

L-force Controls

Manual (Software)

PC based Automation



Global Drive Control (GDC)

Industrial PC as Gateway

Lenze

This manual applies to the Lenze »Global Drive Control« (»GDC«) as of version 4.10 (SP 4)

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Imprint

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2 Safety instructions

Please observe the following safety instructions when you want to commission a controller or system using the »Global Drive Control«.



Please read the documentation supplied with the controller / system components carefully before you start commissioning the devices with the »Global Drive Control«!

The device documentation contains safety instructions which must be observed!



Danger!

According to our present level of knowledge it is not possible to ensure the absolute freedom from errors of a software.

If necessary, systems with built-in controllers must be provided with additional monitoring and protective equipment according to relevant safety regulations (e.g. law on technical equipment, regulations for the prevention of accidents), so that an impermissible operating status does not endanger persons or facilities.

During commissioning persons must keep a safe distance from the motor or the machine parts driven by the motor. Otherwise there would be a risk of injury by the moving machine parts.



Stop!

If you change parameters in the »Global Drive Control« while a device is connected online, the changes will be directly accepted by the device!

A wrong parameter setting can cause unpredictable motor movements. By unintentional direction of rotation, too high speed or jerky operation, the driven machine parts may be damaged!

3 About this Manual

This Software Manual contains information about the Industrial PC(IPC) as gateway .



Note!

The Software Manual supplements the Mounting Instructions enclosed with the controller, the Hardware Manual, and the Software Manual for the controller.

The Mounting Instructions contain safety information which must be observed!

3.1 Conventions used

This Software Manual uses the following conventions to distinguish between different types of information:

Type of information	Writing	Examples/notes
Variable identifier	<i>Italics</i>	By setting <i>bEnable</i> to TRUE...
Window pane		The <i>Message window...</i> / the <i>Options</i> dialog box...
Control element	Bold	The OK button... / The Copy command... / The Properties tab... / The Name input field...
Sequence of menu commands		If the execution of a function requires several commands, the individual commands are separated by an arrow: Select File→Open to...
Keyboard command	< Bold >	Use <F1> to open the Online Help.
		If a command requires a combination of keys, a "+" is placed between the key symbols: Use <Shift>+<ESC> to...
Program listings	Courier	<pre>IF var1 < var2 THEN a = a + 1 END IF</pre>
Keyword	Courier bold	
Hyperlink	<u>Underlined</u>	Hyperlinks are highlighted references which are activated by means of a mouse click.
Step-by-step instructions		Step-by-step instructions are indicated by a pictograph.

3.2 Definition of notes used

The following signal words and symbols are used in this Software Manual to indicate dangers and important information:

Safety instructions

Layout of the safety instructions:



Pictograph and signal word!

(characterise the type and severity of danger)

Note

(describes the danger and suggests how to avoid the danger)

Pictograph	Signal word	Meaning
	Danger!	Danger of personal injury through dangerous electrical voltage Indicates an impending danger that may lead to death or severe personal injury if the corresponding measures are not taken.
	Danger!	Danger of personal injury through a general source of danger Indicates an impending danger that may lead to death or severe personal injury if the corresponding measures are not taken.
	Stop!	Danger of material damage Indicates a potential danger that may lead to material damage if the corresponding measures are not taken.

Application notes

Pictograph	Signal word	Meaning
	Note!	Important note for trouble-free operation
	Tip!	Useful tip for easy handling

4 IPC as gateway

This chapter describes how to use the gateway function of an IPC to establish an online connection to a field device.

The »Global Drive Control« (»GDC«) serves to access field devices like 9300, 8200 and ECS. If the field devices are driven by an IPC via the CAN fieldbus, the »GDC« is able to use the IPC as a gateway. »GDC« is interfaced to the IPC via Ethernet."

4.1 Setting of the communication path



Tip!

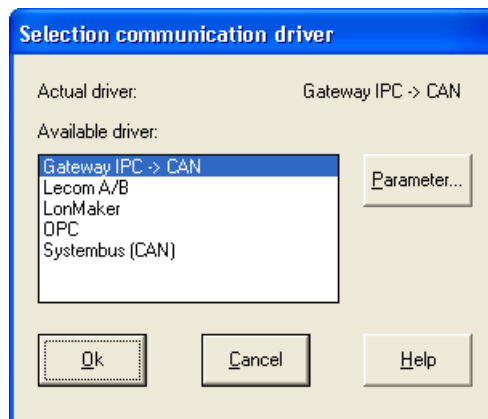
Before working on the communication parameters, switch to the offline mode. To activate the offline mode, press the **F4** button:



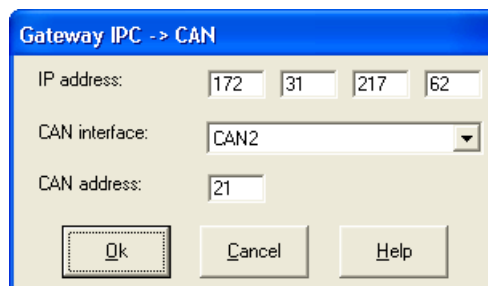
To use the IPC as gateway, you must select the suitable communication driver: **Options → Communication**.

