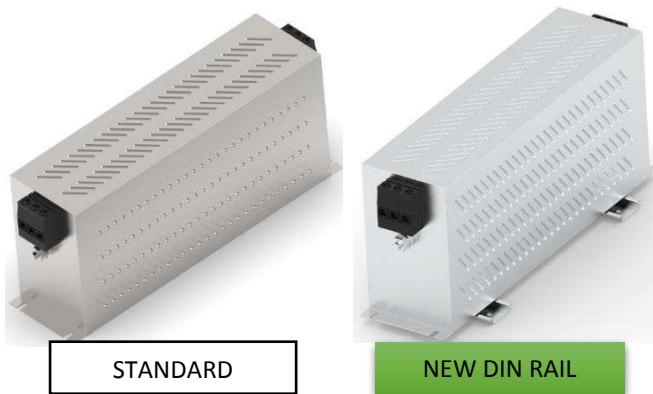


Three Phase High Performance EMI Filter – Bookshelf Type Dual Stage DELTA Configuration

DATASHEET

High performance filters with bookshelf design is designed for motor drive applications requiring minimum space and convenient installation with superior performance at significant interference levels.



Approvals & Compliance

UL Recognised

CSA Certified *

*30th June 2021



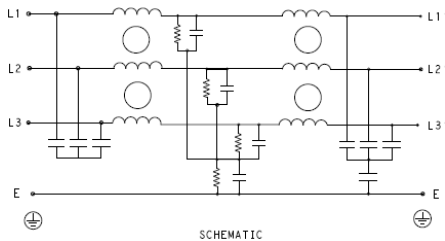
Features

- High Performance
- Bookshelf Design
- Light Weight / Easy Installation
- Dual Stage

Applications

- AC/Dc Drives
- HVAC
- Robotics
- UPS

Typical Circuit Diagram



Specifications

Electrical Characteristics

| | |
|--------------------------------------|--|
| Maximum Continuous Operating Voltage | 440/520VAC |
| Current Ratings | 7A to 150A @40°C, Din Mount 7A to 100A @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 | Shock Proof |
| Flammability corresponding to | UL 94 V-0 |

Reference Standards


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

KEH-BS SERIES



Selection Table -Standard Version



| TE Ordering Number | Part Number | Rated Current @40°C | Rated Voltage @40°C | Leakage Current (mA) | Termination  | Weight (Kgs) |
|--------------------|---------------|---------------------|---------------------|----------------------|--|--------------|
| 2-1609969-0 | 7KEHD10ABSD | 7A | 440 VAC | 10 | 41 | 2 |
| 2-1609969-1 | 16KEHD10ABSD | 16A | 440 VAC | 10 | 41 | 2 |
| 2-1609969-2 | 30KEHD10ABSD | 30A | 440 VAC | 10 | 41 | 2 |
| 2-1609969-3 | 42KEHD10ABSD | 42A | 440 VAC | 15 | 10 | 3 |
| 2-1609969-4 | 55KEHD10ABSD | 55A | 440 VAC | 15 | 10 | 3 |
| 2-1609969-5 | 75KEHD10ABSD | 75A | 440 VAC | 15 | 16 | 3 |
| 2-1609969-6 | 100KEHD10ABSD | 100A | 440 VAC | 15 | 25 | 4 |
| 2-1609969-7 | 120KEHD10ABSD | 120A | 440 VAC | 15 | 50 | 4 |
| 2-1609969-8 | 150KEHD10ABSD | 150A | 440 VAC | 15 | 50 | 4 |
| 5-1609969-0 | 7KEHD10BBSD | 7A | 520 VAC | 10 | 41 | 2 |
| 5-1609969-1 | 16KEHD10BBSD | 16A | 520 VAC | 10 | 41 | 2 |
| 5-1609969-2 | 30KEHD10BBSD | 30A | 520 VAC | 10 | 41 | 2 |
| 5-1609969-3 | 42KEHD10BBSD | 42A | 520 VAC | 15 | 10 | 3 |
| 5-1609969-4 | 55KEHD10BBSD | 55A | 520 VAC | 15 | 10 | 3 |
| 5-1609969-5 | 75KEHD10BBSD | 75A | 520 VAC | 15 | 16 | 3 |
| 5-1609969-6 | 100KEHD10BBSD | 100A | 520 VAC | 15 | 25 | 4 |
| 5-1609969-7 | 120KEHD10BBSD | 120A | 520 VAC | 15 | 50 | 4 |
| 5-1609969-8 | 150KEHD10BBSD | 150A | 520 VAC | 15 | 50 | 4 |

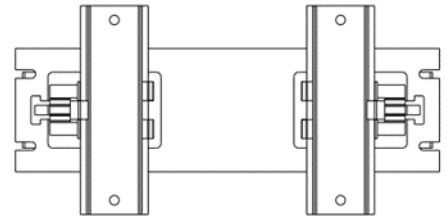
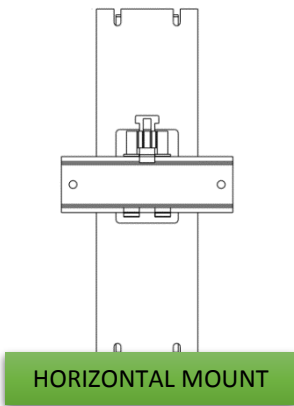
KEH-BS SERIES



Selection Table – Din Rail Mount



NEW



Note: Din Rail not supplied

| TE Ordering Number | Part Number | Din Type | Rated Current @40°C | Rated Voltage @40°C | Leakage Current (mA) | Termination | Weight (Kgs) |
|--------------------|-----------------|------------|---------------------|---------------------|----------------------|-------------|--------------|
| 3-1609969-0 | 7KEHD10ABSDHM | HORIZONTAL | 7A | 440 VAC | 10 | 41 | 2.1 |
| 3-1609969-1 | 16KEHD10ABSDHM | HORIZONTAL | 16A | 440 VAC | 10 | 41 | 2.1 |
| 3-1609969-2 | 30KEHD10ABSDHM | HORIZONTAL | 30A | 440 VAC | 10 | 41 | 2.1 |
| 3-1609969-3 | 7KEHD10ABSDVM | VERTICAL | 7A | 440 VAC | 10 | 41 | 2.2 |
| 3-1609969-4 | 16KEHD10ABSDVM | VERTICAL | 16A | 440 VAC | 10 | 41 | 2.2 |
| 3-1609969-5 | 30KEHD10ABSDVM | VERTICAL | 30A | 440 VAC | 10 | 41 | 2.2 |
| 3-1609969-6 | 42KEHD10ABSDHM | HORIZONTAL | 42A | 440 VAC | 15 | 10 | 3.2 |
| 3-1609969-7 | 55KEHD10ABSDHM | HORIZONTAL | 55A | 440 VAC | 15 | 10 | 3.2 |
| 3-1609969-8 | 75KEHD10ABSDHM | HORIZONTAL | 75A | 440 VAC | 15 | 16 | 3.2 |
| 3-1609969-9 | 100KEHD10ABSDHM | HORIZONTAL | 100A | 440 VAC | 15 | 25 | 4.2 |
| 6-1609969-0 | 7KEHD10BBSDHM | HORIZONTAL | 7A | 520 VAC | 10 | 41 | 2.1 |
| 6-1609969-1 | 16KEHD10BBSDHM | HORIZONTAL | 16A | 520 VAC | 10 | 41 | 2.1 |
| 6-1609969-2 | 30KEHD10BBSDHM | HORIZONTAL | 30A | 520 VAC | 10 | 41 | 2.1 |
| 6-1609969-3 | 7KEHD10BBSDVM | VERTICAL | 7A | 520 VAC | 10 | 41 | 2.2 |
| 6-1609969-4 | 16KEHD10BBSDVM | VERTICAL | 16A | 520 VAC | 10 | 41 | 2.2 |
| 6-1609969-5 | 30KEHD10BBSDVM | VERTICAL | 30A | 520 VAC | 10 | 41 | 2.2 |
| 6-1609969-6 | 42KEHD10BBSDHM | HORIZONTAL | 42A | 520 VAC | 15 | 10 | 3.2 |
| 6-1609969-7 | 55KEHD10BBSDHM | HORIZONTAL | 55A | 520 VAC | 15 | 10 | 3.2 |
| 6-1609969-8 | 75KEHD10BBSDHM | HORIZONTAL | 75A | 520 VAC | 15 | 16 | 3.2 |
| 6-1609969-9 | 100KEHD10BBSDHM | HORIZONTAL | 100A | 520 VAC | 15 | 25 | 4.2 |

