

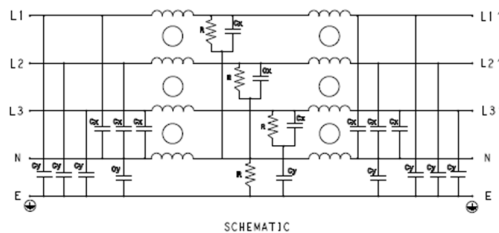
Three Phase Very High-Performance EMI Filter – Dual Stage WYE Configuration

DATASHEET

Very High attenuation and superior performance when used in applications with low Impedance load controlling pulsed, continuous and intermittent interference noise and where high levels of mains borne interference are present.



Typical Circuit Diagram



Specifications

Electrical Characteristics

| | |
|--------------------------------------|--|
| Maximum Continuous Operating Voltage | 440/520VAC |
| Current Ratings | 10A to 250A @40°C |
| Operating Frequency | 50/60Hz |
| High Potential Test Voltage -440VAC | Line to Ground 2632VDC for 1 Minute Line to Line 1892VDC for 1 Minute |
| High Potential Test Voltage -520VAC | Line to Ground 2856VDC for 1 Minute Line to Line 2236VDC for 1 Minute |
| Overload Capability | 135% of Rated current for 15 minutes |

Functional Characteristics

| | |
|---|---|
| Operating Temperature Range | -25°C to +85°C |
| Climatic Category | 25/85/21 |
| Termination (Depends on Current Rating) | Shock Proof (6-100A), Nut & Bolt (150-250A) |
| Flammability corresponding to | UL 94 V-0 |

Reference Standards

| | |
|-------------------------|---------------------------------|
| Design Corresponding to | UL 60939-3 and CSA 22.2 No.8-13 |
|-------------------------|---------------------------------|

Approvals & Compliance

UL Recognised*

CSA Certified **



*31st July 2020

**31st August 2020


Features

- Dual Stage Filter
- Very High Attenuation
- Chassis mounting
- Low Leakage current
- High Performance


Applications

- Computer Server
- Robotics and Automation
- Elevators
- SMPS

Selection Table

| TE Ordering Number | Catalog Number | Rated Current @40°C | Rated Voltage @40°C | Leakage Current (mA) | Termination | | Weight (Kgs) |
|--------------------|----------------|---------------------|---------------------|----------------------|---|---|--------------|
| | | | | |  |  | |
| 1-1609998-0 | 10KEVD10AFPW | 10A | 440 VAC | 10 | 41 | | 3 |
| 1-1609998-1 | 16KEVD10AFPW | 16A | 440 VAC | 10 | 41 | | 3 |
| 1-1609998-2 | 20KEVD10AFPW | 20A | 440 VAC | 10 | 41 | | 3.5 |
| 1-1609998-3 | 40KEVD10AFPW | 40A | 440 VAC | 10 | 10 | | 4 |
| 1-1609998-4 | 60KEVD10AFPW | 60A | 440 VAC | 10 | 16 | | 9 |
| 1-1609998-5 | 80KEVD10AFPW | 80A | 440 VAC | 10 | 25 | | 9 |
| 1-1609998-6 | 100KEVD10AFPW | 100A | 440 VAC | 15 | 25 | | 10 |
| 1-1609998-7 | 150KEVD10AFPW | 150A | 440 VAC | 15 | | M10 | 10 |
| 1-1609998-8 | 200KEVD10AFPW | 200A | 440 VAC | 15 | | M10 | 13 |
| 1-1609998-9 | 250KEVD10AFPW | 250A | 440 VAC | 15 | | M10 | 13 |
| 4-1609998-0 | 10KEVD10BFPW | 10A | 520 VAC | 10 | 41 | | 3 |
| 4-1609998-1 | 16KEVD10BFPW | 16A | 520 VAC | 10 | 41 | | 3 |
| 4-1609998-2 | 20KEVD10BFPW | 20A | 520 VAC | 10 | 41 | | 3.5 |
| 4-1609998-3 | 40KEVD10BFPW | 40A | 520 VAC | 10 | 10 | | 4 |
| 4-1609998-4 | 60KEVD10BFPW | 60A | 520 VAC | 10 | 16 | | 9 |
| 4-1609998-5 | 80KEVD10BFPW | 80A | 520 VAC | 10 | 25 | | 9 |
| 4-1609998-6 | 100KEVD10BFPW | 100A | 520 VAC | 15 | 25 | | 10 |
| 4-1609998-7 | 150KEVD10BFPW | 150A | 520 VAC | 15 | | M10 | 10 |
| 4-1609998-8 | 200KEVD10BFPW | 200A | 520 VAC | 15 | | M10 | 13 |
| 4-1609998-9 | 250KEVD10BFPW | 250A | 520 VAC | 15 | | M10 | 13 |

