



## | HS053 ASSEMBLIES

SSR & HEAT SINK ASSEMBLIES



### Features

- 82.5 amp AC output @ 40°C
- Single Channel or 3 Phase output
- 3 to 32 VDC input control voltage
- Panel mounted
- UL, CSA, VDE, CE approved SSRs
- Epoxy free design



### PRODUCT SELECTION

Description	82.5A	82.5A
3-32 VDC Control	HS053-D24125	HS053-HD60125



### OUTPUT SPECIFICATIONS <sup>(1)</sup>

Description	HS053-D24125	HS053-HD60125
Operating Voltage (47-63Hz) [Vrms]	24-280	48-660
Transient Overvoltage [Vpk]	600	1200
Maximum Off-State Leakage Current @ Rated Voltage [mA <sub>rms</sub> ]	1.0	1.0
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] <sup>(2)</sup>	500	500
Maximum Load Current [Arms]	82.5	82.5
Minimum Load Current [Arms]	150	150
Maximum Surge Current (16.6ms) [A <sub>pk</sub> ]	1200	1200
Maximum On-State Voltage Drop @ Rated Current [Vac]	1.15	1.15
Maximum I <sup>2</sup> t for Fusing (8.3 msec) [A <sup>2</sup> sec]	6000	6000
Minimum Power Factor (with Maximum Load)	0.5	0.5



### INPUT SPECIFICATIONS <sup>(1)</sup>

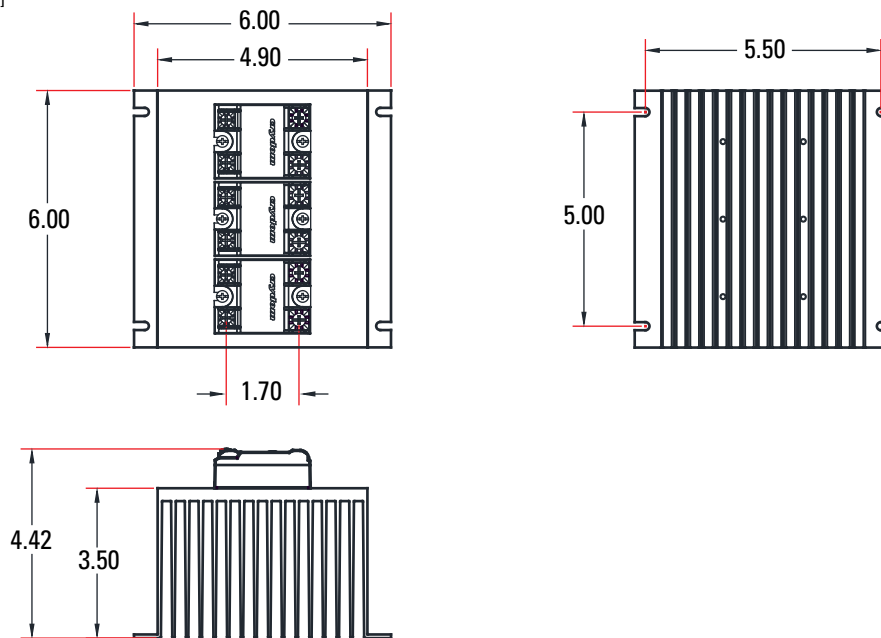
Description	HS053-D24125	HS053-HD60125
Control Voltage Range	3-32 VDC	4-32 VDC
Minimum Turn-On Voltage	3.0 VDC	4.0 VDC
Minimum Turn-Off Voltage	1.0 VDC	1.0 VDC
Maximum Reverse Voltage	-32 VDC	-32 VDC
Minimum Input Current	7.0 mA	7.0 mA
Maximum Input Current	12 mA	12 mA
Nominal Input Impedance	Current Regulated	Current Regulated
Maximum Turn-On Time [msec]	1/2 Cycle	1/2 Cycle
Maximum Turn-Off Time [msec]	1/2 Cycle	1/2 Cycle

## GENERAL SPECIFICATIONS

Description	Parameters
Dielectric Strength, Input/Output/Base (50/60Hz)	4000 Vrms
Minimum Insulation Resistance (@ 500 V DC)	10 <sup>9</sup> Ohm
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125°C
Status Indicator Display	None
Weight (typical)	3.31 lb. (150 g)
Recommended Terminal Screw Torque Range: (in-lb/Nm)	6-32 Screws - 13-15/1.5-1.7. 8-32 Screws - 18-20/2-2.2 (Screws dry without grease)
Thermal pad installed	Yes

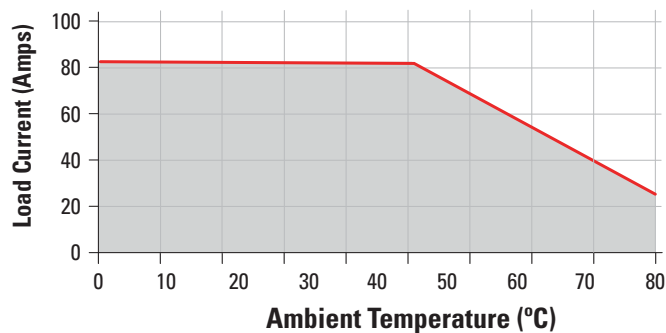
## MECHANICAL SPECIFICATIONS

Tolerances: ±0.02 in / 0.5 mm  
All dimensions are in: inches [millimeters]



## THERMAL DERATE INFORMATION

HS053 w/125A SSR or 1-50A 3-Phase SSR

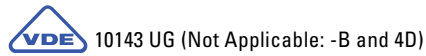


## GENERAL NOTES

- (1) All parameters at 25°C unless otherwise specified.
- (2) Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1

# AGENCY APPROVALS AND CERTIFICATIONS

Designed in accordance with the requirements of IEC 62314  
Agency approvals are for relay only.



## WARNINGS



### RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

**Failure to follow these instructions can result in serious injury, or equipment damage.**



### HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

**Failure to follow these instructions will result in death or serious injury**

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