



DATASHEET

# THREE PHASE EMI FILTER – MF423 4 3D BS

## Description

These series range of three phase filters with neutral in book shelf design give superior performance when used in applications with low Impedance loads controlling pulsed, continuous and intermittent interference noise and where high levels of mains borne interference are present.

## Technical Specifications

|                                      |                                                            |
|--------------------------------------|------------------------------------------------------------|
| Maximum Continuous Operating Voltage | 440/520VAC                                                 |
| Operating Frequency                  | 50/60Hz                                                    |
| Current ratings                      | 7A to 150A @40°C                                           |
| High Potential test voltage          | L to G 2660Vdc for 1 Minute<br>L to L 1950Vdc for 1 Minute |
| Overload Capability                  | 135% of Rated current for 15 minutes                       |
| Design Corresponding to              | UL 60939-3, CSA 22.2 No.8-13 and IEC 60939                 |
| Flammability corresponding to        | UL 94 V-0                                                  |
| Temperature range                    | -25°C to +85°C                                             |
| Climatic Category                    | 25/85/21                                                   |
| Enclosure                            | Aluminium                                                  |

## Approval & Compliance



## Features

- 3 Phase filters with neutral
- Compact/Light Weight/Cost Effective
- Bookshelf Design

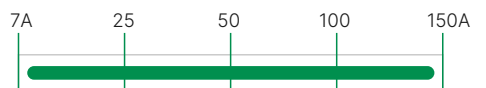
## Applications

- CNC Machines
- Robotics
- Regenerative Drives

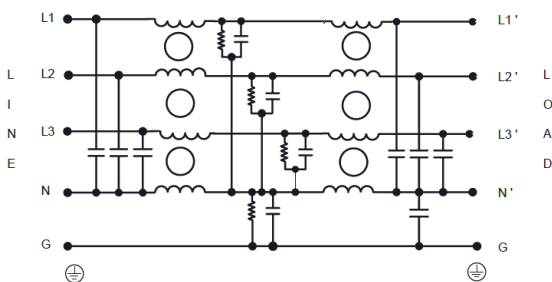
## Performance Indicator

| Standard | High | Very High |
|----------|------|-----------|
|          |      |           |

Rated current [A]



