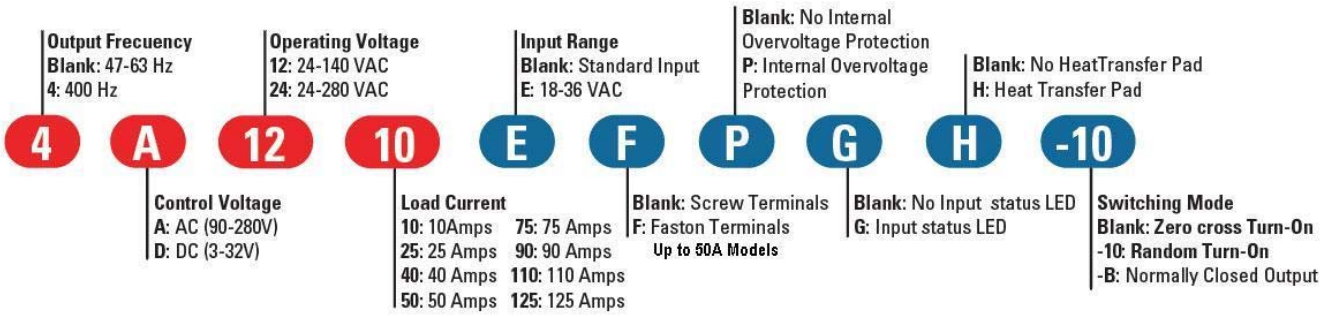
Series 1 240 VAC

- Crydom's signature family of solid-state relays. Ratings from 10A to 125A @ 24-280 VAC
- SCR output for heavy industrial loads
- AC or DC control
- Zero-crossing (resistive loads) or random-fire (inductive loads) output
- UL/CSA/VDE Approved, CE Compliant to EN60950-1

PRODUCT SELECTION

Control Voltage	10A	25A	50A	75A	90A	110A	125A
3-32 VDC	D2410	D2425	D2450	D2475	D2490	D21110	D24125
90-280 VAC	A2410	A2425	A2450	A2475	A2490	A24110	A24125
18-36 VAC	A2410E	A2425E	A2450E	A2475E	A2490E	A24110E	A24125E

AVAILABLE OPTIONS



OUTPUT SPECIFICATIONS (1)

Description	10A	25A	50A	75A	90A	110A	125A
Operating Voltage (47-63Hz) [Vrms]	24-280	24-280	24-280	24-280	24-280	24-280	24-280
Transient Overvoltage [Vpk]	600	600	600	600	600	600	600
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	10	10	10	10	10	10	10
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/µsec] (2)	500	500	500	500	500	500	500
Maximum Load Current (3) [Arms]	10	25	50	75	90	110	125
Minimum Load Current [mArms]	40	40	40	40	40	150	150
Maximum 1 Cycle Surge Current (60Hz) [Apk]	120	250	625	1000	1200	1500	1750
Maximum 1 Cycle Surge Current (50Hz) [Apk]	115	239	597	954	1145	1432	1670
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6	1.6	1.6	1.7	1.7
Thermal Resistance Junction to Case (Rjc) [°C/W]	1.48	1.02	0.63	0.31	0.28	0.25	0.22
Maximum 1/2 Cycle I^2t for Fusing (60Hz) [A2 sec]	60	259	1621	4150	5976	9338	12709
Maximum 1/2 Cycle I^2t for Fusing (50Hz) [A2 sec]	66	285	1779	4555	6560	10249	13950
Minimum Power Factor (with Maximum Load)	0.5	0.5	0.5	0.5	0.5	0.5	0.5

INPUT SPECIFICATIONS (1)

Description	(D PREFIX)	(A PREFIX)	(E SUFFIX)
Control Voltage Range	3-32 VDC	90-280 Vrms	18-36 Vrms
Maximum Reverse Voltage	-32	-	-
Maximum Turn-On Voltage	3.0 VDC (5)	90 Vrms	18 Vrms
Minimum Turn-Off Voltage	1.0 VDC	10 Vrms	4.0 Vrms
Typical Input Current	3.4-20 mA	2.0-4.0 mA	3 mA
Nominal Input Impedance [Ohms]	1500 Ohm	60 K Ohm	9.0 K Ohm
Maximum Turn-On Time [msec] (4)	1/2 Cycle	10	10
Maximum Turn-Off Time [msec]	1/2 Cycle	40	40

