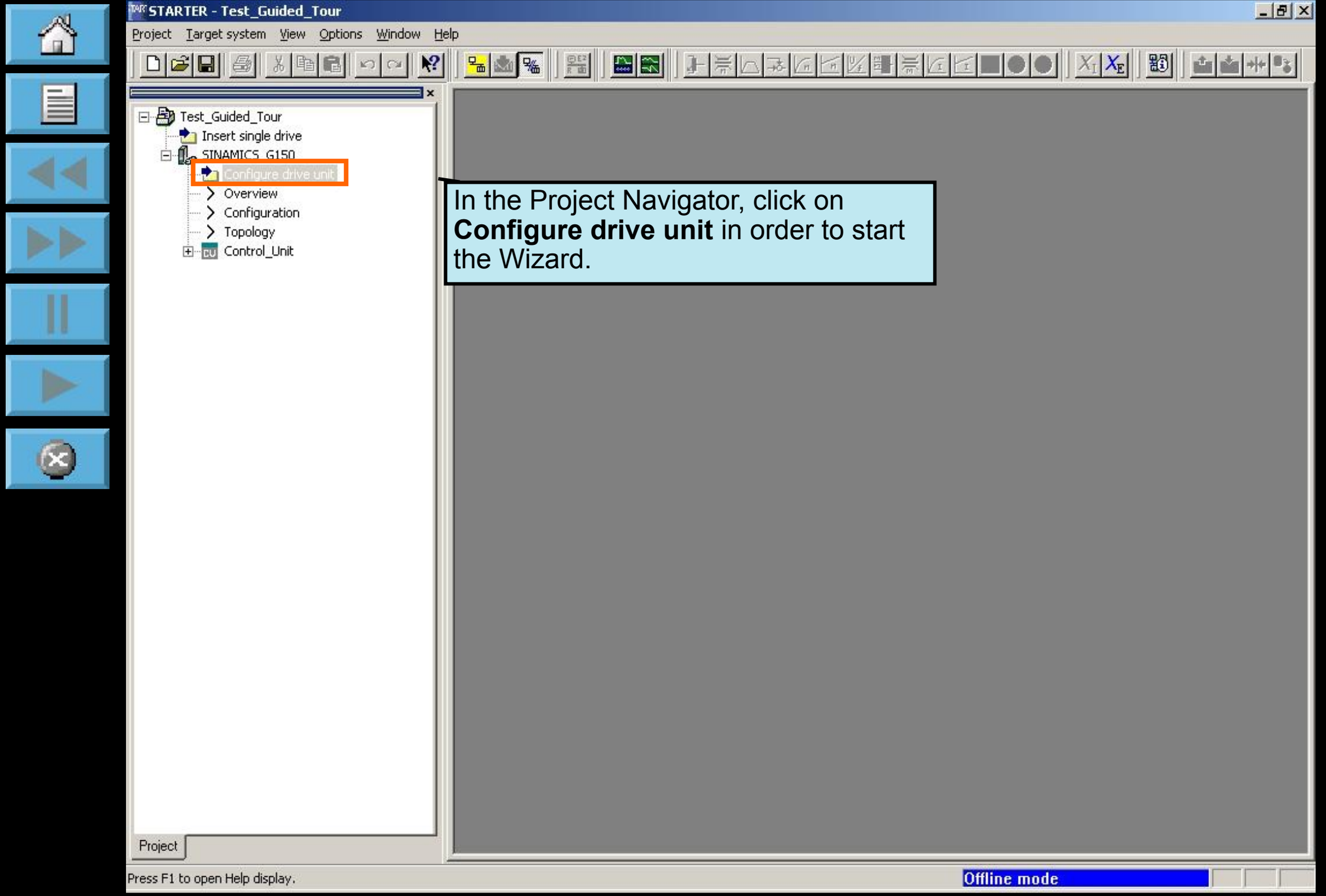
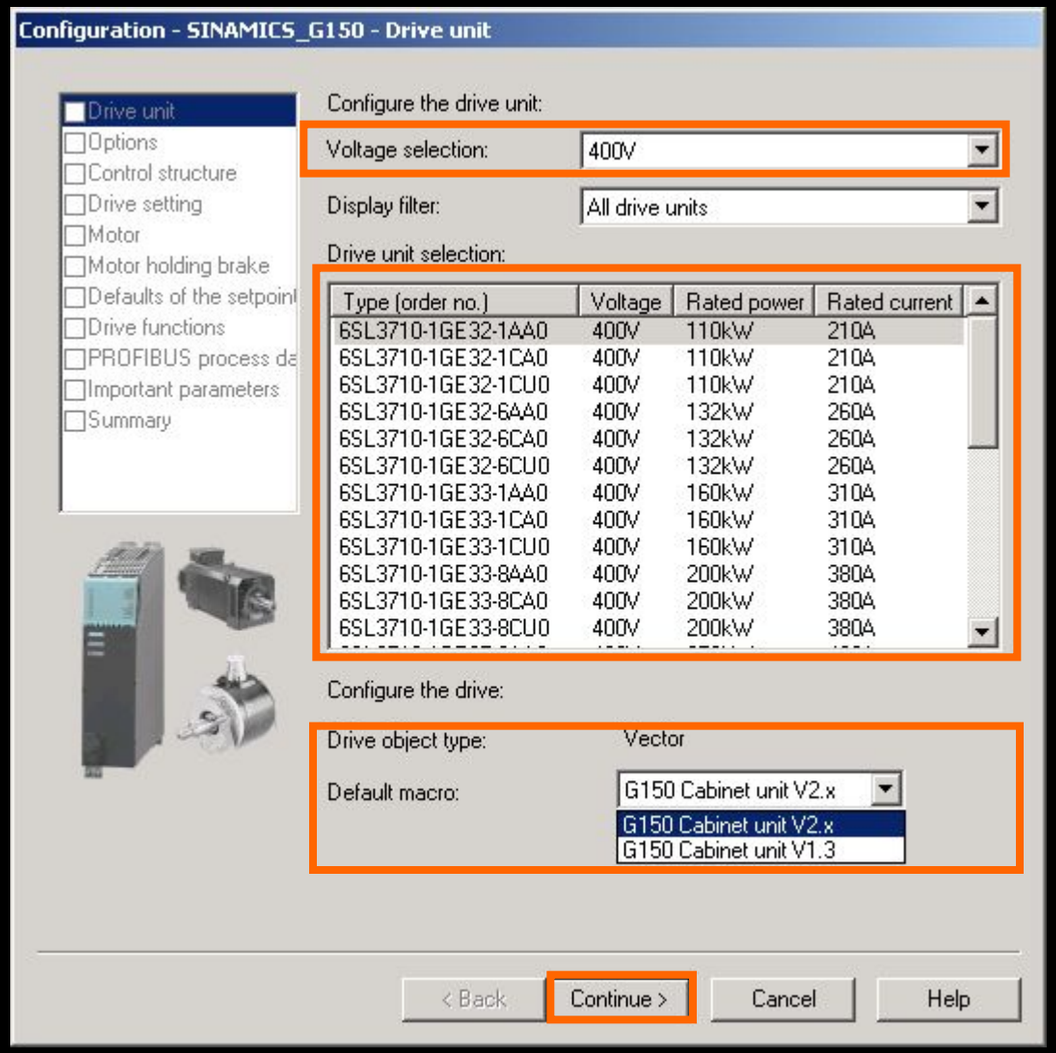
Configuring a SINAMICS G130 or G150 offline

