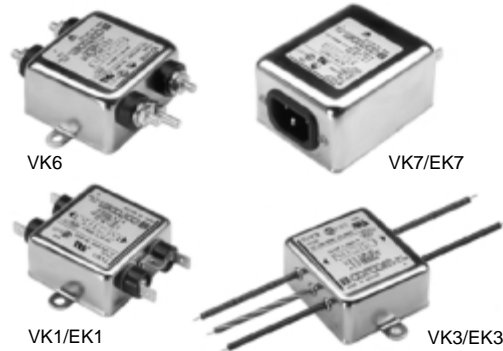


K Series



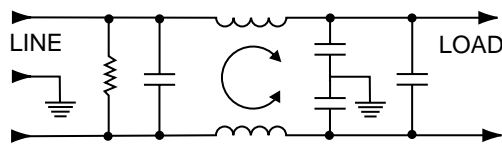
UL Recognized
CSA Certified
VDE Approved



K Series

The K series RFI power line filters are general purpose common-mode and differential-mode filters. They are effective in the control of line-to-line as well as line-to-ground RFI interference. The K series RFI filters are particularly suited in applications where pulsed, continuous and/or intermittent RFI interference is present. The EK models meet the very low leakage current requirements of VDE portable equipment, and (120 Volt) UL544 non-patient medical equipment.

Electrical Schematic



Resistor location for reference only.

Specifications

Maximum leakage current, each line-to-ground

	<u>VK Models</u>	<u>EK Models</u>
@ 120 VAC 60 Hz:	.5 mA	.21 mA
@ 250 VAC 50 Hz:	1.0 mA	.36 mA

Hipot rating (one minute):

line-to-ground	2250 VDC
line-to-line	1450 VDC

Operating frequency:

50/60 Hz

Rated voltage (max.):

250 VAC

Rated current:

1VK/1EK	1A
2VK/2EK	2A
3VK/3EK	3A
5VK/5EK	5A
10VK/10EK	10A
10VK6	10A

Minimum insertion loss in dB:

Line-to-ground in 50 ohm circuit

Current Rating	Frequency-MHz					
	.15	.5	1	5	10	30
VK Models						
1A, 3A	15	30	38	50	50	50
2A, 5A, 10A	6	19	28	42	45	50
EK Models						
1A, 3A	15	29	35	45	45	50
2A, 5A, 10A	8	19	25	38	40	45

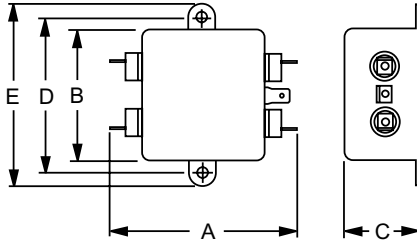
Line-to-line in 50 ohm circuit

Current Rating	Frequency-MHz					
	.15	.5	1	5	10	30
VK, EK Models						
1A, 3A	—	—	48	55	50	35
2A, 5A, 10A	—	—	30	50	30	30

