



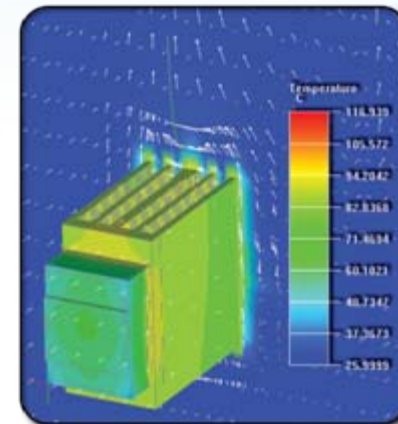
HS Series

Heat Sinks & SSR/Heat Sink Assemblies



What is a Heat Sink & SSR/Heat Sink Assembly and Why Do We Need It?

- ▶ A heat sink is a mechanical structure designed to dissipate thermal energy from a mounted semiconductor into the surrounding ambient air.
- ▶ An SSR/heat sink assembly is a heat sink with a solid state relay installed on it.
- ▶ Heat sinks ensure the proper operation and long term reliability of solid state relays by maintaining a safe operating temperature.



What Makes the HS Series Unique?

- The new offer includes both heat sinks and SSR/heat sink assemblies.



- **HEAT SINKS**

Thermal impedance ratings from 5.0 to 0.5 °C/W

DIN Rail & panel mounting available

Models accepting 1, 2 or 3 SSRs



- **ASSEMBLIES**

SSR/Heat sink assemblies are ready to use!

Output current ratings from 10 to 82.5 Amps at 40 °C

Output voltage ratings of 24 to 280 or 48 to 660 VAC

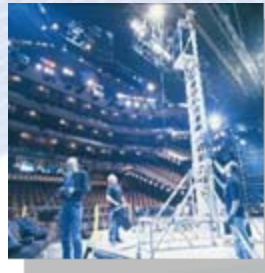
- A wide variety of accessories available
- Heat sinks with optimum thermal performance and a perfect match for Crydom SSRs!!

Why Crydom?

- ▶ Large extrusion houses do not make heat sinks specific for SSR applications.
- ▶ Crydom has the most comprehensive SSR/heat sink assembly offer of any SSR manufacturer.
- ▶ Assembly houses do not have the SSR capability that Crydom does.
- ▶ Our manufacturing expertise in solid state relay technology allows us to provide the best SSR/heat sink optimized solution for your customer.



What Are the Target Markets/ Applications?



- Heating
- Lighting
- Motion Control

Medical Equipment

- Respiratory Equipment
- Cardiac Catheters
- Patient Monitoring
- Scanners

Transportation (Rail, Back Up Power)

Industrial Automation

Process Control

Machine Tools (Hydraulic Pumps)

Semiconductor Equipment

HVAC (Heating, Ventilation & Air Conditioning)

