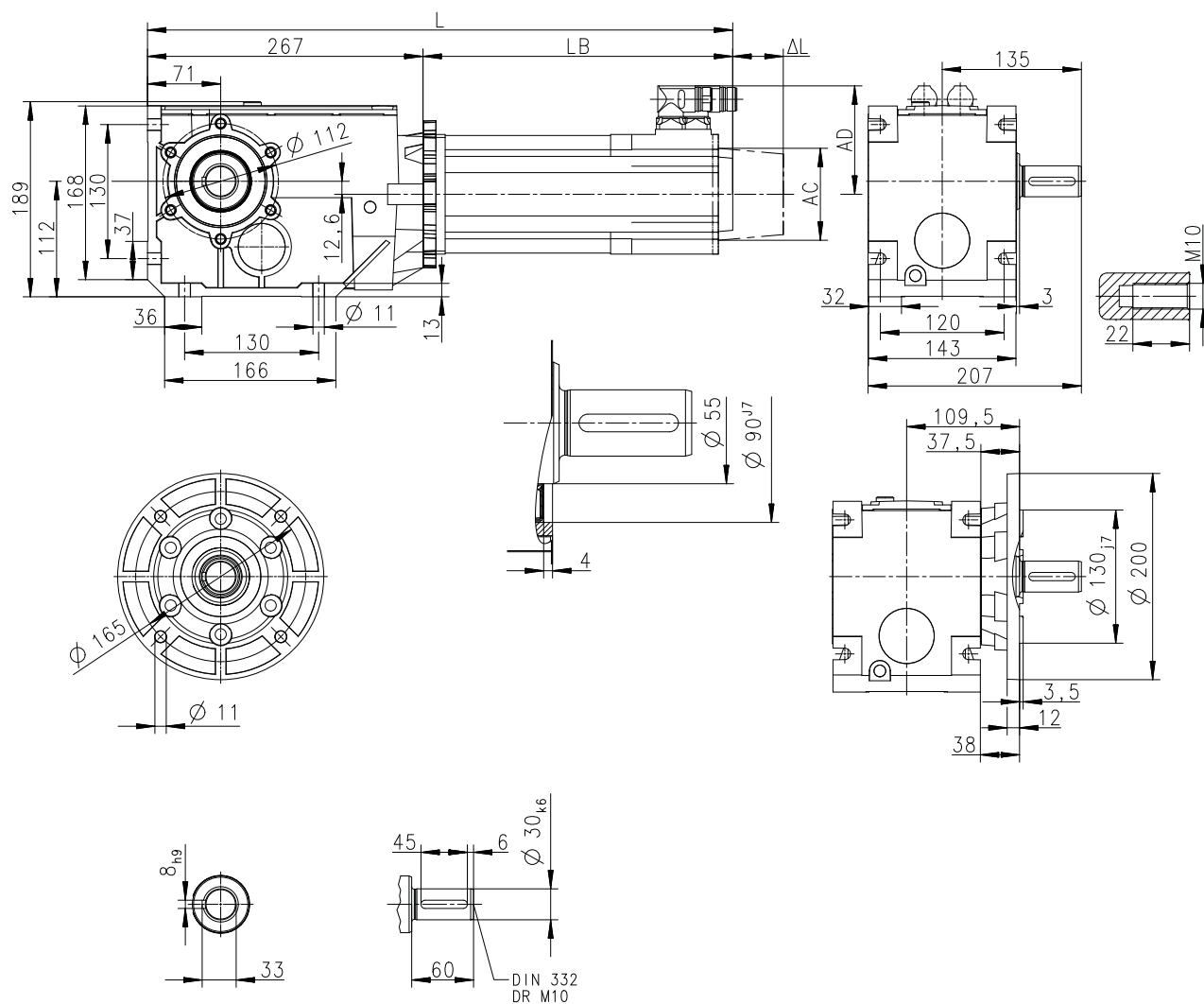


## Technical data

Dimensions  
Basic dimensions

### g500-B450, 3-stage with MCA19

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800170-00

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 19S17-<br>Blower | 19S23-<br>natural | 19S35-<br>Blower | 19S42-<br>natural |
| Cooling type              |     |    |                  |                   |                  |                   |
| Total length              | L   | mm | 789              | 692               | 789              | 692               |
| Motor length              | LB  | mm | 522              | 425               | 522              | 425               |
| Length of motor options   | Δ L | mm | 88               | 88                | 88               | 88                |
| Motor diameter            | AC  | mm | 192              | 192               | 192              | 192               |
| Motor/connection distance | AD  | mm | 151              | 151               | 151              | 151               |

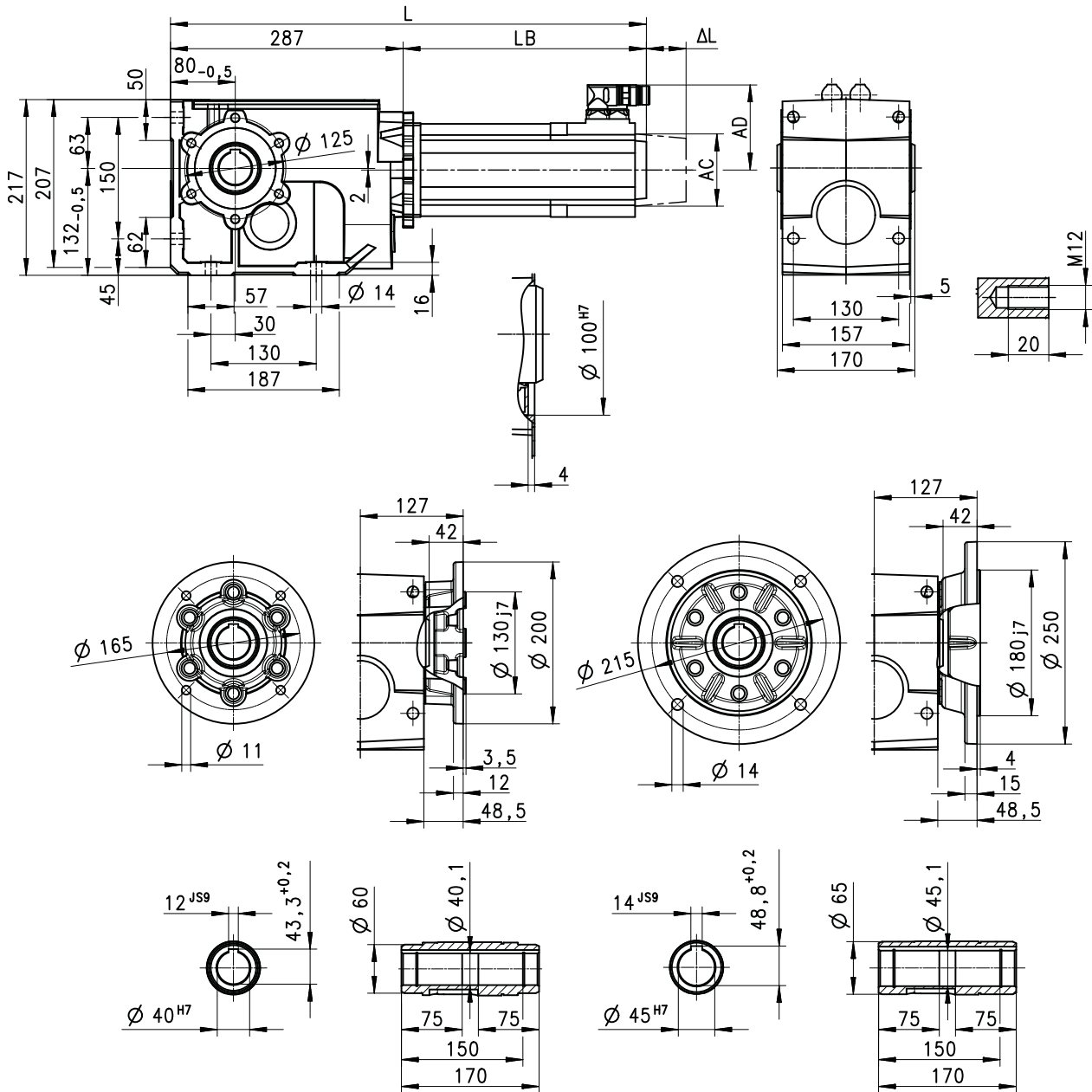
# Technical data

Dimensions  
Basic dimensions



## g500-B600, 3-stage with MCA10

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800569-02

| Motor                     |     |    | MCA     |
|---------------------------|-----|----|---------|
|                           |     |    | 10i40-  |
| Cooling type              |     |    | natural |
| Total length              | L   | mm | 546     |
| Motor length              | LB  | mm | 259     |
| Length of motor options   | Δ L | mm | 78      |
| Motor diameter            | AC  | mm | 102     |
| Motor/connection distance | AD  | mm | 90      |

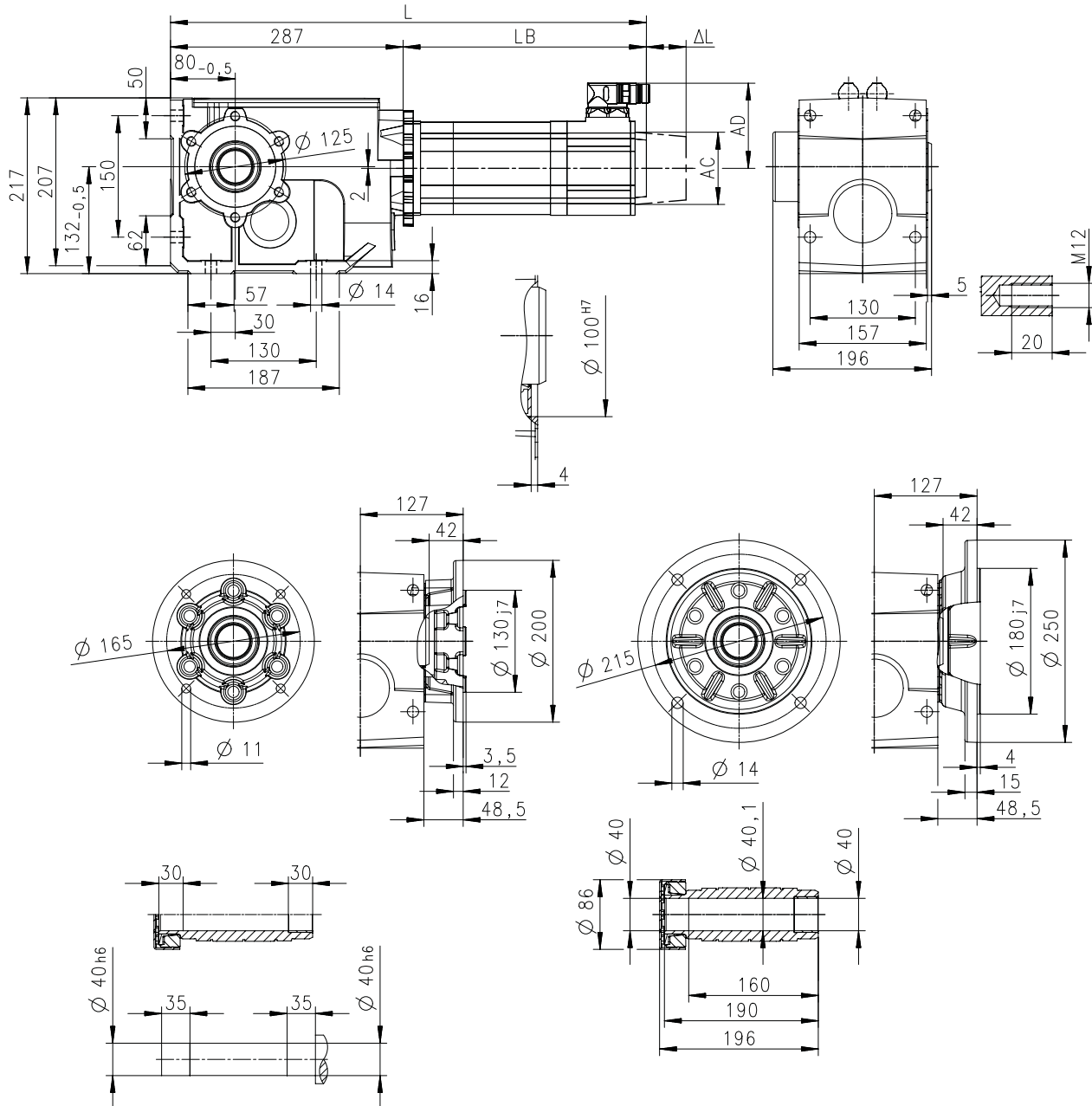


# Technical data

Dimensions  
Basic dimensions

## g500-B600, 3-stage with MCA10

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800571-00

| Motor                     |     |    | MCA     |
|---------------------------|-----|----|---------|
|                           |     |    | 10140-  |
| Cooling type              |     |    | natural |
| Total length              | L   | mm | 546     |
| Motor length              | LB  | mm | 259     |
| Length of motor options   | Δ L | mm | 78      |
| Motor diameter            | AC  | mm | 102     |
| Motor/connection distance | AD  | mm | 90      |

## Dimensions

### Basic dimensions



Technical drawing of a 125 mm diameter hydraulic cylinder with 16 mm wall thickness. The drawing includes a front view, a side view, a top view, and a bottom view. Key dimensions include: overall length 287 mm, bore diameter 125 mm, wall thickness 16 mm, and various mounting dimensions. The drawing is labeled with '125' and '16'.

| Motor                     |     |    | MCA     |
|---------------------------|-----|----|---------|
|                           |     |    | 10I40-  |
| Cooling type              |     |    | natural |
| Total length              | L   | mm | 546     |
| Motor length              | LB  | mm | 259     |
| Length of motor options   | Δ L | mm | 78      |
| Motor diameter            | AC  | mm | 102     |
| Motor/connection distance | AD  | mm | 90      |

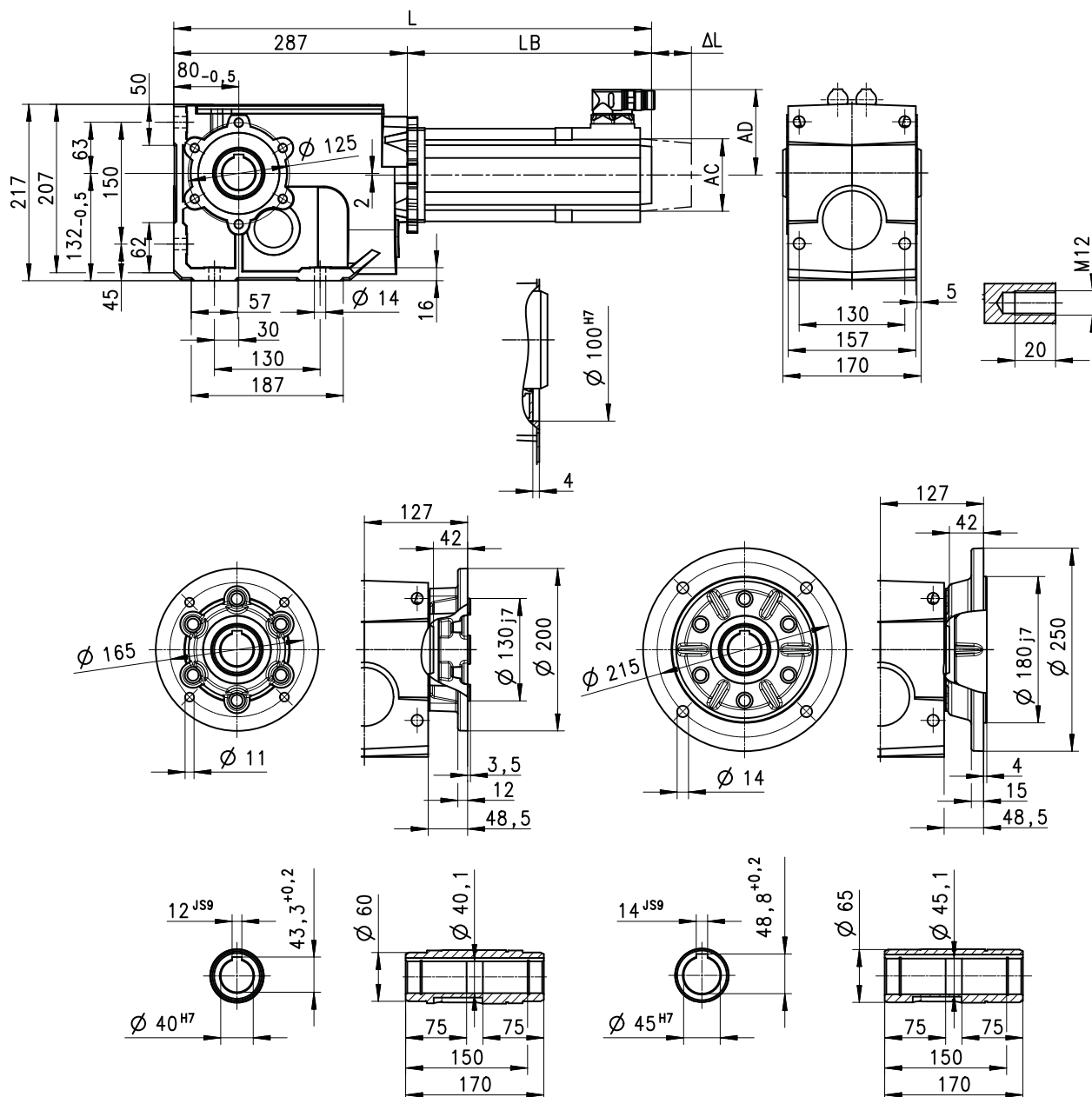


# Technical data

Dimensions  
Basic dimensions

## g500-B600, 3-stage with MCA13

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800569-02

| Motor                     |     |    | MCA    |         |
|---------------------------|-----|----|--------|---------|
|                           |     |    | 13I34- | 13I41-  |
| Cooling type              |     |    | Blower | natural |
| Total length              | L   | mm | 623    | 555     |
| Motor length              | LB  | mm | 336    | 268     |
| Length of motor options   | Δ L | mm | 90     | 90      |
| Motor diameter            | AC  | mm | 130    | 130     |
| Motor/connection distance | AD  | mm | 102    | 102     |

## Dimensions

### Basic dimensions

[illegible]

| Motor                     |     |    | MCA    |         |
|---------------------------|-----|----|--------|---------|
|                           |     |    | 13I34- | 13I41-  |
| Cooling type              |     |    | Blower | natural |
| Total length              | L   | mm | 623    | 555     |
| Motor length              | LB  | mm | 336    | 268     |
| Length of motor options   | Δ L | mm | 90     | 90      |
| Motor diameter            | AC  | mm | 130    | 130     |
| Motor/connection distance | AD  | mm | 102    | 102     |

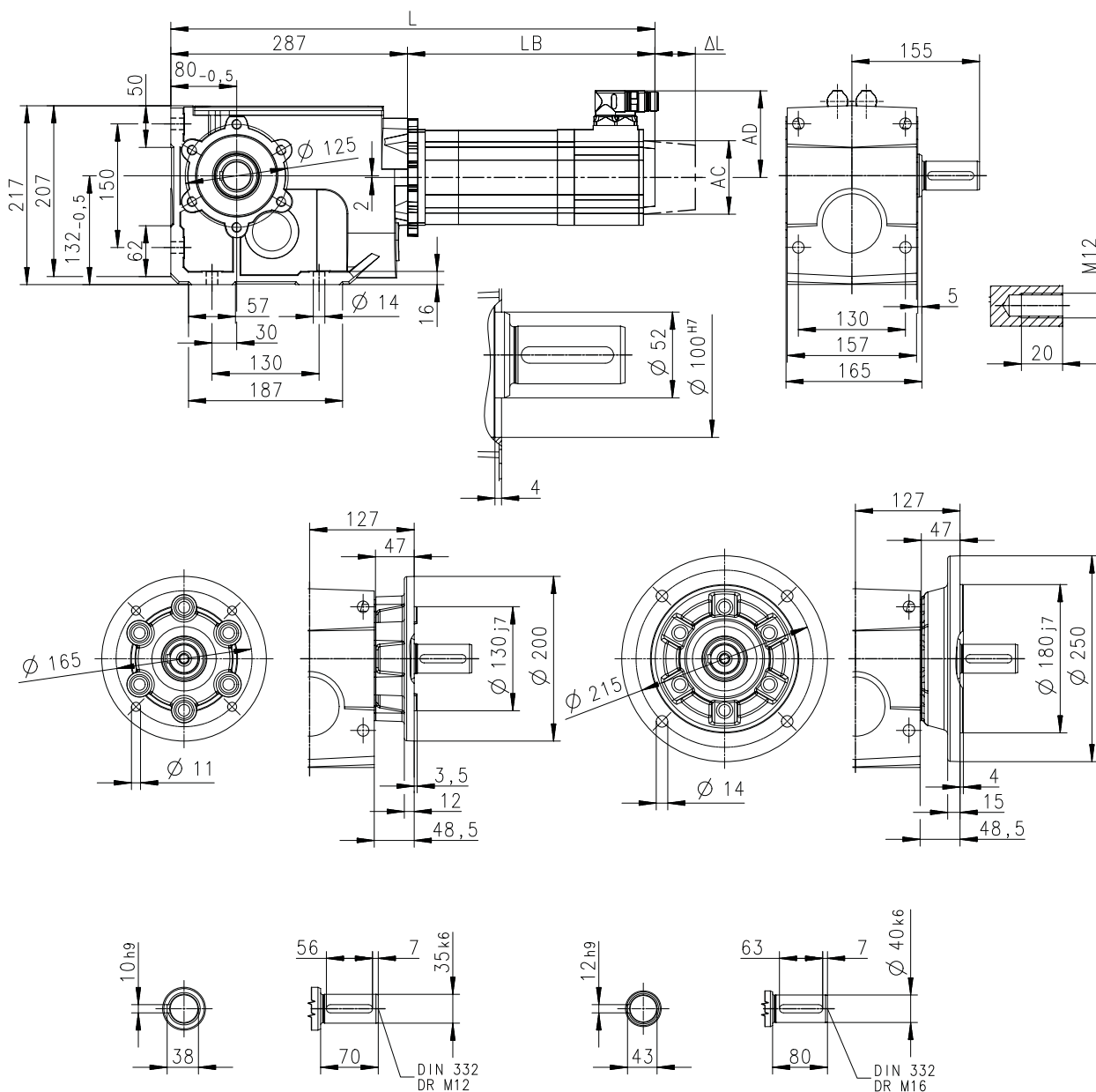


# Technical data

Dimensions  
Basic dimensions

## g500-B600, 3-stage with MCA13

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800570-00

| Motor                     |     |    | MCA    |         |
|---------------------------|-----|----|--------|---------|
|                           |     |    | 13I34- | 13I41-  |
| Cooling type              |     |    | Blower | natural |
| Total length              | L   | mm | 623    | 555     |
| Motor length              | LB  | mm | 336    | 268     |
| Length of motor options   | Δ L | mm | 90     | 90      |
| Motor diameter            | AC  | mm | 130    | 130     |
| Motor/connection distance | AD  | mm | 102    | 102     |

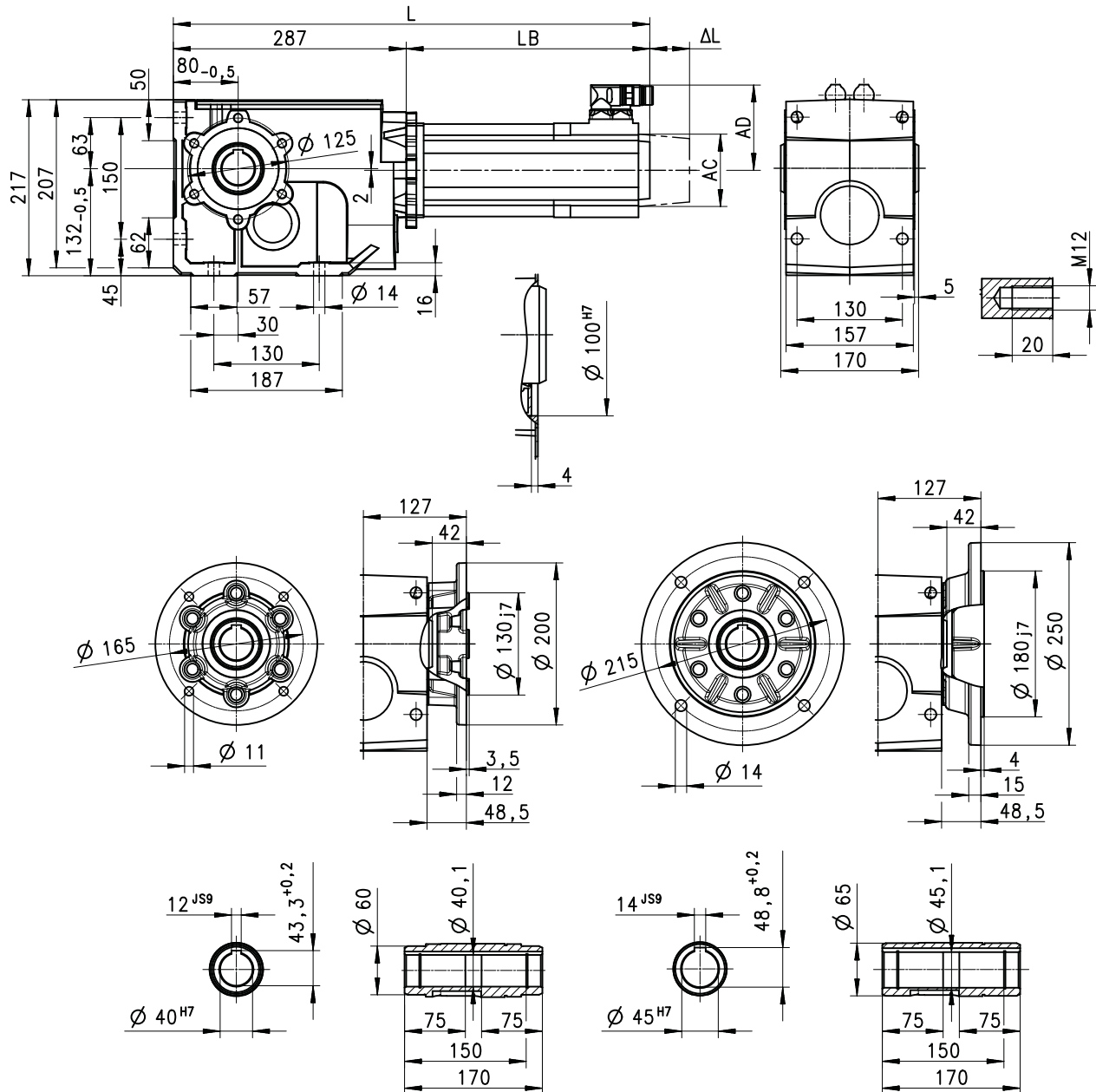
# Technical data

Dimensions  
Basic dimensions



## g500-B600, 3-stage with MCA14

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800569-02

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 14L16-<br>Blower | 14L20-<br>natural | 14L35-<br>Blower | 14L41-<br>natural |
| Cooling type              |     |    |                  |                   |                  |                   |
| Total length              | L   | mm | 667              | 605               | 667              | 605               |
| Motor length              | LB  | mm | 380              | 318               | 380              | 318               |
| Length of motor options   | Δ L | mm | 89               | 89                | 89               | 89                |
| Motor diameter            | AC  | mm | 142              | 142               | 142              | 142               |
| Motor/connection distance | AD  | mm | 109              | 109               | 109              | 109               |

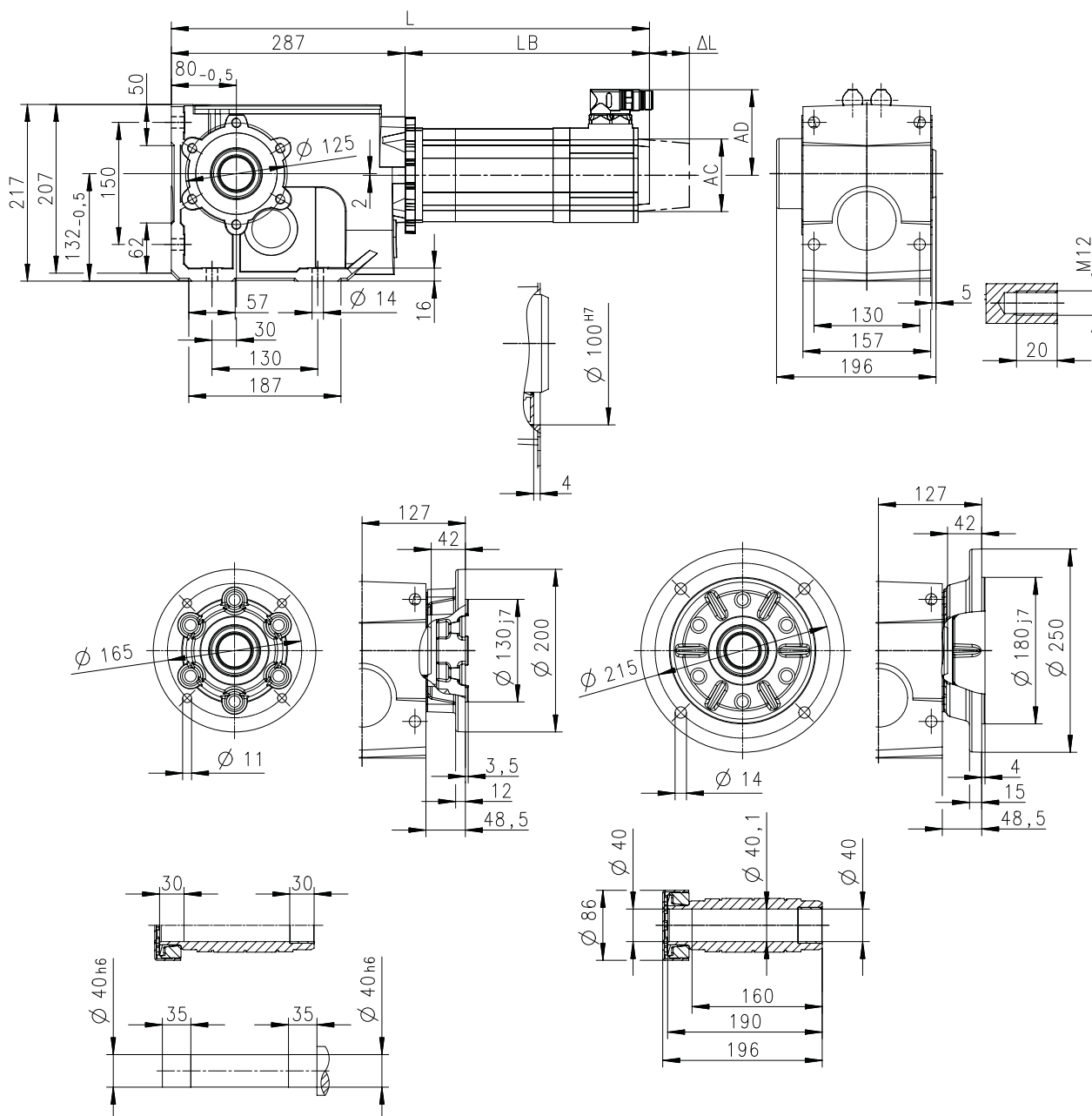


# Technical data

Dimensions  
Basic dimensions

## g500-B600, 3-stage with MCA14

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)

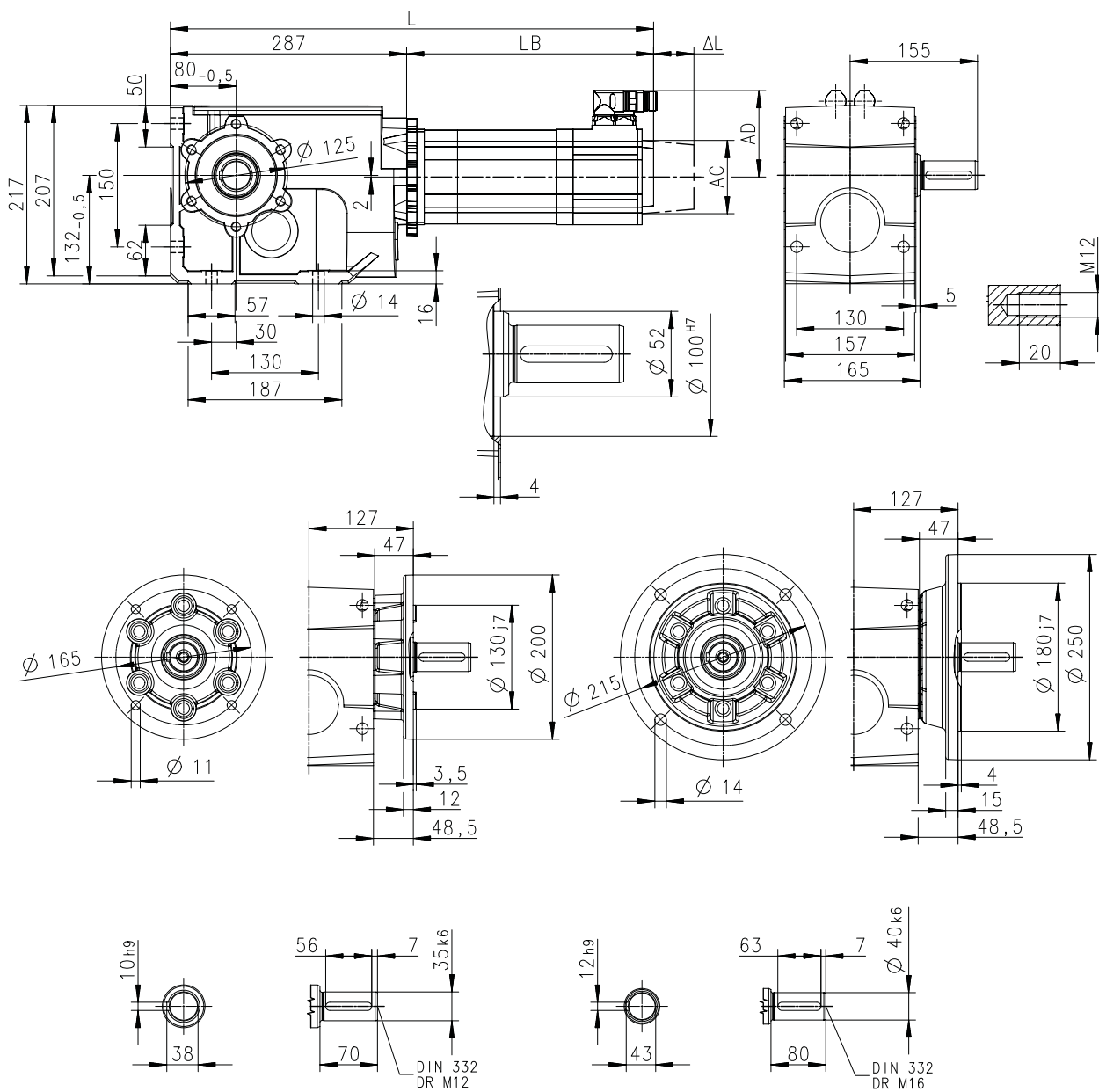


8800571-00

| Motor                     |            |    | MCA              |                   |                  |                   |
|---------------------------|------------|----|------------------|-------------------|------------------|-------------------|
|                           |            |    | 14L16-<br>Blower | 14L20-<br>natural | 14L35-<br>Blower | 14L41-<br>natural |
| Cooling type              |            |    |                  |                   |                  |                   |
| Total length              | L          | mm | 667              | 605               | 667              | 605               |
| Motor length              | LB         | mm | 380              | 318               | 380              | 318               |
| Length of motor options   | $\Delta L$ | mm | 89               | 89                | 89               | 89                |
| Motor diameter            | AC         | mm | 142              | 142               | 142              | 142               |
| Motor/connection distance | AD         | mm | 109              | 109               | 109              | 109               |



Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800570-00

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 14L16- | 14L20-  | 14L35- | 14L41-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 667    | 605     | 667    | 605     |
| Motor length              | LB  | mm | 380    | 318     | 380    | 318     |
| Length of motor options   | Δ L | mm | 89     | 89      | 89     | 89      |
| Motor diameter            | AC  | mm | 142    | 142     | 142    | 142     |
| Motor/connection distance | AD  | mm | 109    | 109     | 109    | 109     |

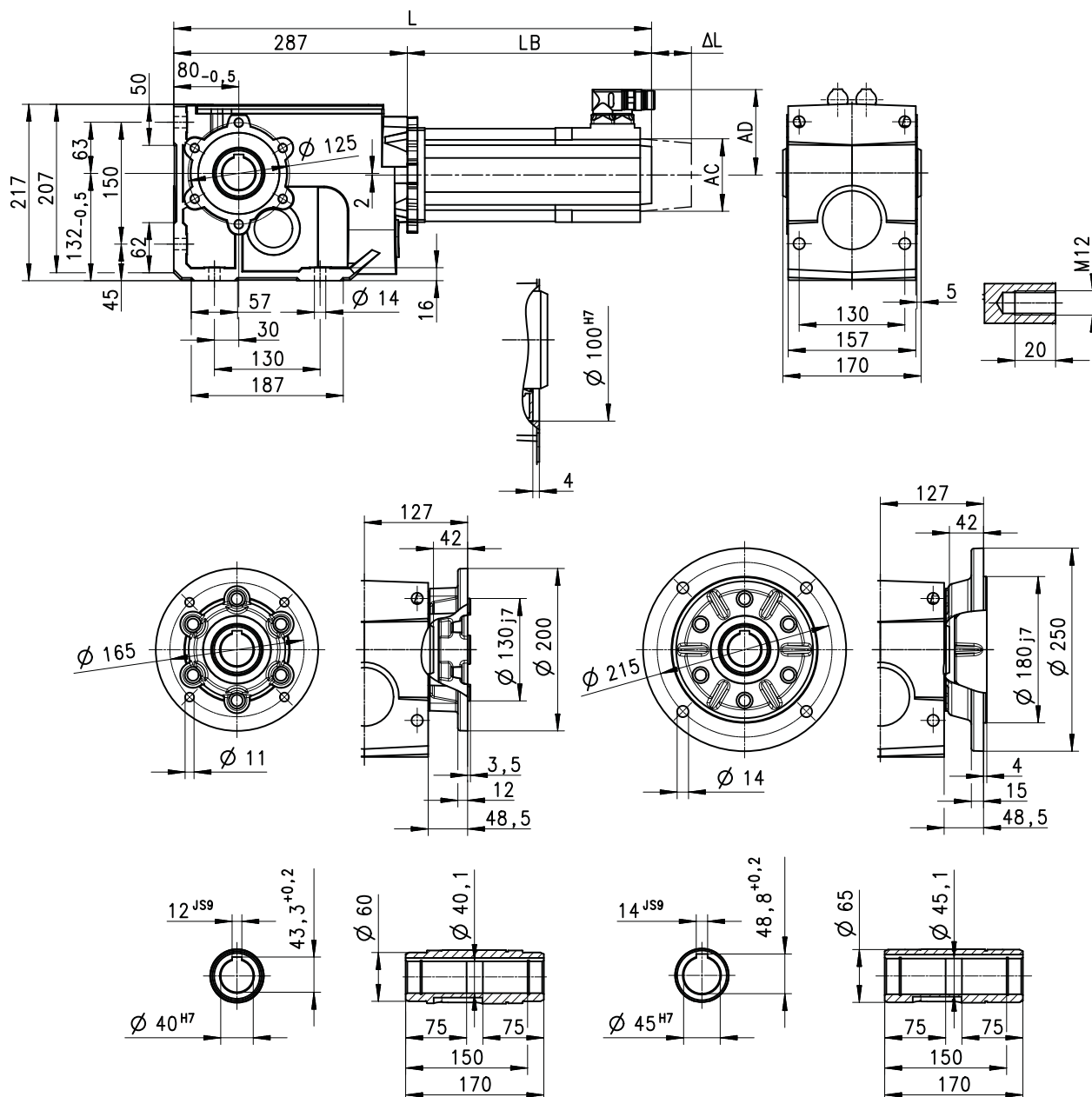


# Technical data

Dimensions  
Basic dimensions

## g500-B600, 3-stage with MCA17

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800569-02

| Motor                     |            |    | MCA              |                   |                  |                   |
|---------------------------|------------|----|------------------|-------------------|------------------|-------------------|
|                           |            |    | 17N17-<br>Blower | 17N23-<br>natural | 17N35-<br>Blower | 17N41-<br>natural |
| Total length              | L          | mm | 730              | 644               | 730              | 644               |
| Motor length              | LB         | mm | 443              | 357               | 443              | 357               |
| Length of motor options   | $\Delta L$ | mm | 90               | 90                | 90               | 90                |
| Motor diameter            | AC         | mm | 165              | 165               | 165              | 165               |
| Motor/connection distance | AD         | mm | 118              | 118               | 118              | 118               |

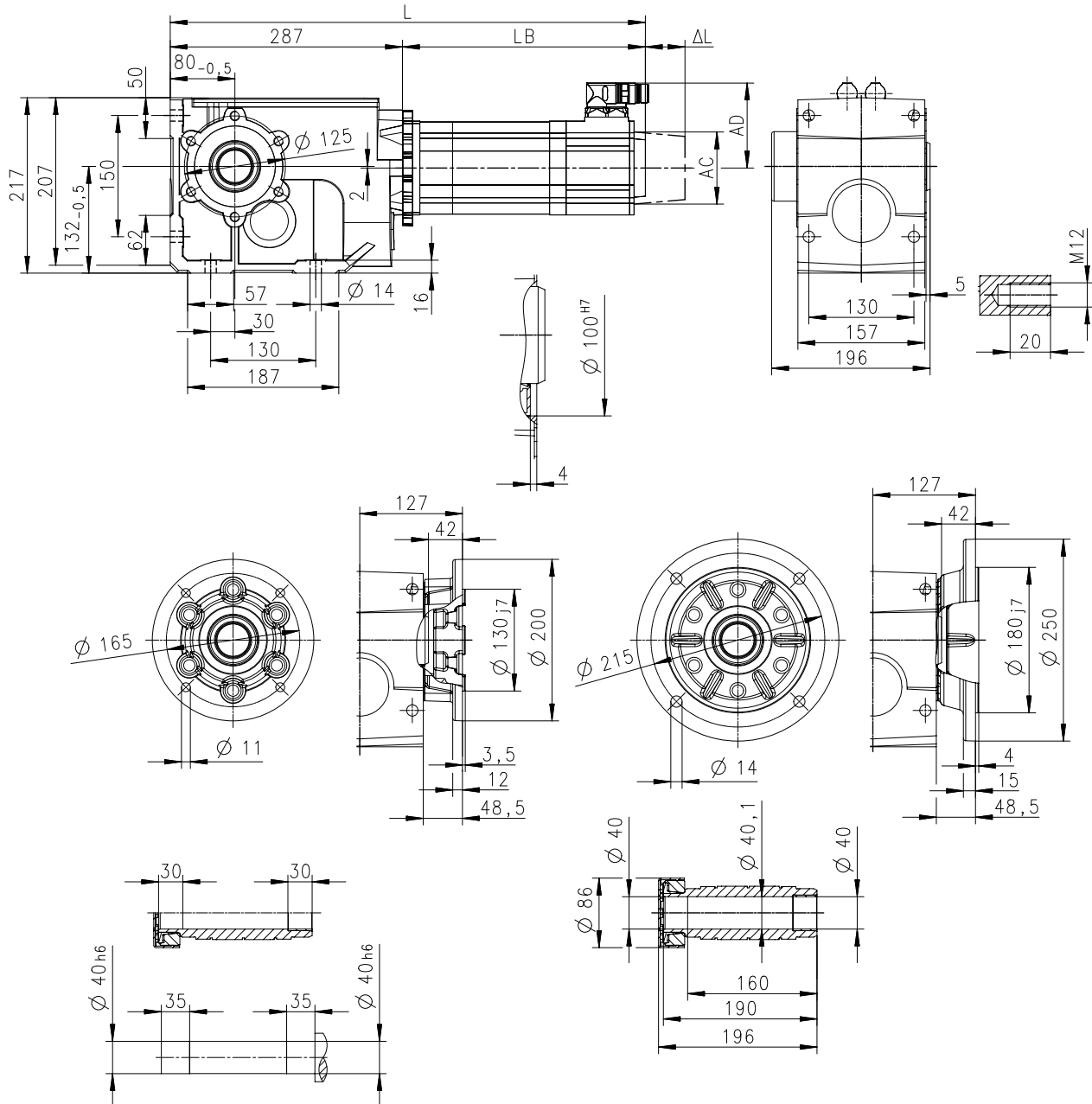
# Technical data

Dimensions  
Basic dimensions



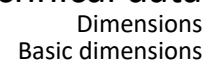
## g500-B600, 3-stage with MCA17

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800571-00

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 17N17-<br>Blower | 17N23-<br>natural | 17N35-<br>Blower | 17N41-<br>natural |
| Cooling type              |     |    |                  |                   |                  |                   |
| Total length              | L   | mm | 730              | 644               | 730              | 644               |
| Motor length              | LB  | mm | 443              | 357               | 443              | 357               |
| Length of motor options   | Δ L | mm | 90               | 90                | 90               | 90                |
| Motor diameter            | AC  | mm | 165              | 165               | 165              | 165               |
| Motor/connection distance | AD  | mm | 118              | 118               | 118              | 118               |



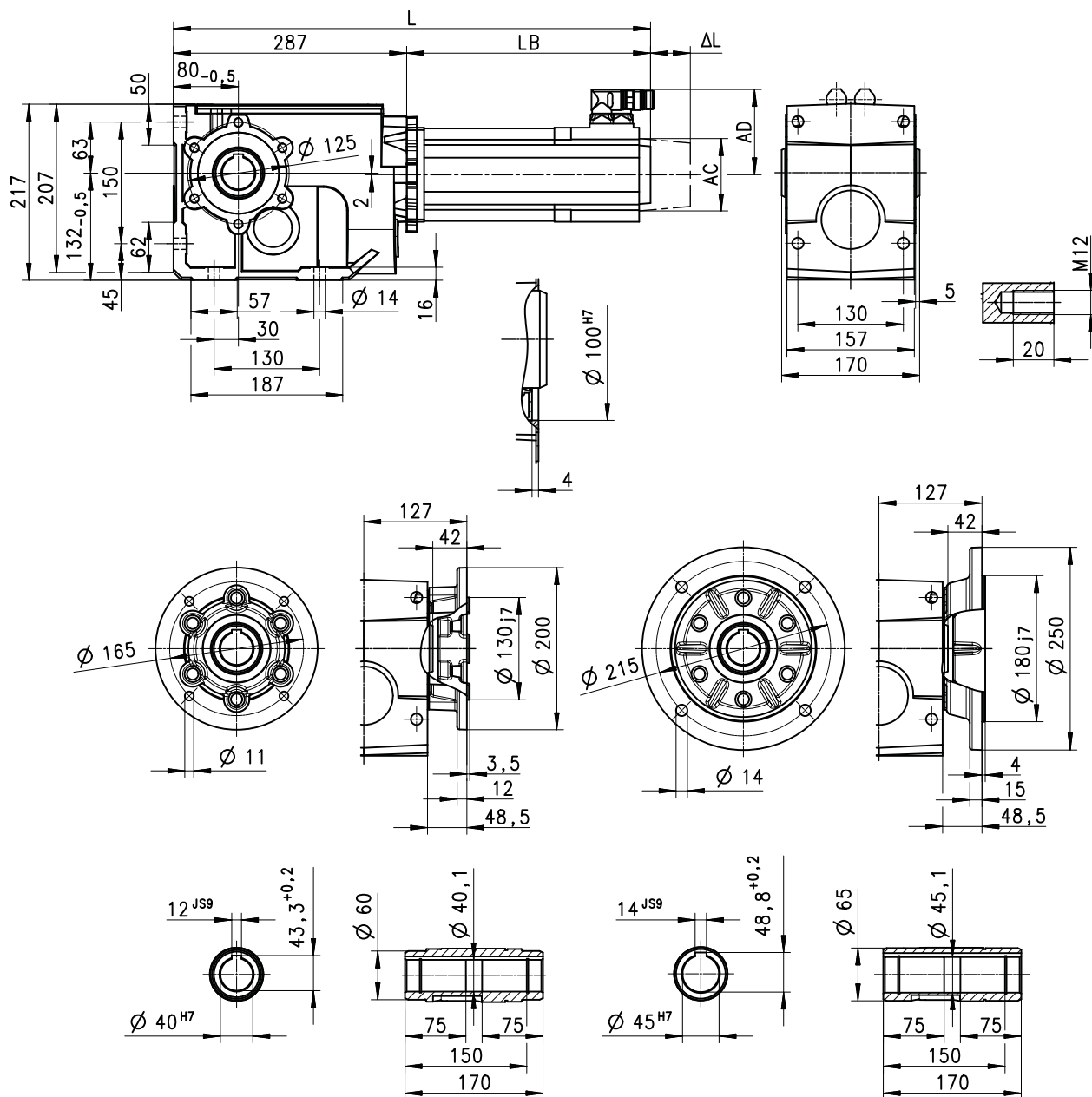
# Technical data

Dimensions  
Basic dimensions



## g500-B600, 3-stage with MCA19

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800569-02

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 19S17-<br>Blower | 19S23-<br>natural | 19S35-<br>Blower | 19S42-<br>natural |
| Cooling type              |     |    |                  |                   |                  |                   |
| Total length              | L   | mm | 809              | 712               | 809              | 712               |
| Motor length              | LB  | mm | 522              | 425               | 522              | 425               |
| Length of motor options   | Δ L | mm | 88               | 88                | 88               | 88                |
| Motor diameter            | AC  | mm | 192              | 192               | 192              | 192               |
| Motor/connection distance | AD  | mm | 151              | 151               | 151              | 151               |



**g500-B600, 3-stage with MCA19**

Technical drawing of a 125mm diameter, 200mm length, 100mm pressure-rated hydraulic cylinder. The drawing includes a front view, a side view, a cross-section of the cylinder body, a cross-section of the end cap, and a cross-section of the mounting bracket. Dimensions are given in millimeters. Key dimensions include: overall length 287mm, bore diameter 125mm, stroke 100mm, and mounting bracket dimensions. The drawing is labeled '125x200x100'.

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 19S17- | 19S23-  | 19S35- | 19S42-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 809    | 712     | 809    | 712     |
| Motor length              | LB  | mm | 522    | 425     | 522    | 425     |
| Length of motor options   | Δ L | mm | 88     | 88      | 88     | 88      |
| Motor diameter            | AC  | mm | 192    | 192     | 192    | 192     |
| Motor/connection distance | AD  | mm | 151    | 151     | 151    | 151     |

# Technical data

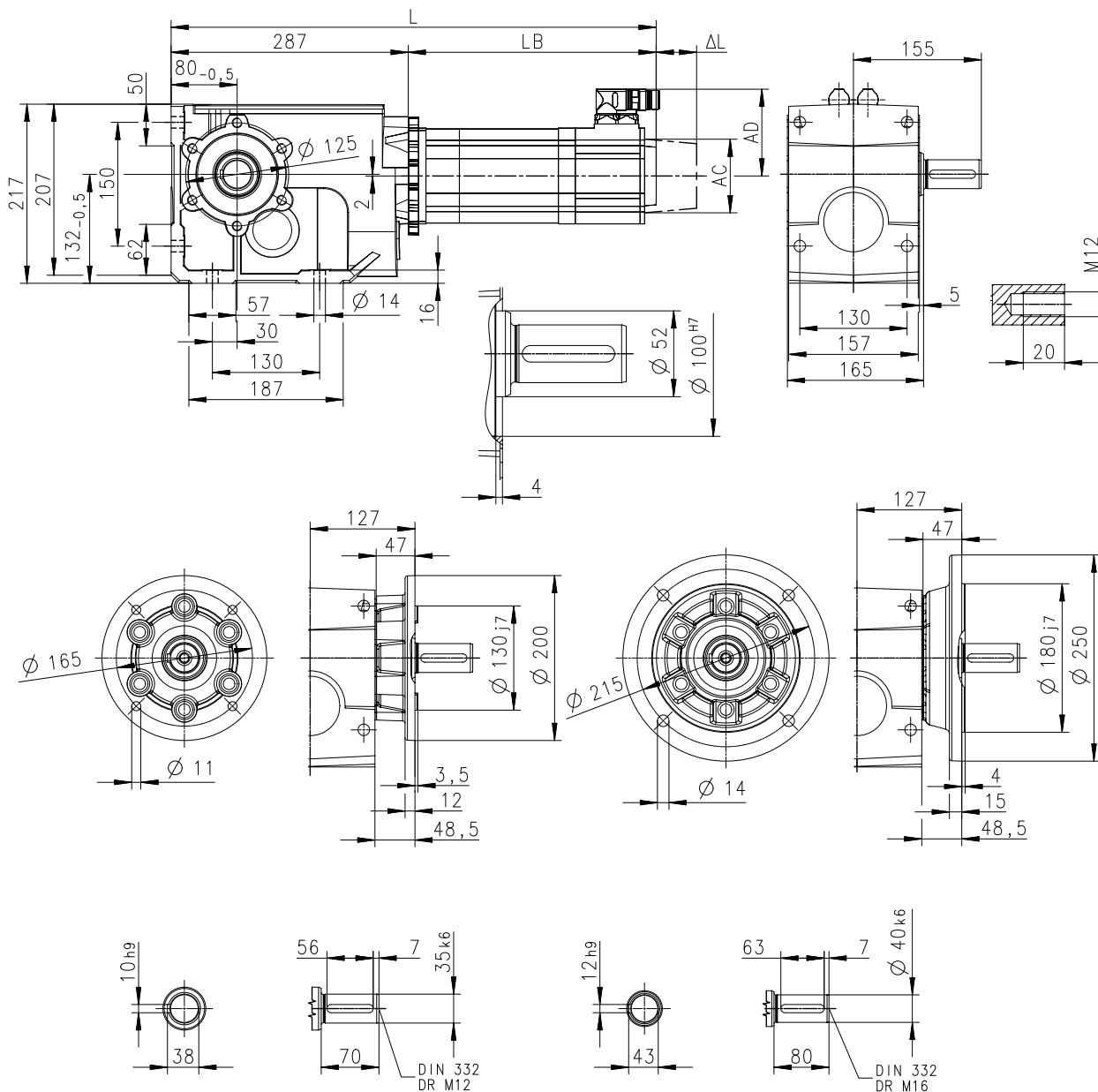
Dimensions

Basic dimensions



## g500-B600, 3-stage with MCA19

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800570-00

| Motor                     |            |    | MCA              |                   |                  |                   |
|---------------------------|------------|----|------------------|-------------------|------------------|-------------------|
|                           |            |    | 19S17-<br>Blower | 19S23-<br>natural | 19S35-<br>Blower | 19S42-<br>natural |
| Total length              | L          | mm | 809              | 712               | 809              | 712               |
| Motor length              | LB         | mm | 522              | 425               | 522              | 425               |
| Length of motor options   | $\Delta L$ | mm | 88               | 88                | 88               | 88                |
| Motor diameter            | AC         | mm | 192              | 192               | 192              | 192               |
| Motor/connection distance | AD         | mm | 151              | 151               | 151              | 151               |

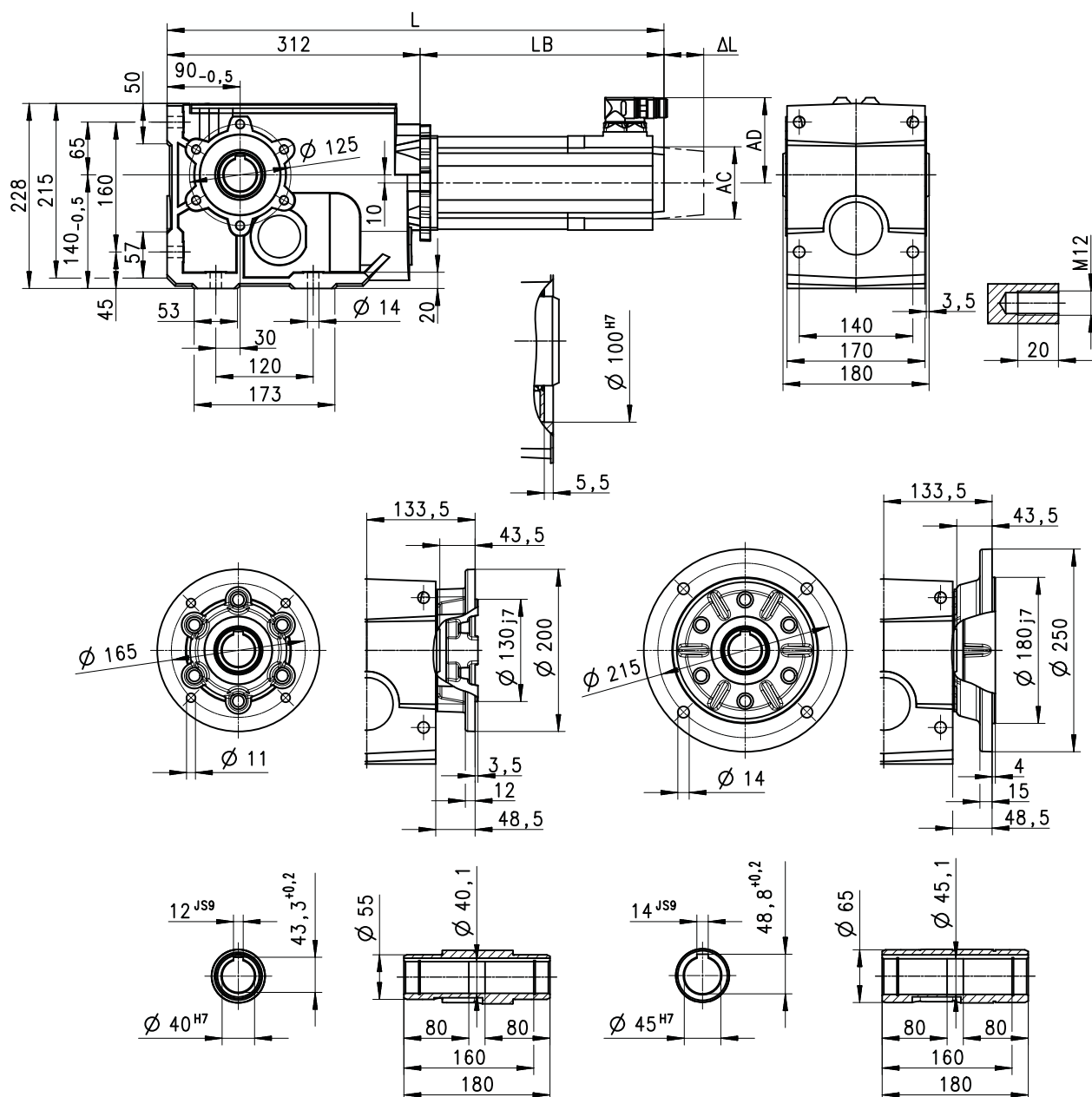


# Technical data

Dimensions  
Basic dimensions

## g500-B820, 3-stage with MCA10

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800572-02

| Motor                     |     |    | MCA     |
|---------------------------|-----|----|---------|
|                           |     |    | 10I40-  |
| Cooling type              |     |    | natural |
| Total length              | L   | mm | 571     |
| Motor length              | LB  | mm | 259     |
| Length of motor options   | Δ L | mm | 78      |
| Motor diameter            | AC  | mm | 102     |
| Motor/connection distance | AD  | mm | 90      |

