KEH SERIES

Three Phase Superior Performance EMI Filter – Dual Stage DELTA Configuration

DATASHEET

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.



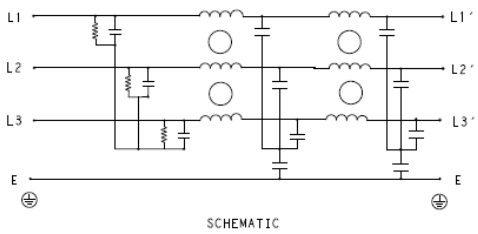
Approvals & Compliance

UL Recognised

CSA Certified

RoHS compliant

Typical Circuit Diagram



SCHEMATIC

Features

- Dual Stage Filter
- Good Attenuation
- Chassis mounting
- Low Leakage current
- Superior Performance

Applications

- Computer Server
- Robotics and Automation
- Elevators
- SMPS

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 +85ºC
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

KEH SERIES

Selection Table

TE Ordering Number	Catalog Number	Rated Current @40°C	Rated Voltage @40°C	Leakage Current (mA)	Termination		Weight (Kgs)
1-1609969-0	10KEHD10AFPD	10A	440 VAC	5	41		3
1-1609969-1	15KEHD10AFPD	15A	440 VAC	5	41		3
1-1609969-2	20KEHD10AFPD	20A	440 VAC	5	41		3
1-1609969-3	40KEHD10AFPD	40A	440 VAC	6	10		4
1-1609969-4	60KEHD10AFPD	60A	440 VAC	6	16		4
1-1609969-5	80KEHD10AFPD	80A	440 VAC	10	25		8
1-1609969-6	100KEHD10AFPD	100A	440 VAC	6	25		8
1-1609969-7	150KEHD10AFPD	150A	440 VAC	20		M10	9
1-1609969-8	200KEHD10AFPD	200A	440 VAC	20		M10	11
1-1609969-9	250KEHD10AFPD	250A	440 VAC	20		M10	11
4-1609969-0	10KEHD10BFPD	10A	520 VAC	5	41		3
4-1609969-1	15KEHD10BFPD	15A	520 VAC	5	41		3
4-1609969-2	20KEHD10BFPD	20A	520 VAC	5	41		3
4-1609969-3	40KEHD10BFPD	40A	520 VAC	6	10		4
4-1609969-4	60KEHD10BFPD	60A	520 VAC	6	16		4
4-1609969-5	80KEHD10BFPD	80A	520 VAC	10	25		8
4-1609969-6	100KEHD10BFPD	100A	520 VAC	6	25		8
4-1609969-7	150KEHD10BFPD	150A	520 VAC	20		M10	9
4-1609969-8	200KEHD10BFPD	200A	520 VAC	20		M10	11
4-1609969-9	250KEHD10BFPD	250A	520 VAC	20		M10	11

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

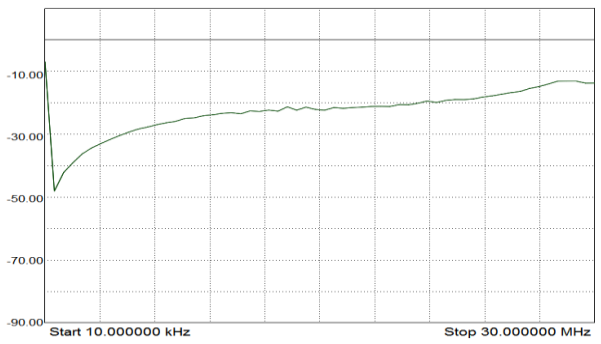
Current Rating	Frequency in MHz								
	0.01	0.05	0.15	0.5	1	3	5	10	30
10A	70	71	75	86	81	63	54	40	38
15A	65	65	75	80	81	64	55	40	36
20A	41	44	55	72	67	58	51	38	21
40A	11	20	72	75	77	66	62	51	32
60A	27	26	41	78	72	70	65	43	24
80A	10	8	37	75	65	57	50	44	28
100A	3	8	35	77	68	57	51	42	28
150A	18	24	54	58	53	44	40	35	32
200A	19	22	52	56	54	42	40	35	32
250A	18	24	50	55	51	42	38	33	32

Differential Mode 50Ω / 50Ω

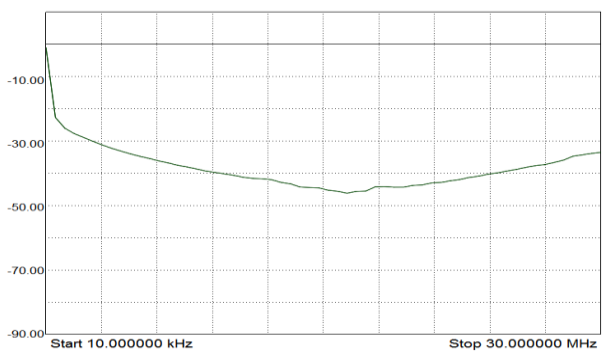
Current Rating	Frequency in MHz								
	0.01	0.05	0.15	0.5	1	3	5	10	30
10A	51	53	64	82	84	63	48	19	22
15A	50	51	65	82	85	68	50	20	23
20A	48	46	60	79	79	59	45	20	26
40A	29	36	76	78	79	64	48	23	26
60A	17	20	24	50	61	60	50	46	72
80A	28	29	32	72	66	46	36	27	22
100A	28	29	32	75	66	46	37	27	25
150A	38	41	55	51	47	40	37	30	25
200A	38	41	55	50	45	40	35	30	22
250A	38	41	55	52	45	39	35	29	27

