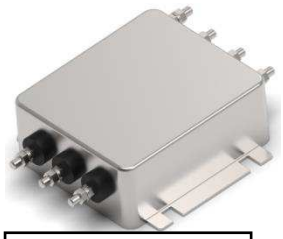
KEB SERIES

Three Phase General Purpose EMI Filter – Single Stage Delta Configuration

DATASHEET

Three phase General Purpose Filters designed to be used in wide range of applications.



STANDARD



NEW DIN RAIL

Approvals & Compliance

UL Approved

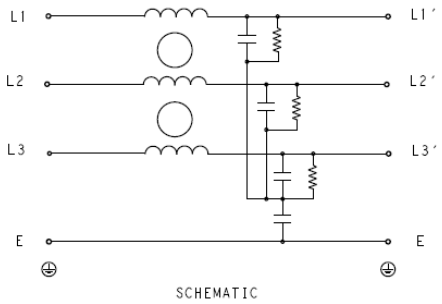
CSA Certified *

* 30th June 2021

Features

- General Purpose
- Standard Attenuation Performance
- Chassis mounting, Din Rail Mount

Typical Circuit Diagram



SCHEMATIC

Applications

- Industrial Automation
- HVAC
- Rectifier

Specifications

Electrical Characteristics

Maximum Continuous Operating Voltage	440/520VAC
Current Ratings	1A to 150A @40°C, Din Mount 1A to 60A@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

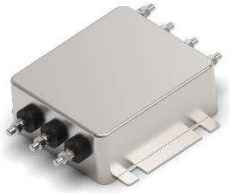
Operating Temperature Range	-25°C to +85ºC
Climatic Category	25/85/21
Termination (Depends on Current Rating)	Quick Connect (1-10A)/ Bolt & Nut (15-150A) / Shock Proof (75-100A)
Flammability corresponding to	UL 94 V-0