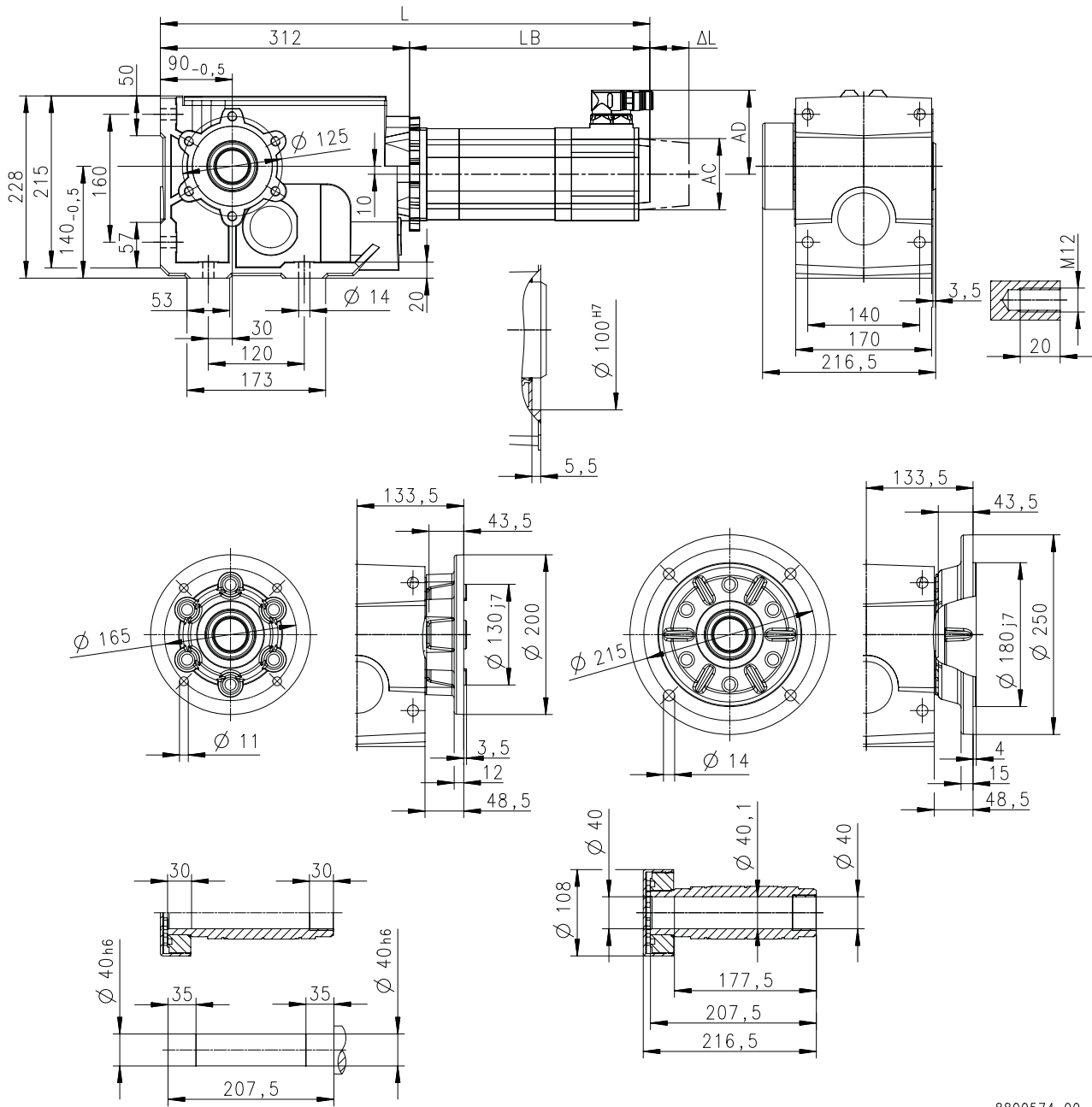
# Technical data

Dimensions  
Basic dimensions



## g500-B820, 3-stage with MCA10

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800574-00

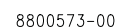
| Motor                     |     |    | MCA           |
|---------------------------|-----|----|---------------|
| Cooling type              |     |    | 10I40-natural |
| Total length              | L   | mm | 571           |
| Motor length              | LB  | mm | 259           |
| Length of motor options   | Δ L | mm | 78            |
| Motor diameter            | AC  | mm | 102           |
| Motor/connection distance | AD  | mm | 90            |



## Dimensions

### Basic dimensions

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)

137

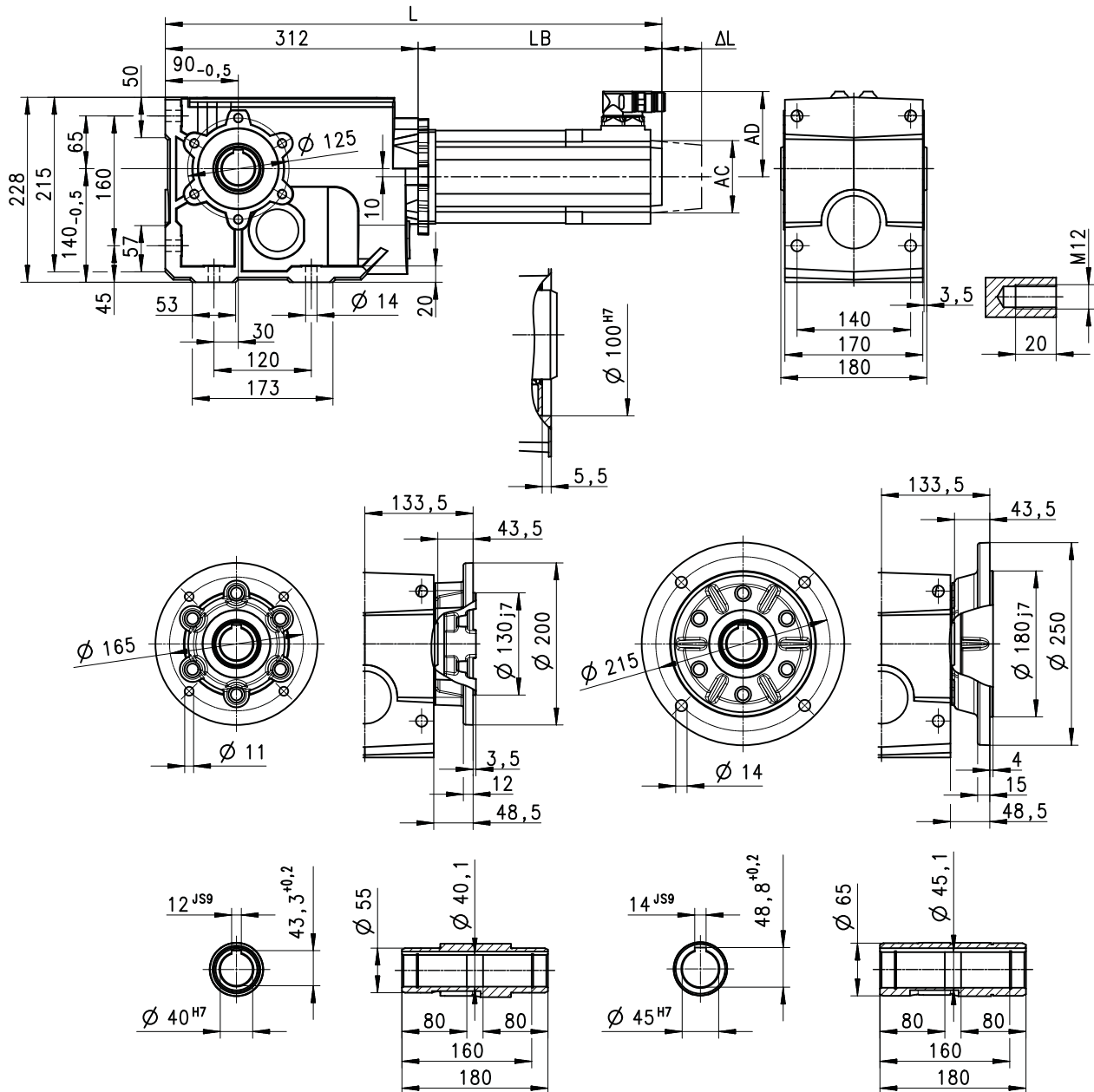
# Technical data

Dimensions  
Basic dimensions



## g500-B820, 3-stage with MCA13

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800572-02

| Motor                     |            |    | MCA              |                   |
|---------------------------|------------|----|------------------|-------------------|
|                           |            |    | 13I34-<br>Blower | 13I41-<br>natural |
| Cooling type              |            |    |                  |                   |
| Total length              | L          | mm | 648              | 580               |
| Motor length              | LB         | mm | 336              | 268               |
| Length of motor options   | $\Delta L$ | mm | 90               | 90                |
| Motor diameter            | AC         | mm | 130              | 130               |
| Motor/connection distance | AD         | mm | 102              | 102               |

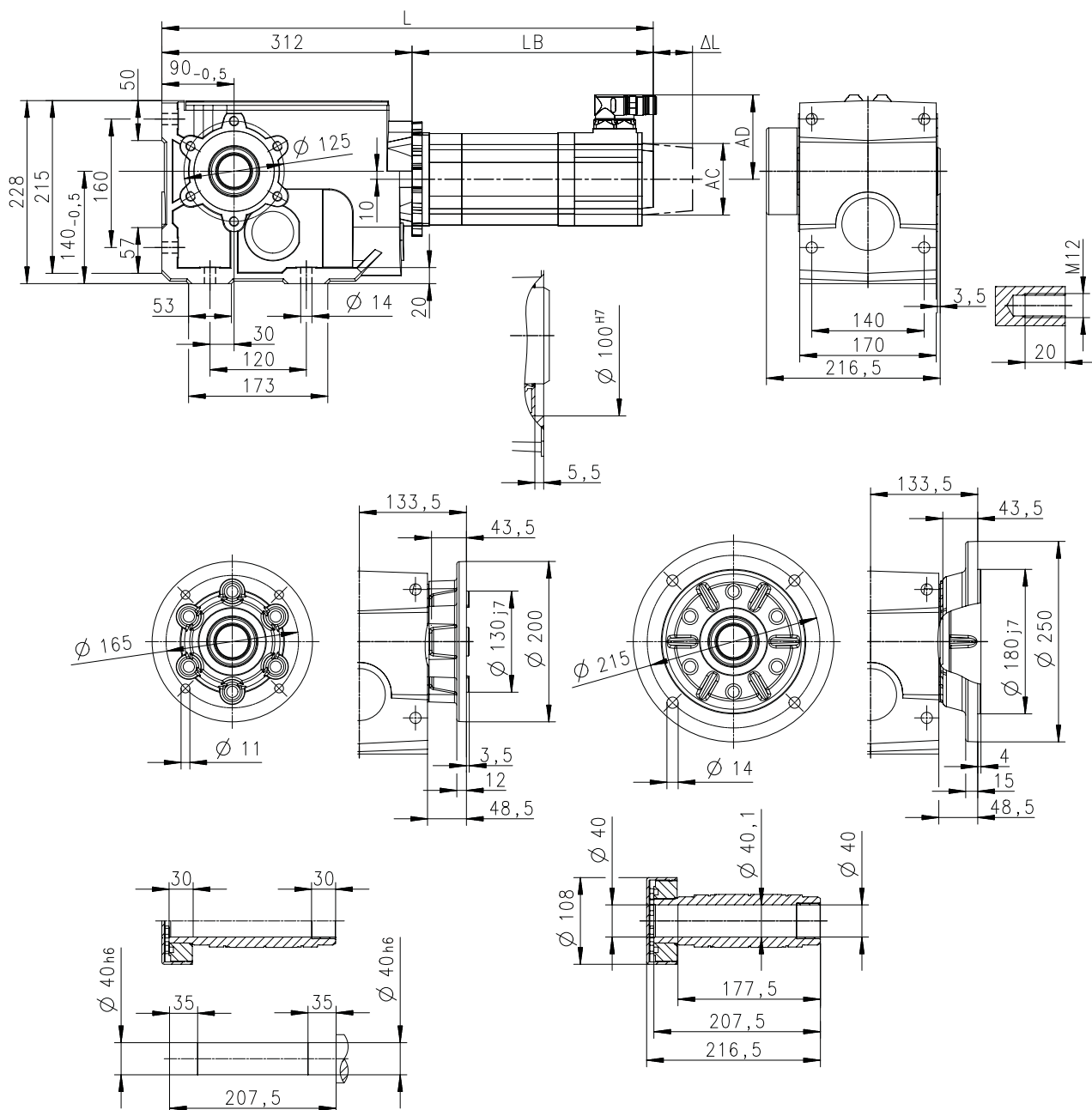


# Technical data

Dimensions  
Basic dimensions

## g500-B820, 3-stage with MCA13

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800574-00

| Motor                     |     |    | MCA    |         |
|---------------------------|-----|----|--------|---------|
|                           |     |    | 13I34- | 13I41-  |
| Cooling type              |     |    | Blower | natural |
| Total length              | L   | mm | 648    | 580     |
| Motor length              | LB  | mm | 336    | 268     |
| Length of motor options   | Δ L | mm | 90     | 90      |
| Motor diameter            | AC  | mm | 130    | 130     |
| Motor/connection distance | AD  | mm | 102    | 102     |

## Dimensions

### Basic dimensions



Technical drawing of a 100 mm diameter hydraulic cylinder with 16 ports. The drawing includes a main side view, a top view, a front view, and a detail of the port. Dimensions are given in mm. Key features include a 125 mm diameter port, a 14 mm diameter port, a 10 mm diameter port, a 160 mm diameter port, a 140 mm diameter port, a 173 mm diameter port, a 177,5 mm diameter port, a 170 mm diameter port, a 140 mm diameter port, a 133,5 mm diameter port, a 47 mm diameter port, a 180 j7 diameter port, a 250 mm diameter port, a 4 mm diameter port, a 15 mm diameter port, a 48,5 mm diameter port, a 12 h9 diameter port, a 43 mm diameter port, a 63 mm diameter port, a 7 mm diameter port, a 40 k6 diameter port, and a DIN 332 DR M16 thread.

| Motor                     |     |    | MCA    |         |
|---------------------------|-----|----|--------|---------|
|                           |     |    | 13I34- | 13I41-  |
| Cooling type              |     |    | Blower | natural |
| Total length              | L   | mm | 648    | 580     |
| Motor length              | LB  | mm | 336    | 268     |
| Length of motor options   | Δ L | mm | 90     | 90      |
| Motor diameter            | AC  | mm | 130    | 130     |
| Motor/connection distance | AD  | mm | 102    | 102     |

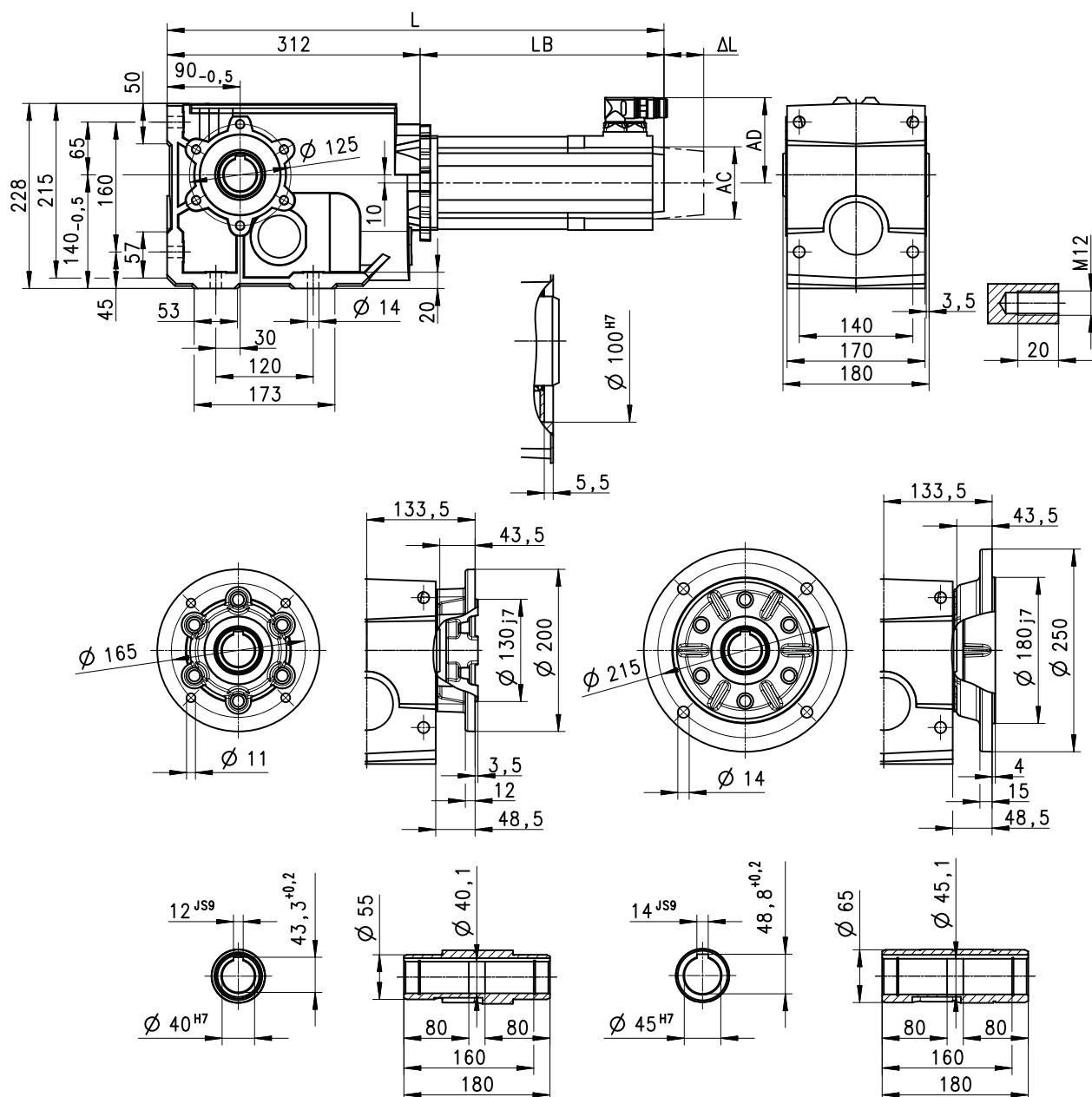


# Technical data

Dimensions  
Basic dimensions

## g500-B820, 3-stage with MCA14

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800572-02

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 14L16-<br>Blower | 14L20-<br>natural | 14L35-<br>Blower | 14L41-<br>natural |
| Cooling type              |     |    |                  |                   |                  |                   |
| Total length              | L   | mm | 692              | 630               | 692              | 630               |
| Motor length              | LB  | mm | 380              | 318               | 380              | 318               |
| Length of motor options   | Δ L | mm | 89               | 89                | 89               | 89                |
| Motor diameter            | AC  | mm | 142              | 142               | 142              | 142               |
| Motor/connection distance | AD  | mm | 109              | 109               | 109              | 109               |

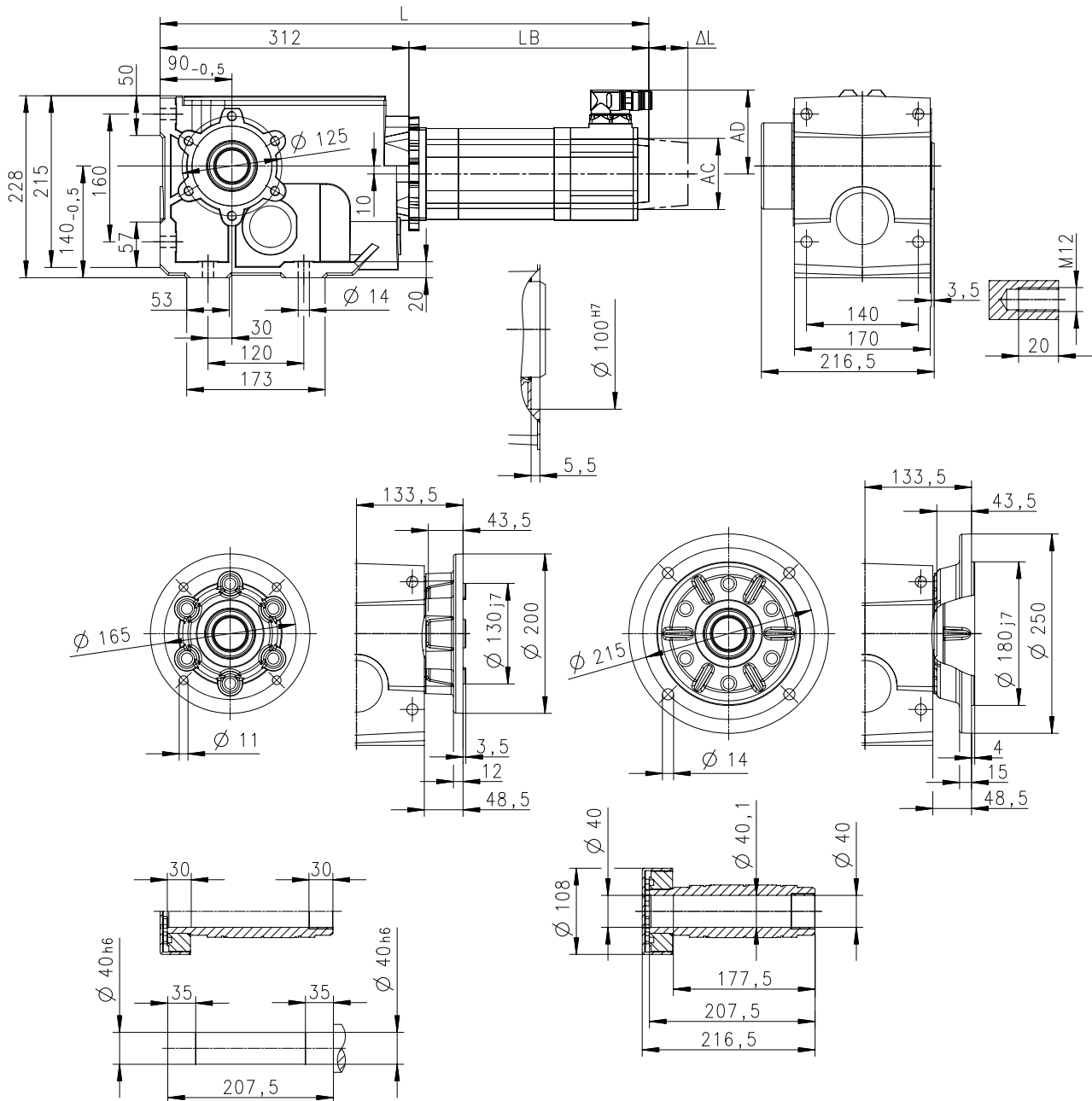
# Technical data

Dimensions  
Basic dimensions



## g500-B820, 3-stage with MCA14

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800574-00

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 14L16-<br>Blower | 14L20-<br>natural | 14L35-<br>Blower | 14L41-<br>natural |
| Cooling type              |     |    |                  |                   |                  |                   |
| Total length              | L   | mm | 692              | 630               | 692              | 630               |
| Motor length              | LB  | mm | 380              | 318               | 380              | 318               |
| Length of motor options   | Δ L | mm | 89               | 89                | 89               | 89                |
| Motor diameter            | AC  | mm | 142              | 142               | 142              | 142               |
| Motor/connection distance | AD  | mm | 109              | 109               | 109              | 109               |

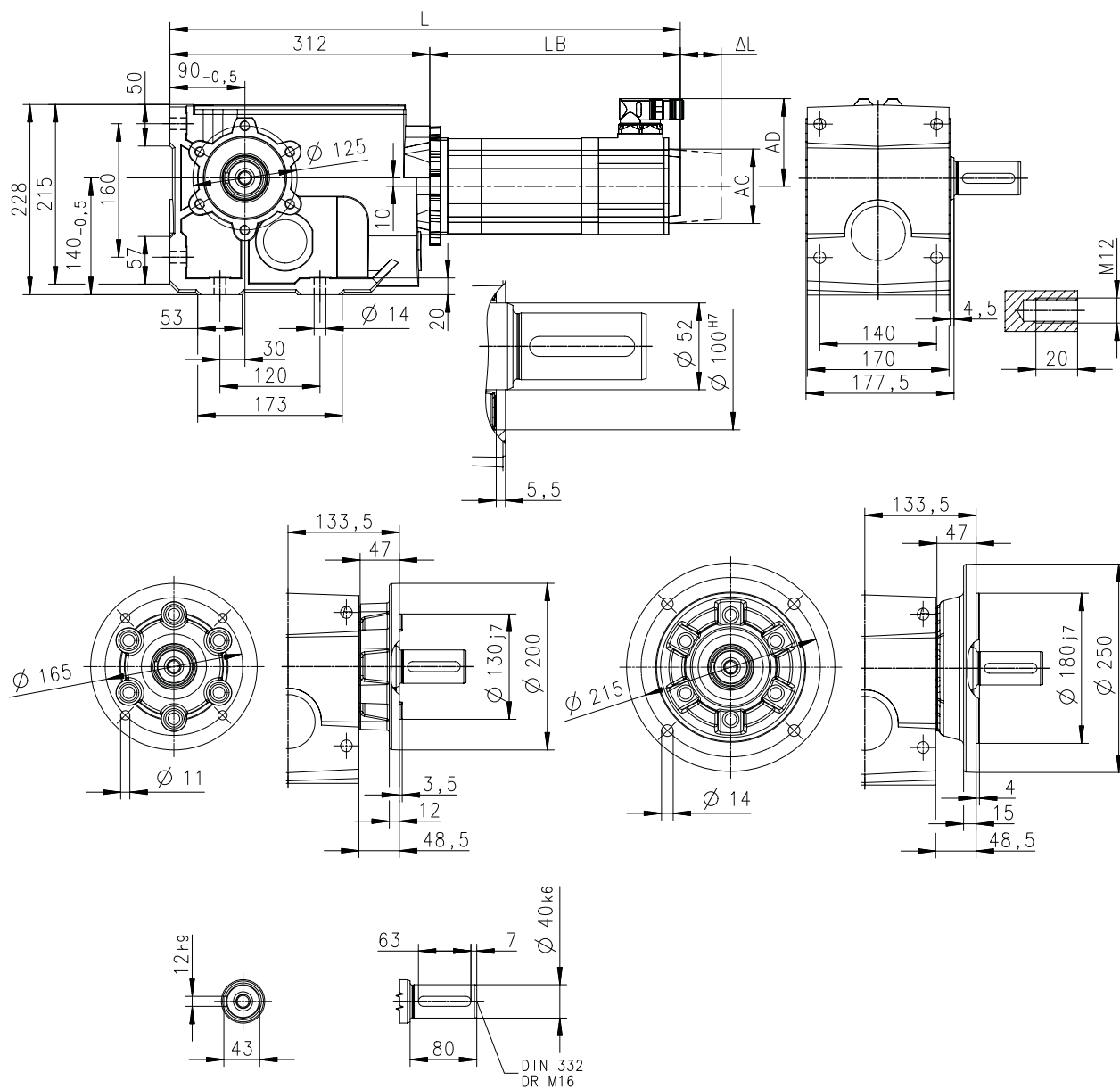


# Technical data

Dimensions  
Basic dimensions

## g500-B820, 3-stage with MCA14

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800573-00

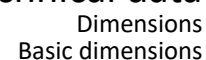
| Motor                     |            |    | MCA              |                   |                  |                   |
|---------------------------|------------|----|------------------|-------------------|------------------|-------------------|
|                           |            |    | 14L16-<br>Blower | 14L20-<br>natural | 14L35-<br>Blower | 14L41-<br>natural |
| Cooling type              |            |    |                  |                   |                  |                   |
| Total length              | L          | mm | 692              | 630               | 692              | 630               |
| Motor length              | LB         | mm | 380              | 318               | 380              | 318               |
| Length of motor options   | $\Delta L$ | mm | 89               | 89                | 89               | 89                |
| Motor diameter            | AC         | mm | 142              | 142               | 142              | 142               |
| Motor/connection distance | AD         | mm | 109              | 109               | 109              | 109               |

## Dimensions

### Basic dimensions



| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 17N17- | 17N23-  | 17N35- | 17N41-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 755    | 669     | 755    | 669     |
| Motor length              | LB  | mm | 443    | 357     | 443    | 357     |
| Length of motor options   | Δ L | mm | 90     | 90      | 90     | 90      |
| Motor diameter            | AC  | mm | 165    | 165     | 165    | 165     |
| Motor/connection distance | AD  | mm | 118    | 118     | 118    | 118     |



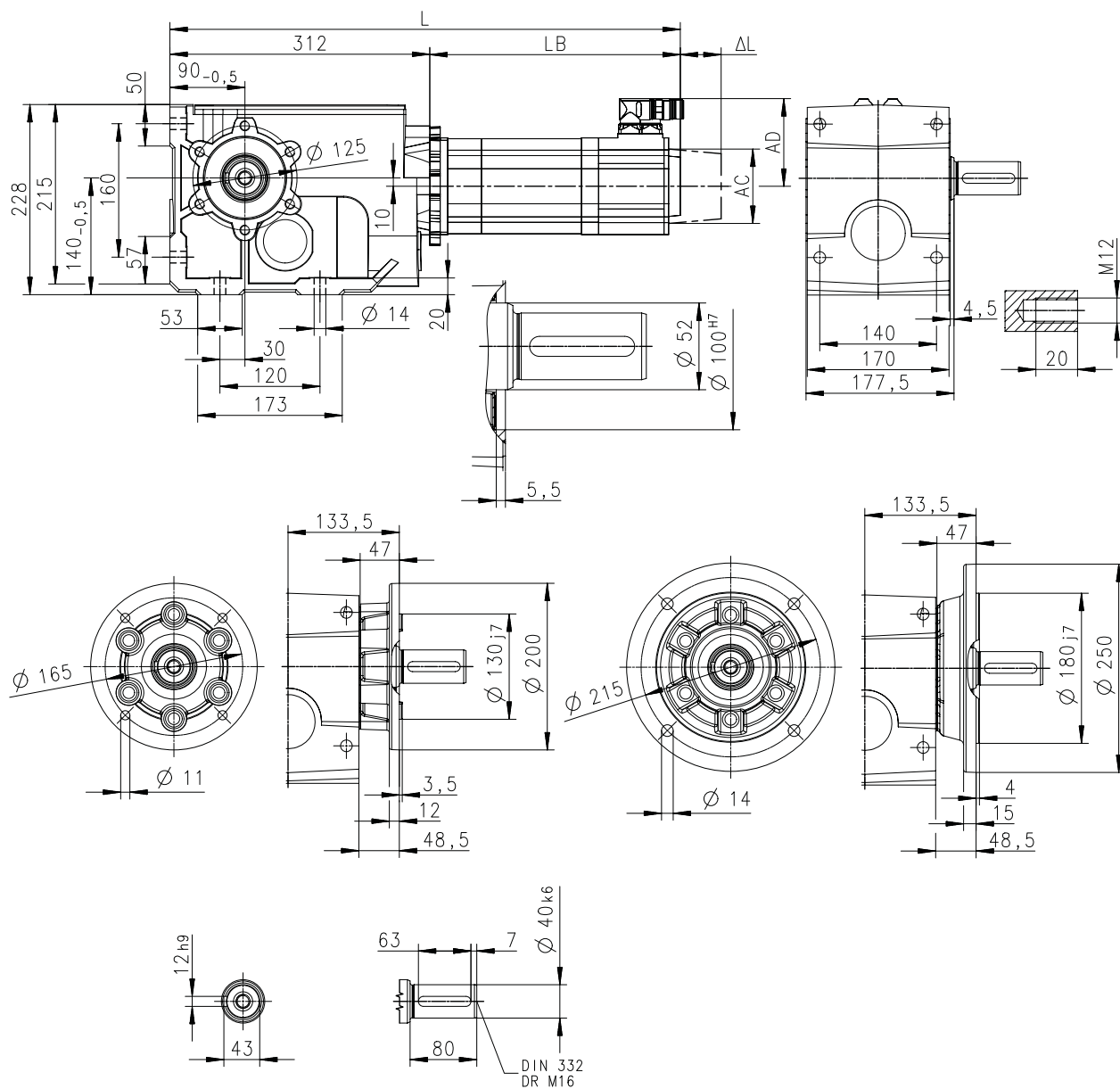
# Technical data

Dimensions  
Basic dimensions



## g500-B820, 3-stage with MCA17

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800573-00

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 17N17-<br>Blower | 17N23-<br>natural | 17N35-<br>Blower | 17N41-<br>natural |
| Total length              | L   | mm | 755              | 669               | 755              | 669               |
| Motor length              | LB  | mm | 443              | 357               | 443              | 357               |
| Length of motor options   | Δ L | mm | 90               | 90                | 90               | 90                |
| Motor diameter            | AC  | mm | 165              | 165               | 165              | 165               |
| Motor/connection distance | AD  | mm | 118              | 118               | 118              | 118               |

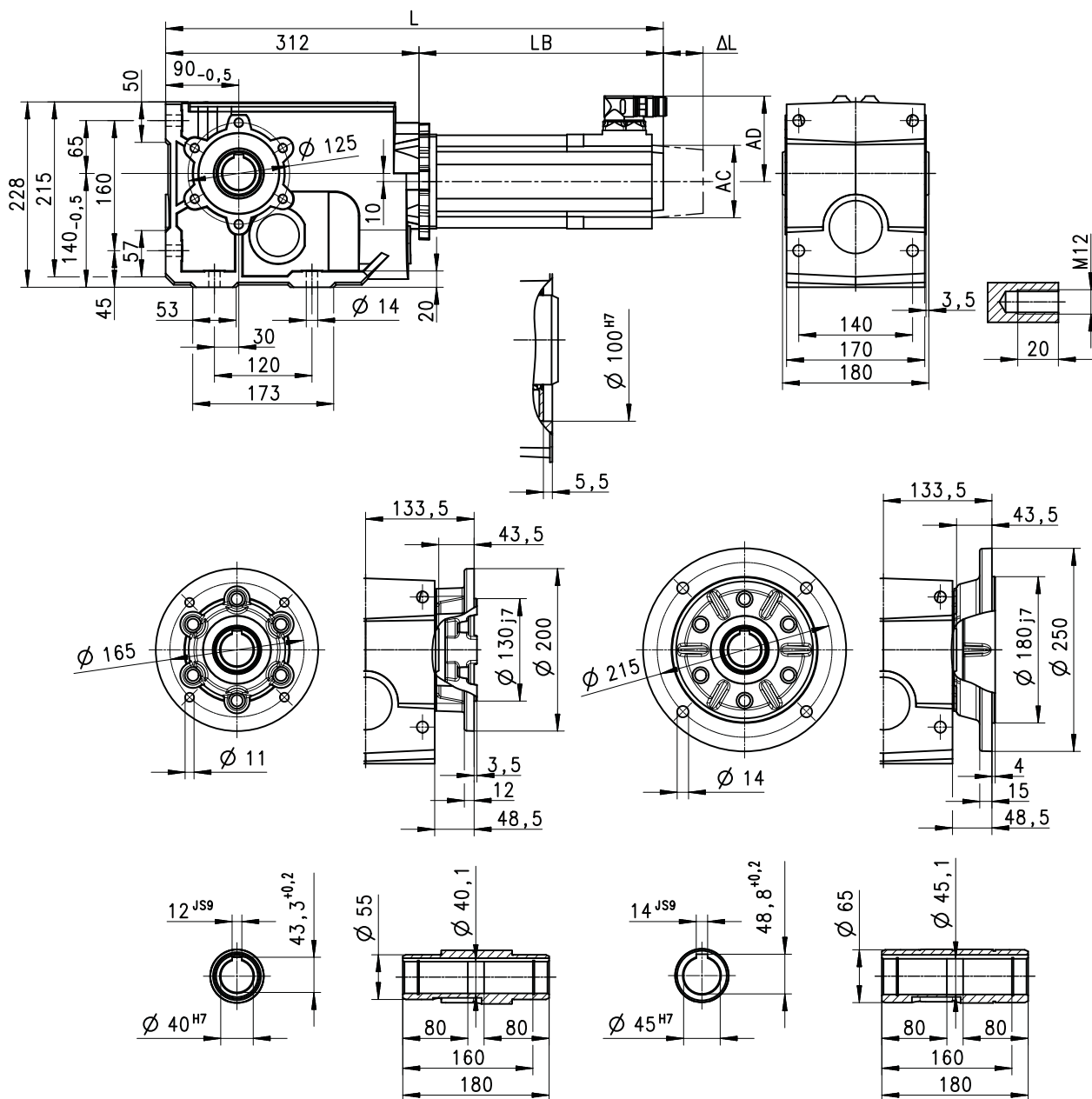


# Technical data

Dimensions  
Basic dimensions

## g500-B820, 3-stage with MCA19

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800572-02

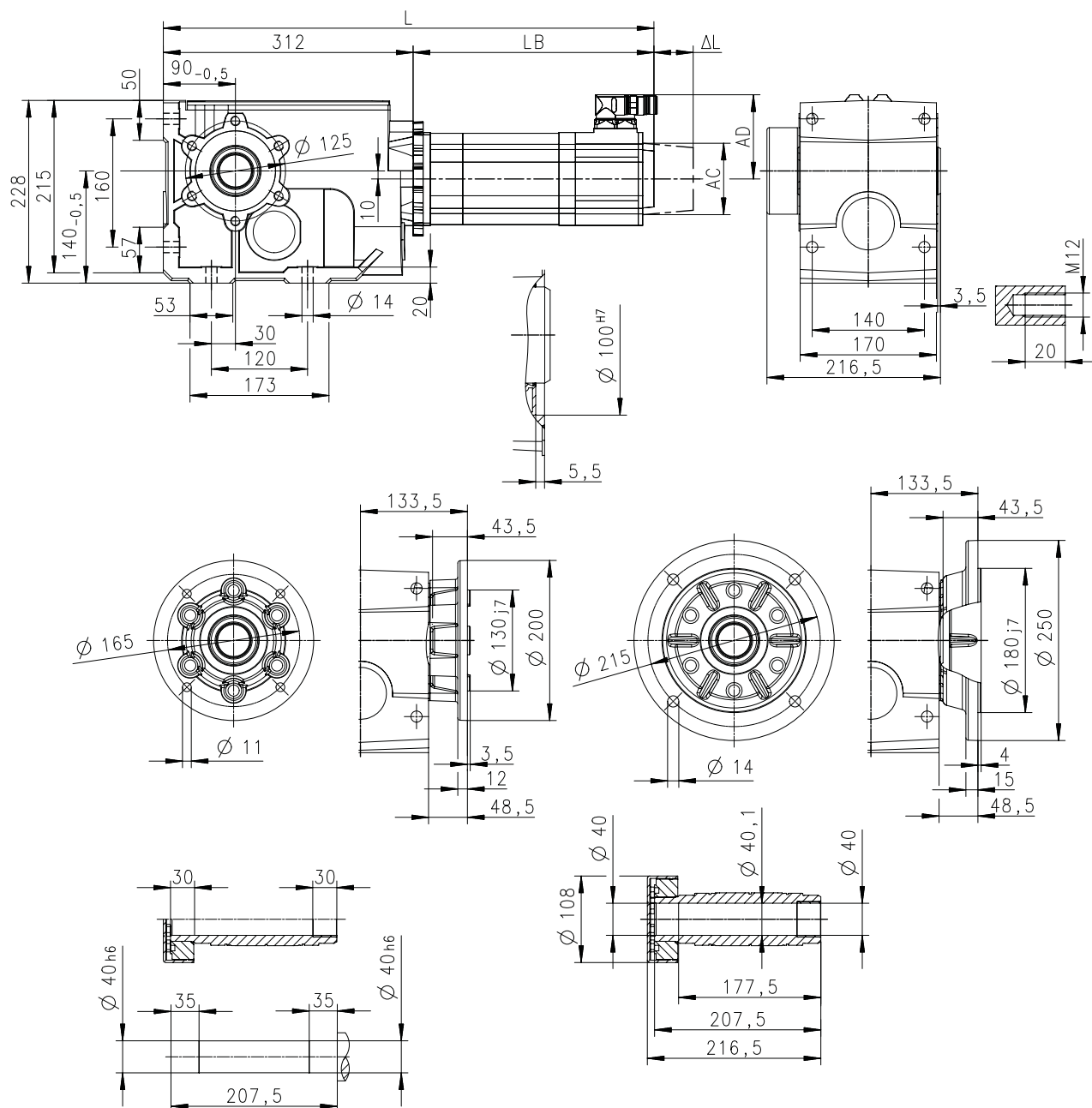
| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 19S17-<br>Blower | 19S23-<br>natural | 19S35-<br>Blower | 19S42-<br>natural |
| Cooling type              |     |    |                  |                   |                  |                   |
| Total length              | L   | mm | 834              | 737               | 834              | 737               |
| Motor length              | LB  | mm | 522              | 425               | 522              | 425               |
| Length of motor options   | Δ L | mm | 88               | 88                | 88               | 88                |
| Motor diameter            | AC  | mm | 192              | 192               | 192              | 192               |
| Motor/connection distance | AD  | mm | 151              | 151               | 151              | 151               |

## Dimensions

### Basic dimensions



Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800574-00

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 19S17- | 19S23-  | 19S35- | 19S42-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 834    | 737     | 834    | 737     |
| Motor length              | LB  | mm | 522    | 425     | 522    | 425     |
| Length of motor options   | Δ L | mm | 88     | 88      | 88     | 88      |
| Motor diameter            | AC  | mm | 192    | 192     | 192    | 192     |
| Motor/connection distance | AD  | mm | 151    | 151     | 151    | 151     |

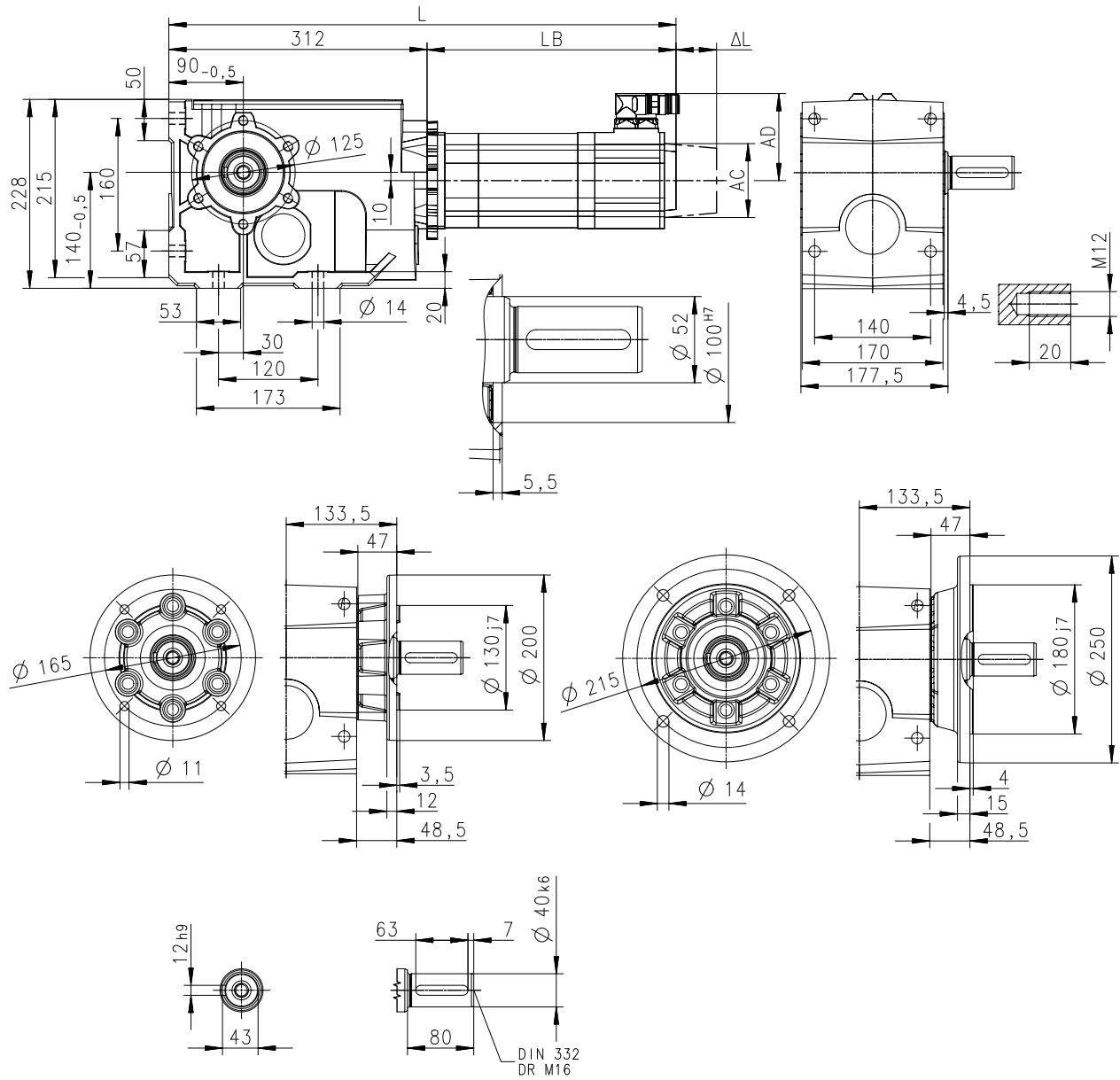


# Technical data

Dimensions  
Basic dimensions

## g500-B820, 3-stage with MCA19

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800573-00

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 19S17- | 19S23-  | 19S35- | 19S42-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 834    | 737     | 834    | 737     |
| Motor length              | LB  | mm | 522    | 425     | 522    | 425     |
| Length of motor options   | Δ L | mm | 88     | 88      | 88     | 88      |
| Motor diameter            | AC  | mm | 192    | 192     | 192    | 192     |
| Motor/connection distance | AD  | mm | 151    | 151     | 151    | 151     |

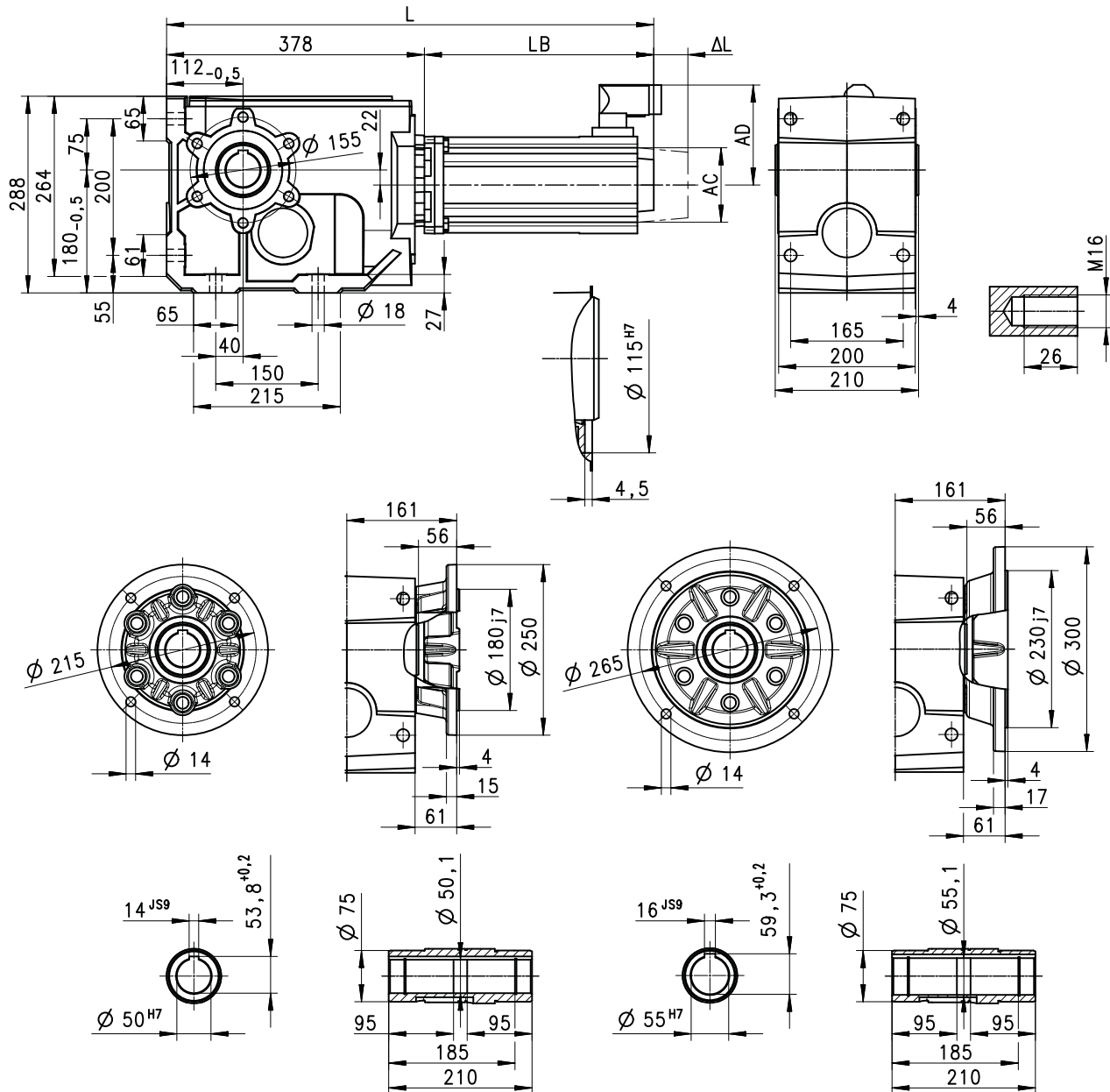
# Technical data

Dimensions  
Basic dimensions



## g500-B1500, 3-stage with MCA10

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800575-02

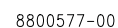
| Motor                     |            |    | MCA     |
|---------------------------|------------|----|---------|
|                           |            |    | 10140-  |
| Cooling type              |            |    | natural |
| Total length              | L          | mm | 637     |
| Motor length              | LB         | mm | 259     |
| Length of motor options   | $\Delta L$ | mm | 78      |
| Motor diameter            | AC         | mm | 102     |
| Motor/connection distance | AD         | mm | 90      |



## Dimensions

### Basic dimensions

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)

151

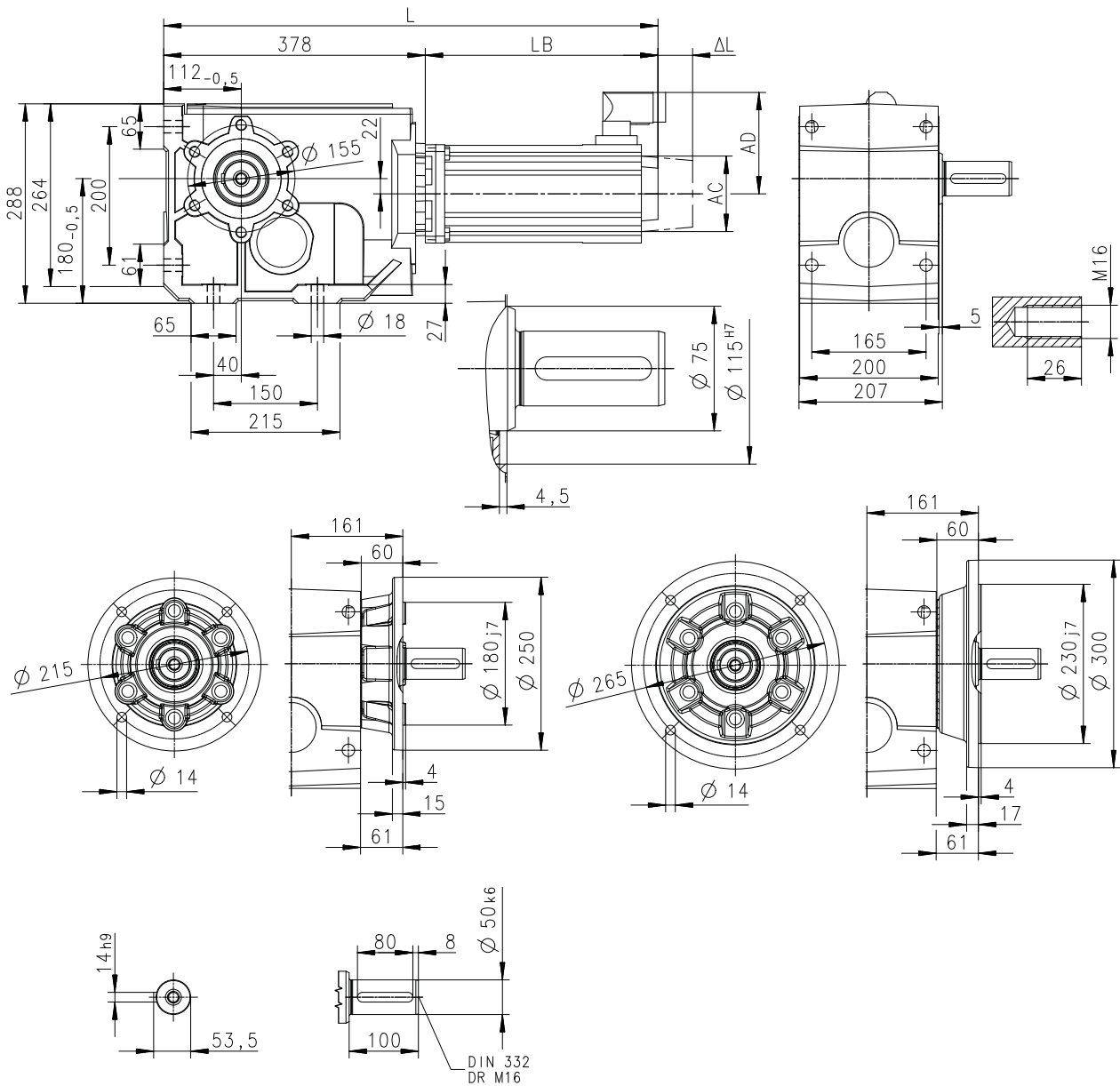
# Technical data

Dimensions  
Basic dimensions



## g500-B1500, 3-stage with MCA10

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800576-00

| Motor                     |            |    | MCA     |
|---------------------------|------------|----|---------|
|                           |            |    | 10I40-  |
| Cooling type              |            |    | natural |
| Total length              | L          | mm | 637     |
| Motor length              | LB         | mm | 259     |
| Length of motor options   | $\Delta L$ | mm | 78      |
| Motor diameter            | AC         | mm | 102     |
| Motor/connection distance | AD         | mm | 90      |

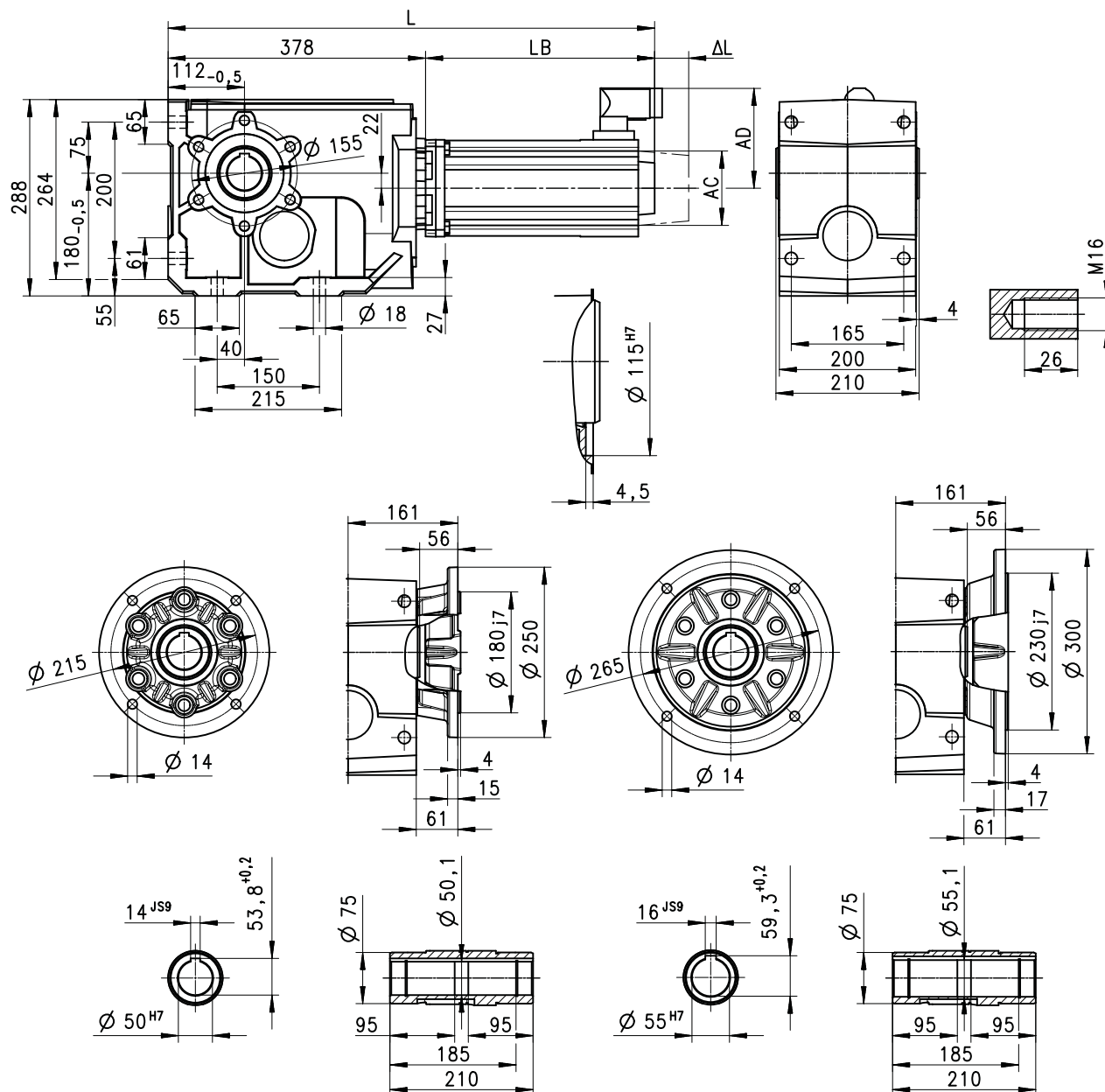


# Technical data

Dimensions  
Basic dimensions

## g500-B1500, 3-stage with MCA13

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800575-02

| Motor                     |     |    | MCA              |                   |
|---------------------------|-----|----|------------------|-------------------|
|                           |     |    | 13I34-<br>Blower | 13I41-<br>natural |
| Cooling type              |     |    |                  |                   |
| Total length              | L   | mm | 714              | 646               |
| Motor length              | LB  | mm | 336              | 268               |
| Length of motor options   | Δ L | mm | 90               | 90                |
| Motor diameter            | AC  | mm | 130              | 130               |
| Motor/connection distance | AD  | mm | 102              | 102               |

