

- Protection From Electric Shock
- Fit Standard Crydom SSRs
- Single and Three Phase SSR Covers

## PRODUCTION DESCRIPTION

The KS100 and KS300 are protective covers made of clear polycarbonate material, which are designed to fit over standard CRYDOM SSRs. They provide added protection from electric shock when installing or checking equipment.

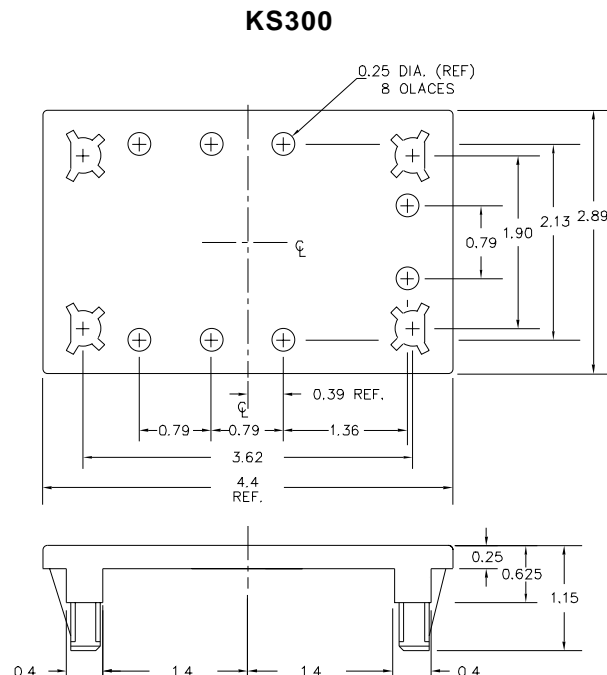
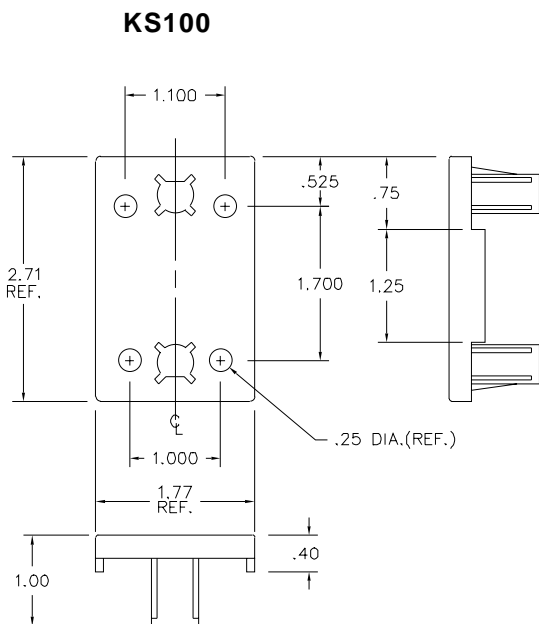
## USE GUIDE

Care should be taken to fit the KS100 or KS300 as per instructions to ensure maximum protection.

## DESIGN ADVANTAGE

The CRYDOM KS100 and KS300 protective covers have been designed specially for Crydom Solid State Relays, and have been made simple to install. The polycarbonate material used is UL94V-0 approved.

