

High Performance Compact Power Line Filter

RK Series



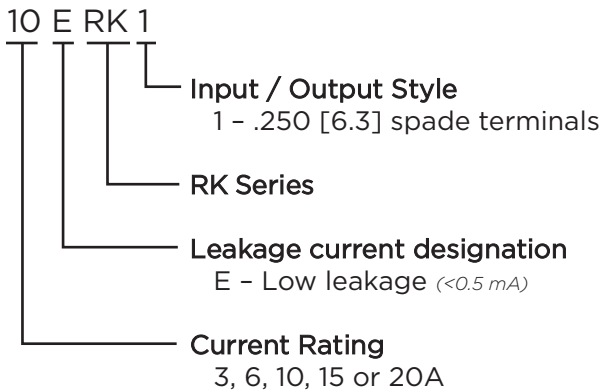
UL Recognized
CSA Certified
VDE Approved



RK Series

- Compact
- Single stage
- Chassis mount
- Significant differential mode performance
- Suitable for industrial machinery
- Low input leakage current makes it suitable for portable equipment

Ordering Information



Available Part Numbers

3ERK1	6ERK1
10ERK1	15ERK1
20ERK1	

Specifications

Maximum leakage current each Line to Ground:
 @ 120 VAC 60 Hz: 0.16 mA
 @ 250 VAC 50 Hz: 0.26 mA

Hipot rating (one minute):
 Line to Ground: 2250 VDC
 Line to Line: 1450 VDC

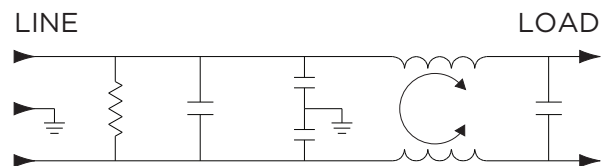
Rated Voltage (max): 250 VAC

Operating Frequency: 50/60 Hz

Rated Current: 3 to 20A

Operating Ambient Temperature Range (at rated current I_r): -10°C to +40°C
 In an ambient temperature (T_a) higher than +40°C the maximum operating current (I_o) is calculated as follows: $I_o = I_r \sqrt{(85-T_a)/45}$

Electrical Schematic

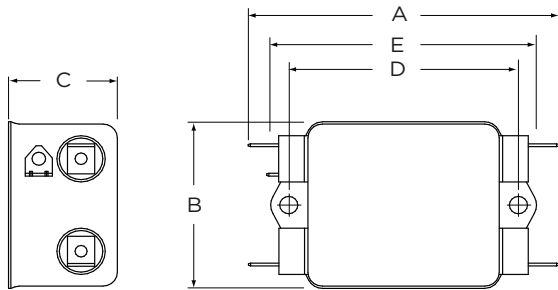


High Performance Compact Power Line Filter *(continued)*

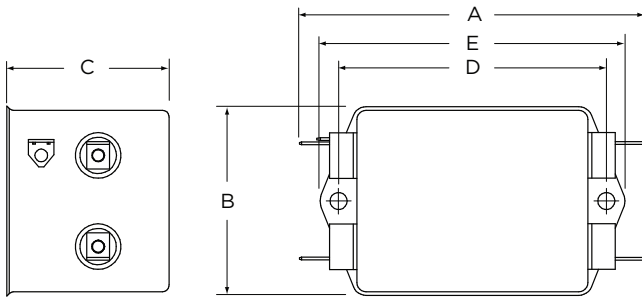
RK Series

Case Styles

RK1 (3 & 6A)



RK1 (10, 15 & 20A)



Case Dimensions

Part No.	A (max)	B (max)	C (max)	D $\pm .015$ $\pm .38$	E (max)
3ERK1	3.35 <i>85.09</i>	1.82 <i>46.23</i>	1.16 <i>29.46</i>	2.38 <i>74.68</i>	2.78 <i>70.61</i>
6ERK1	3.35 <i>85.09</i>	1.82 <i>46.23</i>	1.28 <i>32.51</i>	2.38 <i>74.68</i>	2.78 <i>70.61</i>
10ERK1, 15ERK1, 20ERK1	3.85 <i>97.79</i>	2.07 <i>52.58</i>	1.78 <i>45.21</i>	2.94 <i>74.67</i>	3.35 <i>85.09</i>

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RFI Power Line Filters

High Performance Compact Power Line Filter *(continued)*

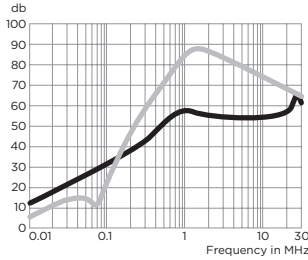
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Performance Data

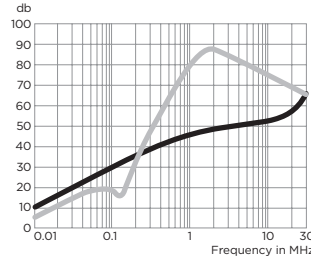
Typical Insertion Loss

Measured in closed 50 Ohm system

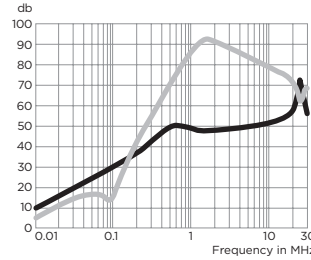
3RK



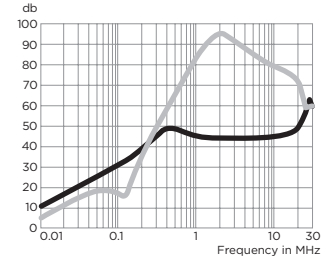
6RK



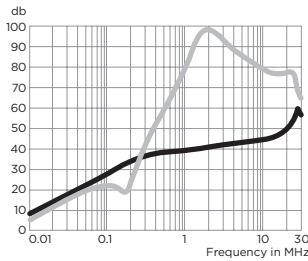
10RK



15RK



20RK



— Common Mode / Asymmetrical (L-G)
— Differential Mode / Symmetrical (L-L)

Minimum Insertion Loss

Common Mode / Asymmetrical (Line to Ground)

Current Rating	Frequency – MHz									
	.05	.10	.15	.5	1	2	5	10	20	30
3A	21	27	30	43	49	50	50	48	50	49
6A	19	29	29	37	43	44	48	46	50	48
10A	20	27	31	45	45	44	46	47	53	44
15A	21	28	31	45	43	41	42	42	47	57
20A	19	25	29	34	36	38	40	41	43	52

Differential Mode / Symmetrical (Line to Line)

Current Rating	Frequency – MHz									
	.05	.10	.15	.5	1	2	5	10	20	30
3A	9	20	35	67	78	78	72	66	61	60
6A	14	14	13	59	74	80	72	68	61	60
10A	14	12	30	65	80	84	78	70	60	50
15A	15	13	20	61	76	88	70	72	64	50
20A	16	19	16	54	74	90	74	67	61	54