Reference Standards

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

KEB SERIES

Selection Table – Standard Version

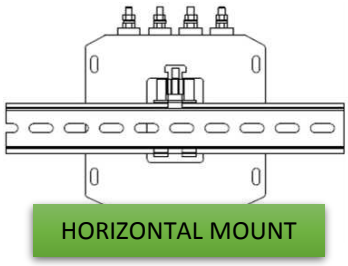


TE Ordering Number	Catalog Number	Rated Current @40°C	Rated Voltage @40°C	Leakage Current (mA)	Termination			Weight (Kgs)
1-1609965-0	1KEBS1AFPD	1A	440 VAC	3	6.3 x 0.8			0.26
1-1609965-1	3KEBS1AFPD	3A	440 VAC	3	6.3 x 0.8			0.26
1-1609965-2	6KEBS1AFPD	6A	440 VAC	3	6.3 x 0.8			0.26
1-1609965-3	10KEBS1AFPD	10A	440 VAC	3	6.3 x 0.8			0.26
1-1609965-4	15KEBS6AFPD	15A	440 VAC	3		M5		0.7
1-1609965-5	20KEBS6AFPD	20A	440 VAC	3		M5		0.7
1-1609965-6	25KEBS6AFPD	25A	440 VAC	5		M5		0.7
1-1609965-7	30KEBS6AFPD	30A	440 VAC	5		M5		0.7
1-1609965-8	40KEBS6AFPD	40A	440 VAC	5		M5		0.7
1-1609965-9	50KEBS6AFPD	50A	440 VAC	5		M6		1.2
2-1609965-0	60KEBS6AFPD	60A	440 VAC	5		M6		1.2
2-1609965-1	75KEBS6AFPD	75A	440 VAC	6		M8		8
2-1609965-2	80KEBS6AFPD	80A	440 VAC	6		M8		8
2-1609965-3	100KEBS6AFPD	100A	440 VAC	6		M10		8
2-1609965-4	125KEBS6AFPD	125A	440 VAC	8		M10		8
2-1609965-5	150KEBS6AFPD	150A	440 VAC	8		M10		8
2-1609965-6	75KEBS10AFPD	75A	440 VAC	6			16	8
2-1609965-7	80KEBS10AFPD	80A	440 VAC	6			25	8
2-1609965-8	100KEBS10AFPD	100A	440 VAC	6			25	8
4-1609965-0	1KEBS1BFPD	1A	520 VAC	3	6.3 x 0.8			0.26
4-1609965-1	3KEBS1BFPD	3A	520 VAC	3	6.3 x 0.8			0.26
4-1609965-2	6KEBS1BFPD	6A	520 VAC	3	6.3 x 0.8			0.26
4-1609965-3	10KEBS1BFPD	10A	520 VAC	3	6.3 x 0.8			0.26
4-1609965-4	15KEBS6BFPD	15A	520 VAC	3		M5		0.7
4-1609965-5	20KEBS6BFPD	20A	520 VAC	3		M5		0.7
4-1609965-6	25KEBS6BFPD	25A	520 VAC	5		M5		0.7
4-1609965-7	30KEBS6BFPD	30A	520 VAC	5		M5		0.7
4-1609965-8	40KEBS6BFPD	40A	520 VAC	5		M5		0.7
4-1609965-9	50KEBS6BFPD	50A	520 VAC	5		M6		1.2
5-1609965-0	60KEBS6BFPD	60A	520 VAC	5		M6		1.2
5-1609965-1	75KEBS6BFPD	75A	520 VAC	6		M8		8
5-1609965-2	80KEBS6BFPD	80A	520 VAC	6		M8		8
5-1609965-3	100KEBS6BFPD	100A	520 VAC	6		M10		8
5-1609965-4	125KEBS6BFPD	125A	520 VAC	8		M10		8
5-1609965-5	150KEBS6BFPD	150A	520 VAC	8		M10		8
5-1609965-6	75KEBS10BFPD	75A	520 VAC	6			16	8
5-1609965-7	80KEBS10BFPD	80A	520 VAC	6			25	8
5-1609965-8	100KEBS10BFPD	100A	520 VAC	6			25	8

