



RF Power Factor Correction Coils

FC 25000 SERIES

HIGHLIGHTS

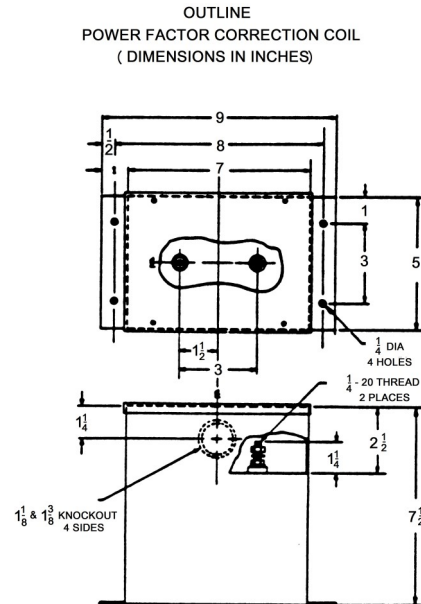
- A-1 Reliability
- Use with Fil-Coil Power Series Filters
- Convenient installation

These RF Power Factor Correction Coils are designed for FCL-11, 110, 14, 140, and 112 power line filters where limited generator output requires reduced reactive current. Since screen room filters consist of inductors and capacitors, they apply a fixed reactive load to power lines. Filters which provide high attenuation at low frequencies (14kHz to 100kHz) present the greatest no-load current problems due to their large capacitive component. If the power source has sufficient reserve to furnish the added reactive current, there is no difficulty. However, if the power source is limited, RF Power Factor Correction Coils must be used to cancel the undesirable capacitive-reactive load component. This problem may arise during 400Hz operation (or high line frequencies); reactive current is less than 2.5 amperes for all standard Fil-Coil filters at 115 volts, 60Hz.

A power line filter is designed for a specific capacitance to ground. Accordingly each Power Factor Correction Coil must be designed to match this capacity.

Therefore, when ordering your Power Factor Correction Coil, be certain that you advise our engineering department of the capacitance to ground of your filter or the Fil-Coil P/N that it is to be used with.

The Fil-Coil power factor correction coils described here are designed for 115VAC, 400Hz operation. For higher voltages contact our engineering department for special designs.



Uncorrected Reactive Current (AMPS)*	Corrected with FC-25000 Series (AMPS)
5	**
8	1.5
11	1.5
15	2.5
19	2.5

Application	No of P.F.C.Coils
1-phase, 2-wire, 1 line grounded	1
1-phase, 2-wire, un-grounded	2
3-phase, 4-wire, neutral grounded	3
3-phase, 4-wire, un-grounded	4

*At 115V, 400Hz. For 1-phase, 2-wire, 115VAC ungrounded or 3-phase, 4-wire ungrounded system, the reactive current will be approximately half the above value

** FC-25000 networks may be supplied although their low reactive current does not normally required PFC

Typical Wiring Diagrams of filtered power lines employing FC-25000 Series Correction Coils

