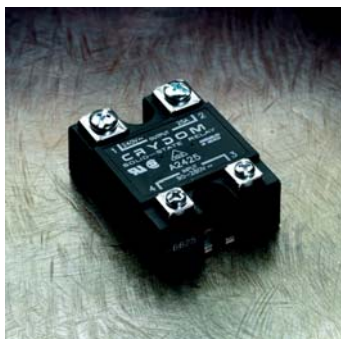


Series 1 480 VAC

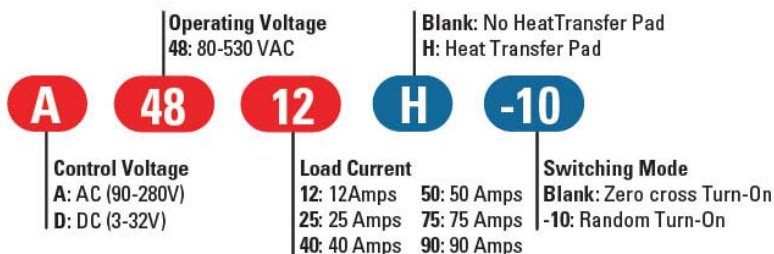


- Ratings from 10A to 90A @ 80-530 VAC
- SCR output for heavy industrial loads
- AC or DC control
- Zero-crossing (resistive loads) or random-fire (inductive loads) output

PRODUCT SELECTION

Control Voltage	12A	25A	50A	75A	90A
3-32 VDC	D4812	D4825	D4850	D4875	D4890
90-280 VAC	A4812	A4825	A4850	A4850	A4890

AVAILABLE OPTIONS



OUTPUT SPECIFICATIONS (1)

Description	12A	25A	50A	75A	90A
Operating Voltage (47-63Hz) [Vrms]	80-530	80-530	80-530	80-530	80-530
Transient Overvoltage [Vpk]	800	800	800	800	800
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	10	10	10	10	10
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/usec] (2)	500	500	500	500	500
Maximum Load Current (3) [mArms]	12	25	50	75	90
Minimum Load Current [mArms]	40	40	40	40	40
Maximum 1 Cycle Surge Current (50/60Hz) [Apk]	134/140	239/250	597/625	954/1000	1145/1200
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.7	1.7	1.7	1.7	1.7
Thermal Resistance Junction to Case (Rjc) [°C/W]	1.48	1.02	0.63	0.31	0.28
Maximum 1/2 Cycle I ² t for Fusing (50/60Hz) [A2 sec]	89/81	285/259	1779/1621	4555/4150	6560/5976
Minimum Power Factor (with Maximum Load)	0.5	0.5	0.5	0.5	0.5

INPUT SPECIFICATIONS (1)

Description	(D PREFIX)	(A PREFIX)
Control Voltage Range	3-32 VDC	90-280 Vrms (60Hz)
Maximum Reverse Voltage	-32	-
Maximum Turn-On Voltage	3.0 VDC	90 Vrms
Minimum Turn-Off Voltage	1.0 VDC	10 Vrms
Typical Input Current	2.0 mA (5)	2.0 mA @ 120 Vrms, 4.0 mA @ 240 Vrms
Nominal Input Impedance	See Note (5)	60 K Ohms
Maximum Turn-On Time [msec] (4)	1/2 Cycle	10
Maximum Turn-Off Time [msec]	1/2 Cycle	40

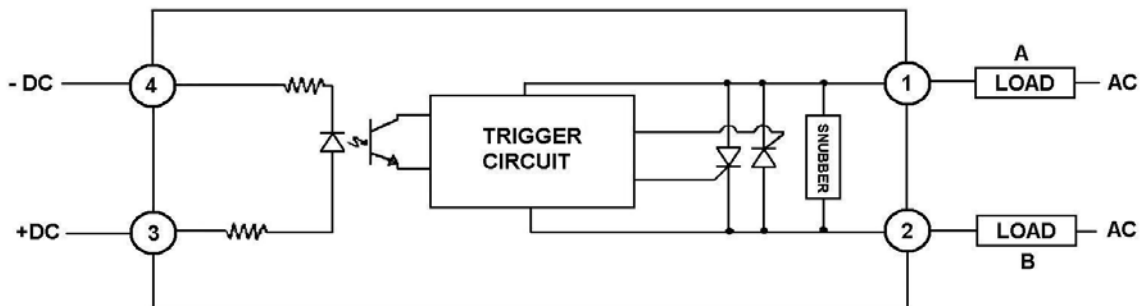
GENERAL SPECIFICATIONS

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
Weight (typical)	3 oz (86.5g)
Encapsulation	Thermally conductive Epoxy
Terminals	Screw and saddle Clamps Furnished, Unmounted
Recommended Terminal Screw Torque Range:	6-32 Screws - 10 in./lbs. 8-32 & 10-32 Screws - 20 in. lbs.
Fastons:	Single pair (up to 25A) Double pair* (50A model only) *Caution: User must connect to both pairs