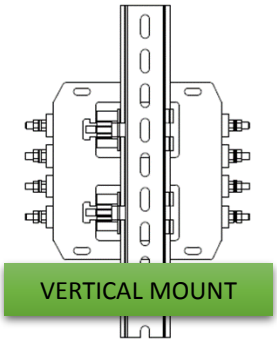
KEB SERIES

Selection Table – Din Rail Mount





Note: Din Rail not supplied



TE Ordering Number	Catalog Number	Din Type	Rated Current @40°C	Rated Voltage @40°C	Leakage Current (mA)	Weight (Kgs)	Termination	
3-1609965-0	1KEBS1AFPDDM	DUAL	1A	440 VAC	3	0.36	6.3 x 0.8	
3-1609965-1	3KEBS1AFPDDM	DUAL	3A	440 VAC	3	0.36	6.3 x 0.8	
3-1609965-2	6KEBS1AFPDDM	DUAL	6A	440 VAC	3	0.36	6.3 x 0.8	
3-1609965-3	10KEBS1AFPDDM	DUAL	10A	440 VAC	3	0.36	6.3 x 0.8	
3-1609965-4	15KEBS6AFPDDM	DUAL	15A	440 VAC	3	0.8		M5
3-1609965-5	20KEBS6AFPDDM	DUAL	20A	440 VAC	3	0.8		M5
3-1609965-6	25KEBS6AFPDDM	DUAL	25A	440 VAC	5	0.8		M5
3-1609965-7	30KEBS6AFPDDM	DUAL	30A	440 VAC	5	0.8		M5
3-1609965-8	40KEBS6AFPDDM	DUAL	40A	440 VAC	5	0.8		M5
3-1609965-9	50KEBS6AFPDHM	HORIZONTAL	50A	440 VAC	5	1.3		M6
6-1609965-0	60KEBS6AFPDHM	HORIZONTAL	60A	440 VAC	5	1.3		M6
6-1609965-1	50KEBS6AFPDVM	VERTICAL	50A	440 VAC	5	1.4		M6
6-1609965-2	60KEBS6AFPDVM	VERTICAL	60A	440 VAC	5	1.4		M6
6-1609965-3	1KEBS1BFPDDM	DUAL	1A	520 VAC	3	0.36	6.3 x 0.8	
6-1609965-4	3KEBS1BFPDDM	DUAL	3A	520 VAC	3	0.36	6.3 x 0.8	
6-1609965-5	6KEBS1BFPDDM	DUAL	6A	520 VAC	3	0.36	6.3 x 0.8	
6-1609965-6	10KEBS1BFPDDM	DUAL	10A	520 VAC	3	0.36	6.3 x 0.8	
6-1609965-7	15KEBS6BFPDDM	DUAL	15A	520 VAC	3	0.8		M5
6-1609965-8	20KEBS6BFPDDM	DUAL	20A	520 VAC	3	0.8		M5
6-1609965-9	25KEBS6BFPDDM	DUAL	25A	520 VAC	5	0.8		M5
7-1609965-0	30KEBS6BFPDDM	DUAL	30A	520 VAC	5	0.8		M5
7-1609965-1	40KEBS6BFPDDM	DUAL	40A	520 VAC	5	0.8		M5
7-1609965-2	50KEBS6BFPDHM	HORIZONTAL	50A	520 VAC	5	1.3		M6
7-1609965-3	60KEBS6BFPDHM	HORIZONTAL	60A	520 VAC	5	1.3		M6
7-1609965-4	50KEBS6BFPDVM	VERTICAL	50A	520 VAC	5	1.4		M6
7-1609965-5	60KEBS6BFPDVM	VERTICAL	60A	520 VAC	5	1.4		M6

KEB SERIES

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 1A	2	3	4	11	20	40	35	35	45
3A	2	2	19	22	40	38	45	47	34
6A	3	5	13	19	33	40	42	48	31
10A	3	4	15	25	29	30	30	32	31
15A	4	5	8	20	30	38	48	30	22
20A	2	2	5	15	22	36	53	39	28
25A	3	5	5	18	23	35	40	44	24
30A	2	4	6	18	24	32	35	39	27
40A	5	5	12	22	34	39	45	37	46
50A	3	3	10	23	32	34	45	43	30
60A	2	4	5	22	27	30	32	35	24
75A	2	3	4	11	20	40	35	35	45
80A	4	5	8	15	18	22	35	42	45
100A	2	4	3	17	23	25	25	32	38
125A	2	2	5	12	18	25	32	40	45
150A	2	3	6	15	22	28	30	35	42

Differential Mode 50Ω / 50Ω

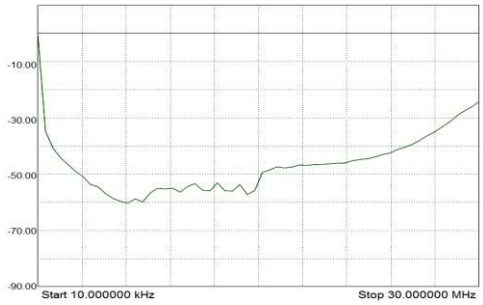
Current Rating	Frequency in MHz								
	0.01	0.05	0.15	0.5	1	3	5	10	30
1A	3	4	6	17	27	33	36	38	54
3A	4	5	36	38	29	35	38	46	45
6A	4	4	15	25	30	38	45	54	56
10A	4	5	20	29	30	31	32	35	40
15A	7	7	10	17	28	40	42	38	49
20A	3	6	6	14	20	44	32	25	23
25A	4	4	19	22	26	32	48	50	52
30A	4	8	15	22	35	42	40	48	50
40A	7	7	11	23	31	38	44	41	51
50A	3	4	8	29	31	36	42	49	49
60A	2	5	5	24	42	38	40	31	29
75A	3	4	6	17	27	33	36	38	54
80A	4	4	10	20	24	30	36	40	42
100A	7	8	14	43	37	40	35	30	40
125A	3	3	9	14	19	31	35	42	42
150A	2	2	8	20	25	31	35	40	47