## MECHANICAL OUTLINE



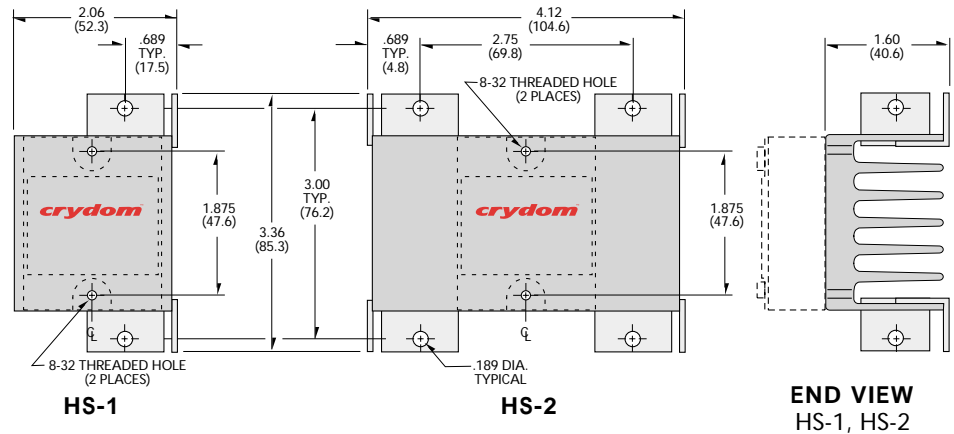
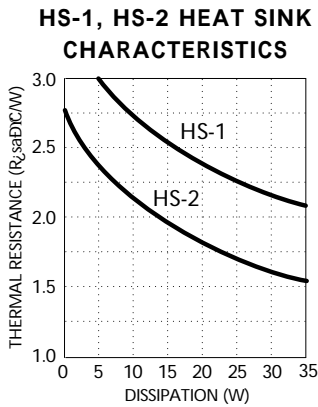
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For recommended applications and more information contact:  
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**UK:** +44 (0)1202 365070 • **FAX** +44 (0)1202 365090 Crydom International Ltd., 7 Cobham Road, Ferndown Industrial Estate, Ferndown, Dorset BH21 7PE, **Email:** intsales@crydom.com.  
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A major consideration in the use of Solid-State Relays is the thermal design. It is essential that the user provide adequate heat sinking for the application.

Crydom heat sinks are designed for excellent thermal management when used with Crydom's Series 1 type package of SSR's and Controllers.

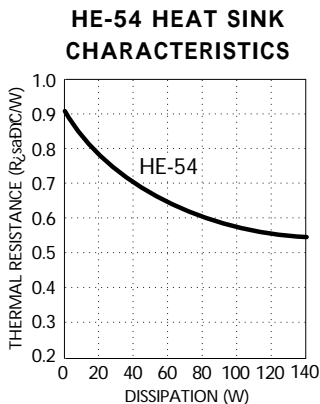
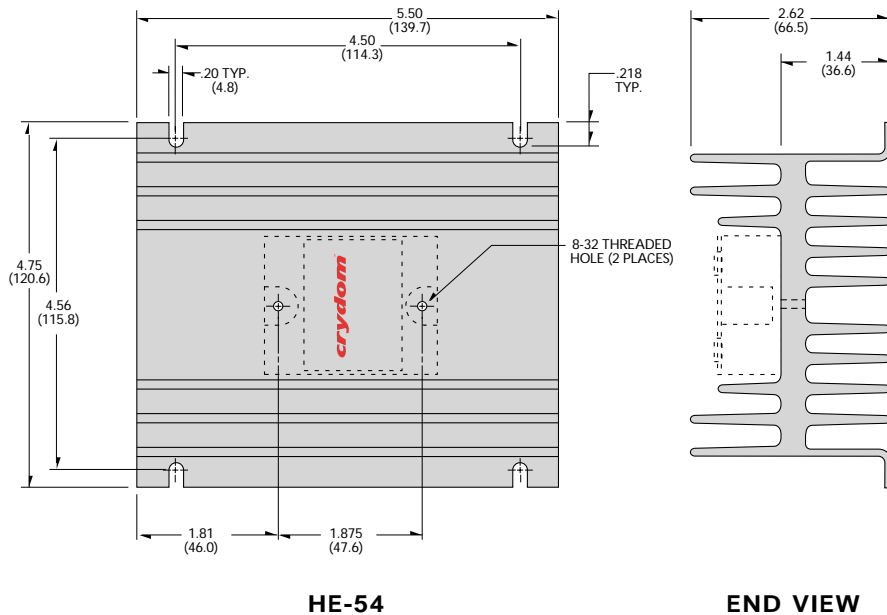
Correct installation is important to assure heat is dissipated correctly. The Crydom SSR should be firmly (20 in-lbs.) mounted on a clean, smooth heat sink surface using thermally conductive grease.



