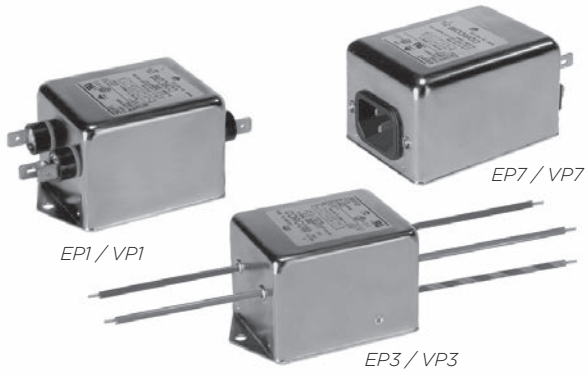
EP / VP Series

UL Recognized
CSA Certified
VDE Approved



EP & VP Series

- Dual stage filter offers high insertion loss
- Well suited for meeting CISPR 22 A and FCC Part 15J, Class B
- EP model meets very low leakage current requirements
- 7A and 12A versions offer optimum package size

Ordering Information

3 EP 7 M

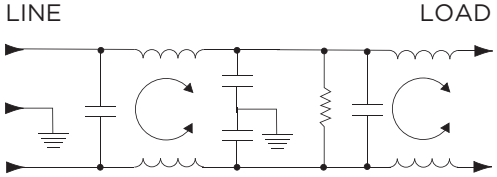
Suffix
M – Metric inserts *(style 7 only)*
Omit for standard or none

Input / Output Style
1 – .250 [6.3] spade terminals
3 – Wire leads
6 – Threaded bolt
7 – IEC inlet* *(line side)*
.250 [6.3] spade terminals
(load side)

EP / VP Series
EP – Low leakage *(<0.5 mA)*
VP – Standard *(20A only)*

Current Rating
3, 6, 7, 10, 12 or 20A

Electrical Schematic



*IEC 60320-1 C14 inlet mates with C13 connector

Specifications

Maximum leakage current each Line to Ground:

	VP Models	EP Models
@ 120 VAC 60 Hz:	.73 mA	.21 mA
@250 VAC 50 Hz:	1.27 mA	.36 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

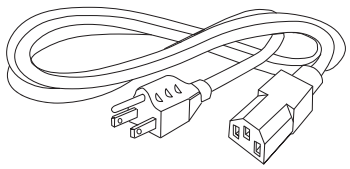
In an ambient temperature (T_a) higher than +40°C the maximum operating current (I_o) is calculated as follows: $I_o = I_r \sqrt{(85-Ta)/45}$

Available Part Numbers

3EP1	10EP1
3EP3	10EP3
3EP7	12EP1
3EP7M	12EP3
6EP1	20EP1
6EP3	20EP6
7EP1	20VP1
7EP3	20VP6

Accessories

GA400: NEMA 5-15P to IEC 60320-1 C-13 line cord



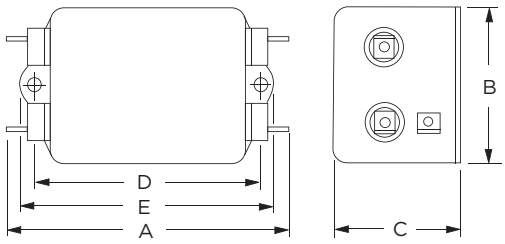
Dimensions are in inches and millimeters unless otherwise specified. Values in italics are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.

For email, phone or live chat, please go to **te.com/help**
corcom.com

EP / VP Series

Case Styles

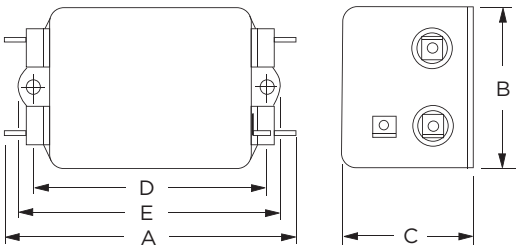
EP1 / VP1 (1-15A)



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 [4.78] Dia.