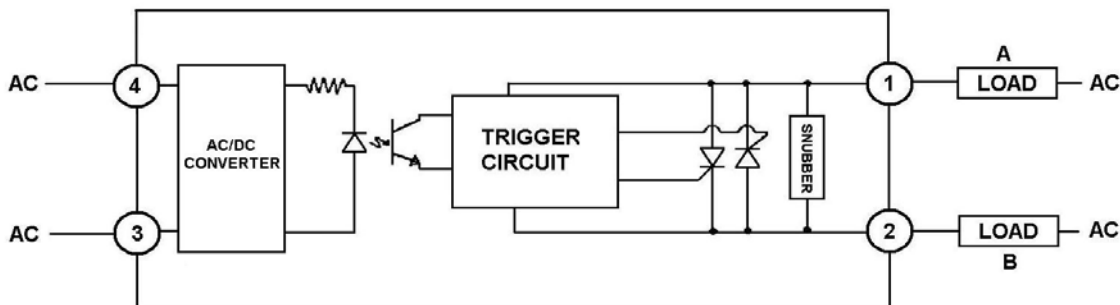
GENERAL NOTES

- 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
- 3) Heat sinking required, for derating curves see page 3.
- 4) Turn-on time for Random turn-on versions is 0.02 msec (DC Control Models)
- 5) Input circuitry incorporates active current limiter.

WIRING DIAGRAM



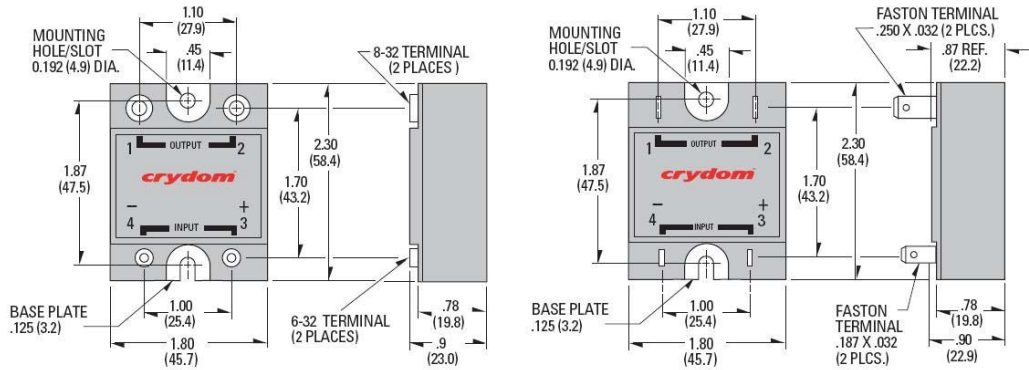
Load can be wired in location A or B





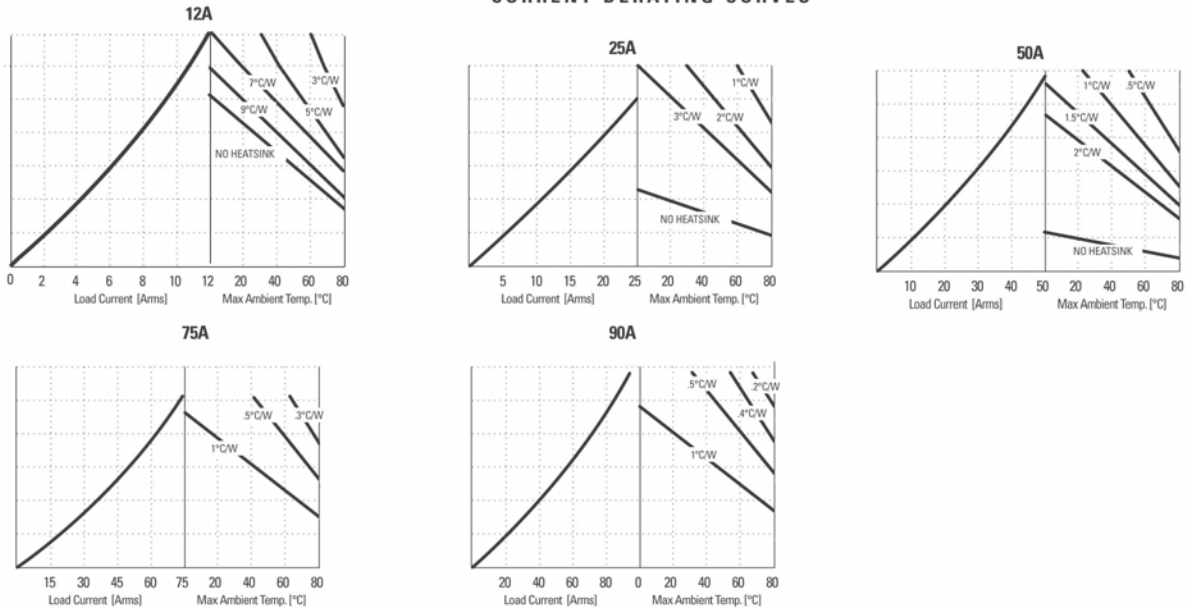
Data Sheet Panel Mount

MECHANICAL SPECIFICATIONS



THERMAL DERATE INFORMATION

CURRENT DERATING CURVES



AGENCY APPROVALS

