

# KEM-BS SERIES

## THREE PHASE HIGH PERFORMANCE EMI FILTER

### BOOKSHELF TYPE SINGLE STAGE DELTA CONFIGURATION

#### INTRODUCTION

Bookshelf design for motor drive applications requiring minimum space and convenient installation with high performance at significant interference levels

#### APPLICATION

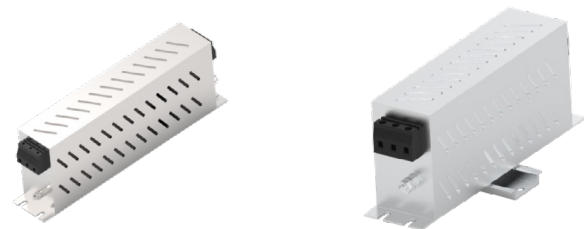
- Industrial Automation
- HVAC
- CNC Machines

#### FEATURES

- 3 Phase filters for Drives/Invertors
- Bookshelf Design
- Chassis Mounting
- High Performance

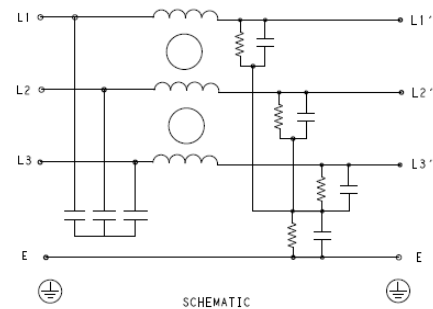
#### APPROVALS AND COMPLIANCE

- UL Recognised
- CSA Certified



STANDARD

NEW-DIN RAIL



#### 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

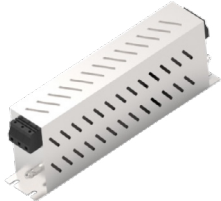
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Three Phase High Performance EMI Filter

Functional Characteristics	
Operating Temperature Range	-25°C to +85°C
Climatic Category	25/85/21
Termination (Depends on Current Rating)	Shock Proof
Flammability Corresponding to	UL 94 V-0

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

### Selection Table - Standard Version



TE Ordering Number	Catalog Number	Rated Current @40°C	Rated Voltage @40°C	Leakage Current (mA)	Weight (Kgs)	Termination
2-1609967-7	7KEMS10ABSD	7A	440 VAC	5	0.7	4
3-1609967-0	16KEMS10ABSD	16A	440 VAC	5	0.8	4
3-1609967-1	30KEMS10ABSD	30A	440 VAC	5	0.8	4
3-1609967-2	42KEMS10ABSD	42A	440 VAC	10	1.2	10
3-1609967-3	55KEMS10ABSD	55A	440 VAC	10	2	10
3-1609967-4	75KEMS10ABSD	75A	440 VAC	10	2	16
3-1609967-5	100KEMS10ABSD	100A	440 VAC	10	3	25
3-1609967-6	120KEMS10ABSD	120A	440 VAC	10	4	50
3-1609967-7	150KEMS10ABSD	150A	440 VAC	10	4	50
5-1609967-7	7KEMS10BBSD	7A	520 VAC	5	0.7	4
6-1609967-0	16KEMS10BBSD	16A	520 VAC	5	0.8	4
6-1609967-1	30KEMS10BBSD	30A	520 VAC	5	0.8	4
6-1609967-2	42KEMS10BBSD	42A	520 VAC	10	1.2	10
6-1609967-3	55KEMS10BBSD	55A	520 VAC	10	2	10
6-1609967-4	75KEMS10BBSD	75A	520 VAC	10	2	16
6-1609967-5	100KEMS10BBSD	100A	520 VAC	10	3	25
6-1609967-6	120KEMS10BBSD	120A	520 VAC	10	4	50
6-1609967-7	150KEMS10BBSD	150A	520 VAC	10	4	50

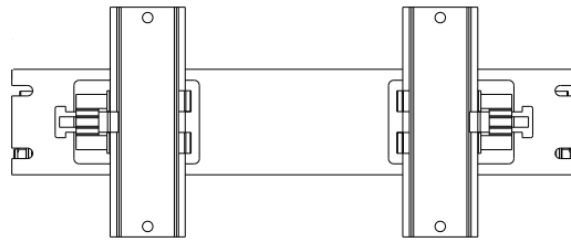
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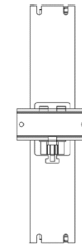
### Selection Table - Din Rail Mount



NEW




VERTICAL MOUNT



HORIZONTAL MOUNT

Note: Din Rail not supplied

TE Part Number	Catalog Number	Din Type	Rated Current @40°C	Rated Voltage @40°C	Leakage Current (mA)	Weight (Kgs)	Termination 
8-1609967-1	7KEMS10ABSDDM	DUAL	7A	440 VAC	5	0.8	4
8-1609967-2	16KEMS10ABSDDM	DUAL	16A	440 VAC	5	0.9	4
8-1609967-3	30KEMS10ABSDDHM	HORIZONTAL	30A	440 VAC	5	0.9	4
8-1609967-4	42KEMS10ABSDDHM	HORIZONTAL	42A	440 VAC	10	1.3	10
8-1609967-5	55KEMS10ABSDDHM	HORIZONTAL	55A	440 VAC	10	2.1	10
8-1609967-6	30KEMS10ABSDDVM	VERTICAL	30A	440 VAC	5	1	4
8-1609967-7	42KEMS10ABSDDVM	VERTICAL	42A	440 VAC	10	1.4	10
8-1609967-8	55KEMS10ABSDDVM	VERTICAL	55A	440 VAC	10	2.2	10
8-1609967-9	75KEMS10ABSDDM	DUAL	75A	440 VAC	10	2.2	16
9-1609967-0	100KEMS10ABSDDM	DUAL	100A	440 VAC	10	3.2	25
7-1609968-2	7KEMS10BBSDDM	DUAL	7A	520 VAC	5	0.8	4
7-1609968-3	16KEMS10BBSDDM	DUAL	16A	520 VAC	5	0.9	4
7-1609968-4	30KEMS10BBSDDHM	HORIZONTAL	30A	520 VAC	5	0.9	4
7-1609968-5	42KEMS10BBSDDHM	HORIZONTAL	42A	520 VAC	10	1.3	10
7-1609968-6	55KEMS10BBSDDHM	HORIZONTAL	55A	520 VAC	10	2.1	10
7-1609968-7	30KEMS10BBSDDVM	VERTICAL	30A	520 VAC	5	1	4
7-1609968-8	42KEMS10BBSDDVM	VERTICAL	42A	520 VAC	10	1.4	10
7-1609968-9	55KEMS10BBSDDVM	VERTICAL	55A	520 VAC	10	2.2	10
8-1609968-0	75KEMS10BBSDDHM	DUAL	75A	520 VAC	10	2.2	16
8-1609968-1	100KEMS10BBSDDHM	DUAL	100A	520 VAC	10	3.2	25