Connectors Cross Section

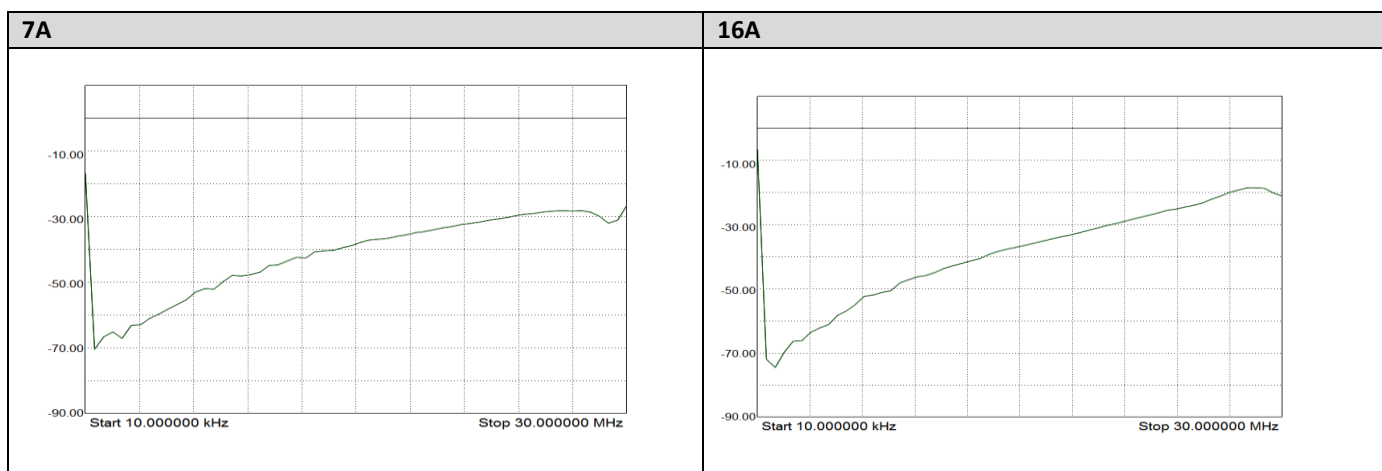
| | 41 | 10 | 16 | 25 | 50 |
|---------------------------------|---------------------|----------------------|---------------------------|--------------------|--------------------|
| Wire Section (mm ²) | 4mm ² | 10 mm ² | 16 mm ² | 25 mm ² | 50 mm ² |
| Wire Section (AWG) | 12AWG | 8 AWG | 6 AWG | 4 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

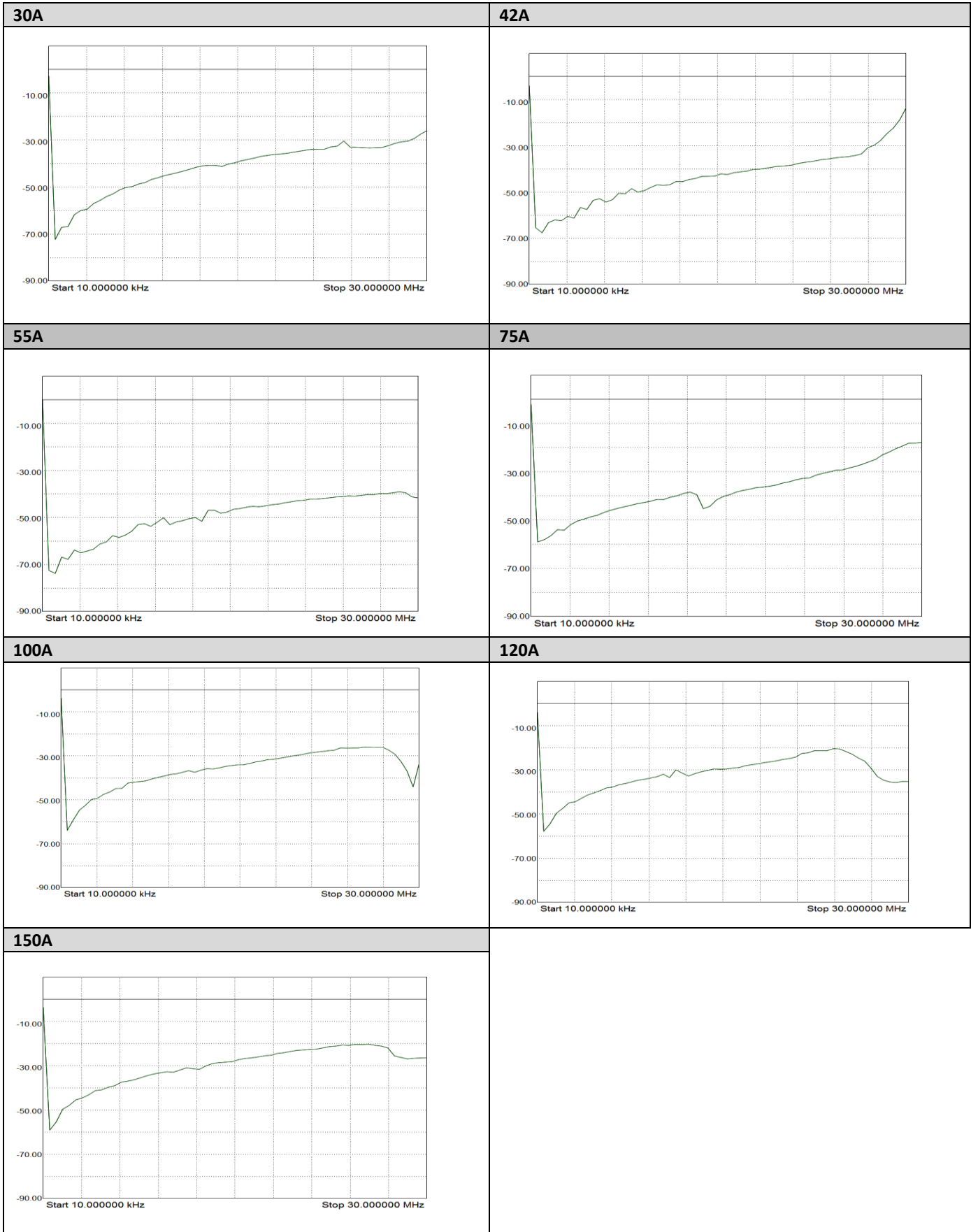
| | | Common Mode 50Ω / 50Ω | | | | | | | | |
|----------------|------|-----------------------|------|------|-----|----|----|----|----|----|
| | | Frequency in MHz | | | | | | | | |
| | | 0.01 | 0.05 | 0.15 | 0.5 | 1 | 3 | 5 | 10 | 30 |
| Current Rating | 7A | 70 | 72 | 75 | 80 | 75 | 60 | 50 | 48 | 19 |
| | 16A | 73 | 70 | 76 | 81 | 78 | 70 | 52 | 48 | 19 |
| | 30A | 42 | 46 | 69 | 77 | 82 | 64 | 57 | 47 | 39 |
| | 42A | 45 | 50 | 65 | 75 | 80 | 65 | 56 | 42 | 32 |
| | 55A | 35 | 41 | 67 | 76 | 77 | 62 | 56 | 47 | 29 |
| | 75A | 35 | 36 | 62 | 72 | 70 | 65 | 50 | 47 | 30 |
| | 100A | 30 | 32 | 65 | 68 | 70 | 62 | 52 | 40 | 32 |
| | 120A | 18 | 21 | 50 | 54 | 55 | 48 | 42 | 34 | 22 |
| | 150A | 14 | 21 | 53 | 58 | 53 | 45 | 41 | 34 | 20 |