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

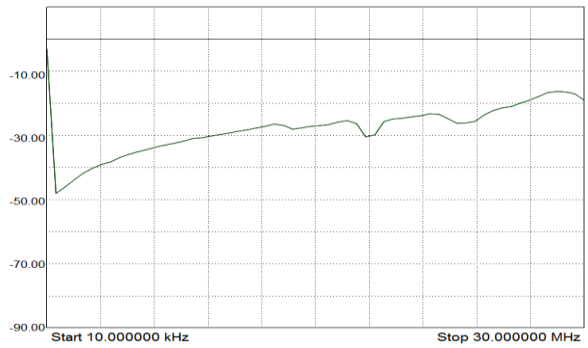
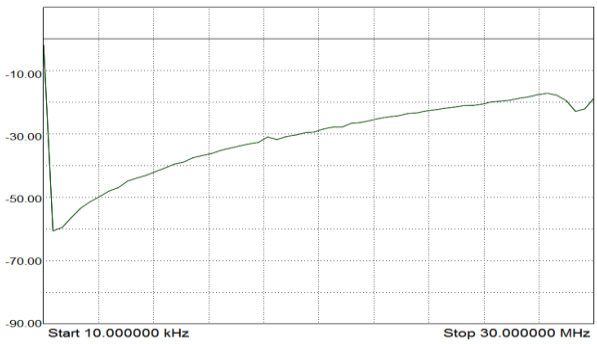
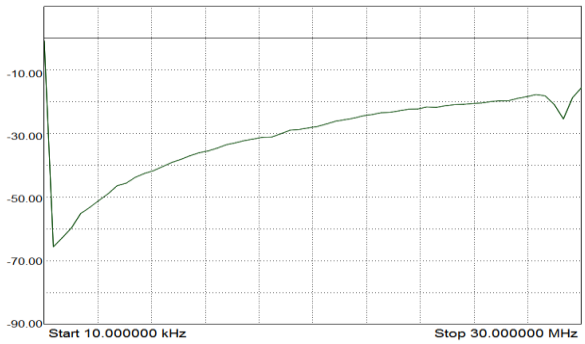
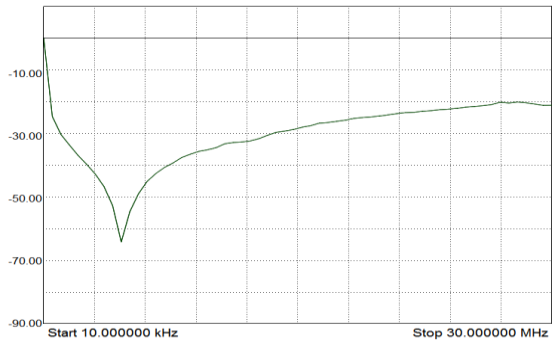
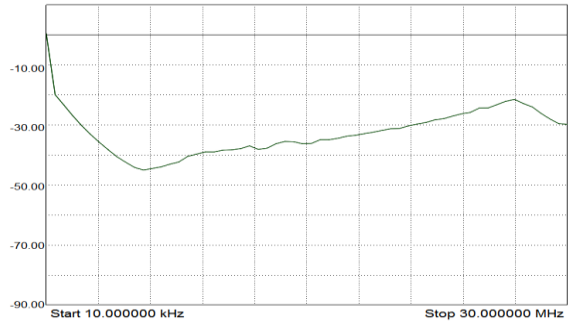
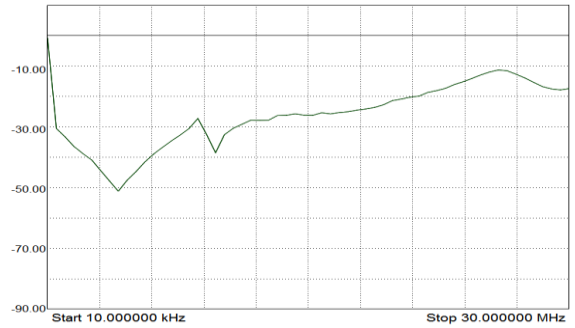
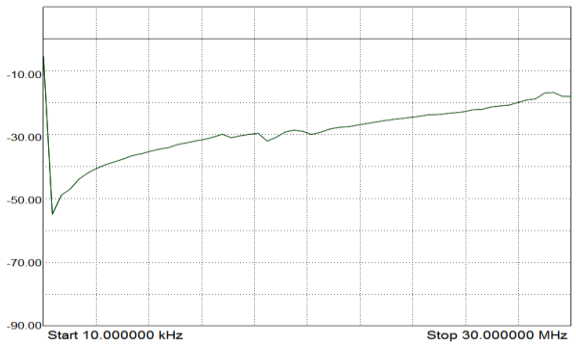
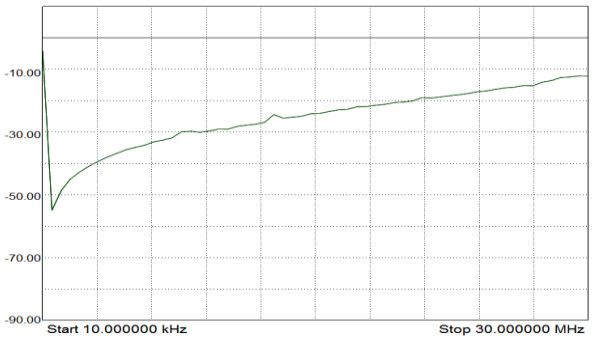
10A