After you have created a project and set-up a drive unit (G130/150), configure this using the Wizard. This involves configuring the drive unit, selecting the option modules and a motor. After the Wizard has been exited, the drive unit is configured and the motor can be tested.


STARTER - Test_Guided_Tour
Project
Target system
View
Options
Window
Help
Test_Guided_Tour
Insert single drive
SINAMICS_G150
Configure drive unit
Overview
Configuration
Topology
Control_Unit
Project
In the Project Navigator, click on **Configure drive unit** in order to start the Wizard.
Press F1 to open Help display.
Offline mode

Selecting the drive unit



Here, select the **line supply voltage** of the drive inverter.

Here, select the unit corresponding to the Order No. of the drive unit.

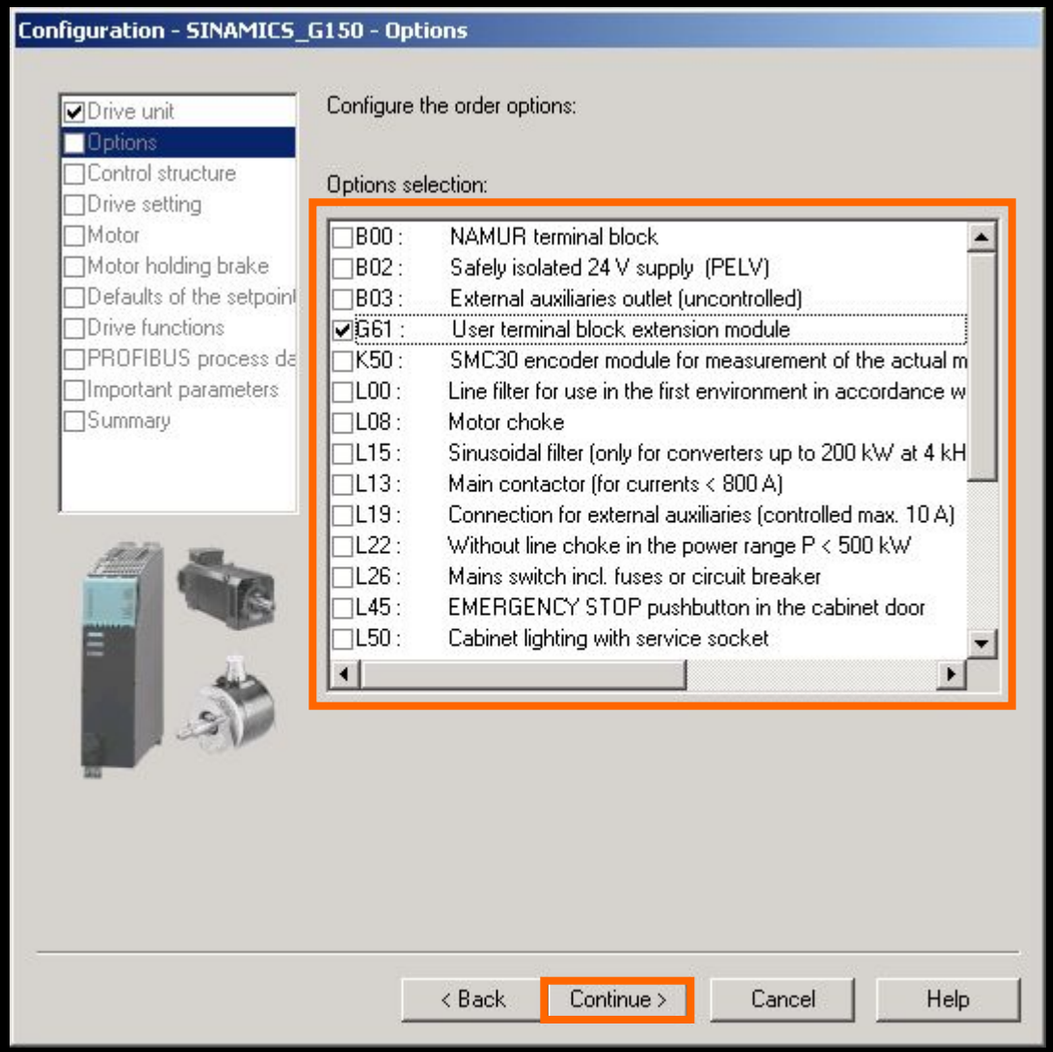
Here, where relevant, select the pre-assignment (default) of the drive units:

- V2.x....terminals, pre-assignment the same as Firmware V2.x (standard)
- V1.3...terminals, pre-assignment the same as Firmware V1.3 (for a firmware upgrade to V2.x and older terminal assignment), select the unit corresponding to the Order No. on the unit.

