



- 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 |
|-----------------------|---------|

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 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 ² |
| Connection cross-section max. | 2.5 mm ² |
| 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 technology



Media converter FX op is / TX SC for Zone 2

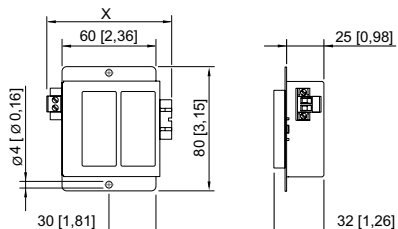
Multi mode

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Mounting / Installation

| | |
|----------------------|------------------------|
| Mounting orientation | Vertical Horizontal |
|----------------------|------------------------|

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.