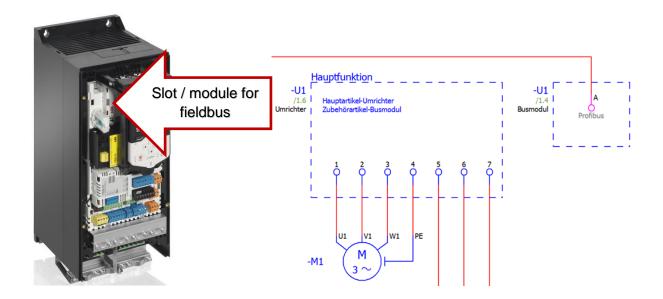


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TechTip: Fieldbus adapters as accessories for ACS880 frequency inverters

Frequency inverters such as ACS880 can be linked up with different bus systems via various fieldbus adapters.

This document describes how the devices are configured in EPLAN so that the PLC developer has the required data for the PLC data exchange.

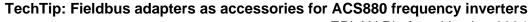


Preparation for the parts management:

Frequency inverters are created as individual parts in the "Converter" product group. Fieldbus adapters are available as individual parts in the "PLC" product group.

- 1. Bus ports are not assigned to the frequency inverters in the function templates.
- 2. The fieldbus adapters are assigned as optional accessories to the frequency inverter.

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Example of an accessories list for the module ACS880-01-025A-01

| Row | Part number / name | Variant | Record type |
|-----|--------------------|---------|-------------|
| 1 | ABB.FENA-21 | 1 | Component |
| 2 | ABB.FPBA-01 | 1 | Component |

- 3. Bus ports are assigned to the fieldbus adapters in the function templates but no PLC boxes.
 - a) For one PROFIBUS port

 Network / bus cable-connection point, general

| Row | Function definition | Connection point designation | Plug designation | Bus system |
|-----|---|------------------------------|------------------|------------|
| 1 | Network / bus cable connection point, general | 1 | X1 | PROFIBUS |

b) For two switched PROFINET ports

Network / bus cable-connection point, general each

| Row | Function definition | Connection point designation | Plug designation | Bus system |
|-----|---|------------------------------|------------------|------------|
| 1 | Network / bus cable connection point, general | | X1 | PROFINET |
| 2 | Network / bus cable connection point, general | | X2 | PROFINET |

- 4. Designate each field bus adapter on the **Accessories** tab as an accessory by activating the corresponding check box.
- 5. In the schematic the black boxes for frequency inverters and fieldbus adapters have the same device tag.
 - The fieldbus adapter is assigned to the frequency inverter as an additional part. A device selection is also possible.

IMPLEMENTATION

6. Through the assignment the fieldbus adapter is part of the frequency inverter. The bus ports of the fieldbus adapter are available at the frequency inverter. In EPLAN the frequency inverter is connected to a network in which the bus port of the fieldbus adapter has the usual PLC settings assigned to it.

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7. The frequency inverter is output as a device during the export with the EPLAN standard exchange format. The included parts list encompasses the frequency inverter and the used fieldbus adapters. The part reference list assigns the fieldbus adapters to their respective frequency inverter.

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