Click on **Continue** to change to the next window.

Selecting the options that you have ordered

In this dialog, you can select the options used so that the Wizard can make the appropriate parameter assignments for you.

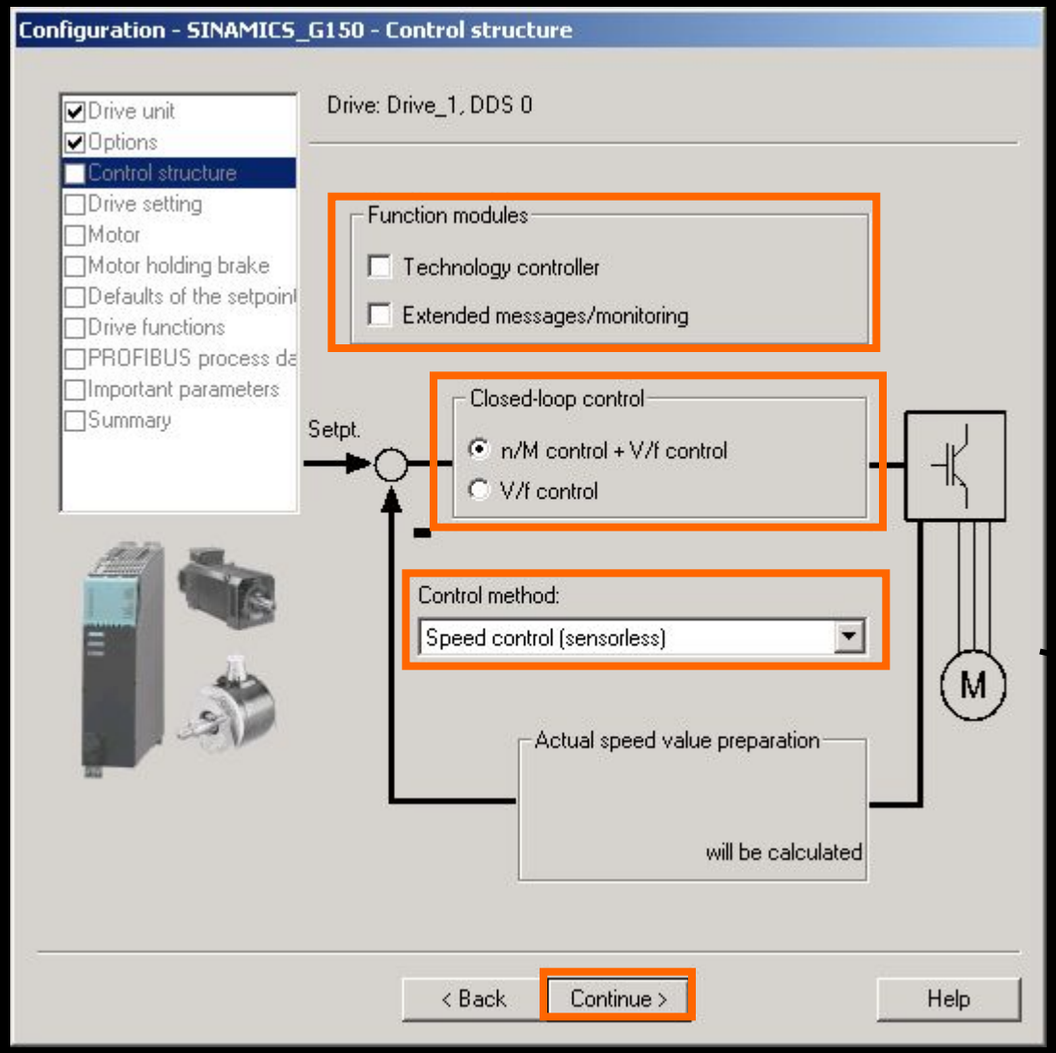


Select the options by activating the checkbox.

Click on **Continue** to change to the next window.

Selecting the function modules and the control mode

In this dialog you have to choose the operating mode of your drive. The operating mode decides on the possible control modes.