15A

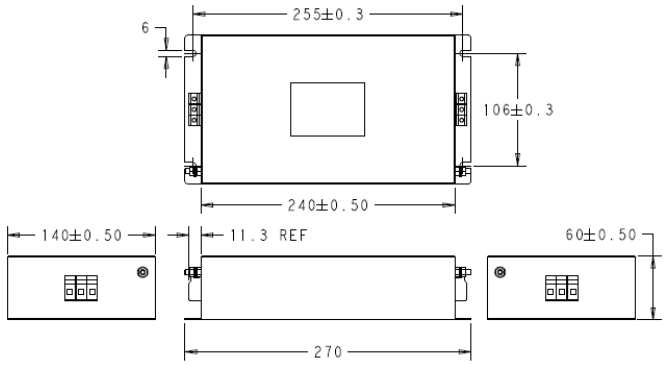
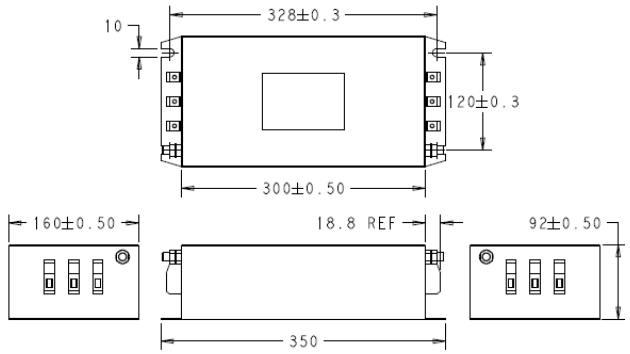
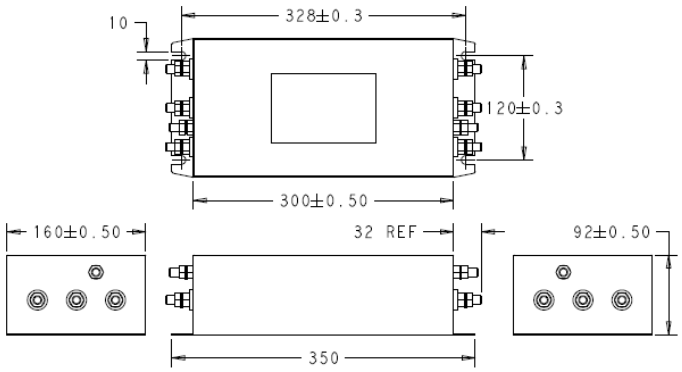
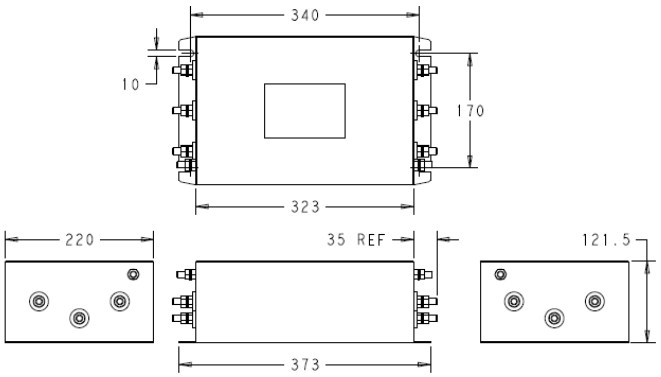


KEH SERIES

20A	40A
	
60A	**80A**
	
100A	**150A**
	
200A	**250A**
	

KEH SERIES

Case Dimensions

10A to 60A Shock Proof Types	80A to 100A Shock Proof Types
	
150A Nut & Bolt Type	**200A to 250A Nut & Bolt Types**
	

All dimensions in mm; Tolerances according: ISO2768-m

KEH SERIES

How to Order