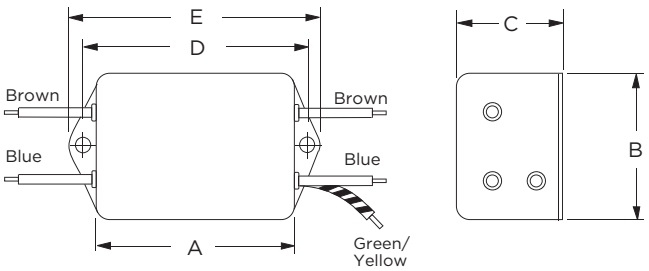
20EP1 / VP1



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 [4.78] Dia.

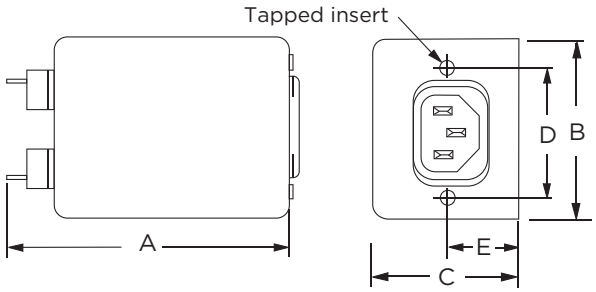
EP3



Typical Dimensions:

Wire leads (5):	4.0 [*101.6*] Min, AWG18
Mounting Holes (2):	.188 [4.78] Dia.

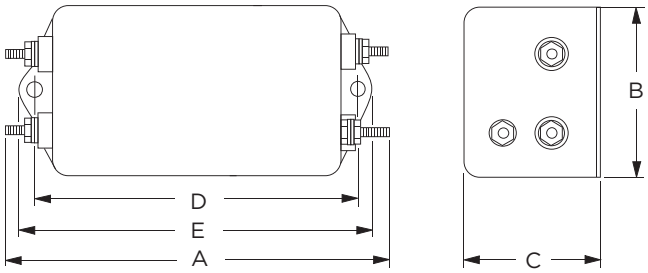
EP7 & EP7M



Typical Dimensions:

Load Terminals (2):	.250 [*6.3*] with .07 [*1.8*] Dia. hole
Line Inlet (1):	IEC 60320-1 C14
EP7 Tapped Inserts (2):	6-32 x 1/4
EP7M Tapped Inserts (2):	M3 x .5

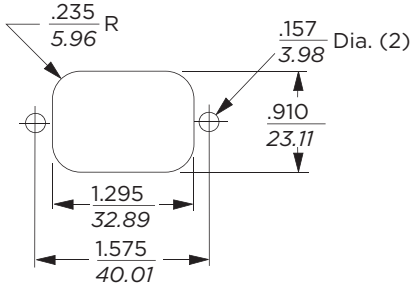
20EP6 / VP6



Typical Dimensions:

Terminals (5):	8-32, Torque 18 lbf-in. [*2.03* N-m] max. ± 2 [*.22*]
Mounting Holes (2):	.188 [4.78] Dia.

Recommended Panel Cutout



Tolerance ± .005 [0.13]

Dimensions are in inches and millimeters unless otherwise specified. Values in italics are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.

EP / VP Series

Case Dimensions

Part No.	A (max)	B (max)	C (max)	D ± .015 / ± .38	E (max)
3EP1	**3.85** *97.8*	**2.07** *52.6*	**1.78** *45.2*	**2.938** *74.63*	**3.35** *85.1*
3EP3	**2.56** *65.0*	**2.07** *52.6*	**1.78** *45.2*	**2.938** *74.63*	**3.35** *85.1*
3EP7/7M	**3.21** *81.5*	**2.25** *57.2*	**1.78** *45.2*	**1.575** *40.01*	**0.63*** *12.1**
6EP1	**6.62** *168.1*	**2.07** *52.6*	**2.28** *57.9*	**5.625** *142.88*	**6.03** *153.2*
6EP3	**5.33** *135.4*	**2.07** *52.6*	**2.28** *57.9*	**5.625** *142.88*	**6.03** *153.2*
7EP1	**4.79** *121.7*	**2.07** *52.6*	**1.53** *38.9*	**3.947** *10.25*	**4.33** *109.98*
7EP3	**3.50** *88.9*	**2.07** *52.6*	**1.53** *38.9*	**3.947** *100.25*	**4.33** *109.98*
10EP1	**6.62** *168.1*	**2.07** *52.6*	**2.78** *70.6*	**5.625** *142.88*	**6.03** *153.2*
10EP3	**5.35** *135.9*	**2.03** *52.6*	**2.78** *70.6*	**5.625** *142.88*	**6.03** *153.2*
12EP1	**4.97** *126.2*	**1.78** *45.2*	**1.78** *45.2*	**4.063** *103.20*	**4.46** *113.28*
12EP3	**3.624** *92.05*	**1.78** *45.2*	**1.78** *45.2*	**4.063** *103.20*	**4.46** *113.28*
20EP1/VP1	**4.95** *125.7*	**1.8** *45.7*	**1.8** *45.7*	**4.063** *103.20*	**4.47** *113.5*
20EP6/VP6	**5.09** *127.3*	**1.78** *45.2*	**1.78** *45.2*	**4.063** *103.20*	**4.46** *113.3*