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### Connectors Cross Section

		4	10	16	25	50
Wire Section (mm <sup>2</sup> )		4mm <sup>2</sup>	10 mm <sup>2</sup>	16 mm <sup>2</sup>	25 mm <sup>2</sup>	50 mm <sup>2</sup>
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	54	56	48	71	82	70	65	40	16
	16A	42	34	46	80	73	48	40	29	13
	30A	40	26	47	70	73	51	44	34	13
	42A	20	13	46	78	69	50	42	32	12
	55A	24	28	32	73	66	56	48	36	19
	75A	23	32	36	71	67	60	54	30	17
	100A	21	32	36	69	58	56	50	30	17
	120A	19	28	33	70	60	56	49	26	18
	150A	20	20	31	65	40	28	24	19	11

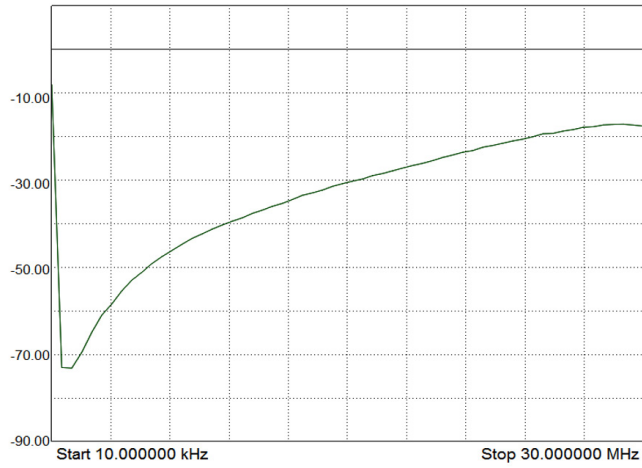
		Differential Mode 50Ω/50Ω								
		Frequency in MHz								
		0.01	0.05	0.15	0.5	1	3	5	10	30
Current Rating	7A	30	32	40	69	54	50	48	34	25
	16A	28	30	42	79	81	58	43	8	22
	30A	28	21	37	76	82	67	49	20	28
	42A	18	21	35	83	74	64	45	13	27
	55A	22	30	34	69	70	58	40	49	22
	75A	38	40	45	86	81	68	50	49	35
	100A	36	40	47	80	75	62	54	50	35
	120A	32	35	45	78	72	60	54	47	31
	150A	31	30	34	48	39	28	23	17	15

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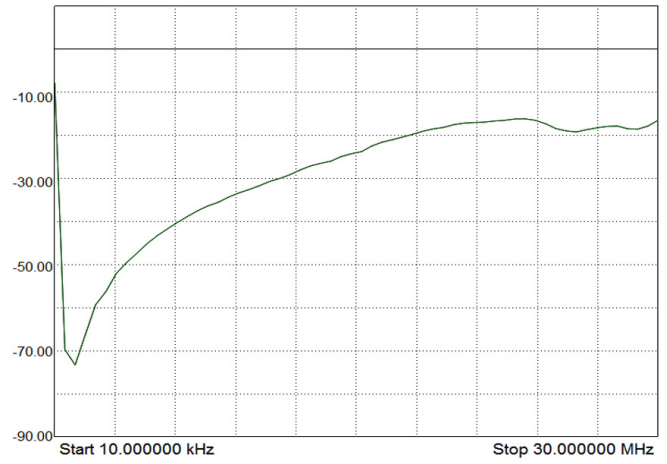
Three Phase High Performance EMI Filter