Select communication driver

Select *Gateway IPC -> CAN* from the list of drivers available:



- Access the *Gateway IPC -> CAN* dialog window via the **Parameter** button.
 - Set communication parameters:



Global Drive Control | Industrial PC as Gateway

IPC as gateway
Connect to drive

- To set the communication parameters, you must enter the following information about your configuration:

Information	Function
IP address	IP address of the IPC which serves as gateway for communication
CAN interface	Number of the CAN interface, to which the required field device is connected
CAN address	Node address of the field device which you want to trigger via the gateway function of the IPC

- Confirm data by **OK**.

4.2

Connect to drive



Tip!

Exit the offline mode by pressing the **F4** button if the **F2** button is deactivated.

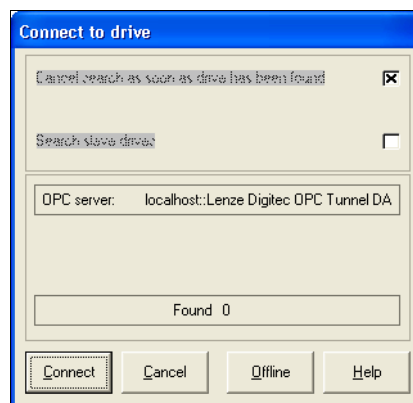


Note!

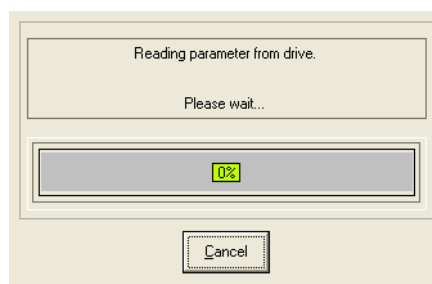
A manual assignment of the device description via the **F3** button is not required.



Access the *Connect to drive* dialog window using **F2**:



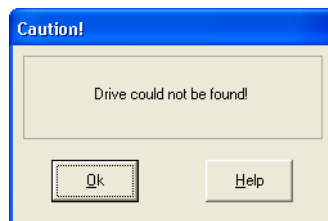
Activate the search process by pressing the **Connect** button to establish an online connection to the drive.



- ▶ The parameters of the connected drive are read from the connected drive.

4.2.1 Remedy in case of error

- ▶ If no drive can be found, the »GDC« displays an error message:



- ▶ Proceed as follows to remove the error:
 - Check the physical connections to the controller and IPC,
 - Make sure that the communication parameters set for the physical configuration are correct.

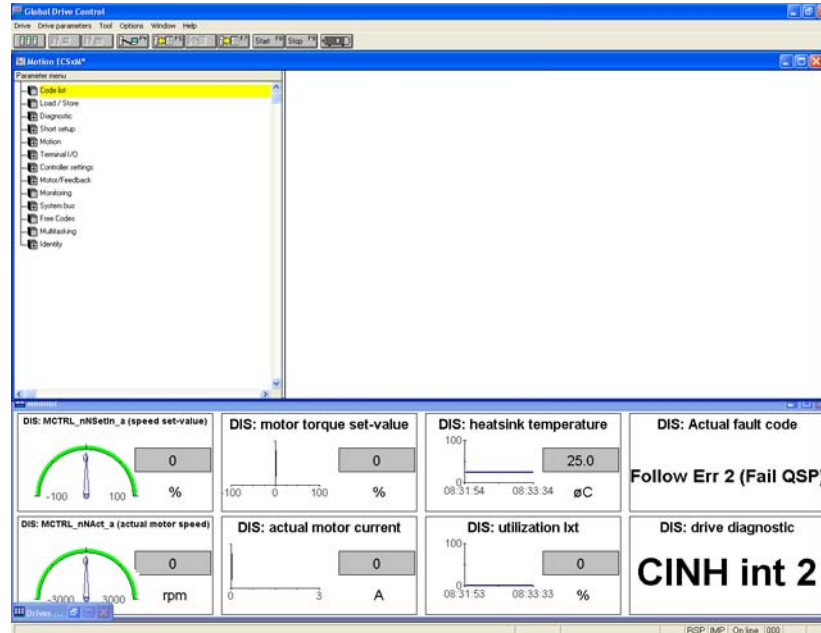


Information on the respective target system of the »GDC« can be found in the corresponding hardware manual.

Nur für internen Gebrauch!

4.2.2 Online mode via IPC gateway function

- After the parameters have been read in successfully, the drive is in online mode. The drive parameters are available in the »GDC«:



In a separate window, the »GDC« provides an overview of the selected drives at the system bus:

Drives connected to bus			
Description	Software version	Address	PLC projekt name
↳ Motion ECSxM	7.4	[IPC:172.31.217.62;CAN:CAN2 dev21]	ECSMot_A120



Note!

The »GDC« displays the selected drive in the *Drives connected to bus* dialog window via the gateway function.. More drives can be connected to the system bus which are not visible in the overview of the dialog window.

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Your opinion is important to us

These Instructions were created to the best of our knowledge and belief to give you the best possible support for handling our product.

If you have suggestions for improvement, please e-mail us to:

feedback-docu@Lenze.de

Thank you for your support.

Your Lenze documentation team