OPTIrep

Function

The PROFIBUS fiber optic converters of the OPTIrep series are used for connecting PROFIBUS segments via fiber optic cables with a distance up to 30 km. The system can be used for line structures as well as for redundant ring structures.

The integrated diagnosis of the fiber optic cables signals the quality of the connection similar to a traffic light via LED. If the “traffic light” is green, everything is fine. If the yellow LED lights, the power budget is still tolerable, but already below a defined limit value. This warning stage and other faulty states are also signalled by potential-free contact.

Technical data

- **Baud rate:** 9.6 kbps to 12 Mbps
- **PROFIBUS Connection:** 1 x SUB-D 9-pin
  1 x 6-pin connection terminal
- **FO Connection:** 1-2 SC or ST
- **Fiber type:**
  - Singlemode 9/125 μm
  - Multimode 62,5(50)/125 μm
- **FO range:**
  - Singlemode 30km (0,3dB/km)
  - Multimode 5km (1dB/km)
- **Wavelength:**
  - Multimode 1300 nm
  - Singlemode 1310 nm
- **Voltage supply:** 12 - 30 VDC
- **Power supply:** 300 mA
- **power loss:** 5W
- **Protective system:** IP20
- **Operating temperature:** -40 °C bis +70 °C
- **Storage temperature:** -40 °C bis +85 °C
- **Dimensions (H x W x D):** 120 x 60 x 113 mm
- **Weight:** 570g
- **Installation:** 35 mm DIN top-hat rail

Function of the DIP-Switch

- **SW1 to SW3:** PROFIBUS termination between “A” and “B”
- **SW4:** enable optical ring
- **SW5:** Fiber Port CH3 disable
- **SW6:** Fiber Port CH2 disable

Function of the Status-LEDs

- **PWR:** Power Supply at VDC1 or VDC2
- **FAIL:** Failure group signal and failure relay opened
- **STA:** No data rate detected yet or bus-error
- **RX:** Data being received
- **FAIL:** Received optical signal failed
- **LMT:** System reserve reached
- **LNK/ACT:** Transmitting or receiving data

Fehlerrelais

- **K1:** No failure
- **K2:** Input signal voltage
- **K3:** Optical connection is disconnected or no power supply
- **K4:** not connected

Explanation of the description

Example: **OPTIrep F1 MM-ST**

- **Number of FO connections:**
  - F1 = 1 connection
  - F2 = 2 connections
- **Fiber type:**
  - SM = Single Mode
  - MM = Multimode
- **Fiber-connector:**
  - SC = SC-Connector
  - ST = ST-Connector

Ordering details

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<th>Model</th>
<th>Art. No.</th>
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