## Common Mode Insertion Loss (Typical in dB - Refer to table above)

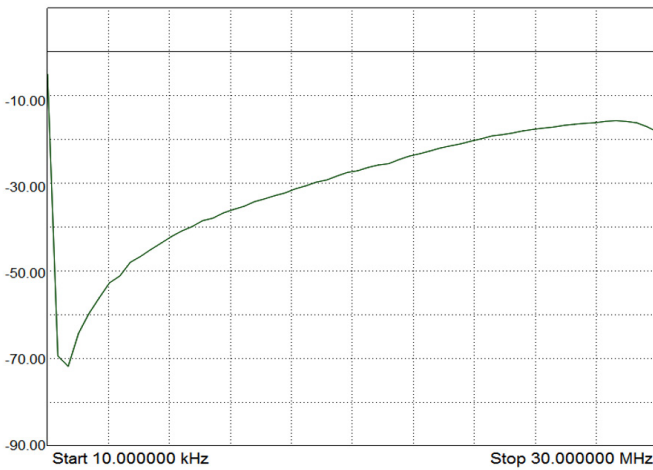
7A



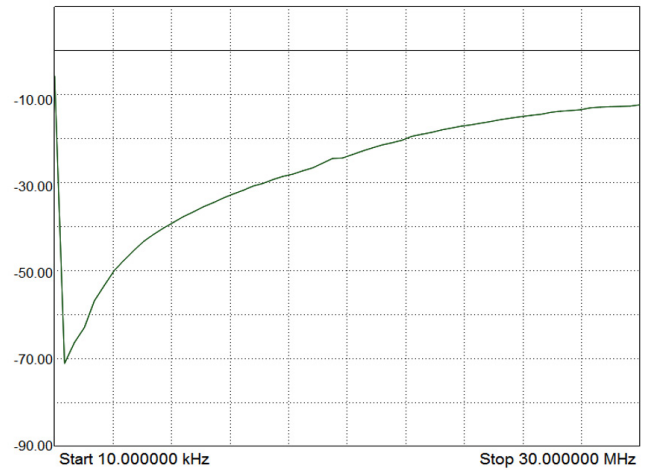
16A



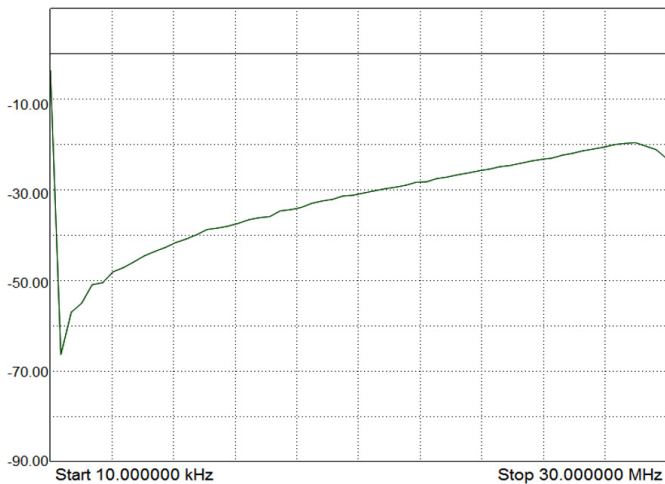
30A



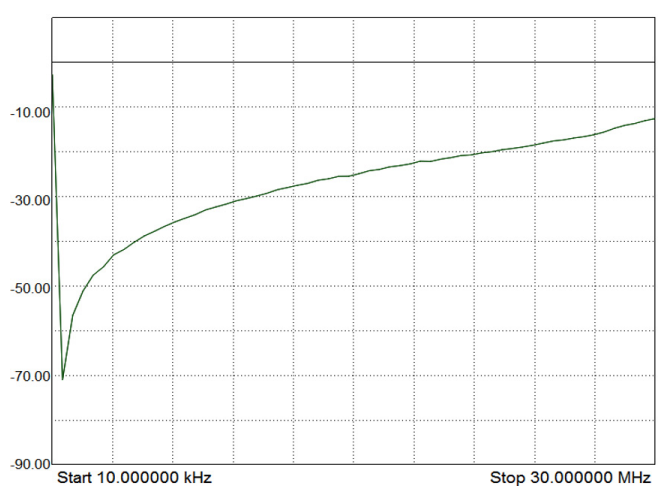
42A



55A



75A

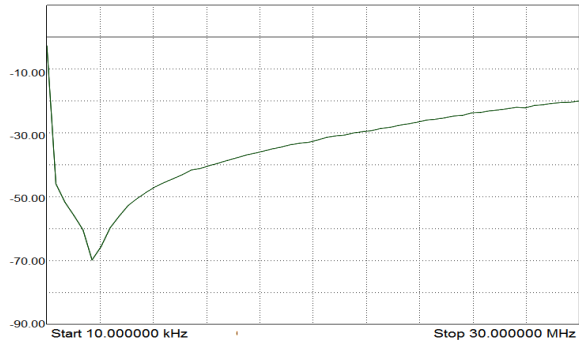


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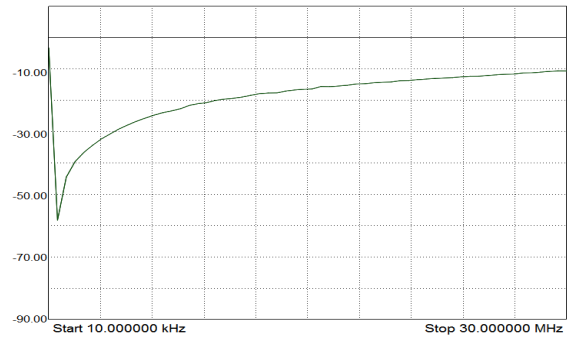
Three Phase High Performance EMI Filter