Connectors Cross Section

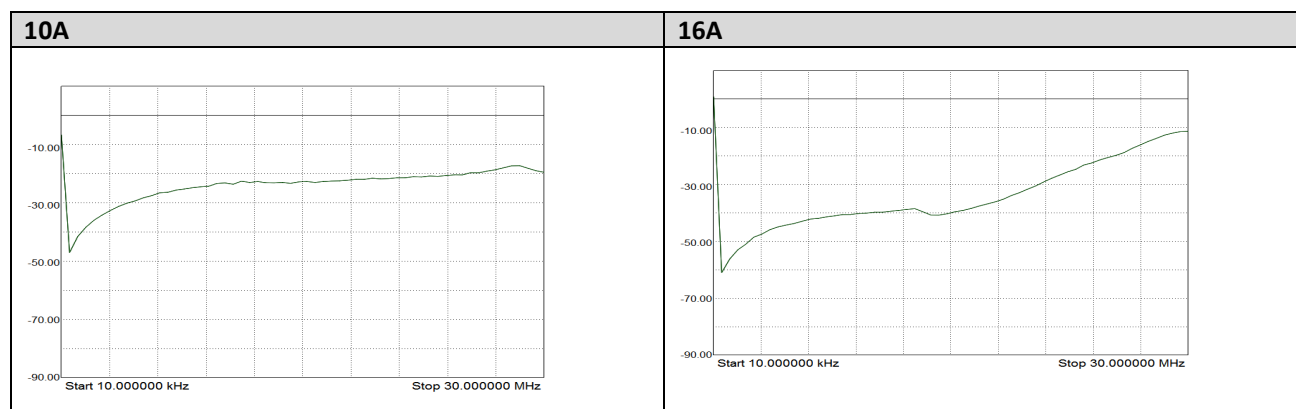
|  | 41 | 10 | 16 | 25 | 50 |
|---|---------------------|----------------------|---------------------------|--------------------|--------------------|
| Wire Section (mm ²) | 4mm ² | 10 mm ² | 16 mm ² | 25 mm ² | 50 mm ² |
| Wire Section (AWG) | 12AWG | 8 AWG | 6 AWG | 4 AWG | 1/0 AWG |
| Wire Stripping | 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 (Typical) – Measured in Closed 50Ω System

