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# Network isolator - FL ISOLATOR 100-M12 RMS - 2904671

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The figure shows version

Passive network isolator with pre-installed adapter for mounting on a DIN rail. Electrical isolation in Ethernet networks. For protection against potential differences up to 4 kV. Transmission speed of up to 100 Mbps. M12 sockets (D-coded).

## Why buy this product

- Easy mounting
- No power supply required
- Dielectric strength of up to 4 kV
- Protection against aggressive environmental influences, particularly harsh industrial environments, thanks to coated PCB
- Approval for railway applications (rolling stock) according to EN 50155 and EN 50121
- Extended temperature range of -40°C to +75°C

## Key Commercial Data

| | |
|---|---|
| Packing unit | 1 STK |
| GTIN | 4 046356 872898 |

## Technical data

### Dimensions

| | |
|---|---|
| Width | 66 mm |
| Height | 91 mm |
| Depth | 50 mm |

### Ambient conditions

| | |
|---|---|
| Ambient temperature (operation) | -40 °C ... 75 °C |
| Ambient temperature (storage/transport) | -40 °C ... 75 °C (85°C for 10 min.; thereafter function can no longer be guaranteed - check device) |
| Permissible humidity (operation) | 10 % ... 95 % |
| Permissible humidity (storage/transport) | 5 % ... 95 % |
| Degree of protection | IP54 |

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## Technical data

### General

| | |
|---|---|
| Electrical isolation | Port X1//port X2 |
| Test voltage data interface/data interface | 4 kV AC (50 Hz, 1 min.) |
| Insulation voltage input/output | 250 $V_{rms}$ |
| Standards/regulations | EN 50121 and EN 50155 (for railway applications) |
| Electromagnetic compatibility | Conformance with EMC Directive 2004/108/EC (valid until 19.04.2016) / 2014/30/EU (valid from 20.04.2016) |
| Mounting position | Alignable on DIN rail |
| Net weight | 343.6 g |
| Housing material | Plastic, FR 2010 |
| | V0 (UL 94) |
| Color | black |
| MTBF | 38062 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day)) |
| | 12264 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day)) |
| MTTF | 18372 Years (SN 29500 standard, temperature 25°C, operating cycle 21 % (5 days a week, 8 hours a day)) |
| | 13381 Years (SN 29500 standard, temperature 40 °C, operating cycle 34.25 % (5 days a week, 12 hours a day)) |
| | 3348 Years (SN 29500 standard, temperature 40°C, operating cycle 100 % (7 days a week, 24 hours a day)) |
| Conformance | CE-compliant |

### Power supply

| | |
|---|---|
| Supply voltage range | passive module, no supply voltage required |

### Serial interface

| | |
|---|---|
| Interface 1 | Ethernet interface, 10/100BASE-T(X) in acc. with IEEE 802.3u |
| Interface | Ethernet |
| Connection method | M 12 connectors (D-coded, female) |
| Transmission length | ≤ 100 m (Total length across both ports (dependent on data rate and cable used)) |
| Protocols supported | Transparent protocol for IPv4 and IPv6 |
| Serial transmission speed | 10/100 Mbps |
| Interface 2 | Ethernet interface, 10/100BASE-T(X) in acc. with IEEE 802.3u |
| Interface | Ethernet |
| Connection method | M 12 connectors (D-coded, female) |

### Standards and Regulations

| | |
|---|---|
| Electromagnetic compatibility | Conformance with EMC Directive 2004/108/EC (valid until 19.04.2016) / 2014/30/EU (valid from 20.04.2016) |
| Type of test | Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6 |
| Test result | 5g, 10-150 Hz, 2.5 h, in XYZ direction |
| Type of test | Vibration resistance according to IEC 61373, EN 61373 |
| Test result | Category 1, Class B |

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## Technical data

### Standards and Regulations

| | |
|---|---|
| Type of test | Shock in acc. with EN 60068-2-27/IEC 60068-2-27 |
| Test result | 15g, 11 ms period, half-sine shock pulse |
| Type of test | Shock in acc. with EN 60068-2-27/IEC 60068-2-27 |
| Test result | 30g, 18 ms period, half-sine shock pulse |
| Standards/regulations | EN 61000-4-4 |
| | EN 50121 and EN 50155 (for railway applications) |
| | IEC 60571 |
| | DIN EN 50153 |
| Conformance | CE-compliant |

## Articles in set

Network isolator - FL ISOLATOR 100-M12 - 2902985

Passive network isolator for electrical isolation in Ethernet networks. For the protection of Ethernet devices against potential differences of up to 4 kV. Can be used for transmission speeds of up to 100 Mbps. Ethernet connection via two M12 sockets (D-coded).

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DIN rail adapter - FL EPA RMS - 2701133

Set for mounting devices with EPA design on a DIN rail

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## Classifications

### eCl@ss

| | |
|---|---|
| eCl@ss 4.0 | 27250591 |
| eCl@ss 4.1 | 27230207 |
| eCl@ss 5.0 | 27230207 |
| eCl@ss 5.1 | 27061803 |
| eCl@ss 6.0 | 27061803 |
| eCl@ss 7.0 | 27061803 |
| eCl@ss 8.0 | 27189268 |

### ETIM

| | |
|---|---|
| ETIM 4.0 | EC002006 |
| ETIM 5.0 | EC002006 |

# Network isolator - FL ISOLATOR 100-M12 RMS - 2904671

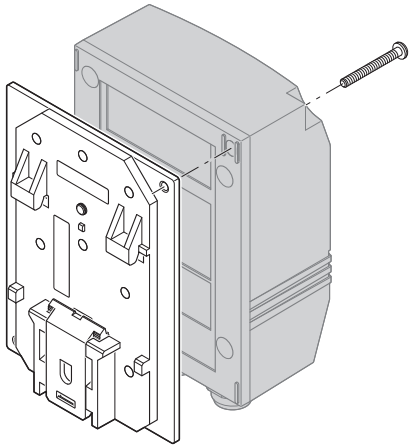
## Classifications

### UNSPSC

| | |
|---|---|
| UNSPSC 6.01 | 26121607 |
| UNSPSC 7.0901 | 26121607 |
| UNSPSC 11 | 26121607 |
| UNSPSC 12.01 | 26121607 |
| UNSPSC 13.2 | 26121607 |

## Drawings

Schematic diagram





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