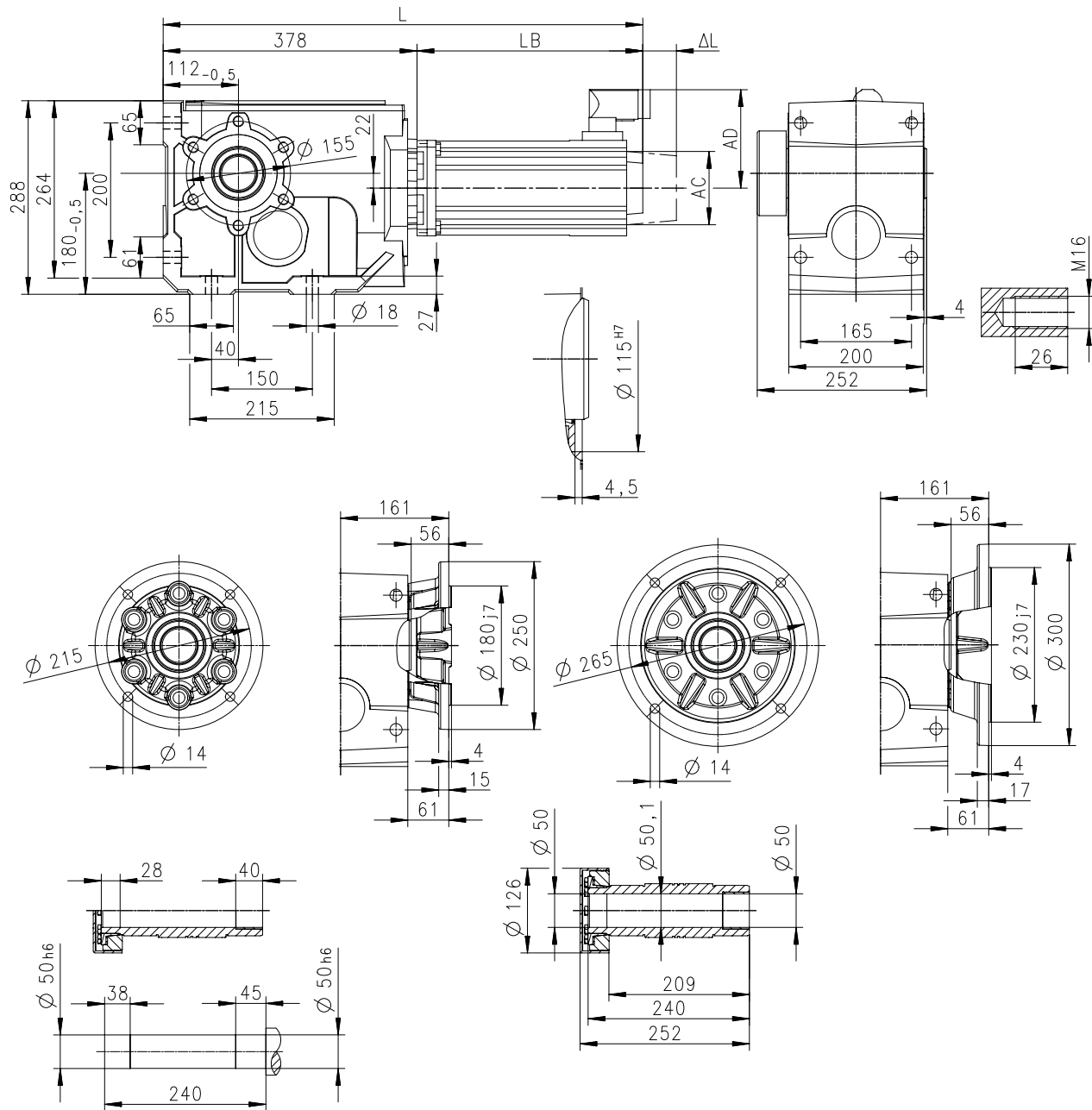
# Technical data

Dimensions  
Basic dimensions



## g500-B1500, 3-stage with MCA13

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800577-00

| Motor                     |     |    | MCA    |         |
|---------------------------|-----|----|--------|---------|
|                           |     |    | 13I34- | 13I41-  |
| Cooling type              |     |    | Blower | natural |
| Total length              | L   | mm | 714    | 646     |
| Motor length              | LB  | mm | 336    | 268     |
| Length of motor options   | Δ L | mm | 90     | 90      |
| Motor diameter            | AC  | mm | 130    | 130     |
| Motor/connection distance | AD  | mm | 102    | 102     |

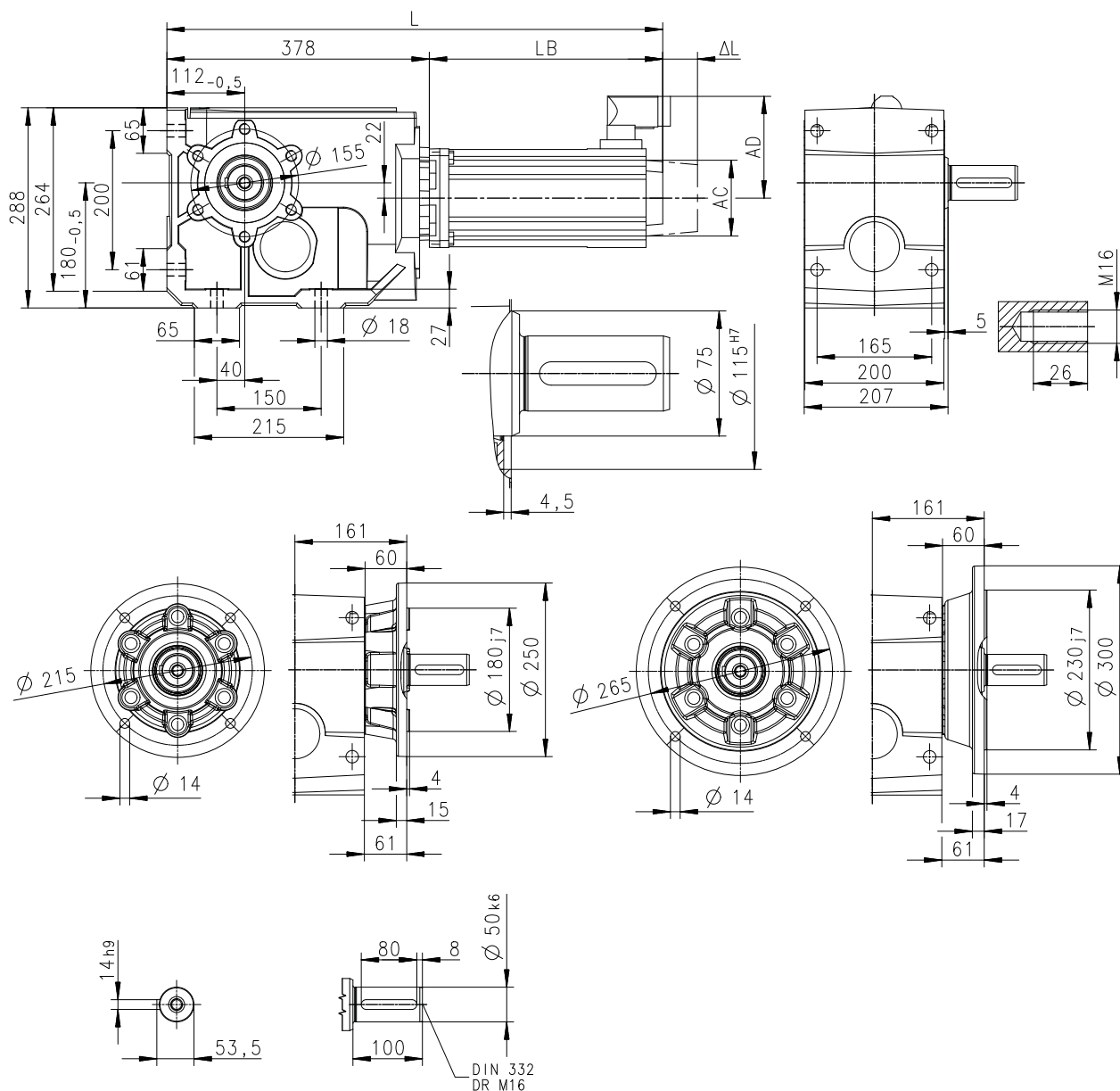


# Technical data

Dimensions  
Basic dimensions

## g500-B1500, 3-stage with MCA13

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800576-00

| Motor                     |     |    | MCA    |         |
|---------------------------|-----|----|--------|---------|
|                           |     |    | 13I34- | 13I41-  |
| Cooling type              |     |    | Blower | natural |
| Total length              | L   | mm | 714    | 646     |
| Motor length              | LB  | mm | 336    | 268     |
| Length of motor options   | Δ L | mm | 90     | 90      |
| Motor diameter            | AC  | mm | 130    | 130     |
| Motor/connection distance | AD  | mm | 102    | 102     |

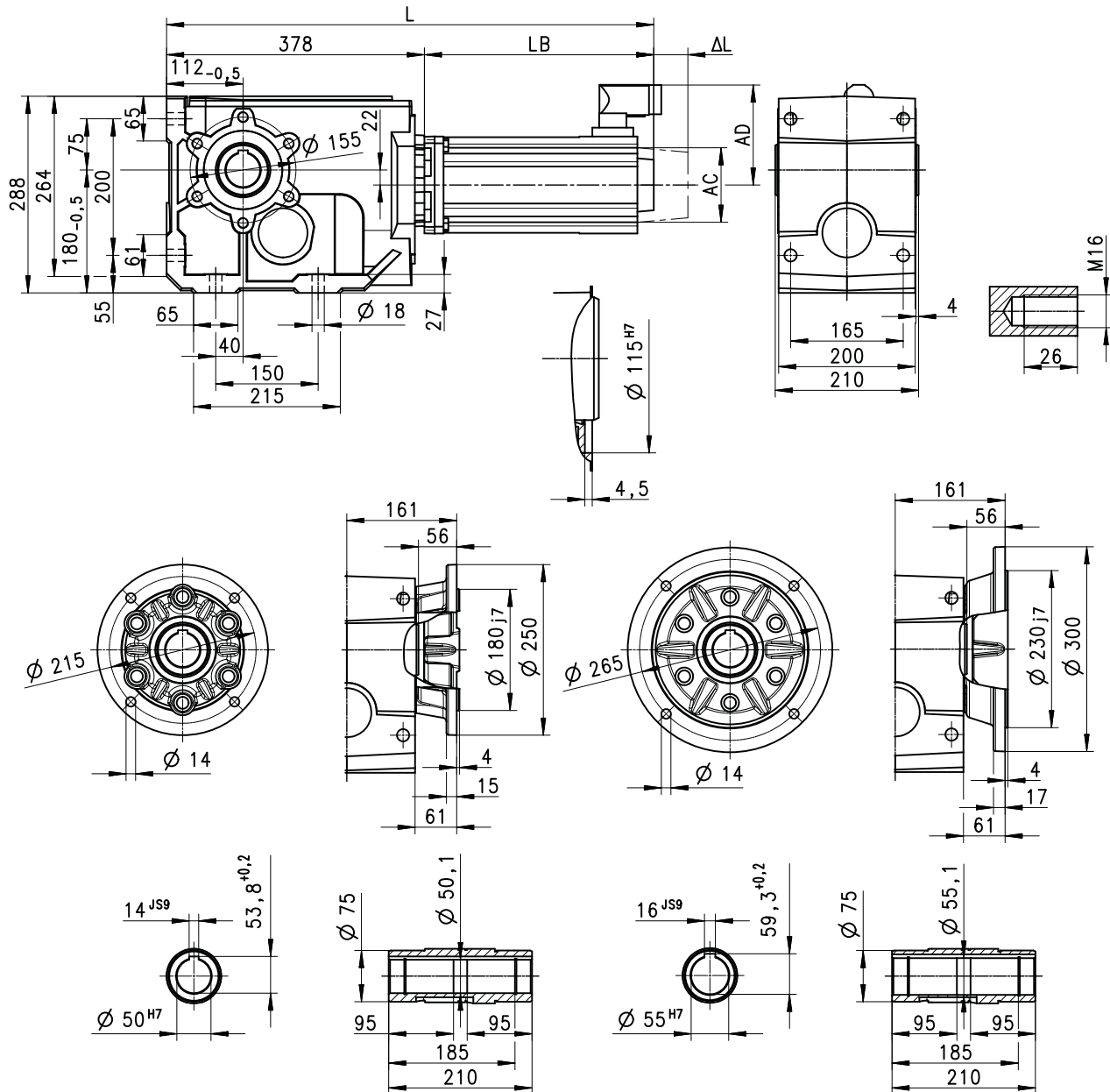
# Technical data

Dimensions  
Basic dimensions



## g500-B1500, 3-stage with MCA14

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800575-02

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 14L16-<br>Blower | 14L20-<br>natural | 14L35-<br>Blower | 14L41-<br>natural |
| Cooling type              |     |    |                  |                   |                  |                   |
| Total length              | L   | mm | 758              | 696               | 758              | 696               |
| Motor length              | LB  | mm | 380              | 318               | 380              | 318               |
| Length of motor options   | Δ L | mm | 89               | 89                | 89               | 89                |
| Motor diameter            | AC  | mm | 142              | 142               | 142              | 142               |
| Motor/connection distance | AD  | mm | 109              | 109               | 109              | 109               |

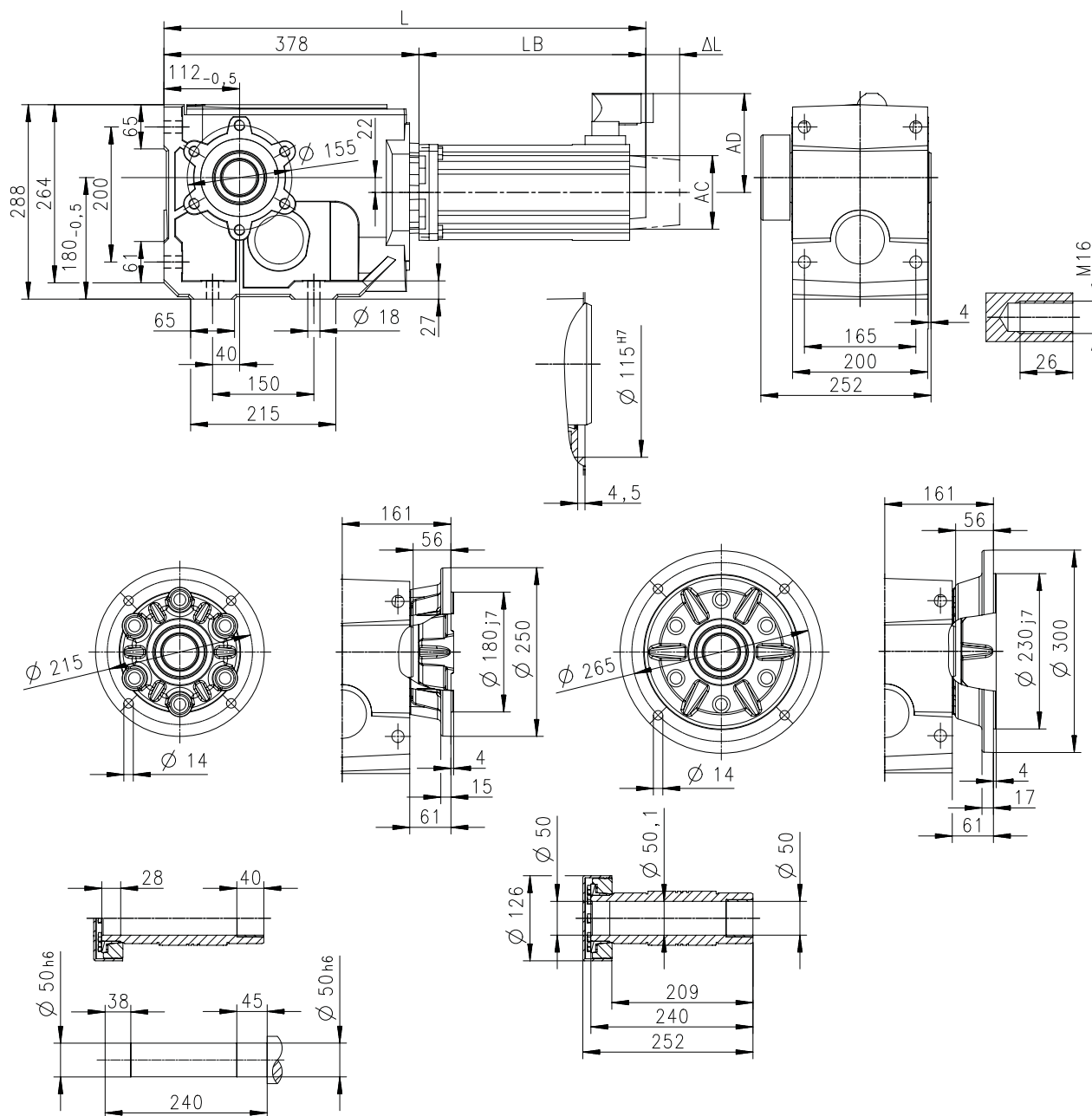


# Technical data

Dimensions  
Basic dimensions

## g500-B1500, 3-stage with MCA14

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800577-00

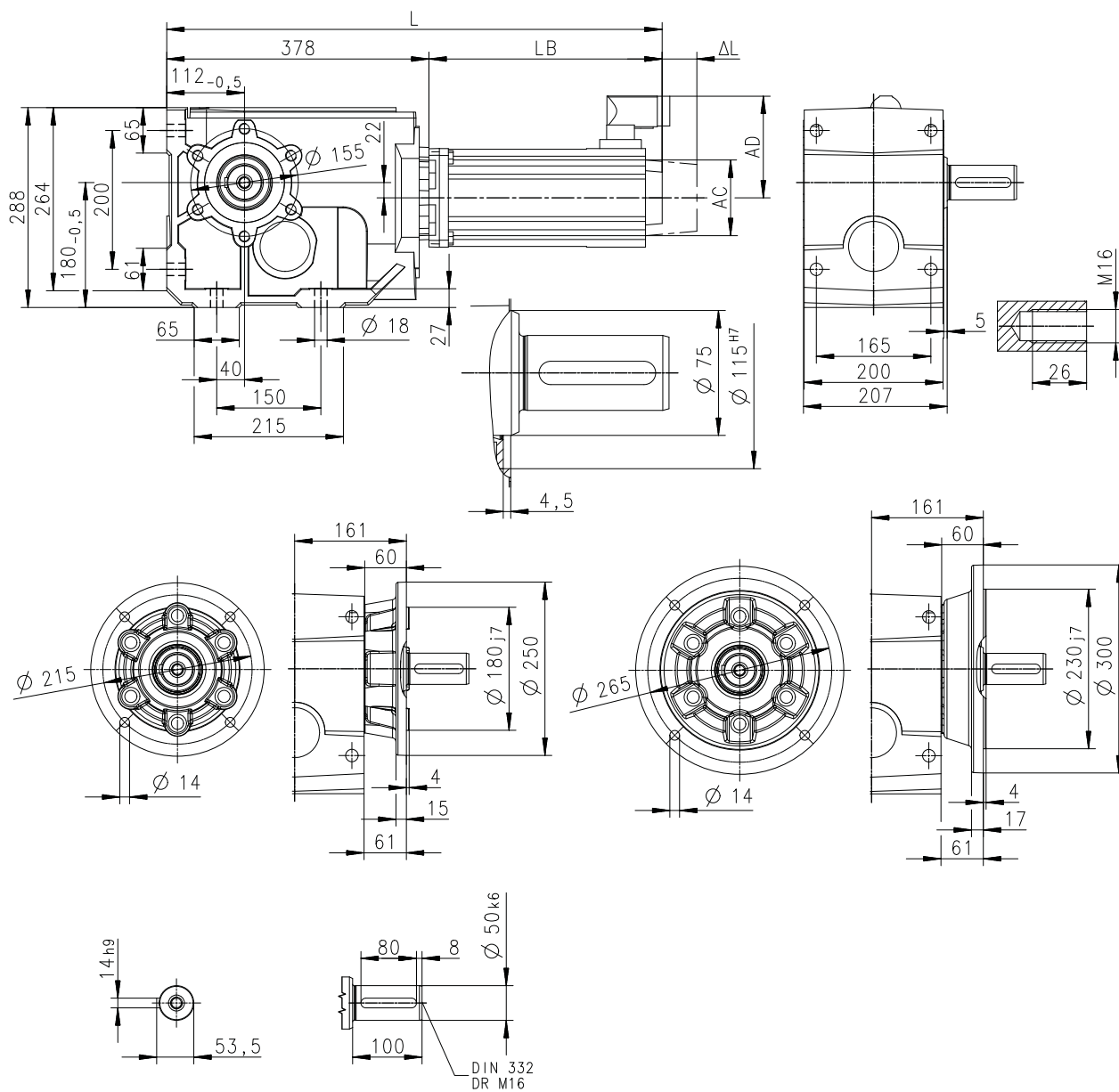
| Motor                     |            |    | MCA              |                   |                  |                   |
|---------------------------|------------|----|------------------|-------------------|------------------|-------------------|
|                           |            |    | 14L16-<br>Blower | 14L20-<br>natural | 14L35-<br>Blower | 14L41-<br>natural |
| Cooling type              |            |    |                  |                   |                  |                   |
| Total length              | L          | mm | 758              | 696               | 758              | 696               |
| Motor length              | LB         | mm | 380              | 318               | 380              | 318               |
| Length of motor options   | $\Delta L$ | mm | 89               | 89                | 89               | 89                |
| Motor diameter            | AC         | mm | 142              | 142               | 142              | 142               |
| Motor/connection distance | AD         | mm | 109              | 109               | 109              | 109               |

## Dimensions

### Basic dimensions



Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800576-00

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 14L16- | 14L20-  | 14L35- | 14L41-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 758    | 696     | 758    | 696     |
| Motor length              | LB  | mm | 380    | 318     | 380    | 318     |
| Length of motor options   | Δ L | mm | 89     | 89      | 89     | 89      |
| Motor diameter            | AC  | mm | 142    | 142     | 142    | 142     |
| Motor/connection distance | AD  | mm | 109    | 109     | 109    | 109     |

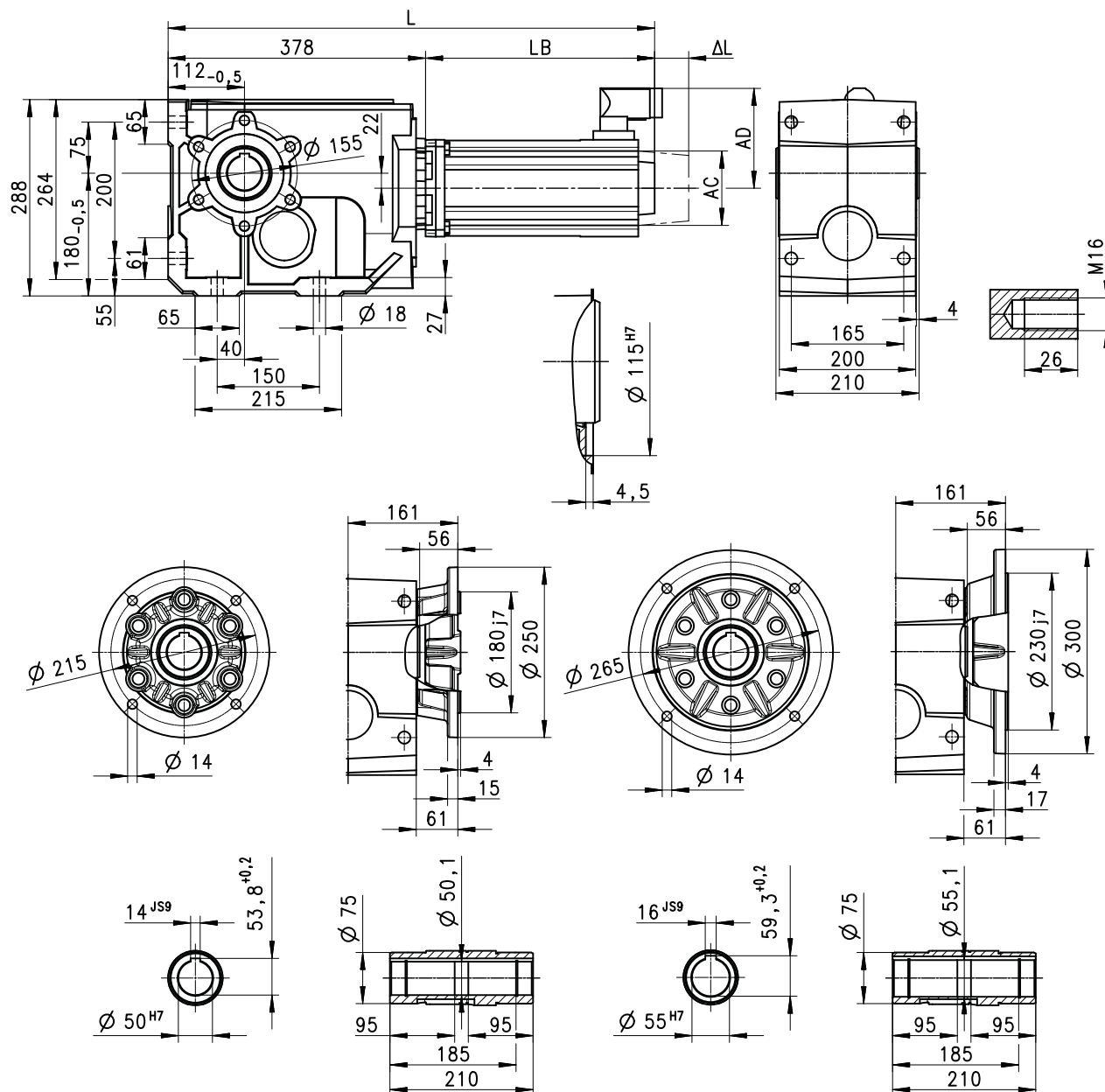


## Technical data

Dimensions  
Basic dimensions

### g500-B1500, 3-stage with MCA17

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800575-02

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 17N17-<br>Blower | 17N23-<br>natural | 17N35-<br>Blower | 17N41-<br>natural |
| Total length              | L   | mm | 821              | 735               | 821              | 735               |
| Motor length              | LB  | mm | 443              | 357               | 443              | 357               |
| Length of motor options   | Δ L | mm | 90               | 90                | 90               | 90                |
| Motor diameter            | AC  | mm | 165              | 165               | 165              | 165               |
| Motor/connection distance | AD  | mm | 118              | 118               | 118              | 118               |

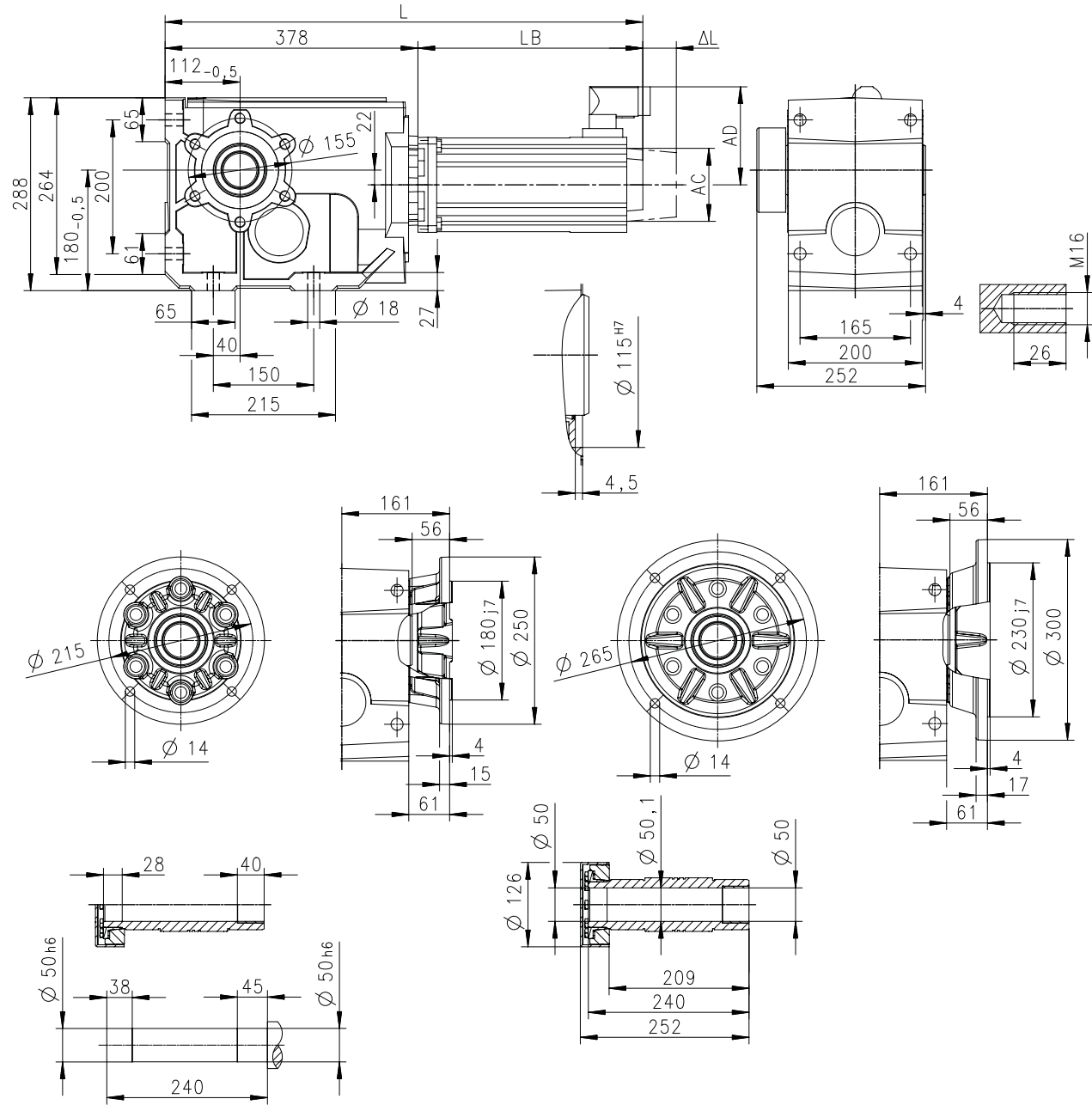
# Technical data

Dimensions  
Basic dimensions



## g500-B1500, 3-stage with MCA17

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800577-00

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 17N17- | 17N23-  | 17N35- | 17N41-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 821    | 735     | 821    | 735     |
| Motor length              | LB  | mm | 443    | 357     | 443    | 357     |
| Length of motor options   | Δ L | mm | 90     | 90      | 90     | 90      |
| Motor diameter            | AC  | mm | 165    | 165     | 165    | 165     |
| Motor/connection distance | AD  | mm | 118    | 118     | 118    | 118     |

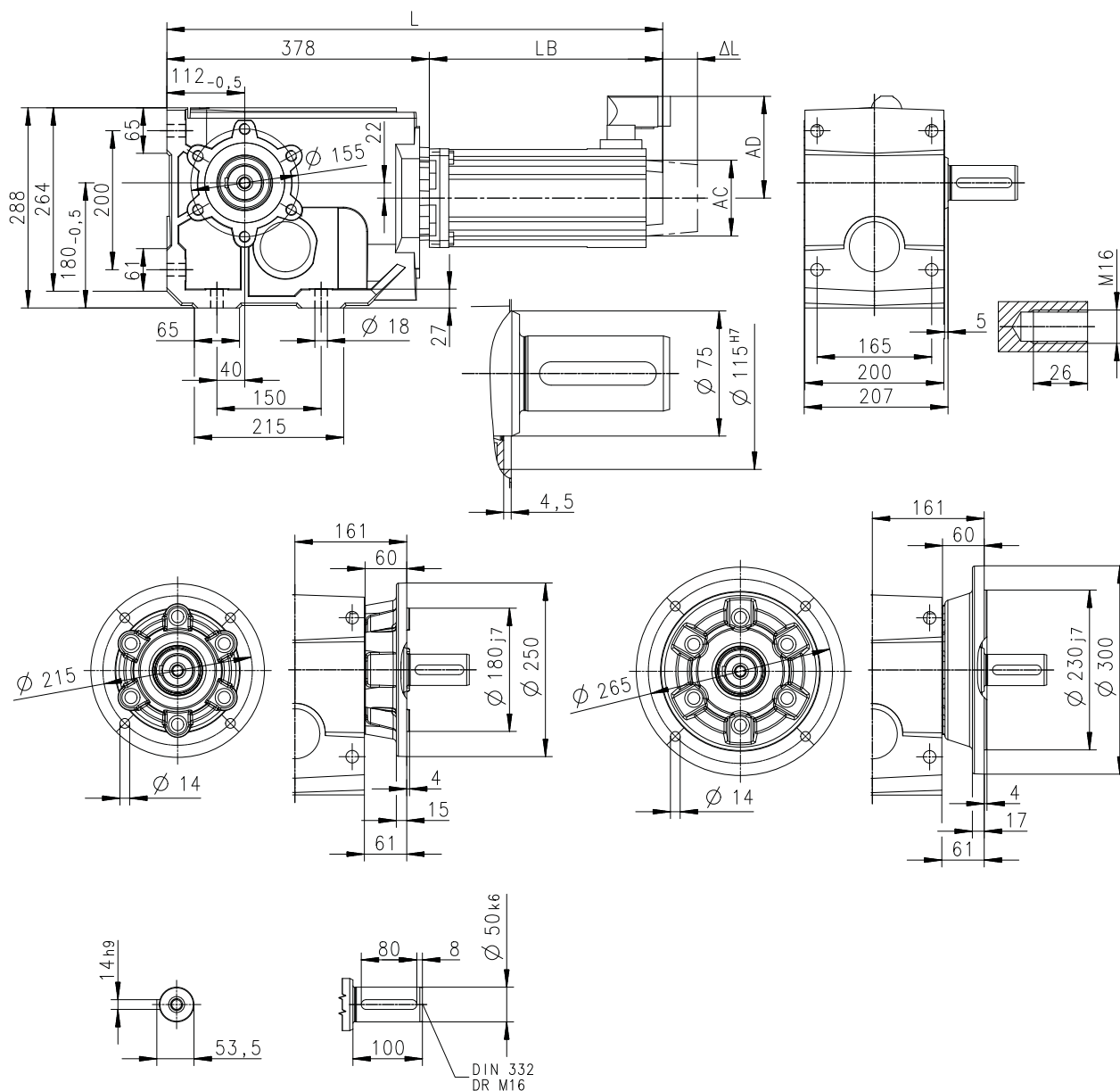


# Technical data

Dimensions  
Basic dimensions

## g500-B1500, 3-stage with MCA17

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)

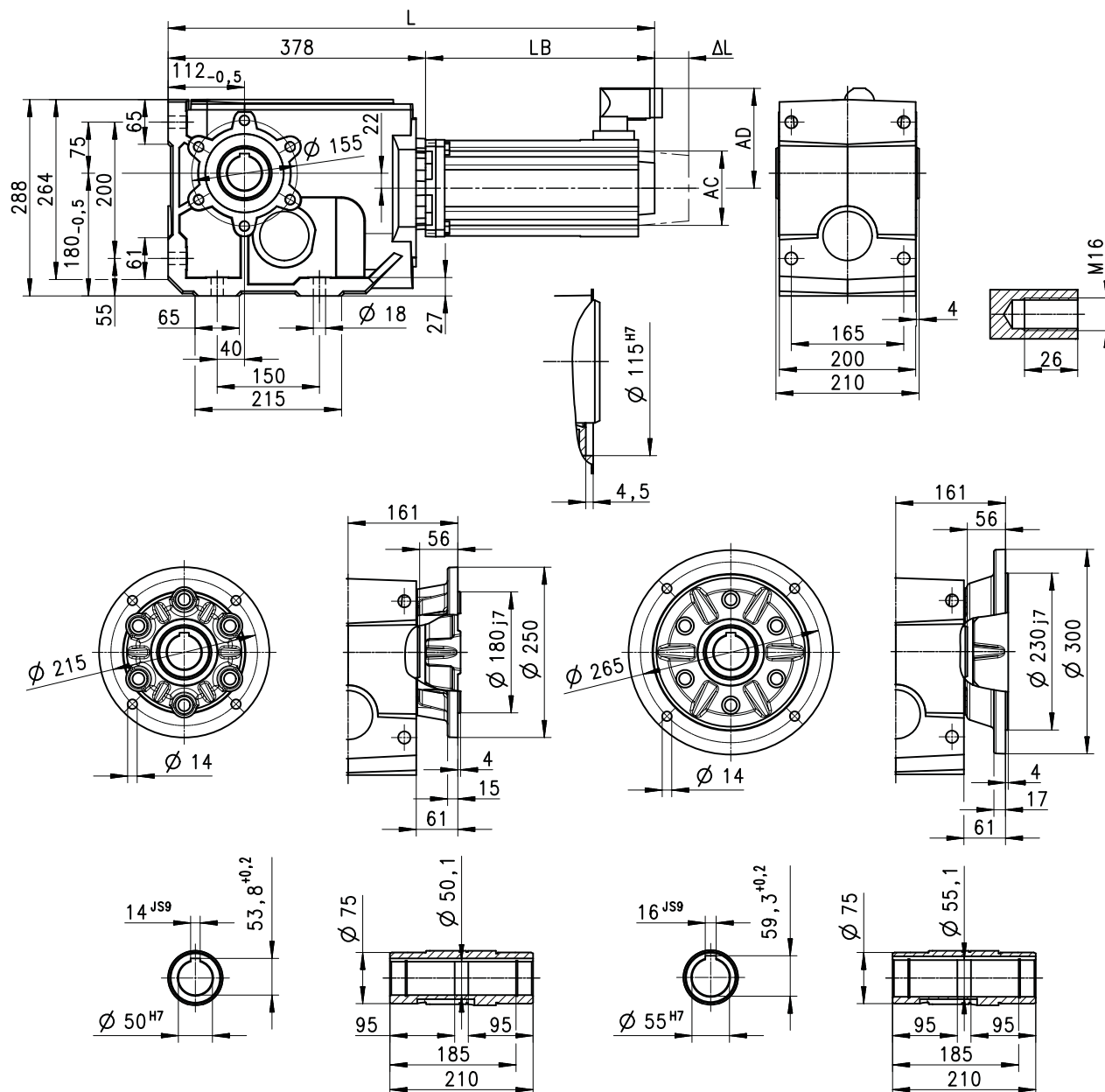


8800576-00

| Motor                     |            |    | MCA              |                   |                  |                   |
|---------------------------|------------|----|------------------|-------------------|------------------|-------------------|
|                           |            |    | 17N17-<br>Blower | 17N23-<br>natural | 17N35-<br>Blower | 17N41-<br>natural |
| Cooling type              |            |    |                  |                   |                  |                   |
| Total length              | L          | mm | 821              | 735               | 821              | 735               |
| Motor length              | LB         | mm | 443              | 357               | 443              | 357               |
| Length of motor options   | $\Delta L$ | mm | 90               | 90                | 90               | 90                |
| Motor diameter            | AC         | mm | 165              | 165               | 165              | 165               |
| Motor/connection distance | AD         | mm | 118              | 118               | 118              | 118               |



Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800575-02

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 19S17- | 19S23-  | 19S35- | 19S42-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 900    | 803     | 900    | 803     |
| Motor length              | LB  | mm | 522    | 425     | 522    | 425     |
| Length of motor options   | Δ L | mm | 88     | 88      | 88     | 88      |
| Motor diameter            | AC  | mm | 192    | 192     | 192    | 192     |
| Motor/connection distance | AD  | mm | 151    | 151     | 151    | 151     |

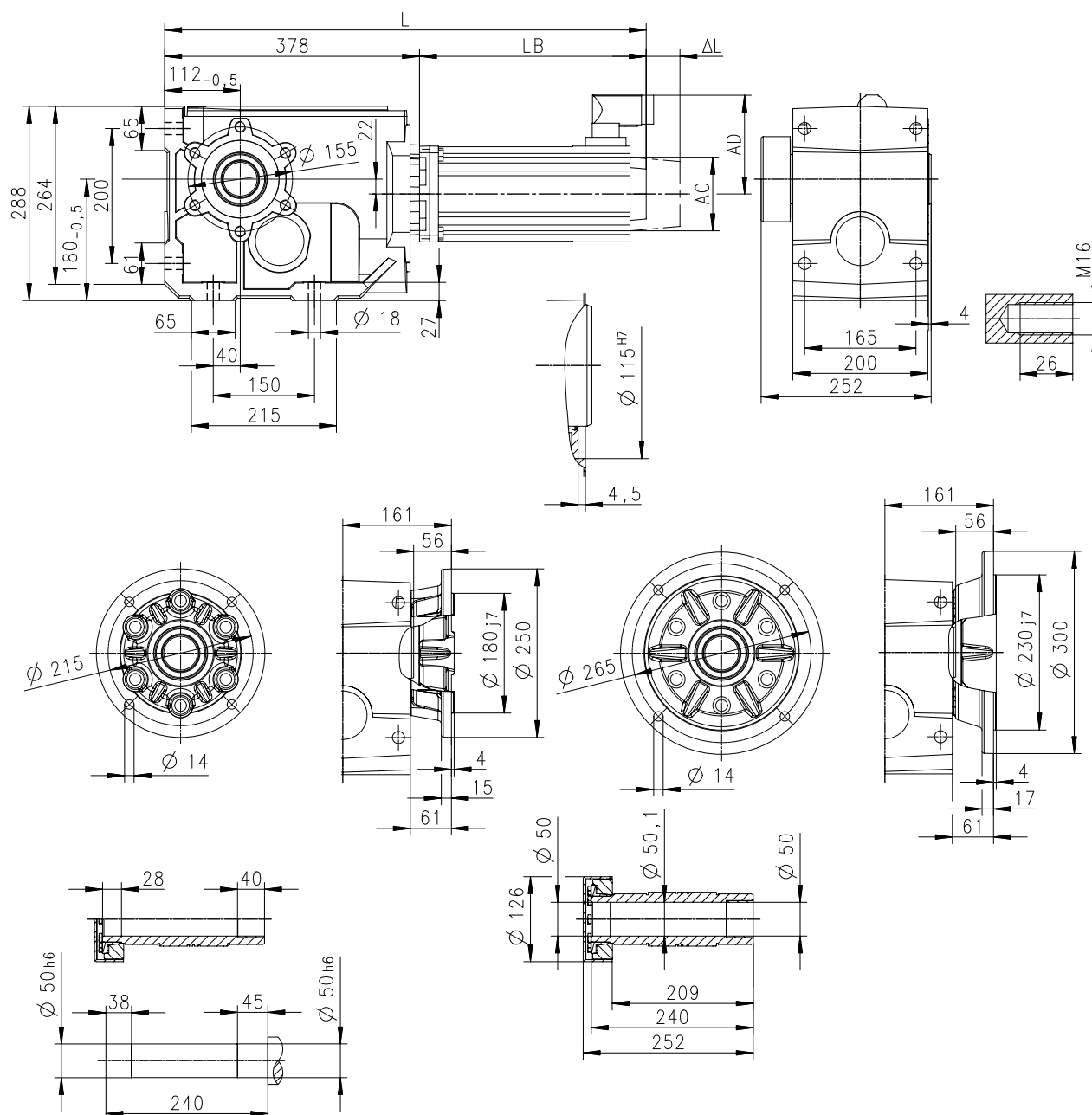


# Technical data

Dimensions  
Basic dimensions

## g500-B1500, 3-stage with MCA19

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800577-00

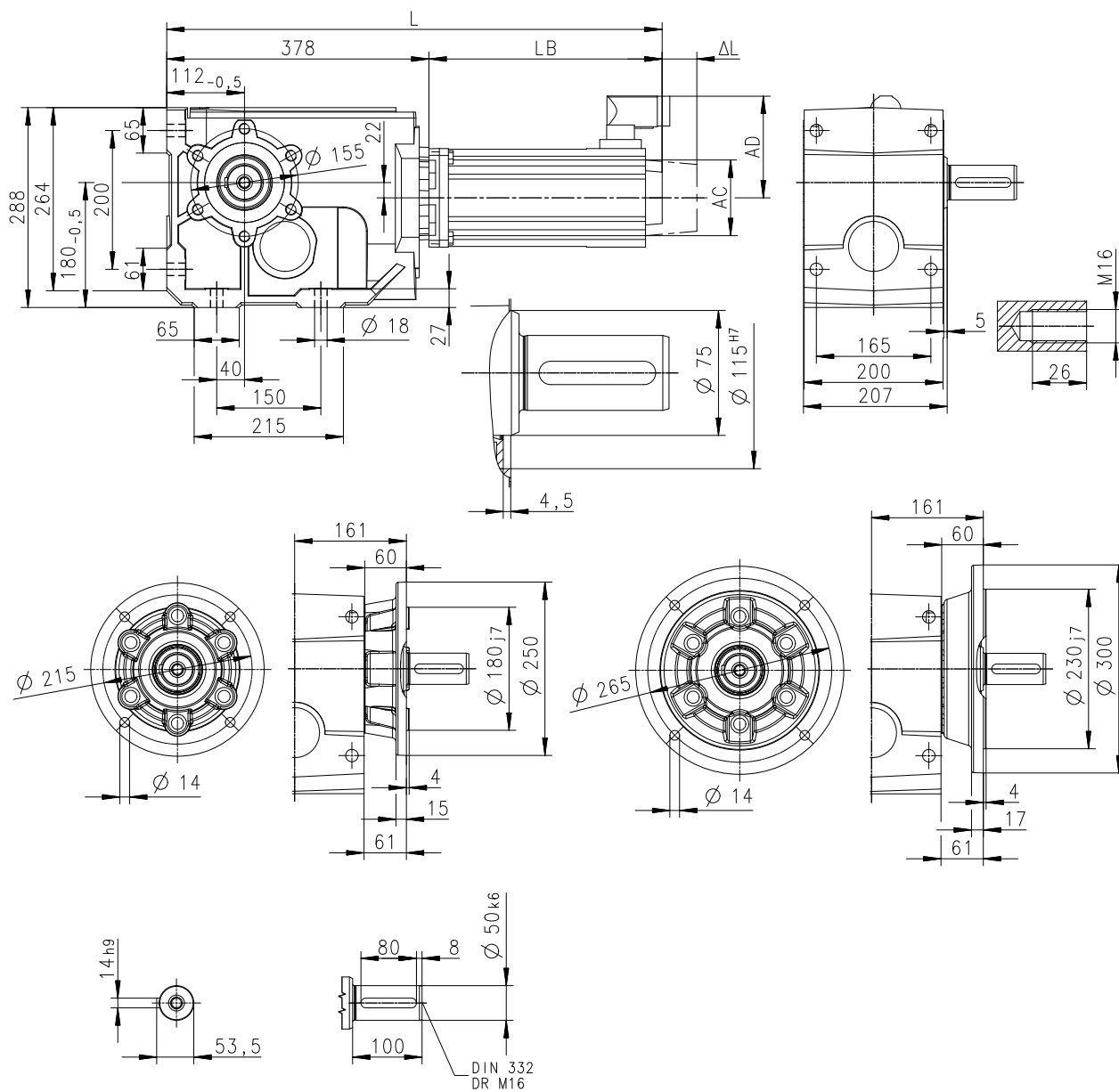
| Motor                     |            |    | MCA              |                   |                  |                   |
|---------------------------|------------|----|------------------|-------------------|------------------|-------------------|
|                           |            |    | 19S17-<br>Blower | 19S23-<br>natural | 19S35-<br>Blower | 19S42-<br>natural |
| Cooling type              |            |    |                  |                   |                  |                   |
| Total length              | L          | mm | 900              | 803               | 900              | 803               |
| Motor length              | LB         | mm | 522              | 425               | 522              | 425               |
| Length of motor options   | $\Delta L$ | mm | 88               | 88                | 88               | 88                |
| Motor diameter            | AC         | mm | 192              | 192               | 192              | 192               |
| Motor/connection distance | AD         | mm | 151              | 151               | 151              | 151               |

## Dimensions

### Basic dimensions



Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800576-00

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 19S17- | 19S23-  | 19S35- | 19S42-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 900    | 803     | 900    | 803     |
| Motor length              | LB  | mm | 522    | 425     | 522    | 425     |
| Length of motor options   | Δ L | mm | 88     | 88      | 88     | 88      |
| Motor diameter            | AC  | mm | 192    | 192     | 192    | 192     |
| Motor/connection distance | AD  | mm | 151    | 151     | 151    | 151     |

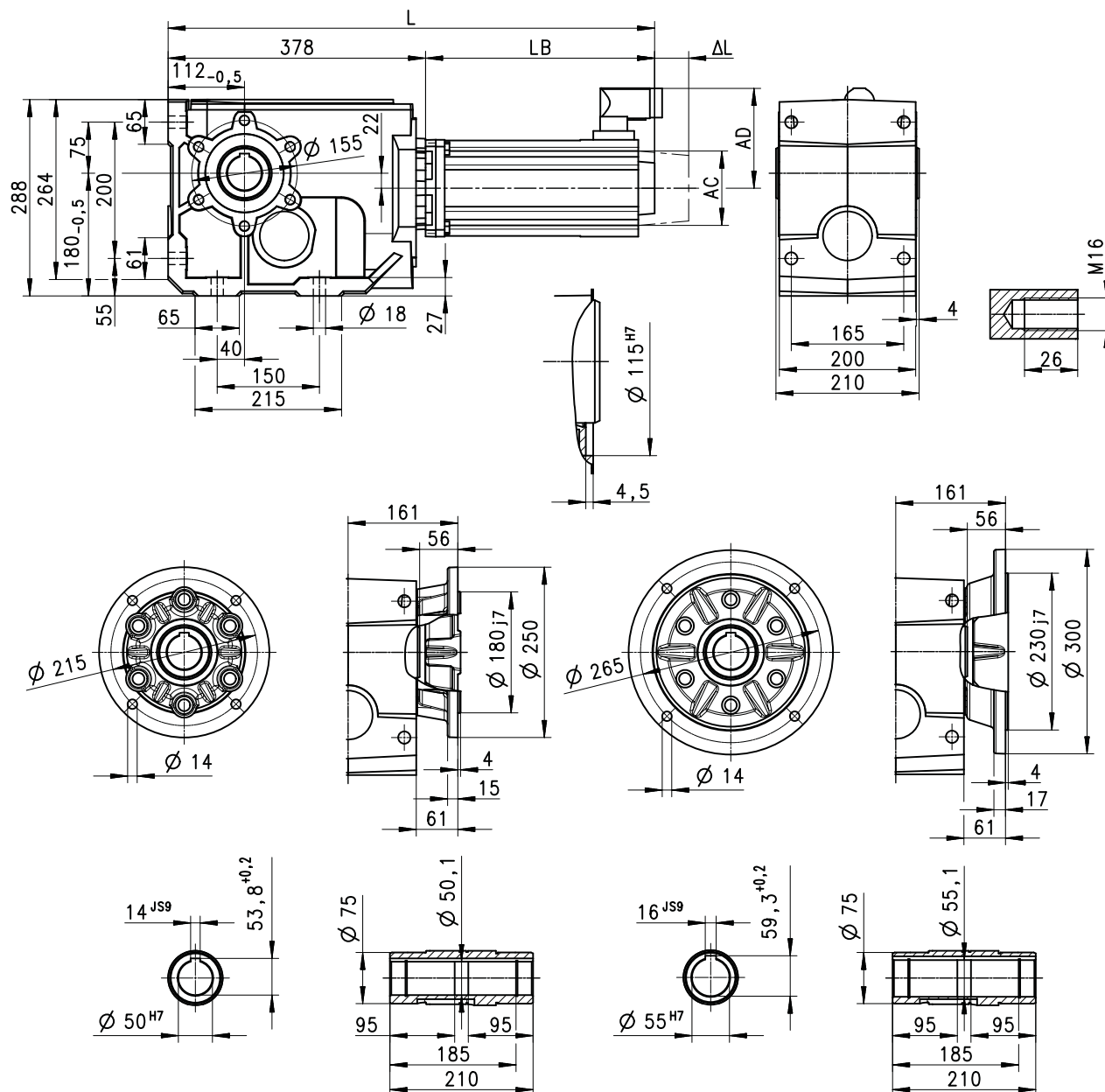


# Technical data

Dimensions  
Basic dimensions

## g500-B1500, 3-stage with MCA21

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800575-02

| Motor                     |            |    | MCA              |                   |                  |                   |
|---------------------------|------------|----|------------------|-------------------|------------------|-------------------|
|                           |            |    | 21X17-<br>Blower | 21X25-<br>natural | 21X35-<br>Blower | 21X42-<br>natural |
| Cooling type              |            |    |                  |                   |                  |                   |
| Total length              | L          | mm | 992              | 896               | 992              | 896               |
| Motor length              | LB         | mm | 614              | 518               | 614              | 518               |
| Length of motor options   | $\Delta L$ | mm | 92               | 92                | 92               | 92                |
| Motor diameter            | AC         | mm | 214              | 214               | 214              | 214               |
| Motor/connection distance | AD         | mm | 162              | 162               | 162              | 162               |

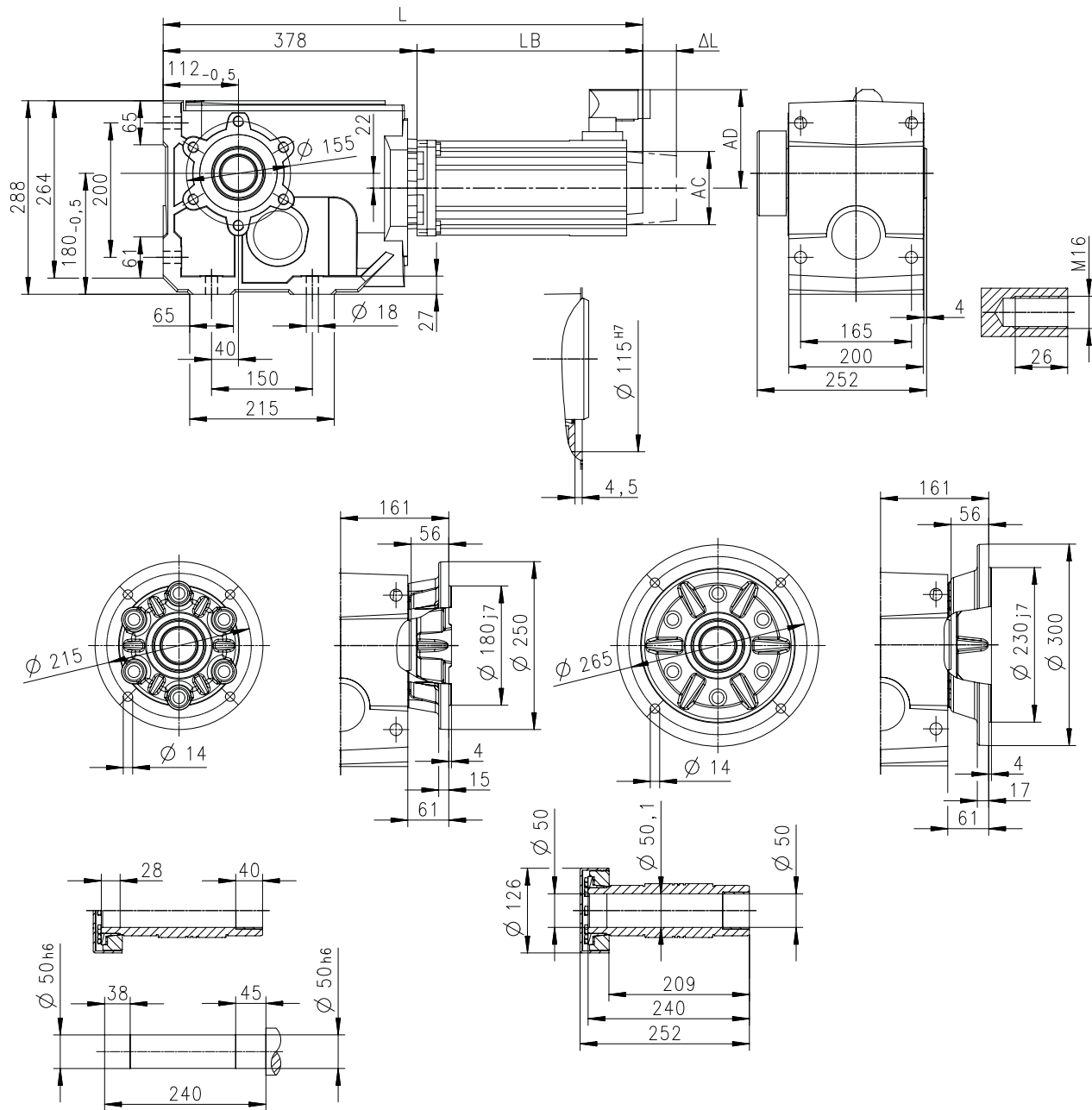
# Technical data

Dimensions  
Basic dimensions



## g500-B1500, 3-stage with MCA21

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800577-00

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 21X17-<br>Blower | 21X25-<br>natural | 21X35-<br>Blower | 21X42-<br>natural |
| Cooling type              |     |    |                  |                   |                  |                   |
| Total length              | L   | mm | 992              | 896               | 992              | 896               |
| Motor length              | LB  | mm | 614              | 518               | 614              | 518               |
| Length of motor options   | Δ L | mm | 92               | 92                | 92               | 92                |
| Motor diameter            | AC  | mm | 214              | 214               | 214              | 214               |
| Motor/connection distance | AD  | mm | 162              | 162               | 162              | 162               |

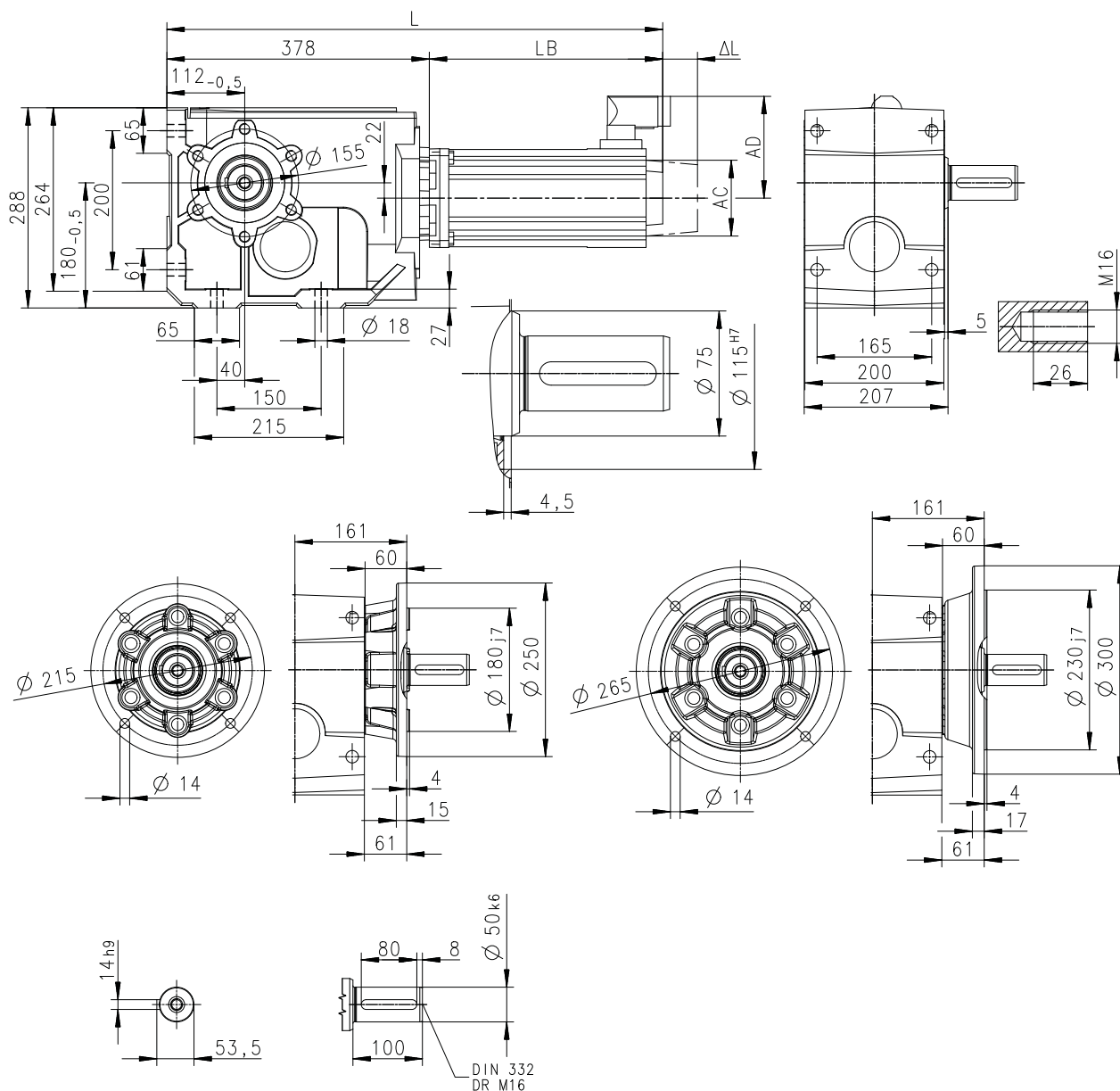


# Technical data

Dimensions  
Basic dimensions

## g500-B1500, 3-stage with MCA21

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800576-00

| Motor                     |            |    | MCA    |         |        |         |
|---------------------------|------------|----|--------|---------|--------|---------|
|                           |            |    | 21X17- | 21X25-  | 21X35- | 21X42-  |
| Cooling type              |            |    | Blower | natural | Blower | natural |
| Total length              | L          | mm | 992    | 896     | 992    | 896     |
| Motor length              | LB         | mm | 614    | 518     | 614    | 518     |
| Length of motor options   | $\Delta L$ | mm | 92     | 92      | 92     | 92      |
| Motor diameter            | AC         | mm | 214    | 214     | 214    | 214     |
| Motor/connection distance | AD         | mm | 162    | 162     | 162    | 162     |

