



FLUO 72

DC/AC INVERTERS

MPF 007 1K01



MPF 016 2K01



MPF 035 2K01



Description

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.

Input Specifications

Product reference	All references
Nominal input voltage	72 VDC
Input voltage range	50,4 to 90 VDC
Input transients voltage	43 VDC, 101 VDC during 100 ms
Reverse input voltage protection	Yes, by serial diode
Inrush current limitation	< 20 In

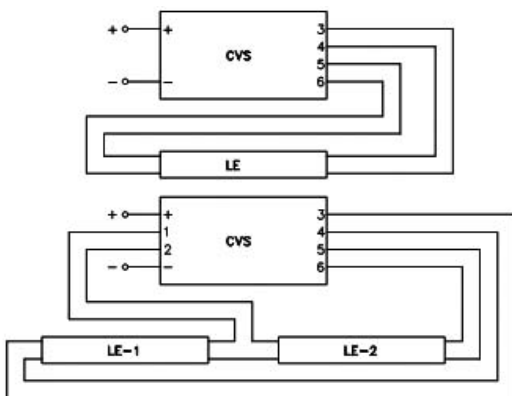
Output Specifications

Product reference	MPF 007 1K01	MPF 016 2K01	MPF 035 2K01
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		

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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 1800V	X
Electronic equipments used into rolling-stocks	STM-E-001		X

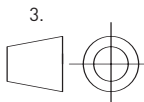
Mechanical Characteristics

Product reference	MPF 007 1K01	MPF 016 2K01	MPF 035 2K01
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		

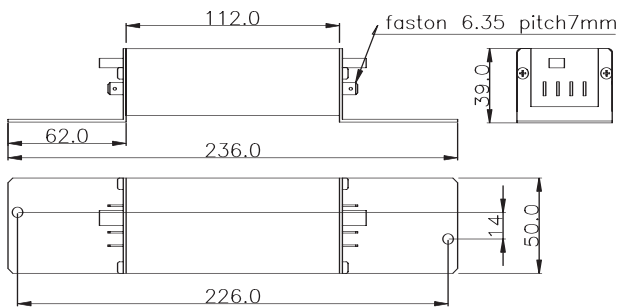
Pinout: According to norm (XPF 61-031: connectors for transistor ballasts)

Technical Drawing

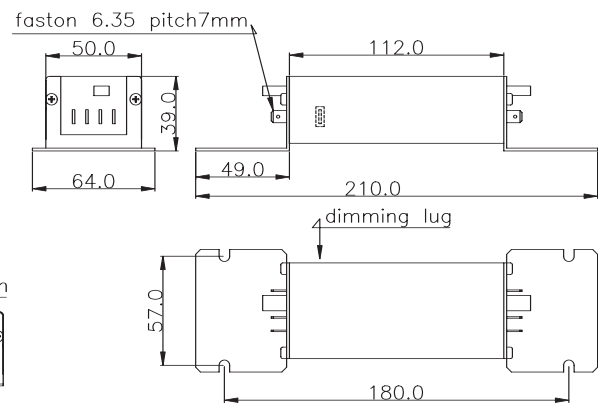
NOTES

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

MPF 016 2K01



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MPF 007 1K01