Food Processing

Compressors

Elevators & Rolling Shutters

Plastics Industry

Material Handling & Packaging

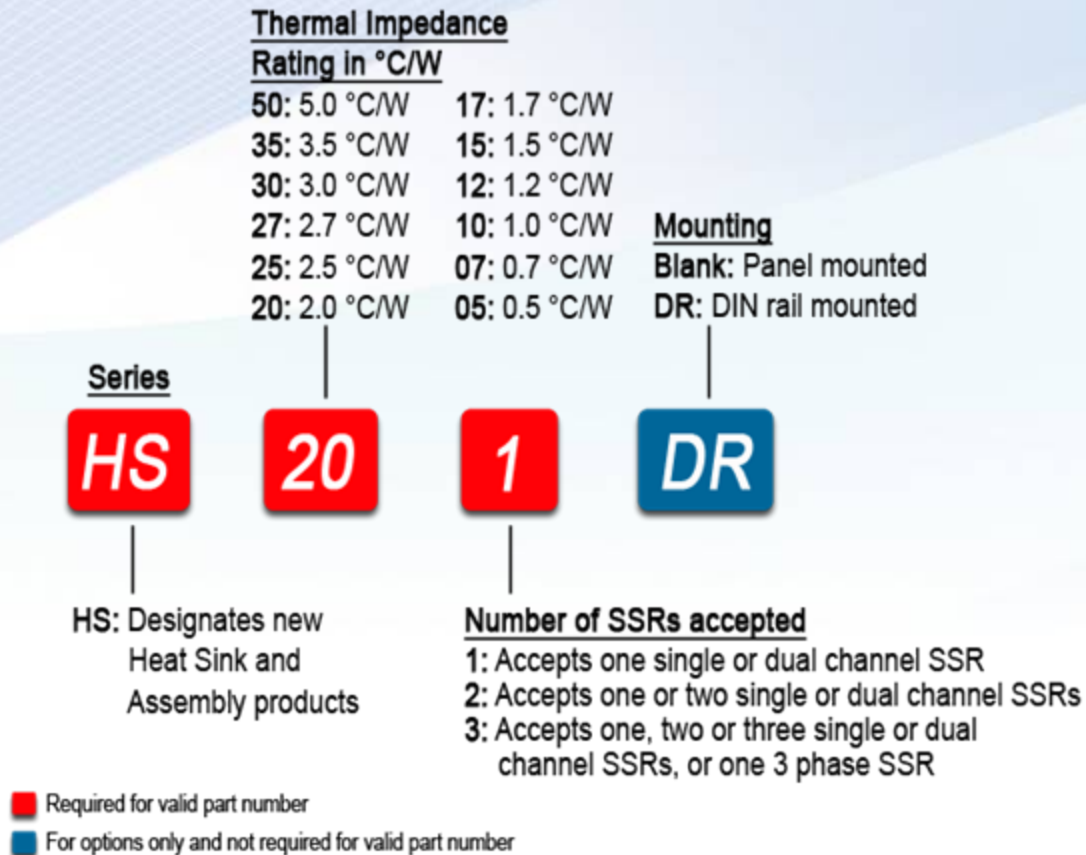
Oil Services

Paper & Printing

Lighting

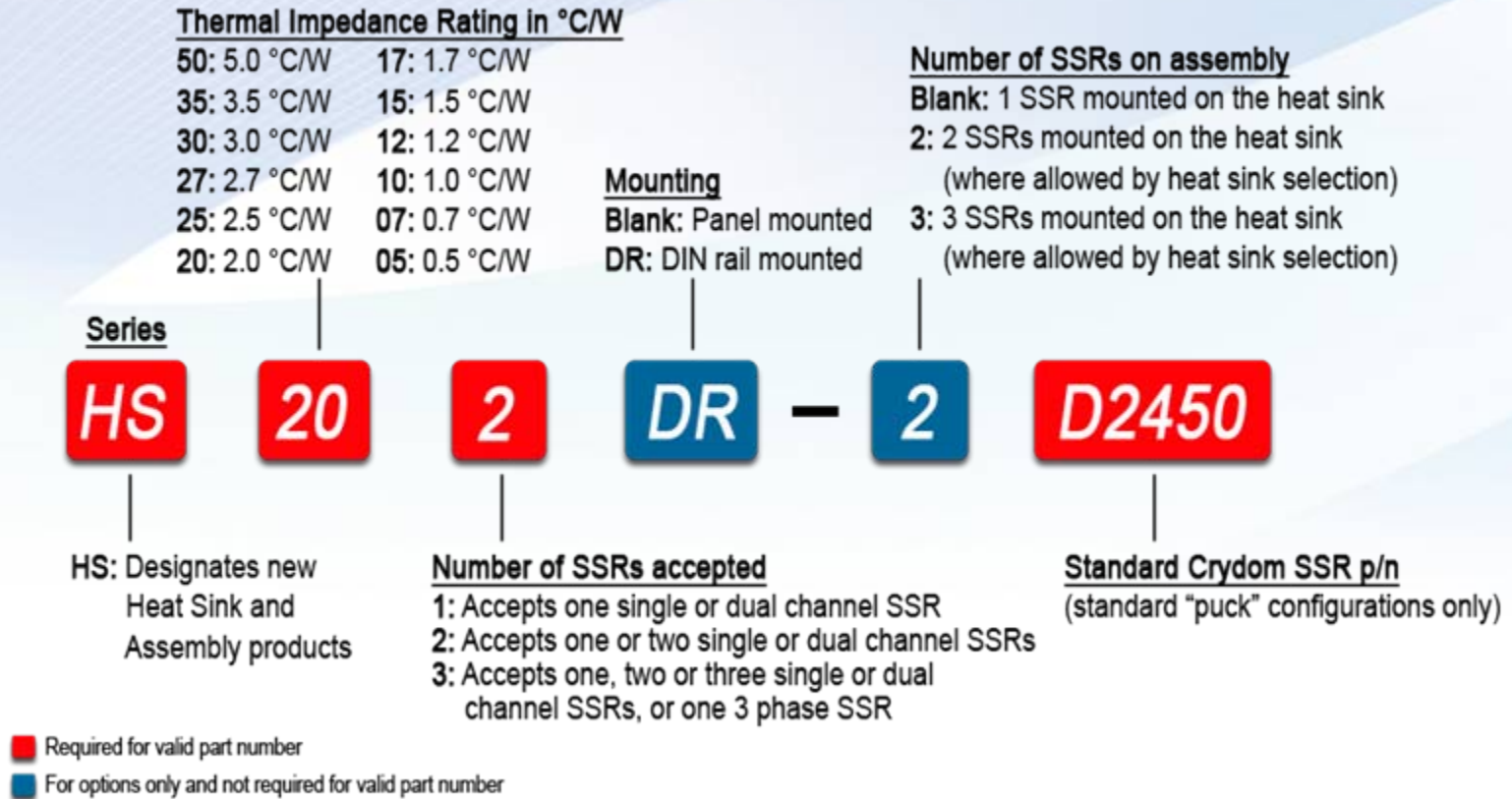
What Is the Heat Sink Part Number Structure?

