

FO converters - PSI-MOS-RS232/FO 850 T - 2708423

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://download.phoenixcontact.com>)



FO converter with integrated optical diagnosis, alarm contact, for RS-232 interfaces up to 115.2 kbps, T-coupler with two FO interfaces (BFOC), 850 nm, for HCS/fiber glass cable

Product Features

- Connections can be plugged in using a COMBICON screw terminal block
- Supply voltage and data signals routed through via DIN rail connectors
- High-quality electrical isolation between all interfaces (RS-232 // fiber optic ports // power supply // DIN rail connector)
- Redundant power supply possible by means of optional system power supply unit
- Approved for use in zone 2
- Floating switch contact for leading alarm generation in relation to critical fiber optic paths
- Intrinsically safe fiber optic interface (Ex op is) for direct connection to devices in zone 1
- Integrated optical diagnostics for continuous monitoring of fiber optic paths
- Automatic data rate detection for all data rates up to 115.2 kbps



Key commercial data

package_quantity	1
GTIN	4017918974114

Technical data

Note:

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
-------------------------	---

Dimensions

Width	35 mm
Height	99 mm
Depth	105 mm

Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	30 % ... 95 % (no condensation)
Altitude	5000 m (For restrictions see manufacturer's declaration)
Degree of protection	IP20

FO converters - PSI-MOS-RS232/FO 850 T - 2708423

Technical data

Ambient conditions

Noise immunity	EN 61000-6-2:2005
-----------------------	-------------------

Serial interface

Interface 1	V.24 (RS-232) interface in acc. with ITU-T V.28, EIA/TIA-232, DIN 66259-1
Connection method	D-SUB-9 male connector
Transmission medium	Copper
Transmission length	≤ 15 m
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	14
Serial transmission speed	115.2 kbps (NRZ)

Optical interface FO

Transmit capacity, minimum	-4.6 dBm (200/230 μm)
Transmit capacity, minimum	-17.6 dBm (50/125 μm)
Transmit capacity, minimum	-13.6 dBm (62,5/125 μm)
Minimum receiver sensitivity	-33.2 dBm
Wavelength	850 nm
Transmission length incl. 3 dB system reserve	2800 m (with F-K 200/230 8 dB/km with quick mounting connector)
Transmission length incl. 3 dB system reserve	4200 m (with F-G 50/125 2.5 dB/km)
Transmission length incl. 3 dB system reserve	4800 m (with F-G 62,5/125 3.0 dB/km)
Transmission medium	HCS fiber
Transmission medium	Multi-mode fiberglass
Transmission protocol	Transparent to protocol for RS-232 interface
Connection method	B-FOC (ST®)

Fault warning output

Maximum switching voltage	60 V DC
Maximum switching voltage	42 V AC
Limiting continuous current	0.46 A

Power supply

Supply voltage range	18 V DC ... 30 V DC
Max. current consumption	120 mA
Typical current consumption	120 mA (24 V DC)
Connection method	COMBICON plug-in screw terminal block

General

Transmission channels	2 (1/1), RxD, TxD, full duplex
Bit distortion, input	± 35 % (permitted)

FO converters - PSI-MOS-RS232/FO 850 T - 2708423

Technical data

General

Bit distortion, output	< 6.25 %
Electrical isolation	(VCC // V.24 (RS-232))
Test voltage data interface/power supply	1.5 kV _{rms} (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 55011
Net weight	200 g
Housing material	PA 6.6-FR
Color	green
MTBF	177 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))
MTBF	26 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day))
Conformance	CE-compliant
ATEX	# II 3 G Ex nAC IIC T4 X
ATEX	# II (2) GD [Ex op is] IIC (PTB 06 ATEX 2042 U)
UL, USA / Canada	Class I, Zone 2, AEx nc IIC T5
UL, USA / Canada	Class I, zone 2, Ex nC nL IIC T5 X
UL, USA / Canada	Class I, Div. 2, Groups A, B, C, D

classifications

eCl@ss

eCl@ss 4.0	27230207
eCl@ss 4.1	27230207
eCl@ss 5.0	27230207
eCl@ss 5.1	27230207
eCl@ss 6.0	27230207
eCl@ss 7.0	27230207
eCl@ss 8.0	27230207