| | | Differential Mode 50Ω / 50Ω | | | | | | | | |
|----------------|------|-----------------------------|------|------|-----|----|----|----|----|----|
| | | Frequency in MHz | | | | | | | | |
| | | 0.01 | 0.05 | 0.15 | 0.5 | 1 | 3 | 5 | 10 | 30 |
| Current Rating | 7A | 45 | 50 | 33 | 47 | 50 | 48 | 38 | 22 | 65 |
| | 16A | 30 | 45 | 33 | 47 | 49 | 65 | 50 | 22 | 65 |
| | 30A | 18 | 24 | 57 | 81 | 87 | 60 | 45 | 17 | 25 |
| | 42A | 18 | 24 | 50 | 70 | 84 | 60 | 45 | 19 | 26 |
| | 55A | 22 | 23 | 25 | 82 | 78 | 59 | 46 | 23 | 26 |
| | 75A | 25 | 24 | 28 | 65 | 75 | 60 | 46 | 26 | 24 |
| | 100A | 26 | 28 | 30 | 62 | 72 | 60 | 46 | 26 | 24 |
| | 120A | 28 | 30 | 60 | 52 | 43 | 32 | 26 | 20 | 19 |
| | 150A | 33 | 38 | 64 | 51 | 43 | 32 | 26 | 20 | 19 |

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



KEH-BS SERIES



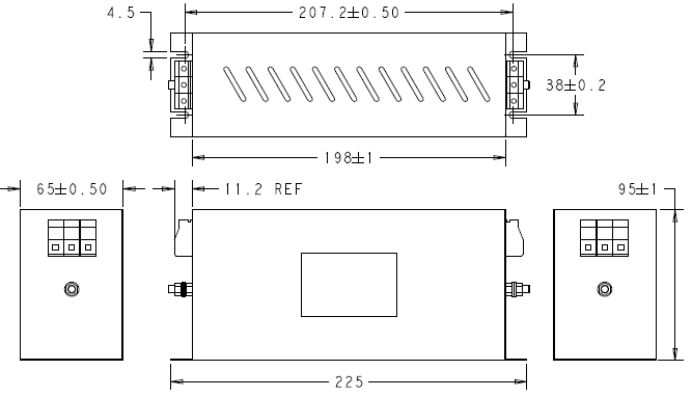
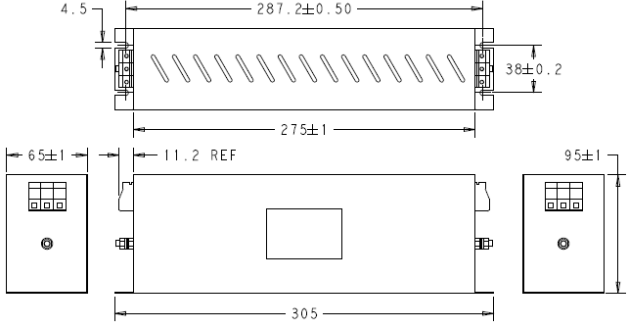
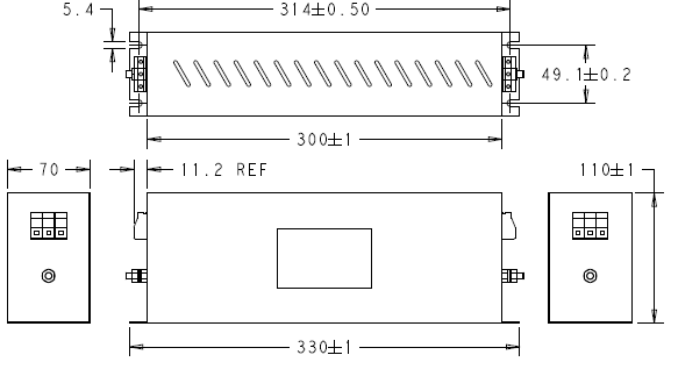
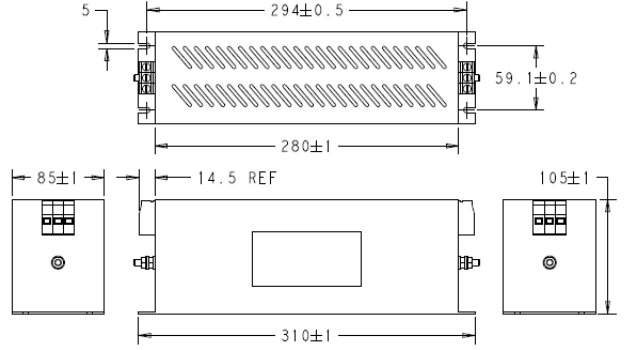
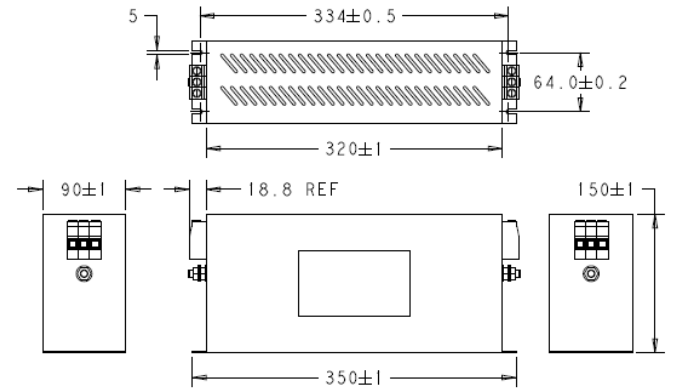
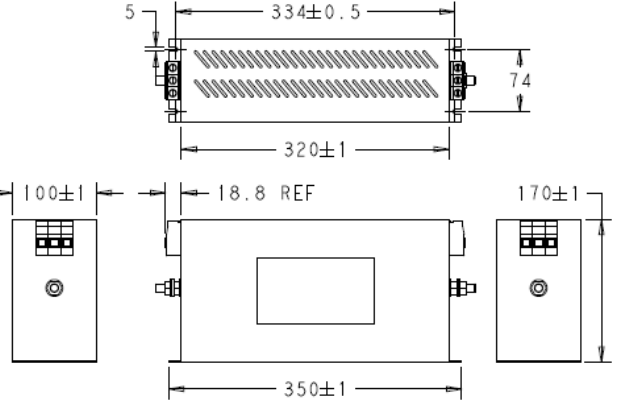
2376469-1
Rev B
Date: 30-Apr-2021

