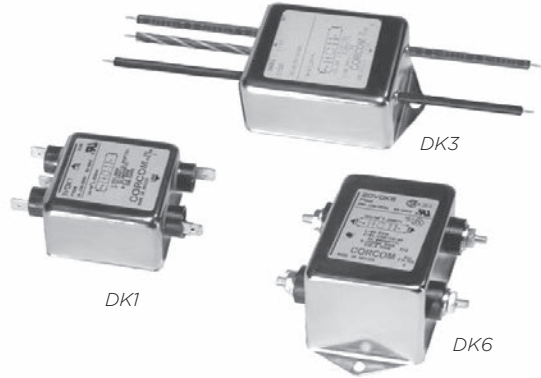


Enhanced Differential Mode Performance K Series RFI Line Filters

DK Series



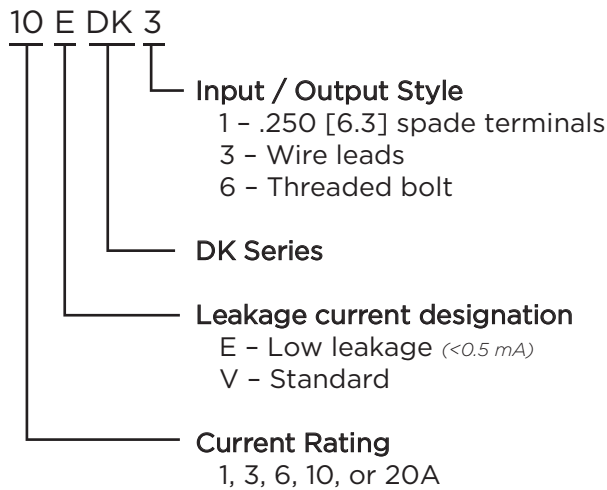
UL Recognized
CSA Certified
VDE Approved



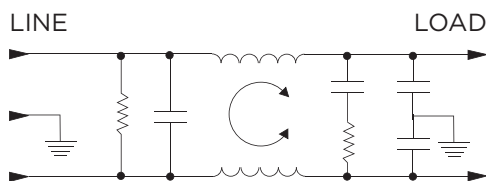
DK Series

- Higher performance Line to Line attenuation than the K Series
- E version meets the low leakage current requirements of VDE portable equipment and non-patient care equipment
- V version features same high performance with more cost-effective design

Ordering Information



Electrical Schematic



Specifications

Maximum leakage current each Line to Ground:

| | VDK Models | EDK Models |
|------------------|------------|------------|
| @ 120 VAC 60 Hz: | .4 mA | .22 mA |
| @250 VAC 50 Hz: | .7 mA | .38 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: 1 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: $I_o = I_r \sqrt{(85-T_a)/45}$

Available Part Numbers

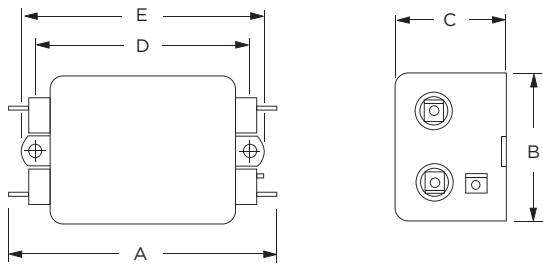
| | |
|--------|--------|
| 1VVK1 | 1EDK1 |
| 1VVK3 | 1EDK3 |
| 3VVK1 | 3EDK1 |
| 3VVK3 | 3EDK3 |
| 6VVK1 | 6EDK1 |
| 6VVK3 | 6EDK3 |
| 10VVK1 | 10EDK1 |
| 10VVK3 | 10EDK3 |
| 20VVK1 | 20EDK1 |
| 20VVK6 | |

Enhanced Differential Mode K Series RFI Power Line Filters *(continued)*

DK Series

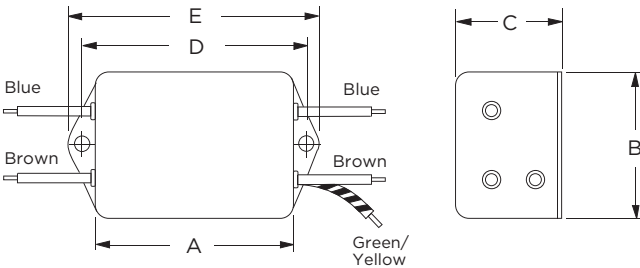
Case Styles

VDK1 / EDK1



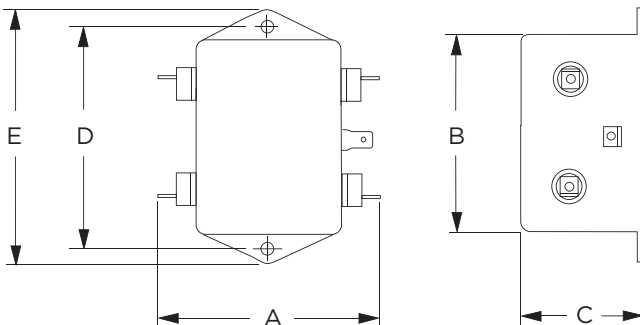
Typical Dimensions:
 Line/Load Terminals (4): .250 [6.3] with .07 [1.8] Dia. hole
 Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot
 Mounting Holes (2): .188 [4.75] Dia.