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

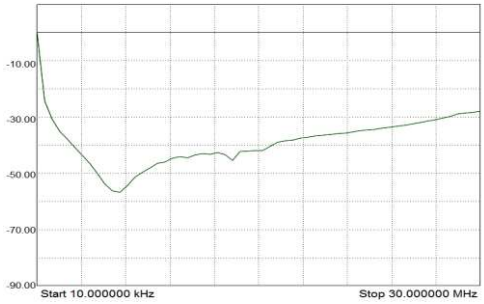
1A



3A



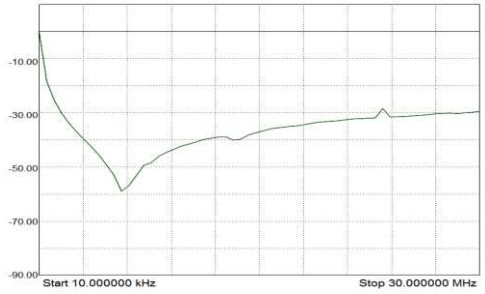
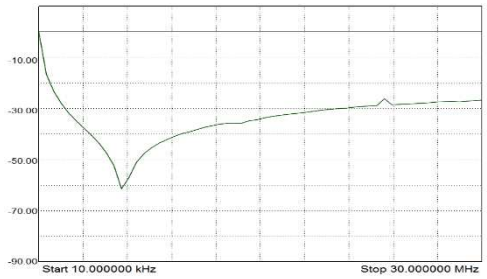
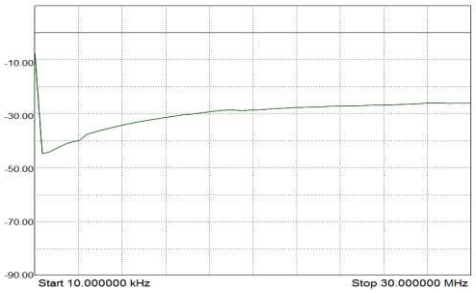
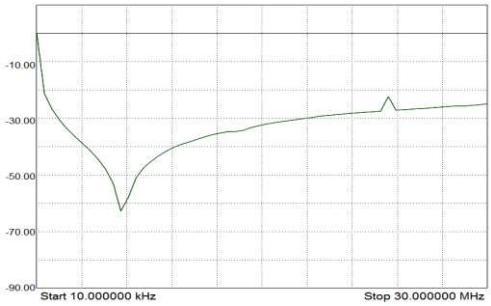
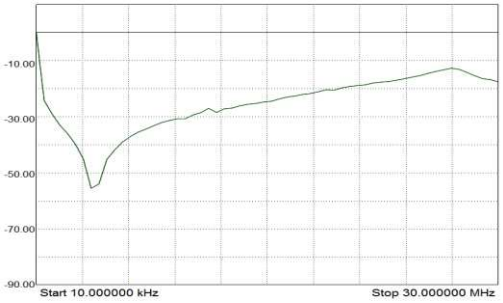
6A

