



| 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 ⁽¹⁾

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 _{rms}]	1.0	1.0
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] ⁽²⁾	500	500
Maximum Load Current [Arms]	82.5	82.5
Minimum Load Current [Arms]	150	150
Maximum Surge Current (16.6ms) [A _{pk}]	1200	1200
Maximum On-State Voltage Drop @ Rated Current [Vac]	1.15	1.15
Maximum I ² t for Fusing (8.3 msec) [A ² sec]	6000	6000
Minimum Power Factor (with Maximum Load)	0.5	0.5



INPUT SPECIFICATIONS ⁽¹⁾

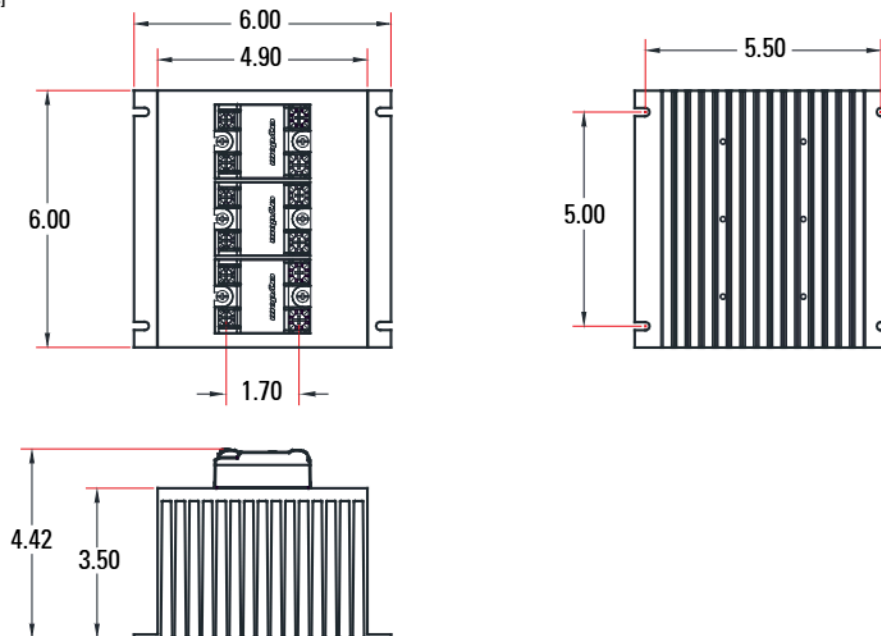
Description	HS053-D24125	HS053-HD60125
Control Voltage Range	3-32 VDC	4-32 VDC
Minimum Turn-On Voltage	3.0 VDC	4.0 VDC
Minimum Turn-Off Voltage	1.0 VDC	1.0 VDC
Maximum Reverse Voltage	-32 VDC	-32 VDC
Minimum Input Current	7.0 mA	7.0 mA
Maximum Input Current	12 mA	12 mA
Nominal Input Impedance	Current 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 ⁹ 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

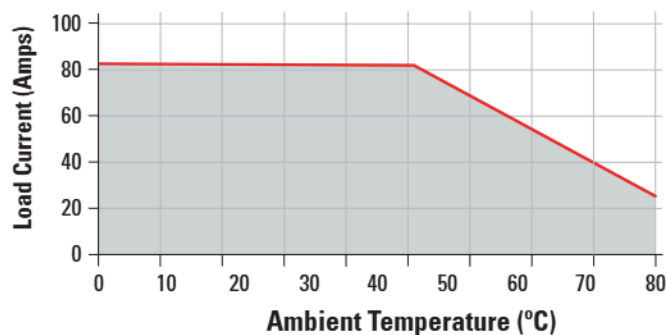
MECHANICAL SPECIFICATIONS

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

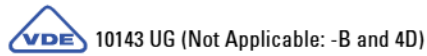


GENERAL NOTES

- (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 ARCH 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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