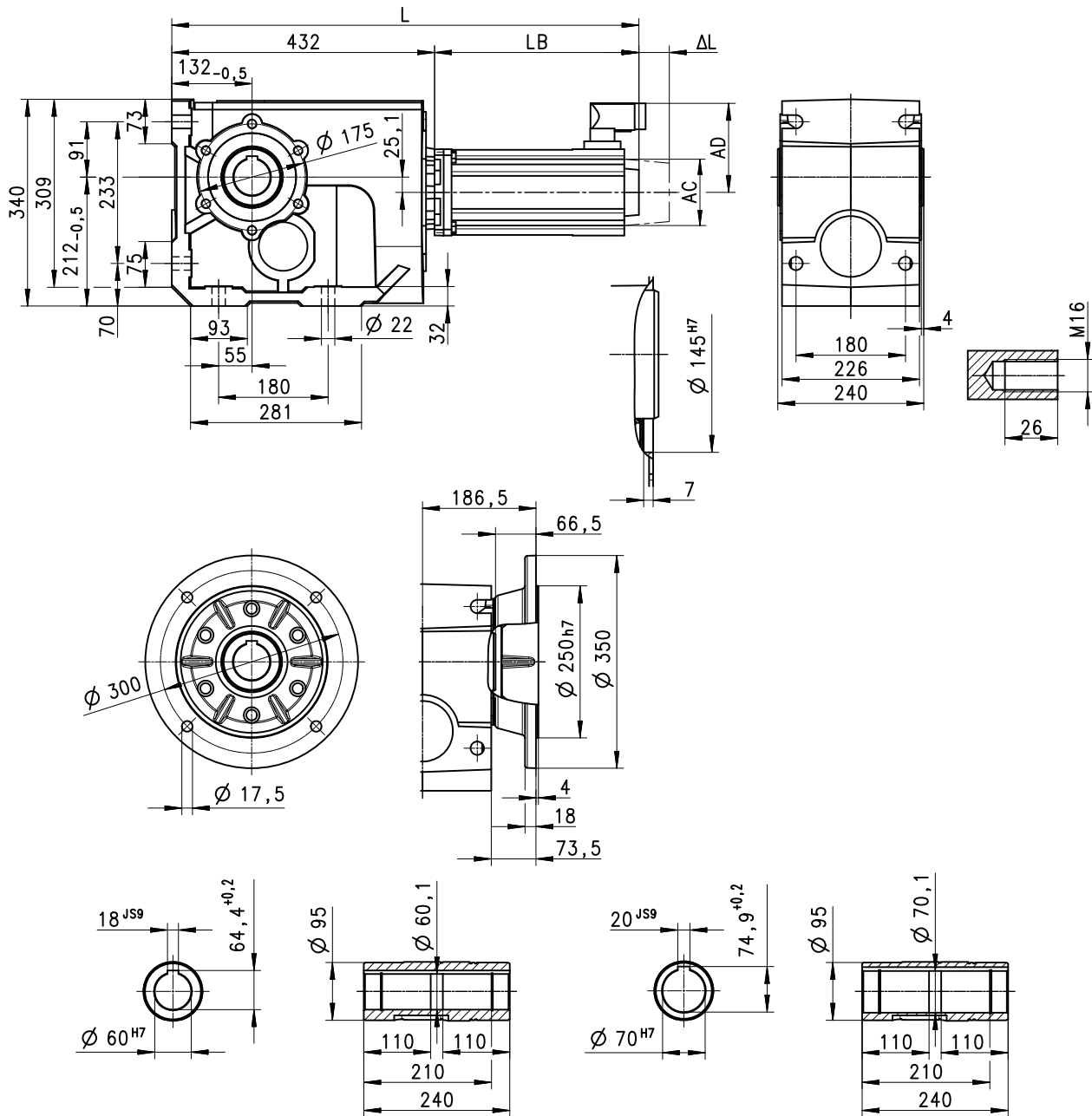
# Technical data

Dimensions  
Basic dimensions



## g500-B2700, 3-stage with MCA10

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800578-02

| Motor                     |     |    | MCA     |
|---------------------------|-----|----|---------|
|                           |     |    | 10140-  |
| Cooling type              |     |    | natural |
| Total length              | L   | mm | 691     |
| Motor length              | LB  | mm | 259     |
| Length of motor options   | Δ L | mm | 78      |
| Motor diameter            | AC  | mm | 102     |
| Motor/connection distance | AD  | mm | 90      |

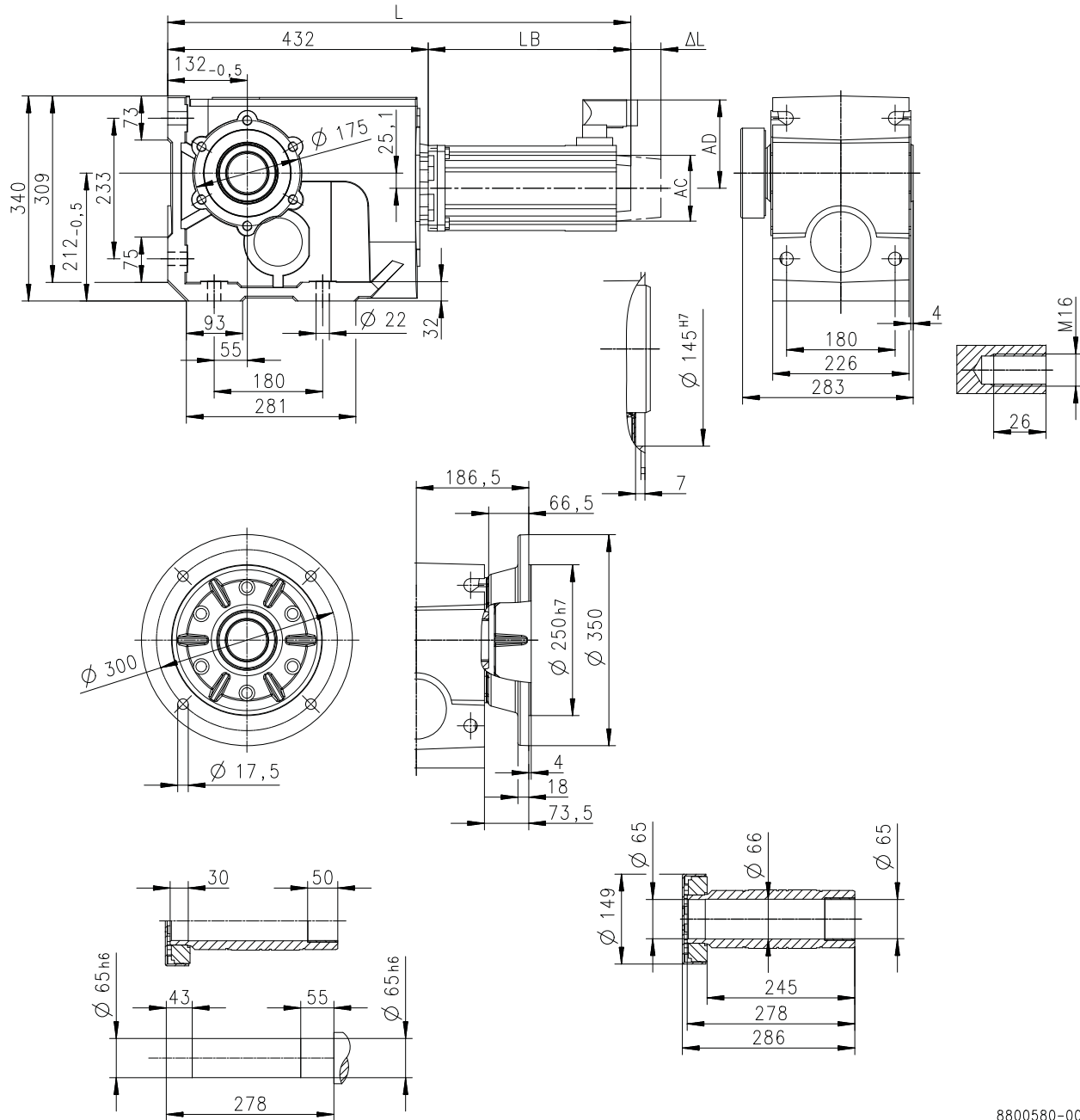


# Technical data

Dimensions  
Basic dimensions

## g500-B2700, 3-stage with MCA10

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800580-00

| Motor                     |     |    | MCA     |
|---------------------------|-----|----|---------|
|                           |     |    | 10140-  |
| Cooling type              |     |    | natural |
| Total length              | L   | mm | 691     |
| Motor length              | LB  | mm | 259     |
| Length of motor options   | Δ L | mm | 78      |
| Motor diameter            | AC  | mm | 102     |
| Motor/connection distance | AD  | mm | 90      |

## Dimensions

### Basic dimensions



Technical drawing of a 300 mm diameter industrial motor, showing multiple views and dimensions:

- Top View:** Shows the motor's footprint with overall dimensions 432 mm (L) and 309 mm (B). Key features include a central shaft with diameter  $\phi 175$ , a mounting flange with diameter  $\phi 300$ , and a base with diameter  $\phi 281$ . Dimensions for mounting holes and flange thickness are provided.
- Front View:** Shows the motor's profile with dimensions for the shaft diameter  $\phi 175$ , the mounting flange diameter  $\phi 300$ , and the base diameter  $\phi 281$ . The total height is 340 mm.
- Side View:** Shows the motor's profile with dimensions for the shaft diameter  $\phi 175$ , the mounting flange diameter  $\phi 300$ , and the base diameter  $\phi 281$ . The total height is 340 mm.
- End View:** Shows the motor's profile with dimensions for the shaft diameter  $\phi 175$ , the mounting flange diameter  $\phi 300$ , and the base diameter  $\phi 281$ . The total height is 340 mm.
- Detail Views:**
  - Shaft Detail:** Shows the shaft with diameter  $\phi 175$  and a keyway with width 7 mm.
  - Mounting Flange Detail:** Shows the flange with diameter  $\phi 300$  and a keyway with width 7 mm.
  - Base Detail:** Shows the base with diameter  $\phi 281$  and a keyway with width 7 mm.

| Motor                     |     |    | MCA     |
|---------------------------|-----|----|---------|
|                           |     |    | 10I40-  |
| Cooling type              |     |    | natural |
| Total length              | L   | mm | 691     |
| Motor length              | LB  | mm | 259     |
| Length of motor options   | Δ L | mm | 78      |
| Motor diameter            | AC  | mm | 102     |
| Motor/connection distance | AD  | mm | 90      |

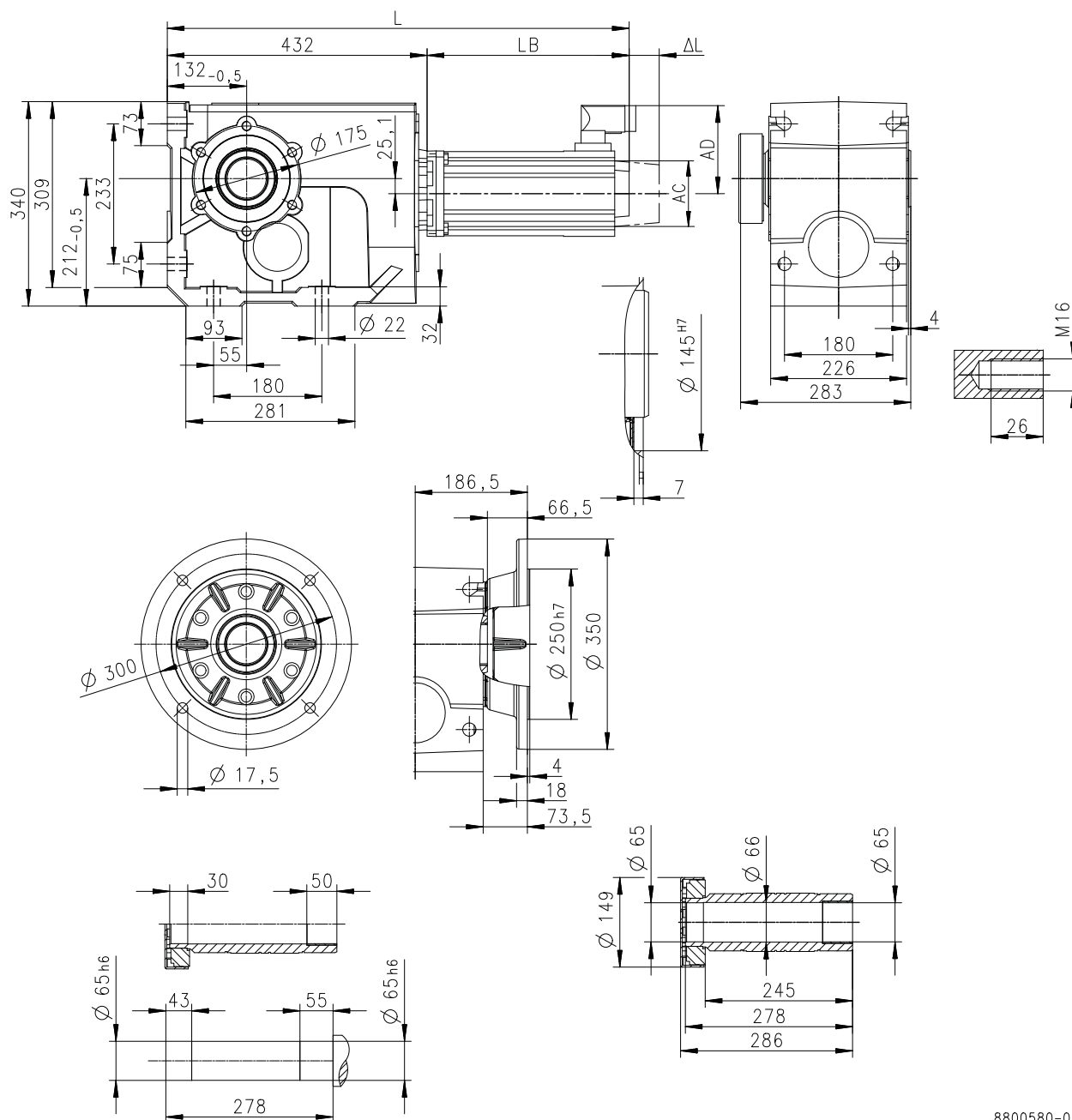


# Technical data

Dimensions  
Basic dimensions

## g500-B2700, 3-stage with MCA13

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800580-00

| Motor                     |     |    | MCA    |         |
|---------------------------|-----|----|--------|---------|
|                           |     |    | 13I34- | 13I41-  |
| Cooling type              |     |    | Blower | natural |
| Total length              | L   | mm | 768    | 700     |
| Motor length              | LB  | mm | 336    | 268     |
| Length of motor options   | Δ L | mm | 90     | 90      |
| Motor diameter            | AC  | mm | 130    | 130     |
| Motor/connection distance | AD  | mm | 102    | 102     |

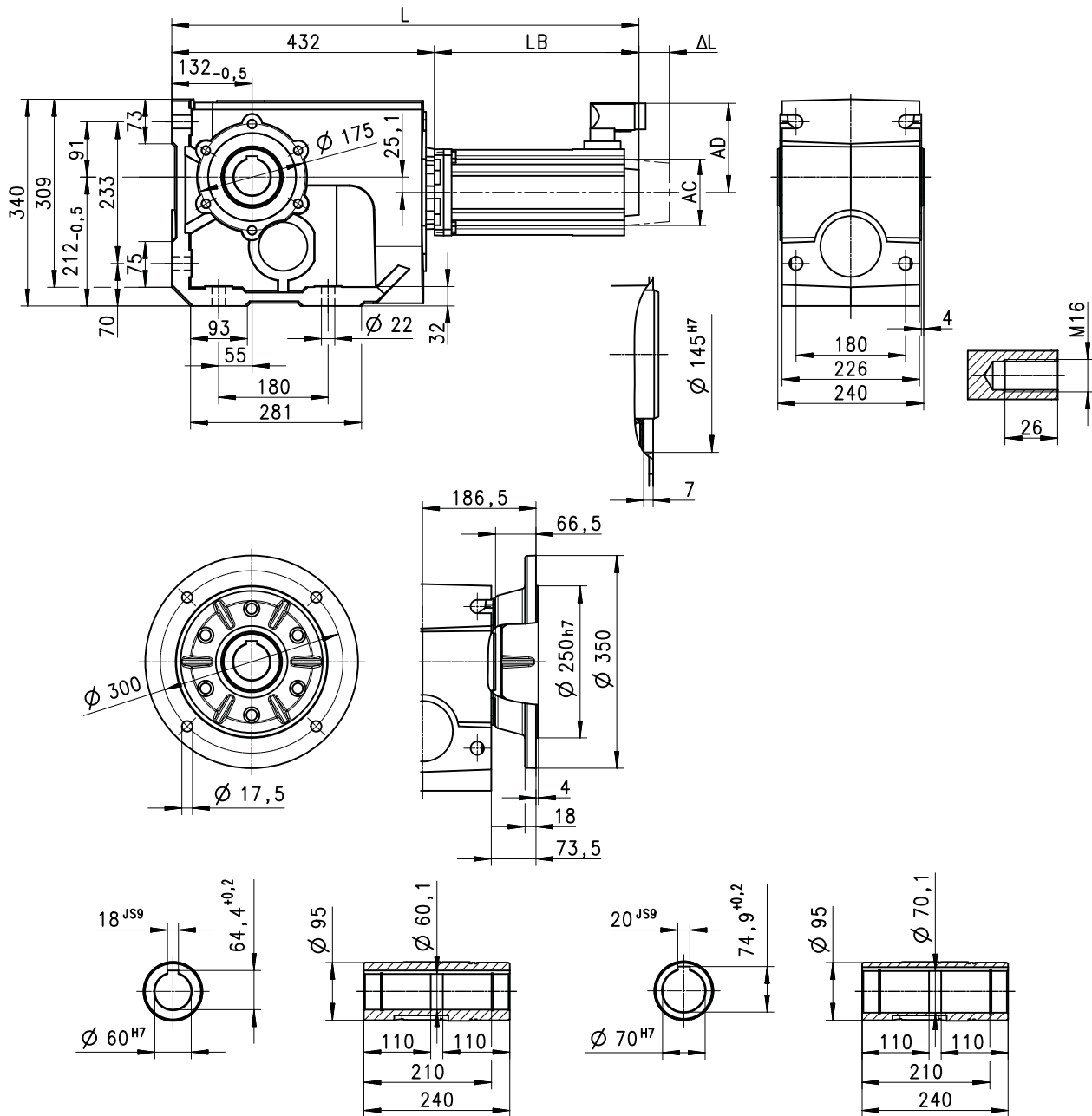
# Technical data

Dimensions  
Basic dimensions



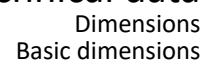
## g500-B2700, 3-stage with MCA13

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800578-02

| Motor                     |     |    | MCA              |                   |
|---------------------------|-----|----|------------------|-------------------|
|                           |     |    | 13I34-<br>Blower | 13I41-<br>natural |
| Cooling type              |     |    |                  |                   |
| Total length              | L   | mm | 768              | 700               |
| Motor length              | LB  | mm | 336              | 268               |
| Length of motor options   | Δ L | mm | 90               | 90                |
| Motor diameter            | AC  | mm | 130              | 130               |
| Motor/connection distance | AD  | mm | 102              | 102               |



Gearbox version: Solid shaft with foot (VAR/VBR/VAK)

8800579-00

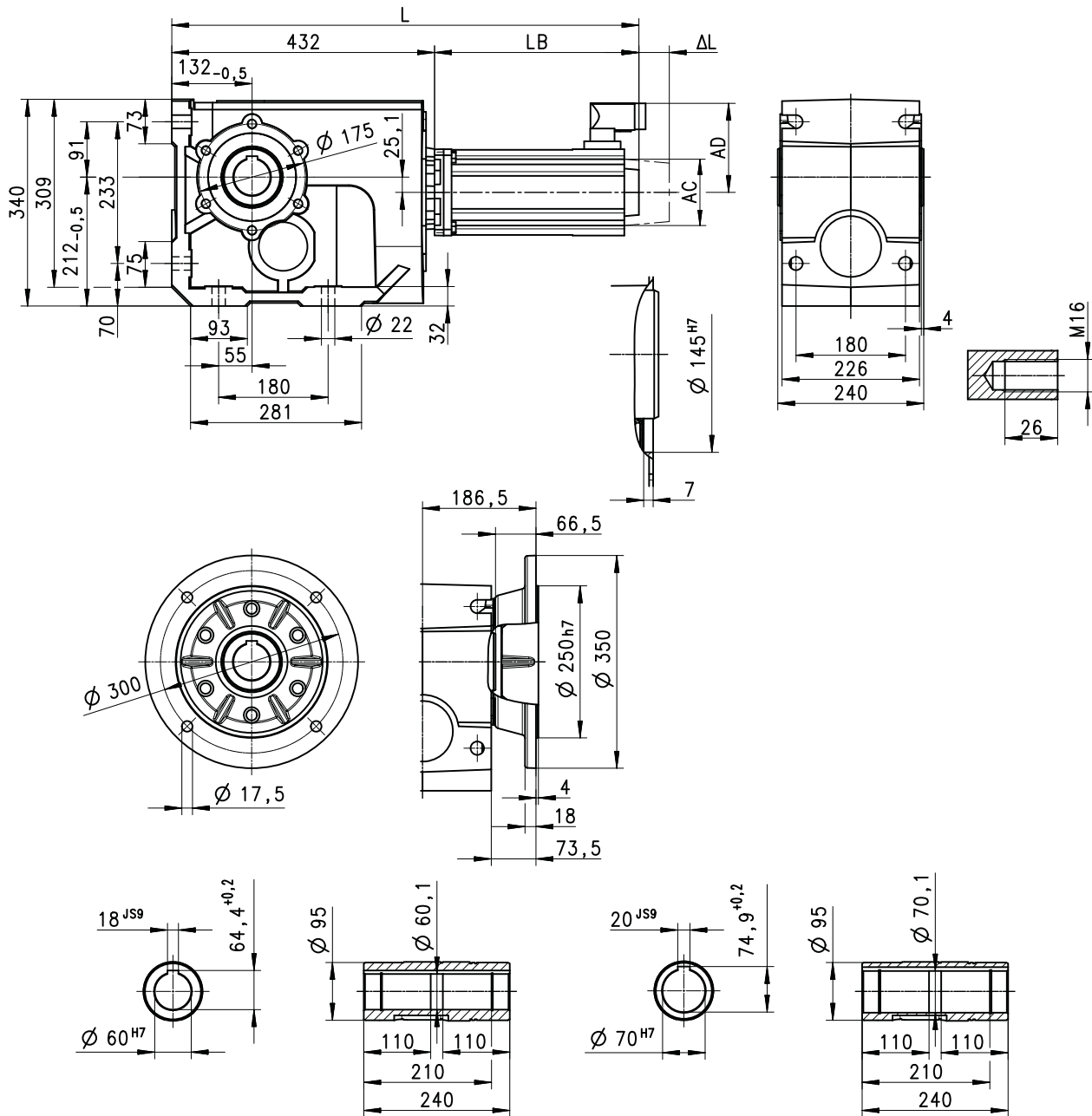
# Technical data

Dimensions  
Basic dimensions



## g500-B2700, 3-stage with MCA14

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800578-02

| Motor                     |            |    | MCA              |                   |                  |                   |
|---------------------------|------------|----|------------------|-------------------|------------------|-------------------|
|                           |            |    | 14L16-<br>Blower | 14L20-<br>natural | 14L35-<br>Blower | 14L41-<br>natural |
| Cooling type              |            |    |                  |                   |                  |                   |
| Total length              | L          | mm | 812              | 750               | 812              | 750               |
| Motor length              | LB         | mm | 380              | 318               | 380              | 318               |
| Length of motor options   | $\Delta L$ | mm | 89               | 89                | 89               | 89                |
| Motor diameter            | AC         | mm | 142              | 142               | 142              | 142               |
| Motor/connection distance | AD         | mm | 109              | 109               | 109              | 109               |

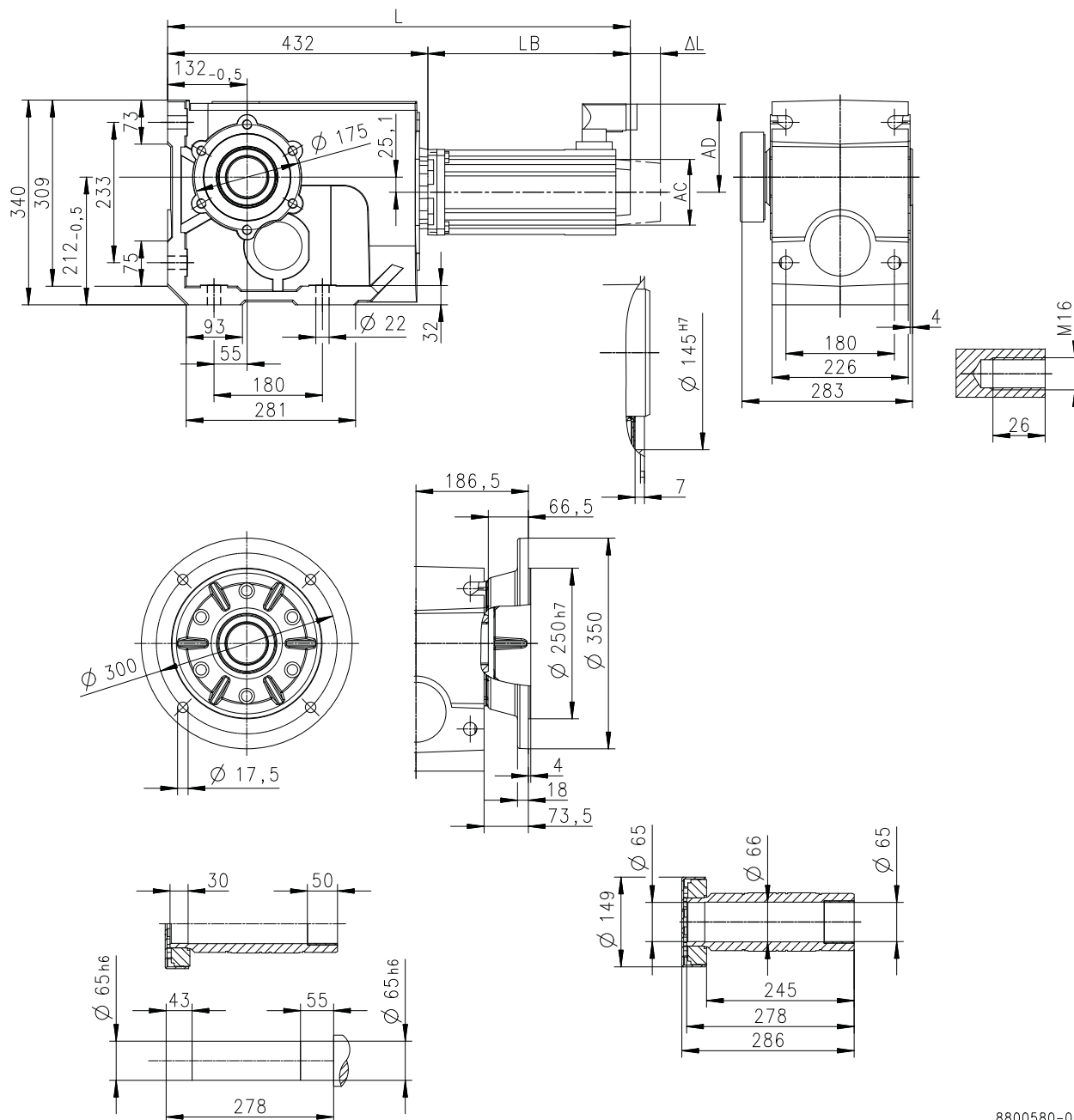


# Technical data

Dimensions  
Basic dimensions

## g500-B2700, 3-stage with MCA14

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800580-00

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 14L16-<br>Blower | 14L20-<br>natural | 14L35-<br>Blower | 14L41-<br>natural |
| Cooling type              |     |    |                  |                   |                  |                   |
| Total length              | L   | mm | 812              | 750               | 812              | 750               |
| Motor length              | LB  | mm | 380              | 318               | 380              | 318               |
| Length of motor options   | Δ L | mm | 89               | 89                | 89               | 89                |
| Motor diameter            | AC  | mm | 142              | 142               | 142              | 142               |
| Motor/connection distance | AD  | mm | 109              | 109               | 109              | 109               |

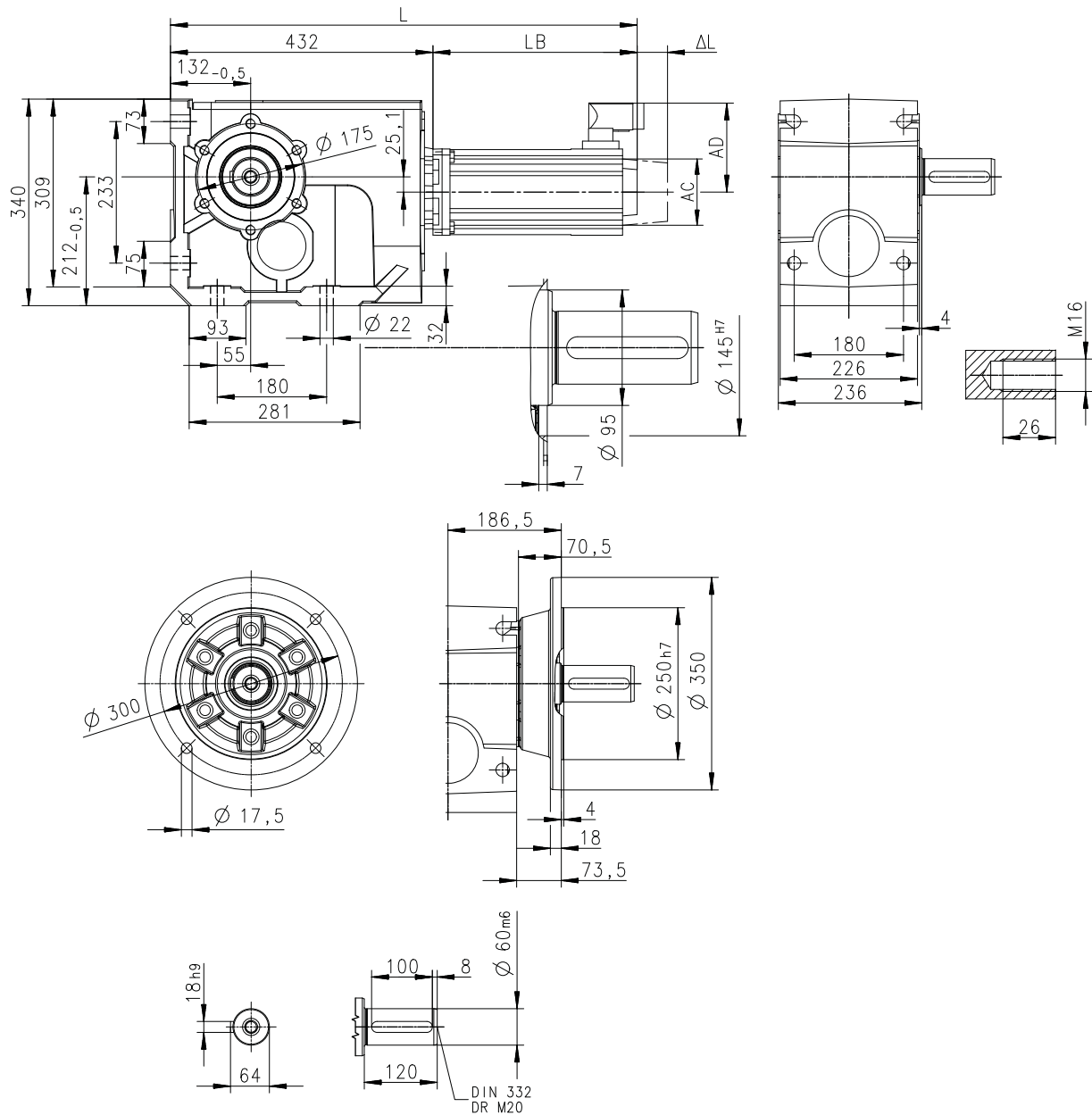
# Technical data

Dimensions  
Basic dimensions



## g500-B2700, 3-stage with MCA14

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800579-00

| Motor                     |            |    | MCA              |                   |                  |                   |
|---------------------------|------------|----|------------------|-------------------|------------------|-------------------|
|                           |            |    | 14L16-<br>Blower | 14L20-<br>natural | 14L35-<br>Blower | 14L41-<br>natural |
| Total length              | L          | mm | 812              | 750               | 812              | 750               |
| Motor length              | LB         | mm | 380              | 318               | 380              | 318               |
| Length of motor options   | $\Delta L$ | mm | 89               | 89                | 89               | 89                |
| Motor diameter            | AC         | mm | 142              | 142               | 142              | 142               |
| Motor/connection distance | AD         | mm | 109              | 109               | 109              | 109               |

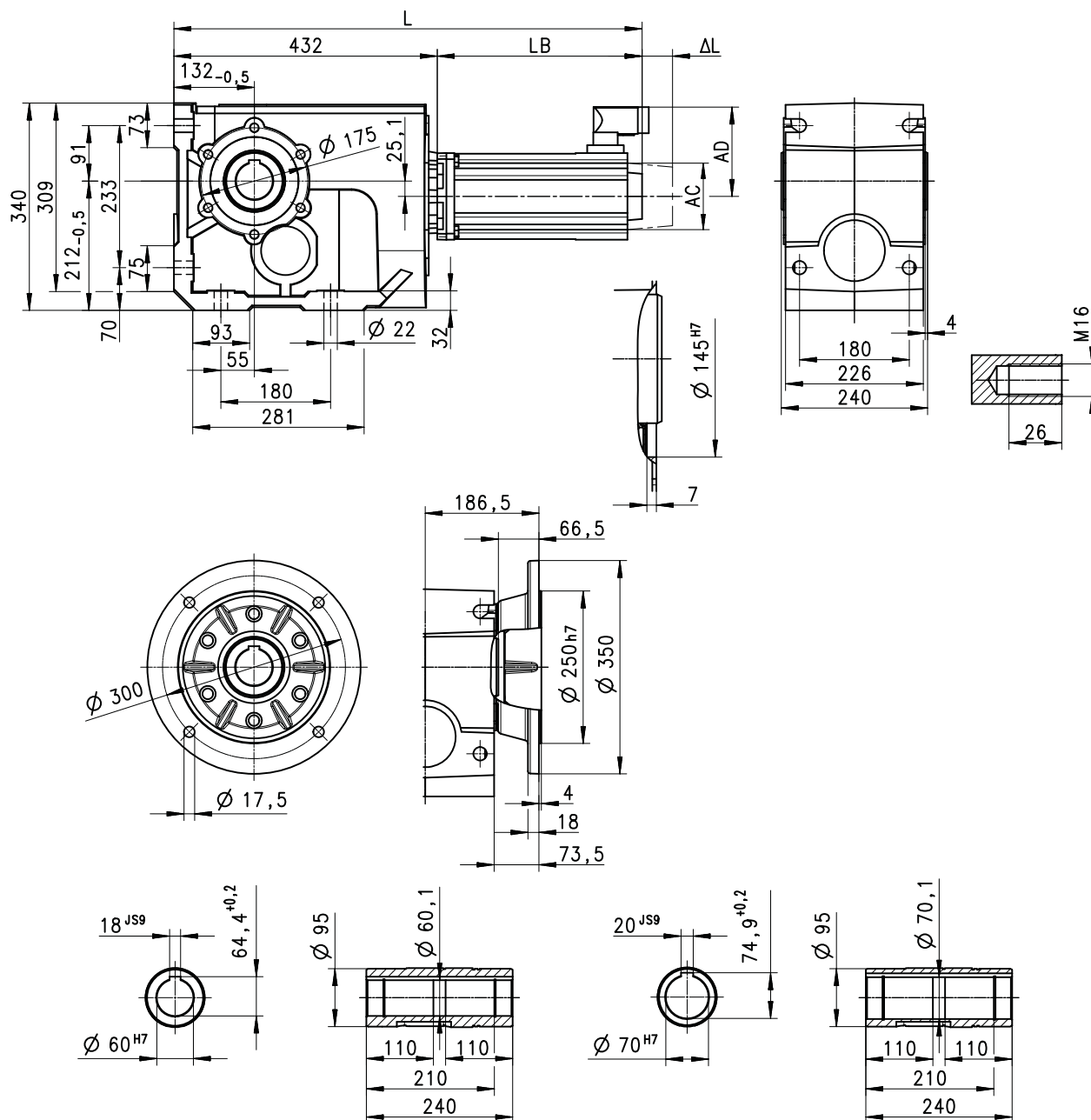


# Technical data

Dimensions  
Basic dimensions

## g500-B2700, 3-stage with MCA17

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800578-02

| Motor                     |            |    | MCA              |                   |                  |                   |
|---------------------------|------------|----|------------------|-------------------|------------------|-------------------|
|                           |            |    | 17N17-<br>Blower | 17N23-<br>natural | 17N35-<br>Blower | 17N41-<br>natural |
| Cooling type              |            |    |                  |                   |                  |                   |
| Total length              | L          | mm | 875              | 789               | 875              | 789               |
| Motor length              | LB         | mm | 443              | 357               | 443              | 357               |
| Length of motor options   | $\Delta L$ | mm | 90               | 90                | 90               | 90                |
| Motor diameter            | AC         | mm | 165              | 165               | 165              | 165               |
| Motor/connection distance | AD         | mm | 118              | 118               | 118              | 118               |

## Dimensions

### Basic dimensions

[illegible]

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 17N17- | 17N23-  | 17N35- | 17N41-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 875    | 789     | 875    | 789     |
| Motor length              | LB  | mm | 443    | 357     | 443    | 357     |
| Length of motor options   | Δ L | mm | 90     | 90      | 90     | 90      |
| Motor diameter            | AC  | mm | 165    | 165     | 165    | 165     |
| Motor/connection distance | AD  | mm | 118    | 118     | 118    | 118     |

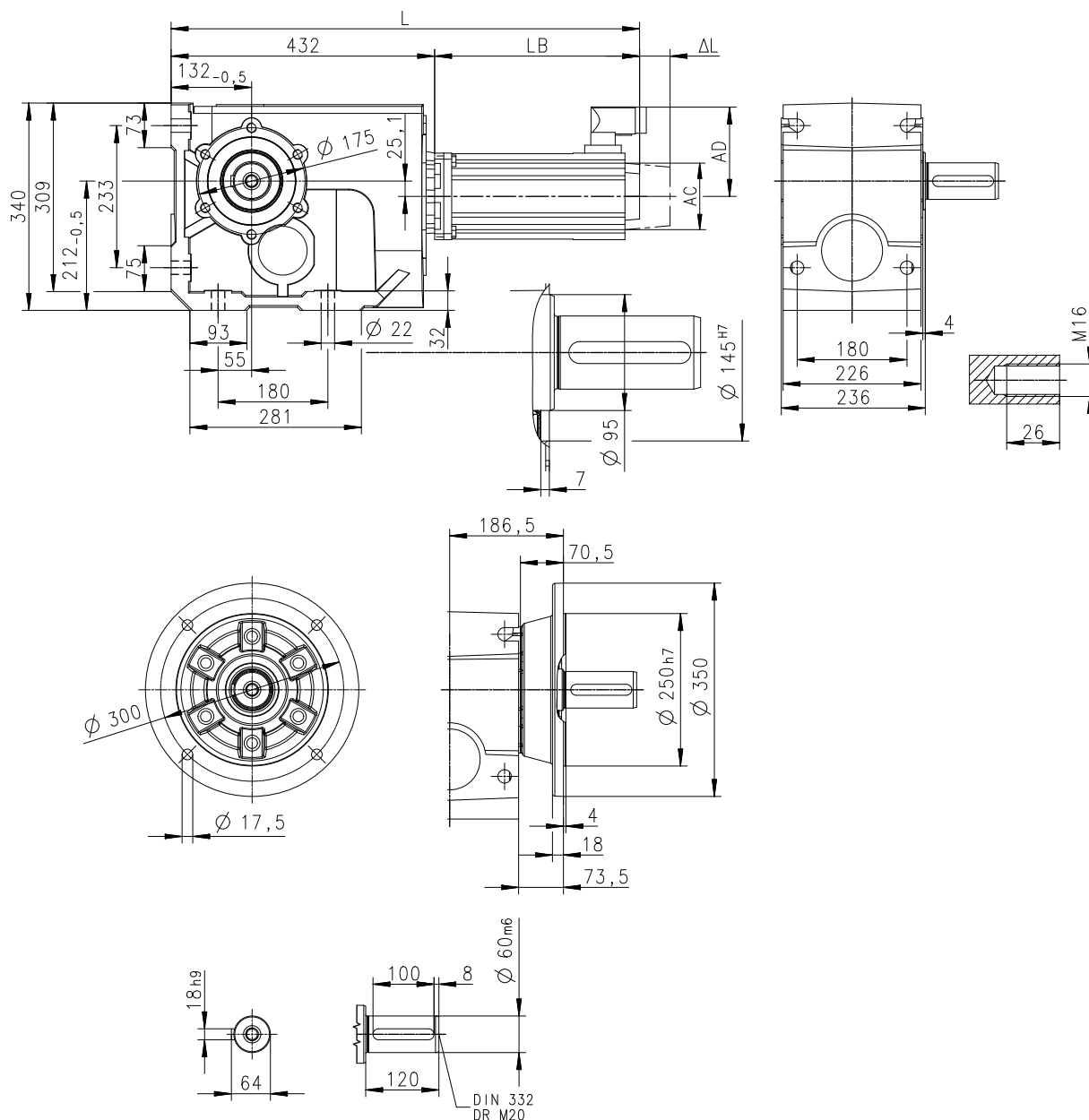


## Technical data

Dimensions  
Basic dimensions

### g500-B2700, 3-stage with MCA17

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800579-00

| Motor                     |            |    | MCA    |         |        |         |
|---------------------------|------------|----|--------|---------|--------|---------|
|                           |            |    | 17N17- | 17N23-  | 17N35- | 17N41-  |
| Cooling type              |            |    | Blower | natural | Blower | natural |
| Total length              | L          | mm | 875    | 789     | 875    | 789     |
| Motor length              | LB         | mm | 443    | 357     | 443    | 357     |
| Length of motor options   | $\Delta L$ | mm | 90     | 90      | 90     | 90      |
| Motor diameter            | AC         | mm | 165    | 165     | 165    | 165     |
| Motor/connection distance | AD         | mm | 118    | 118     | 118    | 118     |

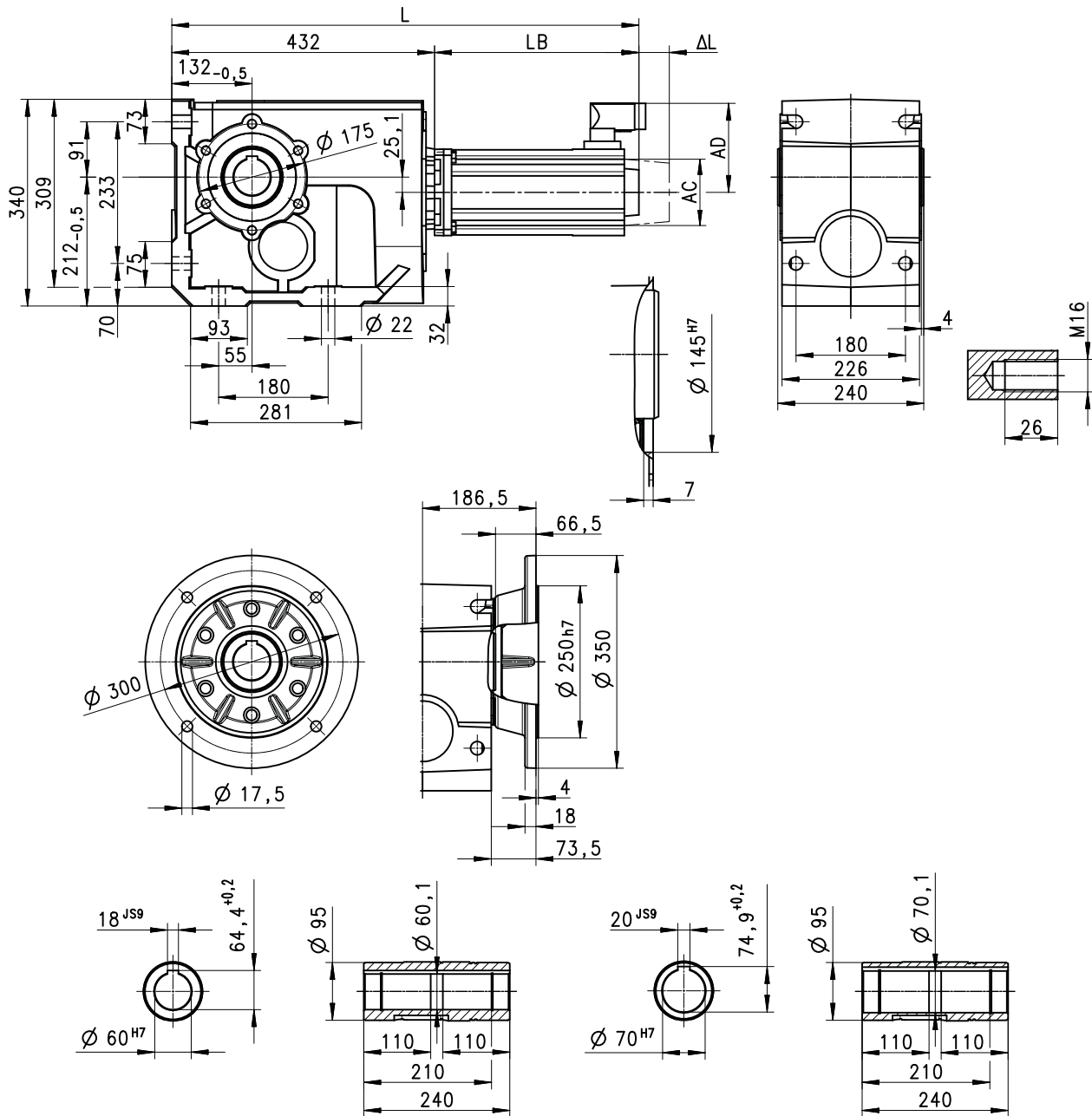
# Technical data

Dimensions  
Basic dimensions



## g500-B2700, 3-stage with MCA19

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800578-02

| Motor                     |            |    | MCA    |         |        |         |
|---------------------------|------------|----|--------|---------|--------|---------|
|                           |            |    | 19S17- | 19S23-  | 19S35- | 19S42-  |
| Cooling type              |            |    | Blower | natural | Blower | natural |
| Total length              | L          | mm | 954    | 857     | 954    | 857     |
| Motor length              | LB         | mm | 522    | 425     | 522    | 425     |
| Length of motor options   | $\Delta L$ | mm | 88     | 88      | 88     | 88      |
| Motor diameter            | AC         | mm | 192    | 192     | 192    | 192     |
| Motor/connection distance | AD         | mm | 151    | 151     | 151    | 151     |

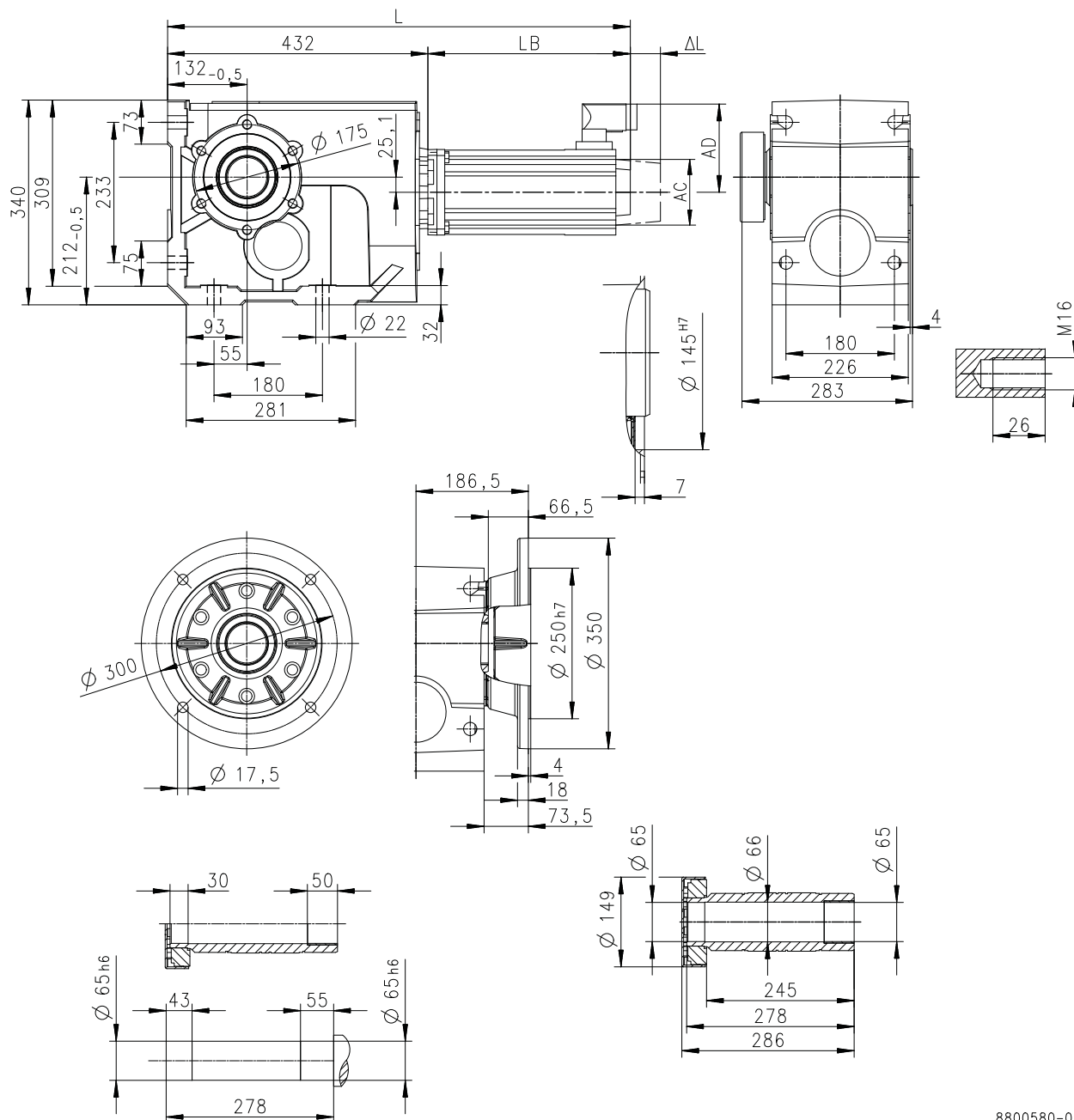


# Technical data

Dimensions  
Basic dimensions

## g500-B2700 with MCA19

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800580-00

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 19S17-<br>Blower | 19S23-<br>natural | 19S35-<br>Blower | 19S42-<br>natural |
| Cooling type              |     |    |                  |                   |                  |                   |
| Total length              | L   | mm | 954              | 857               | 954              | 857               |
| Motor length              | LB  | mm | 522              | 425               | 522              | 425               |
| Length of motor options   | Δ L | mm | 88               | 88                | 88               | 88                |
| Motor diameter            | AC  | mm | 192              | 192               | 192              | 192               |
| Motor/connection distance | AD  | mm | 151              | 151               | 151              | 151               |

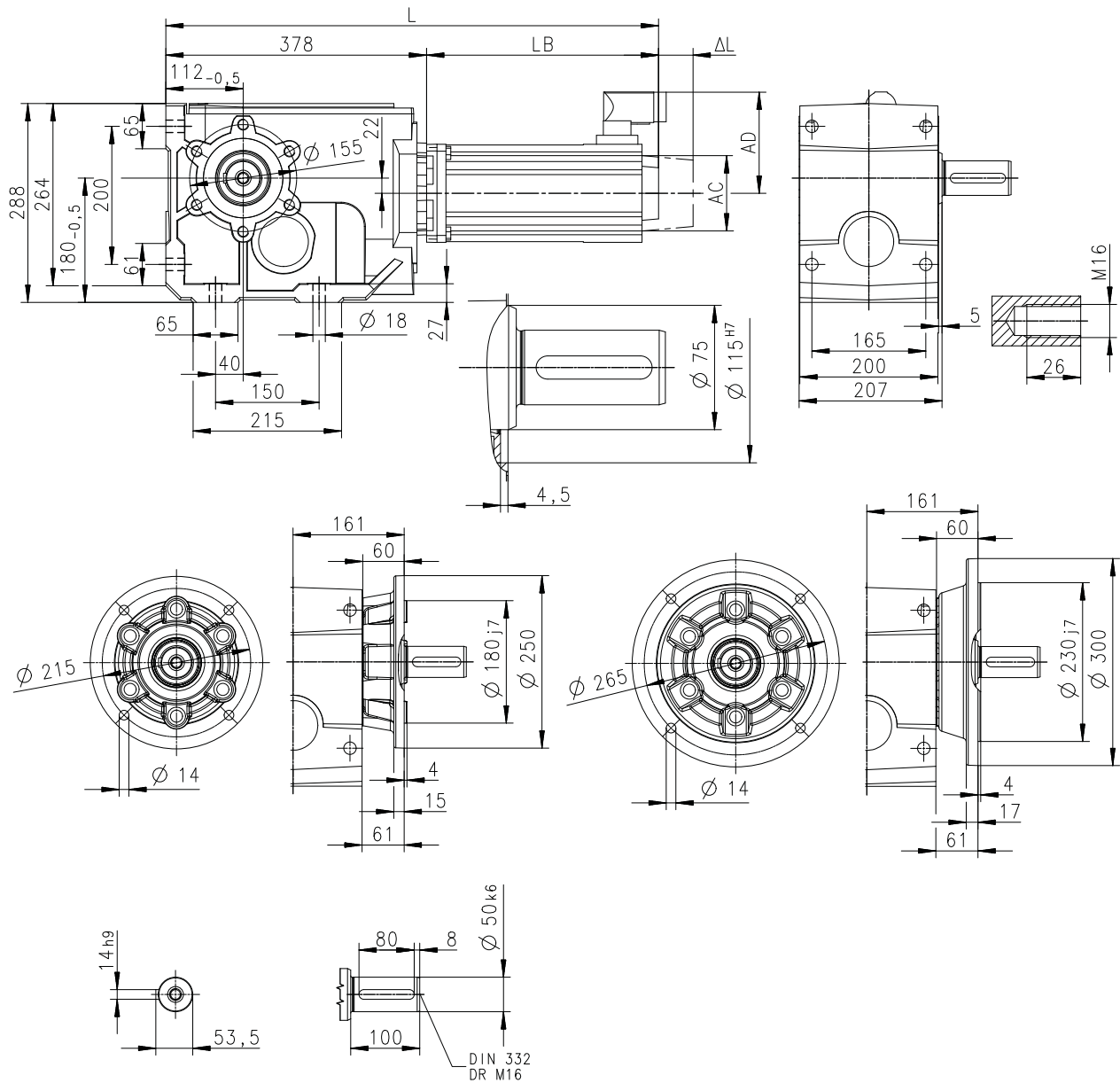
# Technical data

Dimensions  
Basic dimensions



## g500-B2700, 3-stage with MCA19

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800576-00

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 19S17- | 19S23-  | 19S35- | 19S42-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 954    | 857     | 954    | 857     |
| Motor length              | LB  | mm | 522    | 425     | 522    | 425     |
| Length of motor options   | Δ L | mm | 88     | 88      | 88     | 88      |
| Motor diameter            | AC  | mm | 192    | 192     | 192    | 192     |
| Motor/connection distance | AD  | mm | 151    | 151     | 151    | 151     |

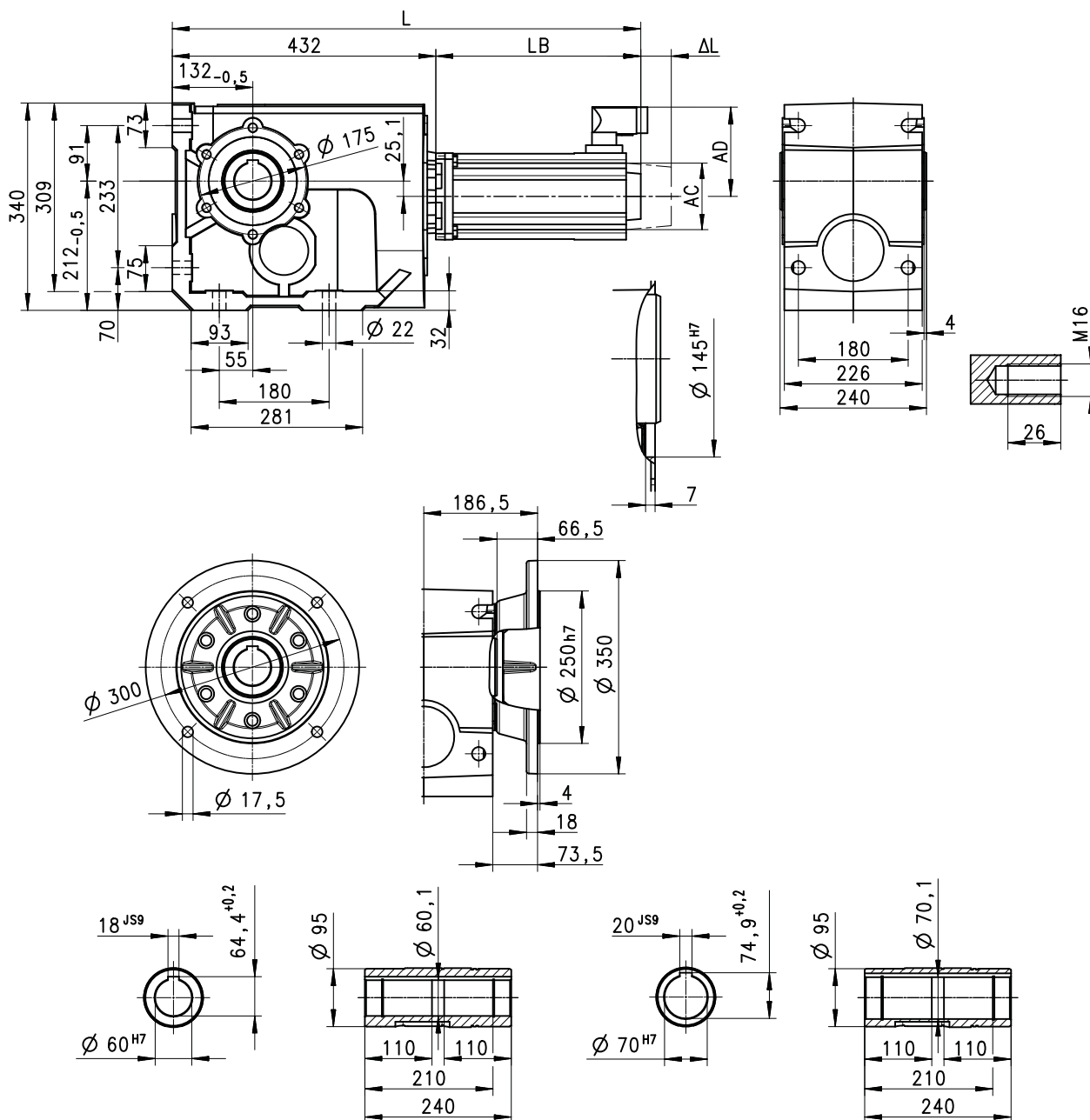


# Technical data

Dimensions  
Basic dimensions

## g500-B2700, 3-stage with MCA21

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800578-02

| Motor                     |            |    | MCA    |         |        |         |
|---------------------------|------------|----|--------|---------|--------|---------|
|                           |            |    | 21X17- | 21X25-  | 21X35- | 21X42-  |
| Cooling type              |            |    | Blower | natural | Blower | natural |
| Total length              | L          | mm | 1046   | 950     | 1046   | 950     |
| Motor length              | LB         | mm | 614    | 518     | 614    | 518     |
| Length of motor options   | $\Delta L$ | mm | 92     | 92      | 92     | 92      |
| Motor diameter            | AC         | mm | 214    | 214     | 214    | 214     |
| Motor/connection distance | AD         | mm | 162    | 162     | 162    | 162     |

