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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



FO converters - PSI-MOS-DNET/FO 850 E - 2313999

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Fiber optic converter with integrated optical diagnostics, for DeviceNet™, CAN, CANopen® up to 1000 kbps, termination device, interfaces: 1 x CAN, 1 x Alarm, 1 x FO (B-FOC), 850 nm, for HCS/fiberglass (multi-mode)

Product Features

- ✓ Data rates of up to 1000 kbps
- ✓ Supply voltage and data signals routed through via DIN rail connectors
- ✓ Can be combined with the PSI copper repeater in a modular way using DIN rail connectors
- ✓ Automatic data rate detection or fixed data rate setting via DIP switches
- ✓ Integrated optical diagnostics for continuous monitoring of fiber optic paths
- ✓ High-quality electrical isolation between all interfaces (DeviceNet // fiber optic ports // power supply // DIN rail connector)
- ✓ Connections can be plugged in using a COMBICON screw terminal block
- ✓ Redundant power supply possible by means of optional system power supply unit
- ✓ Approved for use in zone 2
- ✓ Intrinsically safe fiber optic interface (Ex op is) for direct connection to devices in zone 1
- ✓ Floating switch contact for leading alarm generation in relation to critical fiber optic paths



CANopen



DeviceNet

Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	240.0 GRM
Custom tariff number	85176200
Country of origin	Germany

Technical data

Note

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

Dimensions

Width	35 mm
Height	102 mm
Depth	119 mm

Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	30 % ... 95 % (non-condensing)
Altitude	5000 m (For restrictions see manufacturer's declaration)
Degree of protection	IP20
Noise immunity	EN 61000-6-2

Serial interface

Interface 1	CAN interface, in accordance with ISO/IS 11898 for DeviceNet, CAN, CANopen
Operating mode	Semi-duplex
No. of channels	2 (CAN_High / CAN_Low)
Connection method	COMBICON plug-in screw terminal block
File format/coding	Bit stuffing, NRZ
Transmission medium	2-wire twisted pair, shielded
Transmission method	CSMA/CA
Transmission length	≤ 5000 m (Dependent on the data rate and the protocol used)
Number of INTERBUS devices	≤ 64 (per potential segment)
	≤ 63 (DeviceNet™, can be addressed logically)
	≤ 128 (CANopen®, can be addressed logically)
Termination resistor	124 Ω (Integrated and ready to be switched)
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

Optical interface FO

Transmit capacity, minimum	-13.5 dBm (50/125 μm)
	-12.3 dBm (62,5/125 μm)
	-10.2 dBm (200/230 μm)
Minimum receiver sensitivity	-28.1 dBm (50/125 μm)
	-28.1 dBm (62,5/125 μm)

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Technical data

Optical interface FO

	-28.1 dBm (200/230 µm)
Wavelength	850 nm
Transmission length incl. 3 dB system reserve	1800 m (with F-K 200/230 8 dB/km with quick mounting connector)
	4600 m (with F-G 50/125 2.5 dB/km)
	4200 m (with F-G 62,5/125 3.0 dB/km)
Transmission medium	HCS fiber
	Multi-mode fiberglass
Transmission protocol	Protocol transparent for CAN interface
Connection method	B-FOC (ST®)

Digital outputs

Output name	Relay output
Number of outputs	1
Contact type	N/O contact
Minimum switching voltage	11 V DC
Maximum switching voltage	30 V DC
Limiting continuous current	500 mA

Power supply

Nominal supply voltage	24 V DC
Supply voltage range	11 V DC ... 30 V DC (via pluggable COMBICON screw terminal block)
Typical current consumption	130 mA (24 V DC)

General

Bit distortion, input	± 35 % (permitted)
Bit distortion, output	< 6.25 %
Electrical isolation	VCC // CAN
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	180 g
Housing material	PA 6.6-FR
Color	green
MTBF	253 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))
	38 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day))
MTTF	831 Years (SN 29500 standard, temperature 25°C, operating cycle 21 % (5 days a week, 8 hours a day))