K Series

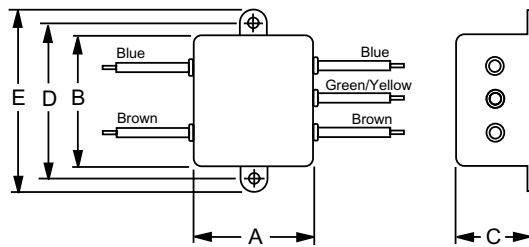
Case Styles

K1



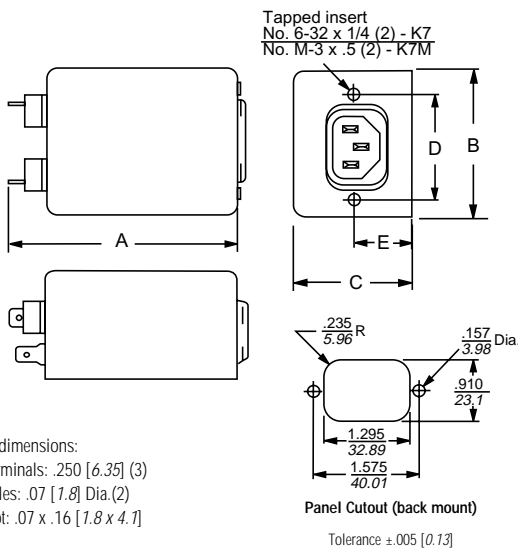
Typical dimensions:
 Terminals: .250 [6.35] (5)
 Slot: .07 x .16 [1.8 x 4.1]
 Holes: .07 [1.8] Dia. (4)
 Mounting holes: .188 [4.78] Dia. (2)

K3



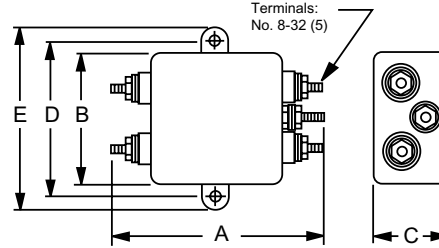
Typical dimensions:
 Wire leads: 4.0 [101.6] Min.
 Mounting holes: .188 [4.78] Dia. (2)

K7 & K7M



Typical dimensions:
 Terminals: .250 [6.35] (3)
 Holes: .07 [1.8] Dia. (2)
 Slot: .07 x .16 [1.8 x 4.1]

10VK6



Typical dimensions:
 Mounting holes: .188 [4.78] Dia. (2) Torque 18±2 in.lb

Case Dimensions

Part No.	A (max)	B (max)	C (max)	D $\pm .015$ $\pm .38$	E (max)
1VK1, 1EK1,	3.1	2.07	0.91	2.375	2.81
2VK1, 2EK1	78.7	52.6	23.1	60.33	71.4
1VK3, 1EK3,	1.81	2.07	0.91	2.375	2.81
2VK3, 2EK3	46.0	52.6	23.1	60.33	71.4
3VK1, 3EK1,	3.10	2.07	1.16	2.375	2.81
5VK1, 5EK1	78.7	52.6	29.5	60.33	71.4
3VK3, 3EK3,	1.81	2.07	1.16	2.375	2.81
5VK3, 5EK3	46.0	52.6	29.5	60.33	71.4
3VK7, 3VK7M,	3.21	2.25	1.28	1.575	0.63
3EK7, 3EK7M	81.5	57.2	32.5	40.01	16.0
5VK7, 5VK7M,	3.21	2.25	1.28	1.575	0.63
5EK7, 5EK7M	81.5	57.2	32.5	40.01	16.0
10VK1,	3.35	2.07	1.16	2.375	2.81
10EK1	85.1	52.6	29.5	60.33	71.4
10VK3,	2.07	2.07	1.16	2.375	2.81
10EK3	52.6	52.6	29.5	60.33	71.4
10VK6	3.46	2.07	1.16	2.375	2.81
	87.9	52.6	29.5	60.33	71.4
10VK7, 10VK7M,	3.71	2.25	1.28	1.575	0.63
10EK7, 10EK7M	94.2	57.2	32.5	40.01	16.0

† ±.02 [±.5]

Part Numbers

1VK1	10VK1	3EK7M
1VK3	10VK3	5EK1
2VK1	10VK6	5EK3
2VK3	10VK7	5EK7M
3VK1	10VK7M	10EK1
3VK3	1EK1	10EK3
3VK7	1EK3	10EK7
3VK7M	2EK1	10EK7M
5VK1	2EK3	
5VK3	3EK1	
5VK7	3EK3	
5VK7M	3EK7	

Line Cord No. GA400

K Series



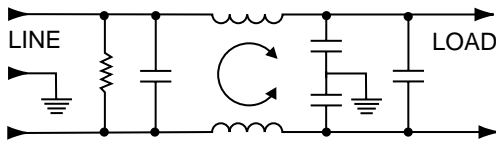
UL Recognized
CSA Certified
VDE Approved



