Network technology

Unmanaged switch FX op is / TX SC for Zone 2
Multi mode
9721/13-42-14 Art. No. 243427

- For operation of up to four inherently safe "op is" fibre optic cables according to IEC 60079-28
- For 100 Mbps Industrial Ethernet
- Transmission range up to 5 km (multi-mode) or up to 30 km (single-mode)
- Extended temperature range from -30 to +70 °C
- Redundant power supply
- Installation in Zone 2 or in safe areas

MY R. STAHL **9721B**

The 9721 unmanaged switch is used to link electrical Ethernet networks (TX) and networks based on fibre optic cables (FX). The fibre optic cables are designed for operation in hazardous areas of Zones 0, 1, 2, 20, 21 and 22 with the "Ex op is" type of protection (IEC/EN 60079-28). Therefore, conventional fibre optic cables can also be used in hazardous areas and may be connected and disconnected during operation (i.e. hot swap).
The unmanaged switch has 2 TX ports and 4 FX op is ports. A redundant power supply can be provided. Compatible with: R. STAHL IS1+ Remote I/O, HMI and IP cameras

Technical Data

Explosion Protection	
Application range (zones)	2
Ex interface zone	0, 1, 2, 20, 21, 22
IECEx gas certificate	IECEx TUR 16.0002 X
IECEx gas explosion protection	Ex ec [op is T6 Ga] IIC T4 Gc
IECEx dust certificate	IECEx TUR 16.0002 X
IECEx dust explosion protection	[Ex op is Da] IIIC
ATEX gas certificate	TÜV 16 ATEX 7742 X
ATEX gas explosion protection	Ⓔx II 3 (1) G Ex ec [op is T6 Ga] IIC T4 Gc
ATEX dust certificate	TÜV 16 ATEX 7742 X
ATEX dust explosion protection	Ⓔx II (1) D [Ex op is Da] IIIC
FMus certificate	FM17US0054X
cFM certificate	FM17CA0030X
Marking cFMus	Class I, Div. 2, Groups A,B,C,D; Class I, Zone 2, AEx/Ex nA [op is] Group IIC T4 Gc Ta = -30 °C to +70 °C See Doc. 9721 6 031 001 1
Certificates	ATEX (TUR), Canada (FM), China (NEPSI), IECEx (TUR), India (PESO), USA (FM)
Ship approval	ABS, BVIS, EU RO MR (DNV), KR, LR
Declaration of Conformity	ATEX (EUK), China (CCC)
Installation	Zone 2
Safety Data	
Max. FO radiant power	≤ 15 mW
Electrical Data	
Transfer rate	10/100 Mbps Auto-negotiation

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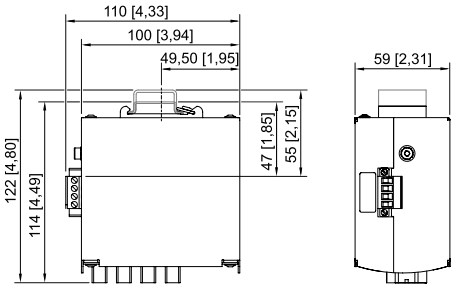
Electrical Data	
Voltage range DC	12 to 30 V DC
Ethernet interface connection	RJ 45 plug connector
Redundant supply	Yes
Interface 1	4 port, 100BASE-FX MM SC
Interface 1 version	EX OP IS
Transmission distance	Up to 100 m (Cat5e or better)
Interface 2	2 Port, 100BASE-TX, RJ45
Interface 2 version	standard
FO wavelength	1310 nm
FO fibre type	Multi mode
FO attenuation	1 dB / km
FO bandwidth	800 MHz * km
FO connection type	SC plug connector
FO fibre cross section	50/125 µm [min. OM2]
FO fibre cross-section Note	Alternative 62.5/125 µm [OM1] max. 4 km
FO optical budget	12 dB
FO transmission distance	5 km
Operating mode	Half duplex, Full duplex Auto-MDI(X)
Auxiliary Power	
Nominal voltage	24 V DC
Power supply	4-pole screw terminal
Max. current consumption	500 mA
Max. power consumption	6.4 W
Polarity reversal protection	Yes
Ambient Conditions	
Ambient temperature	-30 °C ... +70 °C
Ambient temperature	-22°F ... +158°F
Storage temperature	-40 °C ... +85 °C
Storage temperature	-40°F ... +176°F
Maximum relative humidity	< 95% (no condensation)
Use at the height of	< 2000 m
Mechanical Data	
Degree of protection (IP)	IP20
Pollutant class	Corresponds to G3
Enclosure material	Stainless steel, powder-coated
Connection cross section min.	0.08 mm²
Connection cross-section max.	2.5 mm²
Stripping length	7 mm
Weight	500 g
Weight	1.1 lb
Mounting / Installation	
Mounting type	On 35 mm DIN rail
Tightening torque	0.5 Nm
Mounting orientation	any

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



Accessories

FO patch cable		Art. No.
	Patch cable for connecting 9441 IS1+ Ethernet CPU to 9721 media converter; LC/SC plug; length 3 m	220911

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.