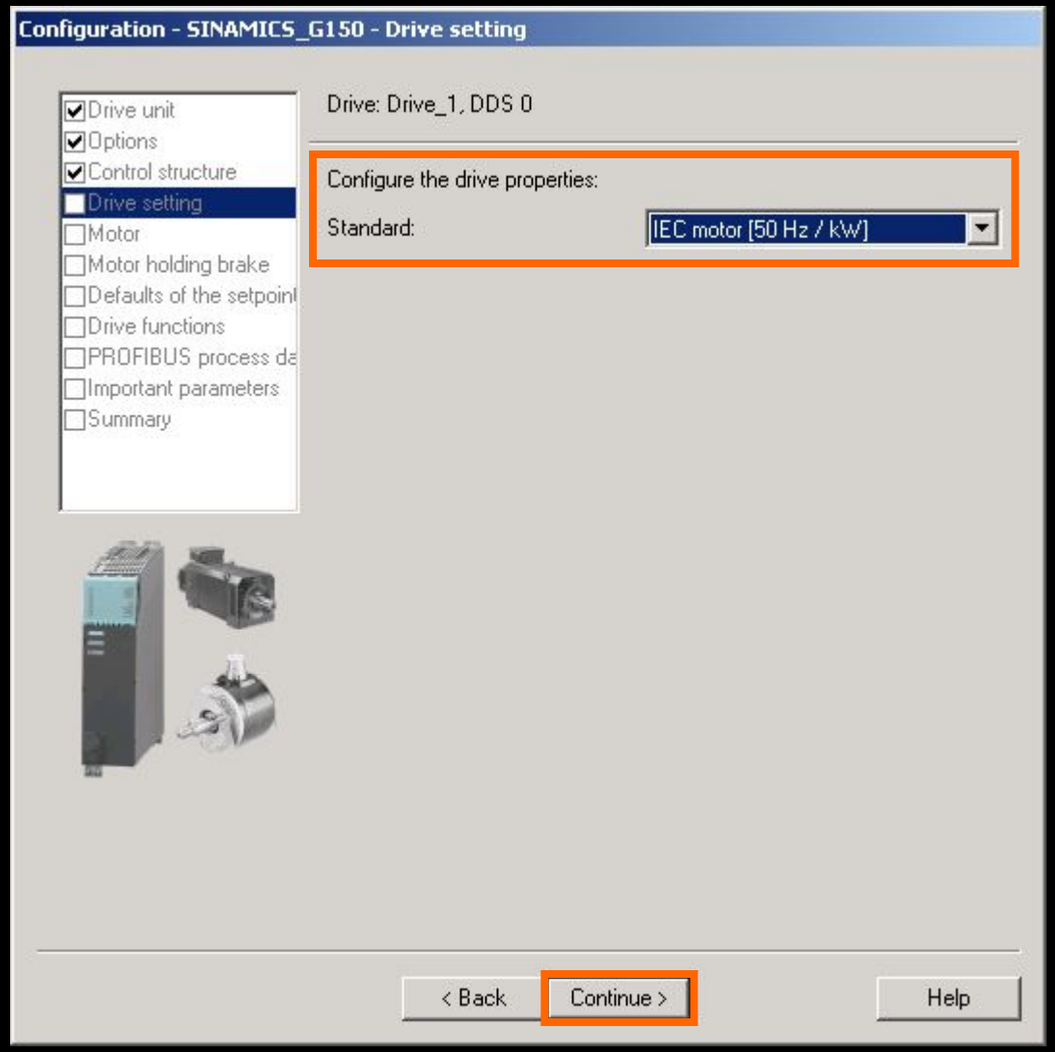
Function modules are additional softwaremodules which allow to realize easy technology functions without a PLC. Before the function modules are usable, they must be activated in the configuration wizard.

Select the operating mode of your drive. In the operating mode “V/f control” no speed or torque control is possible.

Depending on the operating mode choose the control mode of your drive.

Click on **Continue** to change to the next window.

Select the Standard applicable for the motor

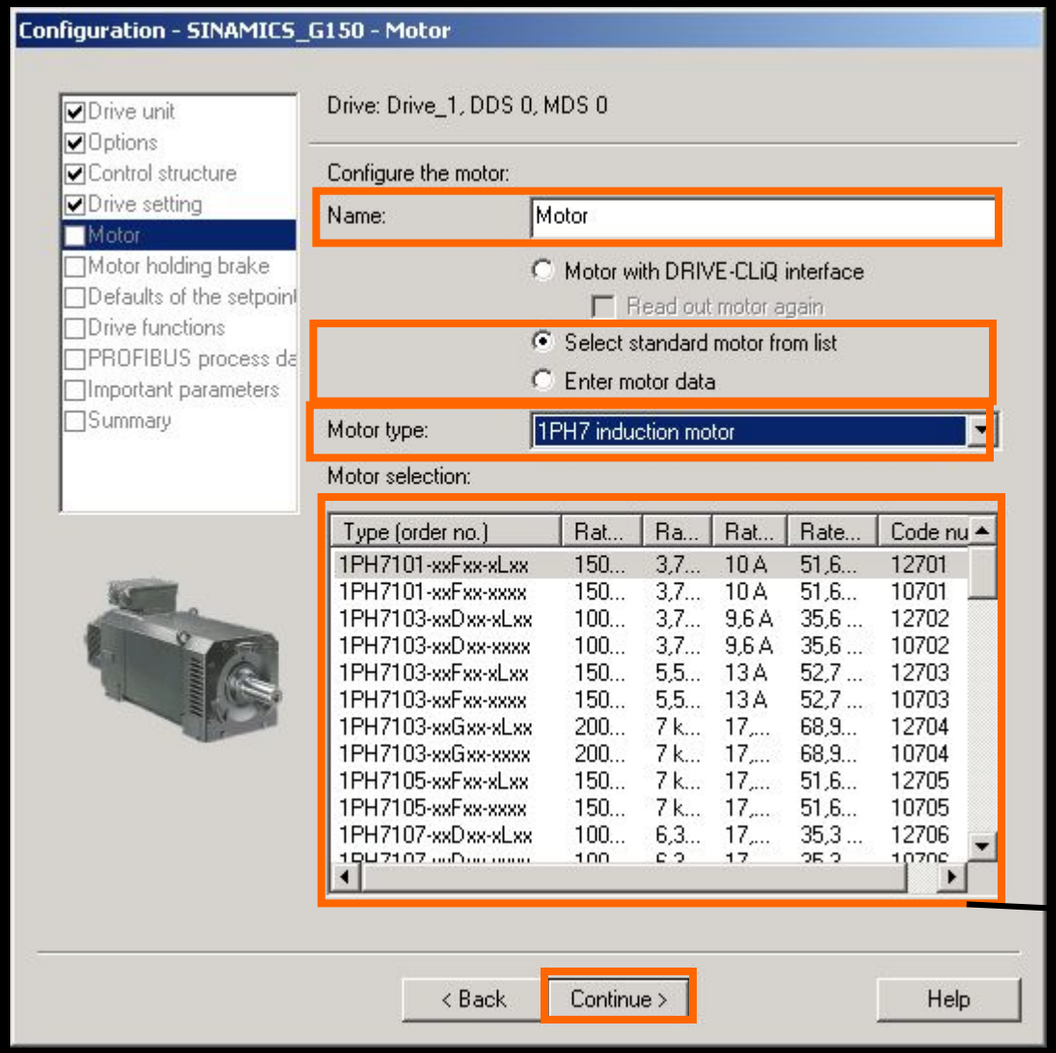


Select the Standard for operation.
- International Standard IEC (Standard)
- US Standard - NEMA

Click on **Continue** to change to the next window.

