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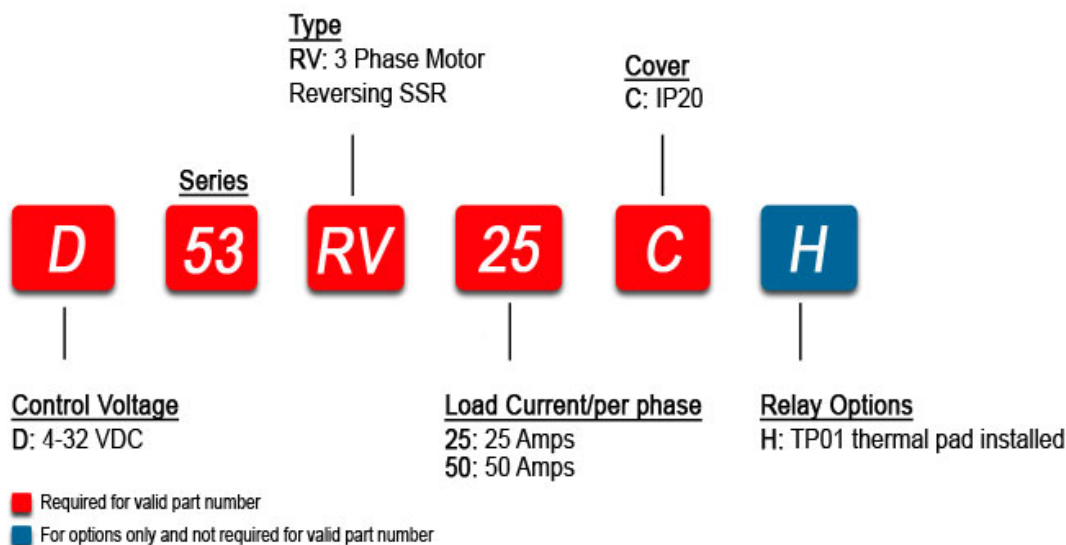
Data Sheet **Panel Mount**

53RV Series



- Three-phase Motor Reversing solid-state relay;
- Ratings from 25A and 50A per phase @ 48-530 VAC
- Interlock Circuit Prevents Inadvertent Actuation of Both Directions
- SCR output for heavy industrial loads
- DC control
- LED input status indicator

PRODUCT SELECTION



Control Voltage	25A	50A
4-32 VDC	D53RV25C	D53RV50C

AVAILABLE OPTIONS

OUTPUT SPECIFICATIONS (1)

Description	D53RV25C	D53RV50C
Operating Voltage (47-63Hz) [Vrms]	48-530	48-530
Maximum Load Current [Arms] (2)	25	50
Transient Overvoltage [Vpk]	1100	1100
Maximum Off-State Leakage Current @ Rated Voltage [mArms] (3)	6	6
Minimum Load Current [Arms]	0.1	0.1
Maximum Surge Current 50/60 Hz (16.6ms) [Apk]	475/500	710/750
1 Second Surge Current 50/60 Hz [Apk]	100	150
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.35	1.35
Maximum I ² T for Fusing (50/60 Hz, 1/2 cycle) [A ² sec]	1139/1038	2520/2320
Thermal Resistance Junction to Case (Rjc) [°C/W]	0.26	0.25
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] (4)	500	500
UL/IEC 60947 Motor Control Ratings at 120V [HP/KW] (5)	0.75/0.56	1.5/1.11
UL/IEC 60947 Motor Control Ratings at 240V [HP/KW] (5)	1/0.74	3/2.22
UL/IEC 60947 Motor Control Ratings at 380V [HP/KW] (5)	2/1.48	5/3.7
UL/IEC 60947 Motor Control Ratings at 480V [HP/KW] (5)	3/2.22	7.5/5.55

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INPUT SPECIFICATIONS (1)

Description	Parameters
Control Voltage Range	4-32 VDC
Minimum Turn-On Voltage	4.0 VDC
Minimum Turn-Off Voltage	1.0 VDC
Minimum Input Current (for on-state)	23mA
Maximum Input Current	35mA
Input Resistance	Current Regulated
Maximum Turn-On Time [msec]	150
Maximum Turn-Off Time [msec]	1/2 Cycle
Interlocking Time [msec]	100

GENERAL SPECIFICATIONS

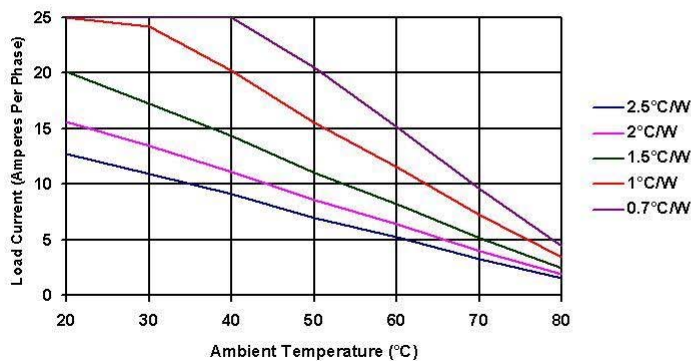
Description	Parameters
Input to Output Isolation	4000 Vrms
Input/ Output to Ground Isolation	2500 Vrms
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 100 °C
Weight (typical)	13.1 oz (370g)
Housing Material	UL 94V0 (self extinguishing)
Terminals	Screws and Clamps Furnished
Input Terminal Screw Torque Range:[in lbs/Nm]	16.8/1.9
Output Terminal Screw Torque Range:[in lbs/Nm]	21.2/2.4