# Technical data

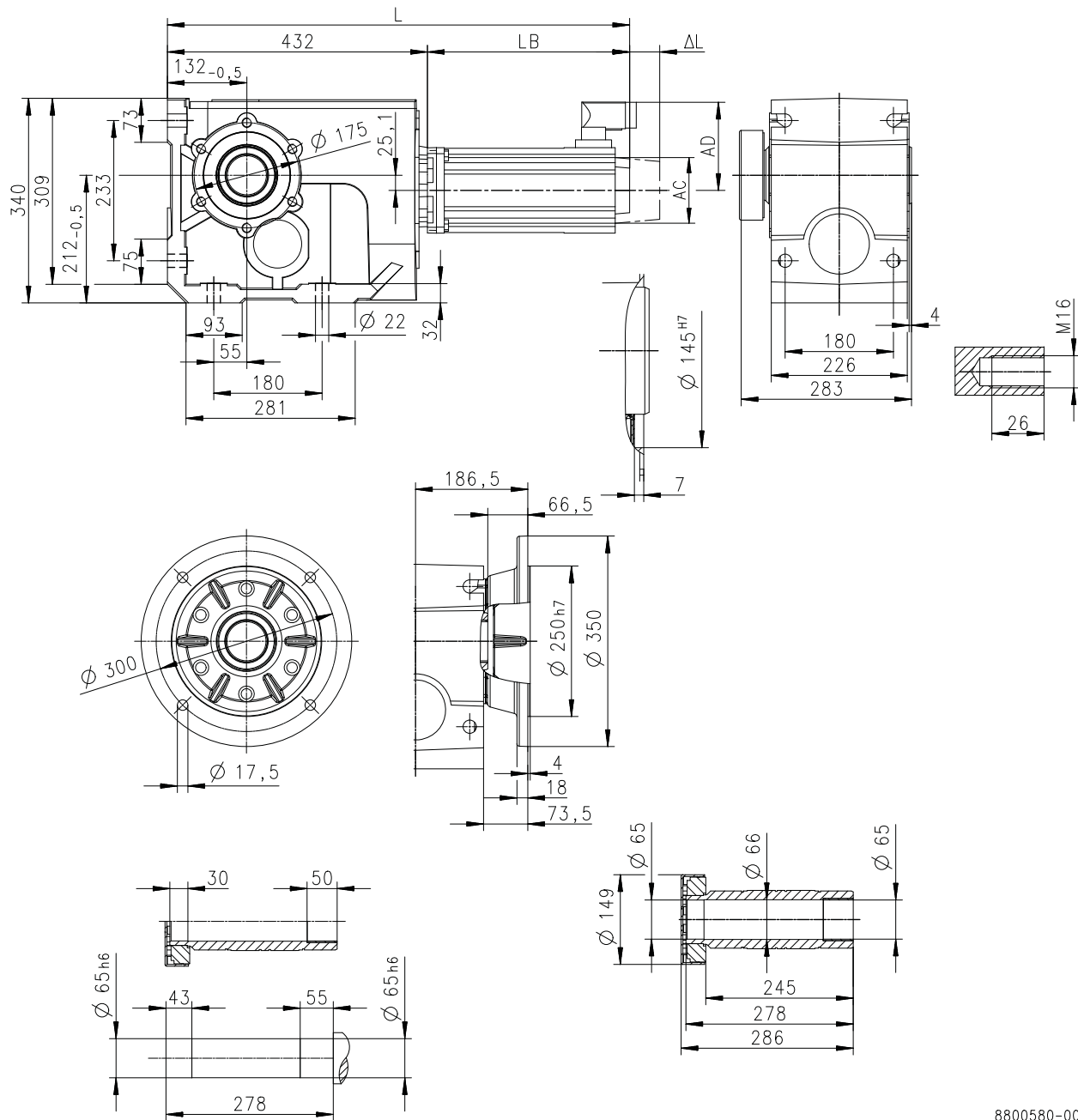
Dimensions

Basic dimensions



## g500-B2700, 3-stage with MCA21

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800580-00

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 21X17- | 21X25-  | 21X35- | 21X42-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 1046   | 950     | 1046   | 950     |
| Motor length              | LB  | mm | 614    | 518     | 614    | 518     |
| Length of motor options   | Δ L | mm | 92     | 92      | 92     | 92      |
| Motor diameter            | AC  | mm | 214    | 214     | 214    | 214     |
| Motor/connection distance | AD  | mm | 162    | 162     | 162    | 162     |

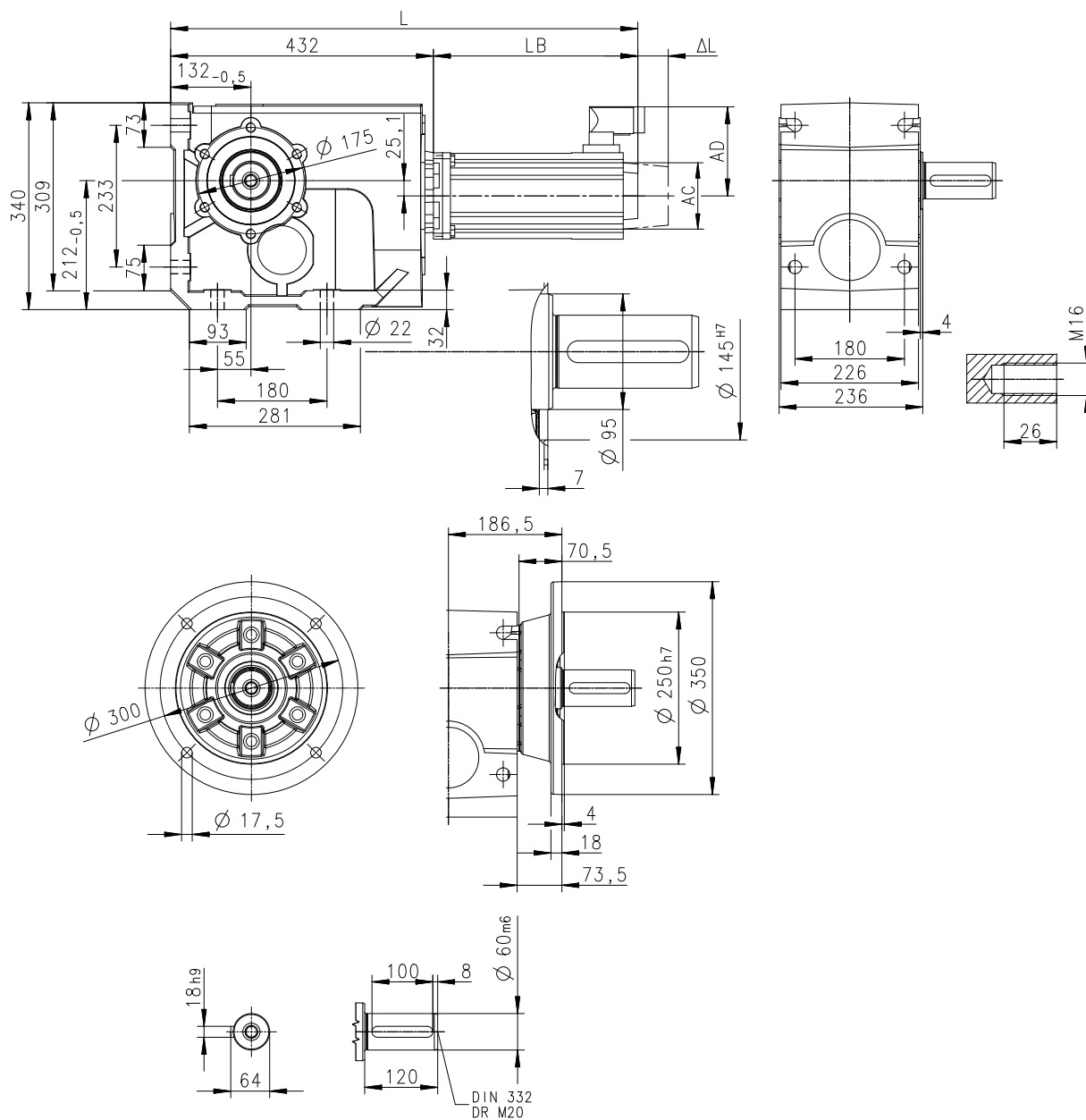


## Technical data

Dimensions  
Basic dimensions

### g500-B2700, 3-stage with MCA21

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800579-00

| Motor                     |            |    | MCA    |         |        |         |
|---------------------------|------------|----|--------|---------|--------|---------|
|                           |            |    | 21X17- | 21X25-  | 21X35- | 21X42-  |
| Cooling type              |            |    | Blower | natural | Blower | natural |
| Total length              | L          | mm | 1046   | 950     | 1046   | 950     |
| Motor length              | LB         | mm | 614    | 518     | 614    | 518     |
| Length of motor options   | $\Delta L$ | mm | 92     | 92      | 92     | 92      |
| Motor diameter            | AC         | mm | 214    | 214     | 214    | 214     |
| Motor/connection distance | AD         | mm | 162    | 162     | 162    | 162     |

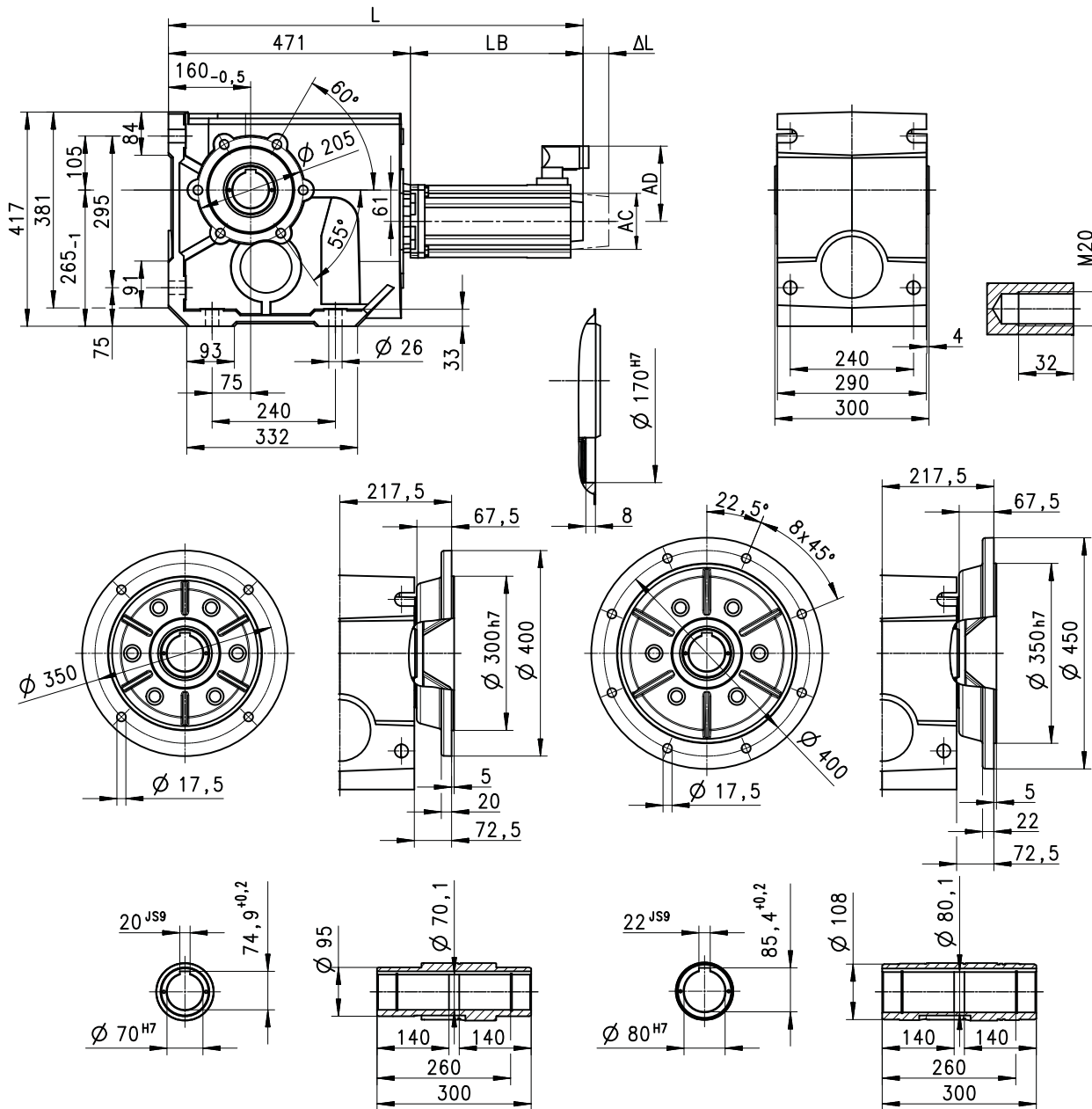
# Technical data

Dimensions  
Basic dimensions



## g500-B4300, 3-stage with MCA10

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800581-02

| Motor                     |            |    | MCA           |
|---------------------------|------------|----|---------------|
| Cooling type              |            |    | 10140-natural |
| Total length              | L          | mm | 730           |
| Motor length              | LB         | mm | 259           |
| Length of motor options   | $\Delta L$ | mm | 78            |
| Motor diameter            | AC         | mm | 102           |
| Motor/connection distance | AD         | mm | 90            |

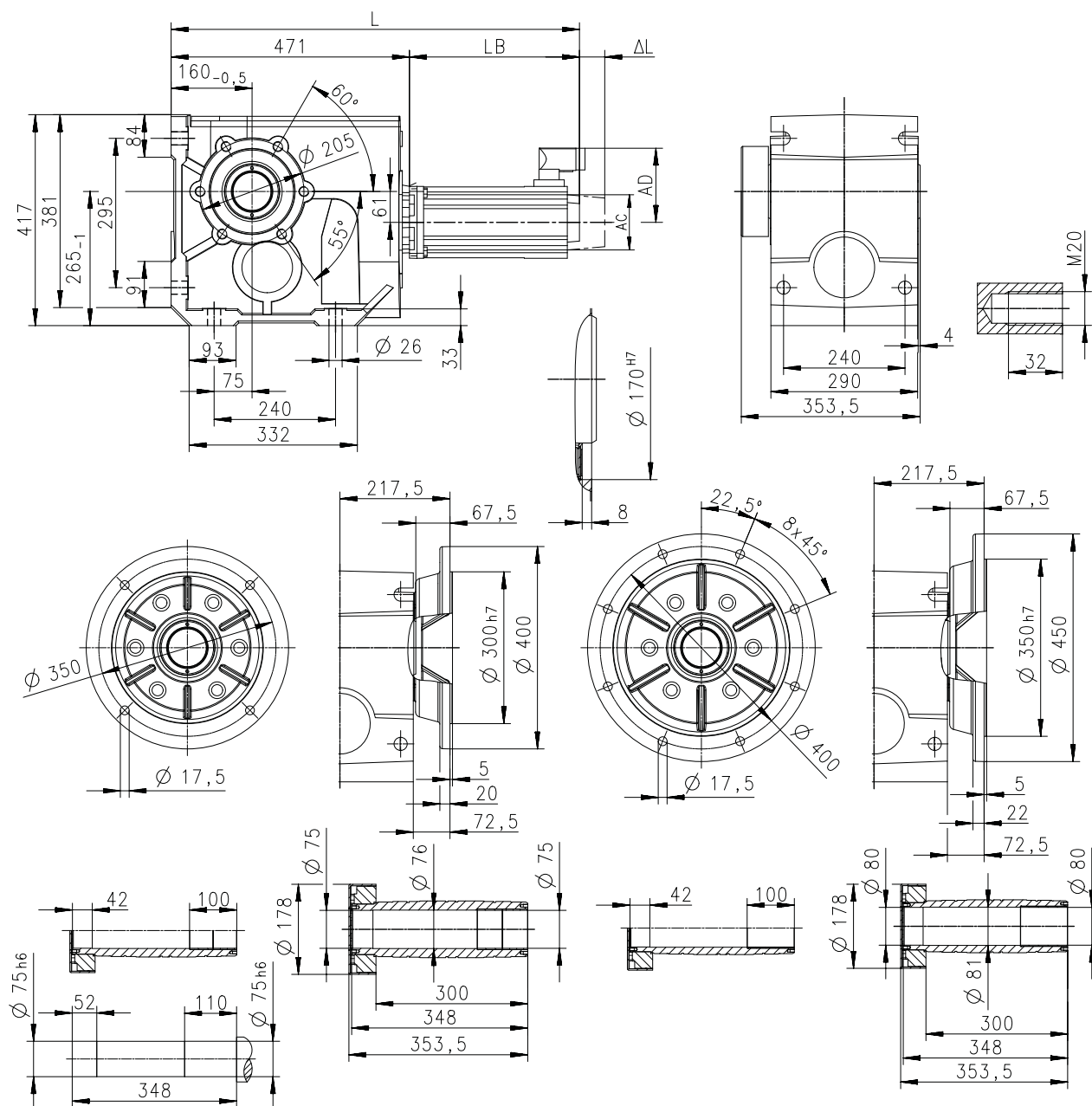


# Technical data

Dimensions  
Basic dimensions

## g500-B4300, 3-stage with MCA10

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)

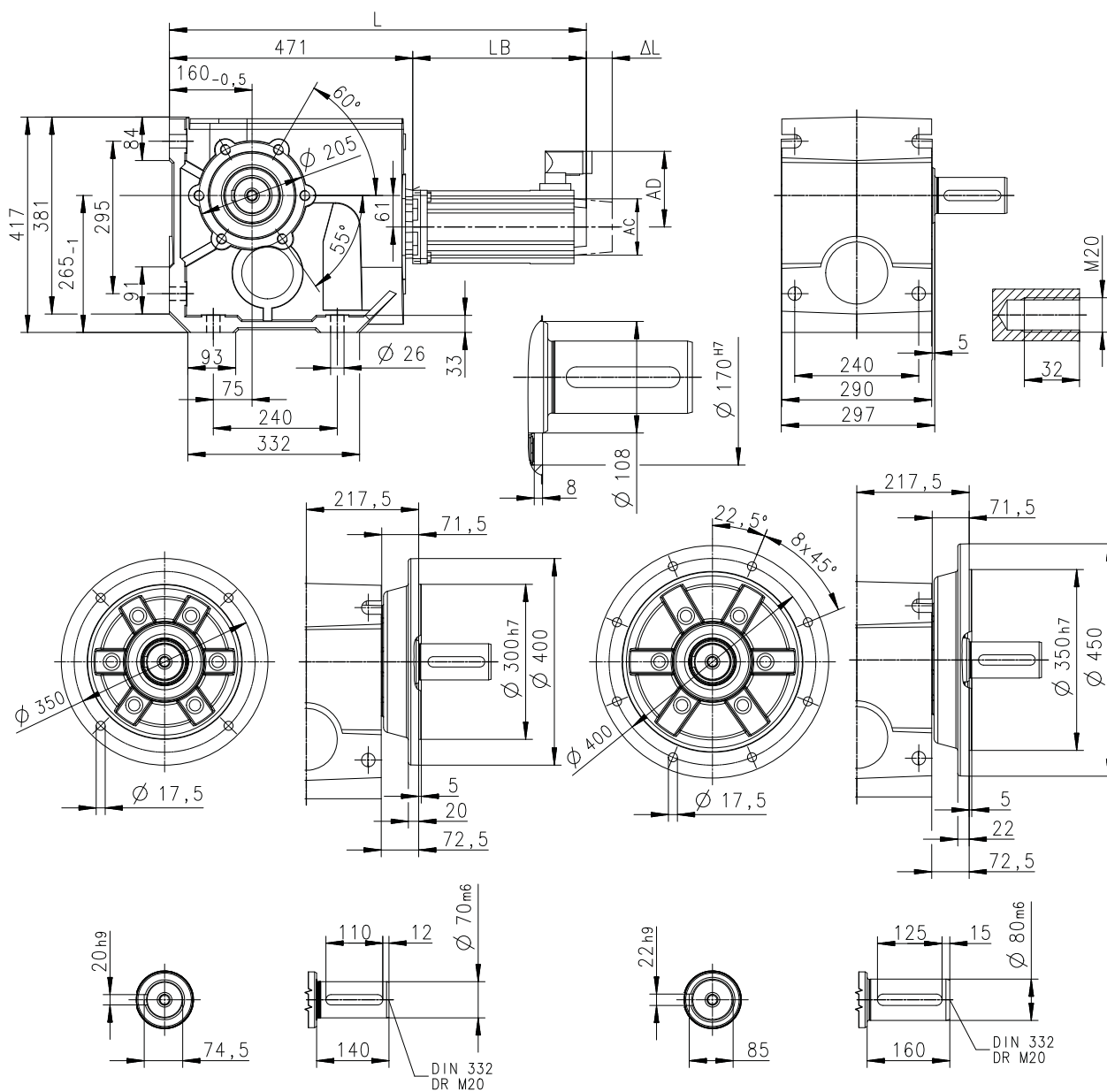


8800583-00

| Motor                     |     |    | MCA     |
|---------------------------|-----|----|---------|
|                           |     |    | 10140-  |
| Cooling type              |     |    | natural |
| Total length              | L   | mm | 730     |
| Motor length              | LB  | mm | 259     |
| Length of motor options   | Δ L | mm | 78      |
| Motor diameter            | AC  | mm | 102     |
| Motor/connection distance | AD  | mm | 90      |



Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800582-00

| Motor                     |     |    | MCA     |
|---------------------------|-----|----|---------|
|                           |     |    | 10I40-  |
| Cooling type              |     |    | natural |
| Total length              | L   | mm | 730     |
| Motor length              | LB  | mm | 259     |
| Length of motor options   | Δ L | mm | 78      |
| Motor diameter            | AC  | mm | 102     |
| Motor/connection distance | AD  | mm | 90      |

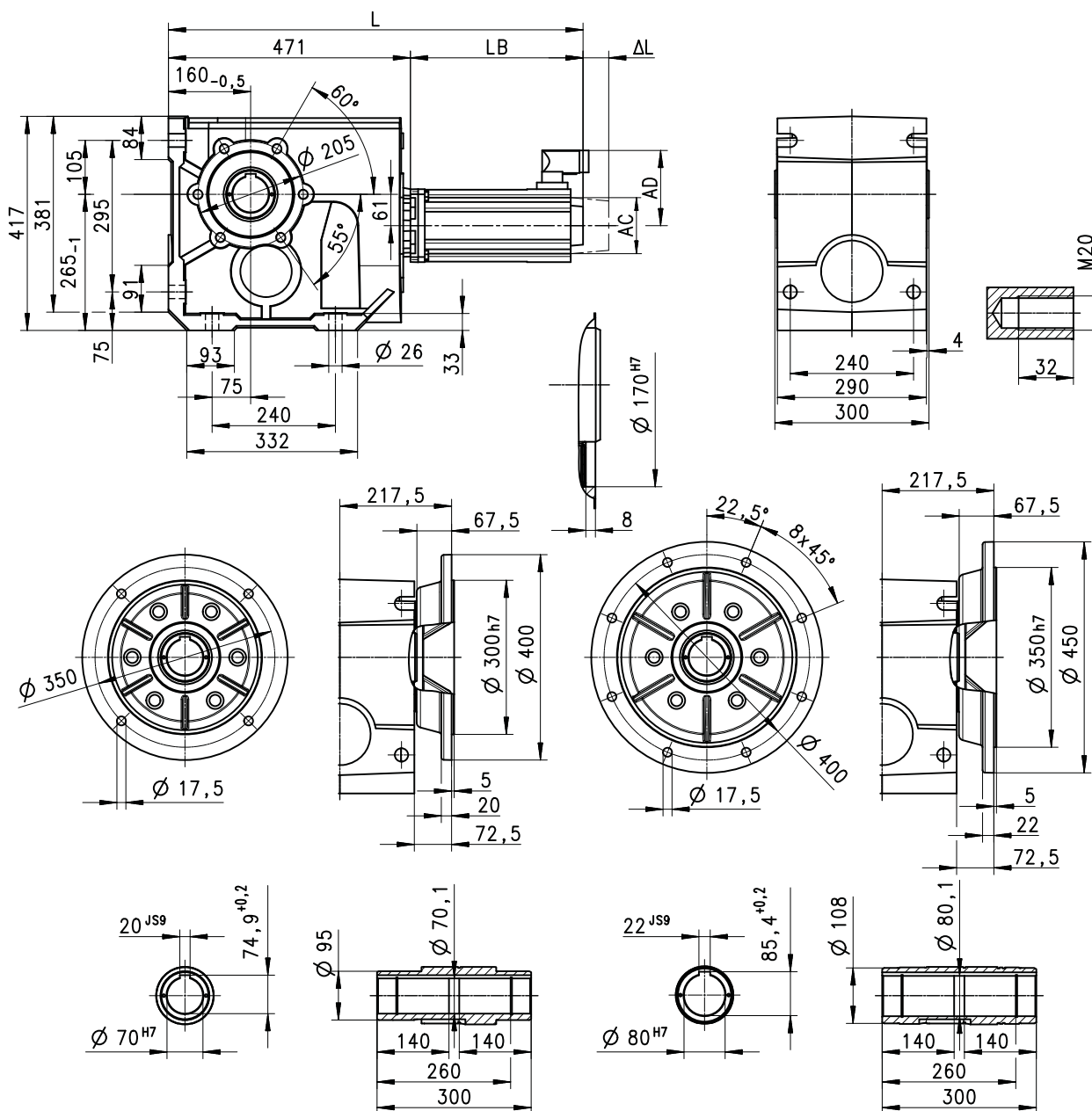


# Technical data

Dimensions  
Basic dimensions

## g500-B4300, 3-stage with MCA13

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800581-02

| Motor                     |     |    | MCA    |         |
|---------------------------|-----|----|--------|---------|
|                           |     |    | 13I34- | 13I41-  |
| Cooling type              |     |    | Blower | natural |
| Total length              | L   | mm | 807    | 739     |
| Motor length              | LB  | mm | 336    | 268     |
| Length of motor options   | Δ L | mm | 90     | 90      |
| Motor diameter            | AC  | mm | 130    | 130     |
| Motor/connection distance | AD  | mm | 102    | 102     |

# Technical data

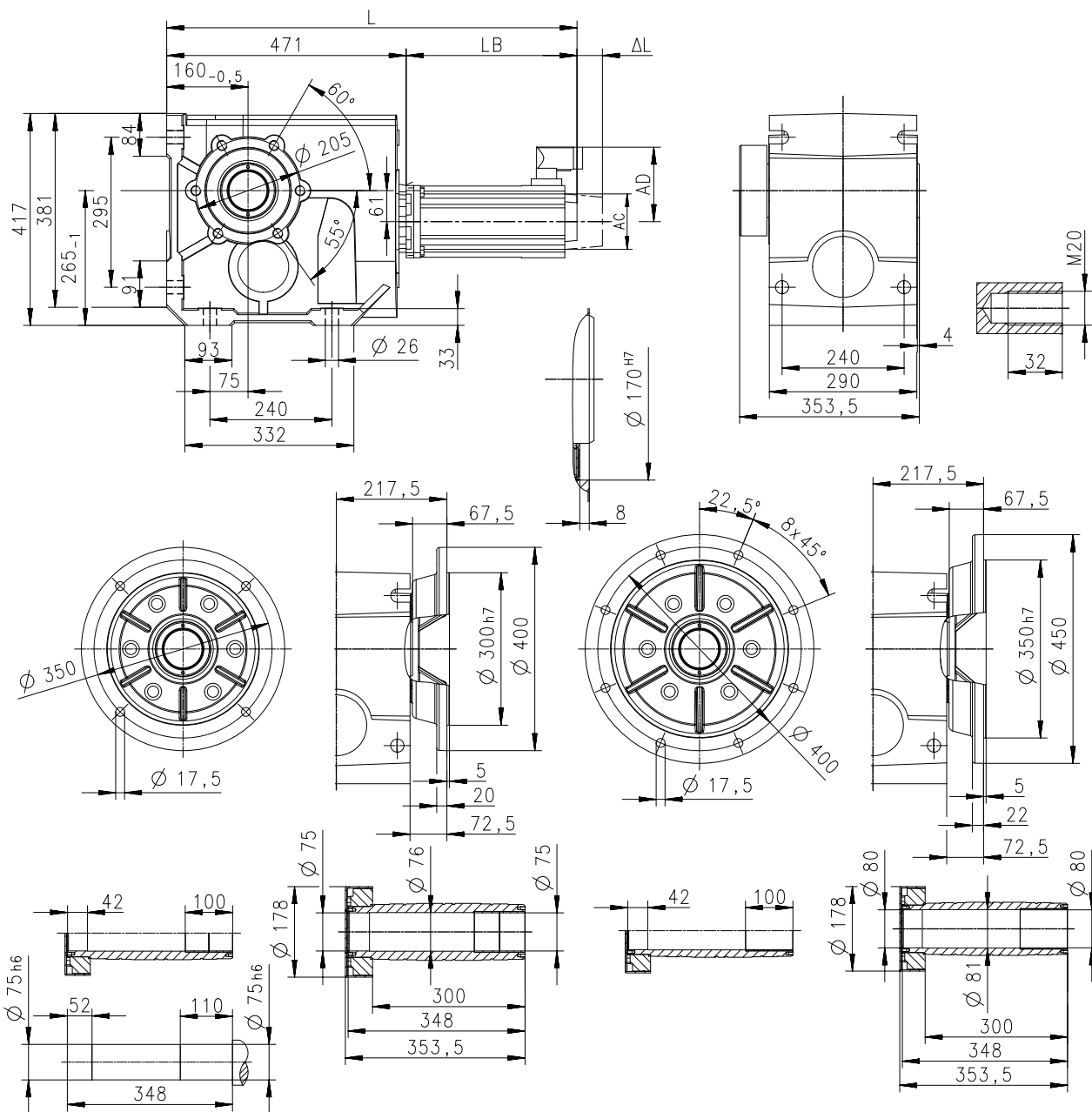
Dimensions

Basic dimensions



## g500-B4300, 3-stage with MCA13

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800583-00

| Motor                     |     |    | MCA    |         |
|---------------------------|-----|----|--------|---------|
|                           |     |    | 13I34- | 13I41-  |
| Cooling type              |     |    | Blower | natural |
| Total length              | L   | mm | 807    | 739     |
| Motor length              | LB  | mm | 336    | 268     |
| Length of motor options   | Δ L | mm | 90     | 90      |
| Motor diameter            | AC  | mm | 130    | 130     |
| Motor/connection distance | AD  | mm | 102    | 102     |

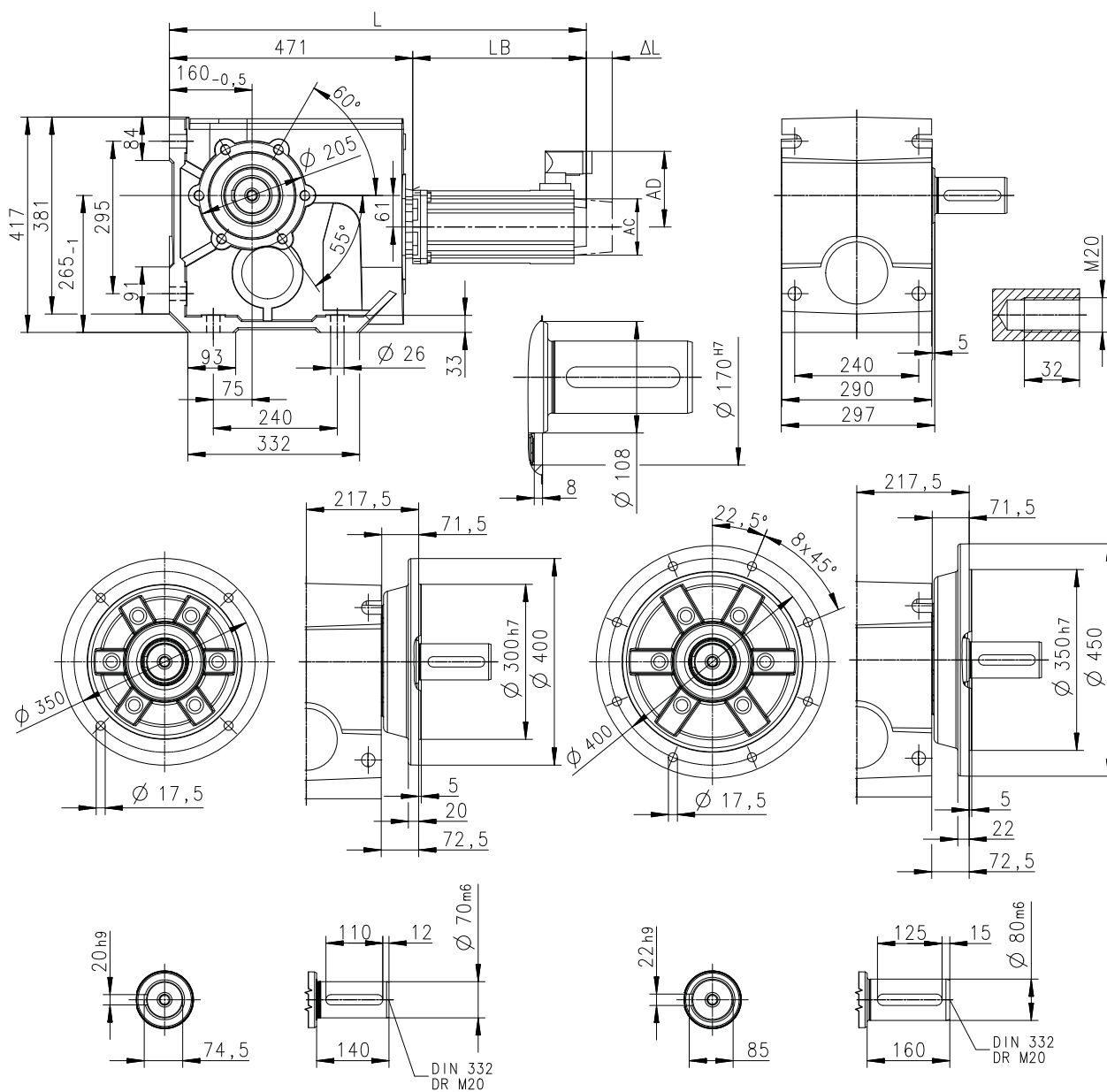
## Technical data

## Dimensions

### Basic dimensions

**g500-B4300, 3-stage with MCA13**

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800582-00

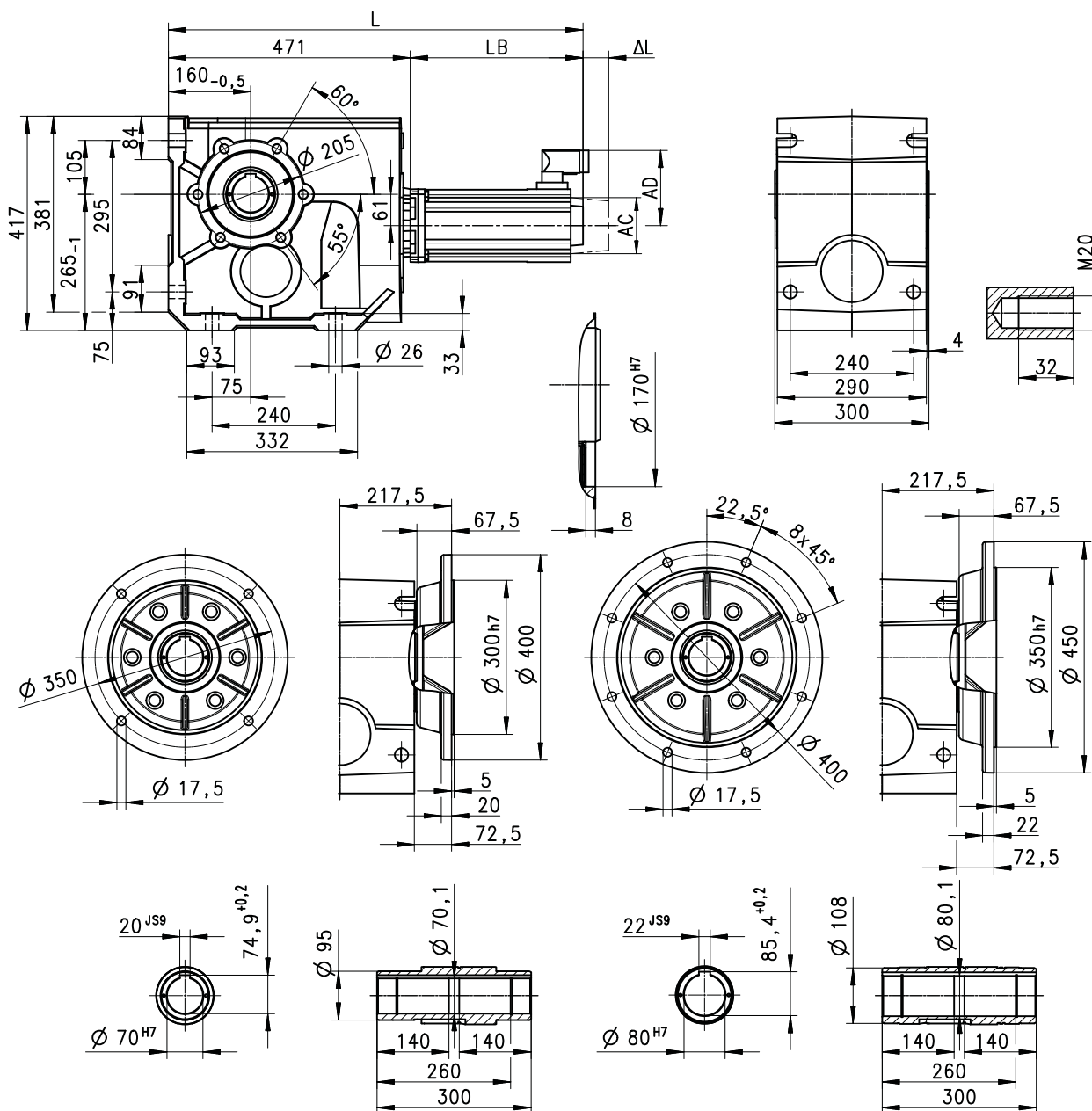
| Motor                     |     |    | MCA    |         |
|---------------------------|-----|----|--------|---------|
|                           |     |    | 13I34- | 13I41-  |
| Cooling type              |     |    | Blower | natural |
| Total length              | L   | mm | 807    | 739     |
| Motor length              | LB  | mm | 336    | 268     |
| Length of motor options   | Δ L | mm | 90     | 90      |
| Motor diameter            | AC  | mm | 130    | 130     |
| Motor/connection distance | AD  | mm | 102    | 102     |

## Dimensions

### Basic dimensions



Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800581-02

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 14L16- | 14L20-  | 14L35- | 14L41-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 851    | 789     | 851    | 789     |
| Motor length              | LB  | mm | 380    | 318     | 380    | 318     |
| Length of motor options   | Δ L | mm | 89     | 89      | 89     | 89      |
| Motor diameter            | AC  | mm | 142    | 142     | 142    | 142     |
| Motor/connection distance | AD  | mm | 109    | 109     | 109    | 109     |

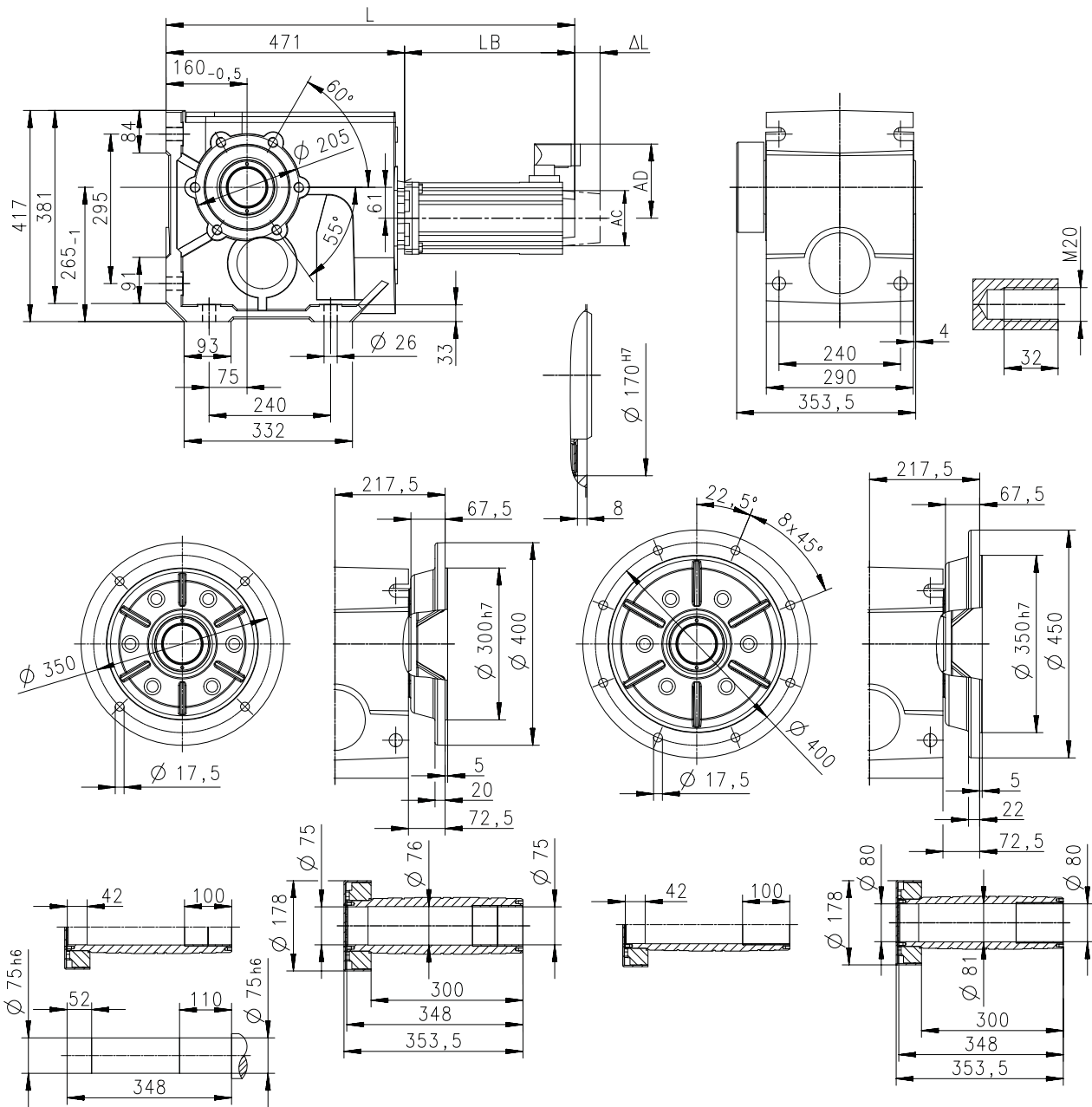


# Technical data

Dimensions  
Basic dimensions

## g500-B4300, 3-stage with MCA14

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800583-00

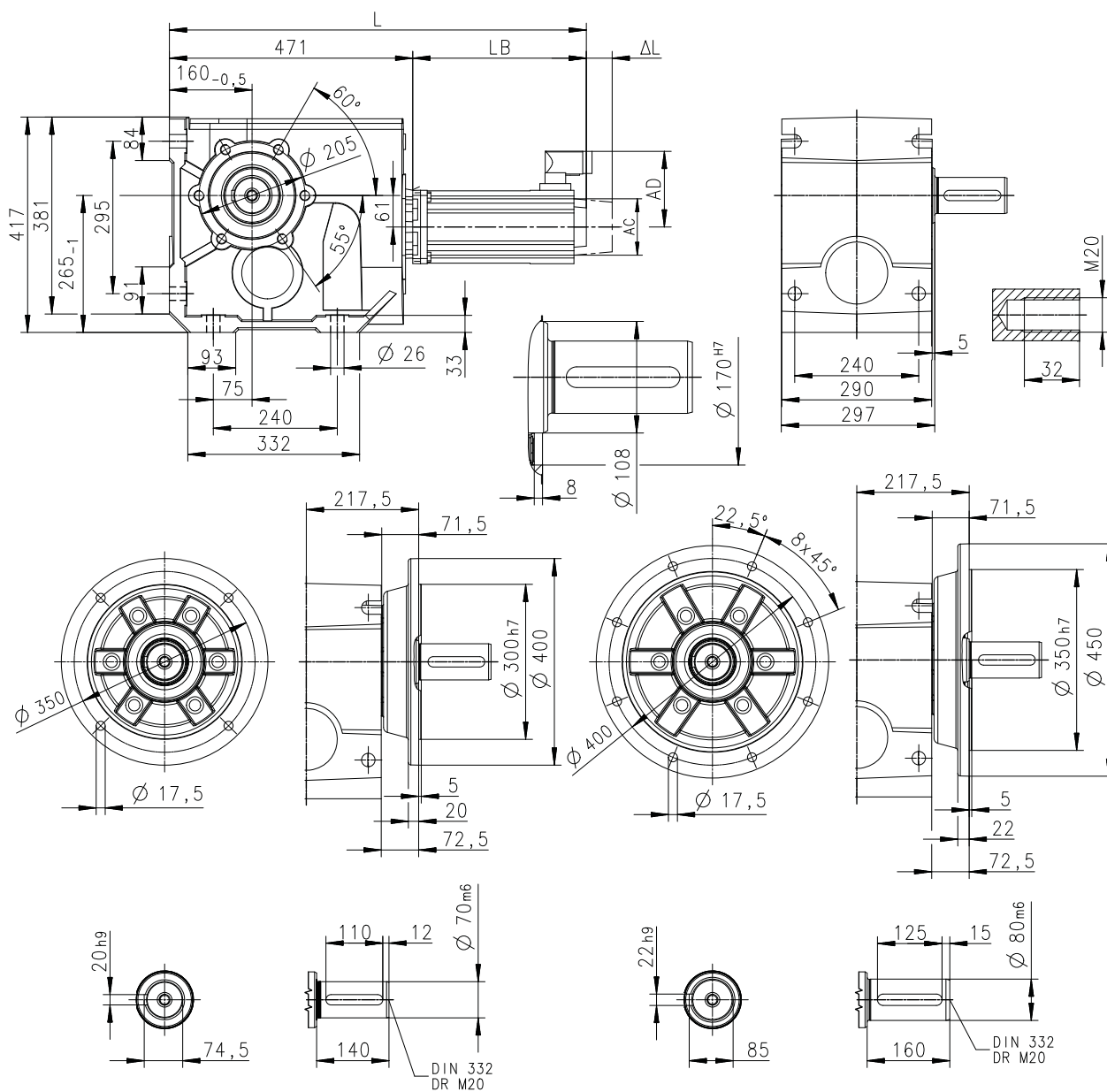
| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 14L16-<br>Blower | 14L20-<br>natural | 14L35-<br>Blower | 14L41-<br>natural |
| Cooling type              |     |    |                  |                   |                  |                   |
| Total length              | L   | mm | 851              | 789               | 851              | 789               |
| Motor length              | LB  | mm | 380              | 318               | 380              | 318               |
| Length of motor options   | Δ L | mm | 89               | 89                | 89               | 89                |
| Motor diameter            | AC  | mm | 142              | 142               | 142              | 142               |
| Motor/connection distance | AD  | mm | 109              | 109               | 109              | 109               |

## Dimensions

### Basic dimensions



Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800582-00

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 14L16- | 14L20-  | 14L35- | 14L41-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 851    | 789     | 851    | 789     |
| Motor length              | LB  | mm | 380    | 318     | 380    | 318     |
| Length of motor options   | Δ L | mm | 89     | 89      | 89     | 89      |
| Motor diameter            | AC  | mm | 142    | 142     | 142    | 142     |
| Motor/connection distance | AD  | mm | 109    | 109     | 109    | 109     |

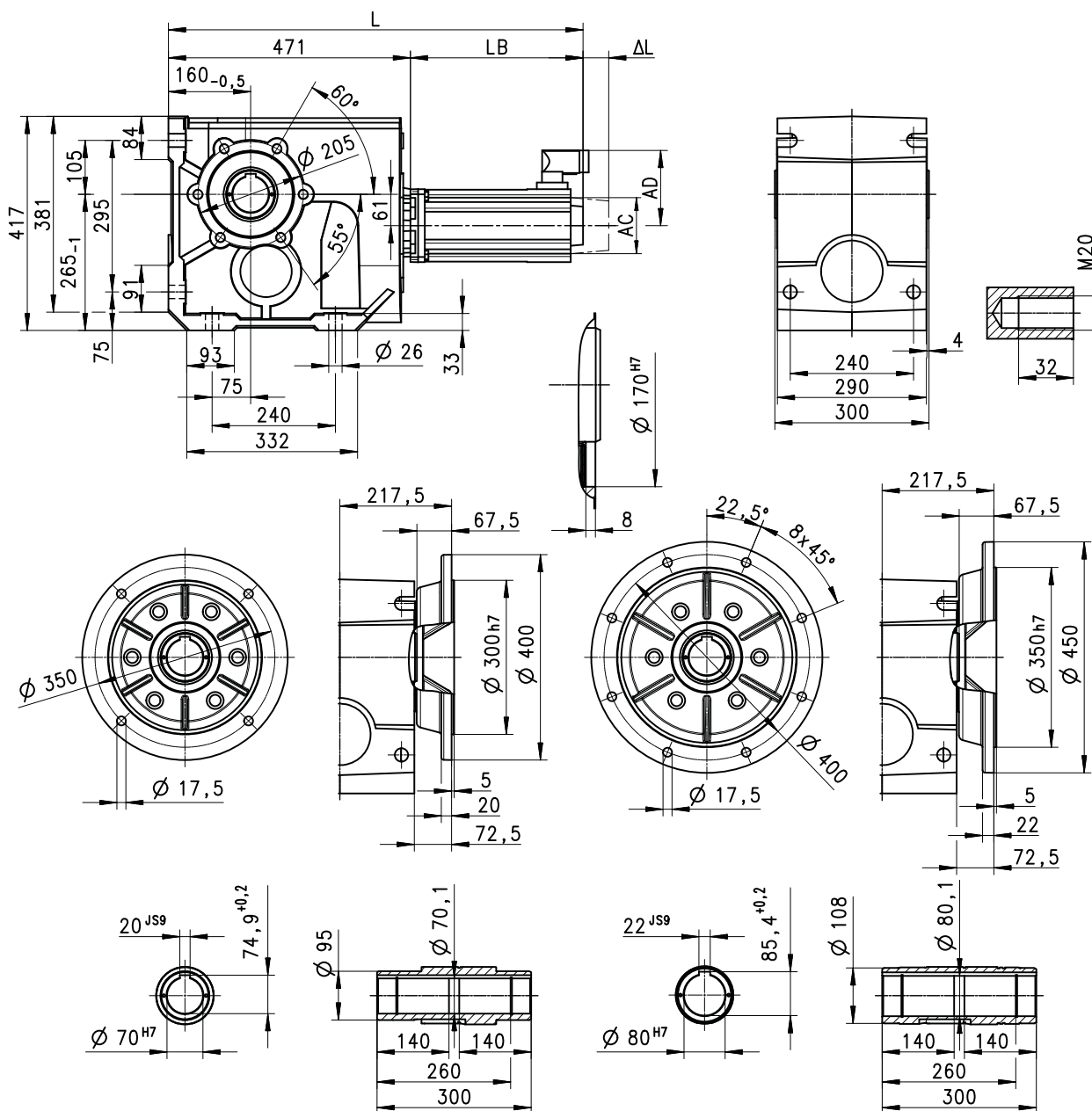


# Technical data

Dimensions  
Basic dimensions

## g500-B4300, 3-stage with MCA17

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800581-02

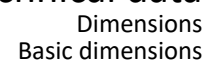
| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 17N17-<br>Blower | 17N23-<br>natural | 17N35-<br>Blower | 17N41-<br>natural |
| Cooling type              |     |    |                  |                   |                  |                   |
| Total length              | L   | mm | 914              | 828               | 914              | 828               |
| Motor length              | LB  | mm | 443              | 357               | 443              | 357               |
| Length of motor options   | Δ L | mm | 90               | 90                | 90               | 90                |
| Motor diameter            | AC  | mm | 165              | 165               | 165              | 165               |
| Motor/connection distance | AD  | mm | 118              | 118               | 118              | 118               |

## Dimensions

### Basic dimensions

[illegible]

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 17N17- | 17N23-  | 17N35- | 17N41-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 914    | 828     | 914    | 828     |
| Motor length              | LB  | mm | 443    | 357     | 443    | 357     |
| Length of motor options   | Δ L | mm | 90     | 90      | 90     | 90      |
| Motor diameter            | AC  | mm | 165    | 165     | 165    | 165     |
| Motor/connection distance | AD  | mm | 118    | 118     | 118    | 118     |

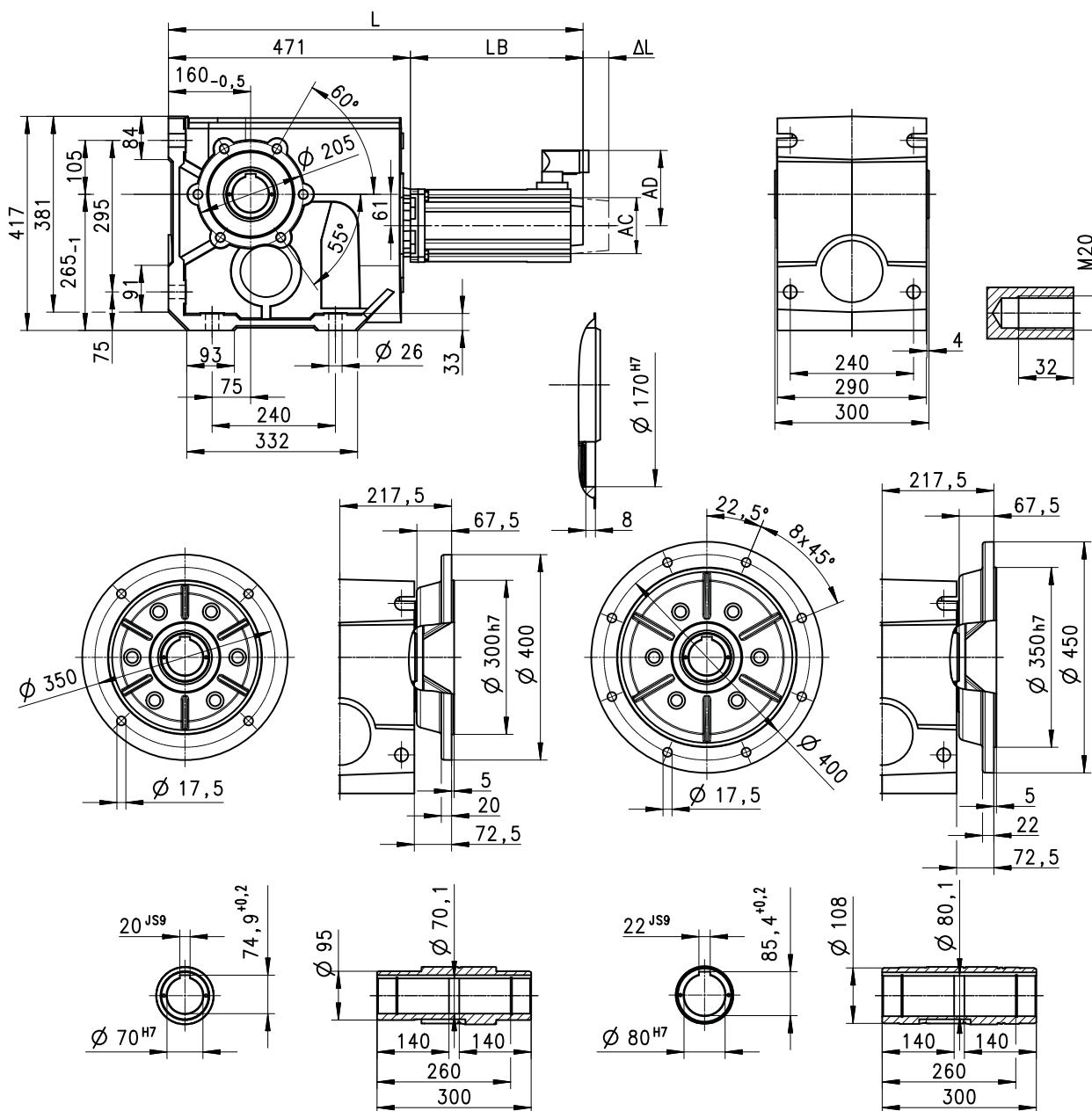


Gearbox version: Solid shaft with foot (VAR/VBR/VAK)

8800582-00



Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)



8800581-02

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 19S17- | 19S23-  | 19S35- | 19S42-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 993    | 896     | 993    | 896     |
| Motor length              | LB  | mm | 522    | 425     | 522    | 425     |
| Length of motor options   | Δ L | mm | 88     | 88      | 88     | 88      |
| Motor diameter            | AC  | mm | 192    | 192     | 192    | 192     |
| Motor/connection distance | AD  | mm | 151    | 151     | 151    | 151     |

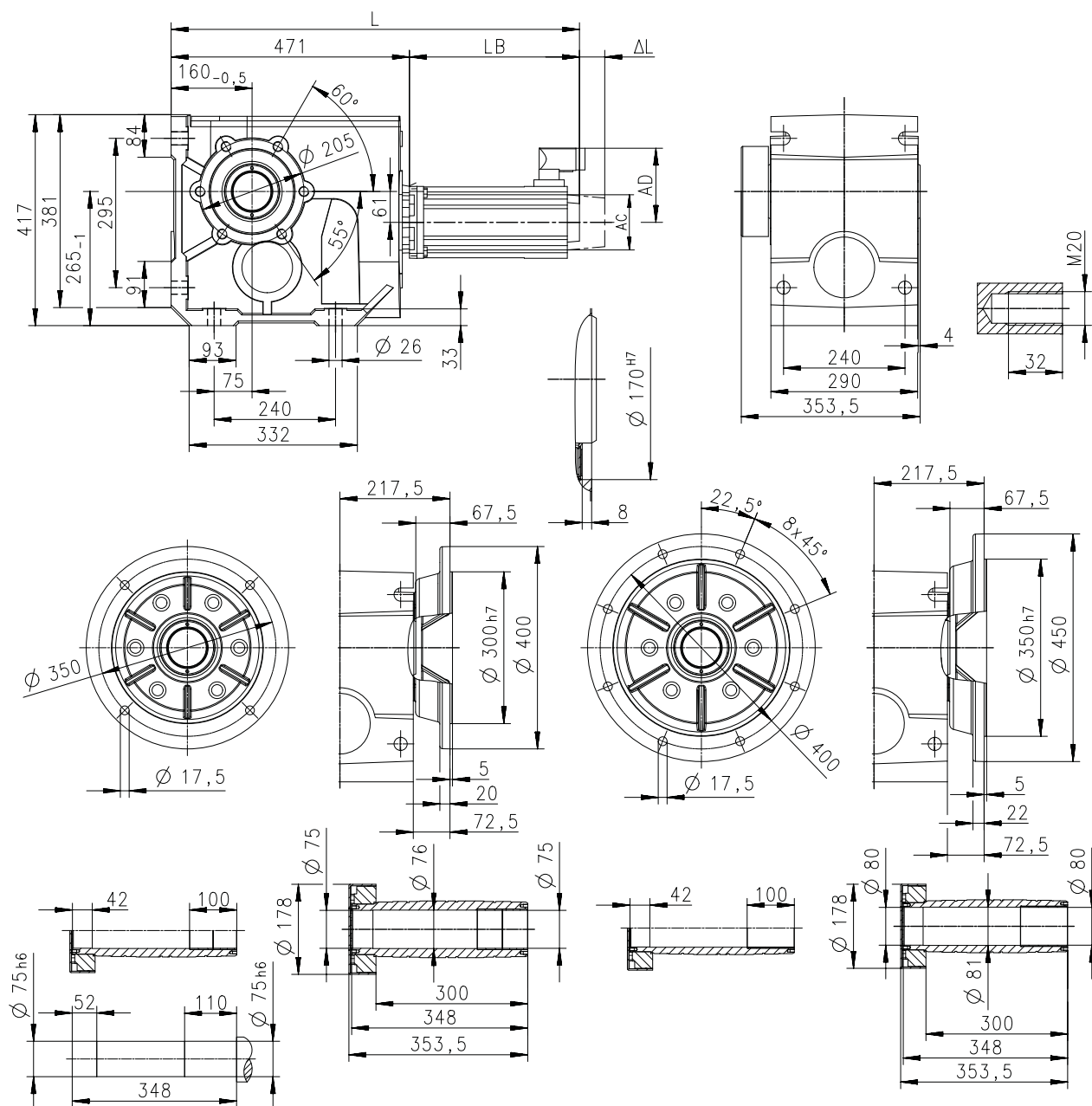


# Technical data

Dimensions  
Basic dimensions

## g500-B4300, 3-stage with MCA19

Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)