Ways of selecting motors

You can either select a SIEMENS motor from the list
- or you can directly enter the motor data.



Enter a name for the motor, e.g. the equipment code.

Here you can either select a SIEMENS motor from the list – or you can manually enter the motor data (refer to the next page).

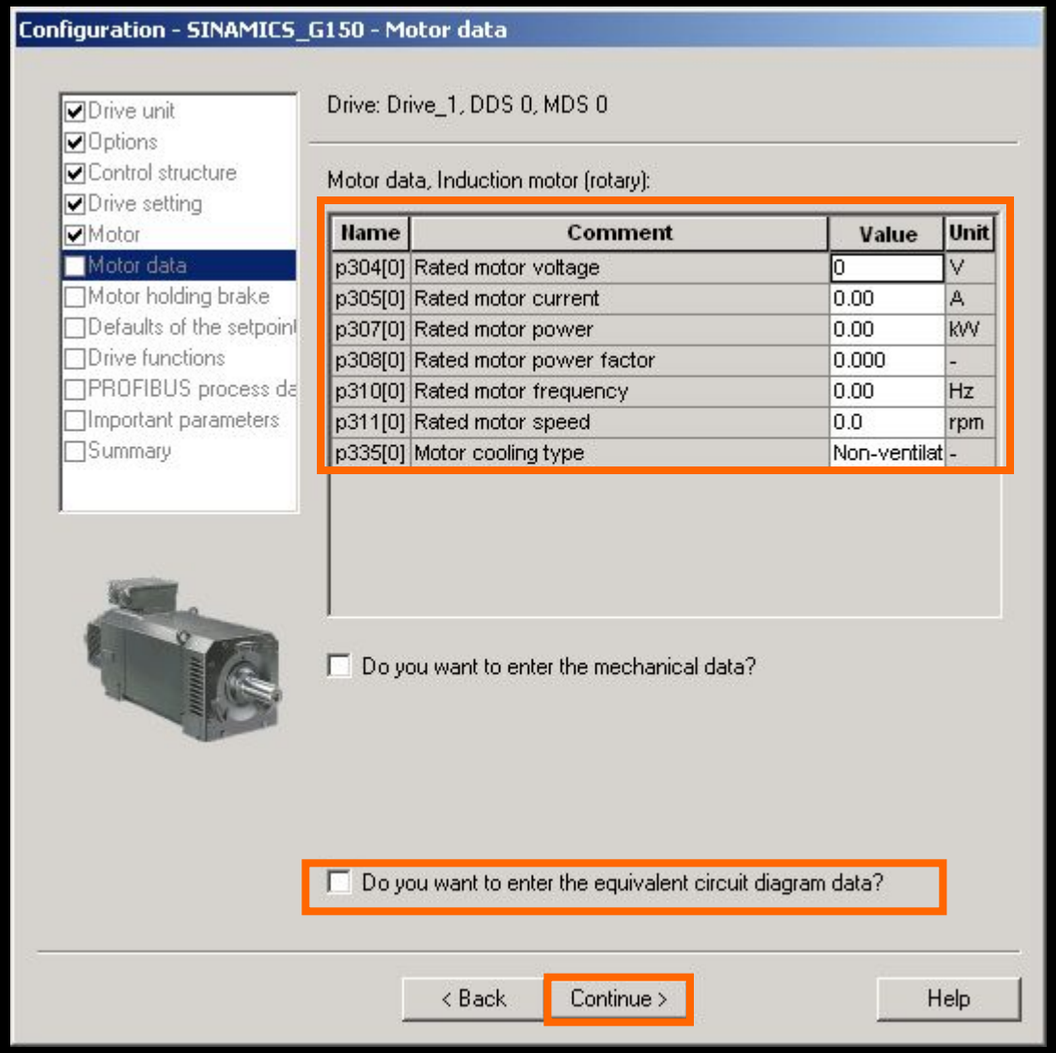
If you have decided to enter a motor from the list, then here, select the motor type (e.g. 1PH7 or 1PH6). In the checkbox below, you can specify whether your motor should have an internal brake.

Here, select your standard motor using the Order No. (this is only active if **Select standard motor from list** is activated).

Click on **Continue** to change to the next window.

Entering motor data according to the rating plate

This dialog box is only displayed if
Enter motor data is activated in the previous dialog box.



