## Approvals & Compliances

(Pending) (Pending)

## Features:

- Filter designs are available up to 600A
- Compact and light weight Design
- Reliable terminal blocks, meeting EN60204-1 standards for industrial use, ensure secure connections
- The TMF4222 provides the attenuation performance needed to meet the requirements of various machine tools

## Applications:

- High-power motor drives, inverters
- Industrial three-phase systems
- Entire factories, plants and installations
- Machinery
- LargeUPS
- Mining equipment

DATASHEET

# Three phase EMI Filter with Neutral - TMF4222

This series is primarily used in industrial equipment, machinery, machine tools and various process automation systems with Three-phase and neutral configuration. Due to its exceptional attenuation performance, TMF4222 is also the preferred choice for noisy power supplies, renewable energy applications and high-power office equipment.

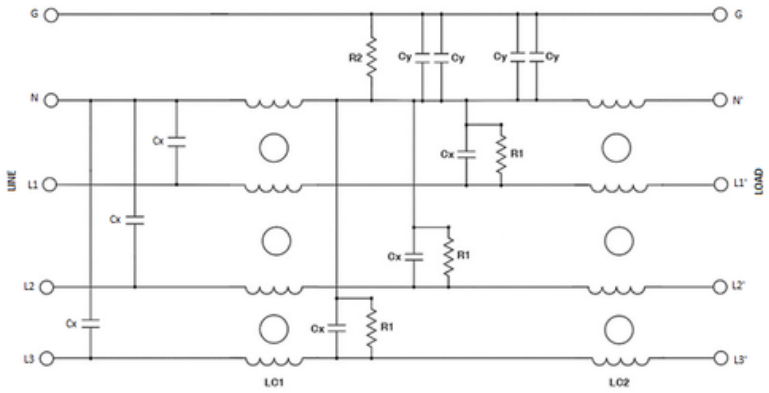
## Performance Indicator:

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

## Rated Current (A):

| 8 | 12 | 30 | 55 | 100 | 250 |
|---|---|---|---|---|---|
| ■ | ■ | ■ | ■ | ■ | |

## Type Circuit Diagram:



## Technical Specifications:

| | |
|---|---|
| Maximum Continuous Operating Voltage | :520VAC |
| Operating Frequency | :50/60 Hz |
| Current ratings | :8A to 250 A @ 50°C |
| High Potential test voltage | :L to G 2856 VDC for 2 Sec<br>L to L 1290 VDC for 2 Sec |
| Overload Capability | :135% of rated current for 15 Mins |
| Flammability according to | :UL 94 V-0 |
| Protection category | :IP 20 |
| Design Corresponding to | :UL60939-3, IEC60939-1&2 and CSA 22.2 NO.8-13 |
| Temperature range | :-25°C to +100°C |
| Climatic Category | :25/100/21 |

## Ordering Information

| High Performance | | | | | | |
|---|---|---|---|---|---|---|
| Model Number | Part Number | Current Rating @50°C(A) | Leakage current @ 520 VAC/ 50 Hz (mA) | Power loss @25°C / 50Hz (W) | Termination  | Min.Weight (kg) |
| TMF4222-8-2 | E111532-1 | 8 | 19 | 4.4 | 4 | 0.9 |
| TMF4222-12-2 | E111533-1 | 12 | 19 | 4.8 | 4 | 1 |
| TMF4222-16-2 | E111534-1 | 16 | 21 | 8.7 | 4 | 1.5 |
| TMF4222-30-2 | E106502-1 | 30* | 21 | 10.7 | 10 | 2 |
| TMF4222-42-2 | E111535-1 | 42 | 30 | 15.7 | 10 | 2.5 |
| TMF4222-55-2 | E111536-1 | 55 | 22 | 24.6 | 16 | 3 |
| TMF4222-75-2 | E111537-1 | 75 | 30 | 38 | 35 | 5 |
| TMF4222-100-2 | E111538-1 | 100 | 21 | 53.3 | 50 | 6.5 |
| TMF4222-130-2 | E111539-1 | 130 | 21 | 71.6 | 50 | 7 |
| TMF4222-180-2 | E111540-1 | 180 | 30.8 | 90.3 | 95 | 11 |
| TMF4222-250-2 | E111541-1 | 250 | 36.6 | 128 | 150 | 15 |

*The Part is UL Approved

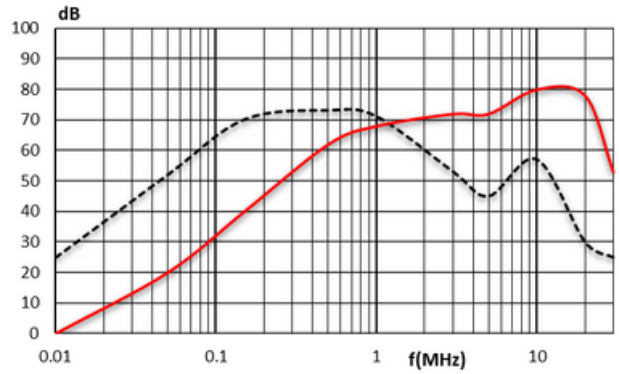
Note: Standardized leakage current calculation as per IEC 60939 under normal operating conditions