The **Heat Sink** part number structure is as follows:



What Is the SSR/ Heat Sink Assembly Part Number Structure?

The **SSR/ Heat Sink Assembly** part number structure is as follows:



Hardware Kits

HK1, HK2



Hardware Kit 1

Part no.: HK1
Bag with 2 SSR mounting screws 8-32 x 3/8.



Hardware Kit 2

Part no.: HK2
Bag with 1 ground screw 10-32 x 3/8 and 2 bracket screws 6-32 x 1/4.

DIN Rail Bracket Kits

DRK1, DRK2



DIN Rail Kit 1

Part no.: DRK1
Weight 0.8lbs/34grs.
Spring, Retaining clip, 45mm DIN Rail bracket and 2 screws 6-32 x 1/4.



DIN Rail Kit 2

Part no.: DRK2
Weight 0.7lbs/31grs.
Spring, DIN Rail Latch, 22.5mm DIN Rail bracket and 2 screws 6-32 x 1/4.

Thermal Pads

HSP1, HSP3, TP01, TP03



TP01

Single Phase Heat Transfer Pads

Part no.: HSP1
2.3x1.8 in or 58.4 x 45.7 mm Non-adhesive thermal pad for single phase and dual panel mount SSRs (25 pack).

Part no.: TP01
2.1x1.6 in or 53.3x40.6 mm Thermal pad for single phase or dual panel mount SSRs. Includes adhesive on one side.



TP03

Three Phase Heat Transfer Pads

Part no.: HSP3
4.1x2.9 in or 104.1x73.7 mm Thermal pad for three phase panel mount SSRs.

Part no.: TP03
3.9x2.8 in or 99.1x71.1 mm Thermal pad for three phase panel mount SSRs. Includes adhesive on one side.

KS Covers

KS100, KS300



Single Phase SSR Cover

Part no.: KS100
Clear plastic cover for standard single phase SSRs.



Three Phase SSR Cover

Part no.: KS300
Clear plastic cover for three phase SSRs.

