General Purpose RFI Power Line Filters Best Buy for High Impedance Load 1, 2, 3, 5, 10A Models



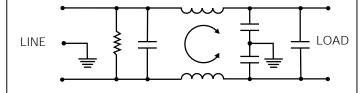
UL Recognized CSA Certified VDE Approved SEV Approved\*

# VK1/EK1 VK3/EK3 10VK6 VK7/EK7

## **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 SEV, VDE portable equipment, and (120 Volt) UL544 nonpatient medical equipment.

# **Electrical Schematic**



Resistor location for reference only.

# **Specifications**

	VK Models	EK Models
Maximum leakage current	,	
each line-to-ground		
@ 120 VAC 60 Hz:	.4 mA	.21 mA
@ 250 VAC 50 Hz:	.7 mA	.36 mA

Hipot rating (one minute):

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

Operating frequency: 50/60 Hz

Rated voltage: 120/250 VAC

Rated current:	@120 VAC	@ 250 VAC
1VK/1EK	1A	1A
2VK/2EK	2A	2A
3VK/3EK	3A	3A
5VK/5EK	5A	5A
10VK/10EK	10A	8A
10VK6	10A	8A

### Minimum insertion loss in dB:

Line-to-ground in 50 ohm circuit

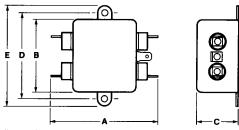
Current		Fr	eque	ncy-N	ЛHz	
Rating	.15	.5	1	5	10	30
VK Models						
1A, 3A	15	30	38	50	50	50
2A, 5A, 10A	6	19	28	42	45	50
EK Models						
1A, 3A	15	29	35	45	45	50
2A, 5A, 10A	8	19	25	38	40	45

# Line-to-line in 50 ohm circuit

Current		F	reque	ncy-N	ЛHz	
Rating	.15	.5	1	5	10	30
VK, EK Models						
1A, 3A	_	_	48	55	50	35
2A, 5A, 10A	-	-	30	50	30	30

<sup>\*</sup> EK models only.



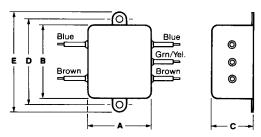


Typical dimensions

Terminals:  $\frac{.250}{6.35}$ (5) Holes:  $\frac{.07}{1.8}$  Dia.(4) Slot:  $\frac{.07 \times .16}{1.8 \times 4.1}$ 

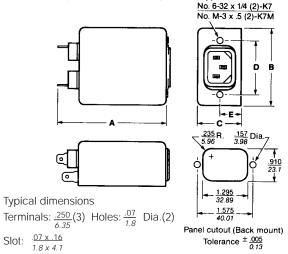
Mounting holes:  $\frac{.188}{4.78}$  Dia. (2)

**K**3



Typical dimensions Wire leads:  $\frac{4.0}{101.6}$  Min. Mounting holes:  $\frac{188}{4.78}$  Dia. (2)

K7 & K7M (with metric insert)



Tapped insert

10VK6 Terminals: 7 <u>o</u>-Typical dimensions
Mounting holes:  $\frac{.188}{4.78}$  Dia. (2)

Libertyville, IL (847) 680-7400 \_

Torque 18±2 in. lb.

## **Case Dimensions**

Metric shown in italics.

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

 $\dot{\tau} = \frac{\pm .02}{\pm .5}$ 

# **Pricing**

Consult your local Corcom sales representative for pricing.

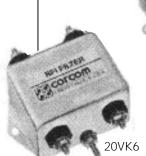
Part No.	Part No.	Part No.
1VK1	10VK3	5EK3
1VK3	10VK6	5EK7
2VK1	10VK7	5EK7M
2VK3	10VK7M	10EK1
3VK1	1EK1	10EK3
3VK3	1EK3	10EK7
3VK7	2EK1	10EK7M
3VK7M	2EK3	
5VK1	3EK1	
5VK3	3EK3	
5VK7	3EK7	
5VK7M	3EK7M	Line Cord:
10VK1	5EK1	No. GA400



General Purpose RFI Power Line Filters Best Buy for High Impedance Load 20, 30A Models



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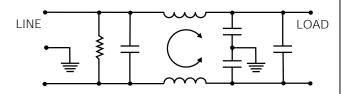




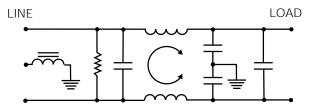
# **K Series**

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 SEV, VDE portable equipment, and (120 Volt) UL544 nonpatient medical equipment.