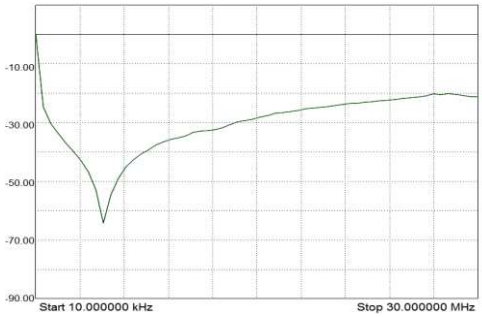
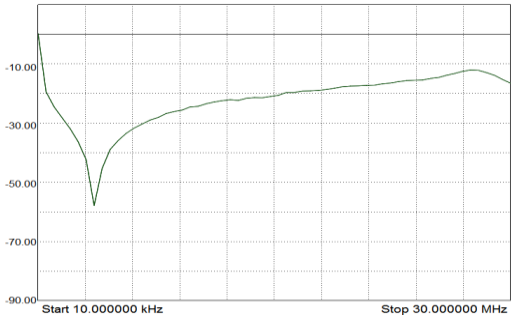


10A



KEB SERIES

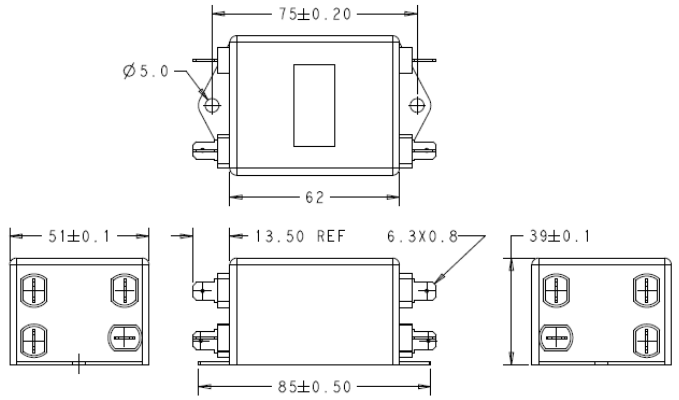
15A	20A
	
25A	**30A**
	
40A	**50A**
	
60A	**75A**
	

80A	100A
	
125A	**150A**
	

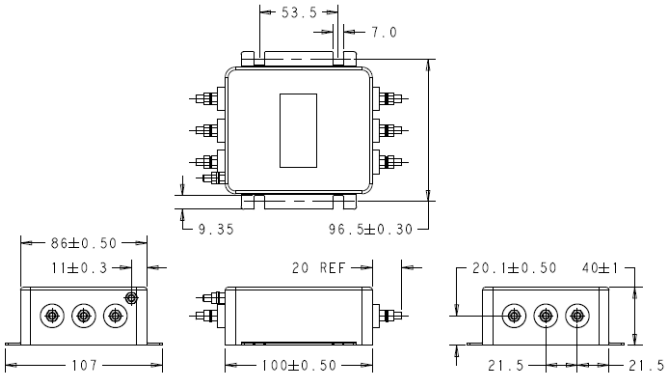
KEB SERIES

Case Dimensions - Standard

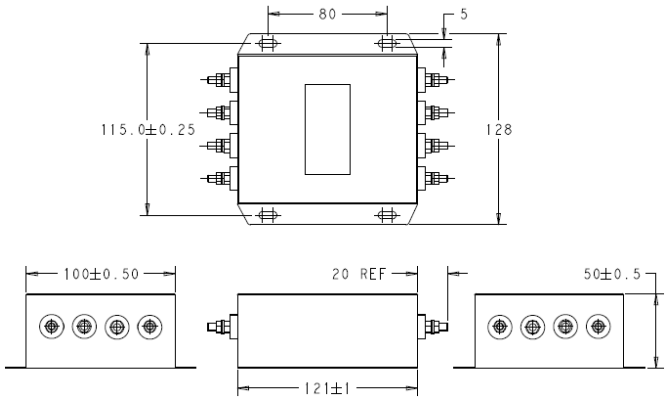