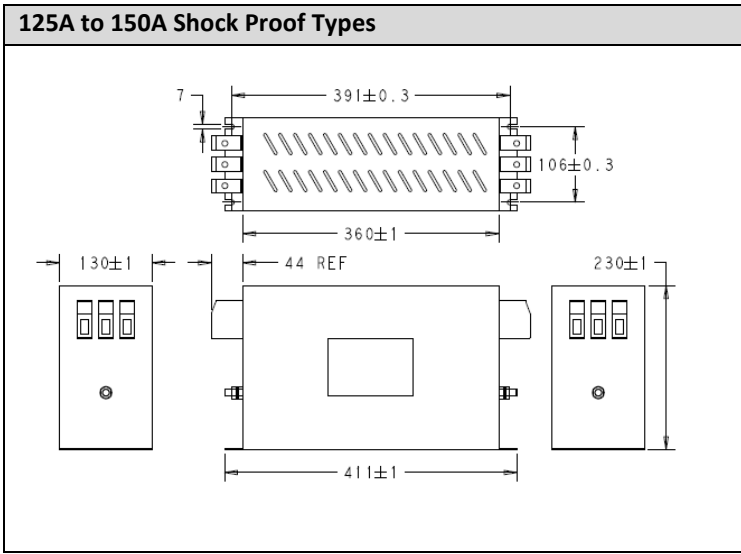
Dimensions in millimetres

Dimensions Shown for reference purposes only. Specifications subject to change

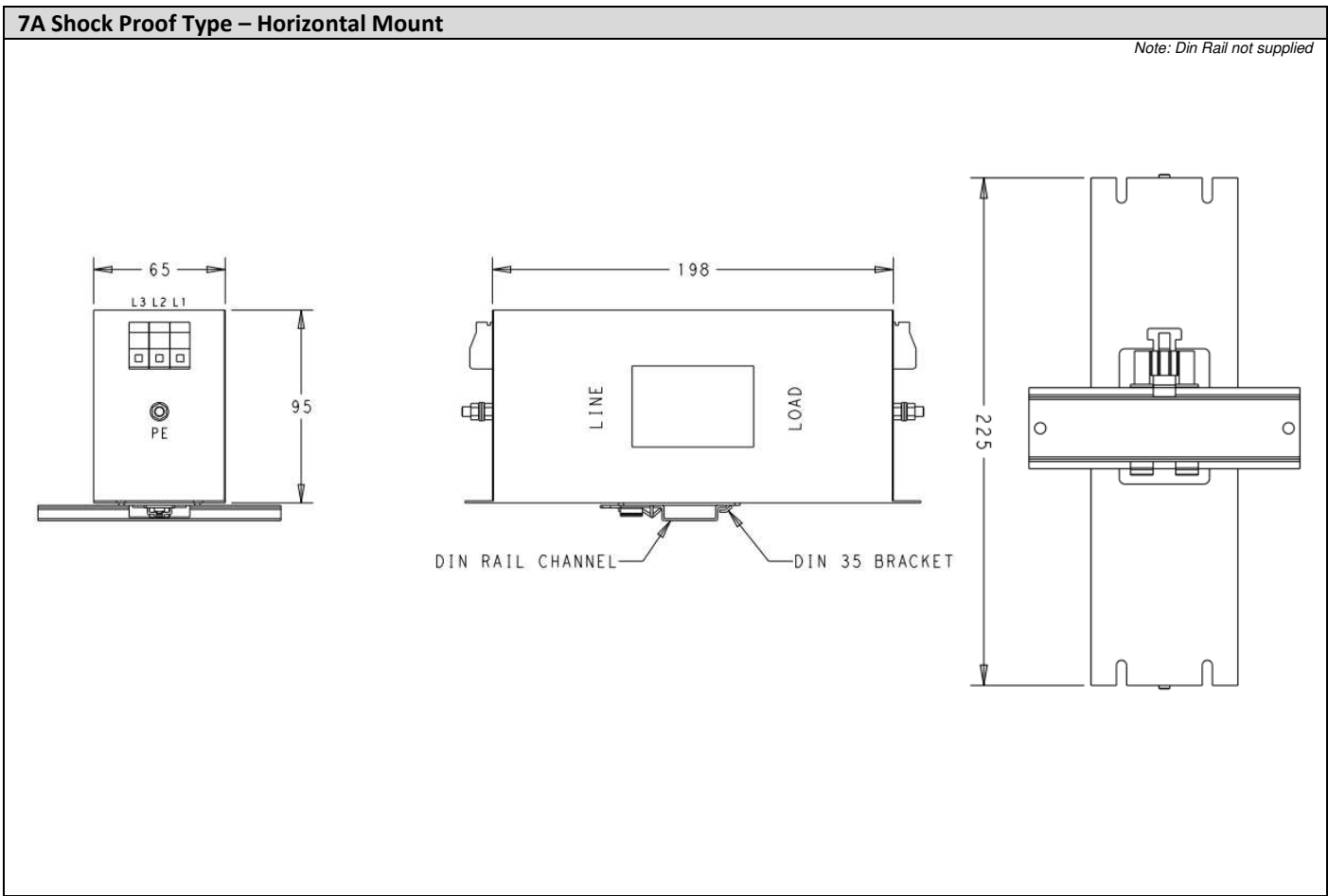
For Email, phone or live chat, go to: www.te.com/help

Case Dimensions – Standard Version

| 7A Shock Proof Type | 16A Shock Proof Type |
|---|--|
|  |  |
| 30A & 42A Shock Proof Types | 55A Shock Proof Type |
|  |  |
| 75A Shock Proof Type | 100A Shock Proof Type |
|  |  |



