

Ultra-compact Low Leakage current EMC/EMI Filter



- Ultra-compact four-wire filter for applications lacking space
- Exceptional low operating leakage current
- Equally suitable for star and delta power networks

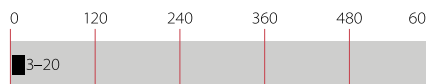


Performance indicators

Attenuation performance



Rated current [A]



Approvals



Features and benefits

- The FN 355 family of three-phase and neutral line filters provides a cost-effective interference suppression solution for a wide variety of applications
- Available in four versions, with current ratings from 3 to 20 A, the filters employ a single-stage four-wire LC circuit with saturating resistant chokes, and have a very low operational leakage current
- FN 355 filters are contained within an extremely compact metal housing, making them ideal for use in situations where space is at a premium

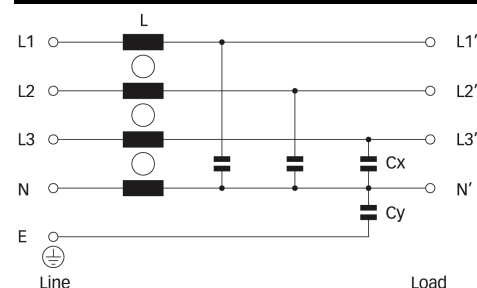
Technical specifications

| | |
|--|---|
| Maximum continuous operating voltage | 3x 440/250 VAC |
| Operating frequency | DC to 400 Hz |
| Rated currents | 3 to 20 A @ 40°C |
| High potential test voltage | P/N → E 2000 VAC for 2 sec P → P 1350 VDC for 2 sec P → N 800 VAC for 2 sec |
| Overload capability | 4x rated current at switch on, 1.5x rated current for 1 minute, once per hour |
| Temperature range (operation and storage) | -25°C to +100°C (25/100/21) |
| Flammability corresponding to | UL 94 V-2 or better |
| Design corresponding to | UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939 |
| MTBF @ 40°C/230 V (Mil-HB-217F) | 850,000 hours |

Typical applications



- Office equipment
- Medical equipment
- General purpose four-wire filtering
- Applications with tight space conditions

Typical electrical schematic



Filter selection table

WOO

| Filter | Rated current @ 40°C (25°C) | Leakage current* @ 440 VAC/50 Hz | Power loss @ 25 °C/ 50Hz | Input/Output connections | |
|---------------------|--------------------------------|-------------------------------------|-----------------------------|---|--|
| | [A] | [mA] | [W] |  |  [kg] |
| FN 355-3-05 | 3 (3.4) | 0.0 | 1.4 | -05 | 0.15 |
| FN 355-6-05 | 6 (6.9) | 0.0 | 1.5 | -05 | 0.21 |
| FN 355-10-05 | 10 (11.5) | 0.0 | 1.8 | -05 | 0.25 |
| FN 355-20-06 | 20 (23) | 0.1 | 3.4 | -06 | 0.29 |
| FN 355-20-03 | 20 (23) | 0.1 | 3.4 | -03 | 0.29 |

* Standardized calculated leakage current acc. IEC60939 under normal operating conditions.

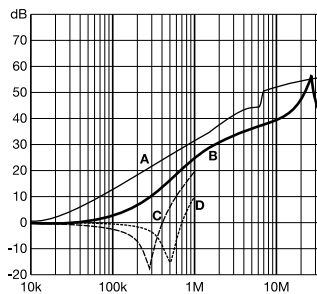
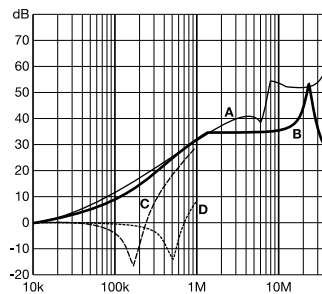
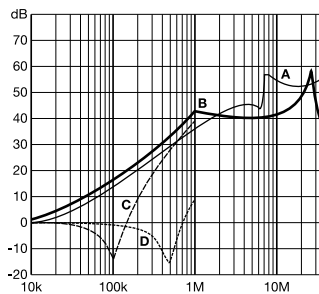
Typical filter attenuation

Per CISPR 17; A=50 Ω/50 Ω sym; B=50 Ω/50 Ω asym; C=0.1 Ω/100 Ω sym; D=100 Ω/0.1 Ω sym

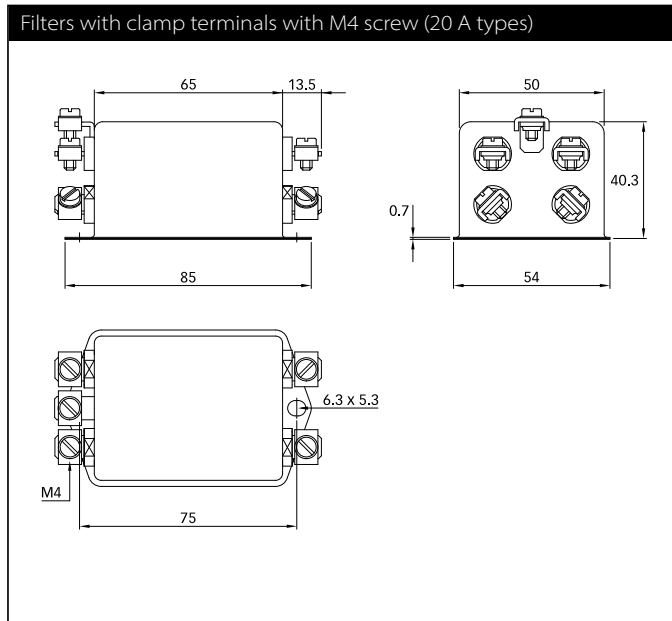
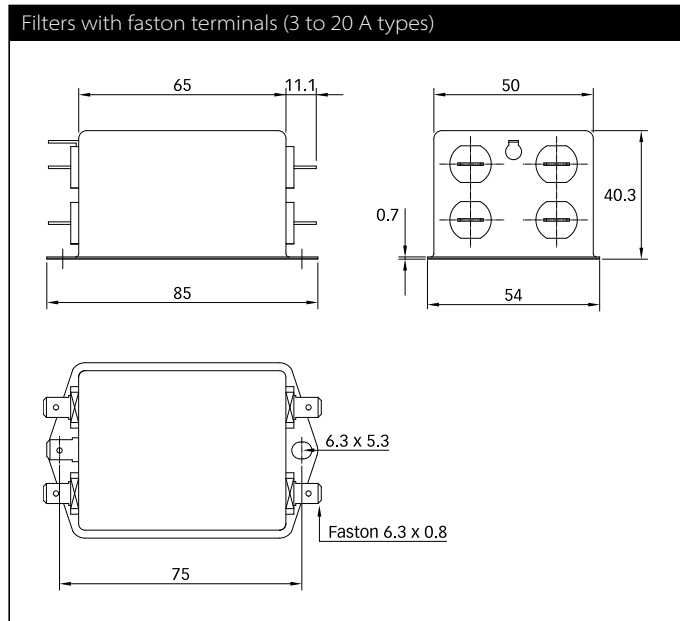
3 A types

6 A types

10 and 20A types



Mechanical data



All dimensions in mm; 1 inch = 25.4 mm
Tolerances according: ISO 2768-m / EN 22768-m

Please visit www.schaffner.com to find more details on connectors.



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