

General Purpose AC EMI Filter

Conformance



*Image shown is for illustrative purpose only



Technical specifications

| | |
|-----------------------------|---------------------------------|
| Operating voltage | 440VAC (P-P) |
| Current rating | 180A - 250A |
| Frequency | 50/60Hz |
| Voltage drop | 1 Volt max. |
| High potential test voltage | P -> E 1500VAC P ->P 2121VDC |
| Insulation resistance | ≥ 300 MΩ @ 500VDC (P→E) |
| Operating temperature | 40°C / -25°C +85°C |

Features and benefits

- All filters provide high attenuation performance. Filters available in single stage double stage
- Two stage filters designed for noisy application requiring excellent filter performance.
- All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- High reliable
- Easy and fast chassis mountable filter with compact size.
- CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- Various terminal options are available

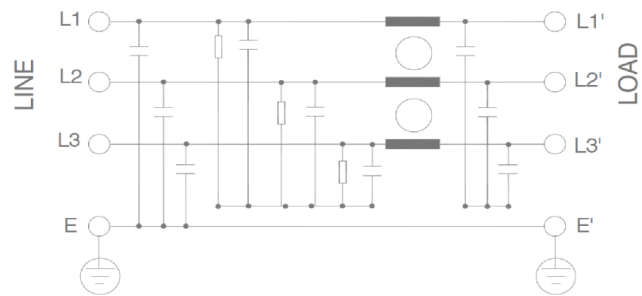
Application

- Consumer product
- Defence application
- Medical equipment
- Industrial application
- Automotive application
- Weighting Machines
- Printing Machinery
- Electrical equipment application
- Office automation equipment

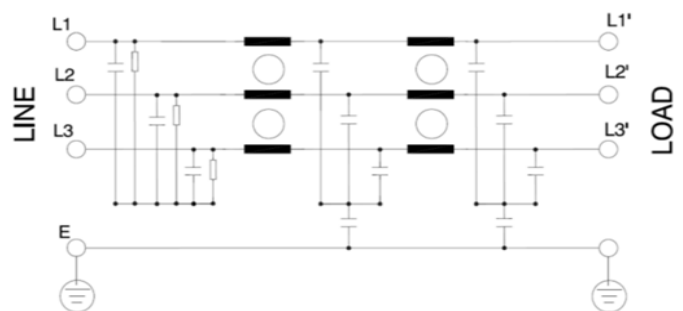
Attenuation type

| | |
|--------------|----------|
| Single Stage | Standard |
| Double Stage | High |

Electrical schematic for Single stage filter



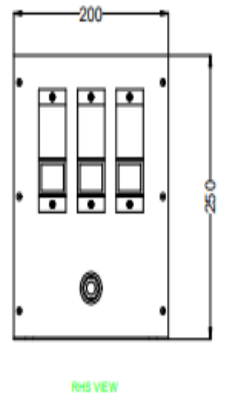
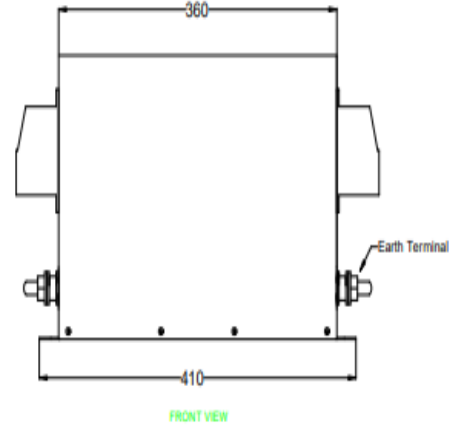
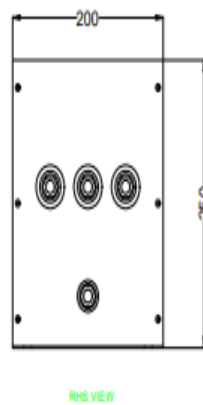
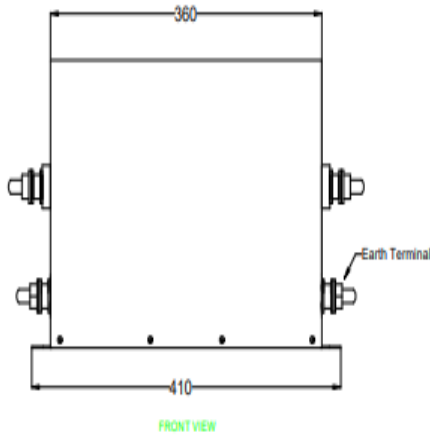
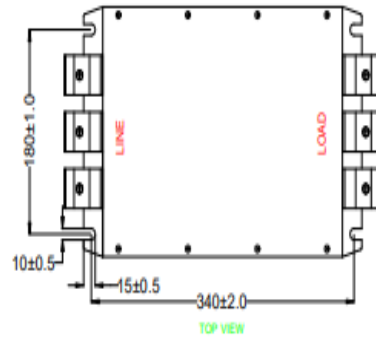
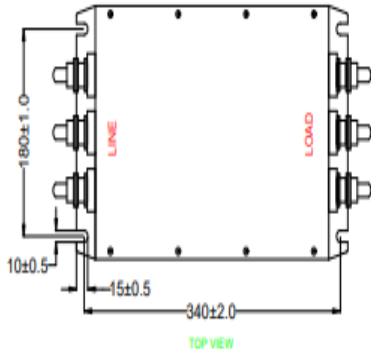
Electrical schematic for Double stage filter