8800583-00

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 19S17-<br>Blower | 19S23-<br>natural | 19S35-<br>Blower | 19S42-<br>natural |
| Cooling type              |     |    |                  |                   |                  |                   |
| Total length              | L   | mm | 993              | 896               | 993              | 896               |
| Motor length              | LB  | mm | 522              | 425               | 522              | 425               |
| Length of motor options   | Δ L | mm | 88               | 88                | 88               | 88                |
| Motor diameter            | AC  | mm | 192              | 192               | 192              | 192               |
| Motor/connection distance | AD  | mm | 151              | 151               | 151              | 151               |

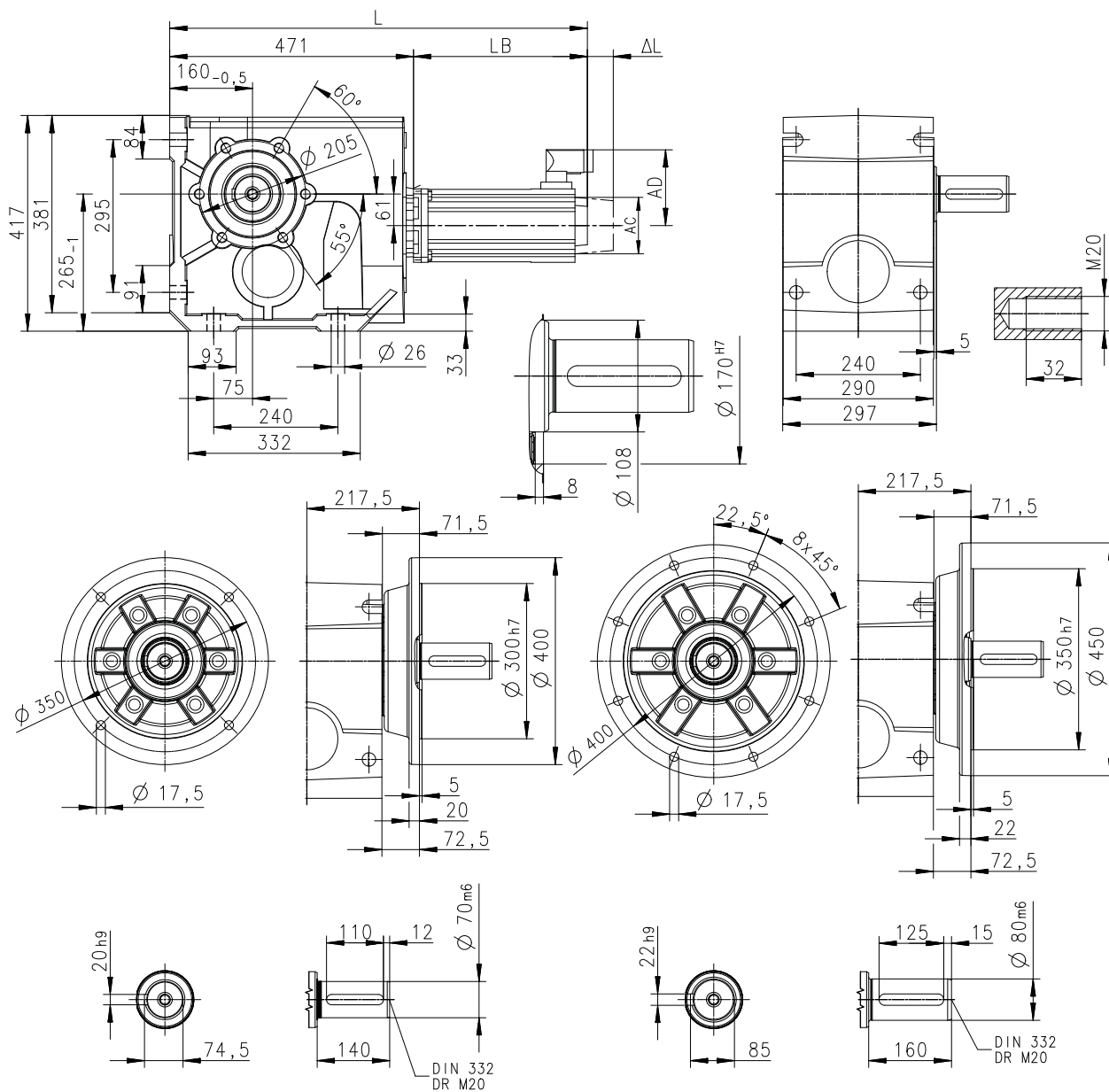
# Technical data

Dimensions  
Basic dimensions



## g500-B4300, 3-stage with MCA19

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800582-00

| Motor                     |            |    | MCA              |                   |                  |                   |
|---------------------------|------------|----|------------------|-------------------|------------------|-------------------|
|                           |            |    | 19S17-<br>Blower | 19S23-<br>natural | 19S35-<br>Blower | 19S42-<br>natural |
| Total length              | L          | mm | 993              | 896               | 993              | 896               |
| Motor length              | LB         | mm | 522              | 425               | 522              | 425               |
| Length of motor options   | $\Delta L$ | mm | 88               | 88                | 88               | 88                |
| Motor diameter            | AC         | mm | 192              | 192               | 192              | 192               |
| Motor/connection distance | AD         | mm | 151              | 151               | 151              | 151               |

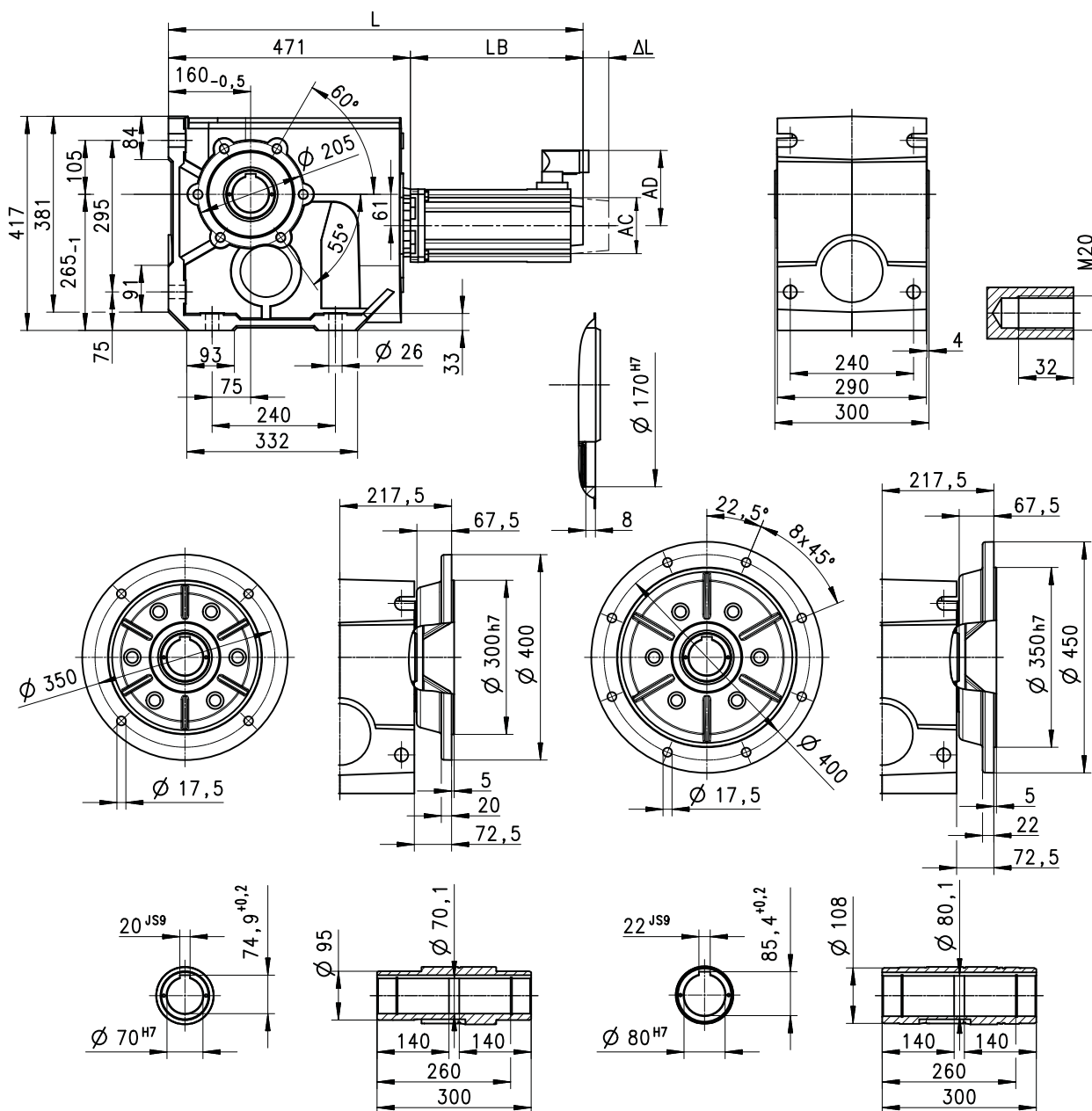


# Technical data

Dimensions  
Basic dimensions

## g500-B4300, 3-stage with MCA21

Gearbox version: Hollow shaft with foot (HAR/HBR/HAK)

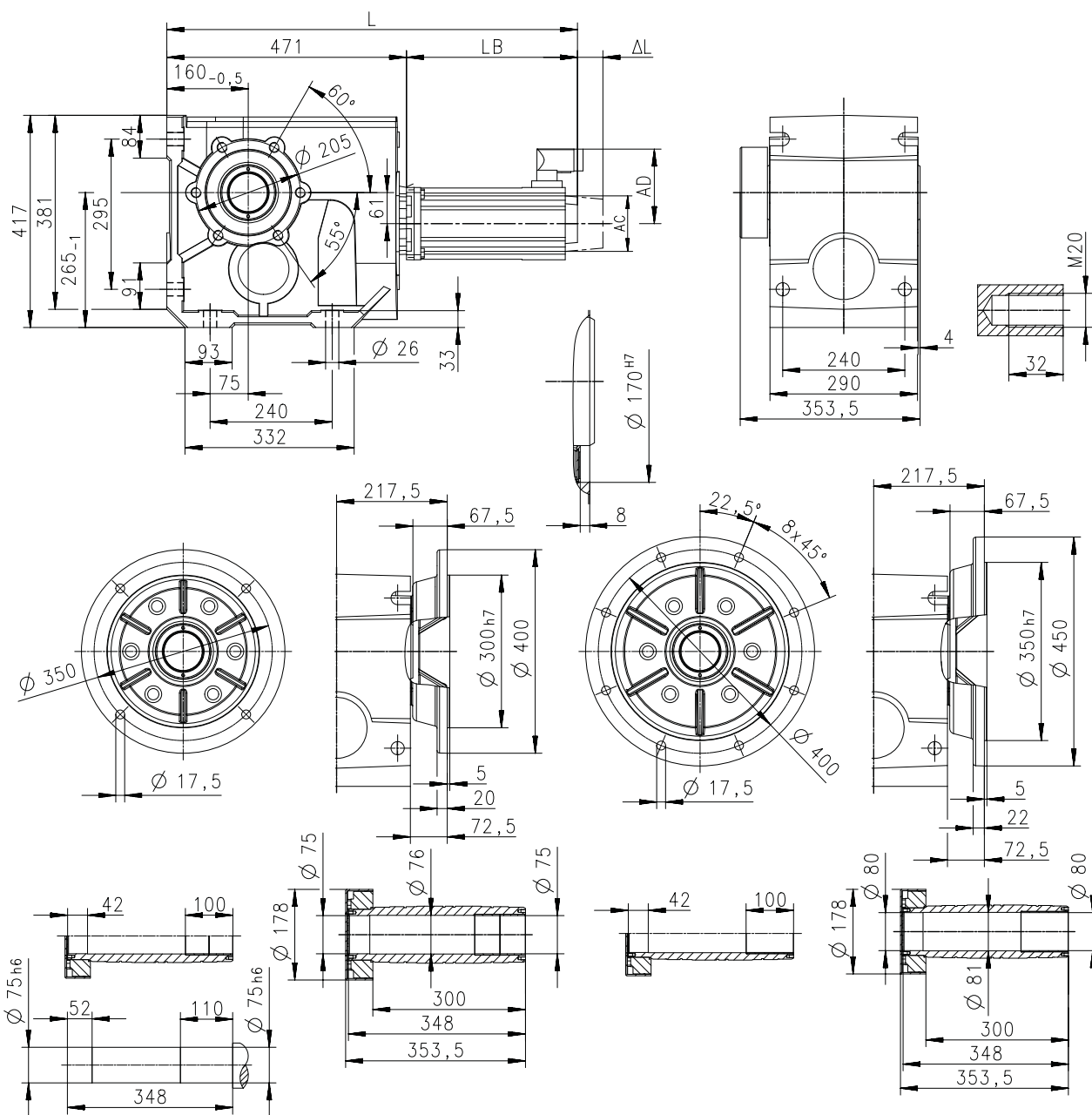


8800581-02

| Motor                     |     |    | MCA              |                   |                  |                   |
|---------------------------|-----|----|------------------|-------------------|------------------|-------------------|
|                           |     |    | 21X17-<br>Blower | 21X25-<br>natural | 21X35-<br>Blower | 21X42-<br>natural |
| Cooling type              |     |    |                  |                   |                  |                   |
| Total length              | L   | mm | 1085             | 989               | 1085             | 989               |
| Motor length              | LB  | mm | 614              | 518               | 614              | 518               |
| Length of motor options   | Δ L | mm | 92               | 92                | 92               | 92                |
| Motor diameter            | AC  | mm | 214              | 214               | 214              | 214               |
| Motor/connection distance | AD  | mm | 162              | 162               | 162              | 162               |



Gearbox version: Hollow shaft with shrink disc, with foot (SAR/SBR/SAK)

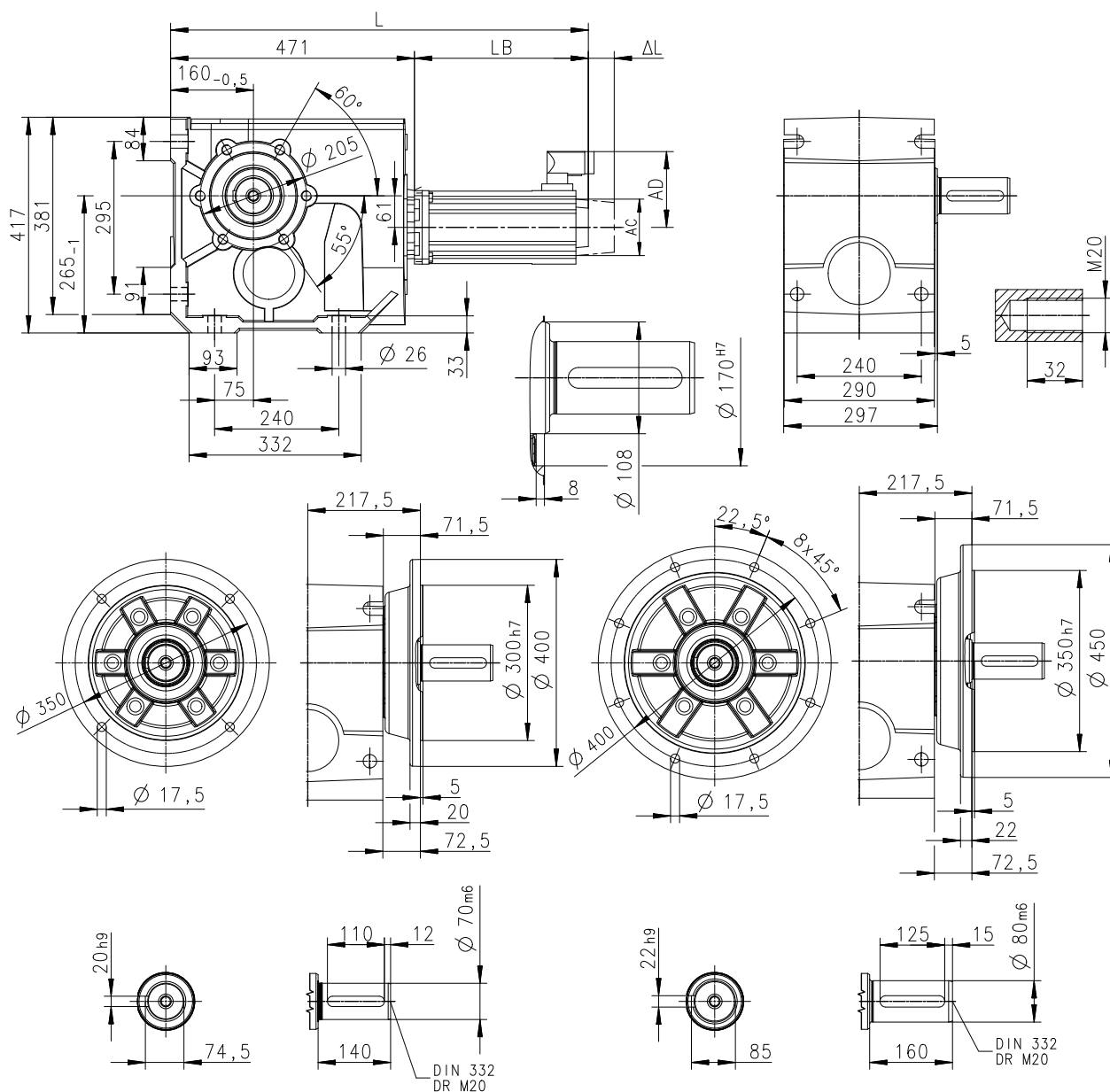


8800583-00

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 21X17- | 21X25-  | 21X35- | 21X42-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 1085   | 989     | 1085   | 989     |
| Motor length              | LB  | mm | 614    | 518     | 614    | 518     |
| Length of motor options   | Δ L | mm | 92     | 92      | 92     | 92      |
| Motor diameter            | AC  | mm | 214    | 214     | 214    | 214     |
| Motor/connection distance | AD  | mm | 162    | 162     | 162    | 162     |

**g500-B4300, 3-stage with MCA21**

Gearbox version: Solid shaft with foot (VAR/VBR/VAK)



8800582-00

| Motor                     |     |    | MCA    |         |        |         |
|---------------------------|-----|----|--------|---------|--------|---------|
|                           |     |    | 21X17- | 21X25-  | 21X35- | 21X42-  |
| Cooling type              |     |    | Blower | natural | Blower | natural |
| Total length              | L   | mm | 1085   | 989     | 1085   | 989     |
| Motor length              | LB  | mm | 614    | 518     | 614    | 518     |
| Length of motor options   | Δ L | mm | 92     | 92      | 92     | 92      |
| Motor diameter            | AC  | mm | 214    | 214     | 214    | 214     |
| Motor/connection distance | AD  | mm | 162    | 162     | 162    | 162     |

# Technical data

Dimensions  
Gearbox with pre-stage



## Gearbox with pre-stage

**g500-B110, 3-stage**

**g500-B240 ... B4300, 4-stage**

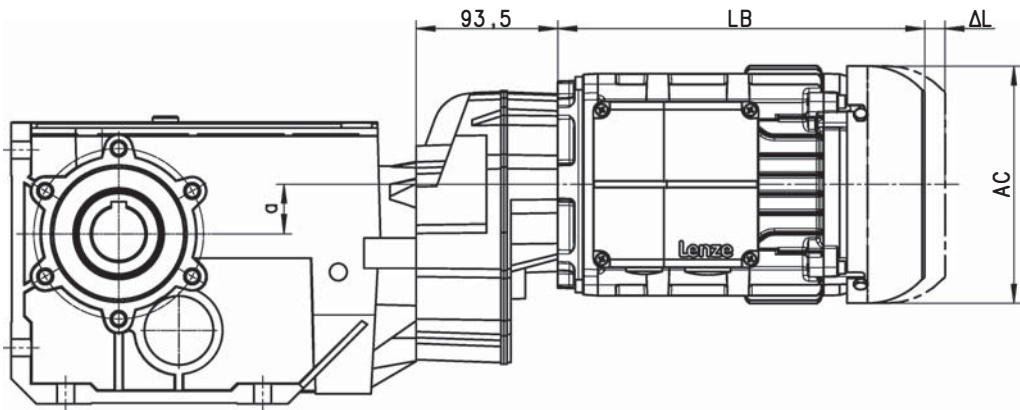


The geared motor dimensions can be found in the basic dimensions, except the total length "L" and the center distance "a".

► [Basic dimensions](#)  90

The total length "L" in the basic dimensions is extended by the 93.5 mm of the pre-stage.

Pay attention to the altered center distance "a" between the gearbox and motor shaft.



8801277-00

| Gearboxes       |   |    | g500-B110 | g500-B240 | g500-B450 | g500-B600 | g500-B820 | g500-B1500 | g500-B2700 | g500-B4300 |
|-----------------|---|----|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|
|                 |   |    | 3-stage   | 4-stage   |           |           |           |            |            |            |
| Center distance | a | mm | 81        | 85        | 32.4      | 43        | 35        | 23         | 19.9       | 16         |



# Technical data

Dimensions  
Additional lengths

## Additional lengths



The motor code indicates the short designation of the brake and feedback.  
Detailed information can be found for

► [Product codes](#) 236

► [Brakes](#) 227

► [Feedback](#) 230

### MCA10

| Motor                       |     |    | MCA     |  |
|-----------------------------|-----|----|---------|--|
|                             |     |    | 10I40-  |  |
| Cooling type                |     |    | natural |  |
| Feedback (without brake B0) |     |    |         |  |
| R□0                         | Δ L | mm | 0       |  |
| SR□ / T20 / E□□             | Δ L | mm | 54      |  |
| Brake (P□) and feedback     |     |    |         |  |
| R□0 / C40                   | Δ L | mm | 25      |  |
| SR□ / T20 / E□□             | Δ L | mm | 78      |  |

### MCA13

| Motor                       |     |    | MCA    |         |
|-----------------------------|-----|----|--------|---------|
|                             |     |    | 13I34- | 13I41-  |
| Cooling type                |     |    | Forced | Natural |
| Feedback (without brake B0) |     |    |        |         |
| R□0                         | Δ L | mm | 0      | 0       |
| SR□ / T20 / E□□             | Δ L | mm | 54     | 54      |
| Brake (P□) and feedback     |     |    |        |         |
| R□0 / C40                   | Δ L | mm | 35     | 35      |
| SR□ / T20 / E□□             | Δ L | mm | 90     | 90      |

### MCA14

| Motor                       |     |    | MCA    |         |        |         |
|-----------------------------|-----|----|--------|---------|--------|---------|
|                             |     |    | 14L16- | 14L20-  | 14L35- | 14L41-  |
| Cooling type                |     |    | Forced | Natural | Forced | Natural |
| Feedback (without brake B0) |     |    |        |         |        |         |
| R□0                         | Δ L | mm | 0      | 0       | 0      | 0       |
| SR□ / T20 / E□□             | Δ L | mm | 55     | 55      | 55     | 55      |
| Brake (P□) and feedback     |     |    |        |         |        |         |
| R□0                         | Δ L | mm | 33     | 33      | 33     | 33      |
| SR□ / T20 / E□□             | Δ L | mm | 89     | 89      | 89     | 89      |

### MCA17

| Motor                       |     |    | MCA    |         |        |         |
|-----------------------------|-----|----|--------|---------|--------|---------|
|                             |     |    | 17N17- | 17N23-  | 17N35- | 17N41-  |
| Cooling type                |     |    | Forced | Natural | Forced | Natural |
| Feedback (without brake B0) |     |    |        |         |        |         |
| R□0                         | Δ L | mm | 0      | 0       | 0      | 0       |
| SR□ / T20 / E□□             | Δ L | mm | 54     | 54      | 54     | 54      |
| Brake (P□) and feedback     |     |    |        |         |        |         |
| R□0                         | Δ L | mm | 35     | 35      | 35     | 35      |
| SR□ / T20 / E□□             | Δ L | mm | 90     | 90      | 90     | 90      |

# Technical data

Dimensions

Additional lengths



## MCA19

| Motor                       |     |    | MCA    |         |        |         |
|-----------------------------|-----|----|--------|---------|--------|---------|
|                             |     |    | 19S17- | 19S23-  | 19S35- | 19S42-  |
| Cooling type                |     |    | Blower | natural | Blower | natural |
| Feedback (without brake B0) |     |    |        |         |        |         |
| R□0                         | Δ L | mm | 0      | 0       | 0      | 0       |
| SR□ / T20 / E□□             | Δ L | mm | 50     | 50      | 50     | 50      |
| Brake (P□) and feedback     |     |    |        |         |        |         |
| R□0                         | Δ L | mm | 38     | 38      | 38     | 38      |
| SR□ / T20 / E□□             | Δ L | mm | 88     | 88      | 88     | 88      |

## MCA21

| Motor                       |     |    | MCA    |         |        |         |
|-----------------------------|-----|----|--------|---------|--------|---------|
|                             |     |    | 21X17- | 21X25-  | 21X35- | 21X42-  |
| Cooling type                |     |    | Forced | Natural | Forced | Natural |
| Feedback (without brake B0) |     |    |        |         |        |         |
| R□0                         | Δ L | mm | 0      | 0       | 0      | 0       |
| SR□ / T20 / E□□             | Δ L | mm | 49     | 49      | 49     | 49      |
| Brake (P□) and feedback     |     |    |        |         |        |         |
| R□0                         | Δ L | mm | 42     | 42      | 42     | 42      |
| SR□ / T20 / E□□             | Δ L | mm | 92     | 92      | 92     | 92      |



# Technical data

Weights  
Basic weights

## Weights

### Basic weights



The basic weights are listed in the selection tables.

Weights with lubricant for mounting position M1, all data approximate values.  
The exact values can be found in the delivery documents

► [Selection tables](#)  55

Observe ► [Additional weights](#)  207!

### Additional weights

#### Gearboxes

| Gearboxes                     |   |    | g500-B45 | g500-B110 | g500-B240 | g500-B450 |
|-------------------------------|---|----|----------|-----------|-----------|-----------|
| Solid shaft                   | m | kg | 0.4      | 0.5       | 1.4       | 1.0       |
| Shrink disc                   | m | kg | 0.2      | 0.2       | 0.7       | 0.6       |
| Flange                        | m | kg | 0.3      | 0.4       | 0.7       | 0.9       |
| Torque plate                  |   |    |          |           |           |           |
| Threaded pitch circle         | m | kg | 0.3      | 0.5       | 1.3       | 2.5       |
| Housing foot                  | m | kg | -        | -         | 2.4       | 1.1       |
| Housing foot, GKS compatible  | m | kg | -        | -         | -         | -         |
| Shaft cover                   |   |    |          |           |           |           |
| Shrink disc cover             | m | kg | 0.1      | 0.1       | 0.1       | 0.1       |
| Hollow shaft cover, hoseproof | m | kg | 0.1      | 0.1       | 0.1       | 0.2       |

| Gearboxes                     |   |    | g500-B600 | g500-B820 | g500-B1500 | g500-B2700 | g500-B4300 |
|-------------------------------|---|----|-----------|-----------|------------|------------|------------|
| Solid shaft                   | m | kg | 1.5       | 1.9       | 3.7        | 6.0        | 15.5       |
| Shrink disc                   | m | kg | 0.6       | 1.2       | 1.7        | 2.3        | 4.3        |
| Flange                        | m | kg | 6.1       | 6.1       | 11.5       | 15.0       | 29.0       |
| Torque plate                  |   |    |           |           |            |            |            |
| Threaded pitch circle         | m | kg | 2.5       | 2.5       | 4.5        | -          | -          |
| Housing foot                  | m | kg | 2.8       | 3.0       | 4.3        | 10         | 13         |
| Housing foot, GKS compatible  | m | kg | 5,0       | 5,0       | 8.2        | 16.5       | 30.5       |
| Shaft cover                   |   |    |           |           |            |            |            |
| Shrink disc cover             | m | kg | 0.1       | 0.1       | 0.2        | 0.3        | 0.4        |
| Hollow shaft cover, hoseproof | m | kg | 0.3       | 0.3       | 0.6        | 0.6        | 0.8        |

#### Motors

| Motor                          |   |    | MCA10 | MCA13 | MCA14 | MCA17 | MCA19 | MCA21 |
|--------------------------------|---|----|-------|-------|-------|-------|-------|-------|
| Permanent magnet holding brake | m | kg | 0.8   | 1.5   | 2.4   | 2.4   | 4.8   | 5.0   |

## Product extensions

### Torque plates



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## Product extensions

### Torque plates

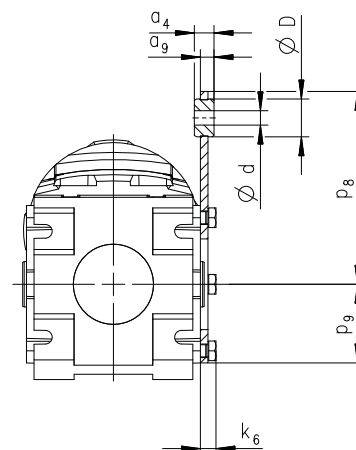
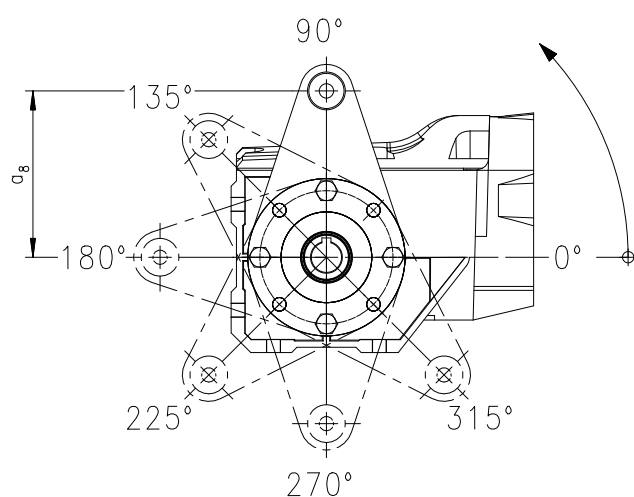
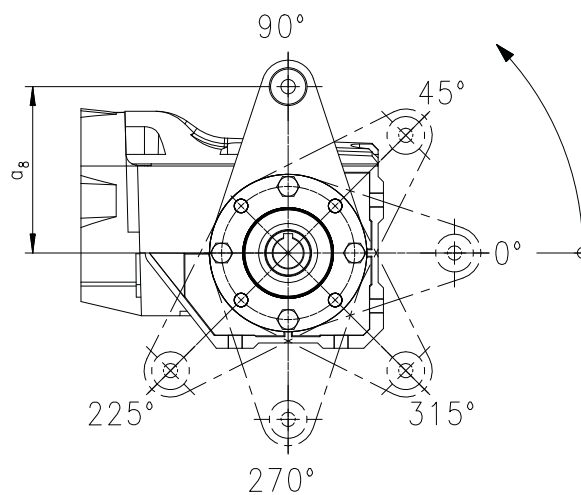
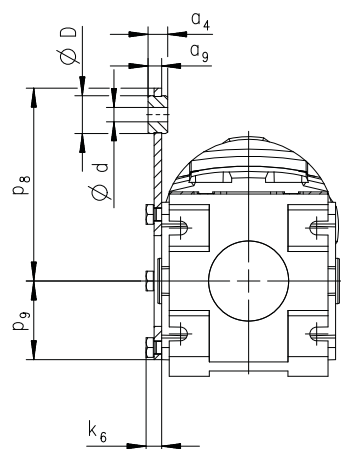
The torque support is usually effected by means of the foot or flange. The torque plates that can be fitted are another possibility. In this case, the torque support is provided only via one point and is suitable for shaft-mounted gearboxes, among other things. Supplied rubber buffers ensure a stress-free installation and absorb slight impacts.

The torque plates are available in two versions, for being installed at the existing threaded pitch circle or for the foot at the gearbox.

In addition, torque support for the g500-B45 gearbox can be effected via the holding fixture of the housing which is integrated on both sides.



**Torque plate on threaded pitch circle**  
**g500-B45 ... B110**



e4001537-00

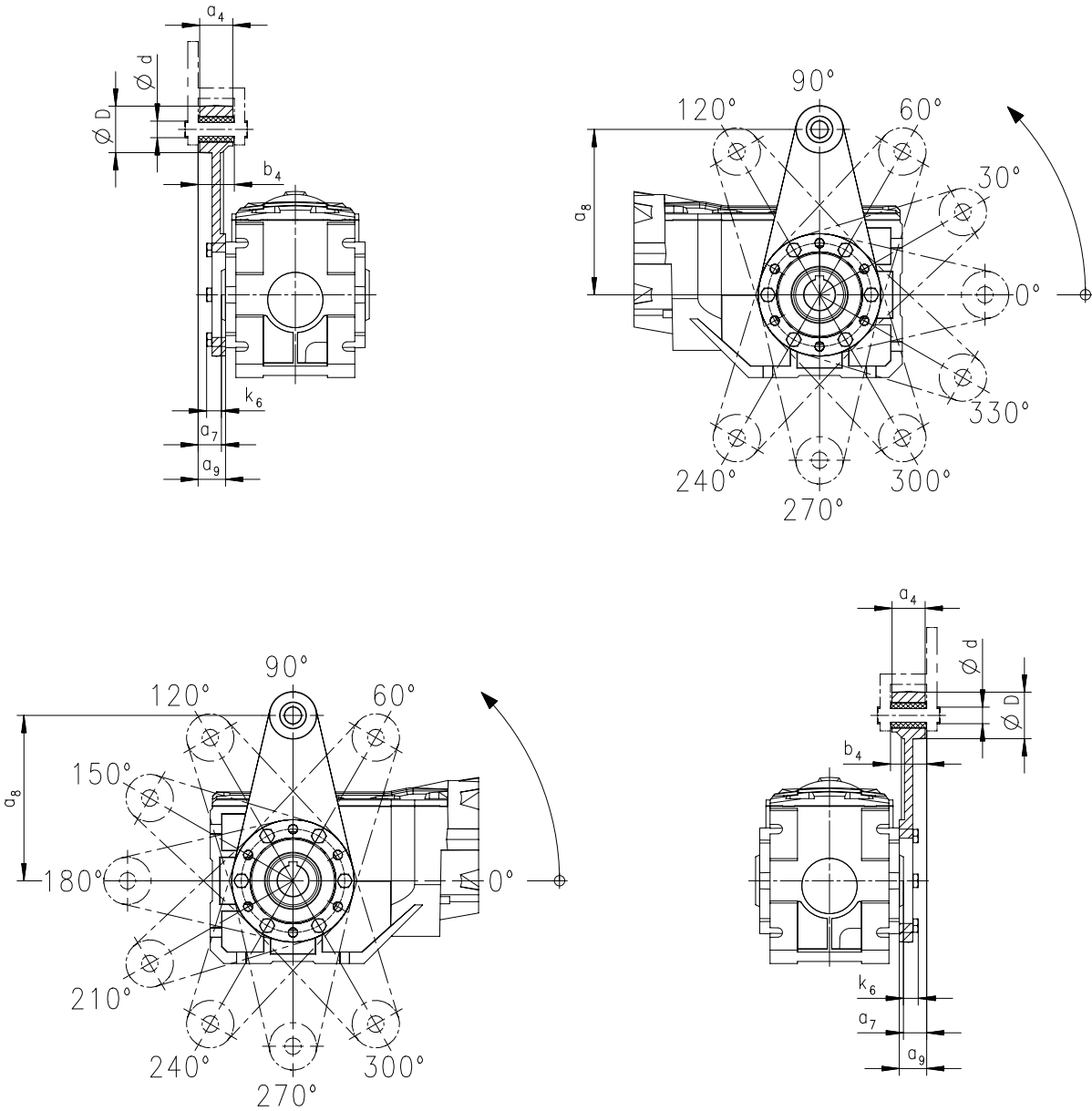
| Gearboxes | Dimensions |       |       |      |      |       |       |       |
|-----------|------------|-------|-------|------|------|-------|-------|-------|
|           | $a_4$      | $a_8$ | $a_9$ | $d$  | $D$  | $p_8$ | $p_9$ | $k_6$ |
|           | mm         | mm    | mm    | mm   | mm   | mm    | mm    | mm    |
| g500-B45  | 12.0       | 100   | 8.0   | 8.0  | 20,0 | 115   | 42.0  | 9.0   |
| g500-B110 | 13.0       | 110   | 9.0   | 10.0 | 25.0 | 128   | 54.0  | 11.0  |

# Product extensions

## Torque plates



**g500-B240 ... B600**



e4001538-00

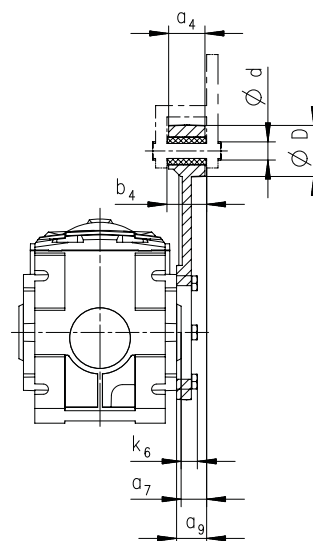
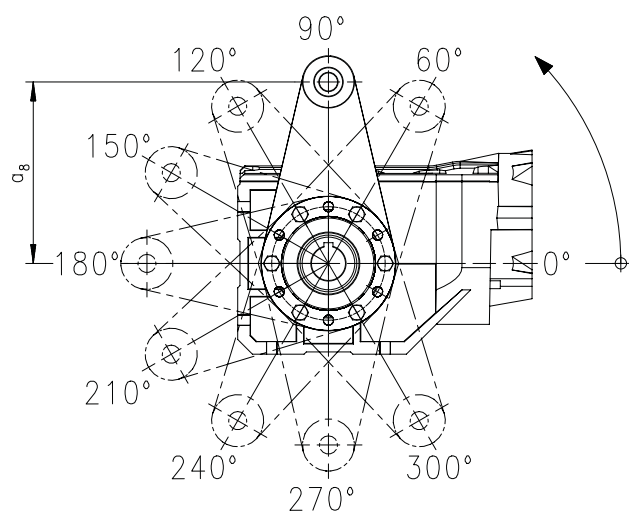
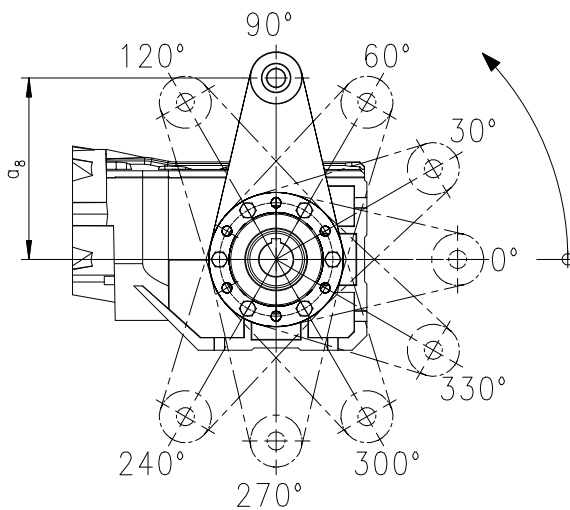
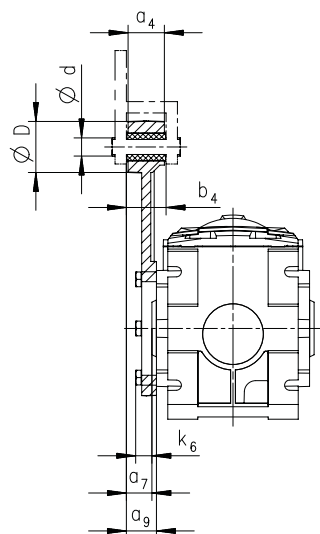
| Gearboxes | Dimensions     |                |                |                |                |      |      |                |
|-----------|----------------|----------------|----------------|----------------|----------------|------|------|----------------|
|           | a <sub>4</sub> | a <sub>7</sub> | a <sub>8</sub> | a <sub>9</sub> | b <sub>4</sub> | d    | D    | k <sub>6</sub> |
|           | mm             | mm             | mm             | mm             | mm             | mm   | mm   | mm             |
| g500-B240 | 34.0           | 23.5           | 160            | 27.5           | 38.5           | 16.0 | 45.0 | 15.0           |
| g500-B450 | 40,0           | 29.0           | 200            | 32.0           | 44.5           | 20,0 | 50.0 | 18.0           |
| g500-B600 | 38.0           | 26.5           | 200            | 31.5           | 40,0           | 20,0 | 50.0 | 19.0           |



# Product extensions

## Torque plates

### g500-B820 ... B1500



e4001538-00

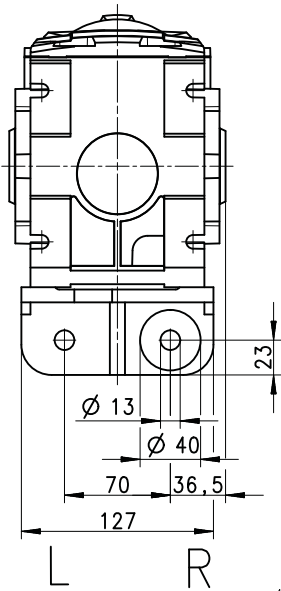
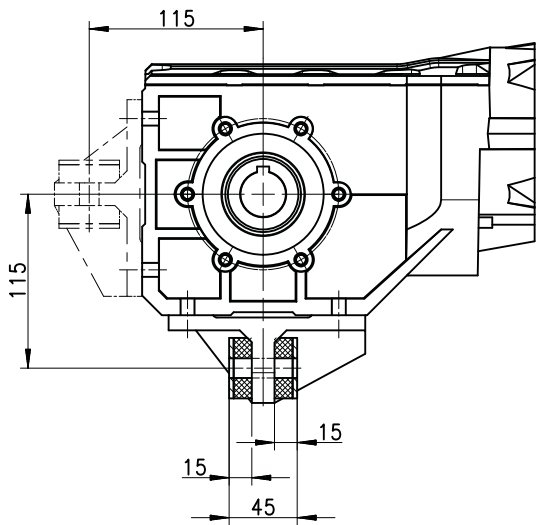
| Gearboxes  | Dimensions |       |       |       |       |      |      |       |
|------------|------------|-------|-------|-------|-------|------|------|-------|
|            | $a_4$      | $a_7$ | $a_8$ | $a_9$ | $b_4$ | $d$  | $D$  | $k_6$ |
|            | mm         | mm    | mm    | mm    | mm    | mm   | mm   | mm    |
| g500-B820  | 38.0       | 28.0  | 200   | 31.5  | 40.0  | 20.0 | 50.0 | 20.5  |
| g500-B1500 | 44.0       | 32.0  | 250   | 36.0  | 46.0  | 25.0 | 65.0 | 24.0  |

# Product extensions

Torque plates



## Torque plate on housing foot g500-B240



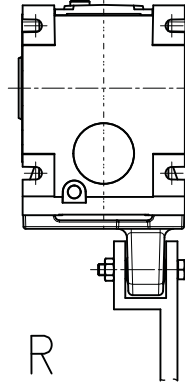
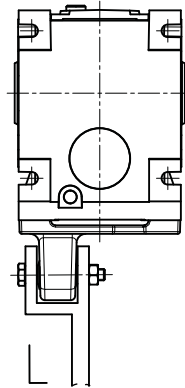
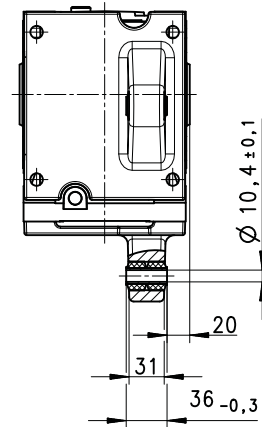
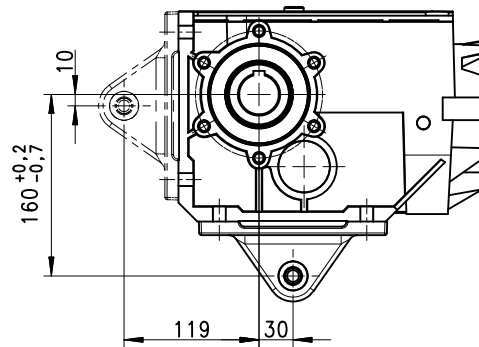
e4001541-01



# Product extensions

Torque plates

## g500-B450



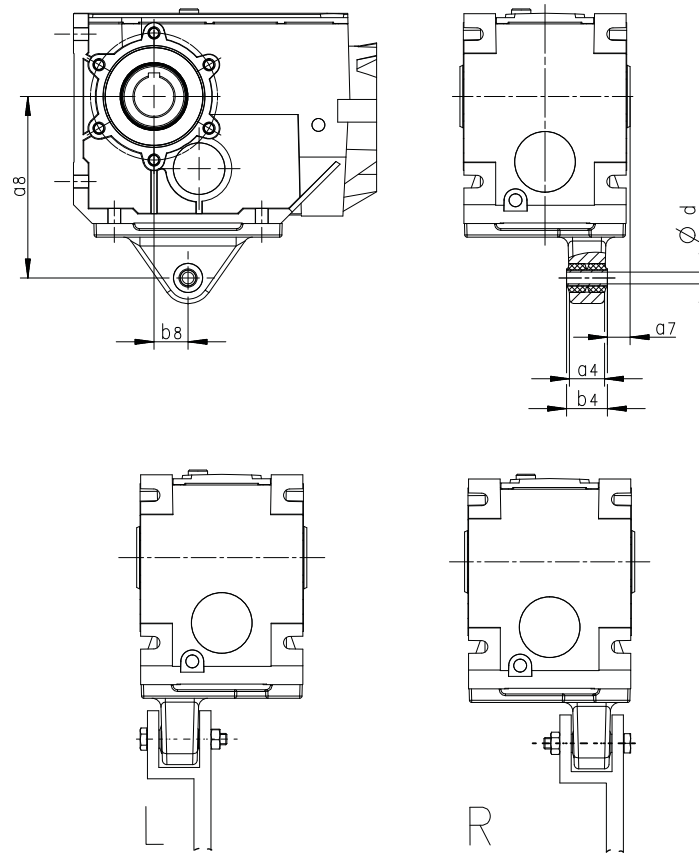
e4001554\_01

# Product extensions

Torque plates



## g500-B600 ... B4300



e4002718-01

| Gearboxes  | Dimensions |                |                |                |                |                |
|------------|------------|----------------|----------------|----------------|----------------|----------------|
|            | d          | a <sub>8</sub> | b <sub>8</sub> | a <sub>4</sub> | b <sub>4</sub> | a <sub>7</sub> |
|            | mm         | mm             | mm             | mm             | mm             | mm             |
| g500-B600  | 16.4       | 192            | 40,0           | 55.0           | 60.0           | 18.0           |
| g500-B820  | 16.4       | 200            | 45.0           | 55.0           | 60.0           | 25.0           |
| g500-B1500 | 16.4       | 250            | 52.5           | 55.0           | 60.0           | 25.0           |
| g500-B2700 | 25.0       | 300            | 60.0           | 72.0           | 80.0           | 30.0           |
| g500-B4300 | 25.0       | 350            | 70.0           | 92.0           | 100            | 40,0           |



## Product extensions

Torque plates

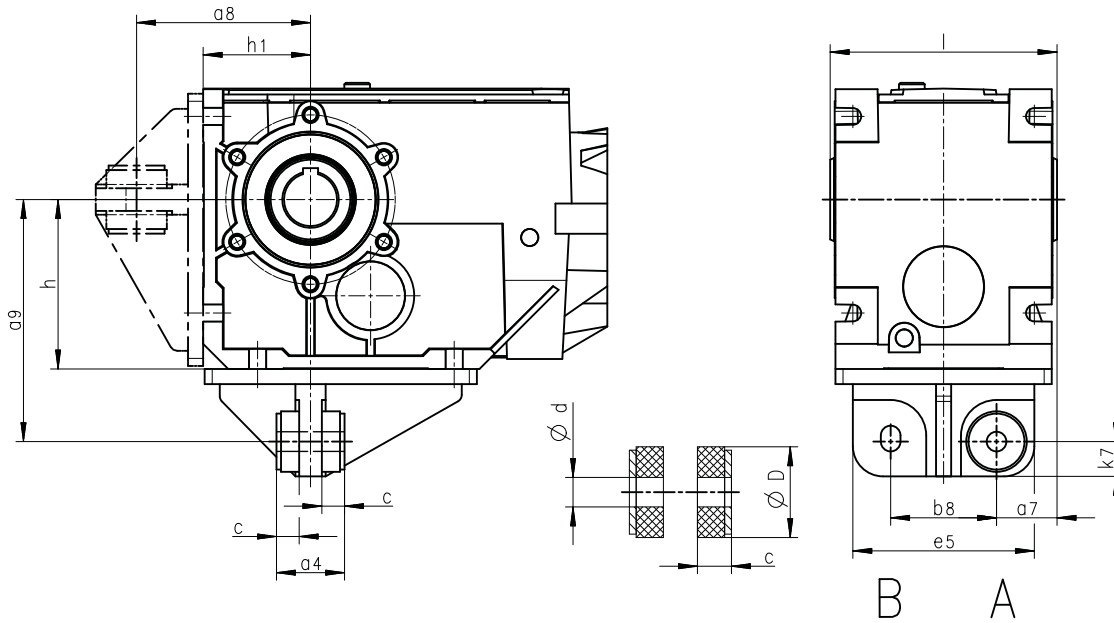
### GKS compatible



The connection dimensions are identical to the previous product GKS for these torque plates.

The GKS gearbox can be replaced by the gearbox from the g500-B series.

### g500-B600 ... B4300



| Gearboxes  |                 | Dimensions |       |       |       |       |       |     |                 |                 |       |       |       |
|------------|-----------------|------------|-------|-------|-------|-------|-------|-----|-----------------|-----------------|-------|-------|-------|
|            | Replacement for | $a_4$      | $a_7$ | $a_8$ | $a_9$ | $b_4$ | $b_8$ | $c$ | $\varnothing d$ | $\varnothing D$ | $e_5$ | $k_7$ | $k_8$ |
|            |                 | mm         | mm    | mm    | mm    | mm    | mm    | mm  | mm              | mm              | mm    | mm    | mm    |
| g500-B600  | GKS06           | 72         | 45.0  | 145   | 195   | 72    | 80    | 27  | 17              | 50              | 135   | 28.0  | 26.0  |
| g500-B820  | GKS06           | 72         | 50.0  | 145   | 195   | 72    | 80    | 27  | 17              | 50              | 140   | 27.5  | 27.5  |
| g500-B1500 | GKS07           | 78         | 55.0  | 170   | 240   | 78    | 100   | 28  | 21              | 60              | 180   | 30.0  | 32.0  |
| g500-B2700 | GKS09           | 86         | 60.0  | 214   | 300   | 86    | 120   | 29  | 26              | 72              | 205   | 42.0  | 48.0  |
| g500-B4300 | GKS11           | 94         | 77.5  | 260   | 375   | 94    | 145   | 30  | 33              | 92              | 255   | 50.0  | 60.0  |

# Product extensions

## Shaft covers



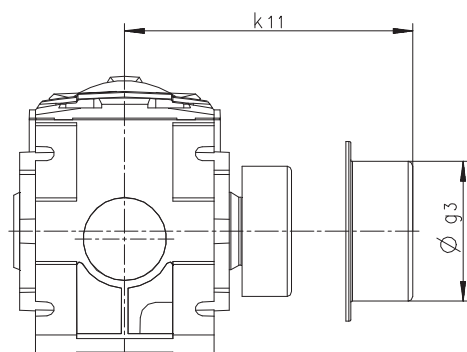
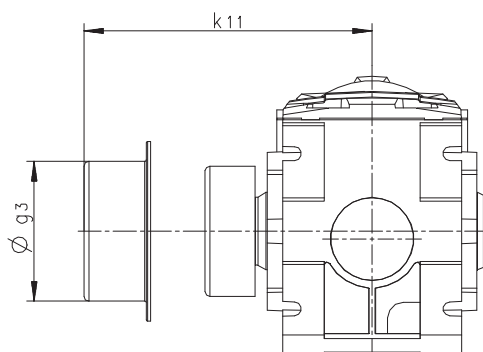
### Shaft covers

The shrink disc cover is provided for the shrink disc to be protected from contact.

The hoseproof hollow shaft cover protects the hollow shaft from objects falling in. It is sealed by a flat gasket between cover and housing. Thus, the hollow shaft is protected from dust and water jets on this side.