VDK3 / EDK3



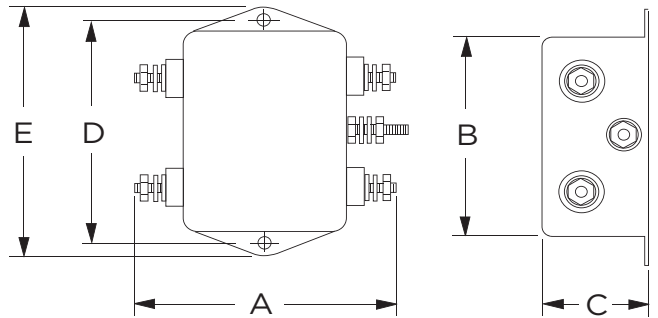
Typical Dimensions:
 Wire leads (5): 4.0 [101.6] Min., AWG18 (AWG16 for 10A)
 Mounting Holes (2): .188 [4.75] Dia.

20VVK1 / 20EDK1



Typical Dimensions:
 Line/Load Terminals (4): .250 [6.3] with .07 [1.8] Dia. hole
 Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot
 Mounting Holes (4): .188 [4.75] Dia.

20VVK6



Typical Dimensions:
 Terminals (5): 8-32, Torque 18 lbf-in. [2.03 N-m] max. ± 2 [.22]
 Mounting Holes (2): .188 [4.75] Dia.

Case Dimensions

| Part No. | A (max) | B (max) | C (max) | D $\pm .015$ $\pm .38$ | E (max) |
|-------------------------------|---------------------|---------------------|---------------------|------------------------------|---------------------|
| 1VVK1, 1EDK1 | 3.35 85.1 | 2.07 52.6 | 1.16 29.5 | 2.375 60.33 | 2.81 71.4 |
| 1VVK3, 1EDK3 | 2.07 52.6 | 2.07 52.6 | 1.16 29.5 | 2.375 60.33 | 2.81 71.4 |
| 3VVK1, 3EDK1, 6VVK1, 6EDK1 | 3.85 97.8 | 2.07 52.6 | 1.16 29.5 | 2.938 74.63 | 3.35 85.1 |
| 3VVK3, 3EDK3, 6VVK3, 6EDK3 | 2.56 65.0 | 2.07 52.6 | 1.16 29.5 | 2.938 74.63 | 3.35 85.1 |
| 10VVK1, 10EDK1 | 3.85 97.8 | 2.07 52.6 | 1.32 33.5 | 2.938 74.63 | 3.35 85.1 |
| 10VVK3, 10EDK3 | 2.57 65.3 | 2.07 52.6 | 1.32 33.5 | 2.938 74.63 | 3.35 85.1 |
| 20VVK1, 20EDK1 | 3.85 97.8 | 2.58 65.5 | 1.78 45.2 | 2.938 74.63 | 3.35 85.1 |
| 20VVK6 | 3.46 87.9 | 2.58 65.5 | 1.78 45.2 | 2.938 74.63 | 3.35 85.1 |

Enhanced Differential Mode K Series RFI Power Line Filters *(continued)*

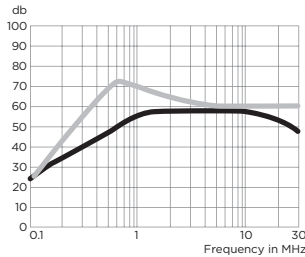
DK Series

Performance Data

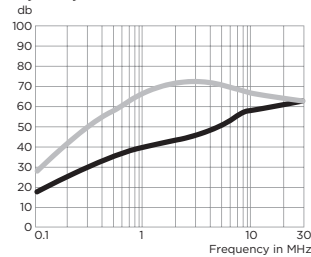
Typical Insertion Loss

Measured in closed 50 Ohm system

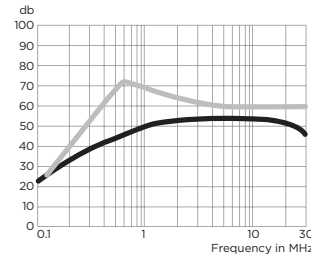
1 & 3VDK



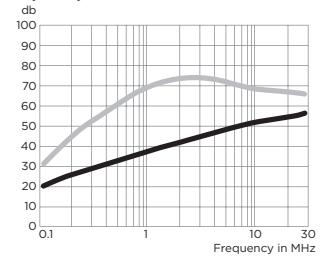
6, 10, 20VDK



1 & 3EDK



6, 10, 20EDK



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

Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

| Current Rating | Frequency – MHz | | | | | |
|-------------------|-----------------|----|----|----|----|----|
| | .15 | .5 | 1 | 5 | 10 | 30 |
| VDK Models | | | | | | |
| 1A, 3A | 18 | 30 | 40 | 48 | 48 | 40 |
| 6A, 10A, 20A | 10 | 22 | 30 | 39 | 44 | 50 |
| EDK Models | | | | | | |
| 1A, 3A | 17 | 27 | 33 | 45 | 45 | 40 |
| 6A, 10A, 20A | 10 | 19 | 25 | 34 | 40 | 46 |

Differential Mode / Symmetrical (Line to Line)

| Current Rating | Frequency – MHz | | | | | |
|-----------------------------|-----------------|----|----|----|----|----|
| | .15 | .5 | 1 | 5 | 10 | 30 |
| VDK & EDK Models | | | | | | |
| 1A, 3A | 18 | 47 | 62 | 60 | 50 | 45 |
| 6A, 10A, 20A | 20 | 43 | 55 | 65 | 60 | 55 |