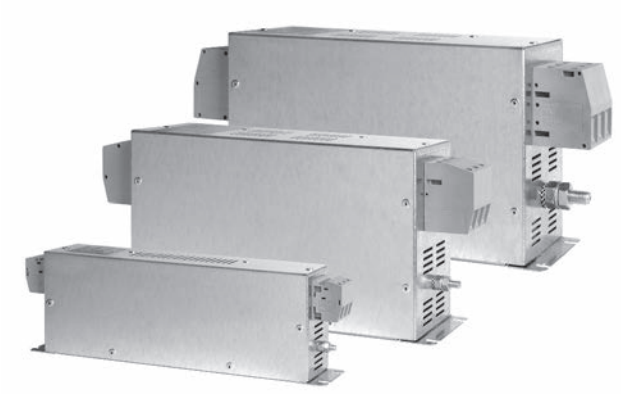
BCF Series

UL Recognized
VDE Approved



BCF Series

- Designed for universal applications
- Compact book-form design
- Low weight
- Insulated, high quality safety terminals for input and output
- Cost-effective design
- Good common and differential mode performance below 100kHz
- Applications include; 3-phase inverters, converters, variable speed motor drives and process automation equipment
- Touch safe terminals provide easy connections and prevent inadvertent contact for safety in the most demanding applications

Ordering Information

55 BCF 10

- 10 – Input / Output Style: 10 – Terminal block
- BCF – Series
- 55 – Current Rating: 7, 16, 30, 42, 55, 75, 100, 130 or 180A

Available Part Numbers

7BCF10	16BCF10
30BCF10	42BCF10
55BCF10	75BCF10
100BCF10	130BCF10
180BCF10	

Specifications

Maximum leakage current each Line to Ground*:
@ 277 VAC 50 Hz: 30 mA

**If 2 phases are interrupted, this leakage current may rise to a significantly higher level*

Hipot rating (one minute):
Line to Ground: 1850 VAC
Line to Line: 1850 VDC

Rated Voltage (max):
Phase to Phase: 480 VAC
Phase to Ground: 277 VAC

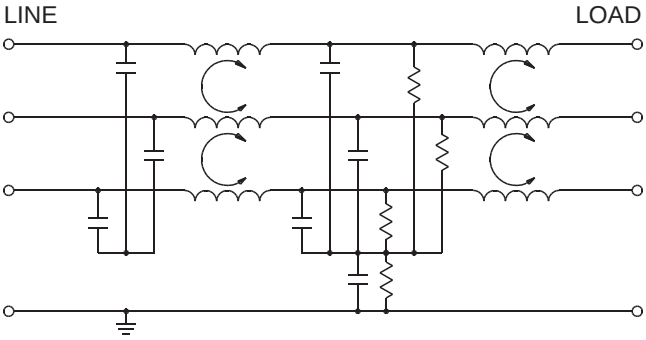
Operating Frequency: 50/60 Hz

Rated Current: 7 to 180A

Operating Ambient Temperature Range (at rated current I_r): -10°C to +50°C

In an ambient temperature (T_a) higher than +50°C the maximum operating current (I_o) is calculated as follows: $I_o = I_r \sqrt{(85-Ta)/35}$

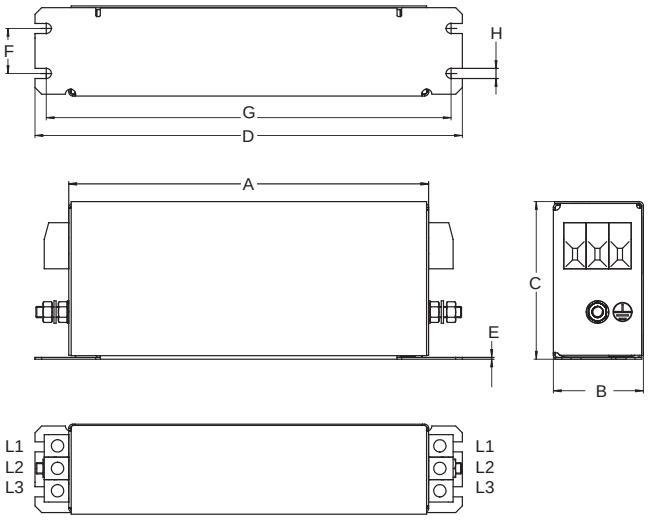
Electrical Schematic



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.

BCF Series

Case Style



Terminals

Part No.	Ground Terminals	Line/Load Terminals
7BCF10, 16BCF10	M5	4mm²
30BCF10	M5	10mm²
42BCF10	M6	10mm²
55BCF10	M6	16mm²
75BCF10	M6	25mm²
100BCF10, 130BCF10	M10	50mm²
180BCF10	M10	95mm²