ETIM

ETIM 2.0	EC001423
ETIM 3.0	EC001423
ETIM 4.0	EC001423
ETIM 5.0	EC001423

UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	43201553

FO converters - PSI-MOS-RS232/FO 850 T - 2708423

approvals

ATEX / UL Listed / cUL Listed / cULus Listed / UL Recognized / cUL Recognized / cULus Recognized /

Approval details

ATEX	
Nominal voltage UN	
Nominal current IN	
mm ² /AWG/kcmil	

UL Listed

cUL Listed

cULus Listed

UL Recognized

cUL Recognized

cULus Recognized

accessories

Connector set

FO converters - PSI-MOS-RS232/FO 850 T - 2708423

accessories

PSM-SET-B-FOC/4-HCS - 2708481



Data cable by the meter

PSM-LWL-HCS-RUGGED-200/230 - 2799885



PSM-LWL-HCSO-200/230 - 2799445



PSM-LWL-GDM-RUGGED- 50/125 - 2799322



PSM-LWL-GDO- 50/125 - 2799432



Power supply

FO converters - PSI-MOS-RS232/FO 850 T - 2708423

accessories

MINI-SYS-PS-100-240AC/24DC/1.5 - 2866983



DIN rail connector

ME 17,5 TBUS 1,5/ 5-ST-3,81 GN - 2709561



Assembly tool

PSM-HCS-KONFTOOL/B-FOC - 2708465



Measuring tools

PSM-FO-POWERMETER - 2799539



Adapter

PSM-SET-BFOC-LINK/2 - 2799429



FO converters - PSI-MOS-RS232/FO 850 T - 2708423