Mechanical Details

screw terminal

touch safe terminal



*All dimensions are in mm.
General tolerance=±2%

Filter Selection Table

| Sr. No | Elcom part codes (ordering code) | Rated Current rating (A) @40°C | Leakage current (mA) @250VAC | Terminals (X) | | Approx. Weight (Kg) | Attenuation |
|--------|----------------------------------|--------------------------------|------------------------------|---------------|-----------|---------------------|-------------|
| | | | | Screw | Touchsafe | | |
| 1 | EF-3A180X01G-C65 | 180 | < 3.5 | D | F | 10 | Standard |
| 2 | EF-3A200X01G-C65 | 200 | < 3.5 | D | F | 10 | Standard |
| 3 | EF-3A250X01G-C65 | 250 | < 3.5 | D | F | 10 | Standard |
| 4 | EF-3A180X20G-C65 | 180 | < 3.5 | D | F | 10 | High |
| 5 | EF-3A200X20G-C65 | 200 | < 3.5 | D | F | 10 | High |
| 6 | EF-3A250X20G-C65 | 250 | < 3.5 | D | F | 10 | High |

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3A180D01G-C65)
- Customize products provided on request.

Connection Type

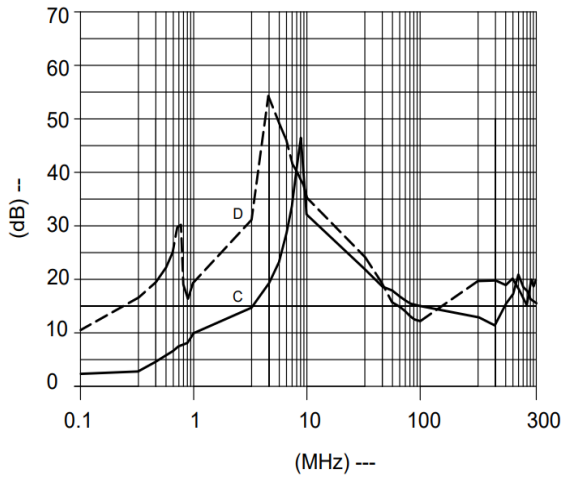
| Current Rating (A) | Screw terminal details | | Touch safe terminal details | | Earthing screw terminal details |
|--------------------|------------------------|-------------------------------|-----------------------------|-------------------------------|---------------------------------|
| | Screw | Recommended tightening torque | Touch safe | Recommended tightening torque | |
| 180 | M12 | 35-40Kgcm | 95 sqmm | 132-177 lbf.in | M10 |
| 200 | M12 | 35-40Kgcm | 95 sqmm | 132-177 lbf.in | M10 |
| 250 | M12 | 35-40Kgcm | 150 sqmm | 50-60 lbf.in | M12 |

Filter attenuation graph

C = Common mode (asymmetrical) —————

D = Differential mode (symmetrical) - - - - -

For general application (Single Stage)
180A-250A



For general application (double Stage)
180A-250A