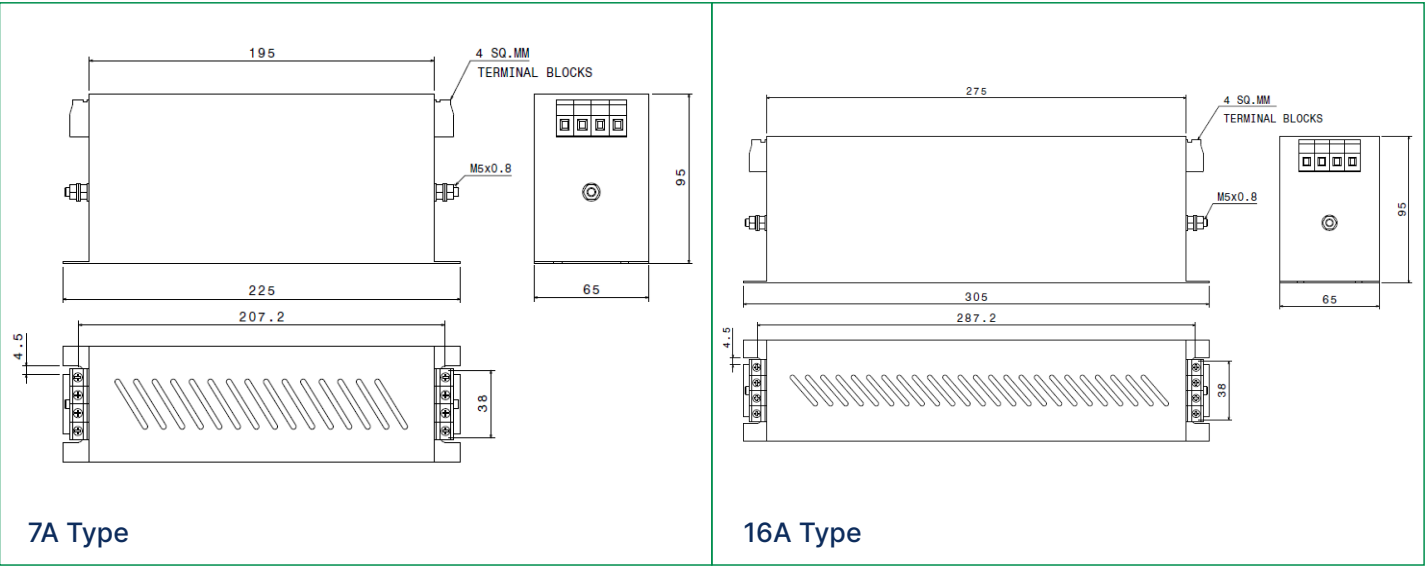
## Typical circuit Diagram

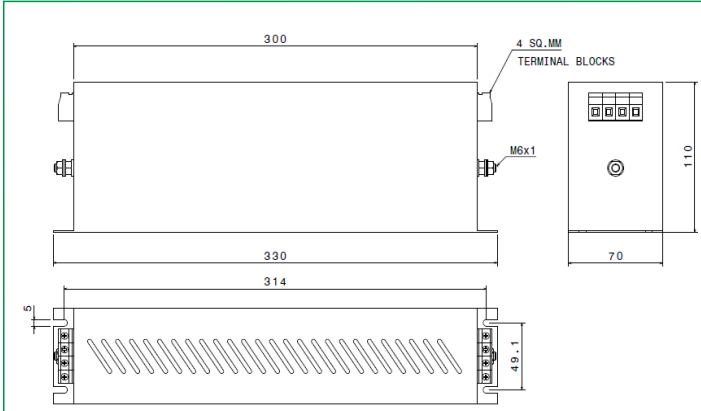


Ordering Code Information

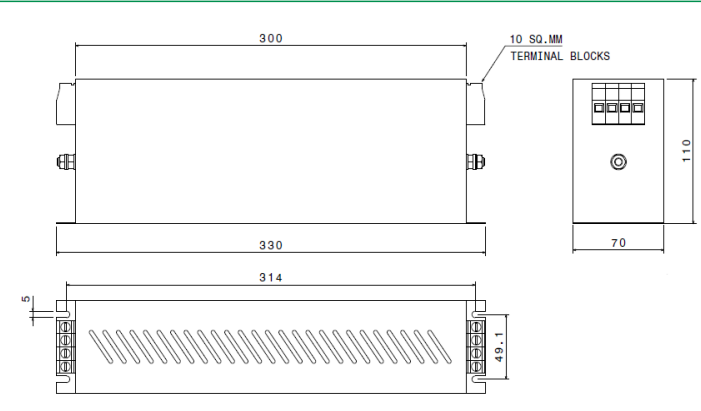
| Part Number    | Ordering Code<br>(440 VAC) | Ordering Code<br>(520 VAC) | Rated Current<br>@40°C | Termination<br> | Weight<br>(Kgs) |
|----------------|----------------------------|----------------------------|------------------------|----------------------------------------------------------------------------------------------------|-----------------|
| MF 423 4 3D BS | E100112-2                  | E100775-2                  | 7A                     | 41                                                                                                 | 1.5             |
| MF 423 4 3D BS | E100112-3                  | E100775-3                  | 16A                    | 41                                                                                                 | 2               |
| MF 423 4 3D BS | E100112-4                  | E100775-4                  | 30A                    | 41                                                                                                 | 2.2             |
| MF 423 4 3D BS | E100112-5                  | E100775-5                  | 42A                    | 10                                                                                                 | 3               |
| MF 423 4 3D BS | E100112-6                  | E100775-6                  | 55A                    | 10                                                                                                 | 3               |
| MF 423 4 3D BS | E100112-7                  | E100775-7                  | 75A                    | 16                                                                                                 | 4               |
| MF 423 4 3D BS | E100112-8                  | E100775-8                  | 100A                   | 25                                                                                                 | 4               |
| MF 423 4 3D BS | E100112-9                  | E100775-9                  | 125A                   | 50                                                                                                 | 8               |
| MF 423 4 3D BS | E100112-10                 | E100775-10                 | 150A                   | 50                                                                                                 | 10              |