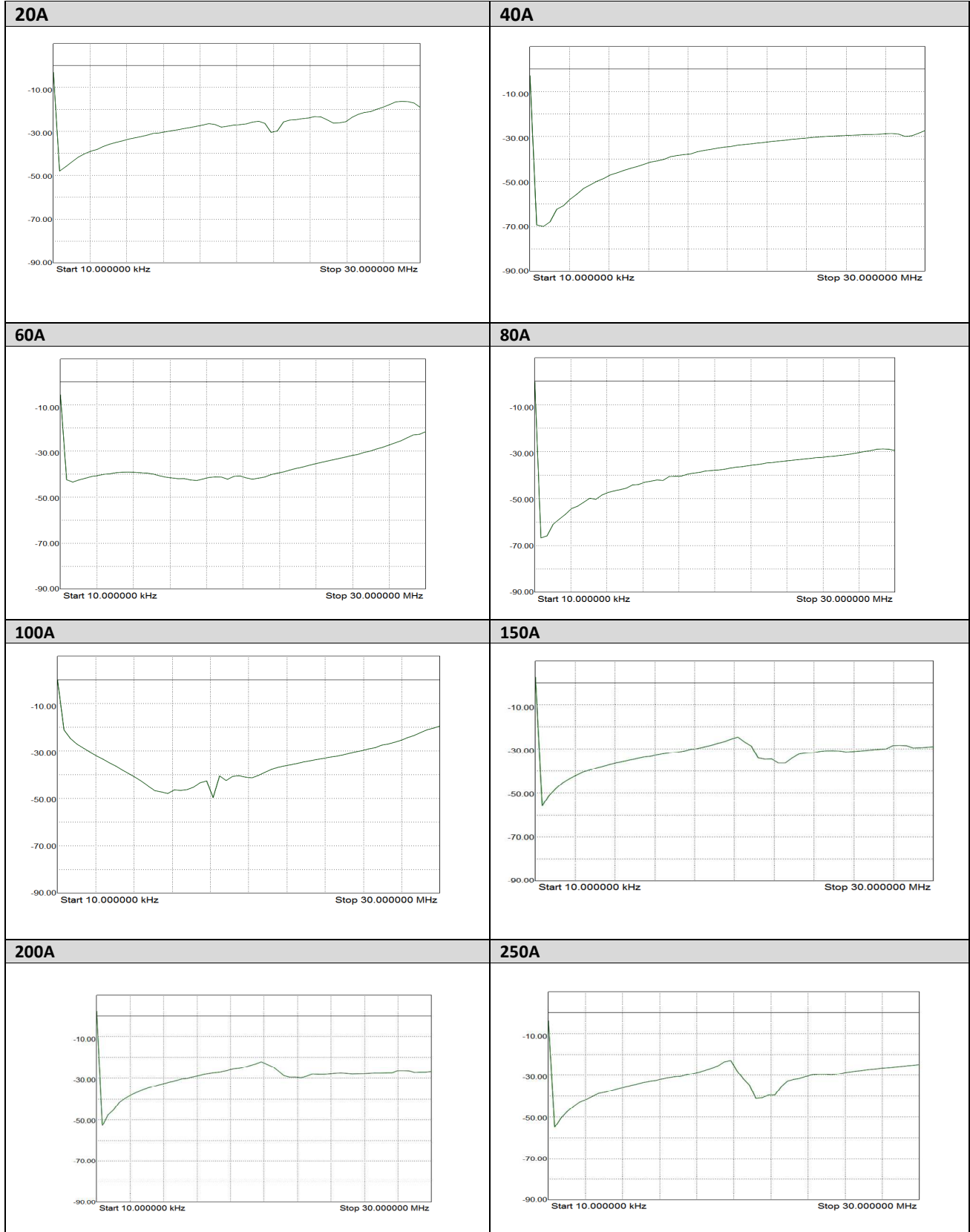
| | | Common Mode 50Ω / 50Ω | | | | | | | | |
|----------------|------|-----------------------|------|------|-----|----|----|----|----|----|
| | | Frequency in MHz | | | | | | | | |
| | | 0.01 | 0.05 | 0.15 | 0.5 | 1 | 3 | 5 | 10 | 30 |
| Current Rating | 10A | 55 | 55 | 58 | 54 | 49 | 41 | 36 | 31 | 20 |
| | 16A | 56 | 56 | 55 | 52 | 49 | 40 | 36 | 30 | 20 |
| | 20A | 55 | 56 | 58 | 50 | 45 | 40 | 37 | 31 | 21 |
| | 40A | 56 | 57 | 58 | 50 | 46 | 40 | 37 | 30 | 20 |
| | 60A | 56 | 56 | 57 | 56 | 51 | 45 | 39 | 33 | 30 |
| | 80A | 57 | 56 | 54 | 56 | 50 | 40 | 35 | 30 | 27 |
| | 100A | 23 | 26 | 27 | 34 | 29 | 42 | 56 | 20 | 14 |
| | 150A | 41 | 40 | 44 | 53 | 48 | 68 | 52 | 31 | 19 |
| | 200A | 35 | 38 | 42 | 57 | 50 | 43 | 38 | 32 | 26 |
| | 250A | 32 | 34 | 43 | 55 | 50 | 41 | 37 | 32 | 30 |