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Technical data

General

	378 Years (SN 29500 standard, temperature 40 °C, operating cycle 34.25 % (5 days a week, 12 hours a day))
	155 Years (SN 29500 standard, temperature 40°C, operating cycle 100 % (7 days a week, 24 hours a day))
Conformance	CE-compliant
ATEX	# II (2) D [Ex op is Db] IIIC (PTB 06 ATEX 2042 U) (Please follow the special installation instructions in the documentation!)
	# II (2) G [Ex op is Gb] IIC (PTB 06 ATEX 2042 U) (Please follow the special installation instructions in the documentation!)
	# II 3 G Ex nA IIC T4 Gc X (Please follow the special installation instructions in the documentation!)
UL, USA / Canada	508 listed

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	27143136

ETIM

ETIM 3.0	EC000236
ETIM 4.0	EC000236
ETIM 5.0	EC001467

UNSPSC

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

Approvals

Approvals

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Approvals

Approvals


UL Listed / cUL Listed / DNV / cULus Listed


Ex Approvals

ATEX

Approvals submitted

Approval details

UL Listed 

cUL Listed 

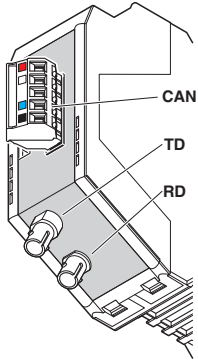
DNV

cULus Listed 

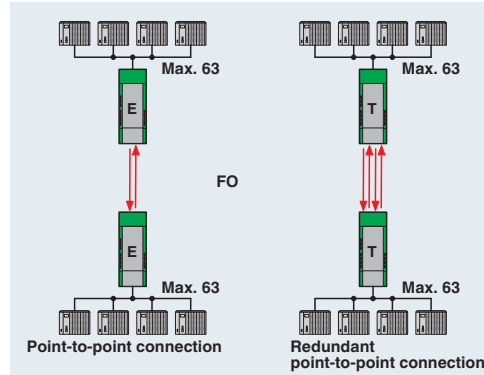
Drawings

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Schematic diagram



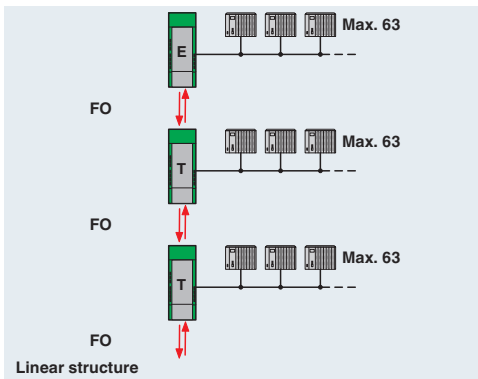
Application drawing



Device connections

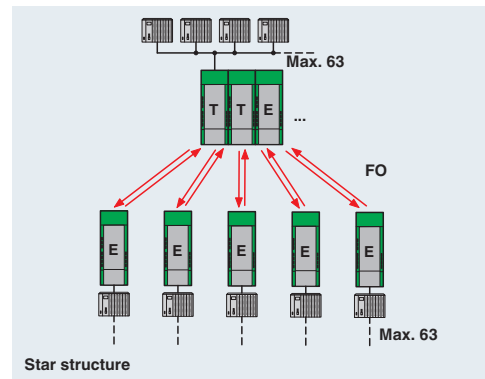
Point-to-point connection

Application drawing



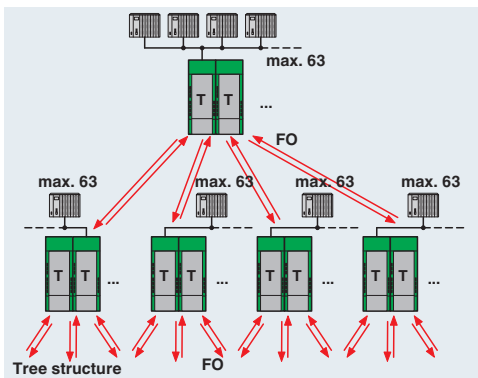
Line structure

Application drawing



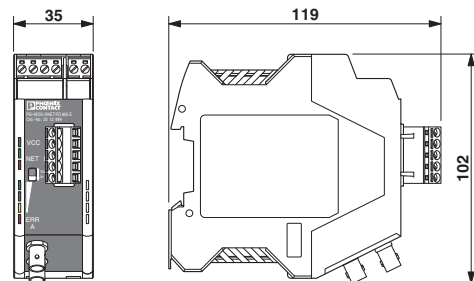
Star structure

Application drawing



Tree structure

Dimensioned drawing



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Block diagram

