



- For 100 Mbps Ethernet with inherently safe "op is" fibre optic cables in Zone 0, 1 or 2
- Transmission range up to 5 km (multi-mode) or up to 30 km (single-mode)
- Extended temperature range from -30 to +75 °C
- Easy commissioning, no configuration required
- Installation in Zone 2 or in safe areas

MY R. STAHL 9721A



This media converter converts electrical Ethernet signals (TX) into optical Ethernet signals (FX). The optical Ethernet signals are used for operation in hazardous areas of Zones 0, 1 and 2 with the "Ex op is" type of protection. This means that conventional fibre optic cables can also be used in hazardous areas and may be connected and disconnected during operation (i.e. hot swap). The media converter (multi-mode) is suitable for operating the IS1+ Remote I/O system in 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 safe areas

### Safety Data

Max. FO radiant power	≤ 15 mW
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### 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

#### Electrical Data

Interface 1	1 port, 100BASE-FX MM SC
Interface 1 version	EX OP IS
Transmission distance	Up to 100 m (Cat5e or better)
Interface 2	1 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	2-pole screw terminal
Max. current consumption	200 mA
Max. power consumption	2.5 W
Polarity reversal protection	Yes

#### Ambient Conditions

Ambient temperature	-30 °C ... +75 °C
Ambient temperature	-22°F ... +167°F
Storage temperature	-40 °C ... +80 °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 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
Mounting orientation	Vertical Horizontal

# Network technology

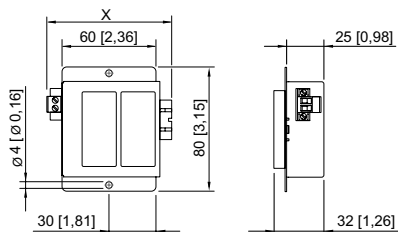


Media converter FX op is / TX SC for Zone 2

Multi mode

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

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



	Dimension X
With fibre optic sockets and an auxiliary power connection	81 mm [3.19]
As above with installed FO connector	116 mm [4.57]

## Accessories

### FO patch cable



Patch cable for connecting 9441 IS1+ Ethernet CPU to 9721 media converter; LC/SC plug; length 3 m

### Art. No.

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.