Wire Lug Terminal

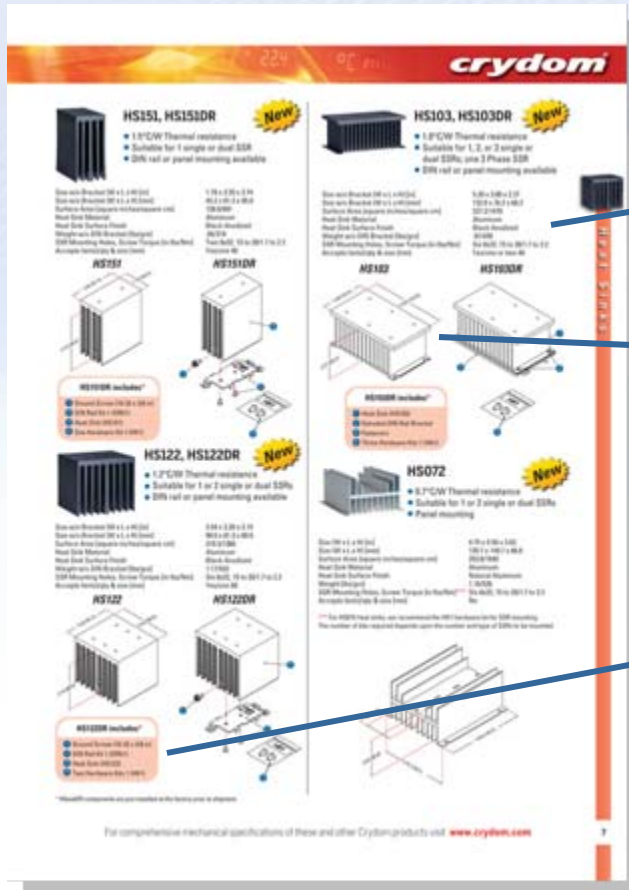
TRM6



Copper wire lug for SSR Output Terminals

Part no.: TRM6
Accepts AWG 14 to AWG 6 wire size.
Mounts with #8, #10, M4 or M5 screws.