# **Electrical Schematics**



**30VK6C Model** (Inductor in Ground Line)



Resistor location for reference only.

\*EK Models only

# **Specifications**

_	VK Models	EK Models
Maximum leakage current	ı	
each line-to-ground		
@ 120 VAC 60 Hz:	.4 mA	.21 mA
@ 250 VAC 50 Hz:	.7 mA	.36 mA

Hipot rating (one minute):

line-to-ground 2250 VDC line-to-line 1450 VDC Operating frequency: 50/60 Hz

20VK1/EK1

Rated voltage: 120/250 VAC

 Rated current:
 @ 120 VAC
 @ 250 VAC

 20VK/20EK
 20A
 16A

 30VK6/30VK6C
 30A
 25A

**Minimum** insertion loss in dB: Line-to-ground in 50 ohm circuit

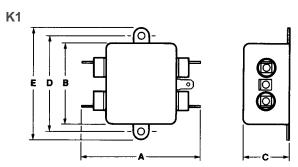
Current		Fr	equei	ncy-N	1Hz	
Rating	.15	.5	1	5	10	30
VK Models						
20A, 30A, 40A	6	19	28	42	45	50
EK Models						
20A	8	19	25	38	40	45

# Line-to-line in 50 ohm circuit

Current	Frequency-MHz					
Rating	.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
EK Models						
20A, 30A	6	6	30	50	30	30



# Case Styles Metric shown in italics.

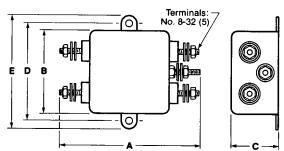


Typical dimensions

Terminals:  $\frac{.250}{6.35}$  (5) Holes:  $\frac{.07}{1.8}$  Dia.(4) Slot:  $\frac{.07 \times .16}{1.8 \times 4.1}$ 

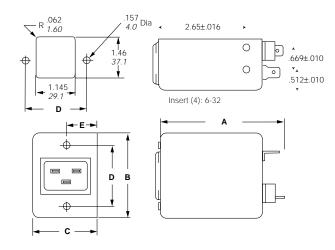
Mounting holes:  $\frac{.188}{4.78}$  Dia. (2)

## 20VK6 (with metric insert)



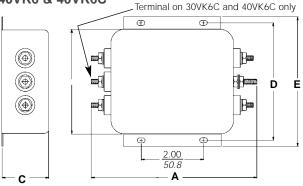
Typical dimensions Mounting holes:  $\frac{.188}{4.78}$  Dia. (2) Torque: 18  $\pm$  2 in.lb.

## 20VK7 (with metric insert)



# Case Style Metric shown in italics.

# 30VK6 & 30VK6C, 40VK6 & 40VK6C



Terminals: No. 8-32 (5)

Slots:  $\frac{.250}{6.35}$  x  $\frac{.156}{3.96}$ 

Mounting holes:  $\frac{.188}{4.78}$  Dia. (2) Torque: 18 ± 2 in.lb.

# **Case Dimensions**

Metric shown in italics.

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	85.1		38.9	74.63	85.1
20VK6	3.46	2.56 65.0	1.53 38.9	2.938 74.63	3.35 85.1
20VK7	3.8	2.28	1.78	1.575	.846 ± .01
	96.52	57.91	50.8	40.39	21.49 ± .25
30VK6	5.34 135.6	3.38	1.53 38.9	3.75 95.25	<u>4.2</u> 106.7
30VK6C	5.34	3.38	1.53	3.75	<u>4.2</u>
	135.6	85.9	38.9	95.25	106.7
40VK6	5.34	3.38	1.53	3.75	<u>4.2</u>
	135.6	85.9	38.9	95.25	106.7
40VK6C	5.34	3.38	1.53	3.75	4.2
	135.6	85.9	38.9	95.25	106.7

# **Pricing**

Consult your local Corcom sales representative for pricing.

Part No.	Part No.	
20VK1	30VK6	
20EK1	30VK6C	
20VK6	40VK6	
20VK7	40VK6C	