

Media converter FX op is / TX SC for Zone 2

Multi mode

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



- 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 |

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Safety Data

| | |
|-----------------------|---------|
| Max. FO radiant power | ≤ 15 mW |
|-----------------------|---------|

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 |
| 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 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] |
| 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 ² |
| Connection cross-section max. | 2.5 mm ² |
| Stripping length | 7 mm |
| Weight | 240 g |
| Weight | 0.53 lb |

Network and Wireless Solutions



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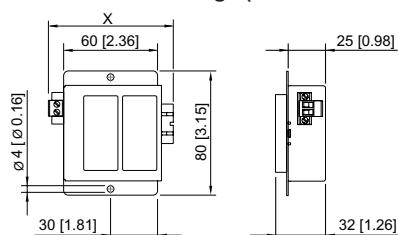
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Mounting / Installation

| | |
|----------------------|---------------------------------|
| Mounting type | On 35 mm DIN rail Wall mounting |
| Tightening torque | 0.5 Nm |
| Mounting orientation | Vertical Horizontal |


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

FO patch cable

| | 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.