accessories

Data plug

SUBCON-PLUS 9/F - 2744241



SUBCON-PLUS 9/M - 2744018



Screwdriver tools

SZS 0,4X2,5 VDE - 1205037



Adapter cable

PSM-KA9SUB9/BB/0,5METER - 2708520



PSM-KA9SUB9/BB/2METER - 2799474



FO converters - PSI-MOS-RS232/FO 850 T - 2708423

accessories

PSM-KA 9 SUB 25/BB/2METER - 2761059



PSM-KAD-IL RS232/9SUB/B/0,8M - 2319200



Interface converter

PSM-ME-RS232/RS485-P - 2744416



Data cable preassembled

FL MM PATCH 1,0 LC-ST - 2989174



FL MM PATCH 2,0 LC-ST - 2989271



FO converters - PSI-MOS-RS232/FO 850 T - 2708423

accessories

FL MM PATCH 5,0 LC-ST - 2901801



FL MM PATCH 1,0 SC-ST - 2901809



FL MM PATCH 5,0 SC-ST - 2901811



FL MM PATCH 1,0 ST-ST - 2901815



FL MM PATCH 2,0 ST-ST - 2901816



FL MM PATCH 5,0 ST-ST - 2901817



FO converters - PSI-MOS-RS232/FO 850 T - 2708423

accessories

FL MM PATCH 1,0 ST-SCRJ - 2901820



FL MM PATCH 2,0 ST-SCRJ - 2901821



FL MM PATCH 5,0 ST-SCRJ - 2901822



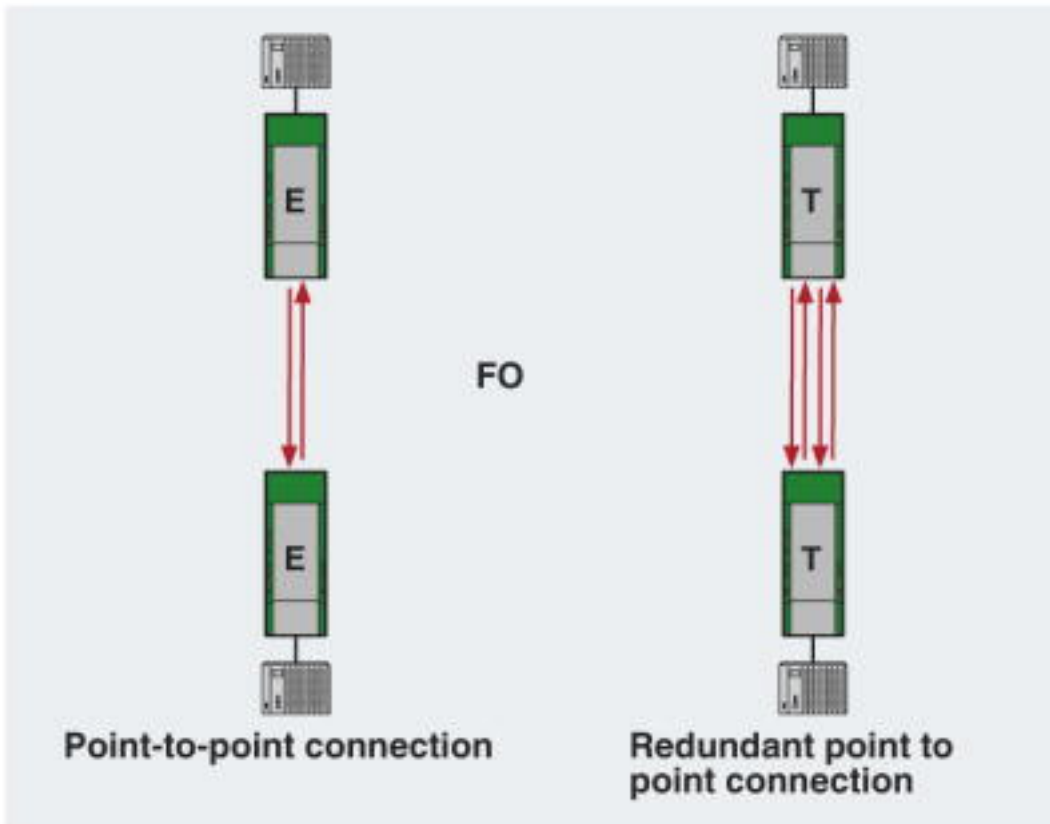
accessories

ME 17,5 TBUS 1,5/PP000-3,81 BK - 2890014

Drawings

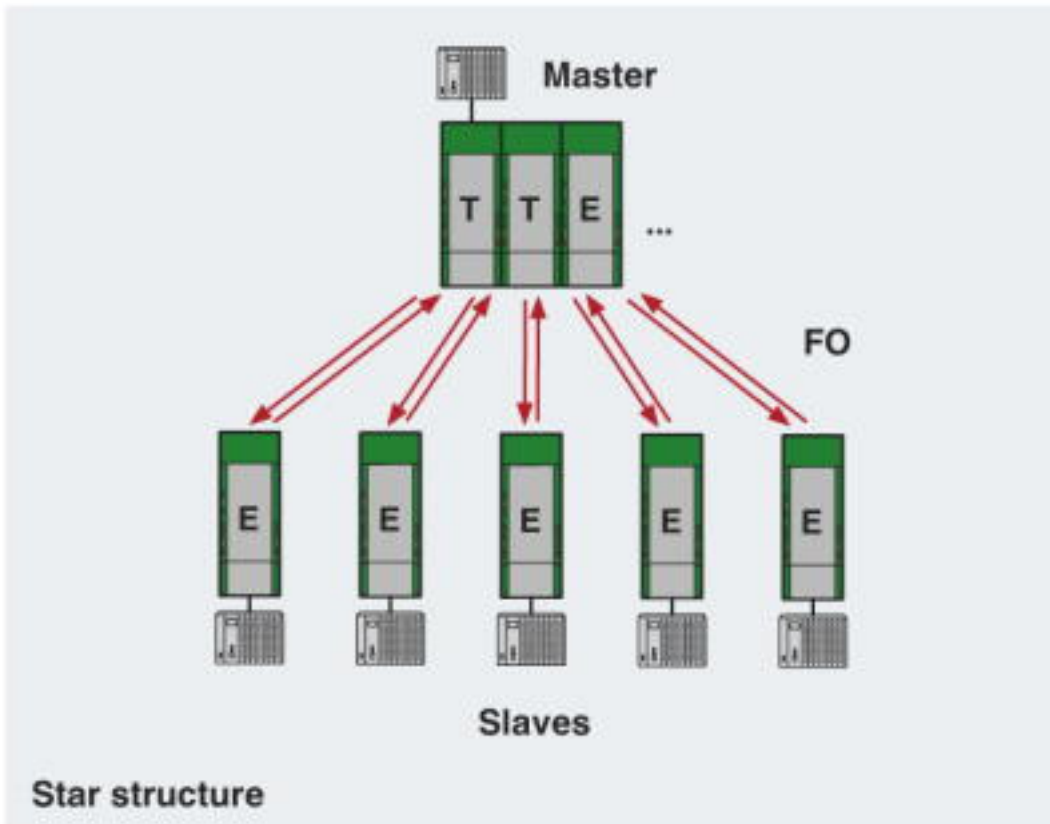
FO converters - PSI-MOS-RS232/FO 850 T - 2708423

