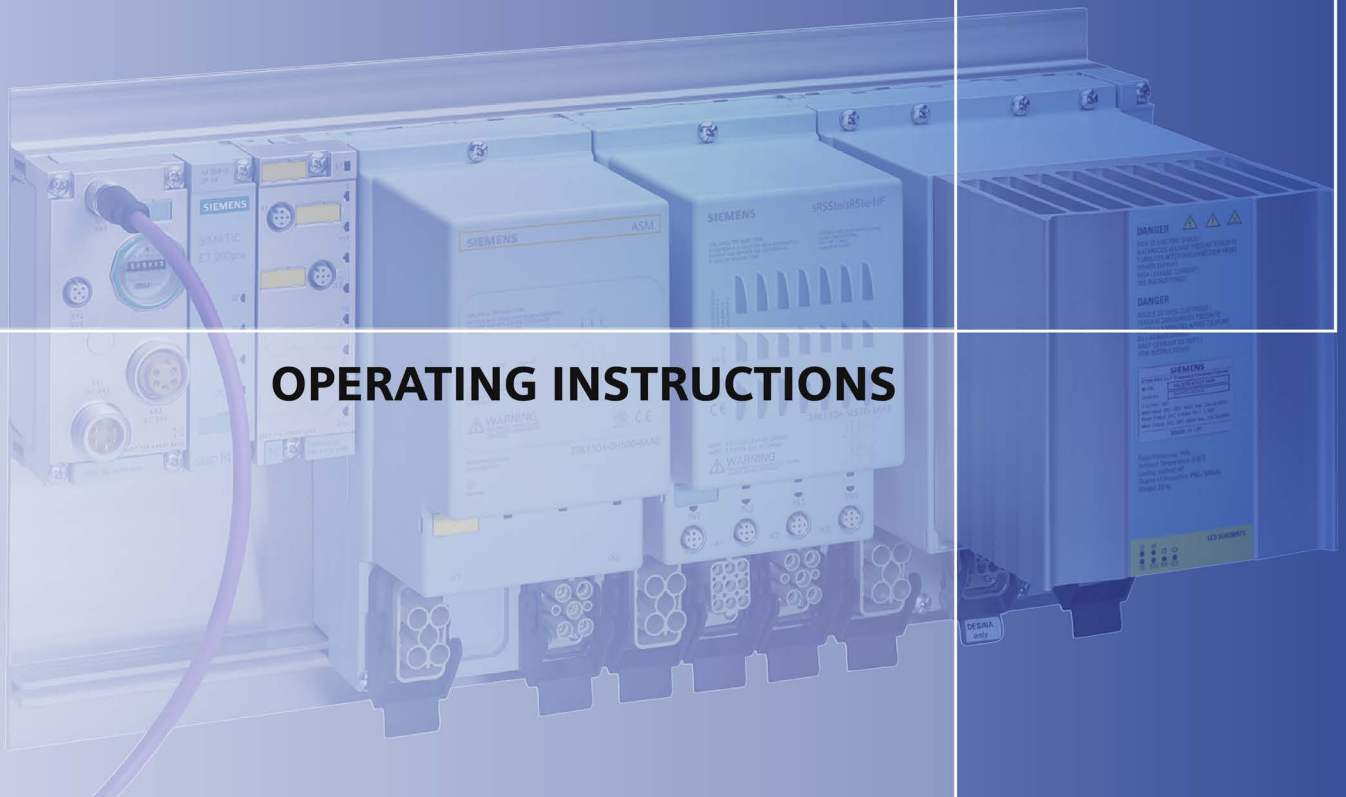


Operating Instructions · 07/2016



OPERATING INSTRUCTIONS

ET 200pro FC

simatic
ET 200pro FC

SIEMENS

Interfaces

3.1 Communication interfaces

Overview

The frequency converter has 3 communication interfaces. These are:

- An optical interface for commissioning the frequency converter using a PC and the RS232 interface
- A fieldbus connection

Through the ET 200pro backplane bus for communicating with a higher-level control

- An MMC slot

Slot for a special micro memory card (MMC). The MMC can be used as a parameter memory or for updating firmware.