Case Dimensions – Din Rail Mount

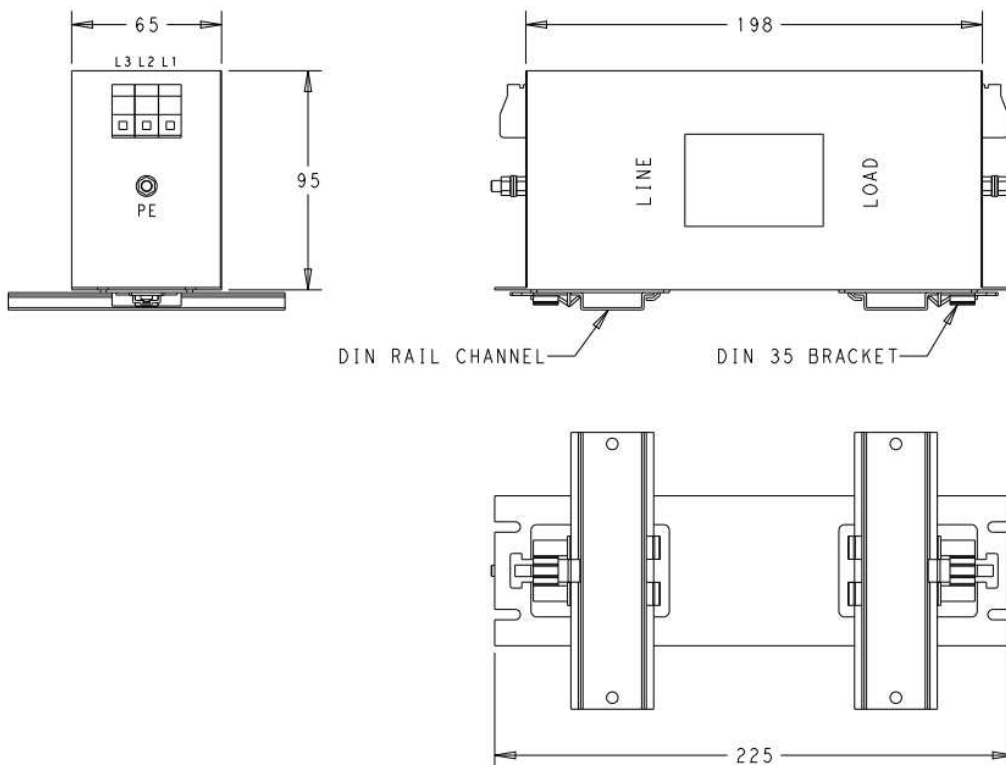


KEH-BS SERIES



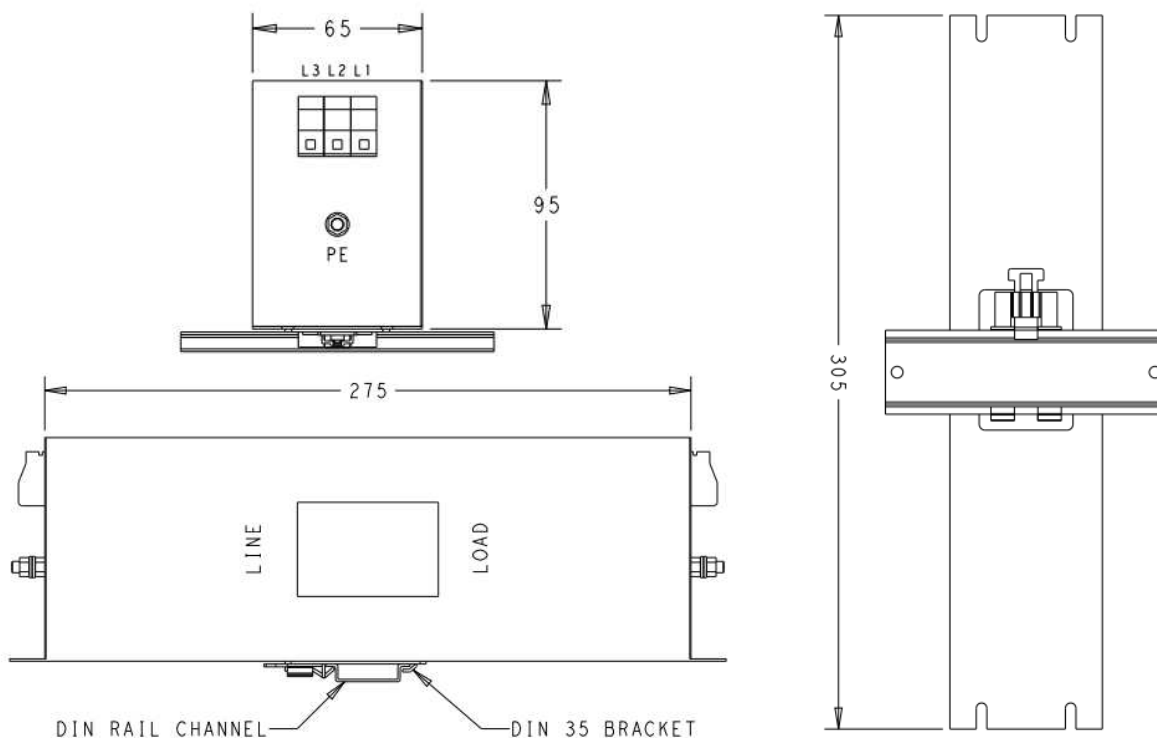
7A Shock Proof Type – Vertical Mount

Note: Din Rail not supplied



16A Shock Proof Type – Horizontal Mount

Note: Din Rail not supplied

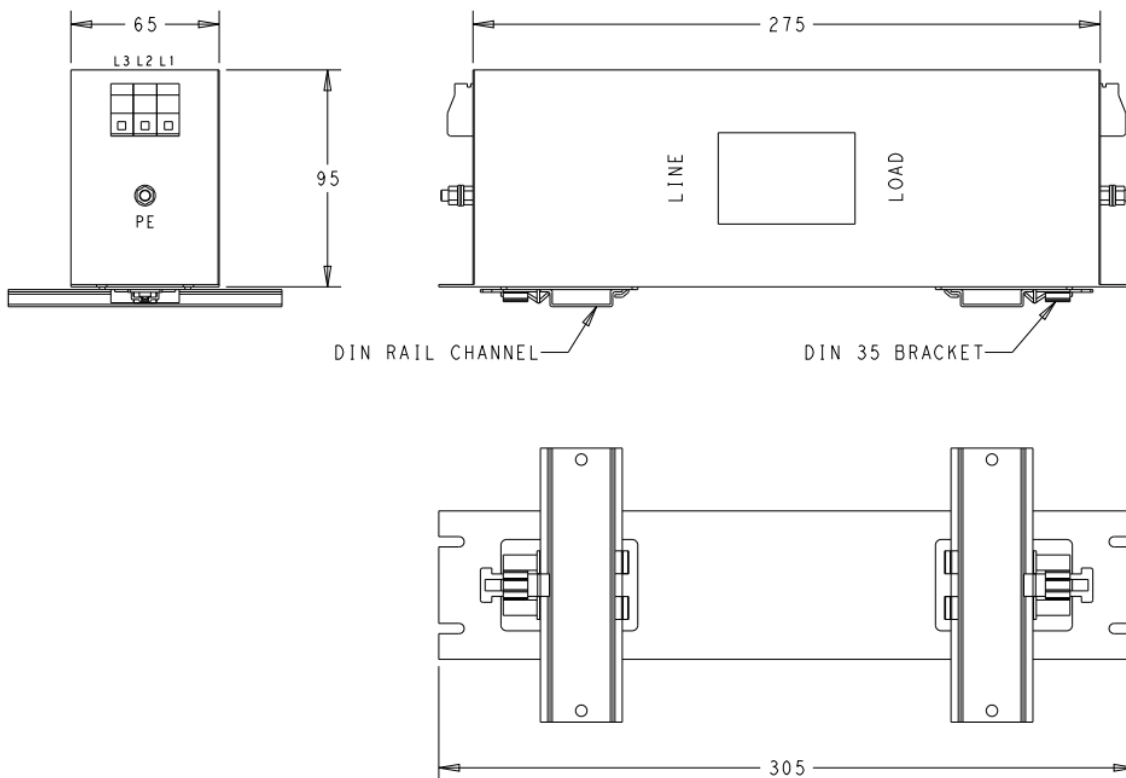


KEH-BS SERIES



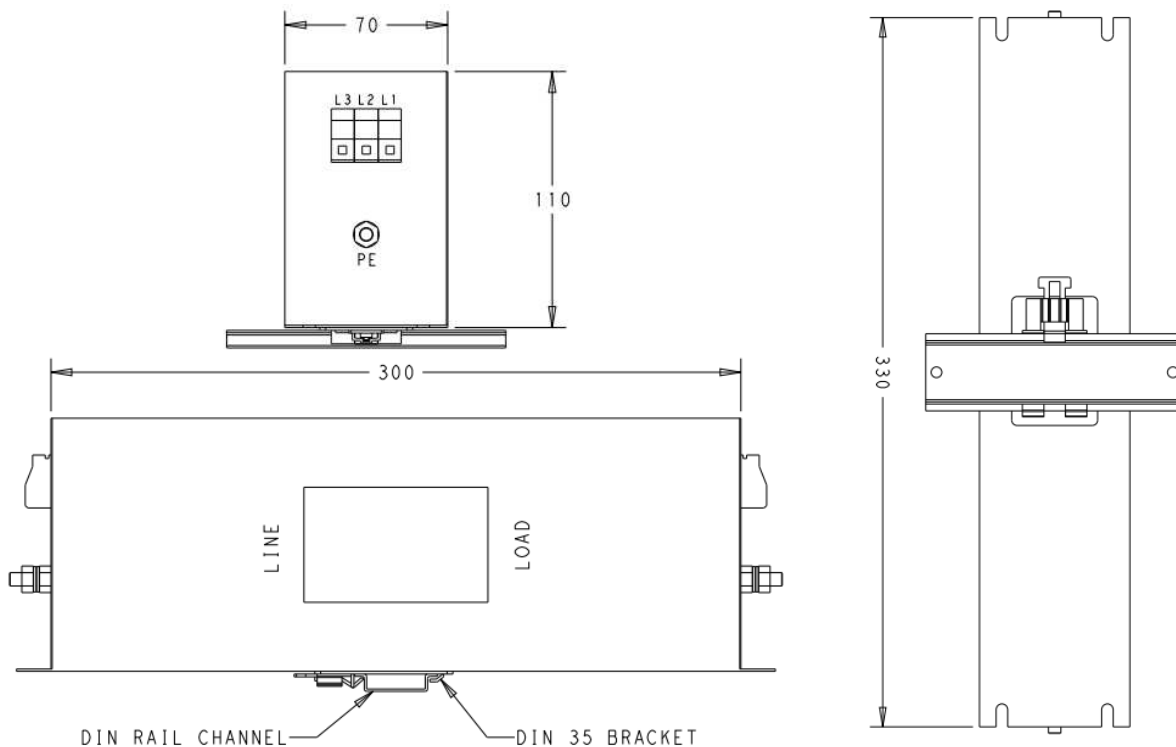
16A Shock Proof Type – Vertical Mount

Note: Din Rail not supplied



30A Shock Proof Type – Horizontal Mount

Note: Din Rail not supplied

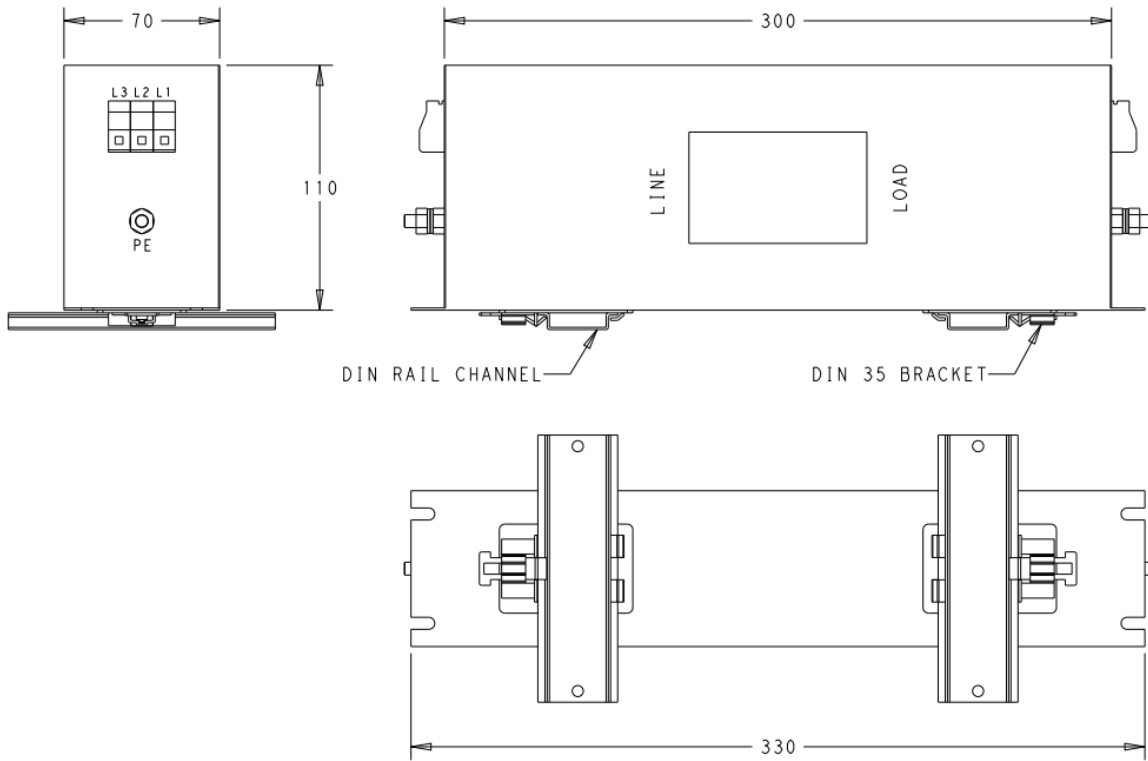