1 to 10A Quick Connect (6.35mm) Types



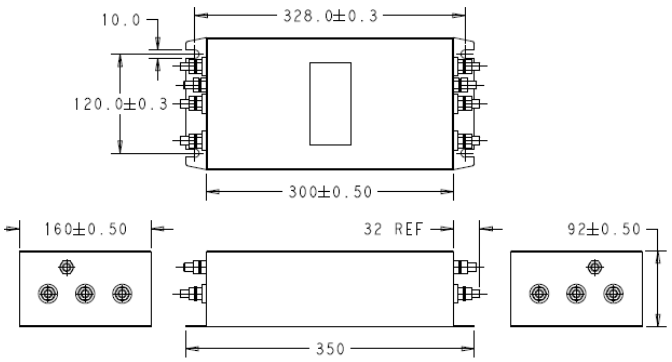
15A to 40A Nut & Bolt Types



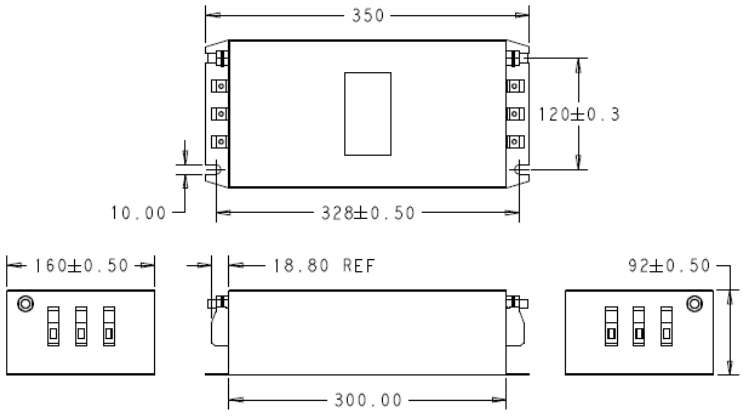
50A to 60A Nut & Bolt Types



75A to 150A Nut & Bolt Types



75A to 150A Shock Proof Types



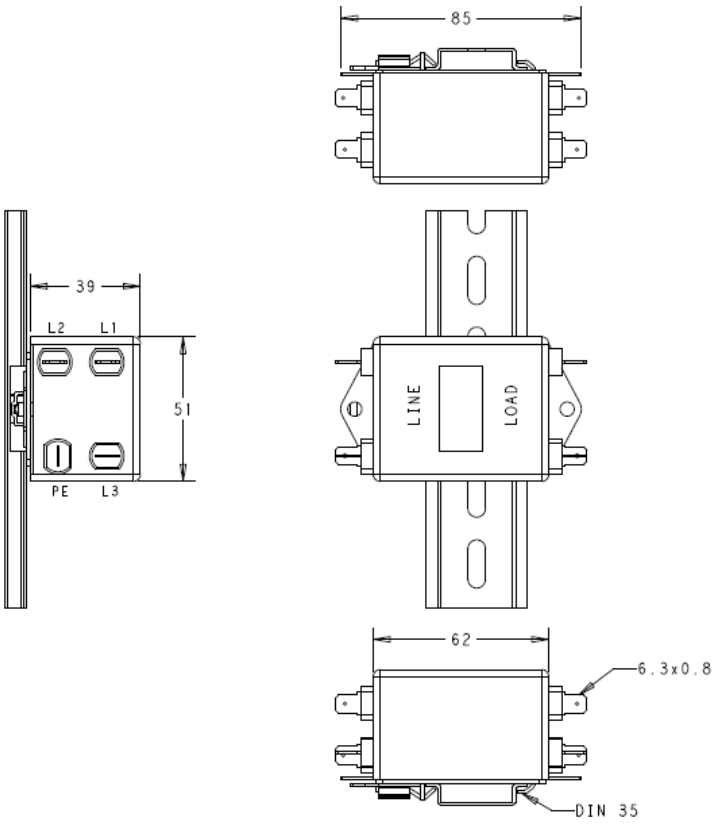
All dimensions in mm; Tolerances according: ISO2768-m

