

Single Phase External Power Line Filter for Frequency Converters

FC Series



UL Recognized



FC10

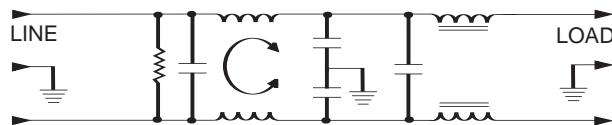
FC Series

The FC filters provide filtering for frequency inverters and variable speed motor drives. Designed for very noisy applications, they attenuate conducted interference at low and high frequency ranges and protect programmable logic controllers from RF noise on the AC power line. These filters perform best when installed on the line side of the motor drive. The FC filters better prevent noise from returning to the line, enabling equipment to meet strict European regulations on RFI.

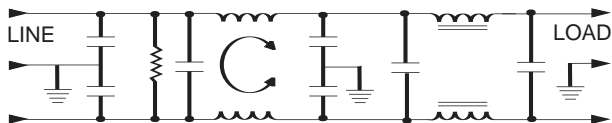
Suited for field wiring applications, these filters are ideal for EMC troubleshooting and field refurbishing. The FC filters feature side flanges for easy mounting and DIN type terminals which eliminate live metal parts, allowing safer and easier connection. The filters could also be sold as an accessory to motor drives marketed into Europe.

Electrical Schematics

6 & 12 Amps



16, 25 & 36 Amps



Resistor location for reference only.

Specifications

Maximum leakage current, each line-to-ground

@ 120 VAC 60 Hz: 3.8 mA

@ 250 VAC 50 Hz: 6.7 mA

Hipot rating (one minute):

line-to-ground 2250 VDC

line-to-line 1450 VDC

Operating frequency:

50/60 Hz

Rated voltage (max.):

250 VAC

Minimum insertion loss in dB:

Line-to-ground in 50 ohm circuit

Current Rating	Frequency—MHz								
	.01	.03	.05	.1	.5	1	5	10	30
6A	9	19	26	37	65	65	50	40	35
12A	5	17	25	37	65	65	65	60	35
16A	4	15	22	36	65	65	70	70	35
25A	2	14	22	36	75	75	70	70	48
36A	0	6	14	27	68	75	70	70	50

Line-to-line in 50 ohm circuit

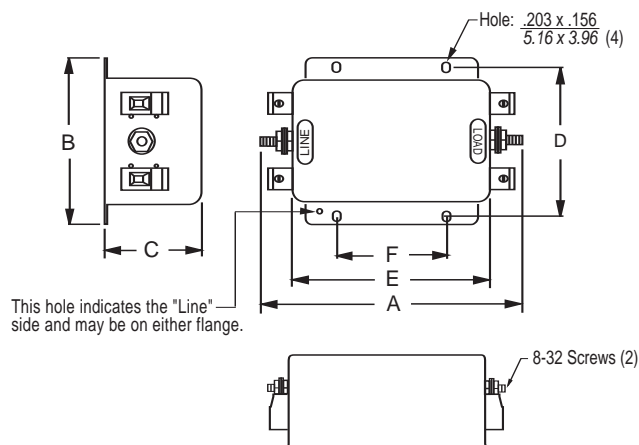
Current Rating	Frequency—MHz								
	.01	.03	.05	.1	.5	1	5	10	30
6A	10	10	35	60	75	75	60	50	45
12A	14	14	30	51	75	75	75	70	45
16A	14	14	29	55	75	75	75	70	45
25A	14	14	17	42	75	75	70	70	50
36A	14	14	17	42	75	75	70	70	50

Single Phase External Power Line Filter for Frequency Converters (Continued)

FC Series

Case Styles

6, 12, 16FC10



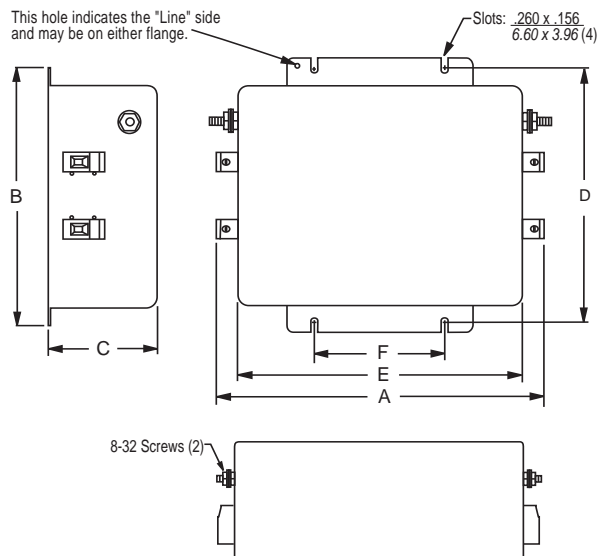
6FC10, 12FC10, 16FC10

Phoenix contact VDFK4

Accepts 10 AWG solid wire, 12 AWG stranded wire

Torque Spec: 5.5 - 7.0 in.lb

25, 36FC10



25FC10, 36FC10

Phoenix contact VDFK6

Accepts 8 AWG solid wire, 10 AWG stranded wire

Torque Spec: 13.5 - 16 in.lb

Case Dimensions

Part No.	A (max)	B (max)	C (max)	D $\pm .020$ $\pm .51$	E (max)	F $\pm .010$ $\pm .254$
6FC10	4.60 116.8	3.10 78.7	1.78 45.21	2.677 67.8	3.70 94.0	2.00 50.8
12FC10	5.95 151.3	3.96 100.6	2.18 55.4	3.50 88.9	4.53 114.8	2.00 50.8
16FC10	5.95 151.3	3.96 100.6	2.18 55.4	3.50 88.9	4.53 114.8	2.00 50.8
25FC10	6.90 175.3	5.48 139.2	2.55 64.77	4.90 124.5	5.94 150.9	2.756 70.0
36FC10	6.90 175.3	5.48 139.2	2.55 64.77	4.90 124.5	5.94 150.9	2.756 70.0

Part Numbers

6FC10 12FC10 16FC10	25FC10 36FC10
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