



# HS103DR SERIES ASSEMBLIES

DIN RAIL MOUNT



## Features

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



## SPECIFICATIONS

### Output <sup>(1)</sup>

Description	HS103DR-D2490	HS103DR-HD6090
<b>Operating Voltage (47-63Hz) [Vrms]</b>	24-280	48-660
<b>Transient Overvoltage [Vpk]</b>	600	1200
<b>Maximum Off-State Leakage Current @ Rated Voltage [mArms]</b>	1.0	1.0
<b>Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] <sup>(2)</sup></b>	500	500
<b>Maximum Load Current [Arms]</b>	55	55
<b>Minimum Load Current [Arms]</b>	150	150
<b>Maximum Surge Current (16.6ms) [Apk]</b>	1200	1200
<b>Maximum On-State Voltage Drop @ Rated Current [Vac]</b>	1.15	1.15
<b>Maximum I<sup>2</sup>t for Fusing (8.3 msec) [A<sup>2</sup> sec]</b>	6000	6000
<b>Minimum Power Factor (with Maximum Load)</b>	0.5	0.5

## Input<sup>(1)</sup>

Description	HS103DR-D2490	HS103DR-HD6090
<b>Control Voltage Range</b>	3-32 VDC	4-32 VDC
<b>Minimum Turn-On Voltage</b>	3.0 VDC	4.0 VDC
<b>Minimum Turn-Off Voltage</b>	1.0 VDC	1.0 VDC
<b>Maximum Reverse Voltage</b>	-32 VDC	-32 VDC
<b>Minimum Input Current</b>	7.0 mA	7.0 mA
<b>Maximum Input Current</b>	12 mA	12 mA
<b>Nominal Input Impedance</b>	Curent Regulated	Curent Regulated
<b>Maximum Turn-On Time [msec]</b>	1/2 Cycle	1/2 Cycle
<b>Maximum Turn-Off Time [msec]</b>	1/2 Cycle	1/2 Cycle

## General

Description	HS103DR-Dxx90
<b>Dielectric Strength, Input/Output/Base (50/60Hz)</b>	4000 Vrms
<b>Minimum Insulation Resistance (@ 500 V DC)</b>	10 9 Ohms
<b>Maximum Capacitance, Input/Output</b>	8 pF
<b>Ambient Operating Temperature Range</b>	-40 to 80°C
<b>Ambient Storage Temperature Range</b>	-40 to 125°C
<b>Status Indicator Display</b>	None
<b>Weight (typical)</b>	1.36 lb. (619 g)
<b>Recommended Terminal Screw Torque Range: (in-lbs/Nm)</b>	6-32 Screws - 13-15/1.5-17. 8-32 Screws - 18-20/2-2.2. (Screws dry without grease)
<b>Thermal pad installed</b>	Yes

## PRODUCT SELECTION

Description	55A	55A
<b>3-32 VDC Control</b>	HS103DR-D2490	HS103DR-HD6090

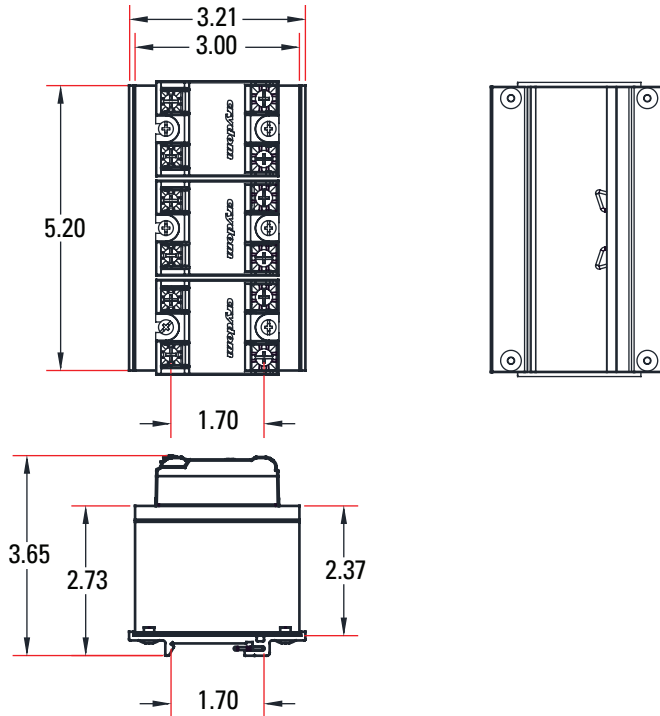
## GENERAL NOTES

<sup>(1)</sup> All parameters at 25°C unless otherwise specified.

<sup>(2)</sup> Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1

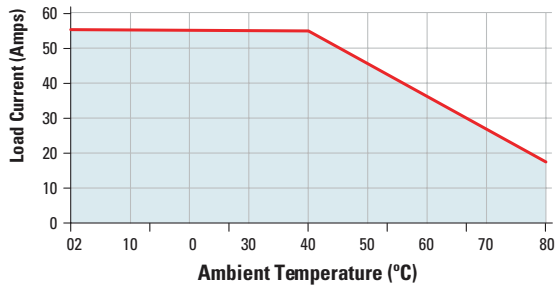


## DIMENSIONS



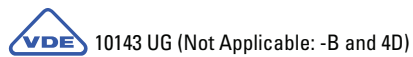
## THERMAL DERATE INFORMATION

HS103DR w/90A SSR or  
1-25A 3-Phase SSR



## AGENCY APPROVALS & 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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