## Common Mode Insertion Loss (Typical in dB - Refer to table above)

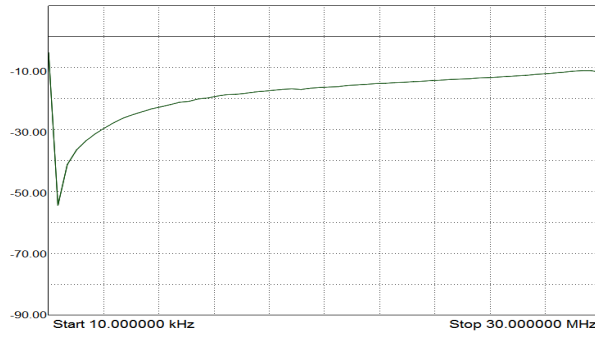
100A



120A



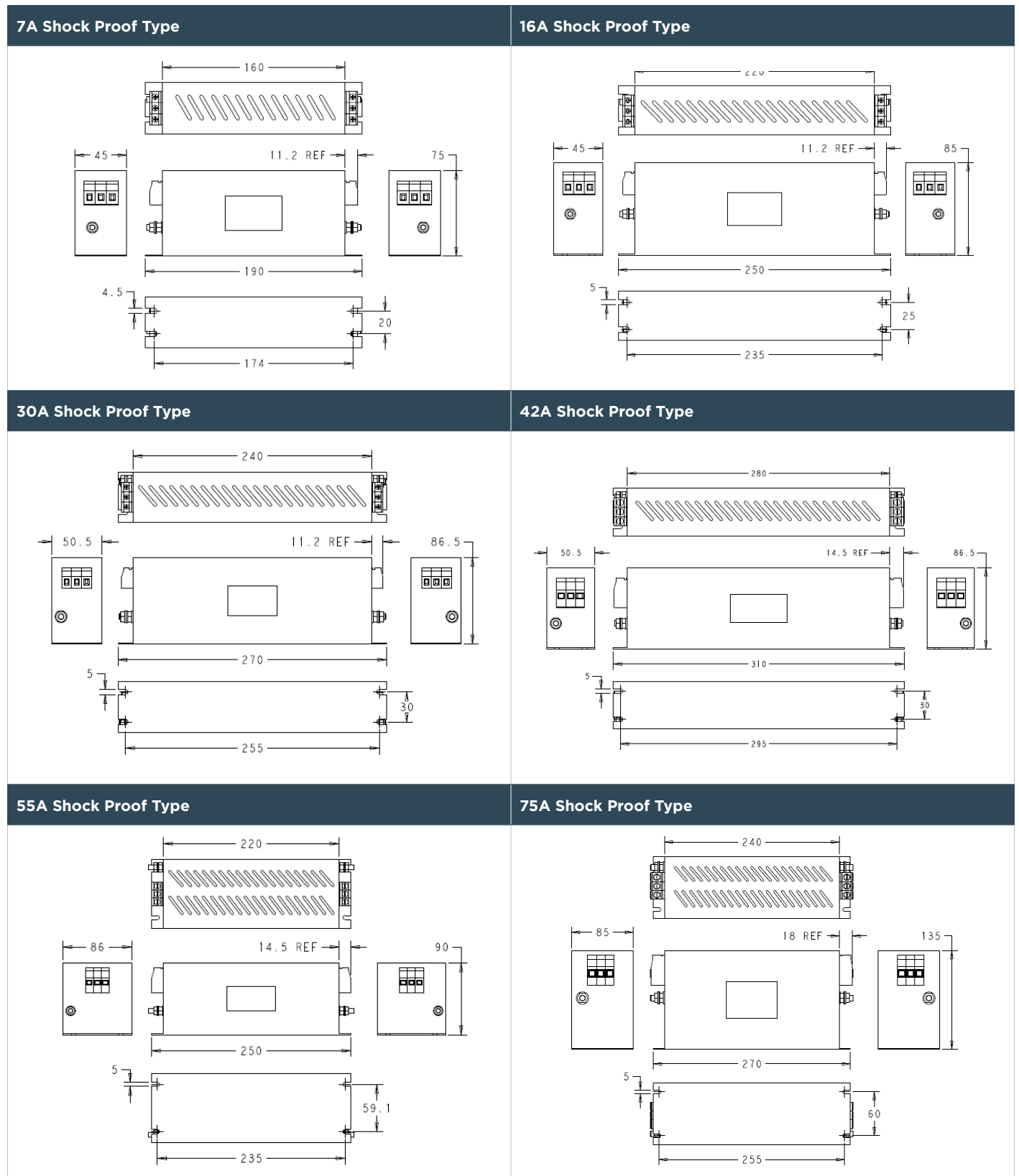
150A



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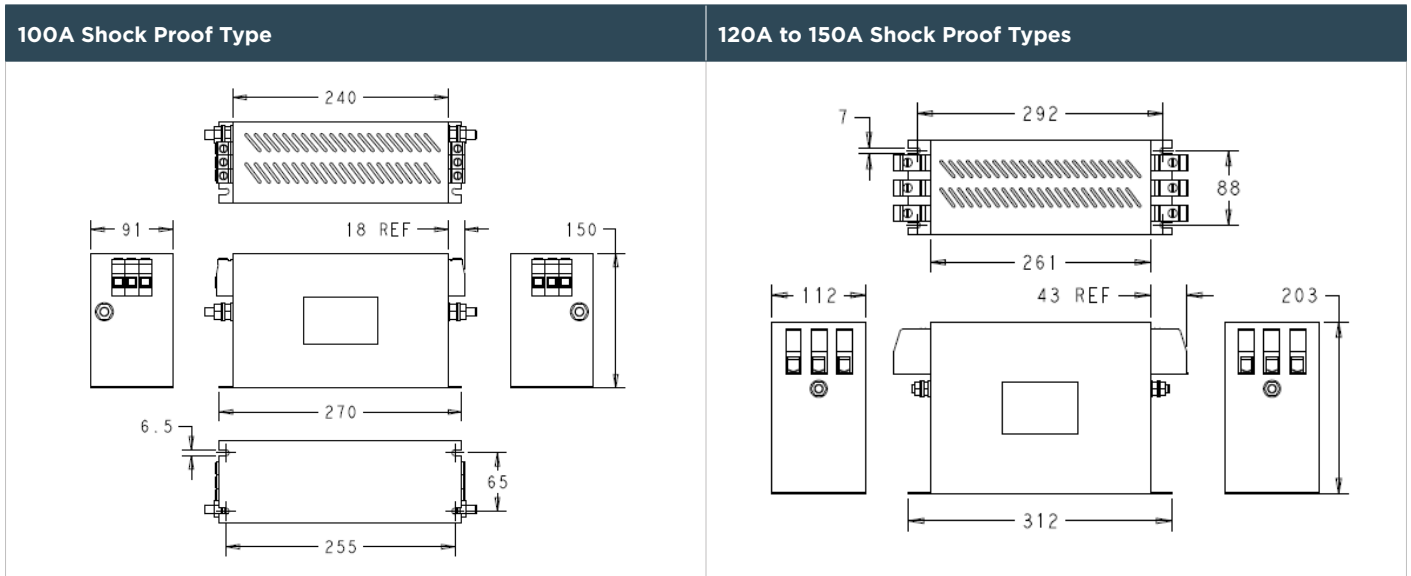
## Case Dimensions - Standard Version



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## Case Dimensions - Standard Version