Application drawing



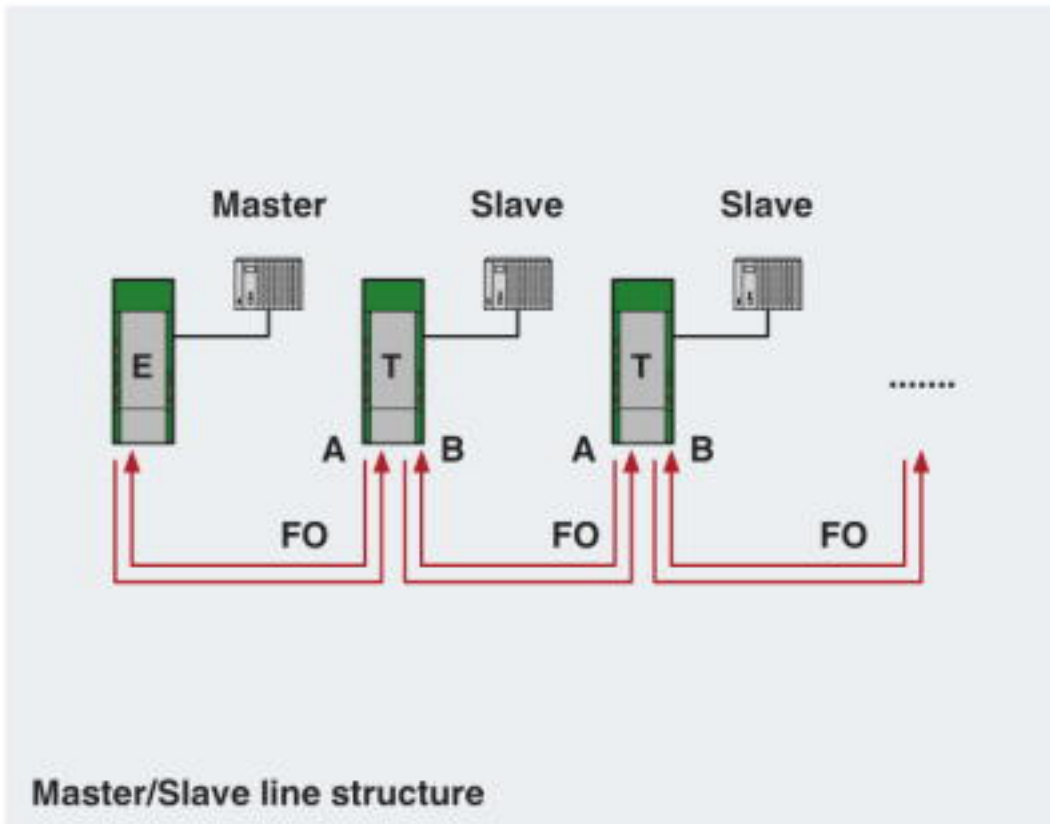
FO converters - PSI-MOS-RS232/FO 850 T - 2708423