#### Shrink disc cover

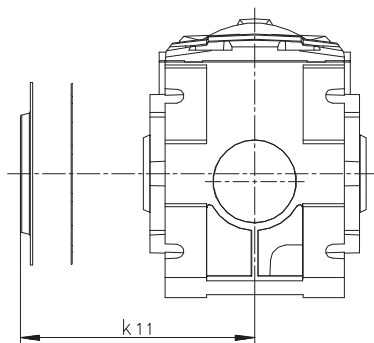
**g500-B45 ... B4300**



| Product    | Dimensions |      |
|------------|------------|------|
|            | g3         | k11  |
|            | mm         | mm   |
| g500-B45   | 65.0       | 87.5 |
| g500-B110  | 79.0       | 97.5 |
| g500-B240  | 90.0       | 111  |
| g500-B450  | 90.0       | 108  |
| g500-B600  | 110        | 124  |
| g500-B820  | 110        | 131  |
| g500-B1500 | 128        | 148  |
| g500-B2700 | 155        | 171  |
| g500-B4300 | 188        | 205  |



## Hollow shaft cover, hoseproof g500-B45 .... B4300



| Product    | Dimensions |  |
|------------|------------|--|
|            | $k_{11}$   |  |
|            | mm         |  |
| g500-B45   | 55.0       |  |
| g500-B110  | 65.0       |  |
| g500-B240  | 75.0       |  |
| g500-B450  | 79.5       |  |
| g500-B600  | 90.0       |  |
| g500-B820  | 97.0       |  |
| g500-B1500 | 113        |  |
| g500-B2700 | 131        |  |
| g500-B4300 | 161        |  |

# Product extensions

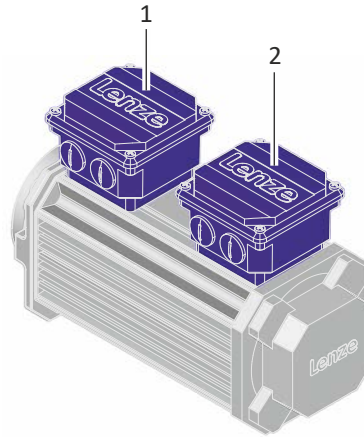
Motor connection  
Connection via terminal box



## Motor connection

### Connection via terminal box

#### Position of the connections



| Position | Meaning                                                                          |
|----------|----------------------------------------------------------------------------------|
| 1        | Power connection<br>Brake connection<br>PE connection                            |
| 2        | Feedback connection<br>Connection of temperature monitoring<br>Blower connection |

#### Cable glands MCA10 ... 19/21



The openings for the cable glands are closed with plugs and arranged on one side. If required, the terminal box can be rotated step by step by 90 ° after loosening the screws in the terminal box.

| Motor               |                 | MCA10<br>MCA13         | MCA14<br>MCA17 | MCA19<br>MCA21               |
|---------------------|-----------------|------------------------|----------------|------------------------------|
| Screwed connections |                 | 2x M20 x 1.5           |                | 1x M32 x 1.5<br>1x M25 x 1.5 |
| cable cross-section | mm <sup>2</sup> | 0.08 ... 2.5           |                | 0.2 ... 10                   |
| Stripping length    | mm              | 10 ... 11              |                |                              |
| Terminal design     |                 | Spring-loaded terminal |                |                              |

| Terminal box, power |      |                     |
|---------------------|------|---------------------|
| Contact             | Name | Meaning             |
| U1                  | L1   | Motor winding phase |
| V1                  | L2   |                     |
| W1                  | L3   |                     |
| PE                  | PE   | PE conductor        |

| Terminal box, DC brake |      |         |
|------------------------|------|---------|
| Contact                | Name | Meaning |
| BD1                    | +    | Brake + |
| BD2                    | -    | Brake - |



## Product extensions

Motor connection  
Connection via terminal box

| Terminal box, AC brake |      |                                  |
|------------------------|------|----------------------------------|
| Contact                | Name | Meaning                          |
| ~                      | L1   | Mains                            |
|                        | N    |                                  |
| +                      | +    | Holding brake (factory-wired)    |
| -                      | -    |                                  |
| Schalter               |      | Switching contact - DC switching |

| Terminal box, resolver |          |                                                                               |
|------------------------|----------|-------------------------------------------------------------------------------|
| Contact                | Name     | Meaning                                                                       |
| B1                     | +Ref     | Transformer windings (reference windings)                                     |
| B2                     | -Ref     |                                                                               |
| B3                     | +VCC ETS | Supply: Electronic nameplate (only for variant with electronic nameplate ETS) |
| B4                     | +COS     | Cosine stator windings                                                        |
| B5                     | -COS     |                                                                               |
| B6                     | +SIN     | Sine stator windings                                                          |
| B7                     | -SIN     |                                                                               |
| B8                     |          | Not assigned                                                                  |

| Terminal box, SinCos absolute value encoder with Hiperface |                |                            |
|------------------------------------------------------------|----------------|----------------------------|
| Contact                                                    | Name           | Meaning                    |
| B1                                                         | + UB           | Supply +                   |
| B2                                                         | GND            | Mass                       |
| B3                                                         | A              | Track A / + COS            |
| B4                                                         | A <sup>-</sup> | Track A inverse /-COS      |
| B5                                                         | B              | Track B / +SIN             |
| B6                                                         | B <sup>-</sup> | Track B inverse/-SIN       |
| B7                                                         | Z              | Zero track / + RS485       |
| B8                                                         | Z <sup>-</sup> | Zero track inverse /-RS485 |
| B10                                                        |                | Incremental encoder shield |

| Terminal box, SinCos absolute value encoder with EnDat |                    |                               |
|--------------------------------------------------------|--------------------|-------------------------------|
| Contact                                                | Name               | Meaning                       |
| B1                                                     | + UB               | Supply +                      |
| B2                                                     | GND                | Mass                          |
| B3                                                     | A                  | Track A / + COS               |
| B4                                                     | A <sup>-</sup>     | Track A inverse /-COS         |
| B5                                                     | B                  | Track B / +SIN                |
| B6                                                     | B <sup>-</sup>     | Track B inverse/-SIN          |
| B7                                                     | Daten              | EnDat interface data          |
| B8                                                     | Daten <sup>-</sup> | Data inverse EnDat interface  |
| B20                                                    | Takt               | EnDat interface cycle         |
| B21                                                    | Takt <sup>-</sup>  | Inverse EnDat interface cycle |
| B22                                                    | Up Sensor          | Up Sensor                     |
| B23                                                    | 0 V Sensor         | 0 V sensor                    |
| B24                                                    | Schirm             | Encoder housing shield        |
| B25                                                    |                    | Not assigned                  |

| Terminal box with temperature monitoring R |      |                      |
|--------------------------------------------|------|----------------------|
| Contact                                    | Name | Meaning              |
| R1                                         | +    | Temperature sensor + |
| R2                                         | -    | Temperature sensor - |

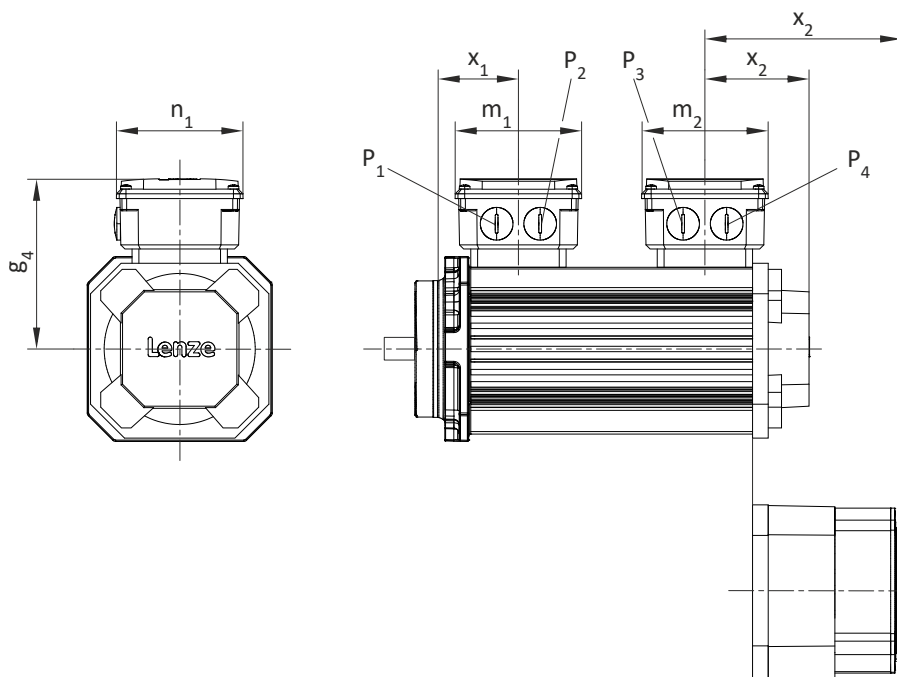
# Product extensions

Motor connection  
Connection via terminal box



| Terminal box, 1-phase separate fan |      |              |
|------------------------------------|------|--------------|
| Contact                            | Name | Meaning      |
| PE                                 | PE   | PE conductor |
| U1                                 | L1   | Mains        |
| U2                                 | N    |              |

## Terminal box dimensions MCA10 ... 17



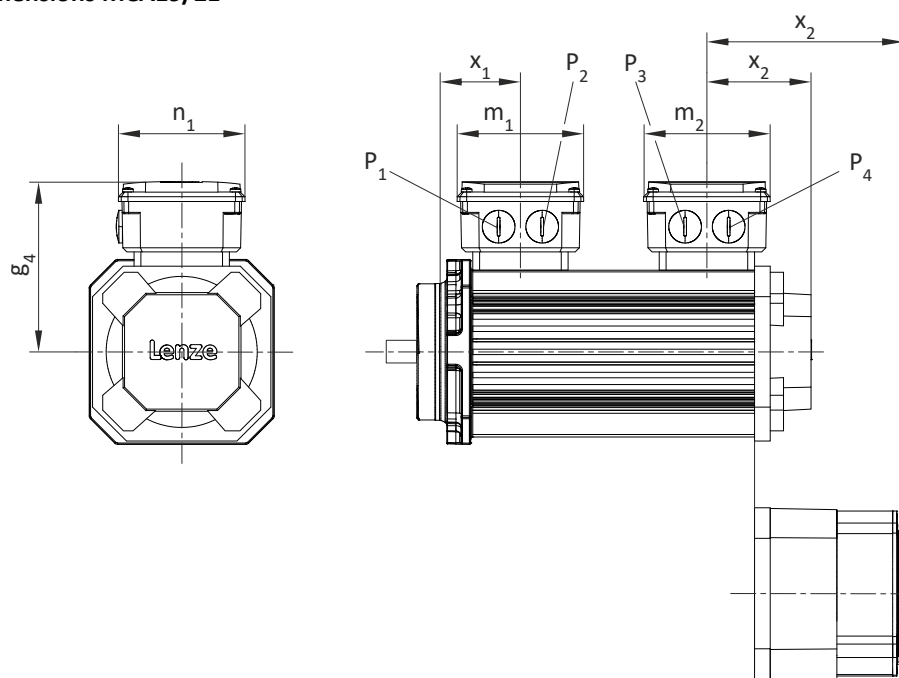
| Motor                                       |                |    | MCA     |        |         |                  |                  |                  |                  |
|---------------------------------------------|----------------|----|---------|--------|---------|------------------|------------------|------------------|------------------|
|                                             |                |    | 10I40-  | 13I34- | 13I41-  | 14L16-<br>14L35- | 14L20-<br>14L41- | 17N17-<br>17N35- | 17N23-<br>17N41- |
| Cooling type                                |                |    | Natural | Forced | Natural | Forced           | Natural          | Forced           | Natural          |
| Motor/connection distance                   | g <sub>4</sub> | mm | 113     | 125    |         | 133              |                  | 141              |                  |
| Power connection, brake                     |                |    |         |        |         |                  |                  |                  |                  |
| Screwed connections                         | P <sub>1</sub> | mm | M20x1.5 |        |         |                  |                  |                  |                  |
|                                             | P <sub>2</sub> | mm | M20x1.5 |        |         |                  |                  |                  |                  |
| Terminal box                                | m <sub>1</sub> | mm | 93      |        |         |                  |                  |                  |                  |
|                                             | n <sub>1</sub> | mm | 93      |        |         |                  |                  |                  |                  |
|                                             | x <sub>1</sub> |    | 51      | 54     |         | 69               |                  | 72               |                  |
| Feedback connection, temperature monitoring |                |    |         |        |         |                  |                  |                  |                  |
| Screwed connections                         | P <sub>3</sub> | mm | M20x1.5 |        |         |                  |                  |                  |                  |
|                                             | P <sub>4</sub> | mm | M20x1.5 |        |         |                  |                  |                  |                  |
| Terminal box                                | m <sub>2</sub> | mm | 93      |        |         |                  |                  |                  |                  |
|                                             | n <sub>1</sub> | mm | 93      |        |         |                  |                  |                  |                  |
| Resolver                                    | x <sub>2</sub> | mm | 78      | 145    | 77      | 147              | 85               | 171              | 85               |
| Absolute value encoder/incremental encoder  | x <sub>2</sub> | mm | 132     | 199    | 131     | 202              | 140              | 225              | 139              |



## Product extensions

Motor connection  
Connection via terminal box

### Terminal box dimensions MCA19/21



| Motor                                       |                |    | MCA     |         |        |         |
|---------------------------------------------|----------------|----|---------|---------|--------|---------|
|                                             |                |    | 19S17-  | 19S23-  | 21X17- | 21X25-  |
|                                             |                |    | 19S35-  | 19S42-  | 21X35- | 21X42-  |
| Cooling type                                |                |    | Forced  | Natural | Forced | Natural |
| Motor/connection distance                   | g <sub>4</sub> | mm | 158     |         | 169    |         |
| Powere connection, brake                    |                |    |         |         |        |         |
| Screwed connections                         | p <sub>1</sub> | mm | M25x1.5 |         |        |         |
|                                             | p <sub>2</sub> | mm | M32x1.5 |         |        |         |
| Terminal box                                | m <sub>1</sub> | mm | 115     |         |        |         |
|                                             | n <sub>1</sub> | mm | 115     |         |        |         |
|                                             | x <sub>1</sub> |    | 88      |         | 118    |         |
| Feedback connection, temperature monitoring |                |    |         |         |        |         |
| Screwed connections                         | p <sub>3</sub> | mm | M20x1.5 |         |        |         |
|                                             | p <sub>4</sub> | mm | M20x1.5 |         |        |         |
| Terminal box                                | m <sub>2</sub> | mm | 115     |         |        |         |
|                                             | n <sub>1</sub> | mm | 115     |         |        |         |
| Resolver                                    | x <sub>2</sub> | mm | 190     | 93      | 193    | 97      |
| Absolute value encoder/incremental encoder  | x <sub>2</sub> | mm | 240     | 143     | 243    | 147     |

# Product extensions

Motor connection  
Connection via ICN connector



## Connection via ICN connector

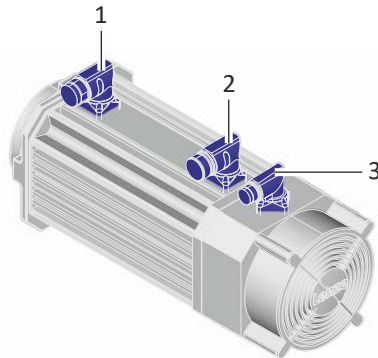
The electrical connection to the servo motors as a standard is established via ICN connectors.

The connectors can be rotated by 270 ° and are provided with a bayonet catch. Since the catch of the connector is also compatible with conventional box nuts, existing mating connectors with a screw plug can continue to be used without any problems.



In order to provide for a quick and error-free connection of Lenze motors to Lenze inverters, we recommend using prefabricated Lenze system cables.

## Position of the connections



| Position | Meaning                                                     |
|----------|-------------------------------------------------------------|
| 1        | Power connection<br>Brake connection<br>PE connection       |
| 2        | Feedback connection<br>Connection of temperature monitoring |
| 3        | Blower connection                                           |



## Product extensions

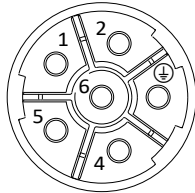
Motor connection  
Connection via ICN connector

### Power and brake connection

Valid for MCA10 ... 17

ICN-M23 connector assignment

6-pole



| ICN M23 6-pole |      |                |
|----------------|------|----------------|
| Contact        | Name | Meaning        |
| PE             | PE   | PE conductor   |
| 1              | BD1  | DC +/-AC brake |
| 2              | BD2  | DC -/AC brake  |
| 4              | U    | Power phase U  |
| 5              | V    | Power phase V  |
| 6              | W    | Power phase W  |

# Product extensions

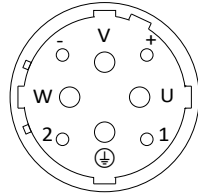
Motor connection  
Connection via ICN connector



Valid for MCA19 ... 21

ICN-M40 connector assignment

8-pole



| ICN M40 8-pole |      |                 |
|----------------|------|-----------------|
| Contact        | Name | Meaning         |
| +              | BD1  | Holding brake + |
| -              | BD2  | Holding brake - |
| PE             | PE   | PE conductor    |
| U              | U    | Power phase U   |
| V              | V    | Power phase V   |
| W              | W    | Power phase W   |
| 1              |      | Not assigned    |
| 2              |      | Not assigned    |



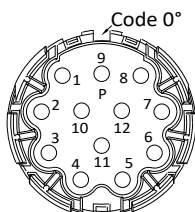
## Product extensions

Motor connection  
Connection via ICN connector

### Feedback and temperature monitoring connection

ICN-M23 connector assignment

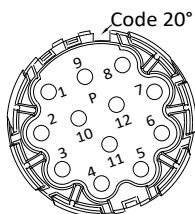
Resolver



| ICN M23 for resolvers |          |                                                                                         |
|-----------------------|----------|-----------------------------------------------------------------------------------------|
| Contact               | Name     | Meaning                                                                                 |
| 1                     | +Ref     | Transformer windings                                                                    |
| 2                     | -Ref     | Transformer windings                                                                    |
| 3                     | +VCC ETS | Supply: Electronic nameplate (Only for motors and inverters that support this function) |
| 4                     | +COS     | Cosine stator windings                                                                  |
| 5                     | -COS     | Cosine stator windings                                                                  |
| 6                     | +SIN     | Sine stator windings                                                                    |
| 7                     | -SIN     | Sine stator windings                                                                    |
| 8                     |          | Not assigned                                                                            |
| 9                     |          | Not assigned                                                                            |
| 10                    | Schirm   | Encoder housing shield                                                                  |
| 11                    | +        | Temperature monitoring: PT1000                                                          |
| 12                    | -        | Temperature monitoring: PT1000                                                          |

ICN-M23 connector assignment

Incremental and SinCos absolute value encoder Hiperface©



| ICN M23 for incremental and SinCos absolute value encoder Hiperface |                |                                |
|---------------------------------------------------------------------|----------------|--------------------------------|
| Contact                                                             | Name           | Meaning                        |
| 1                                                                   | B              | Track B / +SIN                 |
| 2                                                                   | A <sup>-</sup> | Track A inverse /-COS          |
| 3                                                                   | A              | Track A / + COS                |
| 4                                                                   | +UB            | Supply +                       |
| 5                                                                   | GND            | Mass                           |
| 6                                                                   | Z <sup>-</sup> | Zero track inverse /-RS485     |
| 7                                                                   | Z              | Zero track / + RS485           |
| 8                                                                   |                | Not assigned                   |
| 9                                                                   | B <sup>-</sup> | Track B inverse/-SIN           |
| 10                                                                  | Schirm         | Encoder housing shield         |
| 11                                                                  | +              | Temperature monitoring: PT1000 |
| 12                                                                  | -              | Temperature monitoring: PT1000 |

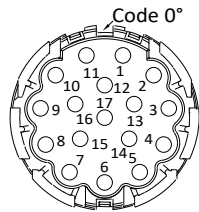
# Product extensions

Motor connection  
Connection via ICN connector



## ICN-M23 connector assignment

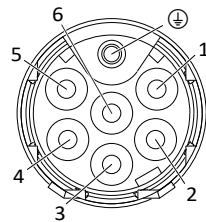
SinCos absolute value encoder with EnDat interface



| ICN M23 SinCos absolute value encoder with EnDat |            |                               |
|--------------------------------------------------|------------|-------------------------------|
| Contact                                          | Name       | Meaning                       |
| 1                                                | UP Sensor  | Up Sensor                     |
| 2                                                |            | Not assigned                  |
| 3                                                |            | Not assigned                  |
| 4                                                | 0 V Sensor | 0 V sensor                    |
| 5                                                | +          | PT1000/KTY temperature sensor |
| 6                                                | -          | PT1000/KTY temperature sensor |
| 7                                                | +UB        | Supply +                      |
| 8                                                | Takt       | EnDat interface cycle         |
| 9                                                | Takt-      | Inverse EnDat interface cycle |
| 10                                               | GND        | Mass                          |
| 11                                               | Schirm     | Encoder housing shield        |
| 12                                               | B          | Track B                       |
| 13                                               | B-         | Track B inverse/-SIN          |
| 14                                               | Daten      | EnDat interface data          |
| 15                                               | A          | Track A                       |
| 16                                               | A-         | Track A inverse /-COS         |
| 17                                               | Daten-     | Data inverse EnDat interface  |

## Blower

Pin assignment ICN-M17



| ICN M17 for blowers 1-ph |      |              |
|--------------------------|------|--------------|
| Contact                  | Name | Meaning      |
| PE                       | PE   | PE conductor |
| 1                        | U1   | Fan          |
| 2                        | U2   | Fan          |
| 3                        |      | Not assigned |
| 4                        |      | Not assigned |
| 5                        |      | Not assigned |
| 6                        |      | Not assigned |



## Brakes

Optionally, the motors can be ordered with a permanent magnet brake as holding brake.

### ⚠ CAUTION!

They may not be used as safety elements (particularly with hoist axes) without additional measures being implemented.

The brakes used are not fail-safe brakes in the sense that prospective disruptive factors, e.g. oil ingress, can lead to a reduction in torque!

- ▶ The brakes must only be used as holding brakes for holding the axes at a standstill or in the deenergised state.
- ▶ The brake must not be used as a service brake.

### ⚠ CAUTION!

If no suitable voltage (incorrect value, incorrect polarity) is applied to the brake, the brake will be applied and can be overheated and destroyed by the motor continuing to rotate.

## Motor supply cables

If long motor supply cables are used, pay attention to the ohmic voltage drop along the cable and compensate for it with a higher voltage at the input end of the cable.

The following applies to Lenze system cables:

|                                                                                  |                 |   |                            |
|----------------------------------------------------------------------------------|-----------------|---|----------------------------|
| $U[V] = U_B[V] + 0.08 \frac{[V]}{[A] \times [m]} \times I_{Lg}[m] \times I_B[A]$ | U               | V | Resulting supply voltage   |
|                                                                                  | U <sub>B</sub>  | V | Rated voltage of the brake |
|                                                                                  | I <sub>Lg</sub> | m | Cable length               |
|                                                                                  | I <sub>B</sub>  | A | Rated current of the brake |

## NOTICE

- ▶ The brakes become active when the supply voltage has been switched off (closed-circuit principle).
- ▶ When using the brakes purely as holding brakes, virtually no wear occurs on the friction surfaces.
- ▶ The friction surfaces must always be free from oil and grease because even small amounts of grease or oil will considerably reduce the braking torque.

## NOTICE

In case of these permanent magnet brakes, the rated torque applies solely as holding torque at standstill.

- ▶ Emergency stops at higher speeds are possible but high switching energy increases wear on the friction surfaces and the hub.
- ▶ During braking from full motor speed, e.g. in the event of emergency stops, the braking torque is significantly reduced.

# Product extensions

Brakes  
Permanent magnet brakes



## NOTICE

In case of travel axes, the compliance of the permissible ratio of mass inertia load/brake motor ( $J_L/J_{MB}$ ) ensures that the permissible maximum switching energy of the brake will not be exceeded and at least the values given for the emergency stop functions from the given speed (see rated data) are applied.

For hoist axes, the load torque resulting from the weight acts additionally. In this case, the specifications for ( $J_L/J_{MB}$ ) do not apply.

To simplify matters, the friction energy per switching cycle can be calculated using the formula below and must not exceed the limit value for emergency stops, which depends on the switching rate:

|                                                                                                                       |             |                  |                                   |
|-----------------------------------------------------------------------------------------------------------------------|-------------|------------------|-----------------------------------|
| $Q = \frac{1}{2} \times J_{ges} \times \left( 2\pi \times \frac{\Delta n}{60} \right)^2 \times \frac{M_N}{M_N - M_L}$ | Q           | J                | Friction energy                   |
|                                                                                                                       | $J_{total}$ | kgm <sup>2</sup> | Total mass inertia (motor + load) |
|                                                                                                                       | $\Delta n$  | rpm              | Differential speed                |
|                                                                                                                       | $M_N$       | Nm               | Rated torque of the brake         |
|                                                                                                                       | $M_L$       | nM               | Load torque                       |



The shortest operating times of the brakes are achieved by DC switching of the voltage and an external suppressor circuit (varistor or spark suppressor).

Without suppressor circuit, the operating times may increase. A varistor/ spark suppressor limits the breaking voltage peaks. It must be ensured that the power limit of the suppressor circuit is not exceeded. This limit depends on the brake current, brake voltage, disengagement time and the switching operations per time unit.

Furthermore the suppressor circuit is necessary for interference suppression and for increasing the service life of the relay contacts (external, is not integrated into the motor).



It is not possible to readjust the brake.

## Permanent magnet brakes

### Rated data



Engagement and disengagement times apply to rated voltage ( $\pm 0\%$ ) and suppressor circuit of the brakes with a varistor with DC switching. Without a suppressor circuit, the times may be longer.

The currents are the maximum values when the brake is cold (value used for dimensioning the current supply). The values for a motor at operating temperature are considerably lower.

With 24 V DC brake: smoothed DC voltage, ripple  $\leq 1\%$ .

With 205 V DC brake: connection to 230 V AC via external rectifier (no cURus possible).

Maximum switching energy per emergency stop with  $n = 3000$  rpm for at least 2000 emergency stops.

### Supply voltage DC 24 V



## Product extensions

Brakes  
Permanent magnet brakes

### Supply voltage DC 205 V

| Motor                  |              |                   | MCA10I            | MCA13I | MCA14L | MCA17N | MCA21X |
|------------------------|--------------|-------------------|-------------------|--------|--------|--------|--------|
| Motor code             |              |                   | P5                | P8     | P8     | P8     | P5     |
| Supply voltage range   | $V_{in}$     | V                 | 186.55 ... 215.25 |        |        |        |        |
| Supply voltage         | $V_{rated}$  | V                 | 205               |        |        |        |        |
| Bemessungsdrehmoment   |              |                   |                   |        |        |        |        |
| At 20 °C               | $M_{rated}$  | Nm                | 6                 | 26     | 46     | 88     |        |
| At 120 °C              | $M_{rated}$  | Nm                | 5                 | 22     | 40     | 80     |        |
| Rated current          | $I_{rated}$  | A                 | 0.08              | 0.088  | 0.11   | 0.18   |        |
| Engagement time t1     | $t_1$        | ms                | 20                | 16     | 25     | 23     |        |
| Disengagement time t2  | $t_2$        | ms                | 29                | 70     | 73     | 140    |        |
| Friction energy        | $Q_E$        | kJ                | 0.40              | 0.7    | 1.90   | 2.80   |        |
| Weight                 | m            | kg                | 0.80              | 1.1    | 1.9    | 3.9    |        |
| Massenträgheitsmoment  |              |                   |                   |        |        |        |        |
| Brake                  | J            | kgcm <sup>2</sup> | 1.06              | 3.60   | 9.50   | 31.8   |        |
| Brake motor            | $J_{MB}$     | kgcm <sup>2</sup> | 3.46              | 11.9   | 28.7   | 45.5   | 212    |
| Load/brake motor ratio | $J_L/J_{MB}$ |                   | 22.4              | 8.4    | 6.6    | 5.1    | 1.7    |



### Feedback

For speed control with a servo inverter, the servo motor can be equipped with the following feedback systems:

| Inverter                     | Feedback without functional safety |                                                                       |                                           |
|------------------------------|------------------------------------|-----------------------------------------------------------------------|-------------------------------------------|
|                              | Resolver                           | Absolute value encoder                                                | Incremental encoder                       |
| i950 servo inverter          | RS0                                | AM1024-8V-H<br>AS1024-8V-H                                            | -                                         |
| i700 servo inverter          | RS0                                | AM1024-8V-H<br>AS1024-8V-H                                            | -                                         |
| 8400 TopLine inverter drives | RS0                                | AM1024-8V-H<br>AS1024-8V-H                                            | IG2048-5V-S<br>IG2048-5V-T<br>IG4096-5V-T |
| 9400 HighLine servo drives   | RS0                                | AM32-5V-E<br>AM1024-8V-H<br>AM2048-5V-E<br>AS1024-8V-H<br>AS2048-5V-E | IG2048-5V-S<br>IG2048-5V-T<br>IG4096-5V-T |

| Inverter                   | Feedback with functional safety |                        |                     |
|----------------------------|---------------------------------|------------------------|---------------------|
|                            | Resolver                        | Absolute value encoder | Incremental encoder |
| i950 servo inverter        | RV03                            | -                      | -                   |
| 9400 HighLine servo drives | RV03                            | -                      | -                   |

### Feedbacks in the environment of functional safety

Motors can perform speed-dependent safety functions for safe speed and/or safe relative position monitoring in a drive system by Lenze inverters or Controllers. In case of inverters, these functions are implemented by integrable safety modules and in case of Controllers by the additionally required Safety Controller.

When planning systems/installations of this kind, always observe the following:

- When using just one single feedback system in the environment of these safety applications, the applicable safety engineering standard EN 61800-5-2 (adjustable speed electrical power drive systems - Part: 5-2: Safety requirements - Functional) stipulates special requirements for the connection between feedback system and motor shaft.
- This is due to the fact that two-channel safety systems at this point in the mechanical system are actually designed as single-channel systems. If this mechanical connection is designed with considerable overdimensioning, the standard permits exclusion of the fault "encoder-shaft breakage" or "encoder-shaft slip". As such, the permissible angular acceleration limit values must not be exceeded for the individual drive solutions.

You can find the limit values in the corresponding feedback data of the individual motor ranges.

### Speed-dependent safety functions

Examples of speed-dependent safety functions:

- Safe stop 1 (SS1)
- Safe operational stop (SOS)
- Safely limited speed (SLS)
- Safe maximum speed (SMS)
- Safe direction (SDI)
- Operation mode selector (OMS) with confirmation (ES)
- Safe speed monitor (SSM)
- Safely limited increment (SLI)



## Resolver

The stator-supplied, 2-pole resolver with two stator windings shifted by 90 degrees and a rotor winding with a transformer winding can record both the speed and the rotor position, just like a single-turn absolute value encoder. The rotor position can be determined within one mechanical motor revolution after a voltage failure.

| Feedback type                          |                     |            | Resolver     |              |
|----------------------------------------|---------------------|------------|--------------|--------------|
| Feedback                               |                     |            | RS0          | RV03         |
| Speed-dependent safety functions       |                     |            | No           | Yes          |
| Design                                 |                     |            | Mounting     |              |
| Resolution - angle                     |                     | '          | 0.8          | 0.8          |
| Min. accuracy                          |                     | '          | -10          | -10          |
| Max. accuracy                          |                     | '          | 10           | 10           |
| Absolute positioning                   |                     |            | 1 revolution | 1 revolution |
| Max. speed                             | $n_{\max}$          | rpm        | 8000         | 8000         |
| Max. DC input voltage                  | $V_{\text{in,max}}$ | V          | 10           | 10           |
| Max. input frequency                   | $f_{\text{in,max}}$ | kHz        | 4            | 4            |
| Ratio stator/rotor                     |                     |            | 0.3          | 0.3          |
| Min ratio tolerance                    |                     | %          | -5           | -5           |
| Max ratio tolerance                    |                     | %          | 5            | 5            |
| Rotor impedance                        | $Z_{\text{ro}}$     | $\Omega$   | 51+j90       | 51+j90       |
| Stator impedance                       | $Z_{\text{so}}$     | $\Omega$   | 102+j150     | 102+j150     |
| Impedance                              | $Z_{\text{rs}}$     | $\Omega$   | 44+j76       | 44+j76       |
| Min. insulation resistance at DC 500 V | $R_{\text{min}}$    | M $\Omega$ | 10           | 10           |
| Number of pole pairs                   |                     |            | 1            | 1            |
| Max. angle error Min                   |                     | '          | -10          | -10          |
| Max. angle error Max                   |                     | '          | 10           | 10           |

## Speed-dependent safety functions

| Feedback                              |          |                    | RV03                      |
|---------------------------------------|----------|--------------------|---------------------------|
| Motor code                            |          |                    | RV03                      |
| Max. permissible angular acceleration | $\alpha$ | rad/s <sup>2</sup> | 22000                     |
| Functional safety                     |          |                    |                           |
| IEC 61508                             |          |                    | SIL3                      |
| EN 13849-1                            |          |                    | Up to Performance Level e |

# Product extensions

Feedback  
Incremental encoder



## Incremental encoder

Incremental encoders can be used for speed measurement. Homing is required in order to enable positioning later.

| Feedback type                    |              |     | SinCos-Inkremental |              | TTL-Inkremental     |             |
|----------------------------------|--------------|-----|--------------------|--------------|---------------------|-------------|
| Feedback                         |              |     |                    | IG2048-5V-S  | IG2048-5V-T         | IG4096-5V-T |
| Speed-dependent safety functions |              |     |                    | No           | No                  | No          |
| Design                           |              |     | Mounting           |              |                     |             |
| Pulses                           |              |     |                    | 2048         | 2048                | 4096        |
| Output signals                   |              |     |                    | SinCos 1 Vss | TTL                 | TTL         |
| Interfaces                       |              |     |                    |              | A, B; N; Ai, Bi; Ni |             |
| Absolute revolution              |              |     |                    | 0            | 0                   | 0           |
| Min. accuracy                    |              | '   |                    | -0.8         | -2                  | -2          |
| Max. accuracy                    |              | '   |                    | 0.8          | 2                   | 2           |
| Min. DC input voltage            | $V_{in,min}$ | V   |                    | 4.5          | 4.75                | 4.75        |
| Max. DC input voltage            | $V_{in,max}$ | V   |                    | 5.5          | 5.25                | 5.25        |
| Max. current consumption         | $I_{max}$    | A   |                    | 0.1          | 0.15                | 0.15        |
| Limit frequency                  | $f_{max}$    | kHz |                    | 180          | 300                 | 300         |



## Product extensions

Feedback  
Absolute value encoder

### Absolute value encoder

Absolute value encoders can detect the speed, the rotor position, and the machine position with a very high resolution. They are used for the positioning of dynamic applications and do not require homing.

| Feedback type                    |              |     | SinCos absolute value encoder |              |              |              |              |
|----------------------------------|--------------|-----|-------------------------------|--------------|--------------|--------------|--------------|
| Feedback                         |              |     | AM32-5V-E                     | AM1024-8V-H  | AM2048-5V-E  | AS1024-8V-H  | AS2048-5V-E  |
| Speed-dependent safety functions |              |     | No                            | No           | No           | No           | No           |
| Design                           |              |     | Mounting                      | Mounting     | Mounting     | Mounting     | Mounting     |
| Encoder type                     |              |     | Multi-turn                    | Multi-turn   | Multi-turn   | Single-turn  | Single-turn  |
| Resolution                       |              | bit | -                             | -            | -            | -            | -            |
| Pulses                           |              |     | 32                            | 1024         | 2048         | 1024         | 2048         |
| Output signals                   |              |     | SinCos 1 Vss                  | SinCos 1 Vss | SinCos 1 Vss | SinCos 1 Vss | SinCos 1 Vss |
| Interfaces                       |              |     | EnDat                         | Hiperface    | EnDat        | Hiperface    | EnDat        |
| Absolute revolution              |              |     | 4096                          | 4096         | 4096         | 1            | 1            |
| Resolution - angle               |              |     | 0.4                           | 0.4          | 0.4          | 0.4          | 0.4          |
| Min. accuracy                    |              | '   | -5                            | -0.8         | -0.6         | -0.8         | -0.6         |
| Max. accuracy                    |              | '   | 5                             | 0.8          | 0.6          | 0.8          | 0.6          |
| Fehlergrenze Positionswert       |              |     |                               |              |              |              |              |
| System accuracy                  |              |     | -                             | -            | -            | -            | -            |
| Integral nonlinearity            |              |     | -                             | -            | -            | -            | -            |
| Min. DC input voltage            | $V_{in,min}$ | V   | 4.75                          | 7            | 4.75         | 7            | 4.75         |
| Max. DC input voltage            | $V_{in,max}$ | V   | 5.25                          | 12           | 5.25         | 12           | 5.25         |
| Max. current consumption         | $I_{max}$    | A   | 0.17                          | 0.08         | 0.25         | 0.08         | 0.15         |
| Limit frequency                  | $f_{max}$    | kHz | 600                           | 200          | 200          | 200          | 200          |

# Product extensions

## Blower



### Blower

The forced ventilation motors are cooled as a standard by means of a separate axial fan.

#### Rated data 50 Hz

| Motor series         |             |    | MCA   |       |      |      |       |       |       |       |      |
|----------------------|-------------|----|-------|-------|------|------|-------|-------|-------|-------|------|
| Size                 |             |    | 13    | 14    | 17   | 19   | 20    | 21    | 22    |       | 26   |
| Degree of protection |             |    | IP54  |       |      |      | IP23  | IP54  |       | IP23  | IP54 |
| Number of phases     |             |    | 1     | 1     | 1    | 1    | 1     | 1     | 1     | 1     | 1    |
| Rated voltage        | $V_{rated}$ | V  | 230   | 230   | 230  | 230  | 230   | 230   | 230   | 230   | 230  |
| Rated power          | $P_{rated}$ | kW | 0.019 | 0.019 | 0.05 | 0.05 | 0.165 | 0.055 | 0.085 | 0.085 | 0.1  |
| Rated current        | $I_{rated}$ | A  | 0.115 | 0.115 | 0.3  | 0.3  | 0.73  | 0.25  | 0.75  | 0.75  | 0.45 |

| Motor series         |             |    | MCA  |  |  |  |  |  |  |  |  |
|----------------------|-------------|----|------|--|--|--|--|--|--|--|--|
| Size                 |             |    | 26   |  |  |  |  |  |  |  |  |
| Degree of protection |             |    | IP23 |  |  |  |  |  |  |  |  |
| Number of phases     |             |    | 1    |  |  |  |  |  |  |  |  |
| Rated voltage        | $V_{rated}$ | V  | 230  |  |  |  |  |  |  |  |  |
| Rated power          | $P_{rated}$ | kW | 0.1  |  |  |  |  |  |  |  |  |
| Rated current        | $I_{rated}$ | A  | 0.45 |  |  |  |  |  |  |  |  |

#### Rated data 60 Hz

| Motor series         |             |    | MCA   |       |       |       |       |       |       |       |       |
|----------------------|-------------|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Size                 |             |    | 13    | 14    | 17    | 19    | 20    | 21    | 22    |       | 26    |
| Degree of protection |             |    | IP54  |       |       |       | IP23  | IP54  |       | IP23  | IP54  |
| Number of phases     |             |    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| Rated voltage        | $V_{rated}$ | V  | 230   | 230   | 230   | 230   | 230   | 230   | 230   | 230   | 230   |
| Rated power          | $P_{rated}$ | kW | 0.018 | 0.018 | 0.039 | 0.039 | 0.205 | 0.065 | 0.085 | 0.085 | 0.138 |
| Rated current        | $I_{rated}$ | A  | 0.105 | 0.105 | 0.25  | 0.25  | 0.9   | 0.29  | 0.75  | 0.75  | 0.61  |

| Motor series         |             |    | MCA   |  |  |  |  |  |  |  |  |
|----------------------|-------------|----|-------|--|--|--|--|--|--|--|--|
| Size                 |             |    | 26    |  |  |  |  |  |  |  |  |
| Degree of protection |             |    | IP23  |  |  |  |  |  |  |  |  |
| Number of phases     |             |    | 1     |  |  |  |  |  |  |  |  |
| Rated voltage        | $V_{rated}$ | V  | 230   |  |  |  |  |  |  |  |  |
| Rated power          | $P_{rated}$ | kW | 0.138 |  |  |  |  |  |  |  |  |
| Rated current        | $I_{rated}$ | A  | 0.61  |  |  |  |  |  |  |  |  |



## Product extensions

Temperature monitoring  
Thermal detectors PT1000

### Temperature monitoring

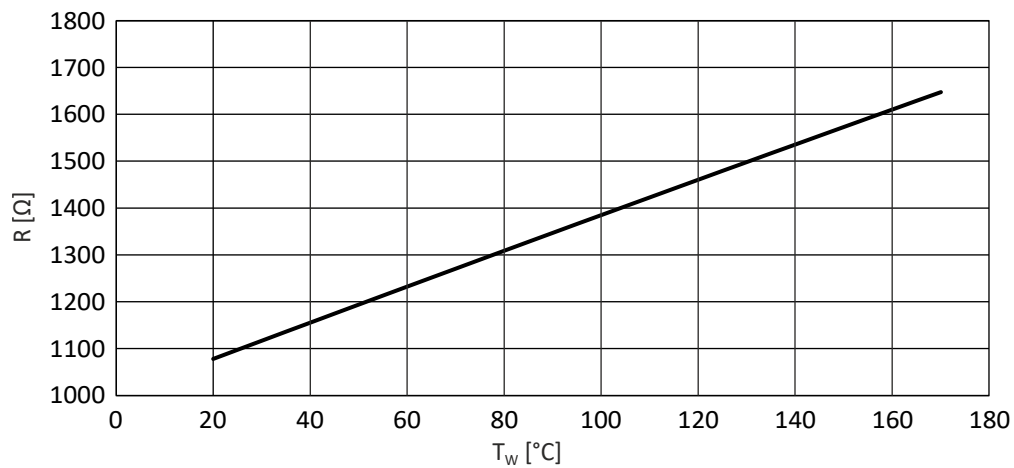
#### Thermal detectors PT1000

The thermal detector used continuously monitors the motor temperature. The temperature information is transferred to the inverter using the system cable of the feedback system. **This is not a full motor protection!**

This makes it possible to determine the motor temperature in the permissible operating range with great accuracy.



When supplying the thermal sensors with a measurement current of 1 mA, the connection between the temperature and the resistance measured applies.



R Resistance  
 $T_w$  Winding temperature



## Product codes

### Gearbox product code

| Example              |                                              | G | 50 | A      | B | 045 | M | H | B | R | 2 | C           | 1A                                 |
|----------------------|----------------------------------------------|---|----|--------|---|-----|---|---|---|---|---|-------------|------------------------------------|
| Product type         | Gearboxes                                    | G |    |        |   |     |   |   |   |   |   |             |                                    |
| Product family       |                                              |   | 50 |        |   |     |   |   |   |   |   |             |                                    |
| Generation           |                                              |   |    | A<br>B |   |     |   |   |   |   |   |             |                                    |
| Gearbox type         | Bevel gearbox                                |   |    |        | B |     |   |   |   |   |   |             |                                    |
| Output torque        | 45 Nm                                        |   |    |        |   | 045 |   |   |   |   |   |             |                                    |
|                      | 110 Nm                                       |   |    |        |   | 111 |   |   |   |   |   |             |                                    |
|                      | 240 Nm                                       |   |    |        |   | 124 |   |   |   |   |   |             |                                    |
|                      | 450 Nm                                       |   |    |        |   | 145 |   |   |   |   |   |             |                                    |
|                      | 600 Nm                                       |   |    |        |   | 160 |   |   |   |   |   |             |                                    |
|                      | 820 Nm                                       |   |    |        |   | 182 |   |   |   |   |   |             |                                    |
|                      | 1500 Nm                                      |   |    |        |   | 215 |   |   |   |   |   |             |                                    |
|                      | 2700 Nm                                      |   |    |        |   | 227 |   |   |   |   |   |             |                                    |
|                      | 4300 Nm                                      |   |    |        |   | 243 |   |   |   |   |   |             |                                    |
|                      | 8000 Nm                                      |   |    |        |   | 280 |   |   |   |   |   |             |                                    |
|                      | 13000 Nm                                     |   |    |        |   | 313 |   |   |   |   |   |             |                                    |
|                      | 20000 Nm                                     |   |    |        |   | 320 |   |   |   |   |   |             |                                    |
| Type of construction | Geared motor                                 |   |    |        |   |     | M |   |   |   |   |             |                                    |
|                      | Gearboxes                                    |   |    |        |   |     | N |   |   |   |   |             |                                    |
| Shaft type           | Solid shaft with featherkey                  |   |    |        |   |     |   | V |   |   |   |             |                                    |
|                      | Hollow shaft with keyway                     |   |    |        |   |     |   | H |   |   |   |             |                                    |
|                      | Hollow shaft with shrink disc                |   |    |        |   |     |   | S |   |   |   |             |                                    |
| Housing type         | Foot mounting + centering                    |   |    |        |   |     |   |   | A |   |   |             |                                    |
|                      | Foot mounting                                |   |    |        |   |     |   |   | B |   |   |             |                                    |
|                      | With centering                               |   |    |        |   |     |   |   | C |   |   |             |                                    |
|                      | Threaded pitch circle                        |   |    |        |   |     |   |   | D |   |   |             |                                    |
| Flange mounting      | Without flange                               |   |    |        |   |     |   |   |   | R |   |             |                                    |
|                      | Flange with through holes                    |   |    |        |   |     |   |   |   | K |   |             |                                    |
| Number of stages     | 2-stage                                      |   |    |        |   |     |   |   |   |   | 2 |             |                                    |
|                      | 3-stage                                      |   |    |        |   |     |   |   |   |   | 3 |             |                                    |
|                      | 4-stage                                      |   |    |        |   |     |   |   |   |   | 4 |             |                                    |
| Motor mounting       | Integrated motor                             |   |    |        |   |     |   |   |   |   |   | C           |                                    |
|                      | IEC adapter with jaw coupling                |   |    |        |   |     |   |   |   |   |   | N<br>T      |                                    |
|                      | IEC adapter with plug-in hollow shaft        |   |    |        |   |     |   |   |   |   |   | H           |                                    |
|                      | NEMA adapter with jaw coupling               |   |    |        |   |     |   |   |   |   |   | A           |                                    |
|                      | NEMA adapter with plug-in hollow shaft       |   |    |        |   |     |   |   |   |   |   | B           |                                    |
|                      | Servomotor adapter with plug-in hollow shaft |   |    |        |   |     |   |   |   |   |   | S           |                                    |
|                      | Servomotor adapter with jaw coupling         |   |    |        |   |     |   |   |   |   |   | E<br>D<br>G |                                    |
| Drive size           |                                              |   |    |        |   |     |   |   |   |   |   |             | 1A<br>...<br>□H<br>08<br>...<br>82 |



## Product code of MCA asynchronous servo motor

| Example                   |                                                                    | M            | C | A | 10 | C             | 40              | - | RS0 | B0              |
|---------------------------|--------------------------------------------------------------------|--------------|---|---|----|---------------|-----------------|---|-----|-----------------|
| Meaning                   | Variant                                                            | Product code |   |   |    |               |                 |   |     |                 |
| Product family            | Motor                                                              | M            |   |   |    |               |                 |   |     |                 |
| Type                      | Compact servo motors                                               |              | C |   |    |               |                 |   |     |                 |
| Version                   | Asynchronous                                                       |              |   | A |    |               |                 |   |     |                 |
| Motor frame size          | Square dimension 102 mm                                            |              |   |   | 10 |               |                 |   |     |                 |
|                           | Square dimension 130 mm                                            |              |   |   | 13 |               |                 |   |     |                 |
|                           | Square dimension 142 mm                                            |              |   |   | 14 |               |                 |   |     |                 |
|                           | Square dimension 165 mm                                            |              |   |   | 17 |               |                 |   |     |                 |
|                           | Square dimension 192 mm                                            |              |   |   | 19 |               |                 |   |     |                 |
|                           | Square dimension 200 mm                                            |              |   |   | 20 |               |                 |   |     |                 |
|                           | Square dimension 214 mm                                            |              |   |   | 21 |               |                 |   |     |                 |
|                           | Square dimension 220 mm                                            |              |   |   | 22 |               |                 |   |     |                 |
|                           | Square dimension 260 mm                                            |              |   |   | 26 |               |                 |   |     |                 |
| Overall length            |                                                                    |              |   |   |    | I<br>...<br>X |                 |   |     |                 |
| Rated speed               | rpm x 100                                                          |              |   |   |    |               | 05<br>...<br>42 |   |     |                 |
| Inverter mains connection | 3 x 400 V                                                          |              |   |   |    |               |                 | - |     |                 |
| Motor protection class    | Degree of protection: IP54 / IP65                                  |              |   |   |    |               |                 |   |     |                 |
|                           | 3 x 400 V                                                          |              |   |   |    |               |                 | H |     |                 |
|                           | Degree of protection: IP23                                         |              |   |   |    |               |                 |   |     |                 |
| Feedback                  | SinCos absolute value encoder, single-turn, EnDat AS2048-5V-E      |              |   |   |    |               |                 |   |     | ECN             |
|                           | SinCos absolute value encoder, multi-turn, EnDat AM32-5V-E         |              |   |   |    |               |                 |   |     | EQI             |
|                           | SinCos absolute value encoder, multi-turn, EnDat AM2048-5V-E       |              |   |   |    |               |                 |   |     | EQN             |
|                           | Resolver                                                           |              |   |   |    |               |                 |   |     | RS0             |
|                           | Safety resolver RV03                                               |              |   |   |    |               |                 |   |     | RV0             |
|                           |                                                                    |              |   |   |    |               |                 |   |     |                 |
|                           | SinCos incremental encoder, single-turn IG2048-5V-S                |              |   |   |    |               |                 |   |     | S20             |
|                           | SinCos absolute value encoder, multi-turn, Hiperface® AM1024-8V-H  |              |   |   |    |               |                 |   |     | SRM             |
|                           | SinCos absolute value encoder, single-turn, Hiperface® AS1024-8V-H |              |   |   |    |               |                 |   |     | SRS             |
|                           | TTL incremental encoder IG2048-5V-T                                |              |   |   |    |               |                 |   |     | T20             |
|                           | TTL incremental encoder IG4096-5V-T                                |              |   |   |    |               |                 |   |     | T40             |
|                           |                                                                    |              |   |   |    |               |                 |   |     |                 |
|                           |                                                                    |              |   |   |    |               |                 |   |     |                 |
| Brake                     | Without brake                                                      |              |   |   |    |               |                 |   |     | B0              |
|                           | Spring-applied brake DC 24 V                                       |              |   |   |    |               |                 |   |     | F1              |
|                           | Spring-applied brake DC 24 V, reinforced                           |              |   |   |    |               |                 |   |     | F2              |
|                           | Spring-applied brake AC 230 V                                      |              |   |   |    |               |                 |   |     | FG              |
|                           | Spring-applied brake AC 230 V, reinforced                          |              |   |   |    |               |                 |   |     | FH              |
|                           | Permanent magnet brake DC 24V                                      |              |   |   |    |               |                 |   |     | P1<br>...<br>P4 |
|                           |                                                                    |              |   |   |    |               |                 |   |     |                 |
|                           | Permanent magnet brake DC 205 V                                    |              |   |   |    |               |                 |   |     | P5<br>...<br>P8 |

# Motor data

Rated data

Inverter mains connection 400 V, Self-ventilated motors



## Motor data

### Rated data

#### Inverter mains connection 400 V, Self-ventilated motors

| Motor                      |                     |                   | MCA 10I40- | MCA 13I41- | MCA 14L41- | MCA 14L20- | MCA 17N23- | MCA 17N41- |
|----------------------------|---------------------|-------------------|------------|------------|------------|------------|------------|------------|
| Degree of protection       |                     |                   | IPxx       | IPxx       | IPxx       | IPxx       | IPxx       | IPxx       |
| Standstill torque          | $M_0$               | Nm                | 2.30       | 4.60       | 8.00       | 8.00       | 12.8       | 12.8       |
| Rated torque               | $M_{rated}$         | Nm                | 2.00       | 4.00       | 5.40       | 6.70       | 10.8       | 9.50       |
| Max. torque                | $M_{max}$           | Nm                | 10.0       | 32.0       | 60.0       | 60.0       | 100        | 100        |
| Rated speed                | $n_{rated}$         | rpm               | 3950       | 4050       | 4100       | 2000       | 2300       | 4110       |
| Max. speed                 | $n_{max}$           | rpm               | 8000       | 8000       | 8000       | 8000       | 8000       | 8000       |
| Rated power                | $P_{rated}$         | kW                | 0.8        | 1.7        | 2.3        | 1.4        | 2.6        | 4.1        |
| Standstill current         | $I_0$               | A                 | 2.55       | 4.60       | 7.70       | 3.85       | 6.00       | 12.0       |
| Rated current              | $I_{rated}$         | A                 | 2.40       | 4.40       | 5.80       | 3.30       | 5.50       | 10.2       |
| Max. current               | $I_{max}$           | A                 | 9.60       | 17.6       | 23.2       | 13.2       | 22.0       | 40.8       |
| Rated voltage              | $V_{rated}$         | V                 | 390        | 390        | 390        | 390        | 390        | 350        |
| Rated frequency            | $f_{rated}$         | Hz                | 140        | 140        | 140        | 70         | 80         | 140        |
| Moment of inertia          | J                   | kgcm <sup>2</sup> | 2.40       | 8.30       | 19.2       | 19.2       | 36.0       | 36.0       |
| Efficiency                 | $\eta$              |                   | 0.700      | 0.750      | 0.780      | 0.840      | 0.860      | 0.830      |
| Stator terminal resistance | $R_{UV\ 20}$<br>°C  | Ω                 | 9.4        | 3.4        | 1.5        | 6          | 3.04       | 0.76       |
| Stator terminal resistance | $R_{UV\ 150}$<br>°C | Ω                 | 14.166     | 5.124      | 2.261      | 9.042      | 4.581      | 1.145      |
| Mutual inductance          | $L_H$               | mH                | 169.15     | 92.64      | 65.8       | 268.7      | 176.4      | 43.4       |
| Stator leakage inductance  | $L_{1\sigma}$       | mH                | 9.8        | 5.408      | 2.493      | 9.971      | 6.162      | 1.536      |
| Rotor leakage inductance   | $L_{2\sigma}$       | mH                | 10         | 4.896      | 2.503      | 10.016     | 6.836      | 1.703      |
| Stator resistance          | $R_{1,\ 20}$        | Ω                 | 4.7        | 1.7        | 0.75       | 3          | 1.52       | 0.38       |
| Rotor resistance           | $R_{2',\ 20}$       | Ω                 | 5.2        | 1.4        | 0.781      | 3.13       | 1.37       | 0.342      |
| Weight                     | m                   | kg                | 6.40       | 10.4       | 15.1       | 15.1       | 22.9       | 22.9       |



# Motor data

Rated data  
Inverter mains connection 400 V, Self-ventilated motors

| Motor                      |                     |                   | MCA 19S42- | MCA 19S23- | MCA 21X42- | MCA 21X25- |
|----------------------------|---------------------|-------------------|------------|------------|------------|------------|
| Degree of protection       |                     |                   | IPxx       | IPxx       | IPxx       | IPxx       |
| Standstill torque          | $M_0$               | Nm                | 22.5       | 22.5       | 39.0       | 39.0       |
| Rated torque               | $M_{rated}$         | Nm                | 12.0       | 16.3       | 17.0       | 24.6       |
| Max. torque                | $M_{max}$           | Nm                | 180        | 180        | 300        | 300        |
| Rated speed                | $n_{rated}$         | rpm               | 4150       | 2340       | 4160       | 2490       |
| Max. speed                 | $n_{max}$           | rpm               | 8000       | 8000       | 8000       | 8000       |
| Rated power                | $P_{rated}$         | kW                | 5.2        | 4          | 7.4        | 6.4        |
| Standstill current         | $I_0$               | A                 | 19.7       | 9.85       | 31.8       | 15.9       |
| Rated current              | $I_{rated}$         | A                 | 14.0       | 8.20       | 19.8       | 13.5       |
| Max. current               | $I_{max}$           | A                 | 56.0       | 32.8       | 79.2       | 54.0       |
| Rated voltage              | $V_{rated}$         | V                 | 330        | 390        | 320        | 390        |
| Rated frequency            | $f_{rated}$         | Hz                | 140        | 80         | 140        | 85         |
| Moment of inertia          | J                   | kgcm <sup>2</sup> | 72.0       | 72.0       | 180        | 180        |
| Efficiency                 | $\eta$              |                   | 0.830      | 0.900      | 0.840      | 0.850      |
| Stator terminal resistance | $R_{UV\ 20}$<br>°C  | Ω                 | 0.35       | 1.38       | 0.18       | 0.72       |
| Stator terminal resistance | $R_{UV\ 150}$<br>°C | Ω                 | 0.527      | 2.08       | 0.271      | 1.085      |
| Mutual inductance          | $L_H$               | mH                | 27.98      | 110.6      | 19.5       | 78.1       |
| Stator leakage inductance  | $L_{1\sigma}$       | mH                | 0.822      | 3.245      | 0.563      | 2.263      |
| Rotor leakage inductance   | $L_{2\sigma}$       | mH                | 0.99       | 3.902      | 0.701      | 2.819      |
| Stator resistance          | $R_{1,\ 20}$        | Ω                 | 0.175      | 0.69       | 0.09       | 0.36       |
| Rotor resistance           | $R_{2',\ 20}$       | Ω                 | 0.154      | 0.616      | 0.0894     | 0.358      |
| Weight                     | m                   | kg                | 44.7       | 44.7       | 60.0       | 60.0       |

# Motor data

Rated data

Inverter mains connection 400 V, Forced ventilated motors



## Inverter mains connection 400 V, Forced ventilated motors

| Motor                      |                     |                   | MCA 13I34- | MCA 14L35- | MCA 14L16- | MCA 17N35- | MCA 17N17- | MCA 19S35- |
|----------------------------|---------------------|-------------------|------------|------------|------------|------------|------------|------------|
| Degree of protection       |                     |                   | IP54       | IP54       | IP54       | IP54       | IP54       | IP54       |
| Standstill torque          | $M_0$               | Nm                | 7.00       | 13.5       | 13.5       | 23.9       | 23.9       | 40.0       |
| Rated torque               | $M_{rated}$         | Nm                | 6.30       | 10.8       | 12.0       | 19.0       | 21.5       | 36.0       |
| Max. torque                | $M_{max}$           | Nm                | 32.0       | 60.0       | 60.0       | 100        | 100        | 180        |
| Rated speed                | $n_{rated}$         | rpm               | 3410       | 3455       | 1635       | 3480       | 1680       | 3510       |
| Max. speed                 | $n_{max}$           | rpm               | 8000       | 8000       | 8000       | 8000       | 8000       | 8000       |
| Rated power                | $P_{rated}$         | kW                | 2.2        | 3.9        | 2.1        | 6.9        | 3.8        | 13.2       |
| Standstill current         | $I_0$               | A                 | 6.30       | 10.5       | 5.25       | 18.1       | 9.05       | 30.8       |
| Rated current              | $I_{rated}$         | A                 | 6.00       | 9.10       | 4.80       | 15.8       | 8.50       | 28.7       |
| Max. current               | $I_{max}$           | A                 | 24.0       | 36.4       | 19.2       | 63.2       | 34.0       | 115        |
| Rated voltage              | $V_{rated}$         | V                 | 390        | 390        | 390        | 390        | 390        | 390        |
| Rated frequency            | $f_{rated}$         | Hz                | 120        | 120        | 60         | 120        | 60         | 120        |
| Moment of inertia          | J                   | kgcm <sup>2</sup> | 8.30       | 19.2       | 19.2       | 36.0       | 36.0       | 72.0       |
| Efficiency                 | $\eta$              |                   | 0.720      | 0.790      | 0.800      | 0.810      | 0.830      | 0.850      |
| Stator terminal resistance | $R_{UV\ 20}$<br>°C  | $\Omega$          | 3.4        | 1.5        | 6          | 0.76       | 3.04       | 0.35       |
| Stator terminal resistance | $R_{UV\ 150}$<br>°C | $\Omega$          | 5.124      | 2.261      | 9.042      | 1.145      | 4.581      | 0.527      |
| Mutual inductance          | $L_H$               | mH                | 76.7       | 56.7       | 224.34     | 36.9       | 143.66     | 20.32      |
| Stator leakage inductance  | $L_{1\sigma}$       | mH                | 4.949      | 2.365      | 9.464      | 1.396      | 5.585      | 0.652      |
| Rotor leakage inductance   | $L_{2\sigma}$       | mH                | 4.392      | 2.324      | 9.303      | 1.51       | 6.042      | 0.765      |
| Stator resistance          | $R_{1,\ 20}$        | $\Omega$          | 1.7        | 0.75       | 3          | 0.38       | 1.52       | 0.175      |
| Rotor resistance           | $R_{2,\ 20}$        | $\Omega$          | 1.41       | 0.781      | 3.13       | 0.342      | 1.37       | 0.154      |
| Weight                     | m                   | kg                | 12.0       | 16.9       | 16.9       | 25.5       | 25.5       | 48.2       |



# Motor data

Rated data

Inverter mains connection 400 V, Forced ventilated motors

| Motor                      |                     |                   | MCA 19S17- | MCA 20X29H | MCA 20X14H | MCA 21X35- | MCA 21X17- | MCA 22P29- |
|----------------------------|---------------------|-------------------|------------|------------|------------|------------|------------|------------|
| Degree of protection       |                     |                   | IP54       | IP23       | IP23       | IP54       | IP54       | IP54       |
| Standstill torque          | $M_0$               | Nm                | 40.0       | 68.0       | 68.0       | 75.0       | 75.0       | 120        |
| Rated torque               | $M_{rated}$         | Nm                | 36.3       | 53.5       | 61.0       | 55.0       | 61.4       | 100        |
| Max. torque                | $M_{max}$           | Nm                | 180        | 250        | 250        | 300        | 300        | 500        |
| Rated speed                | $n_{rated}$         | rpm               | 1700       | 2930       | 1420       | 3520       | 1710       | 2935       |
| Max. speed                 | $n_{max}$           | rpm               | 8000       | 6500       | 6500       | 8000       | 8000       | 6500       |
| Rated power                | $P_{rated}$         | kW                | 6.4        | 16.4       | 9.1        | 20.3       | 11         | 30.7       |
| Standstill current         | $I_0$               | A                 | 15.4       | 52.0       | 26.0       | 49.5       | 25.8       | 80.9       |
| Rated current              | $I_{rated}$         | A                 | 13.9       | 42.4       | 23.0       | 42.5       | 22.5       | 72.1       |
| Max. current               | $I_{max}$           | A                 | 55.6       | 170        | 92.0       | 170        | 90.0       | 288        |
| Rated voltage              | $V_{rated}$         | V                 | 390        | 350        | 350        | 390        | 390        | 360        |
| Rated frequency            | $f_{rated}$         | Hz                | 60         | 100        | 50         | 120        | 60         | 100        |
| Moment of inertia          | J                   | kgcm <sup>2</sup> | 72.0       | 171        | 171        | 180        | 180        | 487        |
| Efficiency                 | $\eta$              |                   | 0.820      | 0.870      | 0.820      | 0.880      | 0.850      | 0.870      |
| Stator terminal resistance | $R_{UV\ 20}$<br>°C  | Ω                 | 1.38       | 0.183      | 0.731      | 0.18       | 0.72       | 0.089      |
| Stator terminal resistance | $R_{UV\ 150}$<br>°C | Ω                 | 2.08       | 0.276      | 1.102      | 0.271      | 1.085      | 0.134      |
| Mutual inductance          | $L_H$               | mH                | 80.92      | 14.28      | 60.16      | 16.8       | 68.9       | 22.93      |
| Stator leakage inductance  | $L_{1\sigma}$       | mH                | 2.608      | 0.5        | 2.01       | 0.519      | 2.076      | 0.901      |
| Rotor leakage inductance   | $L_{2\sigma}$       | mH                | 3.063      | 0.54       | 2.14       | 0.645      | 2.58       | 1.213      |
| Stator resistance          | $R_{1,\ 20}$        | Ω                 | 0.69       | 0.0915     | 0.365      | 0.09       | 0.36       | 0.134      |
| Rotor resistance           | $R_{2',\ 20}$       | Ω                 | 0.616      | 0.09       | 0.361      | 0.0894     | 0.358      | 0.12       |
| Weight                     | m                   | kg                | 48.2       | 64         | 64         | 63.5       | 63.5       | 105        |

# Motor data

Rated data

Inverter mains connection 400 V, Forced ventilated motors



| Motor                      |                     |                   | MCA 22P17- | MCA 22P14- | MCA 22P08- | MCA 22P29H | MCA 22P17H | MCA 22P14H |
|----------------------------|---------------------|-------------------|------------|------------|------------|------------|------------|------------|
| Degree of protection       |                     |                   | IP54       | IP54       | IP54       | IP23       | IP23       | IP23       |
| Standstill torque          | $M_0$               | Nm                | 120        | 120        | 120        | 135        | 135        | 135        |
| Rated torque               | $M_{rated}$         | Nm                | 106        | 107        | 110        | 110        | 112        | 115        |
| Max. torque                | $M_{max}$           | Nm                | 500        | 500        | 500        | 500        | 500        | 500        |
| Rated speed                | $n_{rated}$         | rpm               | 1670       | 1425       | 760        | 2935       | 1670       | 1425       |
| Max. speed                 | $n_{max}$           | rpm               | 6500       | 6500       | 6500       | 6500       | 6500       | 6500       |
| Rated power                | $P_{rated}$         | kW                | 18.5       | 16         | 8.8        | 33.8       | 19.6       | 17.2       |
| Standstill current         | $I_0$               | A                 | 46.7       | 40.5       | 23.4       | 90.2       | 52.1       | 45.1       |
| Rated current              | $I_{rated}$         | A                 | 42.7       | 37.7       | 22.1       | 77.8       | 44.5       | 40.0       |
| Max. current               | $I_{max}$           | A                 | 171        | 151        | 88.4       | 311        | 178        | 160        |
| Rated voltage              | $V_{rated}$         | V                 | 360        | 350        | 345        | 360        | 360        | 360        |
| Rated frequency            | $f_{rated}$         | Hz                | 58         | 50         | 28         | 100        | 58         | 50         |
| Moment of inertia          | J                   | kgcm <sup>2</sup> | 487        | 487        | 487        | 487        | 487        | 487        |
| Efficiency                 | $\eta$              |                   | 0.880      | 0.870      | 0.800      | 0.890      | 0.880      | 0.860      |
| Stator terminal resistance | $R_{UV\ 20}$<br>°C  | Ω                 | 0.268      | 0.357      | 1.072      | 0.089      | 0.268      | 0.357      |
| Stator terminal resistance | $R_{UV\ 150}$<br>°C | Ω                 | 0.404      | 0.538      | 1.616      | 0.134      | 0.404      | 0.538      |
| Mutual inductance          | $L_H$               | mH                | 23.35      | 94.23      | 94.89      | 22.9       | 23.46      | 90.94      |
| Stator leakage inductance  | $L_{1\sigma}$       | mH                | 0.901      | 3.601      | 3.56       | 0.901      | 0.902      | 3.552      |
| Rotor leakage inductance   | $L_{2\sigma}$       | mH                | 1.214      | 4.852      | 4.802      | 1.214      | 1.215      | 4.794      |
| Stator resistance          | $R_{1,\ 20}$        | Ω                 | 0.134      | 0.536      | 0.536      | 0.134      | 0.134      | 0.536      |
| Rotor resistance           | $R_{2',\ 20}$       | Ω                 | 0.12       | 0.477      | 0.477      | 0.12       | 0.12       | 0.477      |
| Weight                     | m                   | kg                | 105        | 105        | 105        | 105        | 105        | 105        |