## Insertion Loss

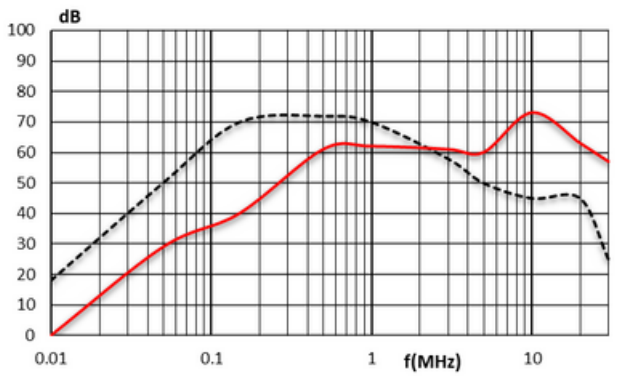
..... Common mode _____ Differential Mode

Per CISPR 17; C=50Ω/50Ω D=50Ω/50Ω

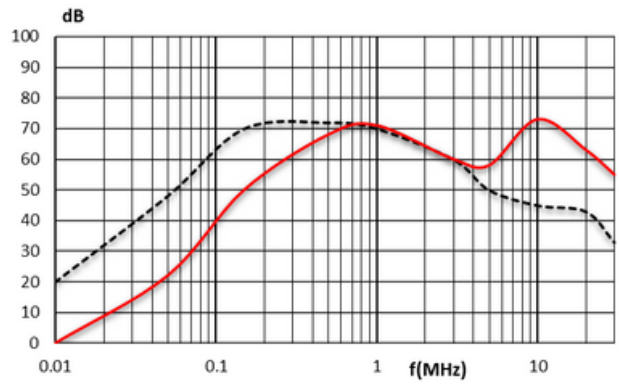
### 8A



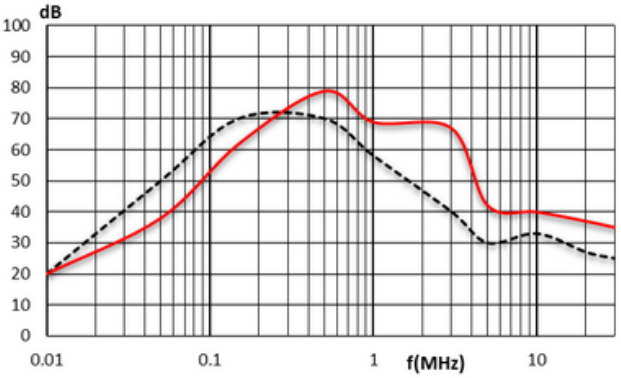

### 12A



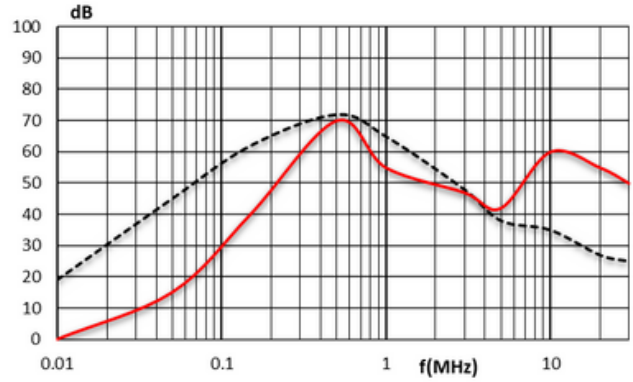

### 16A



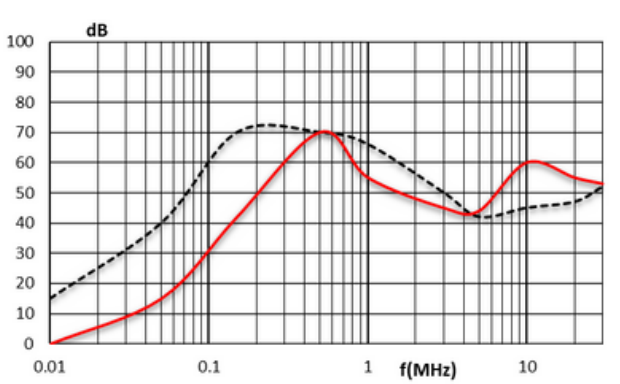

### 30A



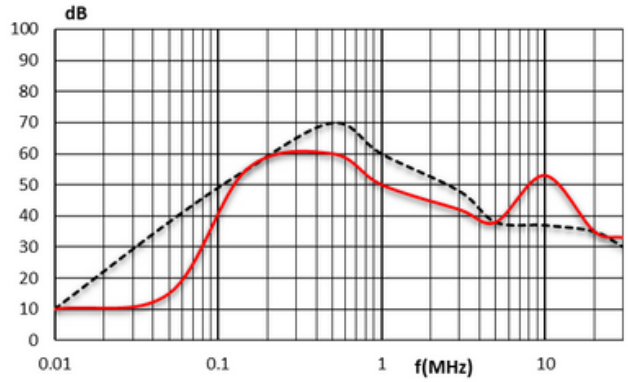

### 42A



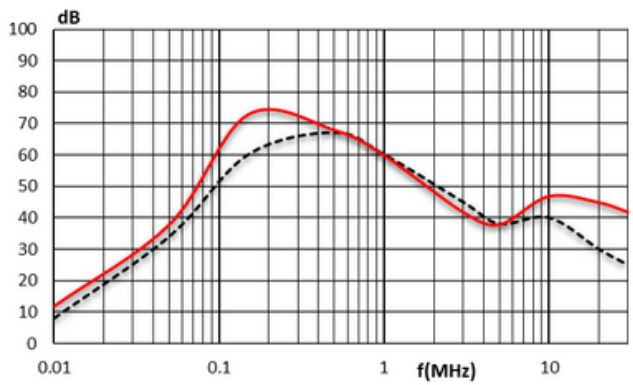

### 55A



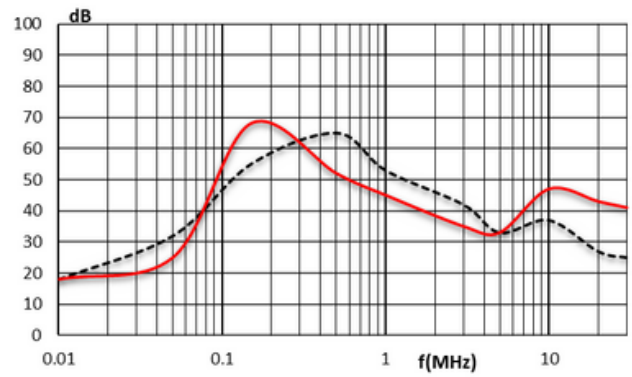
## 75A



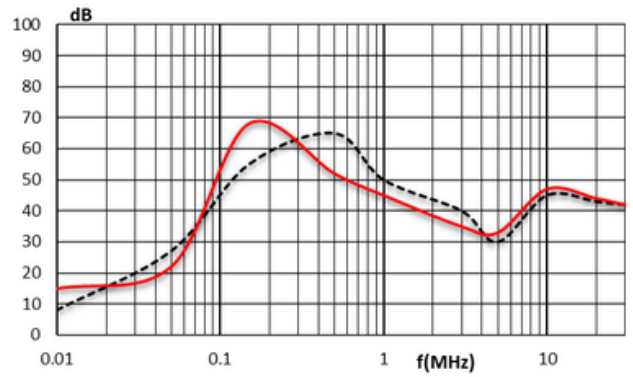

## 100A



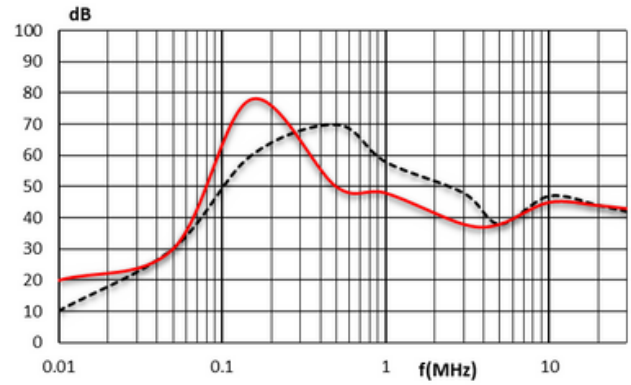

## 130A




## 180A

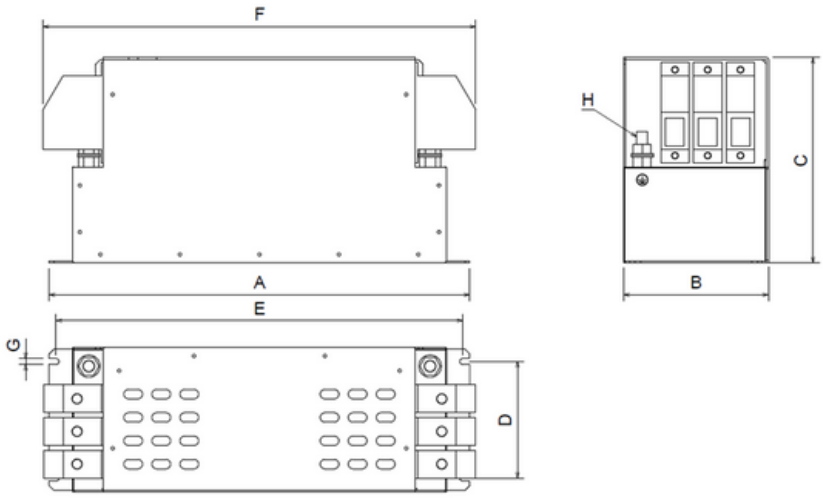