HS Series Heat Sinks



General specifications

Major dimensions

DR versions

Catalog page example

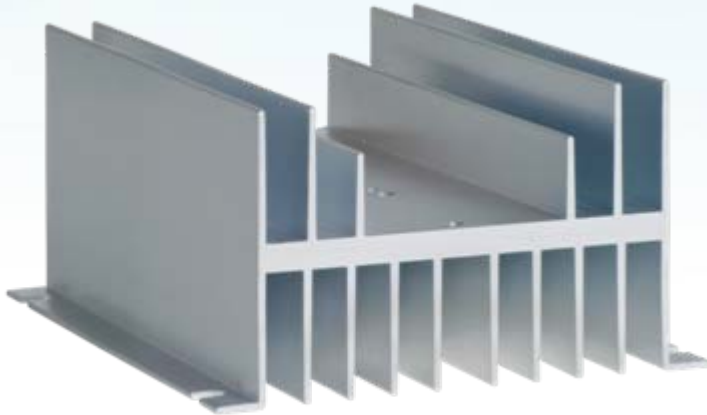
Panel Mount Heat Sinks



HS251



HS172



HS072

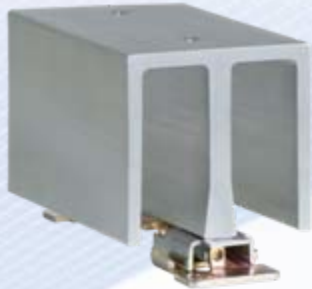


HS053

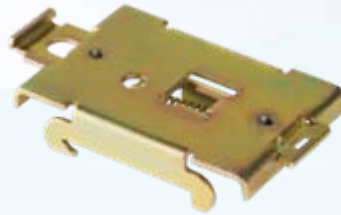
DIN Rail & Panel Mount Heat Sinks



HS351



HS351DR



HS501DR



HS271



HS271DR



HS201



HS201DR



HS151



HS151DR

DIN Rail & Panel Mount Heat Sinks



HS172



HS172DR



HS103



HS103DR



HS122



HS122DR

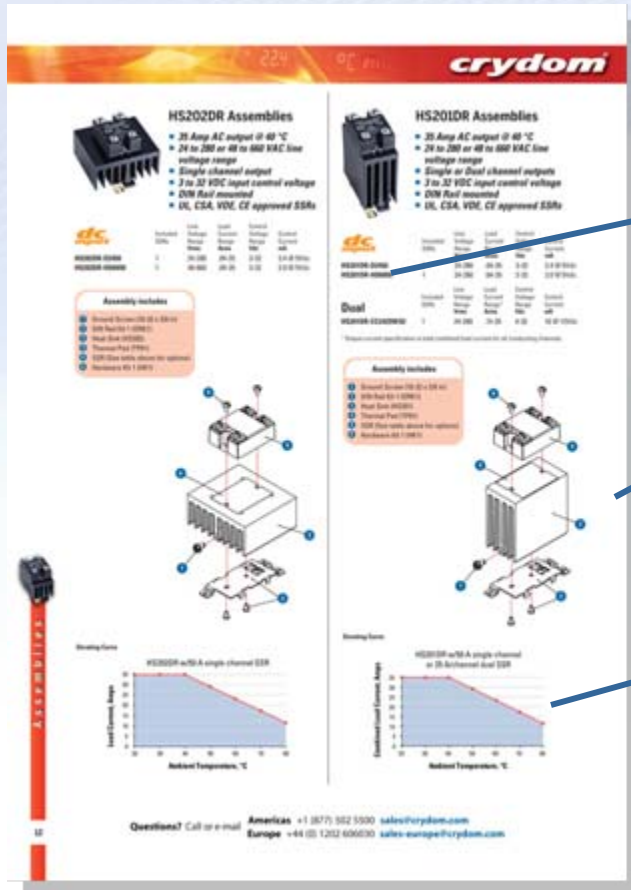


HS301



HS301DR

HS Series Heat Sink/SSR Assemblies



Standard Assembly options

What is included

Derating information

Catalog page example

Standard Heat Sink/SSR Assemblies



HS501DR-xxxx



HS351DR-xxxx



HS301DR-xxxx



HS271DR-xxxx



HS251-xxxx



HS202-xxxx



HS201DR-xxxx

Standard Heat Sink/SSR Assemblies



HS172DR-xxxx



HS151DR-xxxx



HS122DR-xxxx



HS103DR-xxxx



HS072-xxxx



HS053-xxxx

Cool Tool: Selecting the Proper Heat Sink or SSR Assembly

You may choose to look for an assembly or a heat sink

The screenshot shows the Crydom Assembly Selector interface. At the top, there are two tabs: "Assembly" (selected) and "Heat sink". Below the tabs is the title "ASSEMBLY SELECTOR". The interface is divided into several sections:

- application's requirements:** This section includes:
 - Number of phases:** Three radio buttons labeled "1", "2", and "3". The "1" button is selected.
 - Load current [Amps]:** A slider ranging from 3 to 100 with a "Help" button. A gauge on the right shows a value of 40.
 - Ambient temperature [°C]:** A slider ranging from 25 to 80 with a "Help" button. A gauge on the left shows a value of 40.
 - Image:** A photograph of a 1-phase SSR assembly with a "1 phase" label.
- Instructions:** A button labeled "Instructions".
- Suggested assembly:** A list box containing two items: "HS151DR-D2450" and "HS151DR-HD6050".
- Select an assembly:** A button labeled "Select an assembly".
- View datasheet:** A button labeled "View datasheet".

Application's parameters

Suggested result

This tool will be available @ www.crydom.com/en/HSseries

5 Key Take-Aways On Crydom Heat Sinks & SSR/Heat Sink Assemblies

- ▶ Crydom has the most comprehensive offering of heat sinks and SSR/heat sink assemblies
- ▶ Heat sinks ensure the proper operation and long term reliability of solid state relays by maintaining a safe operating temperature
- ▶ We can mount any Crydom standard panel mount SSR on a standard Crydom heat sink
- ▶ SSR/Heat sink assemblies are ready to use, simplifying selection, ordering and installation.
- ▶ Our manufacturing expertise in solid state relay technology allows us to provide the best solid state relay/heat sink optimized solution for your customer.



THE GLOBAL EXPERT IN
SOLID STATE RELAY TECHNOLOGY