678-843 = 1F25
678-855 = 3F20

查询"1F25"供应商

CRYDOM EUROPE

Solid State Relay Filters

Type 1F25 and 3F20

All ac solid state relays generate low frequency thyristor noise which may appear as a conducted emission on the mains supply line connection. Such noise may exceed the current emission standards although normally by only a small amount and only at the lowest end of the specified frequency spectrum.

Typically the level may fall between that required by the domestic (EN50081-1) and industrial (EN50081-2) standards, i.e failing the requirements of the one whilst meeting those of the other. The failure is only likely at frequencies in the range 150 to 250 kHz, compared to the specified spectrum of 150kHz to 30 MHz. Because of the nature of this noise it is a relatively simple matter to effect a cure.

Crydom have developed and patented a novel filter which connects between the incoming mains supply, line to neutral for single-phase and line to line for three-phase systems, and which reduces thyristor noise by a substantial amount. Because the SSR current is not required to pass through the filter it can be used as a simple addition to existing equipment designs being required merely to connect across the incoming mains supply.

No additional connections are needed to the SSR itself. A single filter is normally sufficient for multiple SSR systems as the level of suppression effected is relatively constant at currents in excess of approximately 15amps rms.

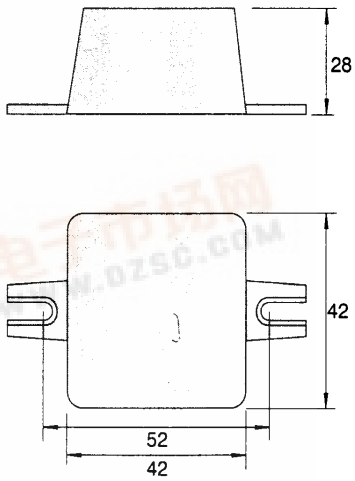
It must be noted however that the effectiveness of the filter/SSR combination depends to some degree on the nature of the load. A load with some inductance generally produces lower levels of noise than one which is more capacitive, although the amount of inductance need be in the region of only a few tens of microHenries; typically the amount present with many resistive heating element loads.

Nominal Performance Data

Type Number	1F25	3F20	
Connection (number of phases)	single	three	
Operating Voltage, maximum	275	475	Vrms
Operating Temperature Range	-40 to +100		degC
Attenuation (150 to 250Khz), typical	30	25	dBμv
Current Drain at Vrms max	40	35	mA

In a typical case filter type 1F25 operating with Crydom SSR type D2450 reduced noise from 70dBμv to 35dBμv at 150kHz and to 40dBμv at 250kHz operating at 30amps rms into a resistive load. A reduction from 70dBμv to 40dBμv was noted on a three phase system using SSR type D53TP25D operating at 15amps rms. Measurement conditions: **quasi-peak per CISPR16**

DISCLAIMER: This information is based on Crydom's understanding of the European EMC regulations.Whilst we believe it to be accurate Crydom Europe cannot accept responsibility for omissions, errors or misunderstandings as related to specific customer applications.



Terminations by flying leads
20cm, 1.5mm² (30/0.25)

All dimensions in mm

Printed in the UK Publication No. 50-083A 11/95
Crydom reserves the right to change specifications without notification

CRYDOM EUROPE

European Headquarters: Crydom Ltd. 7 Redlands Centre, Coulsdon, Surrey CR5 2HT U.K. Tel: +44 (0) 181 763 0550 Fax: +44 (0) 181 763 0499

找PDF 维库一下 pdf.dzsc.com