| | | Differential Mode 50Ω / 50Ω | | | | | | | | |
|----------------|------|-----------------------------|------|------|-----|----|----|----|----|----|
| | | Frequency in MHz | | | | | | | | |
| | | 0.01 | 0.05 | 0.15 | 0.5 | 1 | 3 | 5 | 10 | 30 |
| Current Rating | 10A | 37 | 38 | 44 | 52 | 48 | 41 | 33 | 29 | 22 |
| | 16A | 38 | 40 | 44 | 57 | 48 | 41 | 33 | 29 | 22 |
| | 20A | 40 | 40 | 42 | 54 | 46 | 39 | 32 | 30 | 23 |
| | 40A | 40 | 39 | 41 | 52 | 44 | 39 | 32 | 29 | 24 |
| | 60A | 41 | 42 | 47 | 52 | 48 | 39 | 33 | 28 | 26 |
| | 80A | 41 | 42 | 46 | 57 | 48 | 35 | 32 | 30 | 26 |
| | 100A | 30 | 32 | 40 | 48 | 52 | 46 | 38 | 40 | 16 |
| | 150A | 38 | 40 | 46 | 58 | 60 | 48 | 32 | 21 | 18 |
| | 200A | 46 | 42 | 47 | 50 | 45 | 32 | 30 | 20 | 16 |
| | 250A | 44 | 45 | 47 | 45 | 39 | 30 | 27 | 21 | 18 |

Common Mode Insertion Loss (Typical in dB – refer to Table above)



KEV SERIES



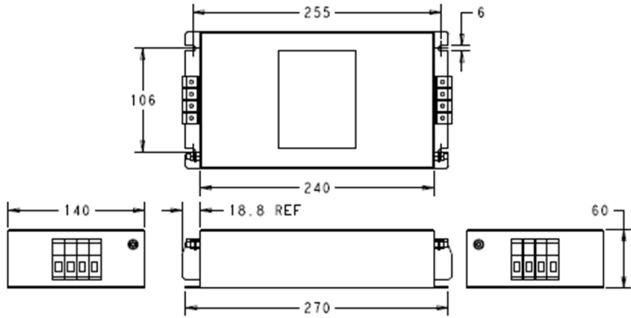
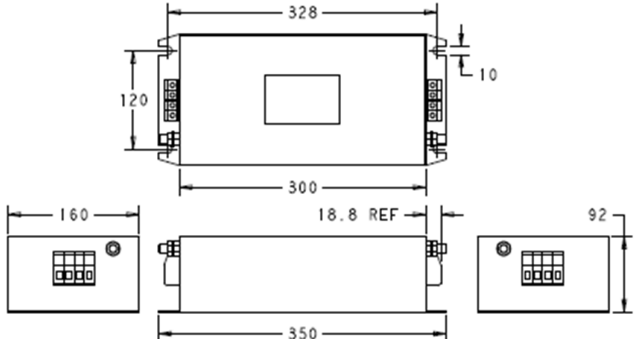
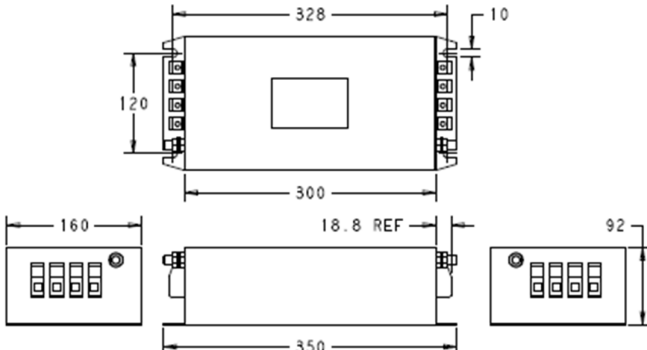
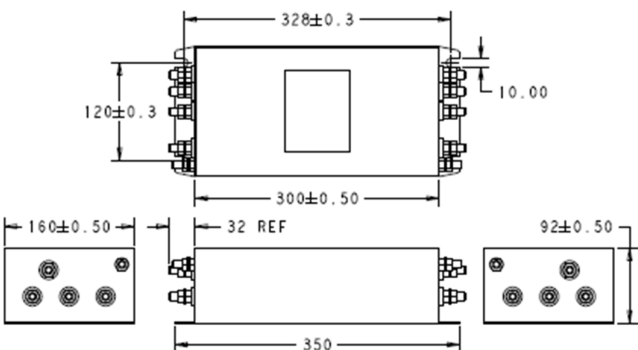
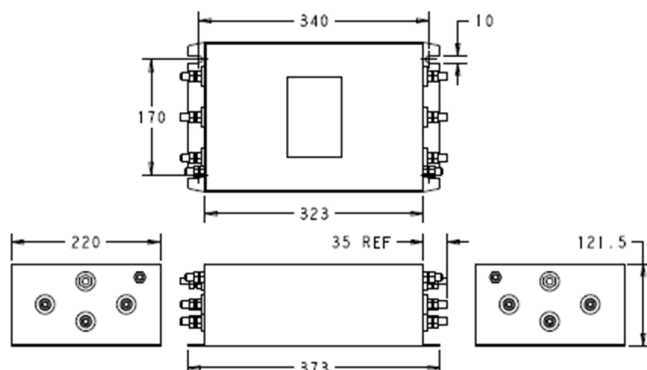
2376472-1
Rev A
Date: 1-Jul-2020