Case Dimensions

Part No.	A (max.)	B (max.)	C (max.)	D (max.)	E (max.)	F (max.)	G (max.)	H (max.)
7BCF10	**6.30** *160.0*	**1.57** *40.0*	**2.76** *70.0*	**7.48** *190.0*	**.03** *.8*	**.79** *20.0*	**7.09** *180.0*	**.18** *4.5*
16BCF10	**8.66** *220.0*	**1.77** *45.0*	**2.76** *70.0*	**9.84** *250.0*	**.03** *.8*	**.98** *25.0*	**9.25** *235.0*	**.21** *5.4*
30BCF10	**9.45** *240.0*	**1.97** *50.0*	**3.35** *85.0*	**10.63** *270.0*	**.03** *.8*	**1.18** *30.0*	**10.04** *255.0*	**.21** *5.4*
42BCF10	**11.02** *280.0*	**1.97** *50.0*	**3.35** *85.0*	**12.20** *310.0*	**.03** *.8*	**1.18** *30.0*	**11.61** *295.0*	**.21** *5.4*
55BCF10	**8.66** *220.0*	**3.35** *85.0*	**3.54** *90.0*	**9.84** *250.0*	**.04** *1.0*	**2.36** *60.0*	**9.25** *235.0*	**.21** *5.4*
75BCF10	**9.45** *240.0*	**3.15** *80.0*	**5.31** *135.0*	**10.63** *270.0*	**.04** *1.0*	**2.36** *60.0*	**10.04** *255.0*	**.26** *6.5*
100BCF10	**9.45** *240.0*	**3.54** *90.0*	**5.91** *150.0*	**10.63** *270.0*	**.04** *1.0*	**2.56** *65.0*	**10.04** *255.0*	**.26** *6.5*
130BCF10	**9.45** *240.0*	**3.54** *90.0*	**5.91** *150.0*	**10.63** *270.0*	**.04** *1.0*	**2.56** *65.0*	**10.04** *255.0*	**.26** *6.5*
180BCF10	**13.78** *350.0*	**4.72** *120.0*	**6.69** *170.0*	**14.96** *380.0*	**.04** *1.0*	**4.2** *102.0*	**14.37** *365.0*	**.26** *6.5*

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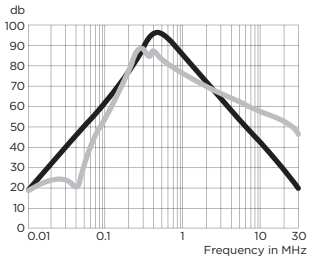
BCF Series

Performance Data

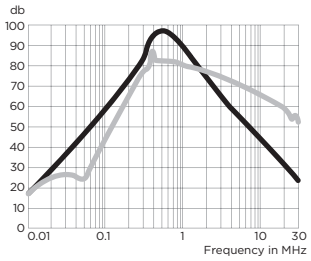
Typical Insertion Loss

Measured in closed 50 Ohm system

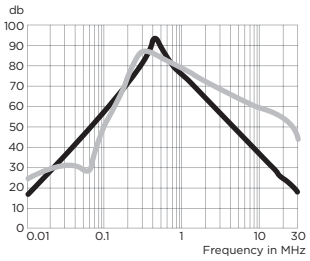
7BCF10



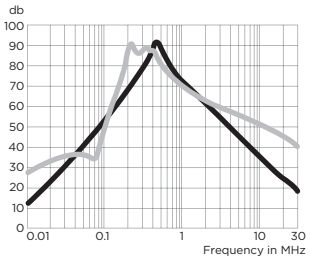
16BCF10



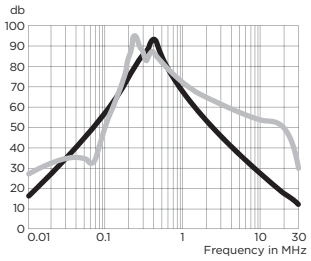
30BCF10



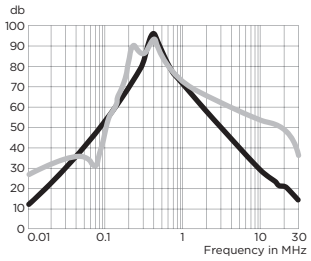
42BCF10



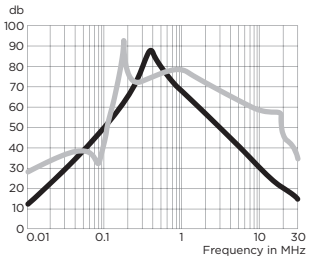
55BCF10



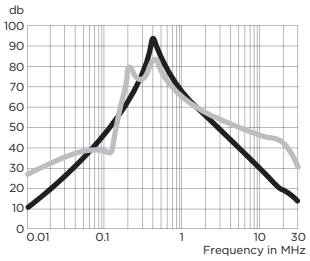
75BCF10



100BCF10

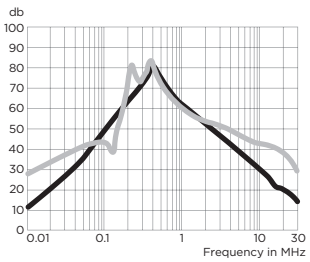


130BCF10



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

180BCF10



Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

Current Rating	Frequency –MHz											
	.01	.03	.05	.1	.15	.3	.5	1	3	5	10	30
7A	18	39	48	62	68	89	96	83	62	53	41	20
16A	17	37	45	58	65	85	96	88	65	56	43	23
30A	16	36	44	58	64	82	90	74	56	48	36	18
42A	12	30	40	52	61	79	90	72	54	47	35	18
55A	16	35	44	58	66	87	87	67	47	38	26	12
75A	12	30	40	53	60	84	90	70	50	42	30	15
100A	12	29	38	50	59	79	80	67	49	40	29	15
130A	11	26	35	48	55	78	83	67	49	40	29	15
180A	11	27	36	49	57	72	77	61	47	40	29	15

Differential Mode / Symmetrical (Line to Line)

Current Rating	Frequency –MHz											
	.01	.03	.05	.1	.15	.3	.5	1	3	5	10	30
7A	16	23	28	54	67	89	85	76	67	62	57	46
16A	18	26	24	48	58	78	82	80	74	71	65	51
30A	23	31	29	49	62	87	84	78	68	64	59	46
42A	13	35	36	50	67	88	82	69	59	55	50	40
55A	27	35	35	51	68	87	83	71	61	58	54	31
75A	27	35	35	50	66	87	86	72	62	58	53	35
100A	28	37	38	47	70	73	76	78	68	64	58	34
130A	27	37	40	38	53	75	80	64	54	50	47	30
180A	27	37	40	42	50	73	73	60	50	47	42	30

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