



FLUO 24 DC/AC INVERTERS

Description

MPF 007 1D01



This series of inverters is designed to supply interior fluorescent tubes in rolling stocks applications. Depending on its different versions, it is possible to supply 1 or 2 tubes from 5 W to 35 W.

MPF 016 2D01



Input Specifications

| Product reference | All references |
|----------------------------------|------------------------|
| Nominal input voltage | 24 VDC |
| Input voltage range | 16,8 to 30 VDC |
| Input transients voltage | 14,4 V-33,6 V / 100 ms |
| Reverse input voltage protection | Yes, by serial diode |
| Inrush current limitation | < 20 In |

Output Specifications

| Product reference | MPF 007 1D01 | MPF 016 2D01 | MPF 035 2D01 |
|--|--------------|--------------|--------------|
| Output signal | Sinus | | |
| Output frequency | 30 to 85 kHz | | |
| Dimming | No | No | Yes |
| Nominal output power (depending on applications) | 5 to 7 W | 5 to 16 W | 14 to 35 W |
| Efficiency | > 74% | | |
| Thermal protection | No | | |
| Overvoltage protection | Yes | | |
| Permanent short circuit protection | Yes | | |

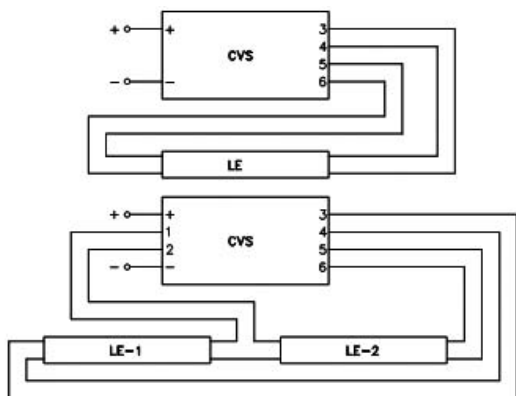
MPF 035 2D01



| Product reference | MPF 007 1D01 | MPF 016 2D01 | MPF 035 2D01 |
|---------------------------------|--|---|--|
| Fluorescent tubes configuration | PL-S PRO 5W or similar PL-S PRO 6W or similar PL-S PRO 7W or similar | PL-S PRO 5W or similar (1 or 2 tubes) TL Mini PRO 8W or similar (1 or 2 tubes) | TL5 35W or similar (1 tube) TL5 28W or similar (1 tube) TL5 21W or similar (1 tube) TL5 14W or similar (1 or 2 tubes) |

Environmental Details

| Product reference | All references |
|--|--|
| Operating temperature range | -25°C to +55°C |
| Ambient temperature around the product | -25°C to +70°C |
| Derating | Without derating |
| Storage temperature range | -40°C to +75° |
| Temperature coefficient | < 2.10 ⁻⁴ /°C |
| Relative humidity at 40°C | 95% |
| Cooling | Natural convection |
| Insulation resistance | > 10 MΩ / 500 VDC |
| Dielectric strength | 1 500 Vrms between input+output and ground |
| MTBF (according to UTE C 80 801) | GM 40°C: 300 000 h |
| Burn in (ON-OFF test) | 100 000 cycles |
| Coating | PCB coated with varnish |
| Protection index | IP40 |





Applicable Norms

| Item | Reference | Level | Compliance |
|--|--------------|--|------------|
| EMC | EN 50121-3-2 | | X |
| Radiated emissions | EN 55011 | Class A radiated | X |
| Conducted emissions | EN 55011 | Class A + 20 dB conducted | X |
| Vibrations | EN 61373 | category 1, mounted in cabin (class B) | X |
| Shocks | NFF 62011 | 1/2 sinus pulse (18 ms, 30 m/s) | X |
| Electrostatic discharges | EN 61000-4-2 | D.E.S 6 kV contact, 8 kV in the air | X |
| Radiated immunity | EN 61000-4-3 | 20 V/m | X |
| Fast transients | EN 61000-4-4 | 2 kV | X |
| Conducted perturbations | EN 61000-4-6 | 3 Vrms | X |
| Surge | EN 50155 | 5/50µs 1800 V | X |
| Electronic equipments used into rolling-stocks | STM-E-001 | | X |

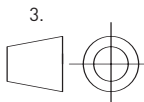
Mechanical Characteristics

| Product reference | MPF 007 1D01 | MPF 016 2D01 | MPF 035 2D01 |
|-------------------|--------------------------|---------------|---------------|
| Box material | Aluminium | | |
| Potting | No | | |
| Dimension | 115 x 50 x 42 | 236 x 50 x 39 | 210 x 64 x 39 |
| Weight | < 200 g | < 290 g | < 310 g |
| Fixing | 4 x Ø5,5 mm | 2 x Ø5,5 mm | 4 x Ø5,5 mm |
| Input connector | 6,35 faston clamps | | |
| Output connector | LMI compatible connector | | |

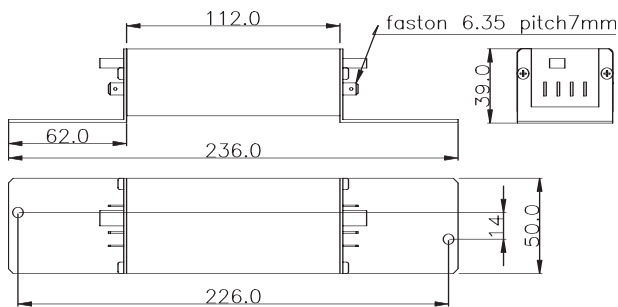
Pinout: According to norm (XPF 61-031: connectors for transistor ballasts)

Technical Drawing

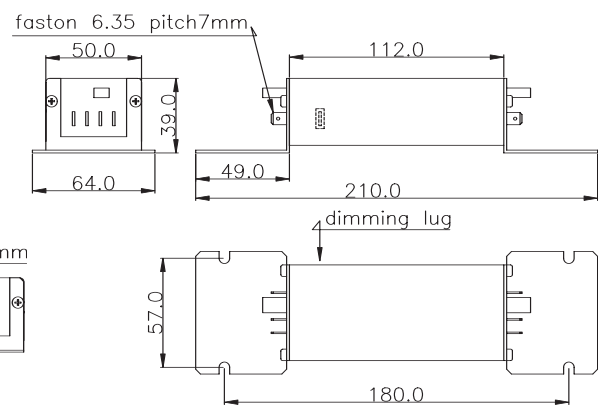
NOTES

- All dimensions in mm
- Specifications subject to change without notification
- 
- Different sizes available for braces

MPF 016 2D01



MPF 035 2D01



MPF 007 1D01