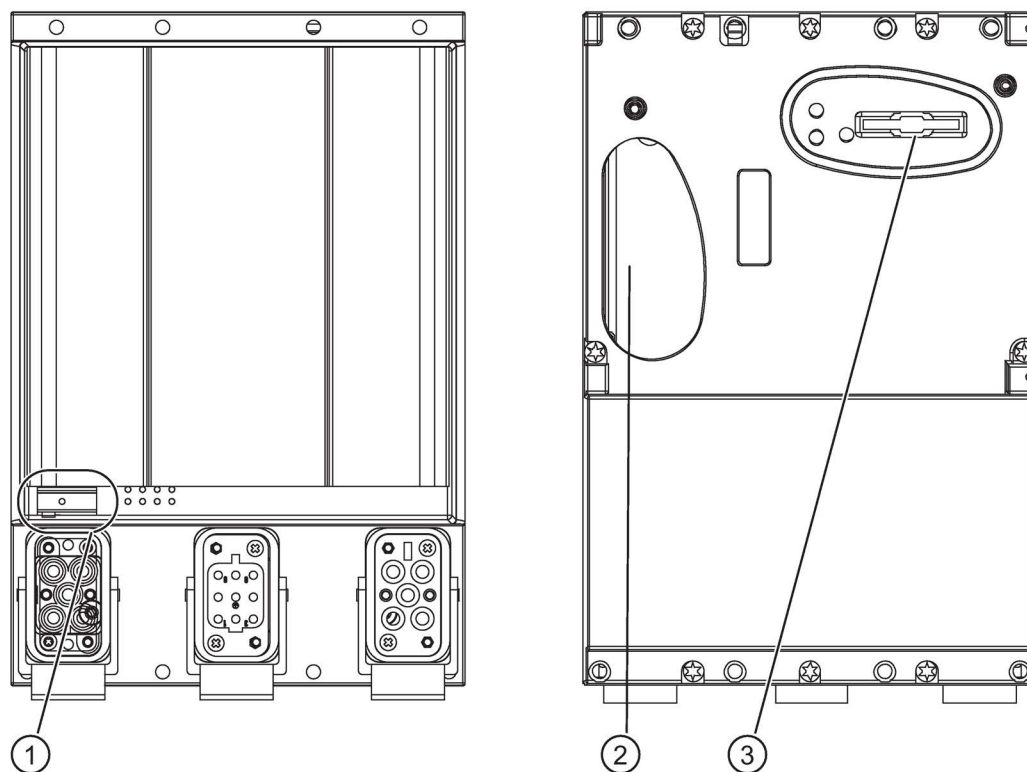


Image 3-1 Interfaces on the ET 200pro

- ① Optical interface
- ② ET 200pro backplane bus
- ③ MMC

8.1 Transfer of the frequency converter parameter assignment

The mechanisms by means of which parameters are transferred to external storage media play an important role both under normal frequency converter operating conditions and during standard commissioning and device replacement. For this reason, the different media and their associated transfer methods are explained below.

8.1.1 Storage media for frequency converter parameters

Internal memory

All frequency converter parameter values are stored in a ROM block and are transferred to the RAM once the device has powered up. Changes to factory settings can be saved in an EEPROM so that they are powerfail-proof.

External memory

The frequency converter parameter values can be transferred to external storage media and saved there. Options are:

- PC hard disk
- PLC memory
- MMC

Note

The file format for the MMC is FAT. Other file formats, such as FAT32 or NTFS, are not compatible with uploading or downloading parameter sets from/to the converter.

Formatting is performed via the following DOS command line:

C:\>format volume /FS:FAT, where "volume" must be replaced by the drive name of the MMC (e.g., A).

Please note that formatting causes all data to be deleted from the MMC.

8.1.3 Parameter transfer with MMC

Upload from frequency converter to an MMC

The frequency converter features an MMC slot, into which a memory card can be inserted. An upload of parameters from EEPROM to the MMC can only be triggered manually.

Prerequisites:

- The upload frequency converter's power supply must be connected.
- The upload frequency converter must be in the "Ready" state.
- You must have an MMC, type 6SL3254-0AM00-0AA0, at your disposal.

Procedure

Parameters	Description (Parameter name and default setting (if this does not vary) in bold)	Setting
	Disassemble frequency converter, insert MMC into rear of frequency converter and re-assemble frequency converter - Carry out the following steps in respect of the parameter set that is to be uploaded:	
P0010 = 30	Commissioning parameter* 0: Ready 1: Quick comm. 2: Frequency converter 30: Factory setting, parameter transfer 95: Commissioning of fail-safe functions	
P0804 = ...	Select clone file 0: clone00.bin ... 99: clone99.bin Remark: You can use P0804 to select the name of the clone file. In theory, up to a maximum of 100 (0 ... 99) parameter sets can be stored on one MMC.	
P0802 = 2	Transfer data from EEPROM 0: Disabled 2: Start MMC transfer	
	If the upload was successfully completed, P0010 and P0802 are set to 0 and the "RY/RDY" LED is lit.	

An unsuccessful upload is signaled by an error message.

Manual download

In the case of a manual download, all the necessary parameters (with the exception of fail-safe parameters) will be downloaded to the frequency converter.

Prerequisites

- The download frequency converter's power supply must be connected.
- The download frequency converter must be in the "Ready" state.
- You must have an MMC, type 6SL3254-0AM00-0AA0, at your disposal.

Procedure

Parameters	Description (Parameter name and default setting (if this does not vary) in bold)	Setting
	Disassemble frequency converter, insert MMC into rear of frequency converter and re-assemble frequency converter; then perform a manual download.	
P0010 = 30	Commissioning parameter* 0: Ready 1: Quick comm. 2: Frequency converter 30: Factory setting, parameter transfer 95: Commissioning of fail-safe functions	
P0804 = ...	Select clone file (for download) 0: clone00.bin ... 99: clone99.bin	
P0803 = 2	Transfer data to EEPROM 0: Disabled 2: Start MMC transfer	
	If the download was successfully completed, P0010 and P0803 are set to 0 and the "RY/RDY" LED is lit.	

Remark: It is possible to transfer data from one MMC to another using a commercially available card reader.

An unsuccessful download is signaled by an error message.

Spare parts/accessories

12.1 Spare parts/accessories

Multi Media Card (MMC)

The Multi Media Card (MMC) is used to save parameters from a control unit. This way it is possible to transfer the saved parameters to another control unit. For a detailed description refer to the section "Operation".

Multi Media Card (MMC)	
Order No.	
6SL3254-0AM00-0AA0	

Optical cable

The optical cable is used to connect a configuring or operating device with an RS232 interface to the optical interface of the frequency converter. Electronics integrated in the cable converts electrical signals of up to 115 kBd into optical signals and vice versa.

Optical cable	
Order No.	
3RK19 22-2BP00	

Motor cable

Prefabricated motor cables up to 10 m long are available ex stock for connecting the motor. Larger lengths up to 15 m can be obtained from our SINAMICS service providers.

Motor cable	
Order No.	Length
6ES7194-1LA01-0AA0	1.5 m
6ES7194-1LB01-0AA0	3.0 m
6ES7194-1LC01-0AA0	5.0 m
6ES7194-1LD01-0AA0	10.0 m