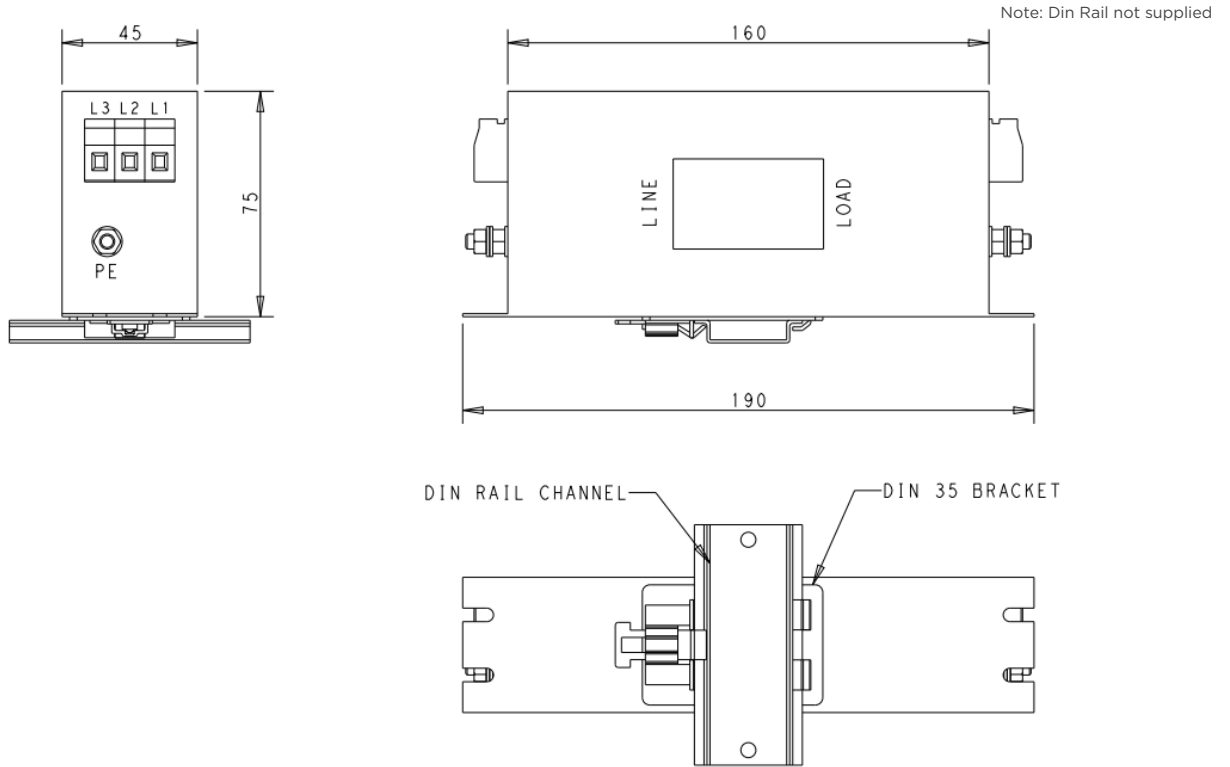


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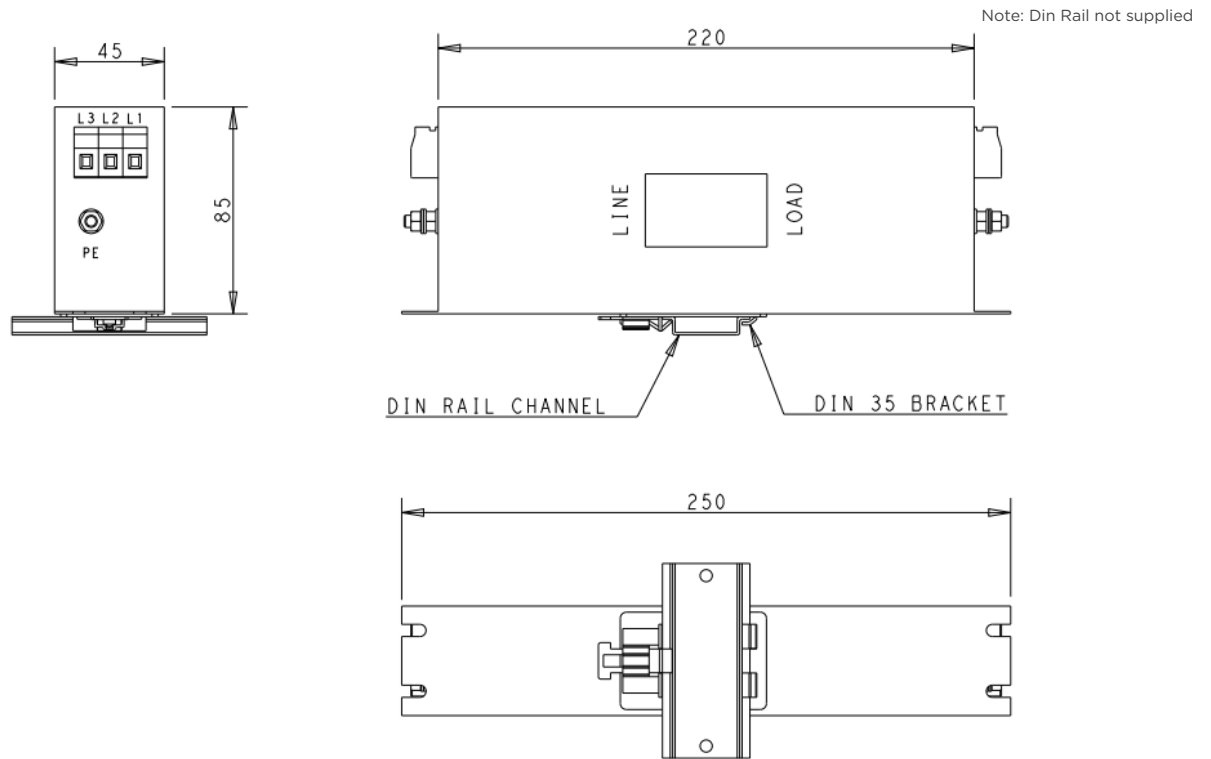
Three Phase High Performance EMI Filter

## Case Dimensions - Din Rail Mount

### 7A Shock Proof Type - Dual Mount



### 16A Shock Proof Type - Dual Mount

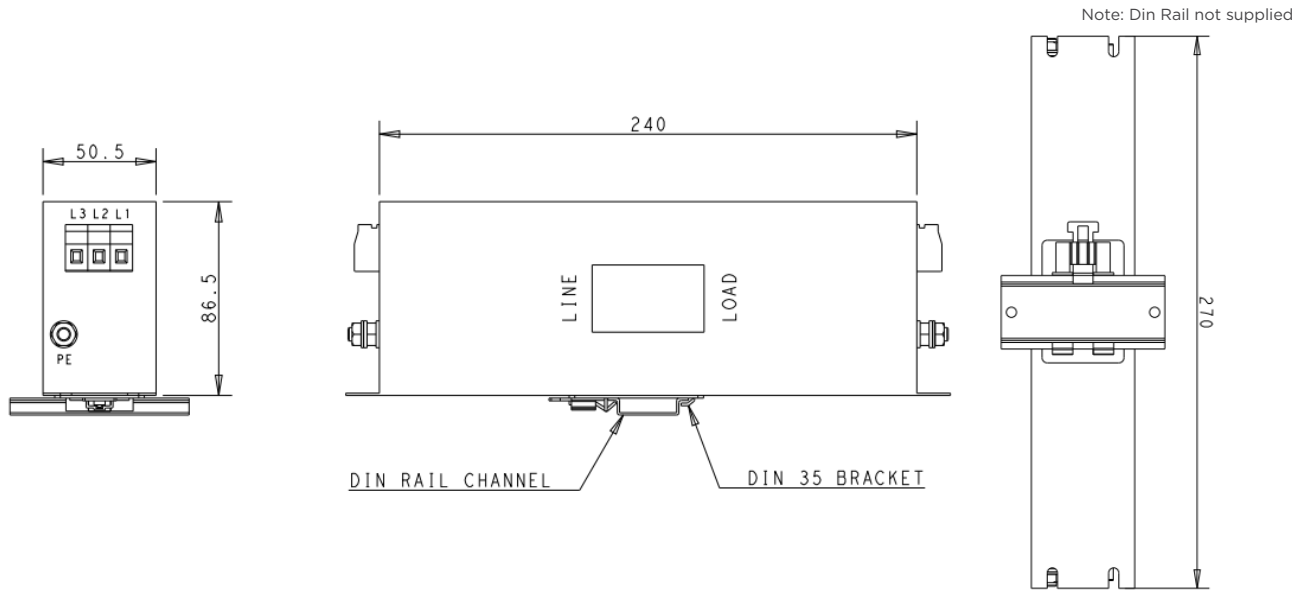


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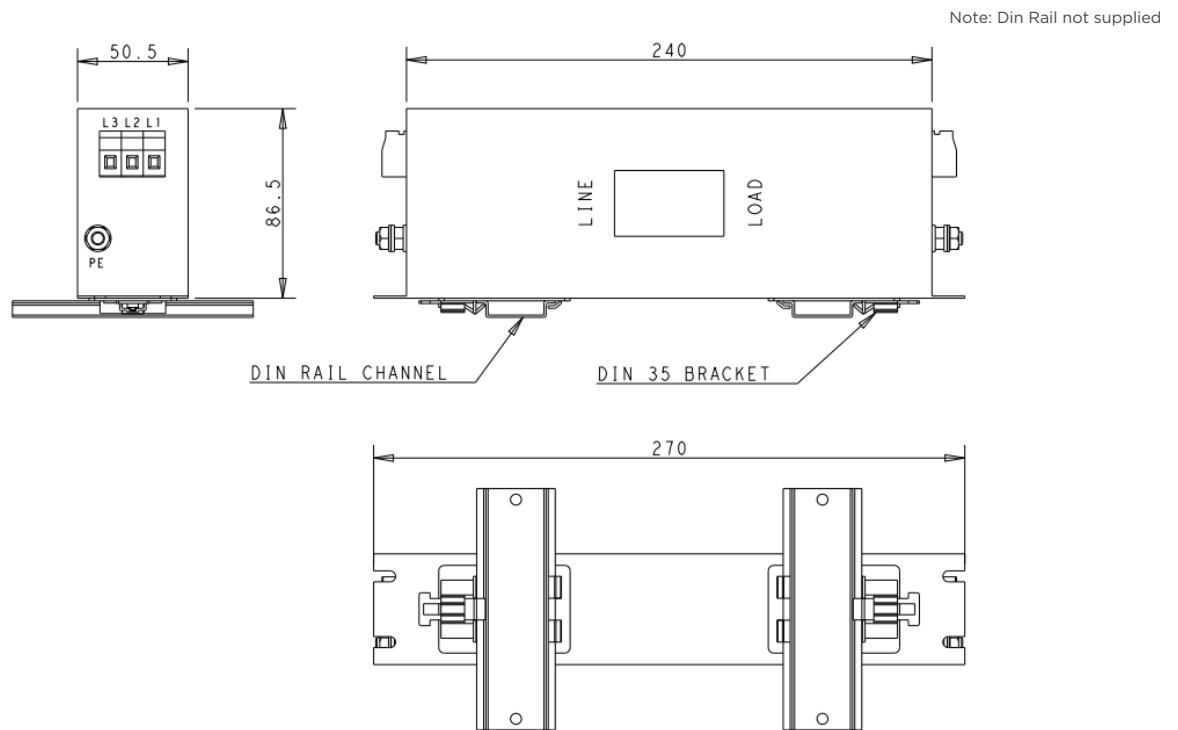
Three Phase High Performance EMI Filter