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### COMPATIBLE CRYDOM PRODUCTS:

- |             |                 |
|-------------|-----------------|
| Series 1    | Series CS       |
| Series CT   | Series HA       |
| Duals       | Series HD       |
| Quad        | Series 1-DC     |
| Series DC60 | Series CPV      |
| Series SST  | Series DSD, DLD |
| Series DLD  | Series RPC      |
| Series PCV  | Series 53TP*    |
- \*Requires HE-90 (see pg 2)



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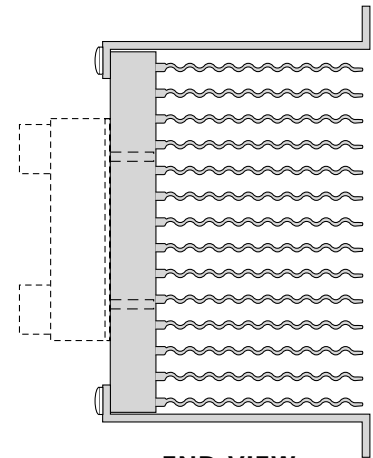
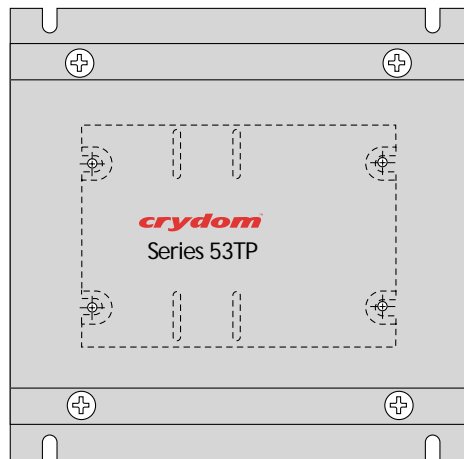
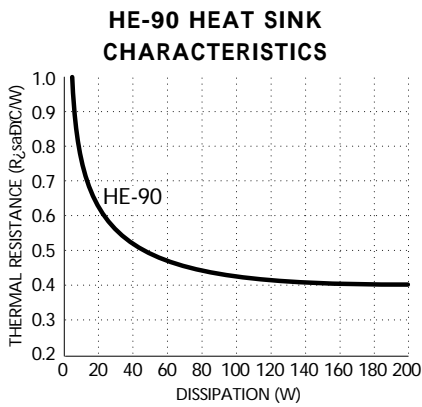


### MECHANICAL SPECIFICATIONS

Model Number	HS-1	HS-2	HE-54	HE-90
Weight: (typical) [ounces]	3.0	5.0	10.0	24.0
Material	Aluminum			
Finish	Chromate Coating & Gold			
Mounting Holes	8-32 threaded			