Application drawing



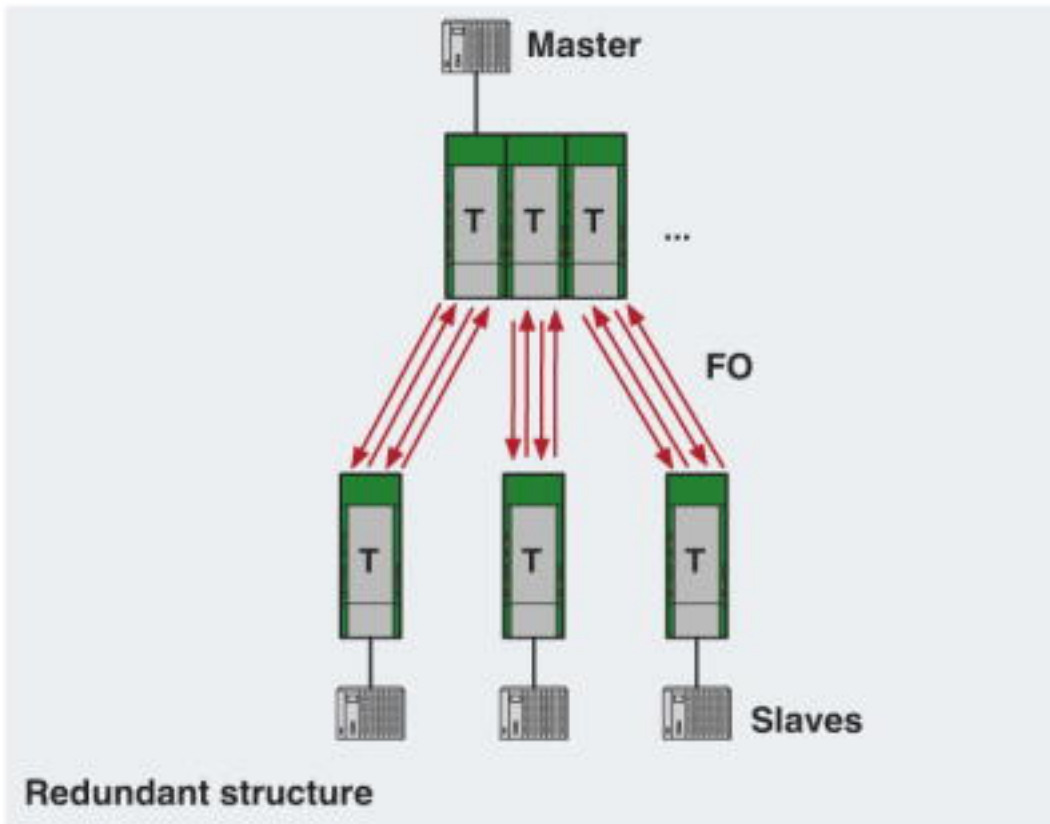
FO converters - PSI-MOS-RS232/FO 850 T - 2708423

Application drawing



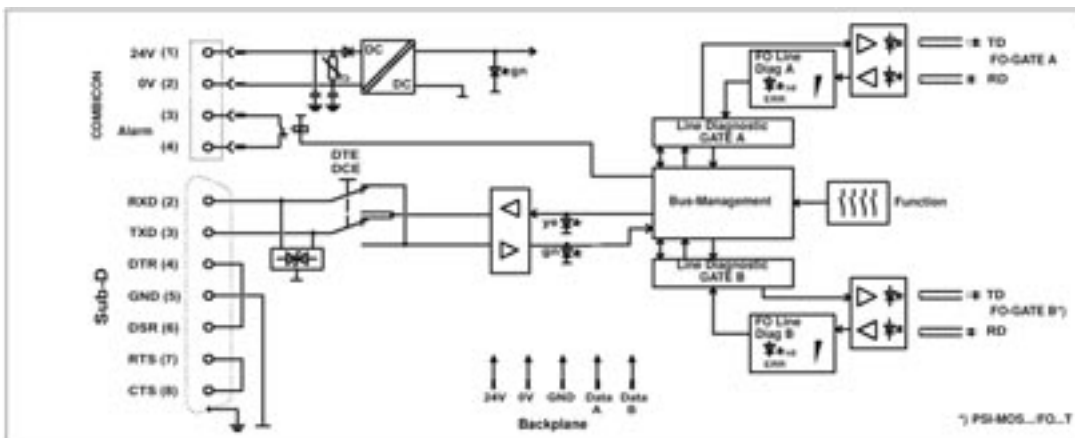
FO converters - PSI-MOS-RS232/FO 850 T - 2708423

Application drawing



Master/Slave line structure

Block diagram



*) only with PSI-MOS.../FO...T