Dimensions in
millimetres

Dimensions Shown for
reference purposes only.
Specifications subject to
change

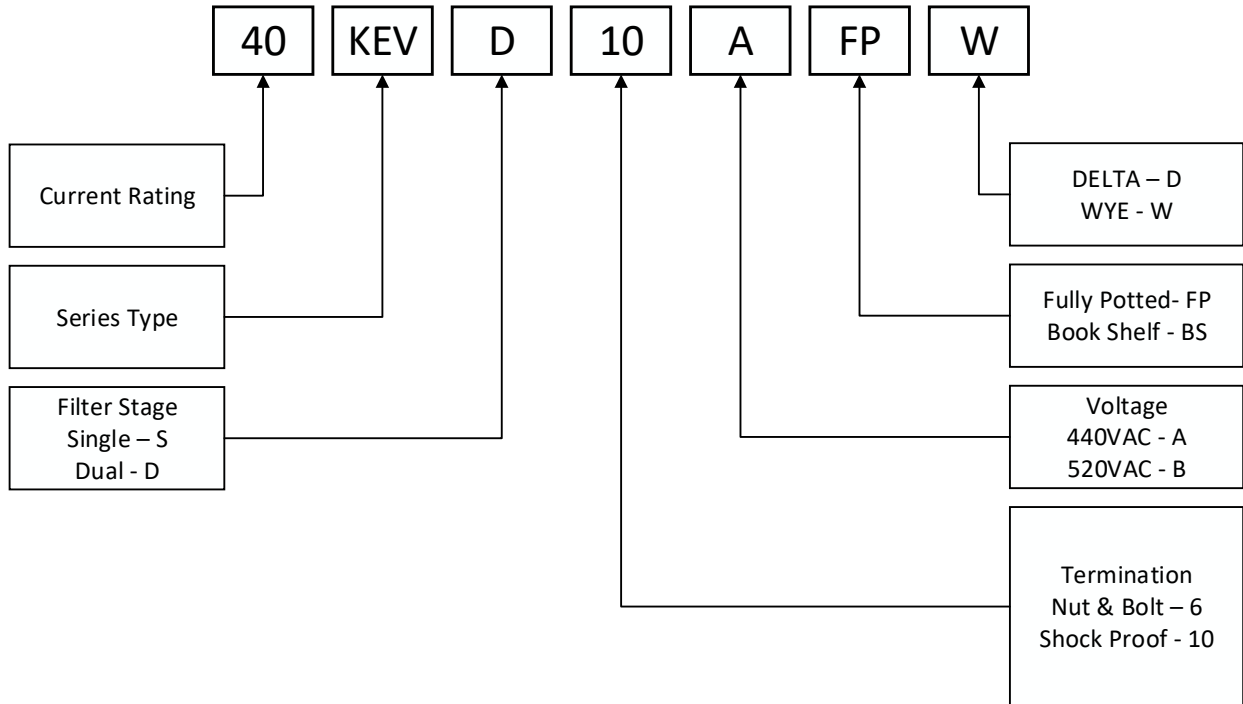
For Email, phone or live chat,
go to: www.te.com/help

Case Dimensions

| 10A to 50A Shock Proof Types | 60A Shock Proof Type |
|---|---|
|  |  |
| 80A to 100A Shock Proof Types | 150A Nut & Bolt Type |
|  |  |
| 200A to 100A Nut & Bolt Types | |
|  | |

All dimensions in mm; Tolerances according: ISO2768-m

How to Order



Mouser Electronics

Authorized Distributor

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[100KEVD10BFPW](#)