20, 30 and 40 Amp High Performance K Series RFI Power Line Filters



UL Recognized CSA Certified VDE Approved

SK Series

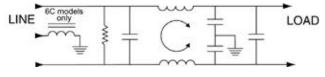
This series of RFI filters was designed to reduce conducted noise to acceptable limits for equipment that must comply with the FCC specifications in the USA and CISPR specifications in Europe.

The SK (Super K) series filters offer significantly higher performance than the K series, which makes this series particularly suited for equipment with high line-to-ground as well as line-to-line conducted emissions.

The ESK models meet the very low leakage current requirements of SEV, VDE portable equipment and (120 Volt) UL544 nonpatient medical equipment.

Models ESK6C and VSK6C additionally incorporate a separate ground-circuit inductor to isolate the equipment chassis from power line ground at RF frequencies.

Electrical Schematic



Resistor location for reference only.

#COMCOM





Specifications

| | VSK Models | ESK Models |
|-------------------------|------------|------------|
| Maximum leakage current | , | |
| each line-to-ground | | |
| @ 120 VAC 60 Hz: | 0.75 mA | 0.3 mA |
| @ 250 VAC 50 Hz: | 1.25 mA | 0.5 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

 20ESK/20VSK
 20A
 16A

 30ESK/30VSK
 30A
 25A

 40VSK
 40A
 36A

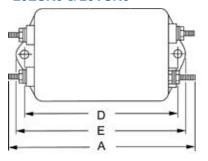
Minimum insertion loss in dB: Line-to-ground in 50 ohm circuit

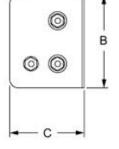
| Frequency MHz | VSK 20A | VSK 30A | VSK 40A | ESK 20A | ESK 30A |
|---|---|---|---|---|---|
| .01 .08 .10 .15 .5 .1 5 | 7 23 25 29 43 44 48 48 | 2 13 14 15 27 31 46 51 39 | 2 15 18 22 40 43 45 50 30 | 7 22 24 28 35 38 45 45 | 2 13 15 15 27 31 40 41 36 |

Line-to-line in 50 ohm circuit

| Frequency MHz | VSK 20A | VSK 30A | VSK 40A | ESK 20A | ESK 30A |
|------------------|----------------|-------------------|------------|----------------|----------------|
| .01 | 1 | 5 | 7 | 1 | 5 |
| .08 | 10 | 13 | 14 | 10 | 12 |
| .10 | 8 | 13 | 16 | 8 | 12 |
| .15 | 8 | 13 | 30 | 8 | 13 |
| .5 | 45 | 60 | 65 | 45 | 60 |
| 1 | 60 | 60 | 65 | 60 | 60 |
| 5 | 65 | 51 | 65 | 65 | 51 |
| 10 | 60 | 43 | 57 | 60 | 43 |
| 30 | 60 | 43 | 50 | 60 | 43 |

20ESK6 & 20VSK6

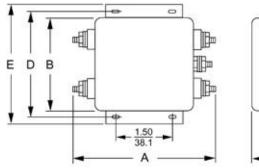


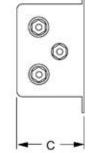


Holes: $\frac{.187}{4.75}$ Terminals: No. 8-32

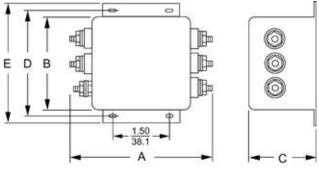
Torque 18 \pm 2 in.lb.

30ESK6 & 30VSK6



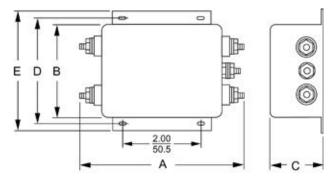


30ESK6C & 30VSK6C



Mounting slots: .250 x .156 6.35 x 3.96 Terminals: 10-32 Torque 27 \pm 3 in.lb.

40VSK6



Mounting slots: $\frac{.203 \times .156}{5.16 \times 3.96}$

Terminals: 10-32

Torque 27 \pm 3 in.lb.

Case Dimensions

Metric shown in italics.

| Part No. | A (max) | B (max) | C (max) | D ± .015 ± .38 | E (max) |
|----------|-------------|------------|------------|----------------------|------------|
| 20ESK6, | 5.09 | 2.25 | 1.78 | 4.063 | 4.46 |
| 20VSK6 | 127.3 | 57.2 | 45.2 | 103.2 | 129.3 |
| Part No. | A (max) | B (max) | C (max) | D ± .020 ± .51 | E (max) |
| 30ESK6, | <u>4.92</u> | 3.12 | 2.75 | 3.437 | <u>4.0</u> |
| 30ESK6C | 125.0 | 79.25 | 69.85 | 87.3 | 101.6 |
| 30VSK6, | <u>4.92</u> | 3.12 | 2.75 | 3.437 | <u>4.0</u> |
| 30VSK6C | 125.0 | 79.25 | 69.85 | 87.3 | 101.6 |
| 40VSK6 | 6.0 | 3.12 | 2.18 | 3.5 | 3.96 |
| | 152.4 | 79.25 | 55.4 | 88.9 | 100.6 |

Ordering Information

Consult your local Corcom sales representative for pricing.

| Available Part Numbers | |
|------------------------|---------|
| 20ESK6 | 30VSK6 |
| 20VSK6 | 30VSK6C |
| 30ESK6 | 40VSK6 |
| 30ESK6C | |
| Line Cord No. GA400 | |