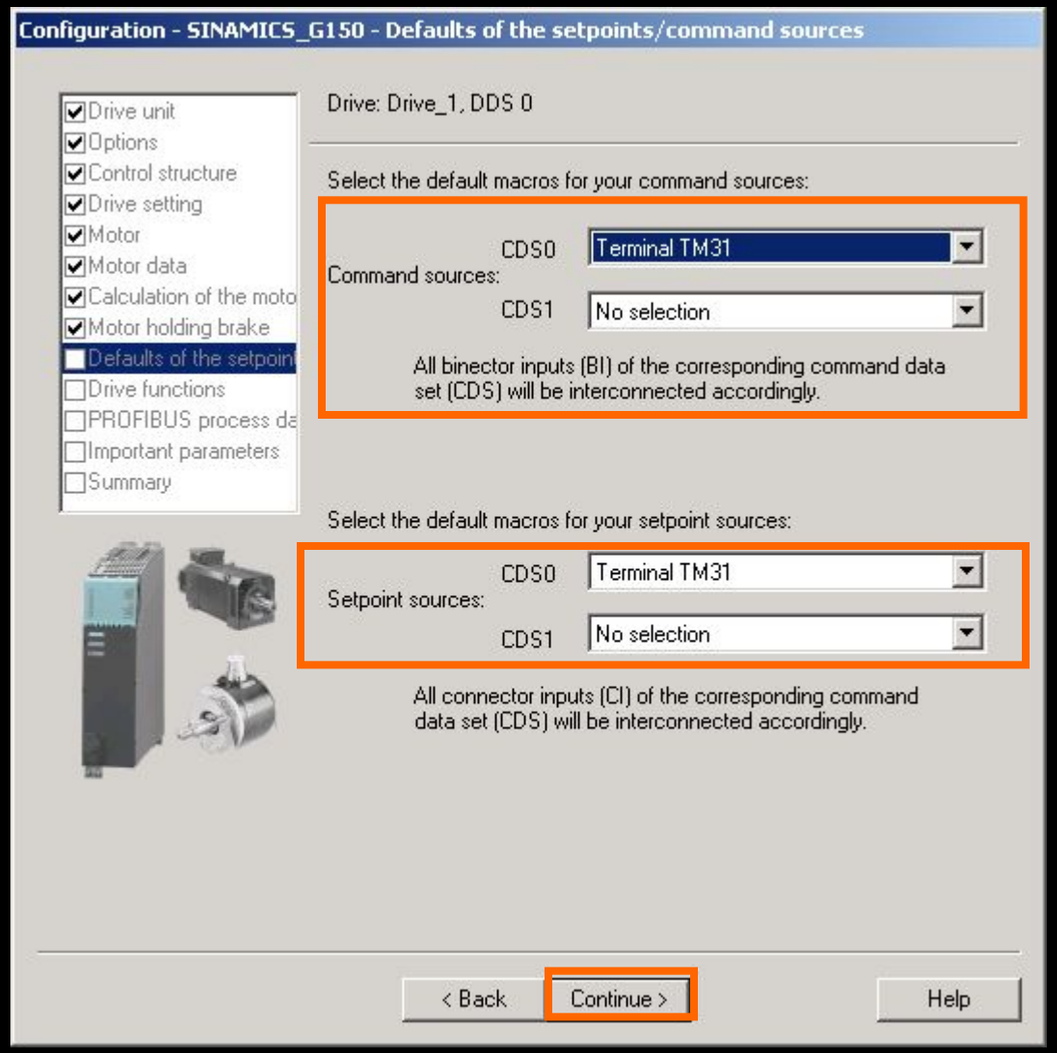
Enter the motor data according to the rating plate.

Activate the checkbox if you also wish to enter equivalent circuit diagram data (motor data sheet). Generally this is not required for standard applications.

Click on **Continue** to change to the next window.

Selecting the default settings for your command and setpoint sources for the standard data set (CDS0)

In addition you can also change the default settings for a second data set (CDS1) (CDS: ControlDataSet).

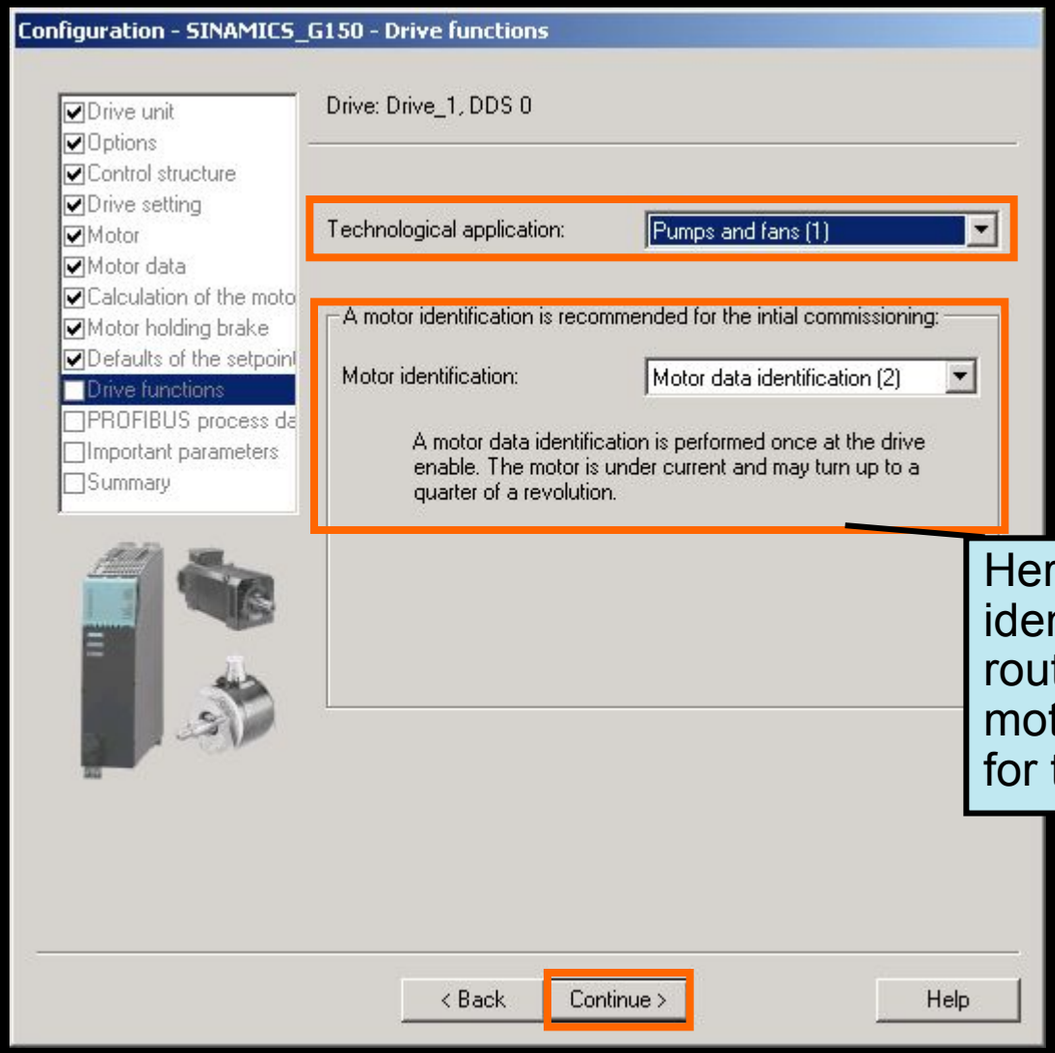


Here, select a source for your basic drive controls – for example, the power-on command.