KEB SERIES

Case Dimensions – Din Rail Mount

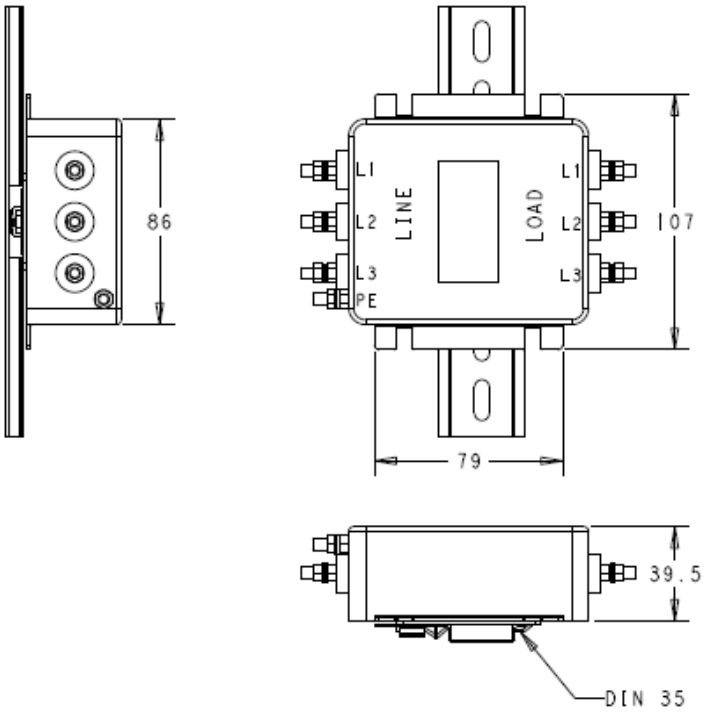
1 to 10A Quick Connect (6.35mm) Types – Dual Mount

