# FdxCompact FX-RS485-C

2 port RS485 extension module
for the FX-3000-C controller



❯ Screwless installation
(click on DIN-rail)

❯ Push-in spring connectors for cables

❯ Each port can have its own independently
parameterisable speed, parity and protocol

## Extend communications

The FX-RS485-C module offers 2 additional RS485
ports to the FX-3000-C controller.

This means the FX-3000-C can become even
more of an integration platform by offering
connections at different speeds, parity or even
using an entire different communication protocol.

Each port can be independently parametrised on
the FX-controller to offer full flexibilty.

## Technical features

| | |
|---|---|
| Dimensions: | 113 x 78 x 19 mm |
| Installation width: | 22.5 mm |
| Weight: | 69 gr |
| Power consumption: | max. 20 mA |
| Operating temperature: | 0 to +40°C |
| Storage temperature: | -40 to +85°C |
| Maximum relative humidity during operation: | 90%, no condensation |

**Use:** The FX-3000-C controller has one built-in serial port (RS485). Using the click-on connector inside the DIN rail, its port is pre-wired and ready for use out-of-the-box. The FX-RS485-C module can be used to add 2 more RS485 ports to the FX-3000-C controller.

**Power supply:** Power to the module is provided through the 20-way flat flex cable that is connected to the FX-3000-C controller.

**Connecting the module: IMPORTANT! Before opening or connecting anything, disconnect the power supply from the FX-30000-C controller** and wait about 30 seconds for the controller to empty the capacitor and save all volatile data into memory.

① Remove the sticker on the side of the FX-3000-C controller.

② Access the connection port and open the connector by moving the plastic slide lock about 2mm to the right.

③ Take the 20-way flat flex cable that is attached to the FX-RS485-C module and sticks out about 3 or 4 cm from its back side. Carefully pull out the flat flex cable. It is approximately 12 cm long when pulled out of the module encasing.

④ Gently slide the flat flex cable into the connector on the controller, all the while making sure the slide lock stays in the open position. Approximately half of the blue cable ending should still be visible when the flat flex cable is properly positioned.

⑤ Move the slide lock of the connector on the FX-3000-C controller towards the end of the flat flex cable to lock the cable onto the PCB of the controller. It will "click" into its locked position.

The module and the controller can now together be clicked onto the T-bus connectors on the DIN rail. For the FX-RS485-C module, a DIN-rail T-bus connector without connections at the bottom of the module can be used (shown in the drawing on the right). This connector is used to pass along power and the communication from port 3 of the FX-3000-C to subsequently connected modules or other devices.

But also a connector with upwards connectors can be used; as the PCB of the FX-RS485-C module has no contacts where the connectors grab on to it, there is no harm in using it, but installation requires one less different component.
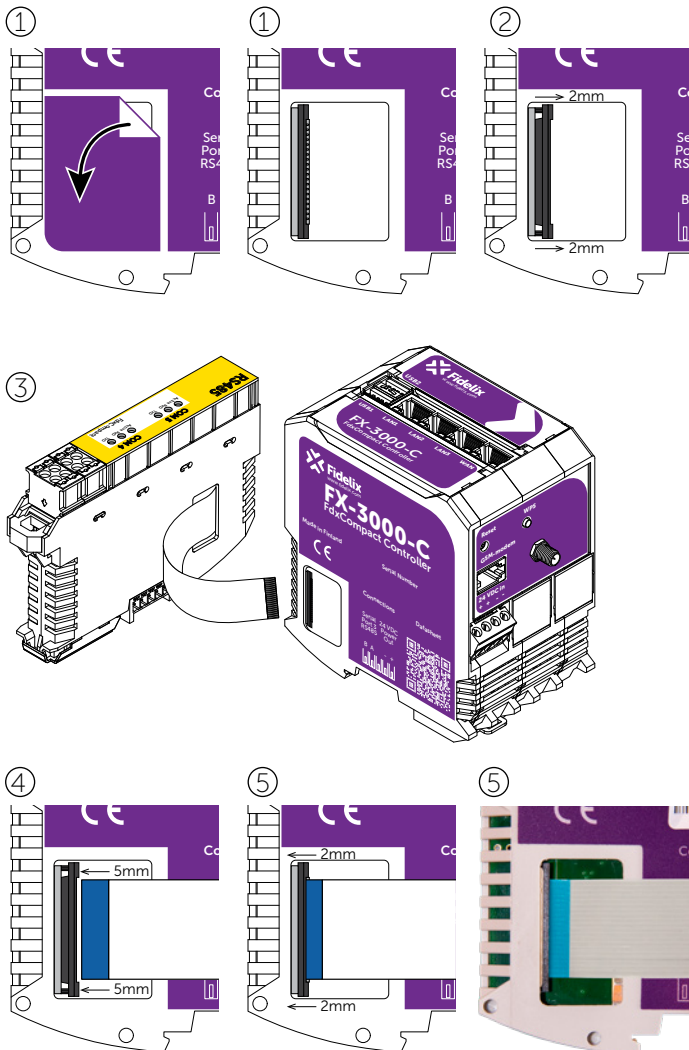
The connector is 22.5 mm wide (compared to 19 mm for the module itself), allowing for a small gap between the module and the controller.

**LEDs:** The module has 3 LEDs for each RS485 channel; 1 indicating that the module is powered up and the port is ready to be used by the FX (marked "Active"), and then 1 RxD/TxD set, indicating the receiving/sending of information on the RS485 channel.

**Power consumption:** The module uses up to 20 mA depending on the load on the bus.