



- For 100 Mbit/s Ethernet with inherently safe "op is" fiber optic in Cl. I, II, III, Div.1 and Zone 0, 1 or 2
- Range up to 3.1 mi / 5 km (multi-mode) or up to 18.6 mi / 30 km (single-mode)
- Increased temperature range of -22 ... +158 °F / -30 to +75 °C
- Easy commissioning, no configuration required
- Installation in Cl. I, Div. 2, Zone 2 and safe area

### MY R. STAHL 9721A



The Media Converter is used to convert electrical Ethernet signals (TX) into optical Ethernet signals (FX).

The optical Ethernet signals are used for operation in hazardous areas of Cl. I, II, III Div. 1 and Zone 0, 1, 2 with the type of protection Ex "op is".

Therefore, conventional fiber optic cables can also be used in hazardous areas and may be connected and disconnected during operation (hot swap).

The Media Converter (multi-mode) is suitable for operation of Remote I/O systems IS1+ in Cl. I, Div. 1 and Zone 1.

## Technical Data

### Explosion Protection

Application range (zones)	2
Ex interface zone	0, 1, 2, 20, 21, 22
IECEX gas certificate	IECEX TUR 13.0014 X
IECEX gas explosion protection	Ex ec [op is T6 Ga] IIC T4 Gc
IECEX dust certificate	IECEX TUR 13.0014 X
IECEX dust explosion protection	[Ex op is Da] IIIC
ATEX gas certificate	TÜV 13 ATEX 7316 X
ATEX gas explosion protection	⊕ II 3 (1) G Ex ec [op is T6 Ga] IIC T4 Gc
ATEX dust certificate	TÜV 13 ATEX 7316 X
ATEX dust explosion protection	⊕ 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 +75 °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, Zone 22 or in the safe area

### Safety Data

Max. FO radiant power	≤ 15 mW
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# Network and Wireless Solutions

## Media converter FX op is / TX SC for Zone 2

### Multi mode

9721/13-11-14 Art. No. 220381



#### Electrical Data

Transfer rate	10/100 Mbps Auto-negotiation
Voltage range DC	10.8 to 26.4 V DC
Ethernet interface connection	RJ 45 plug connector
Interface 1	1 port, 100BASE-FX MM SC
Interface 1 version	EX OP IS
FO wavelength	1310 nm
FO fiber type	Multi-mode
FO attenuation	1 dB / km
FO bandwidth	800 MHz * km
FO connection type	SC plug connector
FO fiber 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	3.1 mi / 5 km [OM3, OM4] 2.8 mi / 4 km [OM1]
Interface 2	1 Port, 100BASE-TX, RJ45
Interface 2 version	standard
Transmission distance	Up to 100 m (Cat5e or better)
Operating mode	Half duplex, Full duplex Auto-MDI(X)

#### Auxiliary Power

Nominal voltage $V_{nom}$	24 V DC
Power supply	2-pole screw terminal
Max. current consumption	200 mA
Max. power consumption	2.5 W
Polarity reversal protection	Yes

#### Ambient Conditions

Ambient temperature °C	-30 °C ... +75 °C
Ambient temperature °F	-22°F ... +167°F
Storage temperature °C	-40 °C ... +80 °C
Storage temperature °F	-40°F ... +176°F
Max. 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 mm <sup>2</sup>
Connection cross-section max.	2.5 mm <sup>2</sup>
Stripping length	7 mm
Weight	240 g
Weight	0.53 lb

#### Mounting / Installation

Mounting type	On 35 mm DIN rail Wall mounting
Tightening torque	0.5 Nm

# Network and Wireless Solutions



Media converter FX op is / TX SC for Zone 2

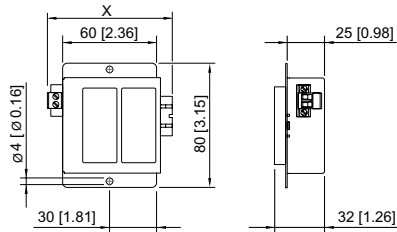
Multi mode

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## Mounting / Installation


Mounting orientation	Horizontal Vertical
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## Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



	Dimension X
with fiber optic sockets and an auxiliary power connection	81 mm [3.19]
as described above with an installed fiber optic plug	116 mm [4.57]

## Accessories

		Art. No.
	Patch cable for connection of IS1+ Ethernet CPU 9441 with media converter 9721; plug LC / SC; length 3.8 ft / 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.