KEH-BS SERIES



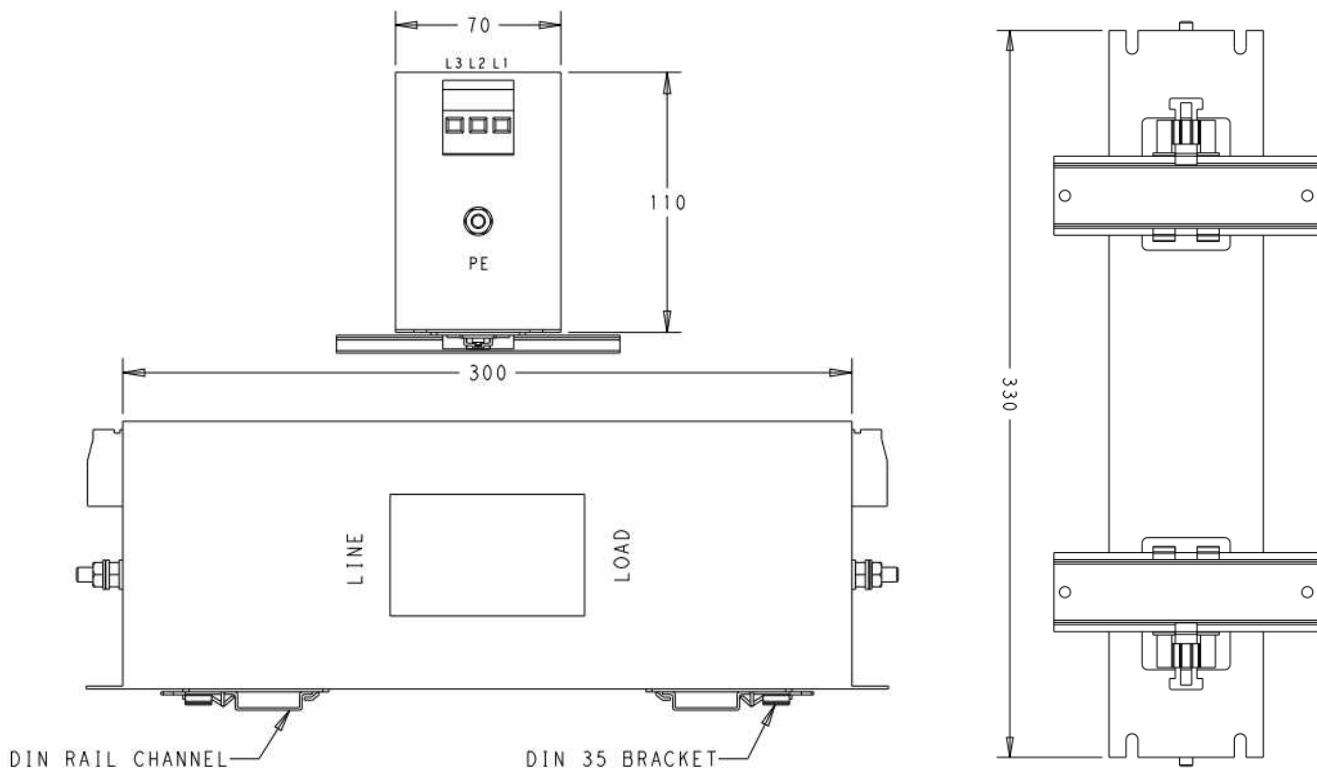
30A Shock Proof Types – Vertical Mount

Note: Din Rail not supplied



42A Shock Proof Type – Horizontal Mount

Note: Din Rail not supplied

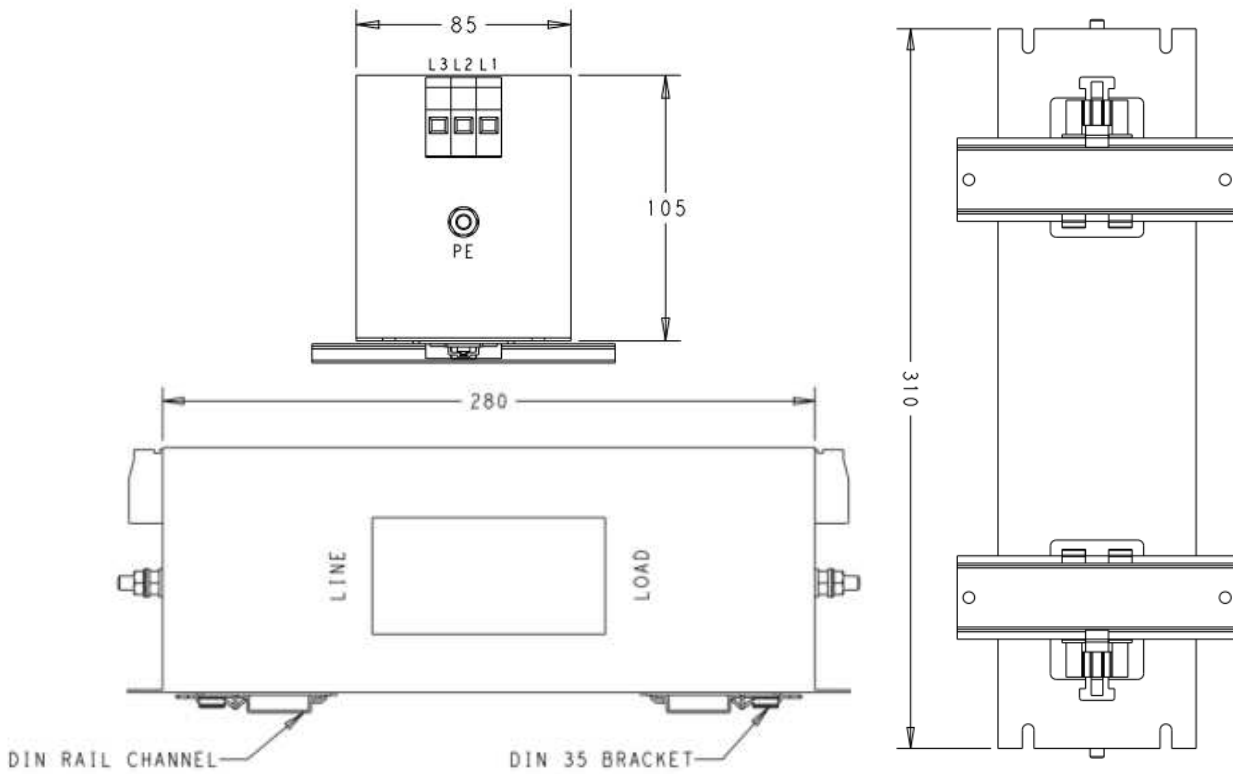


KEH-BS SERIES



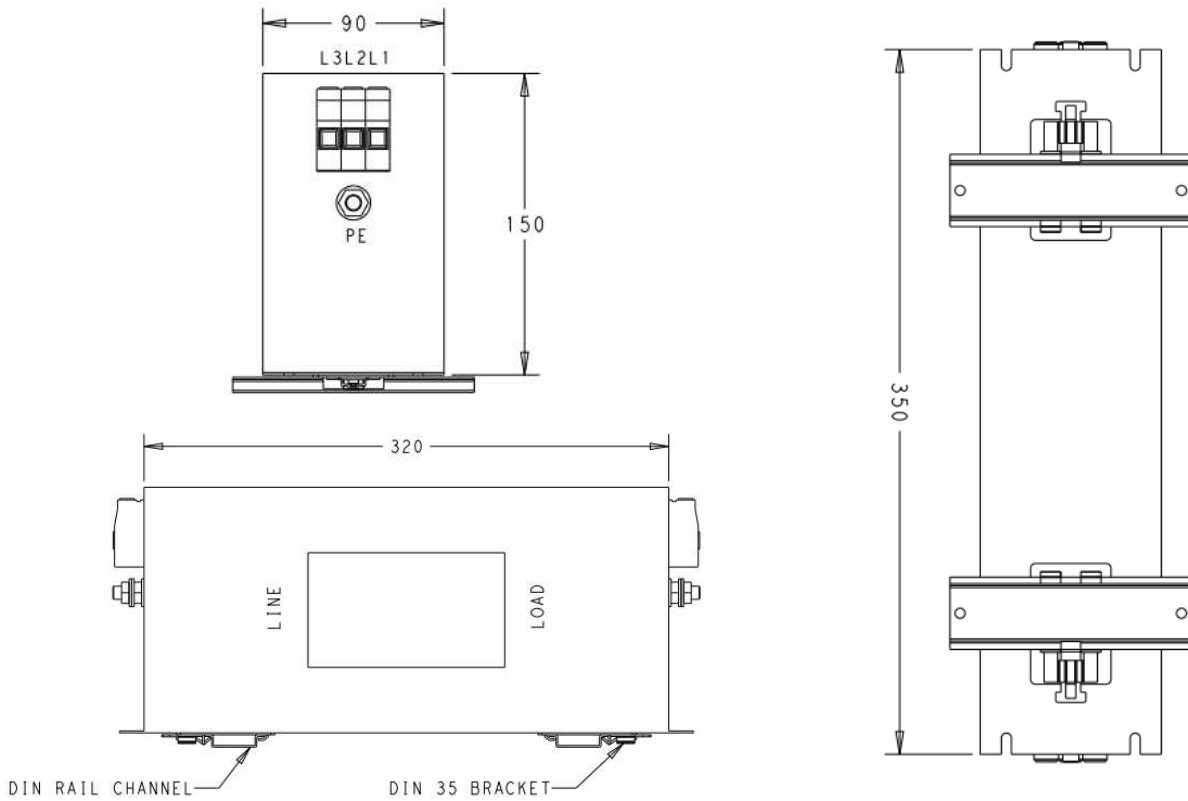
55A Shock Proof Type – Horizontal Mount

Note: Din Rail not supplied



75A Shock Proof Type – Horizontal Mount

Note: Din Rail not supplied

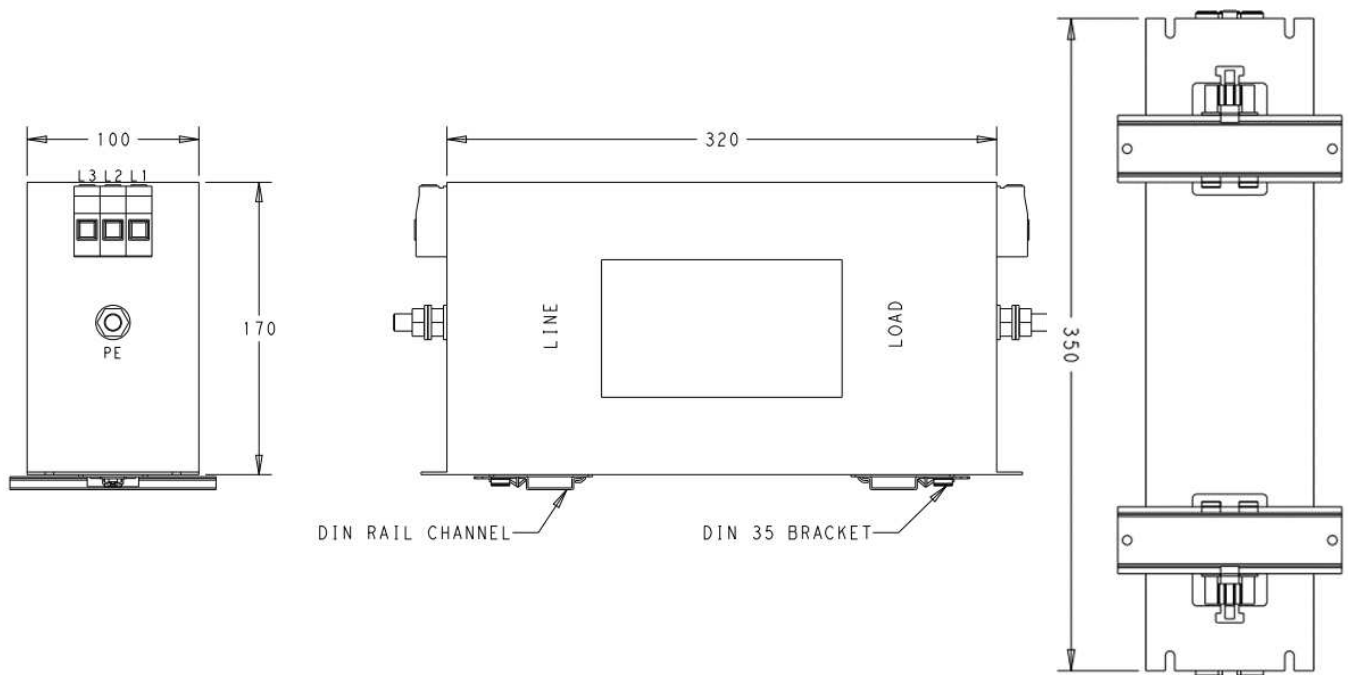


KEH-BS SERIES



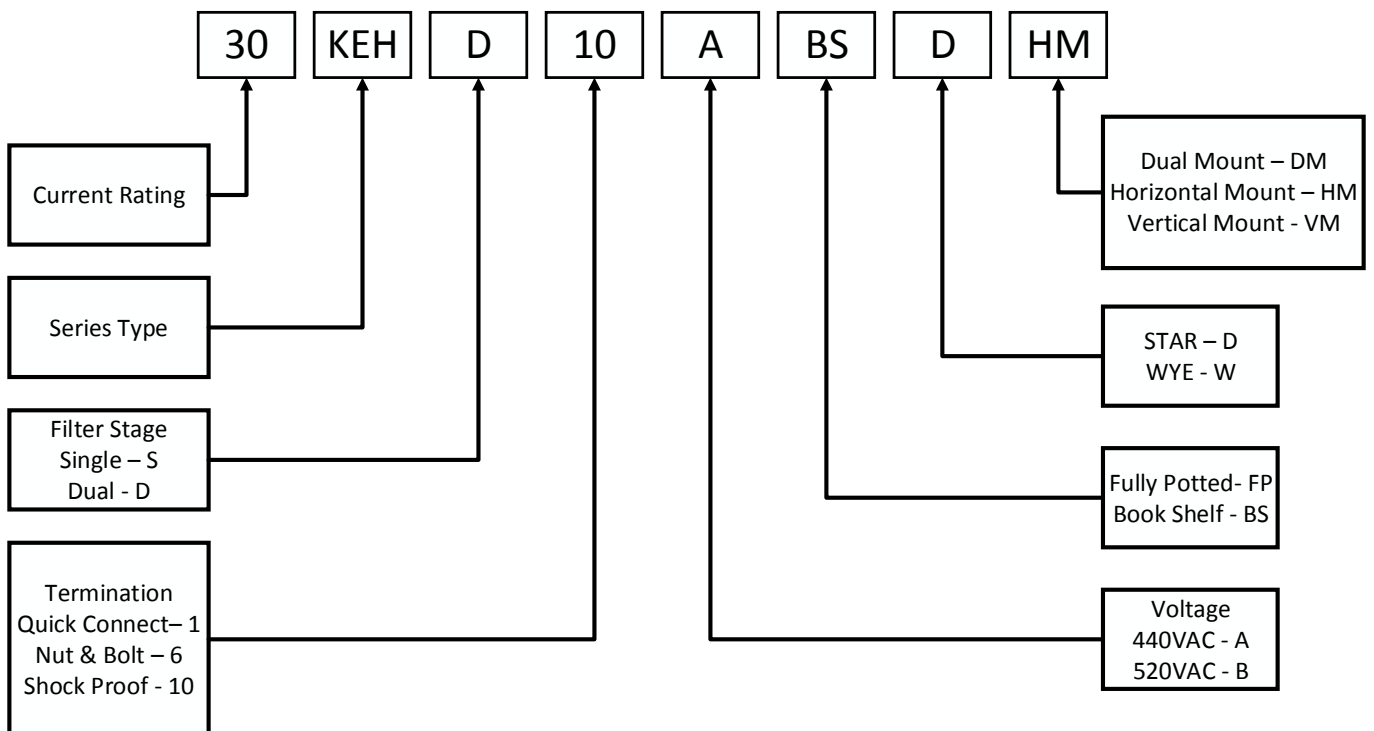
