Jameco Part Number 467057

Solid State Relay Filters

AC OUTPUT

- Suppresses EMI Noise
- Simple Installation

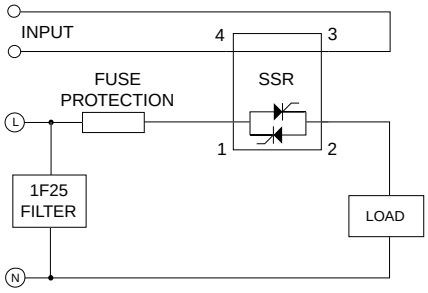
The Series F Solid State Relay Filters from Crydom are designed to significantly reduce EMI noise generated by Solid State Relays to meet EMC regulations.

All AC Solid State Relays that use thyristor switching devices generate some low frequency noise, that may appear as conducted emissions on the main supply line connection. Crydom's Series F filters are simple to install in new or existing equipment. SSR current is not required to pass through the filter, the only connections required are across the incoming supply line.

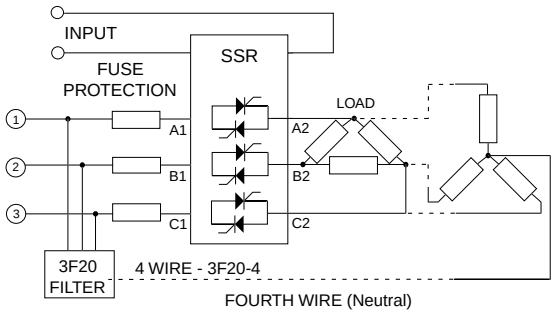
Three models are available, the 1F25 for single-phase systems, 3F20 for three -phase without neutral and 3F20-4 for three-phase with neutral.

WIRING DIAGRAM

Single Phase



Three Phase



MODEL NUMBERS	1F25	3F20	3F20-4

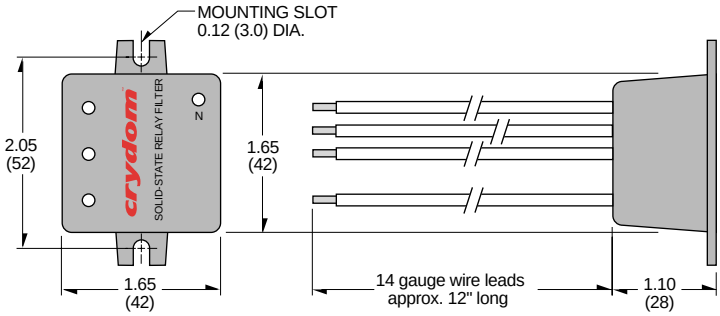
SPECIFICATIONS ①

Connection (number of phases)	Single	Three	Three (w/neutral)
Maximum Operating Voltage	275 Vrms	475Vrms	475Vrms
Operating Temperature Range		-40 to +100˚ C	
Attenuation (150 to 250 Khz), typical	30 dBµV	25 dBµV	25 dBµV
Current Drain at Vrms max	40 mA	35 mA	35 mA

GENERAL NOTES

① All parameters at 25˚C unless otherwise specified.

MECHANICAL OUTLINE (3F20-4 shown)



All dimensions are in inches (millimeters)

Sample testing indicated reduced noise levels from 70dBµv to 35dBµv at 150kHz and to 40dBµv at 250kHz operating at 30Arms into a resistive load. The results are based on a 1F25 Filter operating with Crydom's Series 1-D2450 Solid State Relay. A reduction from 70dBµv to 40dBµfv was noted using the 3F20 Filter on a three phase system operating with Crydom's Series 53TP-D53TP25D at 15Arms.

Measurement conditions: quasi-peak per CISPR16.

All information is based on Crydom's understanding of European EMC regulations. While we believe it to be accurate Crydom accepts no responsibility for omissions, errors or misunder standings as them relate to specific customer applications.

For recommended applications and more information contact:
USA: Sales Support (877) 502-5500 **Tech Support** (877) 702-7700 **FAX** (619) 710-8540
Crydom Corp, 2320 Paseo de las Americas, Ste. 201, San Diego, CA 92154
Email: sales@crydom.com **WEB SITE:** http://www.crydom.com
UK: +44 (0)1202 365070 • **FAX** +44 (0)1202 365090 Crydom International Ltd., 7 Cobham Road, Ferndown Industrial Estate, Ferndown, Dorset BH21 7PE, **Email**: intsales@crydom.com.
GERMANY: +49 (0)180 3000 506