## 250A

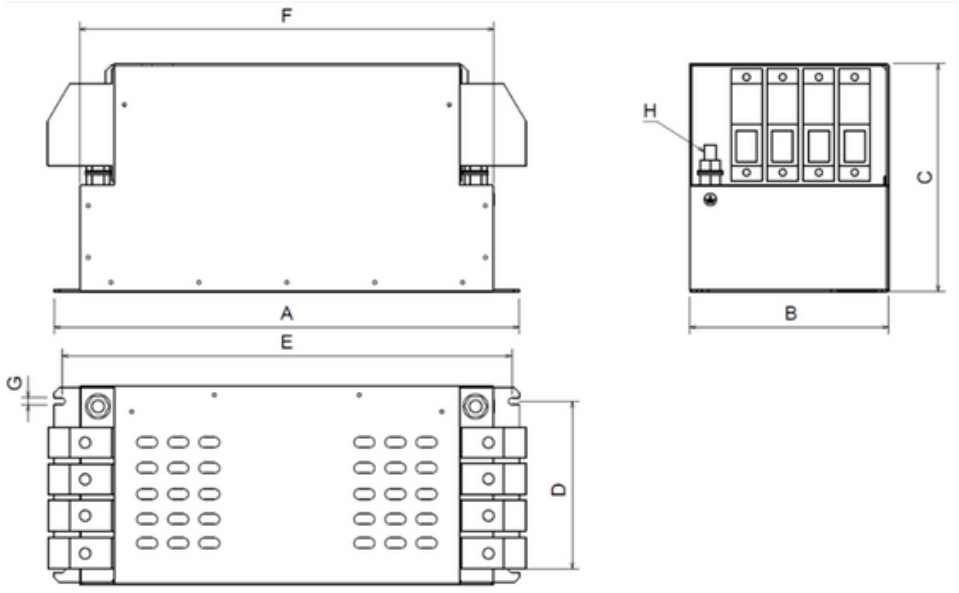


## Mechanical Drawing

### 8A - 42A




### 55A - 250A



## Termination &Torque details

| Current rating(A) | 8 | 12 | 16 | 30 | 42 | 55 | 75 | 100-130 | 180 | 250 |
|---|---|---|---|---|---|---|---|---|---|---|
| Line & load terminal | 4mm² | 4mm² | 4mm² | 10mm² | 10mm² | 16mm² | 35mm² | 50mm² | 95mm² | 150mm² |
| Torque in Nm | 0.5-1.0 | 0.5-1.0 | 0.5-1.0 | 1.2-2.0 | 1.2-2.0 | 2.0-4.0 | 2.0-5.0 | 6.0-8.0 | 8.0-12 | 14.0-20.0 |
| Earth terminal | M5 | M5 | M5 | M5 | M6 | M6 | M8 | M10 | M10 | M12 |
| Torque in Nm | 3 | 3 | 3 | 3 | 6 | 6 | 12 | 20 | 20 | 20 |

## Mechanical Dimensions

| Current ratings (A) | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 8 | 190 | 55 | 75 | 30 | 180 | 166 | 5.5 | M5 |
| 12 | 220 | 55 | 75 | 30 | 210 | 190 | 5.5 | M5 |
| 16 | 250 | 55 | 75 | 30 | 240 | 220 | 5.5 | M5 |
| 30 | 270 | 70 | 95 | 45 | 255 | 240 | 5.5 | M5 |
| 42 | 310 | 70 | 95 | 40 | 295 | 280 | 5.5 | M6 |
| 55 | 250 | 100 | 95 | 70 | 235 | 215 | 5.5 | M6 |
| 75 | 270 | 100 | 150 | 70 | 255 | 240 | 6.5 | M8 |
| 100 | 320 | 115 | 150 | 85 | 305 | 285 | 6.5 | M10 |
| 130 | 320 | 115 | 150 | 85 | 305 | 285 | 6.5 | M10 |
| 180 | 380 | 155 | 180 | 125 | 365 | 345 | 6.5 | M10 |
| 250 | 450 | 186 | 220 | 155 | 435 | 410 | 6.5 | M12 |

All dimensions in mm ; Tolerance according to ISO 2768-C