## Case Dimensions - Din Rail Mount

### 30A Shock Proof Type - Horizontal Mount



### 30A Shock Proof Type - Vertical Mount

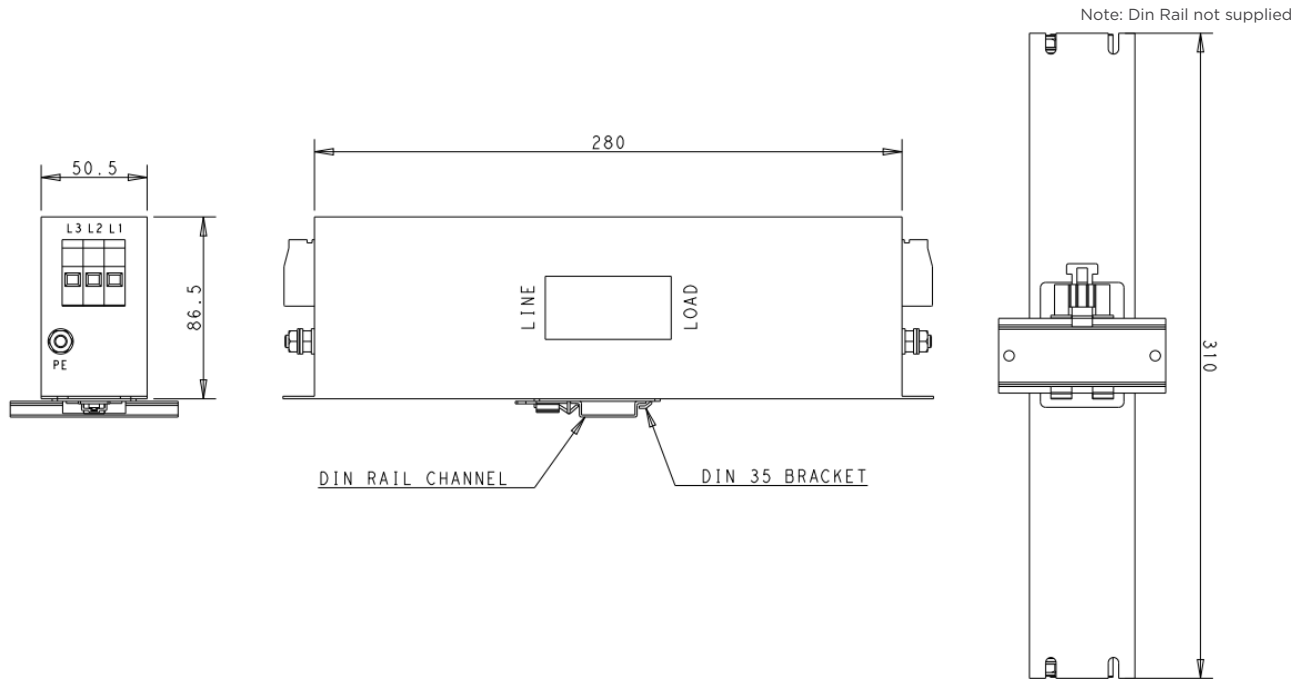


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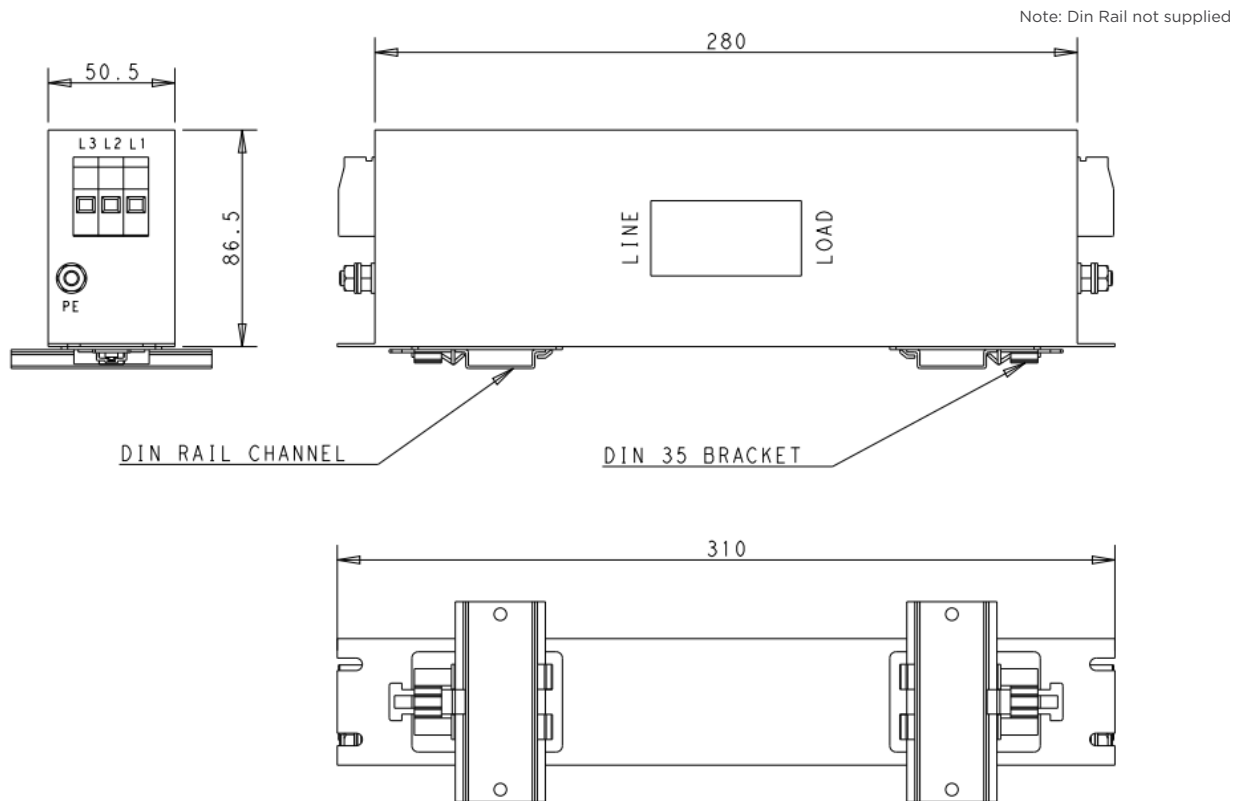
Three Phase High Performance EMI Filter