Here, select your setpoint source, e.g. analog input on a TM31.

Click on **Continue** to change to the next window.

Make the appropriate control settings and select a Profibus telegram

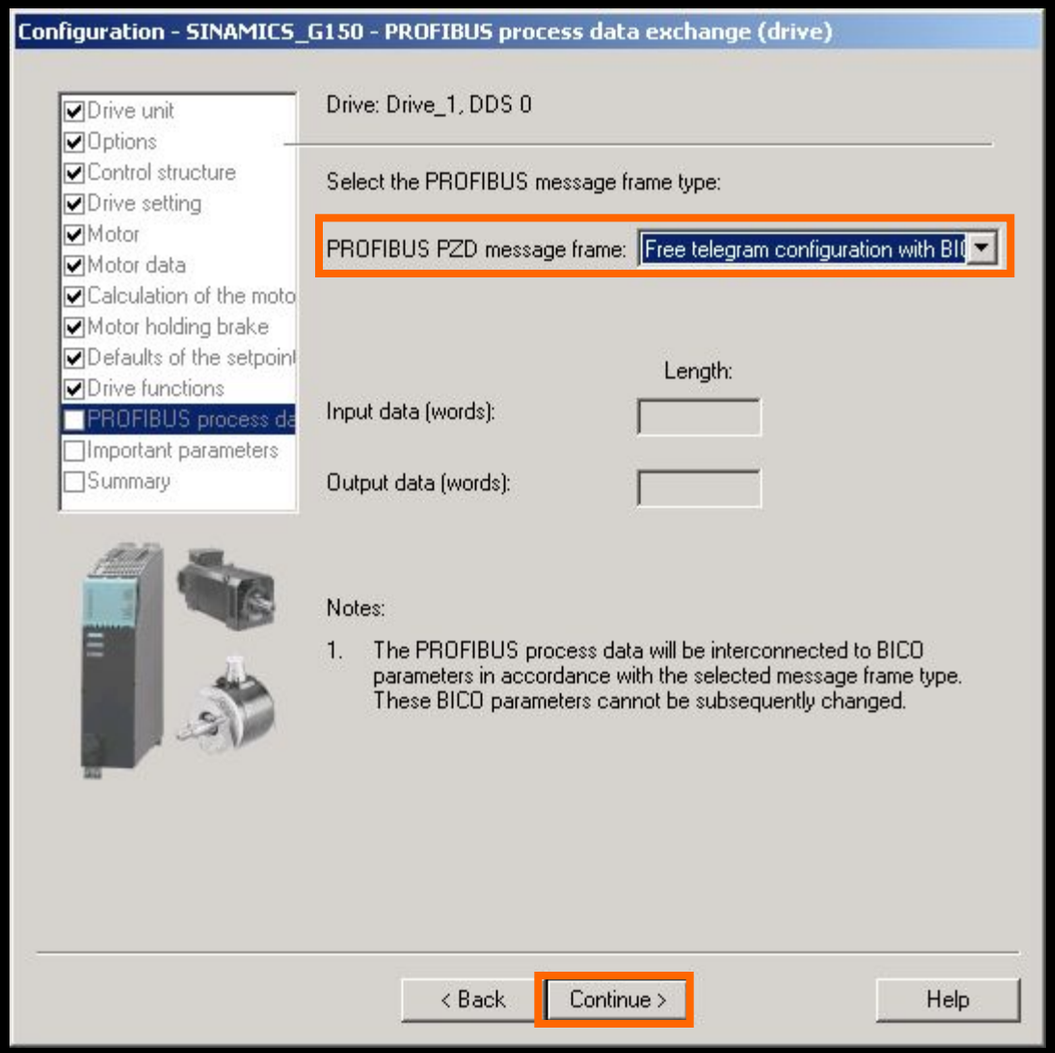


Here, select your particular drive application. This selection influences the pre-assignment (default setting) of the closed-loop control parameters.

Here, you can define the type of motor identification and controller optimization routines. For the motor identification routine, motor data are determined that are important for the closed-loop control.

Click on **Continue** to change to the next window.

