

FC Series

Single Phase External Power Line Filter for Frequency Converters



UL Recognized

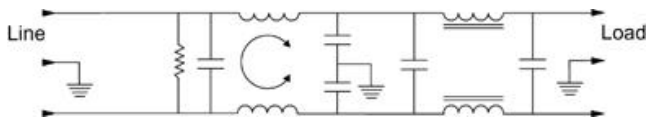
FC Series

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 prevent noise from returning to the line, enabling equipment to meet strict European regulations on RFI.

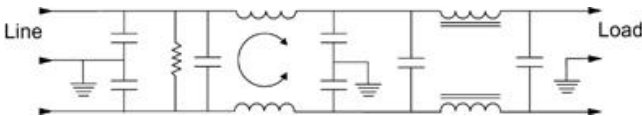
Suited for field wiring applications, these filters are ideal for EMC troubleshooting and field refurbishing. The FC filters feature side flanges for easy mounting and DIN type terminals which eliminate live metal parts, allowing safe and easy connection. The filters could also be sold as an accessory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

Electrical Schematics

6 & 12 Amps



16, 25 & 36 Amps



Resistor location for reference only.



FC10

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: 120/250 VAC

Rated current: @ 120/250 VAC
 6FC10 5 Amps
 12FC10 12 Amps
 16FC10 16 Amps
 25FC10 25 Amps
 36FC10 36 Amps

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
6FC10	9	19	26	37	65	65	50	40	35
12FC10	5	17	25	37	65	65	65	60	35
16FC10	4	15	22	36	65	65	70	70	35
25FC10	2	14	22	36	75	75	70	70	48
36FC10	0	6	14	27	68	75	70	70	50

Line-to-line in 50 ohm circuit

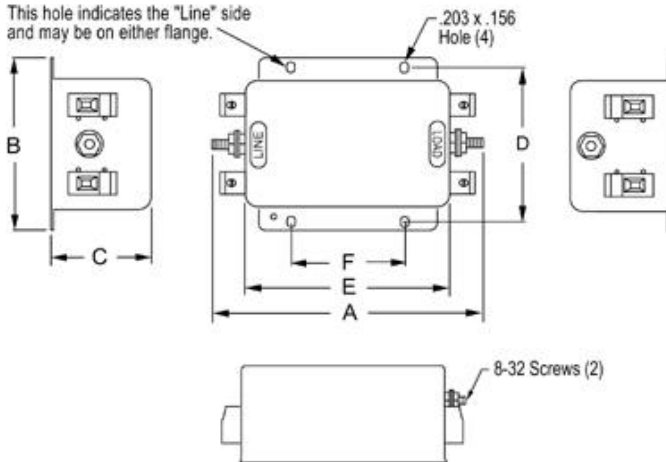
Current Rating	Frequency-MHz								
	.01	.03	.05	.1	.5	1	5	10	30
6FC10	10	10	35	60	75	75	60	50	45
12FC10	14	14	30	51	75	75	75	70	45
16FC10	14	14	29	55	75	75	75	70	45
25FC10	14	14	17	42	75	75	70	70	50
36FC10	14	14	17	42	75	75	70	70	50

Case Styles

Metric shown in italics.

6, 12, 16FC10

This hole indicates the "Line" side and may be on either flange.



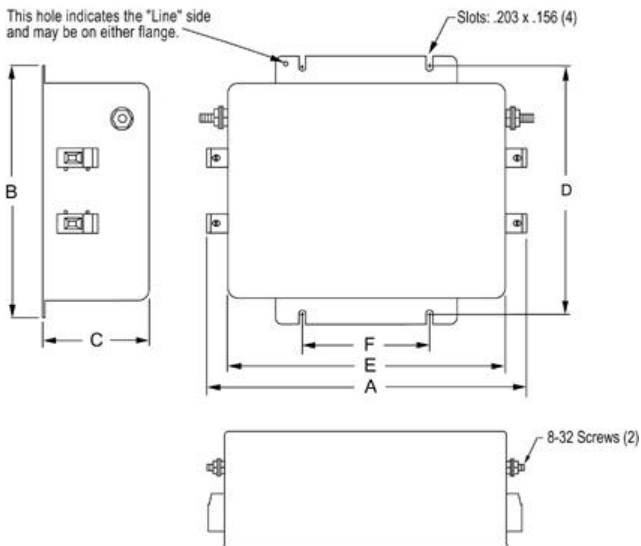
6FC10, 12FC10, 16FC10

Phoenix contact VDFK4

Accepts 10 AWG solid wire, 12 AWG stranded wire
Torque Spec: 5.5 - 7.0 in.lb.

25, 36FC10

This hole indicates the "Line" side and may be on either flange.



25FC10, 36FC10

Phoenix contact VDFK6

Accepts 8 AWG solid wire, 10 AWG stranded wire
Torque Spec: 13.5 - 16 in.lb.

Case Dimensions

Metric shown in italics.

Part No.	A (max)	B (max)	C (max)	D $\pm .020$ $\pm .51$	E (max)	F $\pm .010$ $\pm .254$
6FC10	<i>4.6</i> <i>116.8</i>	<i>3.1</i> <i>78.7</i>	<i>1.78</i> <i>45.21</i>	<i>2.677</i> <i>67.8</i>	<i>3.7</i> <i>94.0</i>	<i>2.0</i> <i>50.8</i>
12FC10	<i>5.95</i> <i>151.3</i>	<i>3.96</i> <i>100.6</i>	<i>2.18</i> <i>55.4</i>	<i>3.5</i> <i>88.9</i>	<i>4.53</i> <i>114.8</i>	<i>2.0</i> <i>50.8</i>
16FC10	<i>5.95</i> <i>151.3</i>	<i>3.96</i> <i>100.6</i>	<i>2.18</i> <i>55.4</i>	<i>3.5</i> <i>88.9</i>	<i>4.53</i> <i>114.8</i>	<i>2.0</i> <i>50.8</i>
25FC10	<i>6.9</i> <i>175.3</i>	<i>5.48</i> <i>139.2</i>	<i>2.55</i> <i>64.77</i>	<i>4.9</i> <i>124.5</i>	<i>5.94</i> <i>150.9</i>	<i>2.756</i> <i>70.0</i>
36FC10	<i>6.9</i> <i>175.3</i>	<i>5.48</i> <i>139.2</i>	<i>2.55</i> <i>64.77</i>	<i>4.9</i> <i>124.5</i>	<i>5.94</i> <i>150.9</i>	<i>2.756</i> <i>70.0</i>

Pricing

Consult your local Corcom sales representative for pricing.

Part No.

6FC10
12FC10
16FC10
25FC10
36FC10