## Case Dimensions - Din Rail Mount

### 42A Shock Proof Type - Horizontal Mount



### 42A Shock Proof Type - Vertical Mount



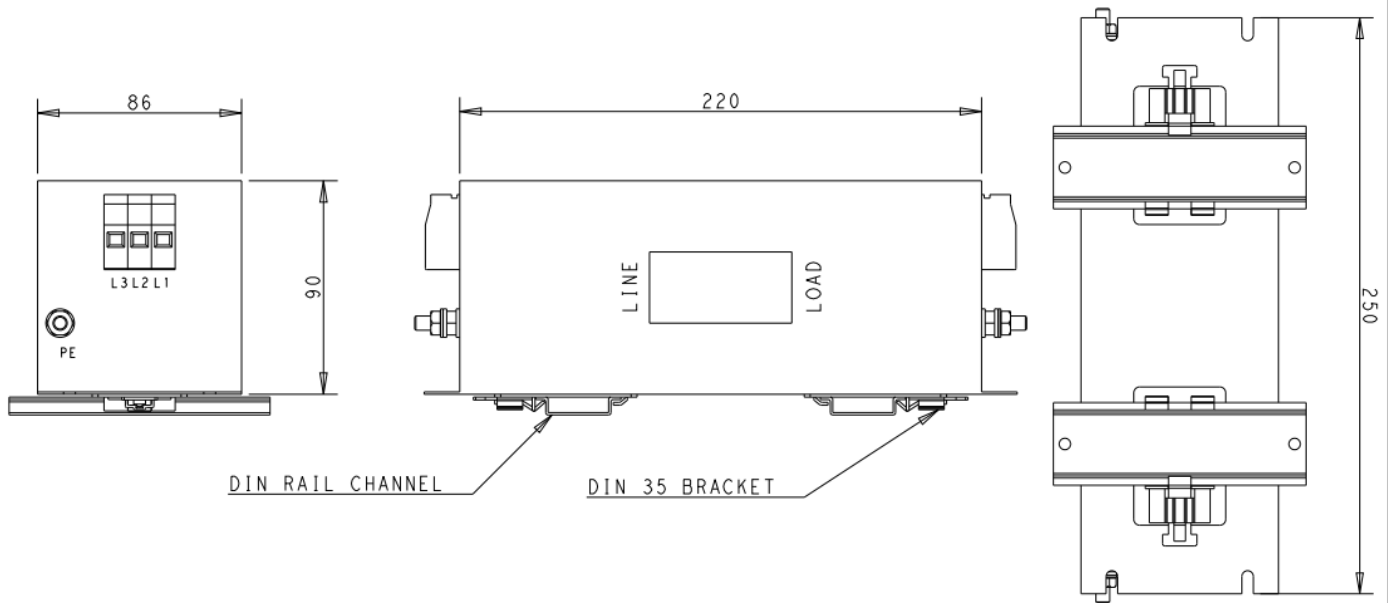
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## Case Dimensions - Din Rail Mount

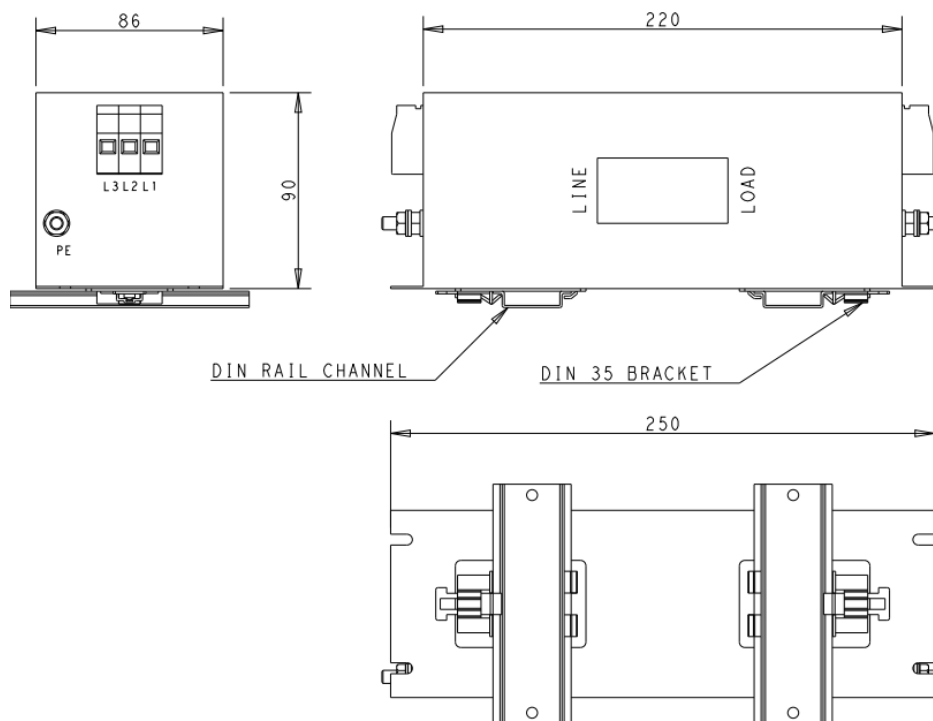
### 55A Shock Proof Type - Horizontal Mount