## Motor data

Rated data

Inverter mains connection 400 V, Forced ventilated motors

| Motor                      |                     |                   | MCA 22P08H | MCA 26T22- | MCA 26T12- | MCA 26T10- | MCA 26T05- | MCA 26T22H |
|----------------------------|---------------------|-------------------|------------|------------|------------|------------|------------|------------|
| Degree of protection       |                     |                   | IP23       | IP54       | IP54       | IP54       | IP54       | IP23       |
| Standstill torque          | $M_0$               | Nm                | 135        | 220        | 220        | 220        | 220        | 290        |
| Rated torque               | $M_{rated}$         | Nm                | 120        | 195        | 207        | 210        | 216        | 230        |
| Max. torque                | $M_{max}$           | Nm                | 500        | 1100       | 1100       | 1100       | 1100       | 1100       |
| Rated speed                | $n_{rated}$         | rpm               | 760        | 2235       | 1200       | 1030       | 550        | 2235       |
| Max. speed                 | $n_{max}$           | rpm               | 6500       | 5500       | 5500       | 5500       | 5500       | 5500       |
| Rated power                | $P_{rated}$         | kW                | 9.6        | 45.6       | 26         | 22.7       | 12.4       | 53.8       |
| Standstill current         | $I_0$               | A                 | 26.0       | 125        | 78.4       | 62.9       | 35.4       | 160        |
| Rated current              | $I_{rated}$         | A                 | 23.5       | 113        | 75.1       | 61.5       | 34.9       | 127        |
| Max. current               | $I_{max}$           | A                 | 94.0       | 452        | 300        | 246        | 140        | 507        |
| Rated voltage              | $V_{rated}$         | V                 | 355        | 340        | 350        | 350        | 350        | 340        |
| Rated frequency            | $f_{rated}$         | Hz                | 28         | 76         | 41         | 35         | 19         | 76         |
| Moment of inertia          | J                   | kgcm <sup>2</sup> | 487        | 1340       | 1340       | 1340       | 1340       | 1340       |
| Efficiency                 | $\eta$              |                   | 0.800      | 0.920      | 0.870      | 0.880      | 0.830      | 0.920      |
| Stator terminal resistance | $R_{UV\ 20}$<br>°C  | Ω                 | 1.072      | 0.05       | 0.15       | 0.196      | 0.589      | 0.05       |
| Stator terminal resistance | $R_{UV\ 150}$<br>°C | Ω                 | 1.616      | 0.075      | 0.226      | 0.295      | 0.888      | 0.075      |
| Mutual inductance          | $L_H$               | mH                | 91.93      | 19.84      | 18.1       | 69.24      | 66.8       | 20.2       |
| Stator leakage inductance  | $L_{1\sigma}$       | mH                | 3.5        | 0.778      | 0.74       | 2.932      | 2.862      | 0.78       |
| Rotor leakage inductance   | $L_{2\sigma}$       | mH                | 4.738      | 1.29       | 1.29       | 5.117      | 5.037      | 1.3        |
| Stator resistance          | $R_{1,\ 20}$        | Ω                 | 0.536      | 0.075      | 0.075      | 0.294      | 0.294      | 0.075      |
| Rotor resistance           | $R_{2',\ 20}$       | Ω                 | 0.477      | 0.0621     | 0.0621     | 0.25       | 0.25       | 0.0621     |
| Weight                     | m                   | kg                | 105        | 194        | 194        | 194        | 194        | 194        |

# Motor data

Rated data

Inverter mains connection 400 V, Forced ventilated motors



| Motor                      |                     |                   | MCA 26T12H | MCA 26T10H | MCA 26T05H |
|----------------------------|---------------------|-------------------|------------|------------|------------|
| Degree of protection       |                     |                   | IP23       | IP23       | IP23       |
| Standstill torque          | $M_0$               | Nm                | 290        | 290        | 290        |
| Rated torque               | $M_{rated}$         | Nm                | 255        | 260        | 280        |
| Max. torque                | $M_{max}$           | Nm                | 1100       | 1100       | 1100       |
| Rated speed                | $n_{rated}$         | rpm               | 1200       | 1030       | 550        |
| Max. speed                 | $n_{max}$           | rpm               | 5500       | 5500       | 5500       |
| Rated power                | $P_{rated}$         | kW                | 32         | 28         | 16.1       |
| Standstill current         | $I_0$               | A                 | 101        | 78.0       | 44.0       |
| Rated current              | $I_{rated}$         | A                 | 83.3       | 69.6       | 42.4       |
| Max. current               | $I_{max}$           | A                 | 333        | 278        | 170        |
| Rated voltage              | $V_{rated}$         | V                 | 350        | 350        | 350        |
| Rated frequency            | $f_{rated}$         | Hz                | 41         | 36         | 20         |
| Moment of inertia          | J                   | kgcm <sup>2</sup> | 1340       | 1340       | 1340       |
| Efficiency                 | $\eta$              |                   | 0.870      | 0.870      | 0.810      |
| Stator terminal resistance | $R_{UV\ 20}$<br>°C  | $\Omega$          | 0.15       | 0.196      | 0.589      |
| Stator terminal resistance | $R_{UV\ 150}$<br>°C | $\Omega$          | 0.226      | 0.295      | 0.888      |
| Mutual inductance          | $L_H$               | mH                | 18.64      | 71.4       | 72.1       |
| Stator leakage inductance  | $L_{1\sigma}$       | mH                | 0.78       | 3.165      | 3.112      |
| Rotor leakage inductance   | $L_{2\sigma}$       | mH                | 1.3        | 5.135      | 5.08       |
| Stator resistance          | $R_{1,\ 20}$        | $\Omega$          | 0.075      | 0.294      | 0.294      |
| Rotor resistance           | $R_{2',\ 20}$       | $\Omega$          | 0.0621     | 0.25       | 0.25       |
| Weight                     | m                   | kg                | 194        | 194        | 194        |



## Torque characteristics

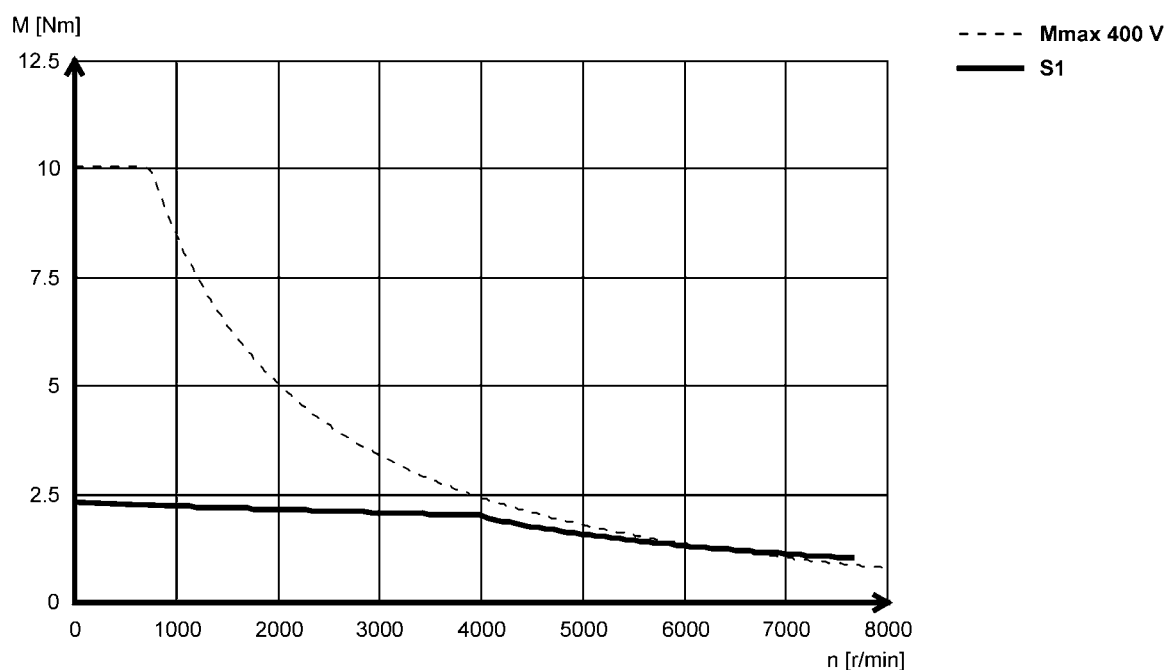


The torque/speed characteristic for your motor/inverter combination can be found on the Internet:  
<http://www.lenze.com> → Product Finder → M-n characteristics

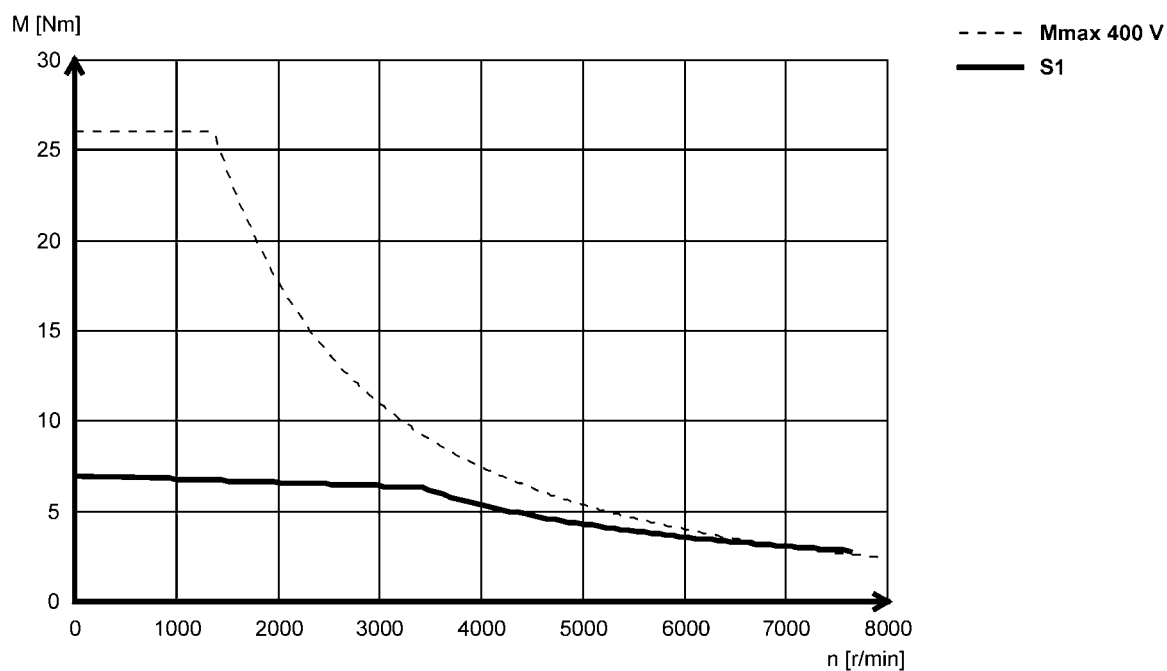


The following data apply to a mains voltage 3 x 400 V of the inverter.

### MCA10I40- (self-ventilated)

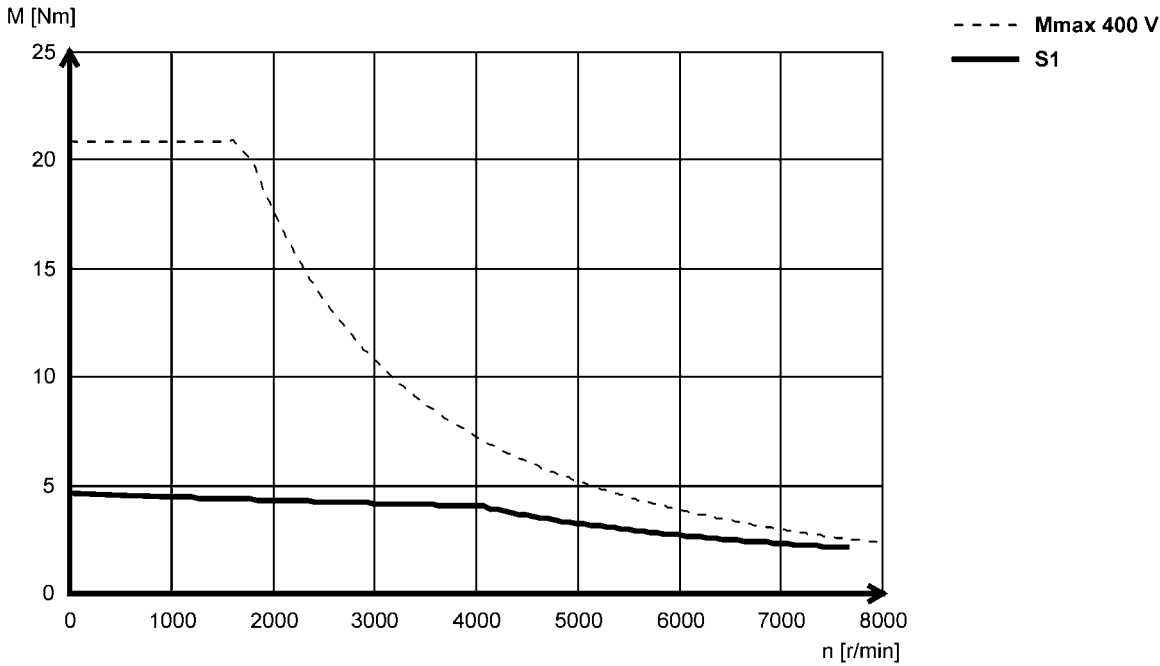


### MCA13I34- (forced ventilated)

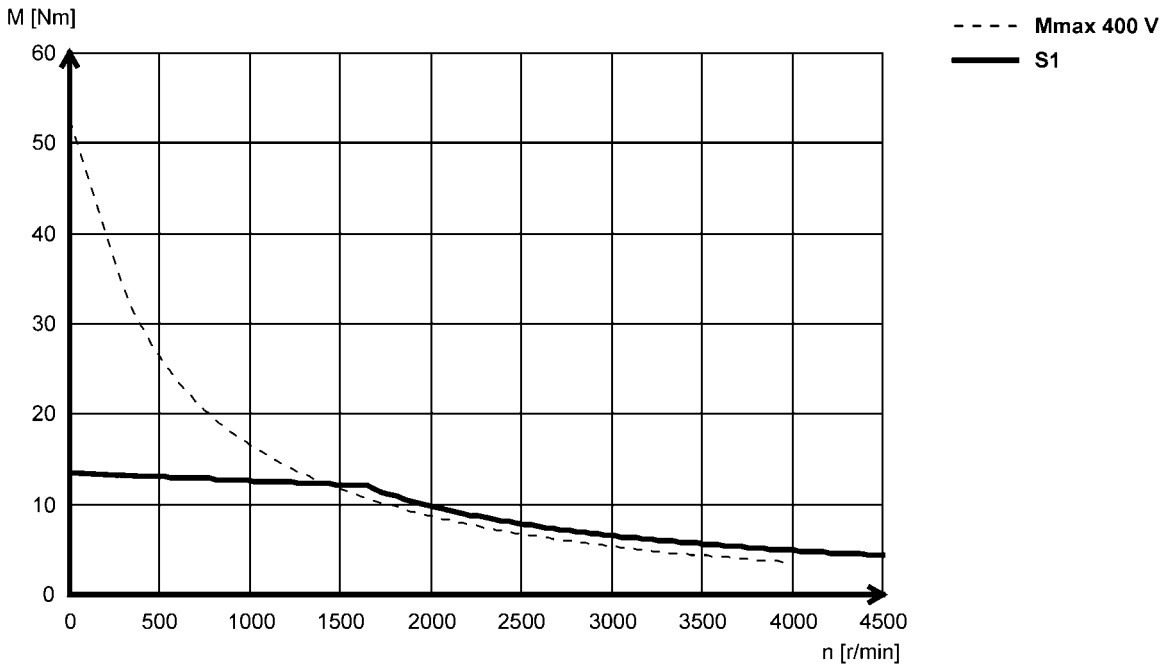




MCA13I41- (self-ventilated)



MCA14L16- (forced ventilated)

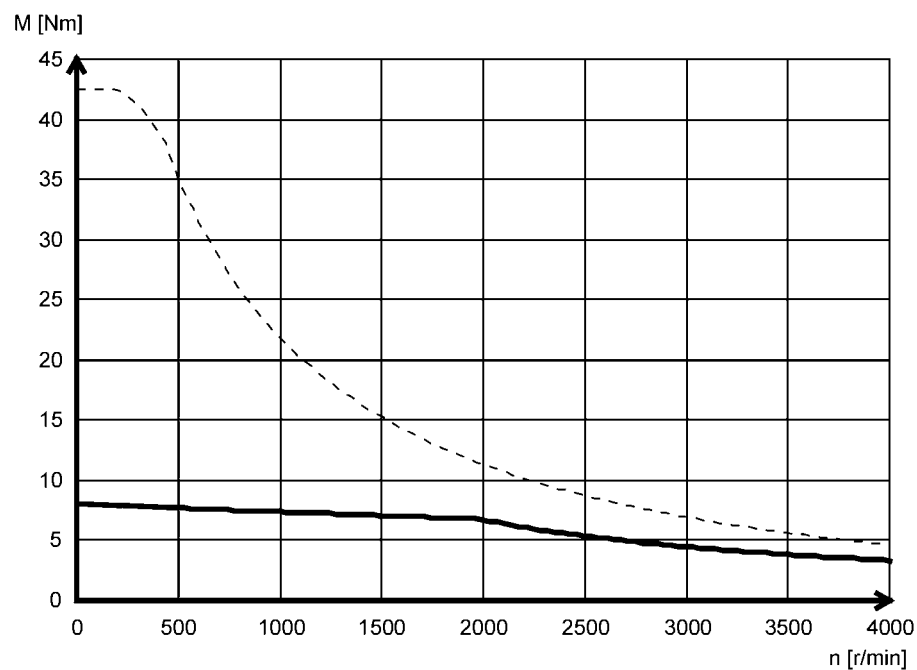




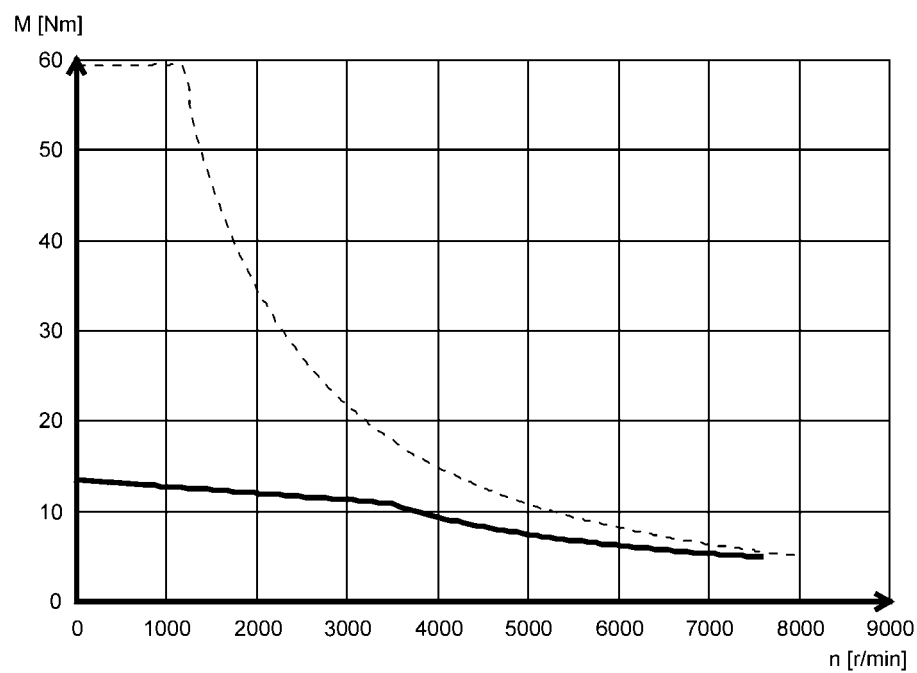
## Motor data

Torque characteristics

### MCA14L20- (self-ventilated)



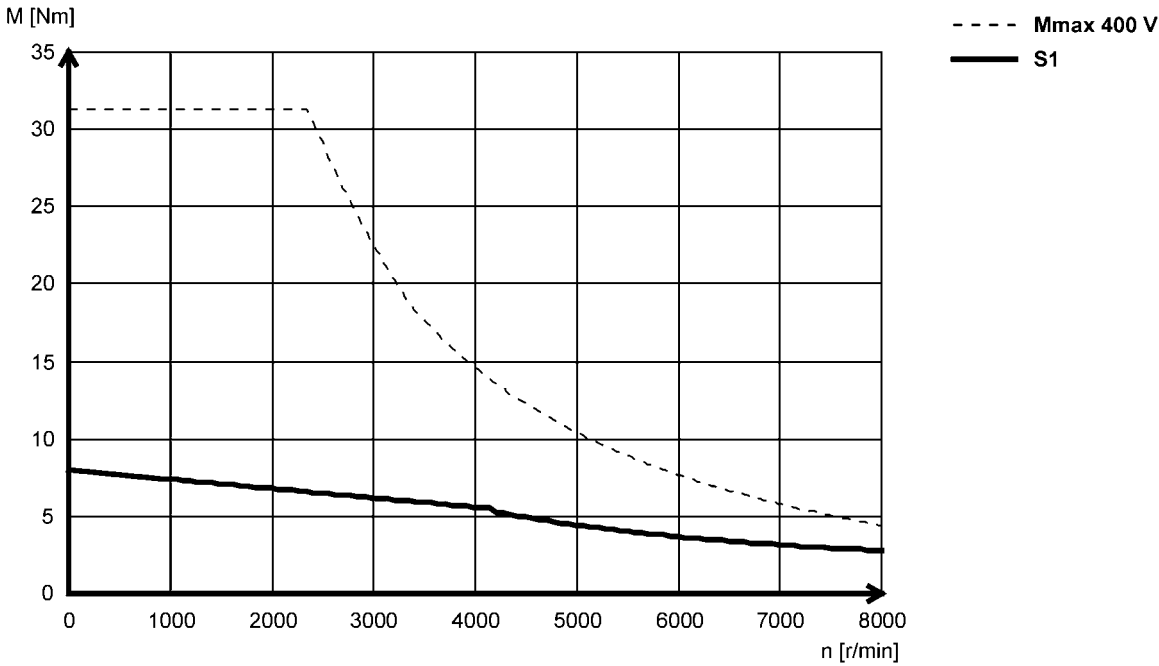
### MCA14L35- (forced ventilated)



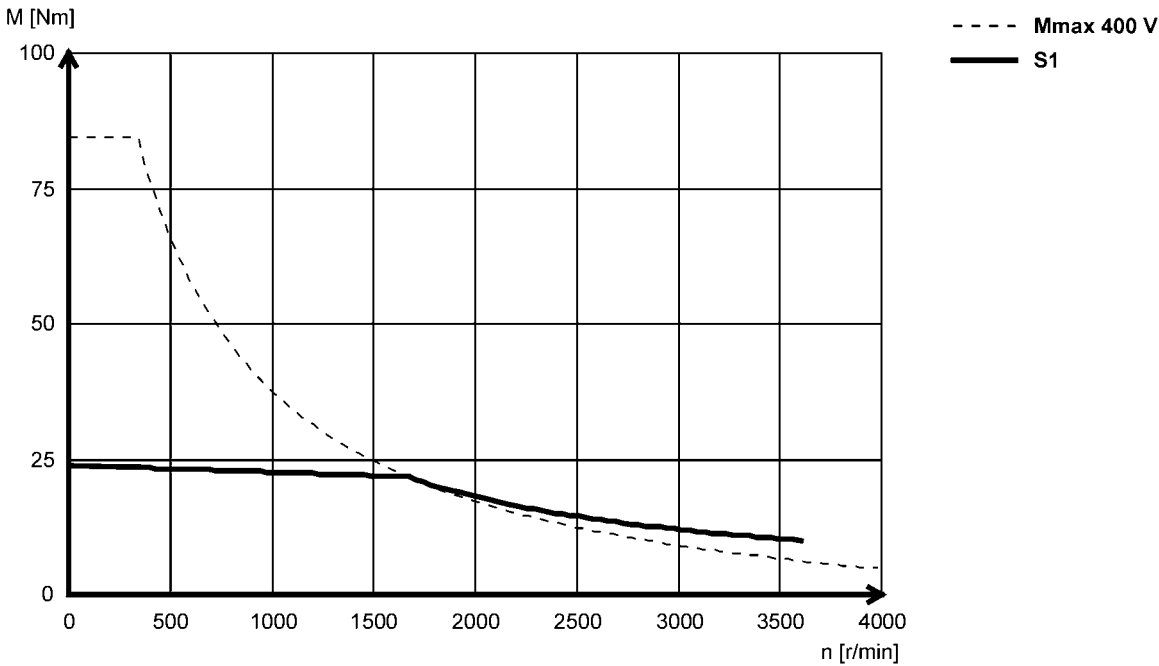
Motor data  
Torque characteristics



MCA14L41- (self-ventilated)



MCA17N17- (forced ventilated)

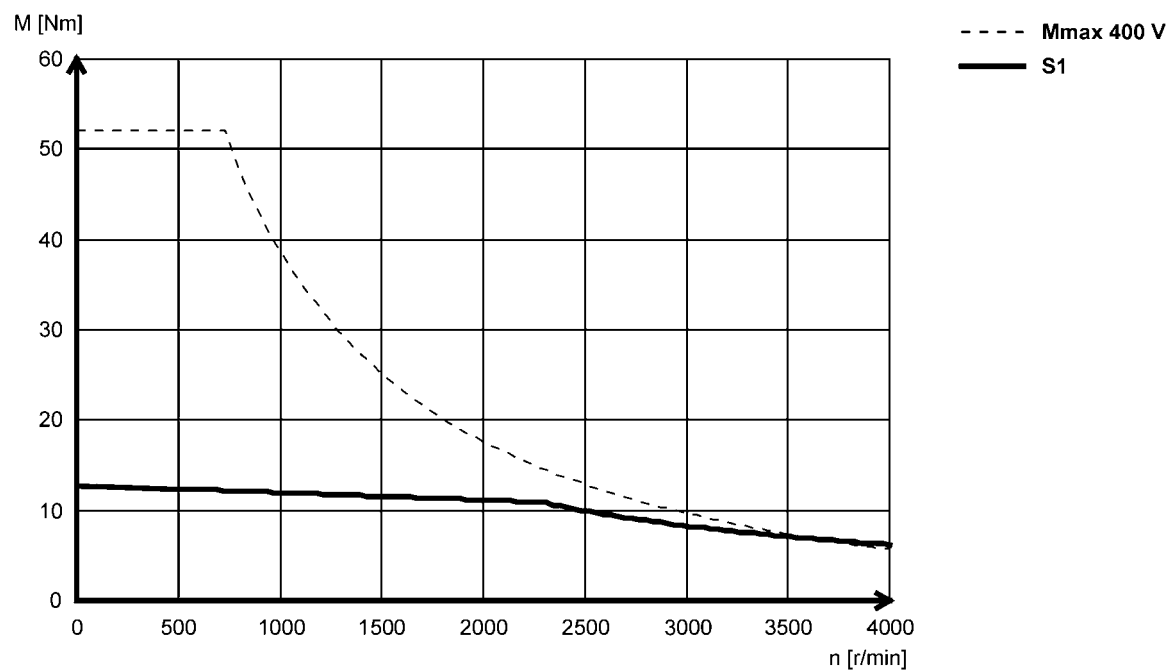




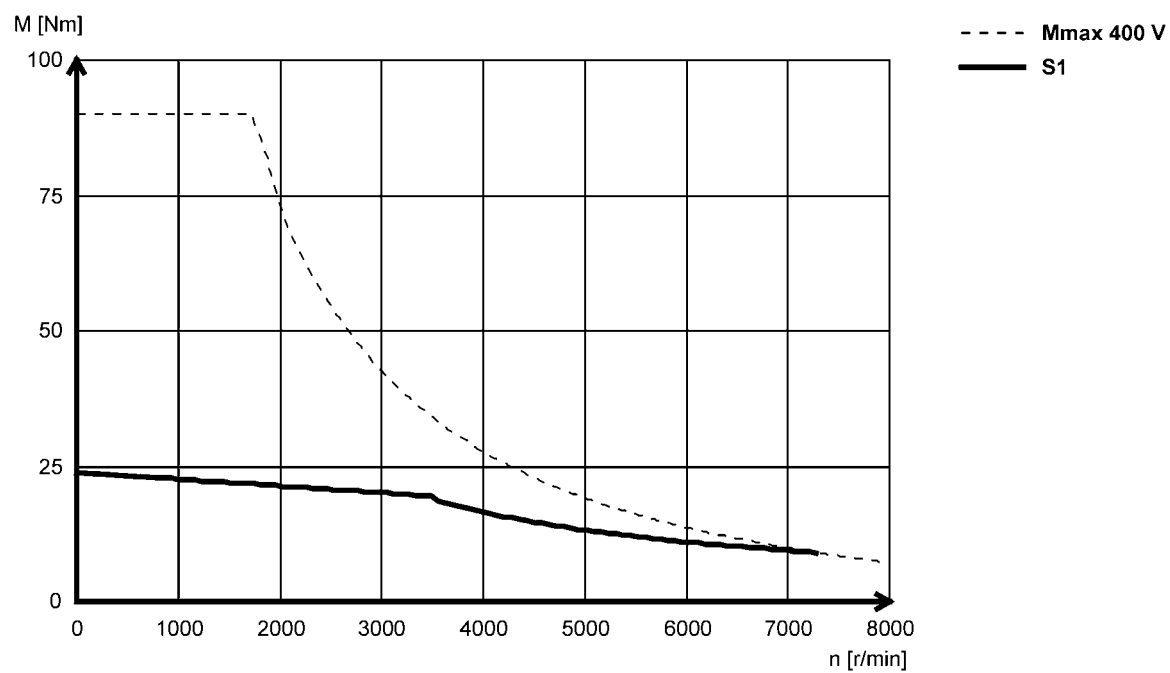
## Motor data

Torque characteristics

### MCA17N23- (self-ventilated)

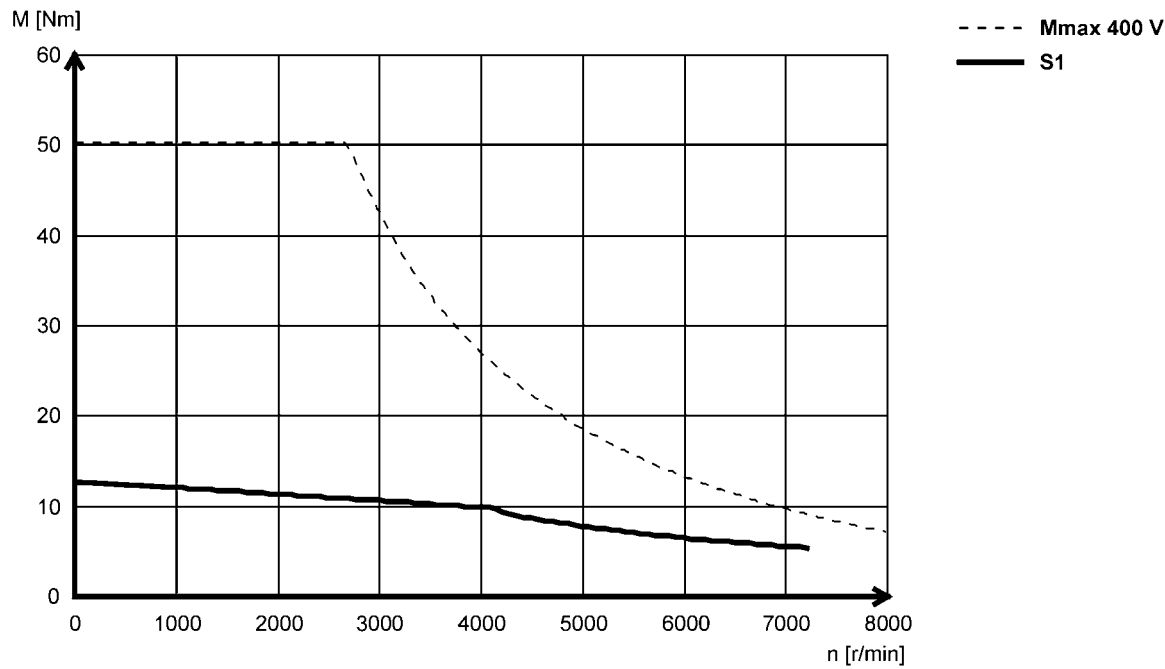


### MCA17N35- (forced ventilated)

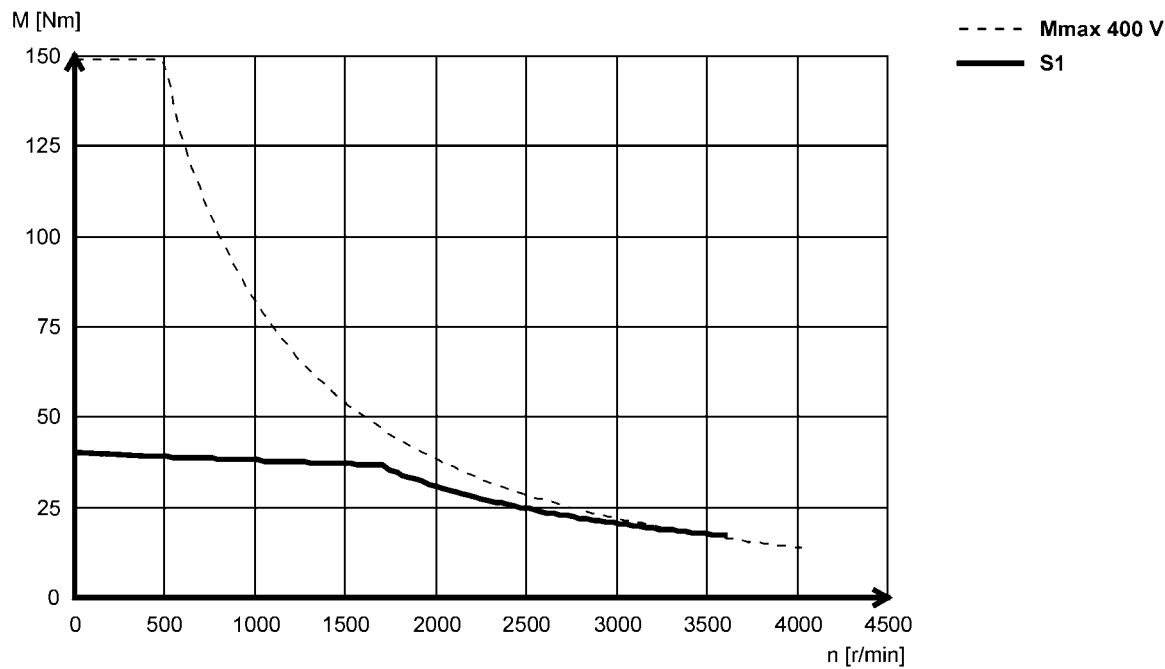




MCA17N41- (self-ventilated)



MCA19S17- (forced ventilated)

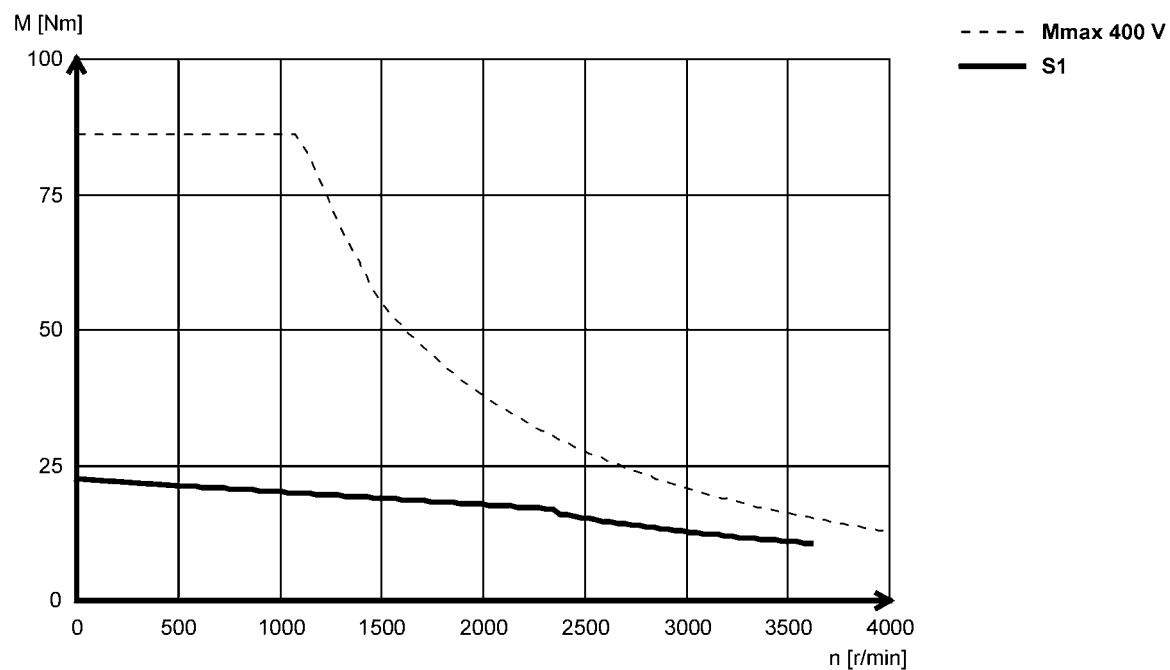




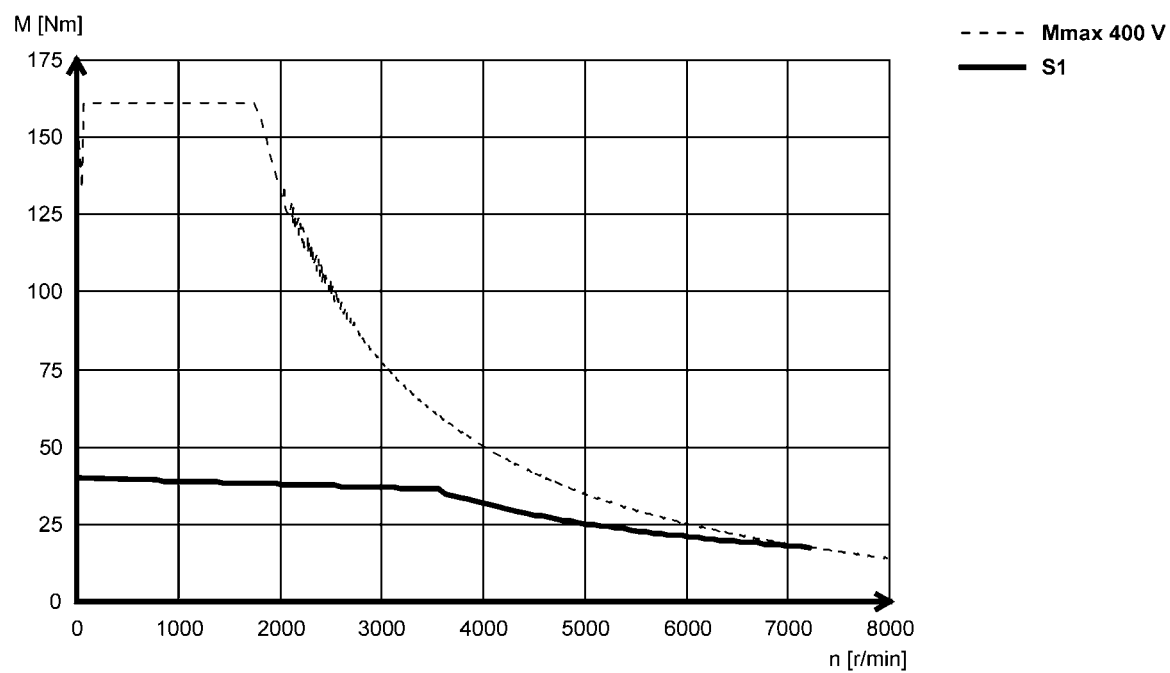
## Motor data

Torque characteristics

### MCA19S23- (self-ventilated)

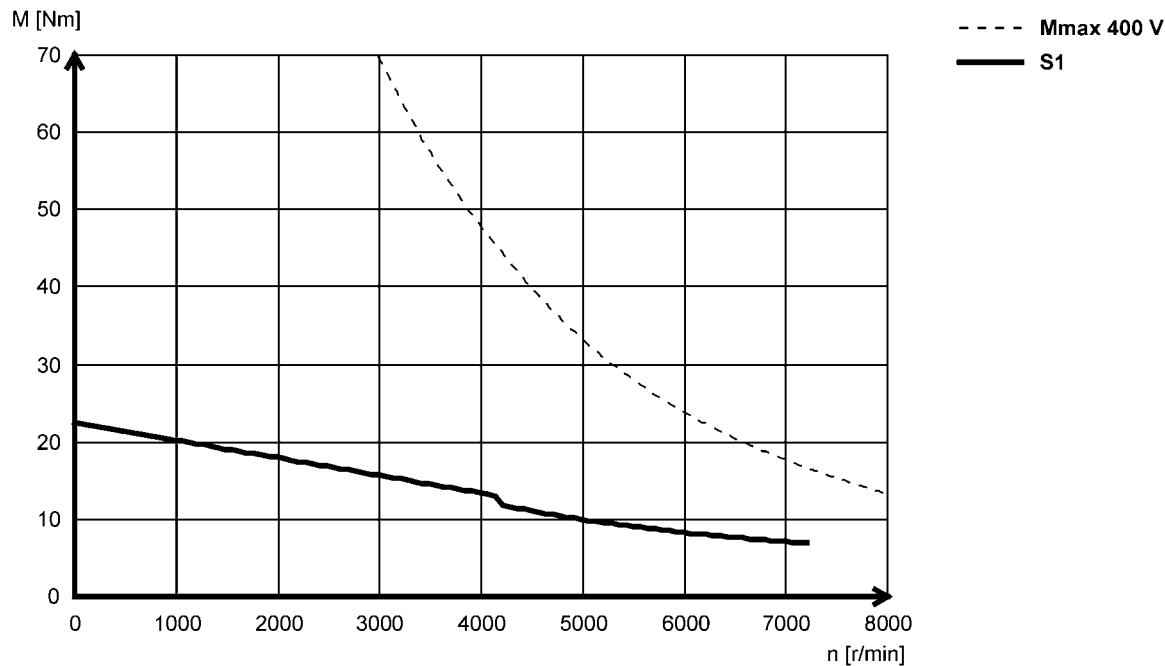


### MCA19S35- (forced ventilated)

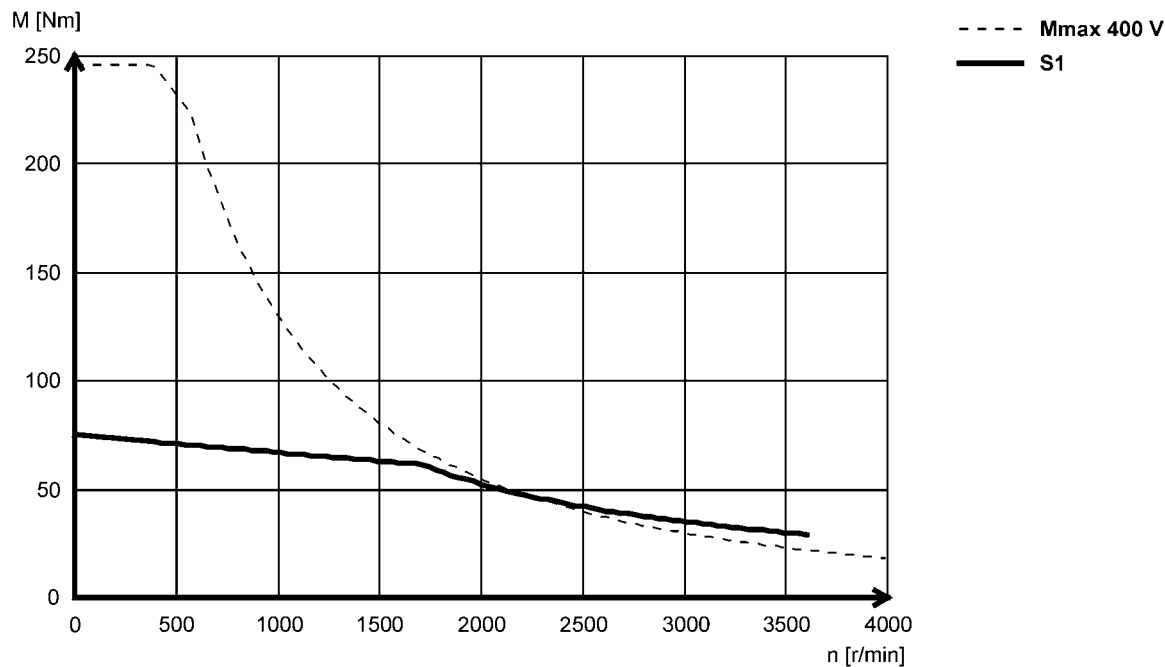




MCA19S42- (self-ventilated)



MCA21X17- (forced ventilated)

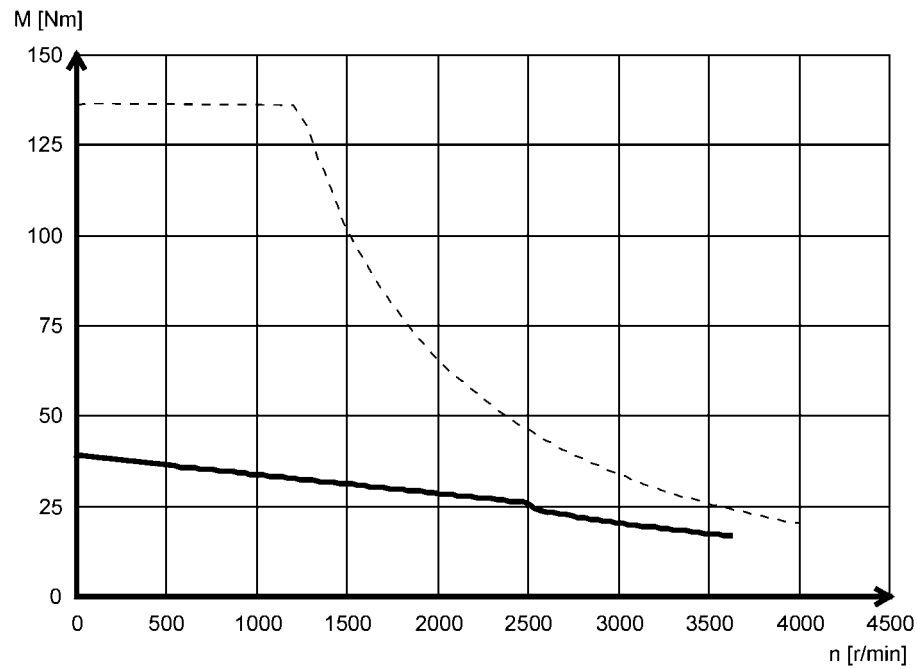




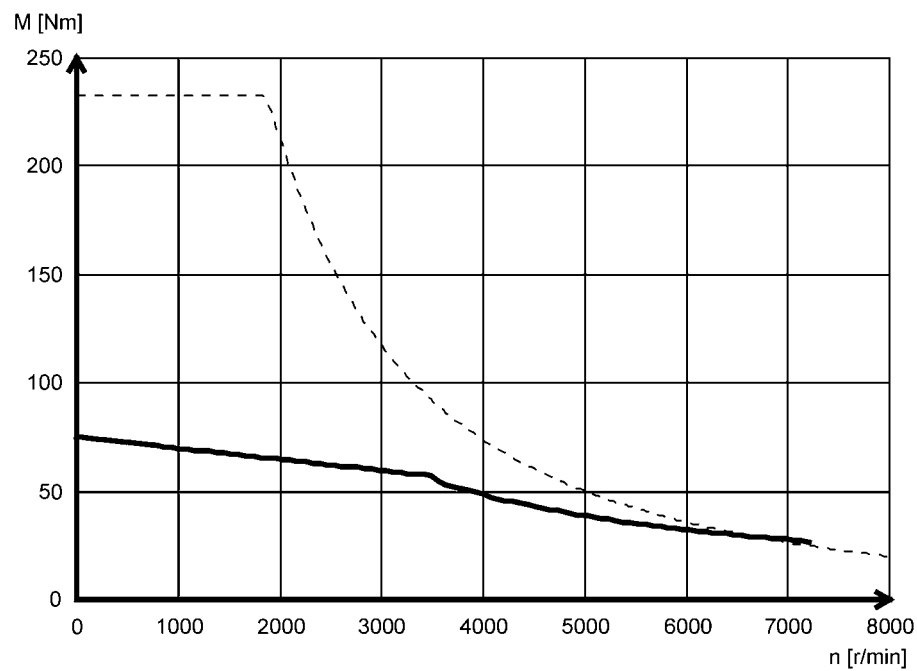
## Motor data

Torque characteristics

### MCA21X25- (self-ventilated)



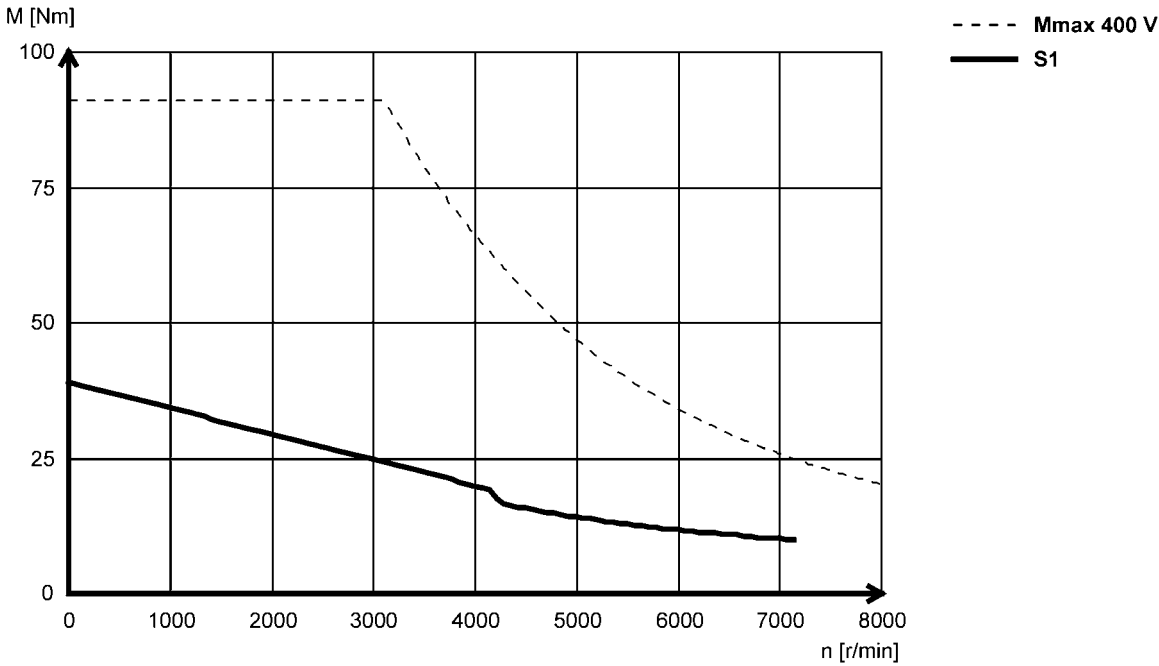
### MCA21X35- (forced ventilated)



Motor data  
Torque characteristics



MCA21X42- (self-ventilated)





### Environmental notes and recycling

Lenze has been certified to the worldwide environmental management standard for many years (DIN EN ISO 14001). As part of our environmental policy and the associated climate responsibility, please note the following information on hazardous ingredients and the recycling of Lenze products and their packaging:



Lenze products are partly subject to the EU Directive on the restriction of certain hazardous substances in electrical and electronic equipment 2011/65/EU: RoHS Directive [UKCA: S.I. 2012/3032 - The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012] . This is documented accordingly in the EU declaration of conformity and with the CE mark.



The crossed-out wheeled bin symbol is located on the equipment. This information indicates that used electrical and electronic products must not be disposed of with normal household waste.

The EU Directive 2012/19/EU: Directive on waste electrical and electronic equipment (WEEE) [UKCA: S.I. 2013/3113 - The Waste Electrical and Electronic Equipment Regulations 2013] , which has been transposed into national law by the respective EU member states, applies to the disposal of equipment. As a customer, you have the option of disposing of the electrical and electronic equipment that you have purchased from us and that is subject to WEEE via the Lenze branch in your country.

Lenze addresses in Europe: <https://www.lenze.com/en-de/company/global-presence>

Some Lenze products contain batteries/rechargeable batteries in accordance with EU Directive 2006/66/EC: Battery Directive [UKCA: S.I. 2009/890 - The Waste Batteries and Accumulators Regulations 2009] . Any batteries/rechargeable batteries included are designed to last the life of the product and do not need to be replaced or otherwise removed by the end user.



Lenze products are usually sold with cardboard or plastic packaging. This packaging complies with EU Directive 94/62/EC: Directive on packaging and packaging waste [UKCA: S.I. 1997/648 - The Producer Responsibility Obligations (Packaging Waste) Regulations 1997] . The required disposal route is indicated by material-specific labels with the "recycling triangle". Example: "21 - other cardboard"

REACH

Lenze products are subject to REGULATION (EC) No 1907/2006: REACH Regulation [UKCA: S.I. 2008/2852 - The REACH Enforcement Regulations 2008] . When used as intended, exposure of substances to humans, animals and the environment is excluded.

Lenze products are industrial electrical and electronic products and are disposed of professionally. Both the mechanical and electrical components such as electric motors, gearboxes or inverters contain valuable raw materials that can be recycled and reused. Proper recycling and thus maintaining the highest possible level of recyclability is therefore important and sensible from an economic and ecological point of view.

- Coordinate professional disposal with your waste disposal company.
- Separate mechanical and electrical components, packaging, hazardous waste (e.g. gear oils) and batteries/rechargeable batteries wherever possible.
- Dispose of the separated waste in an environmentally sound and proper manner (no household waste or municipal bulky waste).

| What?                                     | Material                                           | Disposal instructions                                                               |
|-------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------|
| Pallets                                   | Wood                                               | Return to manufacturers, freight forwarders or reusable materials collection system |
| Packaging material                        | Paper, cardboard, pasteboard, plastics             | Collect and dispose of separately                                                   |
| Products                                  |                                                    |                                                                                     |
| Electronic devices                        | Metal, plastics, circuit boards, heatsinks         | As electronic waste give to professional disposer for recycling                     |
| Gearbox                                   | Oil                                                | Drain oil and dispose of separately                                                 |
|                                           | Casting, steel, aluminium                          | Dispose as metal scrap                                                              |
| Motors                                    | Casting, copper, rotors, magnets, potting compound | As engine scrap give to professional disposer for recycling                         |
| Dry-cell batteries/rechargeable batteries |                                                    | As used batteries give to professional disposer for recycling                       |



Further information on Lenze's environmental and climate responsibility and on the topic of energy efficiency can be found on the Internet:

[www.Lenze.com](http://www.Lenze.com) → search word: "Sustainability"



Appendix

Good to know

Operating modes of the motor

In continuous operation a motor reaches its permissible temperature limit if it outputs the rated power dimensioned for continuous operation. However, if the motor is only subjected to load for a short time, the power output by the motor may be greater without the motor reaching its permissible temperature limit. This behaviour is referred to as overload capacity.

Depending on the duration of the load and the resulting temperature rise, the required motor can be selected reduced by the overload capacity.

Operating modes S1 ... S10 as specified by EN 60034-1 describe the basic stress of an electrical machine.

The most important operating modes

| Continuous operation S1                                                                                                                       | Short-time operation S2                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                               |                                                                                                                                                                                                                                               |
| Operation with a constant load until the motor reaches the thermal steady state. The motor may be actuated continuously with its rated power. | Operation with constant load; however, the motor does not reach the thermal steady state. During the following standstill, the motor winding cools down to the ambient temperature again. The increase in power depends on the load duration. |



| Intermittent operation S3                                                                                                                                                                                                                                                                                                                                                  | Non-intermittent periodic operation S6                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Sequence of identical duty cycles comprising operation with a constant load and subsequent standstill. Start-up and braking processes do not have an impact on the winding temperature. The steady-state is not reached. The guide values apply to a cycle duration of 10 minutes. The power increase depends on the cycle duration and on the load period/downtime ratio. | Sequence of identical duty cycles comprising operation with a constant load and subsequent no-load operation. The motor cools down during the no-load phase. Start-up and braking processes do not have an impact on the winding temperature. The steady-state is not reached. The guide values apply to a cycle duration of 10 minutes. The power increase depends on the cycle duration and on the load period/idle time ratio. |

P Power  
t Time  
 $t_L$  Idle time  
 $\theta$  Temperature

$P_v$  Power loss  
 $t_B$  Load period  
 $t_S$  Cycle duration

## Enclosures

The protection class indicates the suitability of a product for specific ambient conditions with regard to humidity as well as the protection against contact and the ingress of foreign particles. The protection classes are classified in the EN 60034-5/ EN IEC 60529.

The first code number after the code letters IP indicates the protection against the ingress of foreign particles and dust. The second code number refers to the protection against the ingress of humidity.

| Code number 1 | Degree of protection                                                                                         | Code number 2 | Degree of protection                                                                                          |
|---------------|--------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------------------------------------------------|
| 0             | No protection                                                                                                | 0             | No protection                                                                                                 |
| 1             | Protection against the ingress of foreign particles $d > 50$ mm. No protection in case of deliberate access. | 1             | Protection against vertically dripping water (dripping water).                                                |
| 2             | Protection against medium-sized foreign particles, $d > 12$ mm, keeping away fingers or the like.            | 2             | Protection against diagonally falling water (dripping water), $15^\circ$ compared to normal service position. |
| 3             | Protection against small foreign particles $d > 2.5$ mm. Keeping away tools, wires or the like.              | 3             | Protection against spraying water, up to $60^\circ$ from vertical.                                            |
| 4             | Protection against granular foreign particles, $d > 1$ mm, keeping away tools, wire or the like.             | 4             | Protection against spraying water from all directions.                                                        |
| 5             | Protection against dust deposits (dust-protected), complete protection against contact.                      | 5             | Protection against water jets from all directions.                                                            |
| 6             | Protection against the ingress of dust (dust-proof), complete protection against contact.                    | 6             | Protection against choppy seas or heavy water jets (flood protection).                                        |





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