GENERAL NOTES

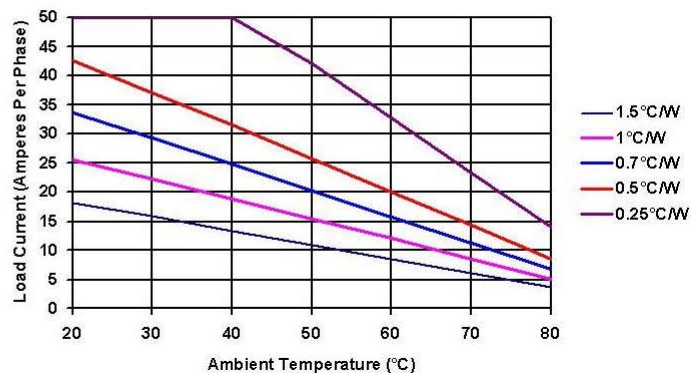
- 1) All parameters at 25°C unless otherwise specified.
- 2) When mounted to the proper size heat sink (see derating curves)
- 3) Measured between 1/L1 and 2/T1 or 3/L2 and 4/T2
- 4) Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1
- 5) At 40°C Ambient temperature.

THERMAL DERATE INFORMATION

DERATING CURVES:
53RV - 25AMP



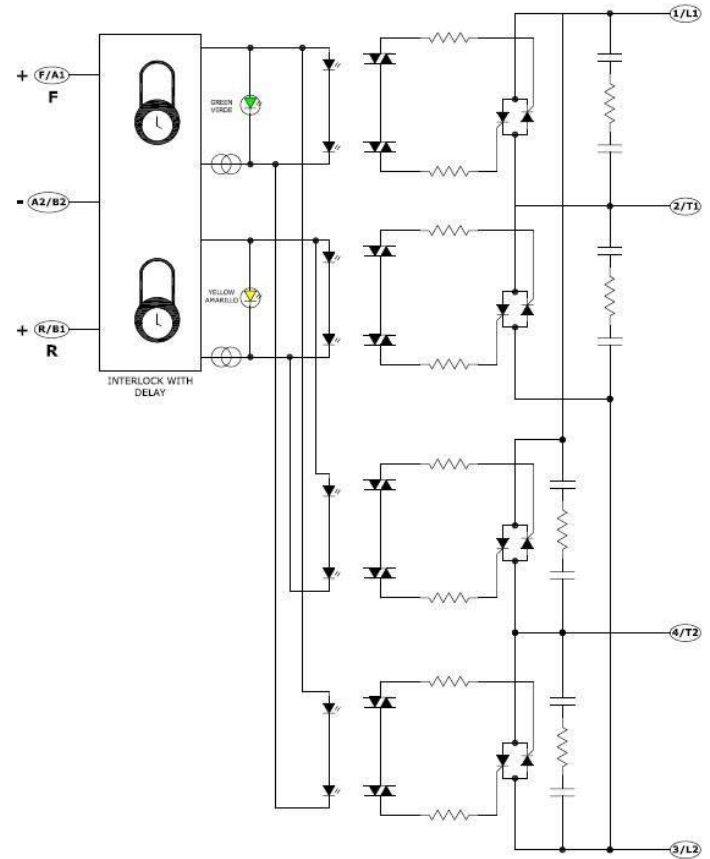
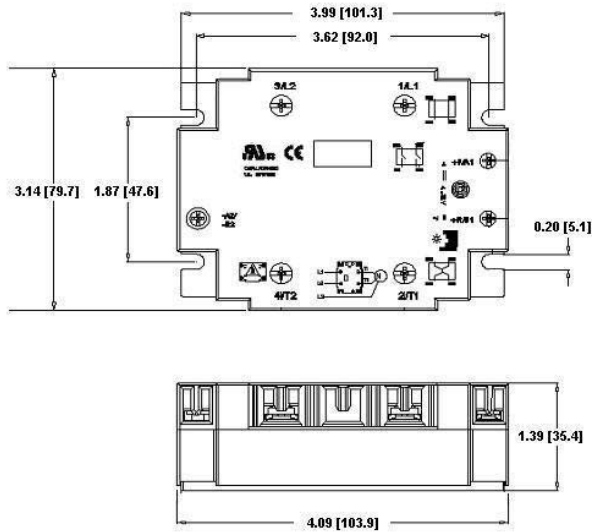
DERATING CURVES:
53RV - 50AMPS



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MECHANICAL SPECIFICATIONS



AGENCY APPROVALS



Rev. 060711