Note: Din Rail not supplied



### 55A Shock Proof Type - Vertical Mount

Note: Din Rail not supplied



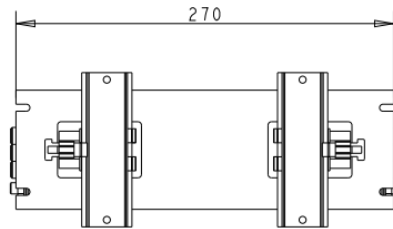
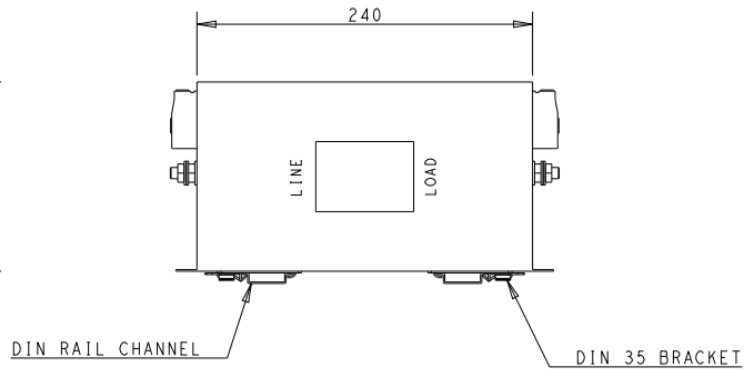
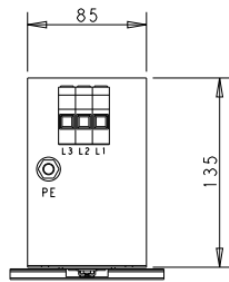
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## Case Dimensions - Din Rail Mount

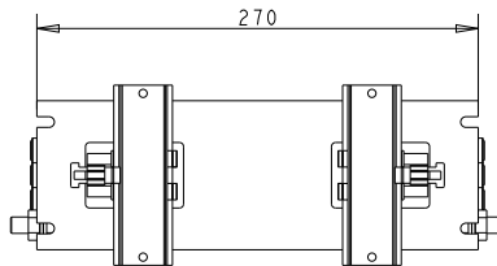
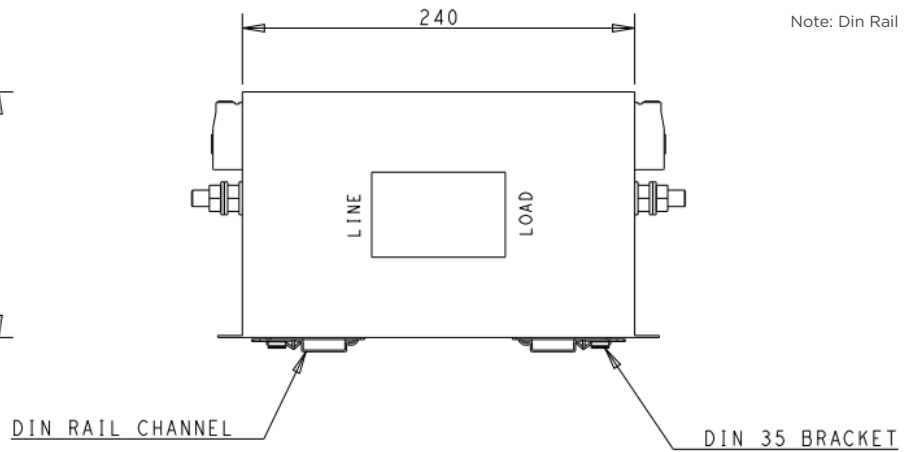
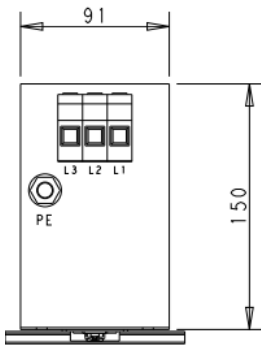
### 75A Shock Proof Type - Dual Mount

Note: Din Rail not supplied



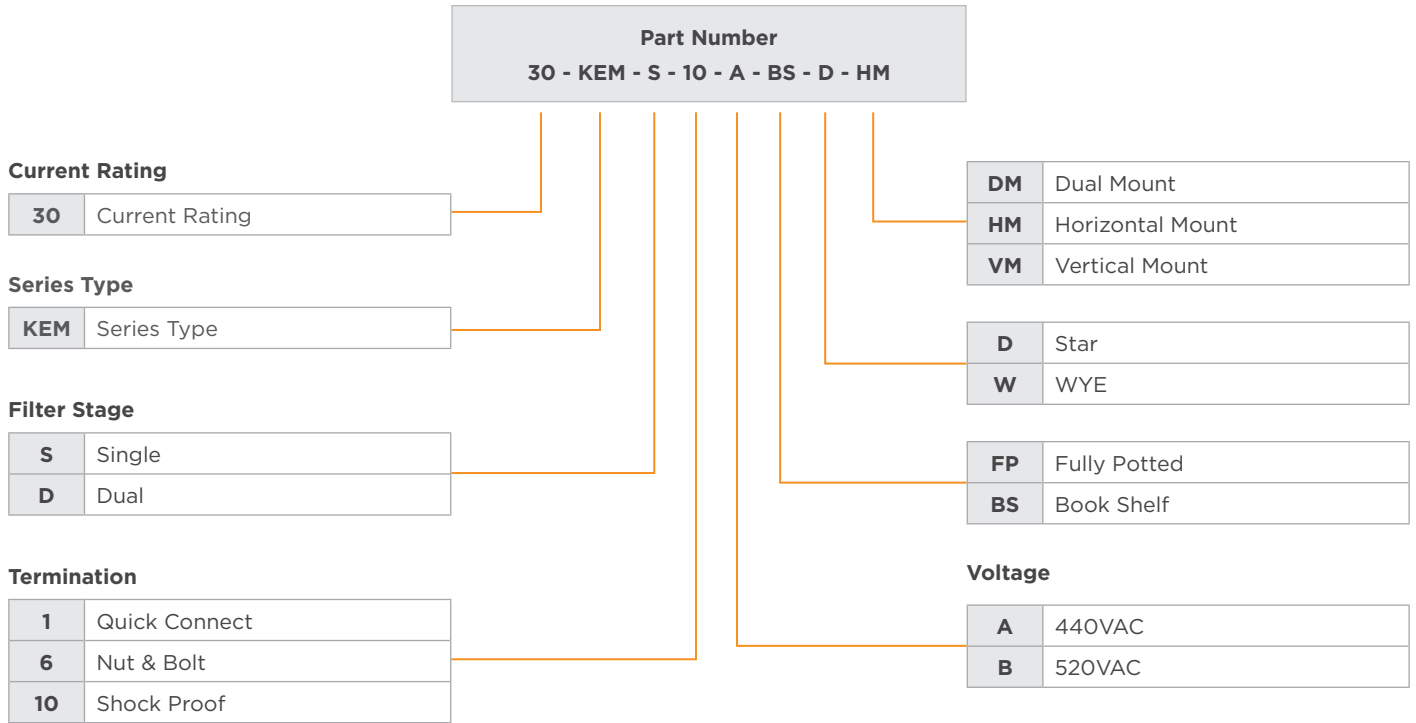
### 100A Shock Proof Type - Dual Mount

Note: Din Rail not supplied



All dimensions in mm; Tolerances according: ISO2768-m

## HOW TO ORDER



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