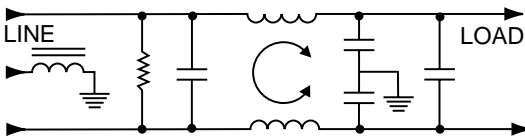
K Series

The K series RFI power line filters are general purpose common-mode and differential-mode filters. They are effective in the control of line-to-line as well as line-to-ground RFI interference. The K series RFI filters are particularly suited in applications where pulsed, continuous and/or intermittent RFI interference is present. The EK models meet the very low leakage current requirements of VDE portable equipment, and (120 Volt) UL544 non-patient medical equipment.

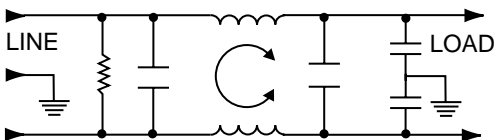
Electrical Schematics



30VK6C Model (Inductor in Ground Line)



60VK6 Model



Resistor location for reference only.

Specifications

Maximum leakage current, each line-to-ground

	VK Models	EK Models
@ 120 VAC 60 Hz:	.5 mA	.21 mA
@ 250 VAC 50 Hz:	1.0 mA	.36 mA

Hipot rating (one minute):

line-to-ground	2250 VDC
line-to-line	1450 VDC

Operating frequency:

50/60 Hz

Rated voltage (max.):

250 VAC

Rated current:

20VK/20EK	20A
30VK6/30VK6C	30A
40VK6/40VK7C	40A
60VK6	60A

Minimum insertion loss in dB:

Line-to-ground in 50 ohm circuit

Current Rating	Frequency—MHz					
	.15	.5	1	5	10	30
VK Models						
20A, 30A, 40A	6	19	28	42	45	50
60A	6	22	28	32	39	35
EK Models						
20A	8	19	25	38	40	45

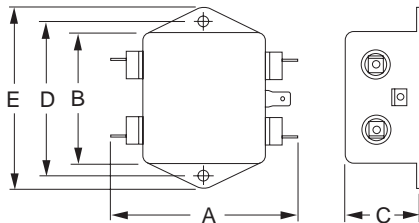
Line-to-line in 50 ohm circuit

Current Rating	Frequency—MHz					
	.15	.5	1	5	10	30
VK Models						
20A	6	6	30	50	30	30
30A	2	40	60	65	57	55
40A	2	40	60	65	57	55
60A	13	49	67	57	53	53
EK Models						
20A, 30A	6	6	30	50	30	30

K Series

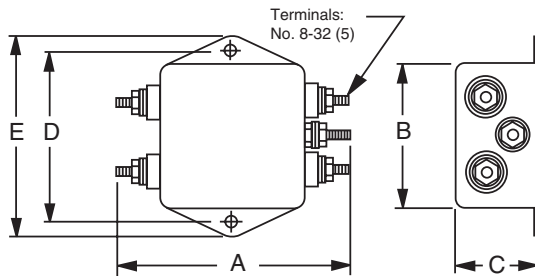
Case Styles

20EK1/20VK1



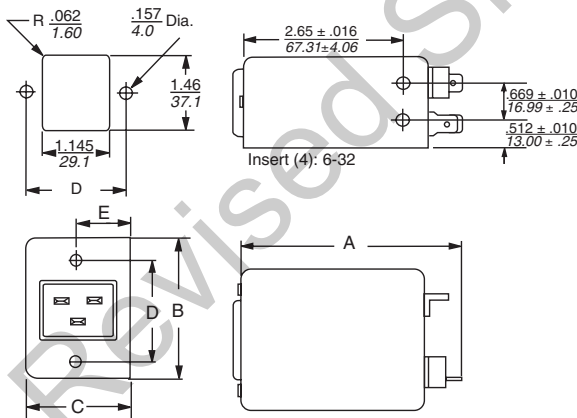
Typical dimensions:
 Terminals: .250 [6.35] (5)
 Slot: .07 x .16 [1.8 x 4.1]
 Holes: .07 [1.8] Dia. (4)
 Mounting holes: .188 [4.78] Dia. (2)