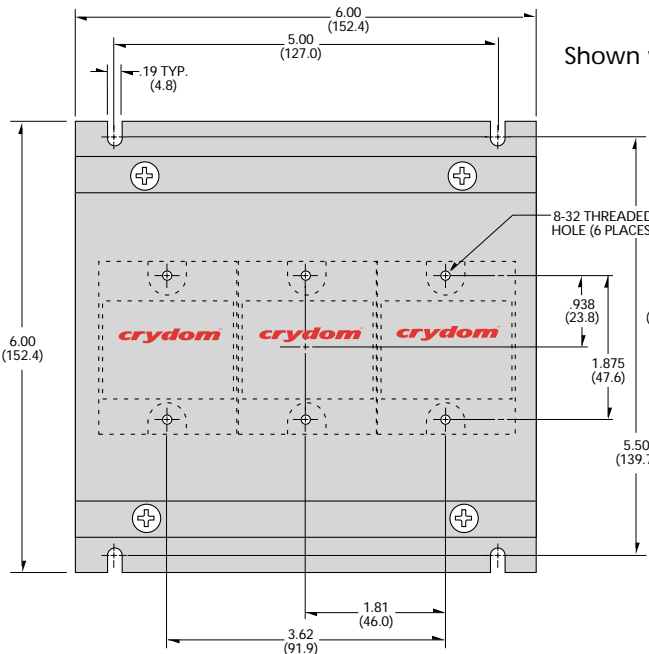
### HE-90

Shown with Series 53TP Mounted



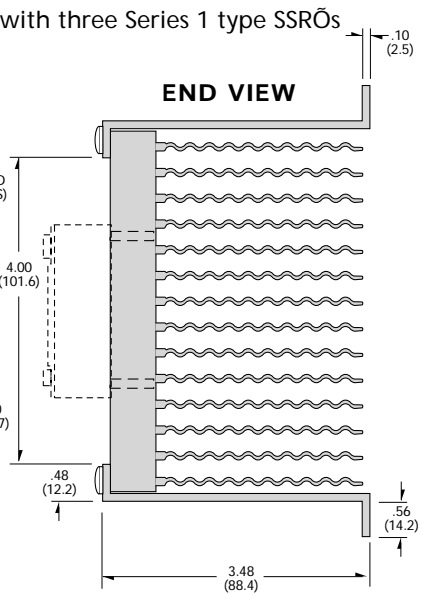
END VIEW

The HE-90 heat sink offers excellent thermal management for up to three Series 1 type package SSRs or a single three phase SSR (Model 53TP). All mounting holes are predrilled & tapped and are user configurable depending on the specific application.



### HE-90

Shown with three Series 1 type SSRs



END VIEW

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- 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.

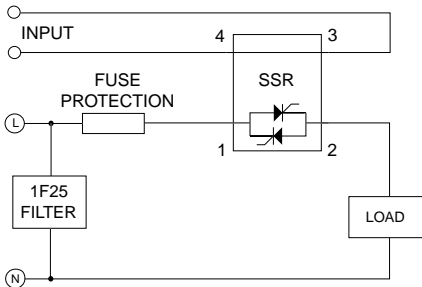
All AC Solid State Relays that use thyristor switching devices generate some low frequency noise, that may

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.

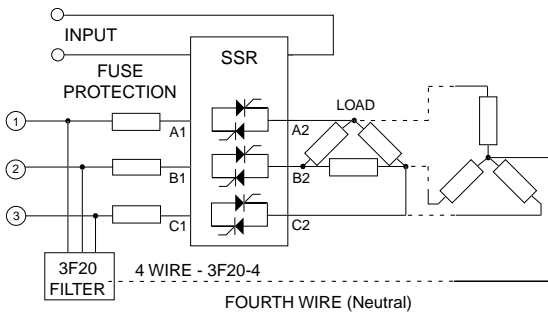
Three models are available, the 1F25 for single-phase systems, 3F20 for three-phase without neutral and 3F20-4 for three-phase with neutral.

### WIRING DIAGRAM

#### Single Phase



#### Three Phase

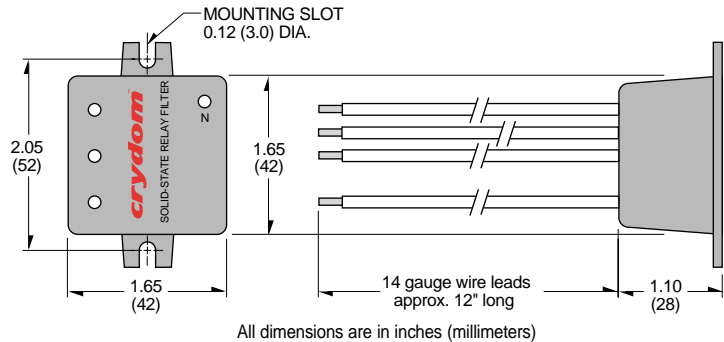


MODEL NUMBERS	1F25	3F20	3F20-4
<b>SPECIFICATIONS</b> ①			
Connection (number of phases)	Single	Three	Three (w/neutral)
Maximum Operating Voltage	275 Vrms	475Vrms	475Vrms
Operating Temperature Range	-40 to +100° C		
Attenuation (150 to 250 KHz), typical	30 dBµV	25 dBµV	25 dBµV
Current Drain at Vrms max	40 mA	35 mA	35 mA

### GENERAL NOTES

① All parameters at 25°C unless otherwise specified.

### MECHANICAL OUTLINE (3F20-4 shown)



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 40dBµv 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 misunderstandings as them relate to specific customer applications.

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