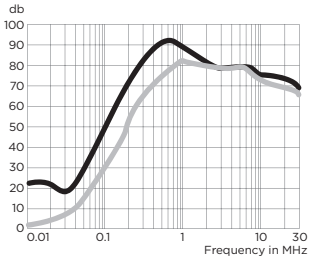
*±0.02 [0.5]

Performance Data

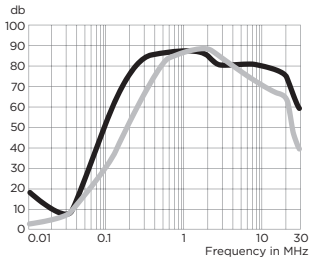
Typical Insertion Loss

Measured in closed 50 Ohm system

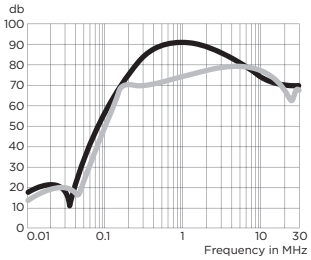
3EP



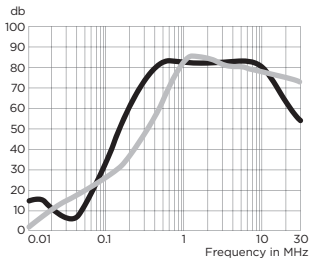
6EP



7EP

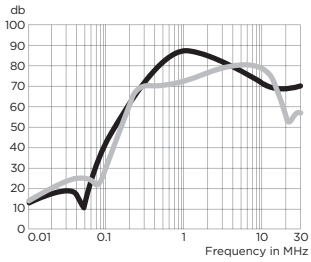


10EP

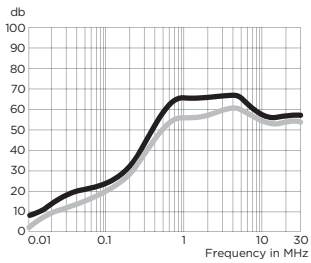


Typical Insertion Loss *(continued)*

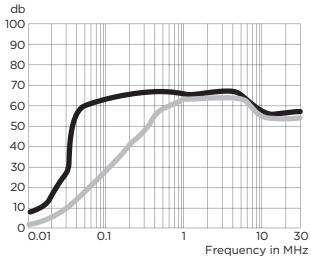
12EP



20EP



20VP



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 .01	.05	.15	.5	1	5	10	30
EP Models								
3A	12	10	58	65	65	66	62	30
6, 10A	10	15	60	65	65	65	60	35
7A	15	28	63	75	78	75	75	55
12A	12	7	52	68	70	70	70	45
20A	3	6	28	50	55	60	55	55
VP Models								
20A	3	2	42	60	65	65	55	55

Differential Mode / Symmetrical (Line to Line)

Current Rating	Frequency – MHz .01	.05	.15	.5	1	5	10	30
EP Models								
3A	1	3	36	65	65	65	58	58
6, 10A	1	3	30	65	65	65	65	35
7A	10	13	55	65	68	70	65	50
12A	11	7	43	70	70	70	65	45
20A	8	25	60	65	65	58	58	58
VP Models								
20A	8	-	25	60	65	65	58	58

Dimensions are in inches and millimeters unless otherwise specified. Values in italics are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.

For email, phone or live chat, please go to **te.com/help**
corcom.com