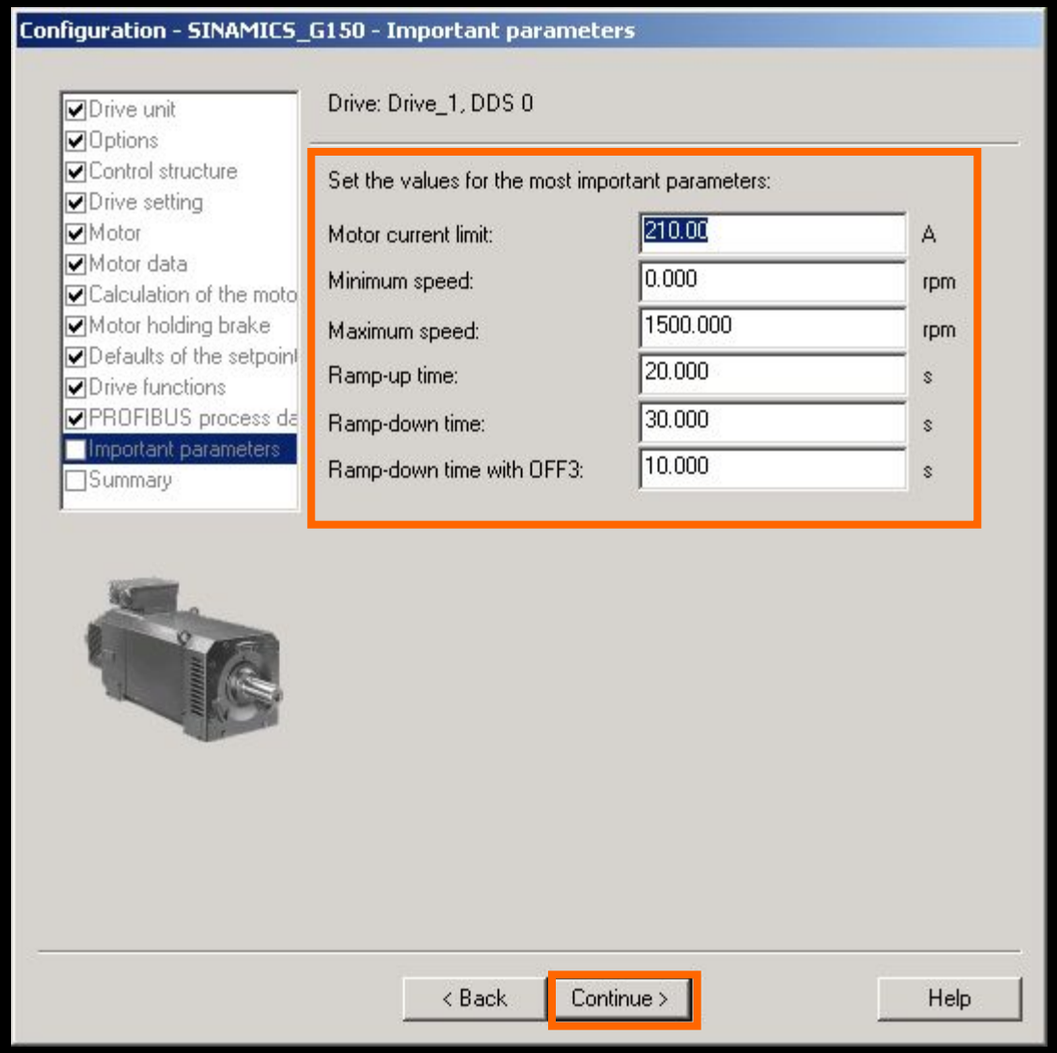
Select a Profibus telegram



Here, you can select the Profibus telegram. You can either select a standard telegram or a freely assigning a telegram.

Click on **Continue** to change to the next window.

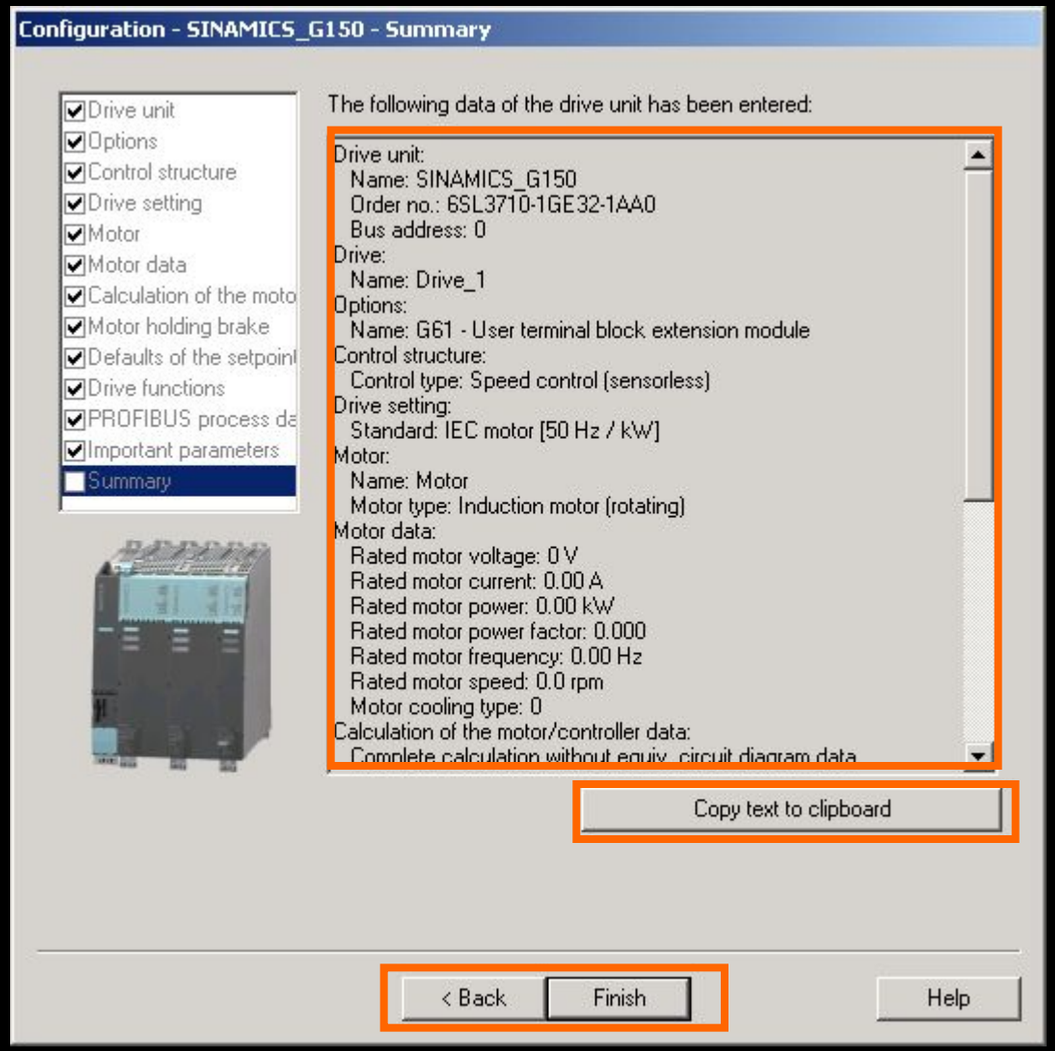
Entering the most important drive parameters



Here, enter the most important drive parameters.

Click on **Continue** to change to the next window.

Summary of the settings made



In this window you can see a summary of the settings you made.

You can copy this summary into a buffer with **Copy** so that it can be used in other applications, e.g. to generate a report.

In order to exit the Wizard, click on **Finish**. You can still change the settings with **Back**.

The drive unit has now been configured

You can now:

- Make additional settings
- Download the project into the target system
- Save the project and exit Starter
- ...