Note: Din Rail not supplied



15A to 40A Nut & Bolt Types - Dual Mount

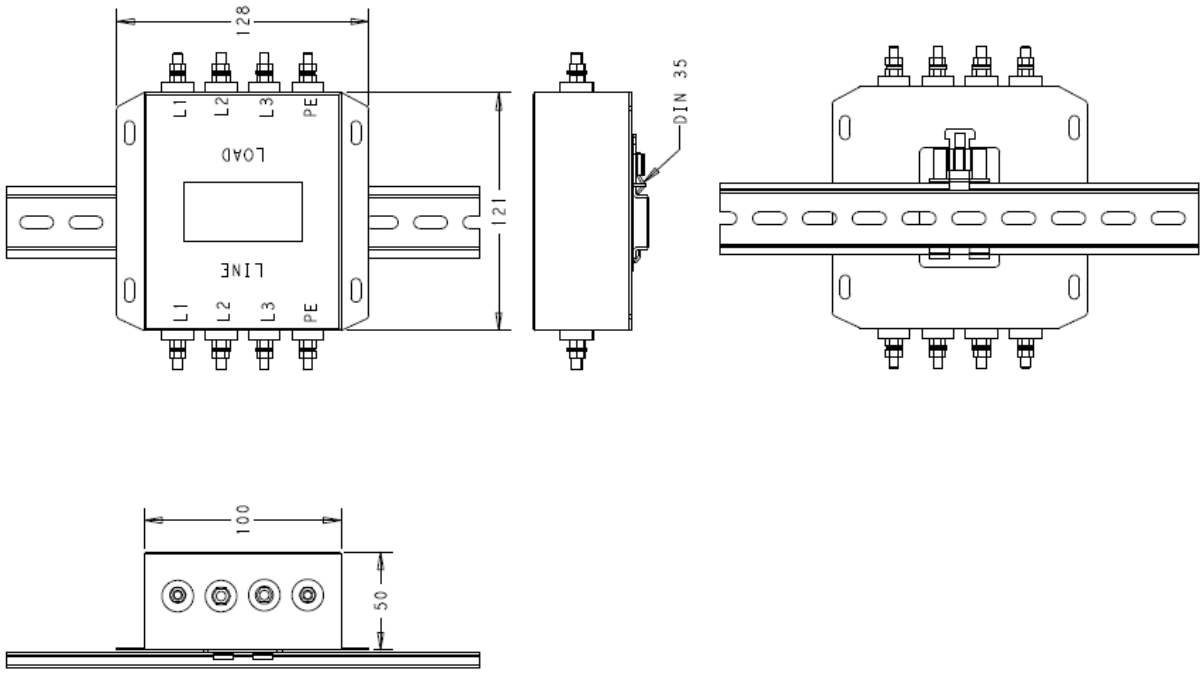
Note: Din Rail not supplied



KEB SERIES

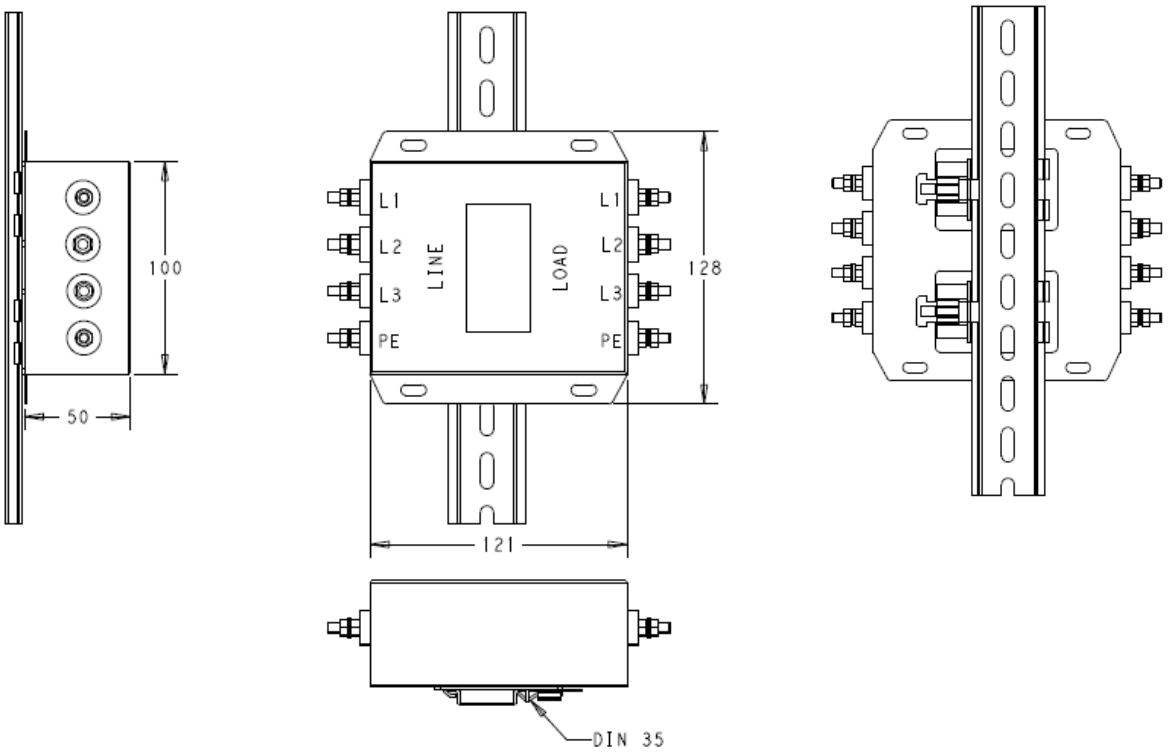
50A to 60A Nut & Bolt Types – Horizontal Mount

Note: Din Rail not supplied



50A to 60A Nut & Bolt Types – Vertical Mount

Note: Din Rail not supplied



All dimensions in mm; Tolerances according: ISO2768-m

KEB SERIES

How to Order

