

Performance EMI Filter



- | Rated currents from 1 to 10 A
- | Dual-stage filter
- | Compact housing
- | Integrated earth line choke

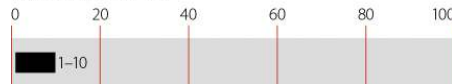


Performance indicators

Attenuation performance



Rated current [A]



Technical specifications

| | |
|--|--|
| Maximum continuous operating voltage | 250 VAC, 50/60 Hz |
| Operating frequency | dc to 400 Hz |
| Rated currents | 1 to 10 A @ 40 °C max. |
| High potential test voltage | P → PE 2000 VAC for 2 sec P → N 760 VAC for 2 sec |
| 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/230V (Mil-HB-217F) | 970,000 hours |

Approvals



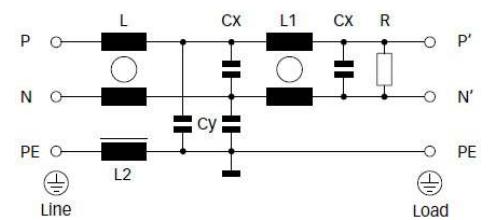
Features and benefits

- | FN 343 filters are designed for easy and fast chassis mounting
- | Increased attenuation performance based on dual-stage filter design and earth line choke
- | All FN 343 single-phase filters provide an excellent attenuation performance, based on chokes with high saturation and excellent thermal behavior
- | Faston connection
- | Integrated earth line choke
- | Compact design
- | Custom-specific versions on request


Typical applications

- | Electrical and electronic equipment
- | Consumer goods
- | Household equipment
- | Power supplies
- | Office automation equipment
- | Datacom equipment
- | Industrial equipment auxiliary supply

Typical electrical schematic



Filter selection table

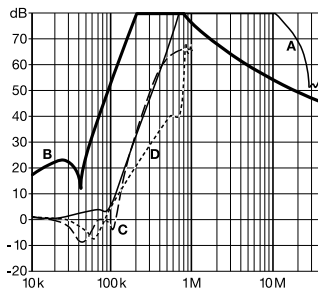
| Filter | Rated current @ 40 °C (25 °C) [A] | Leakage current* @ 230 VAC/50 Hz [µA] | Inductance | | | Capacitance | | Resistance R [MΩ] | Input/Output connections  | Weight [g] |
|--------------|---|---|------------|------------|------------|-------------|------------|-------------------------|--|---------------|
| | | | L [mH] | L1 [mH] | L2 [mH] | Cx [nF] | Cy [nF] | | | |
| FN 343-1-05 | 1 (1.15) | 340 | 5.9 | 9.5 | 0.46 | 100 | 2.2 | 1 | -05 | 160 |
| FN 343-3-05 | 3 (3.4) | 340 | 1.1 | 2 | 0.4 | 100 | 2.2 | 1 | -05 | 160 |
| FN 343-6-05 | 6 (6.9) | 340 | 0.43 | 0.77 | 0.4 | 100 | 2.2 | 1 | -05 | 160 |
| FN 343-10-05 | 10 (11.5) | 340 | 0.27 | 0.66 | 0.4 | 100 | 2.2 | 1 | -05 | 160 |

* Maximum leakage under normal operating conditions. Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

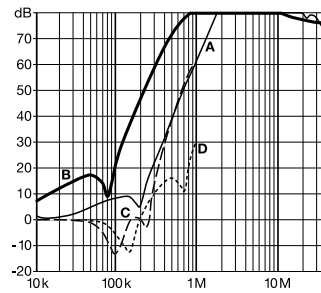
Typical filter attenuation

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

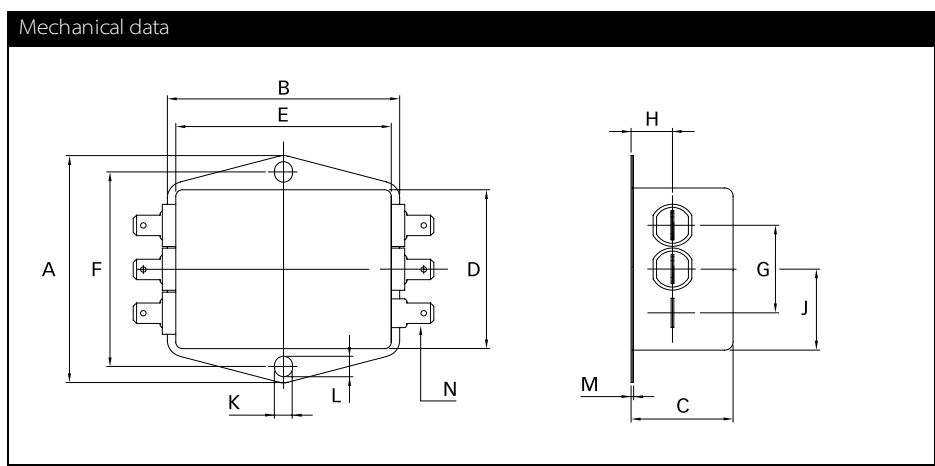
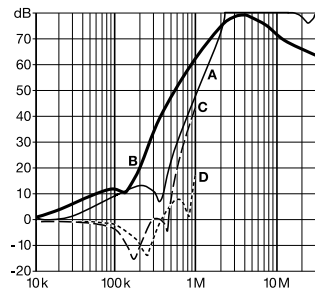
1 A types



3 A types



6 and 10 A types



Dimensions

| | 1 to 10 A | Tolerances |
|---|-----------|------------|
| A | 70 | ±0.5 |
| B | 69 | ±0.5 |
| C | 30.3 | ±1 |
| D | 50 | ±1 |
| E | 64.8 | ±1 |
| F | 60 | ±0.2 |
| G | 27 | ±0.5 |
| H | 12.3 | ±0.5 |
| J | 25 | ±0.5 |
| K | 5.3 | |
| L | 6.3 | |
| M | 0.7 | |
| N | 6.3 x 0.8 | |

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



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