Mechanical Drawing

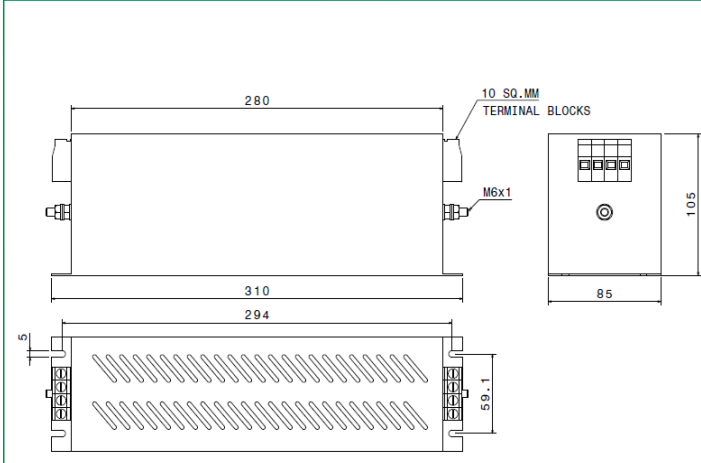




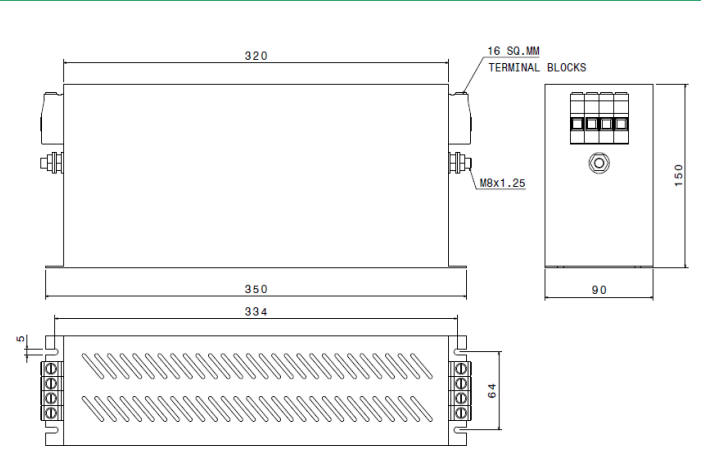
30A Type



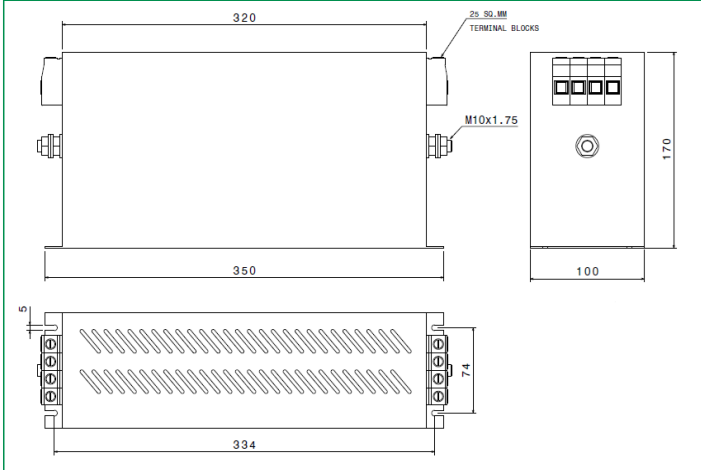
42A Type



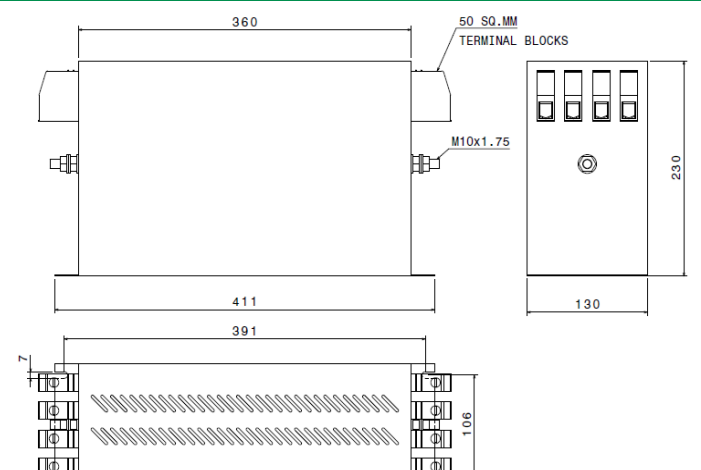
55A Type



75A Type



100A Type



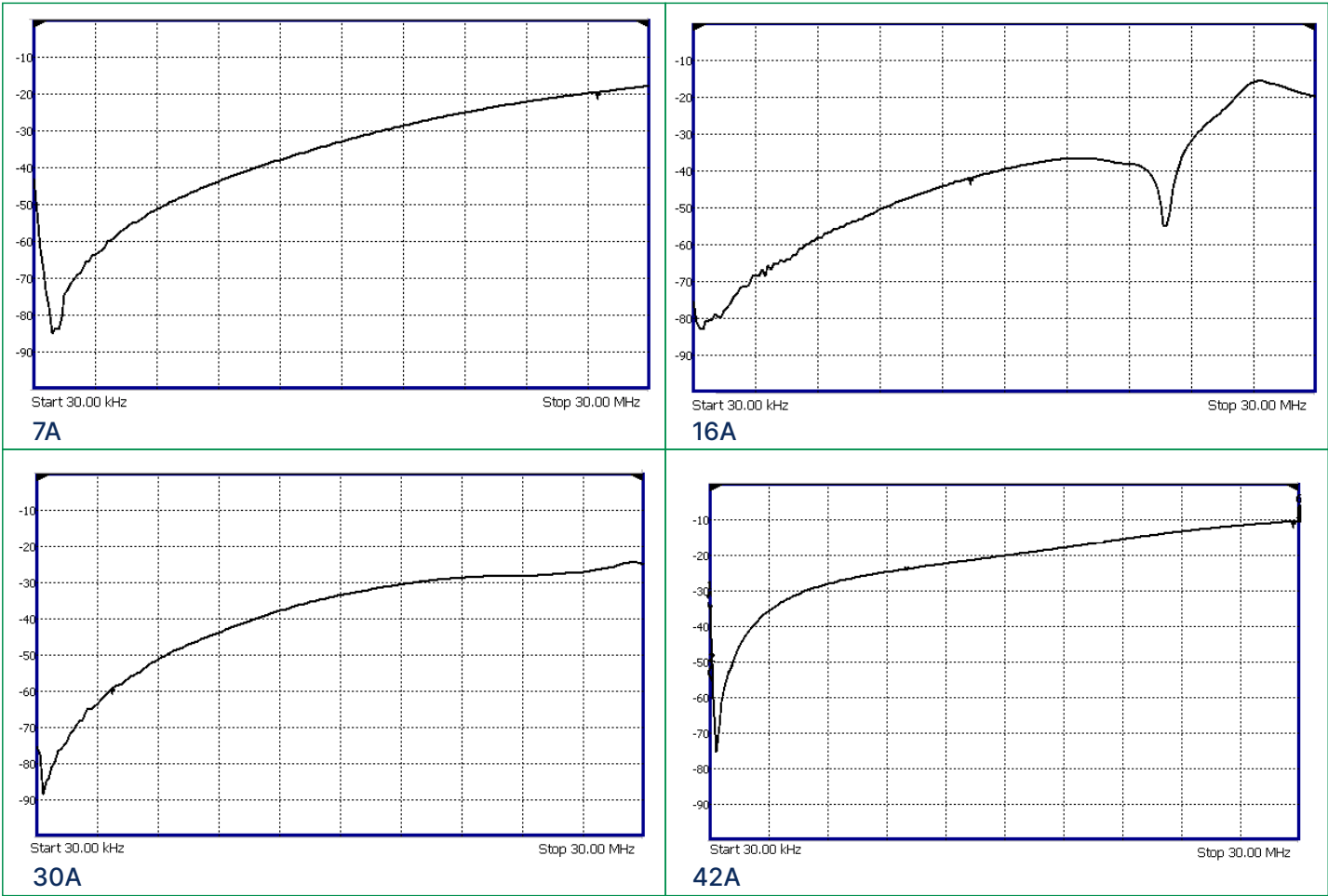
125A & 150A Type

Note: All dimensions in mm; Tolerances according to ISO2768-m

Connectors Cross Sections

|                                                                                   |                     |                      |                           |                  |                  |
|-----------------------------------------------------------------------------------|---------------------|----------------------|---------------------------|------------------|------------------|
|  | 41                  | 10                   | 16                        | 25               | 50               |
| Wire Section (mm²)                                                                | 4mm²                | 10 mm²               | 16 mm²                    | 25 mm²           | 50 mm²           |
| Wire Section (AWG)                                                                | 12AWG               | 8 AWG                | 6 AWG                     | 4 AWG            | 1/0 AWG          |
| Wire Stripping                                                                    | Max 10mm            | max 13.5 mm          | max 17 mm                 | max 17 mm        | max 20 mm        |
| Max Recommended Torque                                                            | 0.5 Nm / 4.5 in.lbs | 1.2 Nm / 10.8 in.lbs | 2÷2.2 Nm / 18÷19.8 in.lbs | 2 Nm / 18 in.lbs | 6 Nm / 54 in.lbs |

Insertion Loss – (Common Mode)



Insertion Loss – (Differential Mode)