100A Shock Proof Type – Horizontal Mount

Note: Din Rail not supplied



All dimensions in mm; Tolerances according: ISO2768-m

How to Order



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Power Line Filters](#) category:

Click to view products by [TE Connectivity](#) manufacturer:

Other Similar products are found below :

[6609019-3](#) [6609026-5](#) [6609030-6](#) [6609973-2](#) [D30A](#) [7-1609090-5](#) [F2810](#) [F4456A](#) [F7382Z](#) [F7863Z](#) [FAHAV3100ZC000](#) [806276](#) [FN2020B-1-06](#) [FN2080B-10-06](#) [FN2410H-32-33](#) [FN2410H-80-34](#) [FP144](#) [FS4153-20-06](#) [FS4353-500-99](#) [12-MMB-030-11-D](#) [DB4-393](#) [15811T200](#) [20B1](#) [LC630](#) [2B1](#) [1609080-2](#) [1609993-8](#) [1-6609070-1](#) [F1100AA02](#) [F1150CC10](#) [F1500CA10](#) [F1500CA15](#) [F4041Z](#) [F7585E](#) [1B1](#) [FN2070A-16-06](#) [FN2090A-20-06](#) [FN2090B-12-06](#) [FN2090Z-1-06](#) [FN2410H-25-33](#) [FN2410H-60-34](#) [FN2410H-8-44](#) [FN2412H-8-44](#) [FN323B-6-01](#) [FN3258H-130-35](#) [FN610R-3-06](#) [20EHQ7](#) [20EHZ7](#) [20K1](#) [30B6](#)