

EMV / RFI Filter

DIN-Rail EMV / RFI Filter with Minimum Leakage Current.

- » Compact state-of-the-art filter concept
- » Light weight plastic enclosure design
- » Minimized filter leakage current
- » Hinged safety covers
- » Revolutionary embedded filter terminals
- » Environmental friendly design without potting compound



Design protected by European patent (EP 1727280)

3-Phase Filter	NF01-FS34985-20-71
Maximum continuous operating voltage:	3x 520/300 VAC
Operating frequency:	DC up to 60Hz
High potential test voltage:	P → E 3000 VDC for 2 sec (HP Typen)
Protection category:	IP20
Overload capability:	4x Nennstromm at switch on 1.5x current rating for 1 Minute → Einmal pro Stunde
Temperature range (operation and storage)::	-25 °C to +100 °C (25/100/21)
Flammability corresponding to:	UL 94 V-2 or besser
Design corresponding to:	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
MTBF @ 50°C/400V (Mil-HB-217F):	>200,000 h
current rating @ 50°C (40°C):	20 (21.4) A
Typical drive power rating ¹⁾	11 kW
Leakage current @ 480VAC / 50Hz ²⁾	2.5 mA
Power loss @ 25°C / 50Hz:	6.2 W
Weight:	0.52 kg

FILTER INPUT / OUTPUT CONNECTOR:

Input / Output Connector (cross sections)



Wire	4 - 6 mm ²
AWG Type Wire	AWG 12-AWG 10
Ring / Gabel Kabelschuhe ³⁾	max. 11 mm (9.5 mm) / min. Ø 4.3 mm ⁴⁾
Recommended torque	1.0 – 1.2 Nm

1) Calculated at rated current, 480 VAC and cos phi = 0.8. The exact value depends upon the efficiency of the drive, the motor and the entire application.

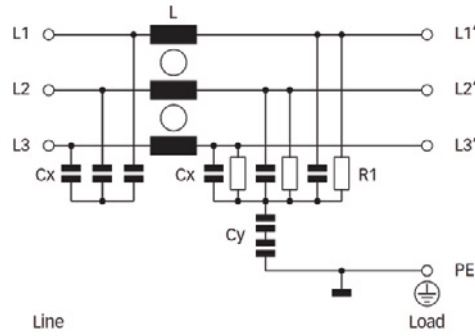
2) Maximum leakage under normal operating conditions.

Note: if two phases are interrupted, worst case leakage could reach up to 10 times higher levels (at 520 VAC 60 Hz).

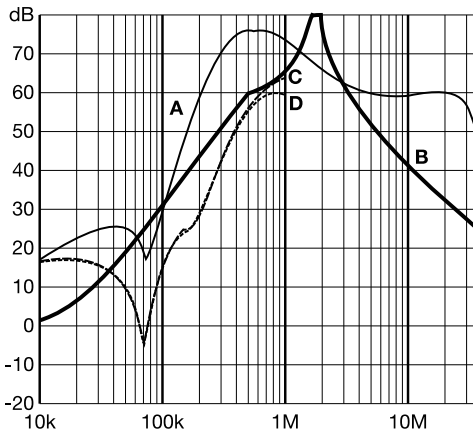
3) LinMot recommends the use of insulated and UL-recognized ring lugs or fork lugs of the appropriate size.

4) Specification in () relates to earth connector.

ELECTRICAL SCHEMATIC



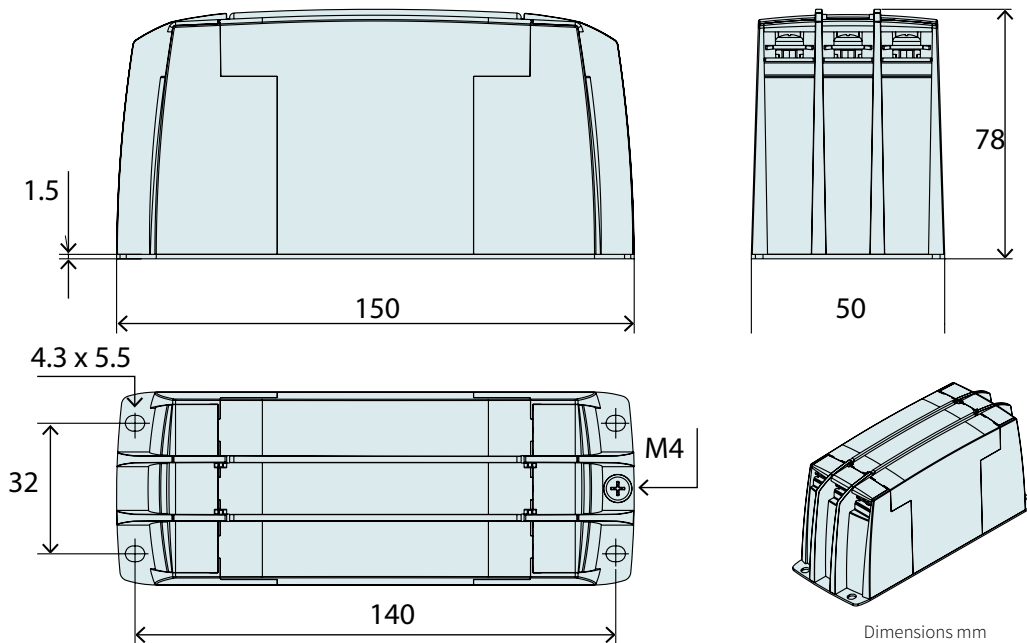
TYPICAL FILTER ATTENUATION



Per CISPAR 17

- A = 50Ω/50Ω sym
- B = 50Ω/50Ω asym
- C = 0.1Ω/100Ω sym
- D = 100Ω/0.1Ω sym

DIMENSIONS



Item	Description	Item-No.
NF01-FS34985-20-71	Line Filter for E1400 (motor cable up to 20 m)	0150-2746