20VK6



Typical dimensions:
 Mounting holes: .188 [4.78] Dia. (2)
 Torque: 18 ± 2 in.lb

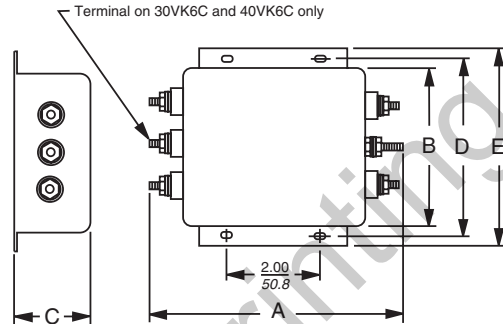
20VK7 (with metric insert)



Part Numbers

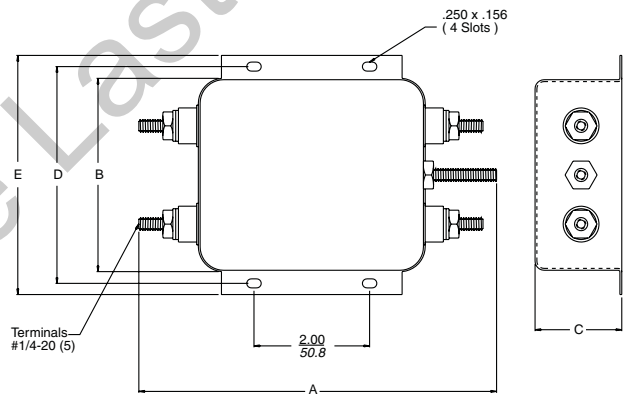
20VK1	30VK6
20EK1	30VK6C
20VK6	40VK6
20VK7	40VK6C
	60VK6

30VK6 & 30VK6C, 40VK6 & 40VK6C



Typical dimensions:
 Terminals: No. 8-32 (5)
 Slots: .250 [6.35] x .156 [3.96] (4)
 Torque: 18 ± 2 in. lb.
 Mounting holes: .188 [4.78] Dia. (2)

60VK6



Case Dimensions

Part No.	A (max)	B (max)	C (max)	D (±.015 ±.38)	E (max)
20VK1,	3.35	2.56	1.53	2.938	3.35
20EK1	<i>85.1</i>	<i>65.0</i>	<i>38.9</i>	<i>74.63</i>	<i>85.1</i>
20VK6	3.46	2.56	1.53	2.938	3.35
	<i>87.9</i>	<i>65.0</i>	<i>38.9</i>	<i>74.63</i>	<i>85.1</i>
20VK7	3.8	2.28	1.78	1.575	.846 ± .010
	<i>96.52</i>	<i>57.9</i>	<i>50.8</i>	<i>40.39</i>	<i>21.49 ± .25</i>
30VK6	5.34	3.38	1.53	3.750	4.20
	<i>135.6</i>	<i>85.9</i>	<i>38.9</i>	<i>95.25</i>	<i>106.7</i>
30VK6C	5.34	3.38	1.53	3.750	4.20
	<i>135.6</i>	<i>85.9</i>	<i>38.9</i>	<i>95.25</i>	<i>106.7</i>
40VK6	5.34	3.38	1.53	3.750	4.20
	<i>135.6</i>	<i>85.9</i>	<i>38.9</i>	<i>95.25</i>	<i>106.7</i>
40VK6C	5.34	3.38	1.53	3.750	4.20
	<i>135.6</i>	<i>85.9</i>	<i>38.9</i>	<i>95.25</i>	<i>106.7</i>
60VK6	6.189	3.344	1.50	3.75	4.136
	<i>157.2</i>	<i>84.94</i>	<i>38.1</i>	<i>95.25</i>	<i>105.05</i>