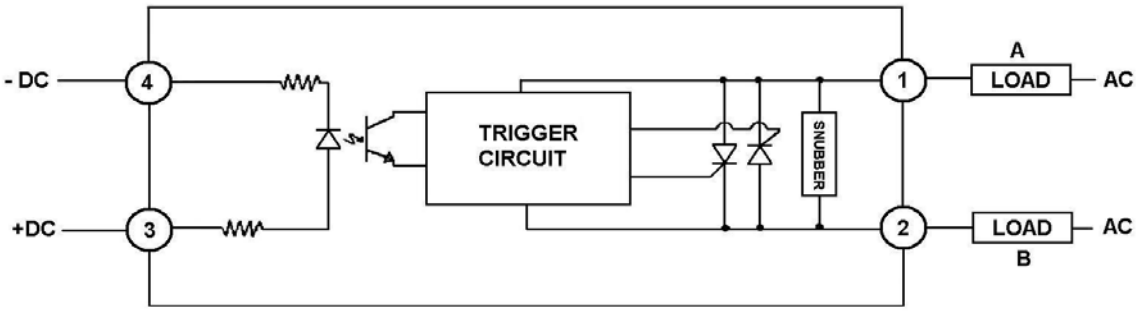
GENERAL SPECIFICATIONS

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, mounted
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

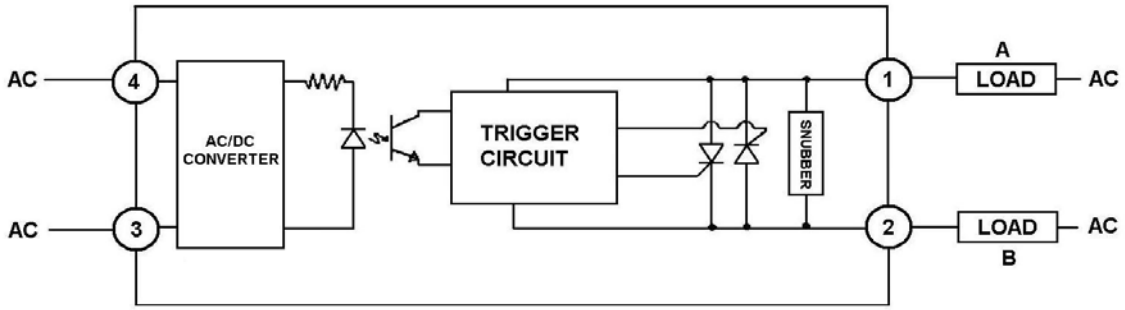
GENERAL NOTES

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) For relays with option "G" minimum control voltage is 4.5VDC

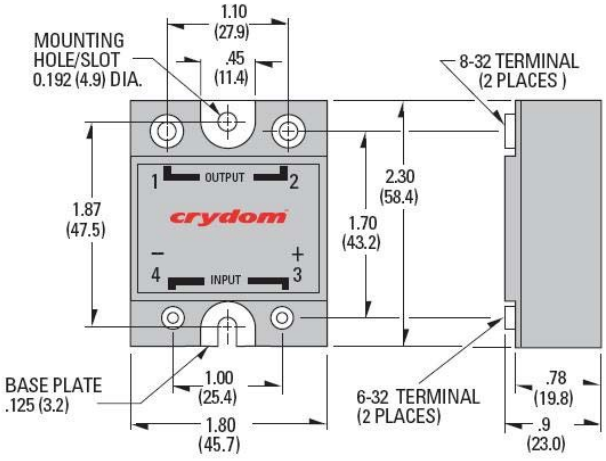
WIRING DIAGRAM

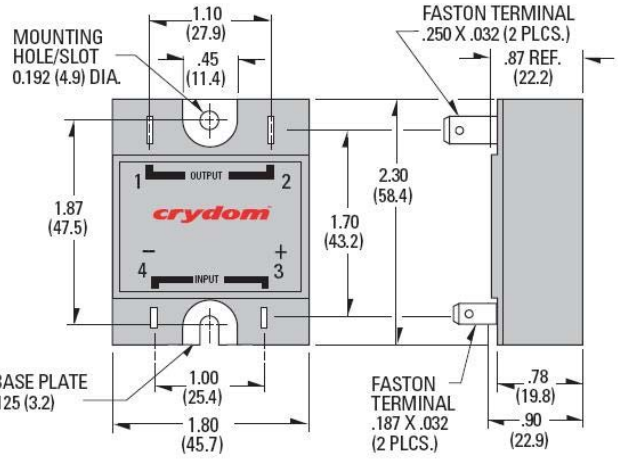


Load can be wired in location A or B

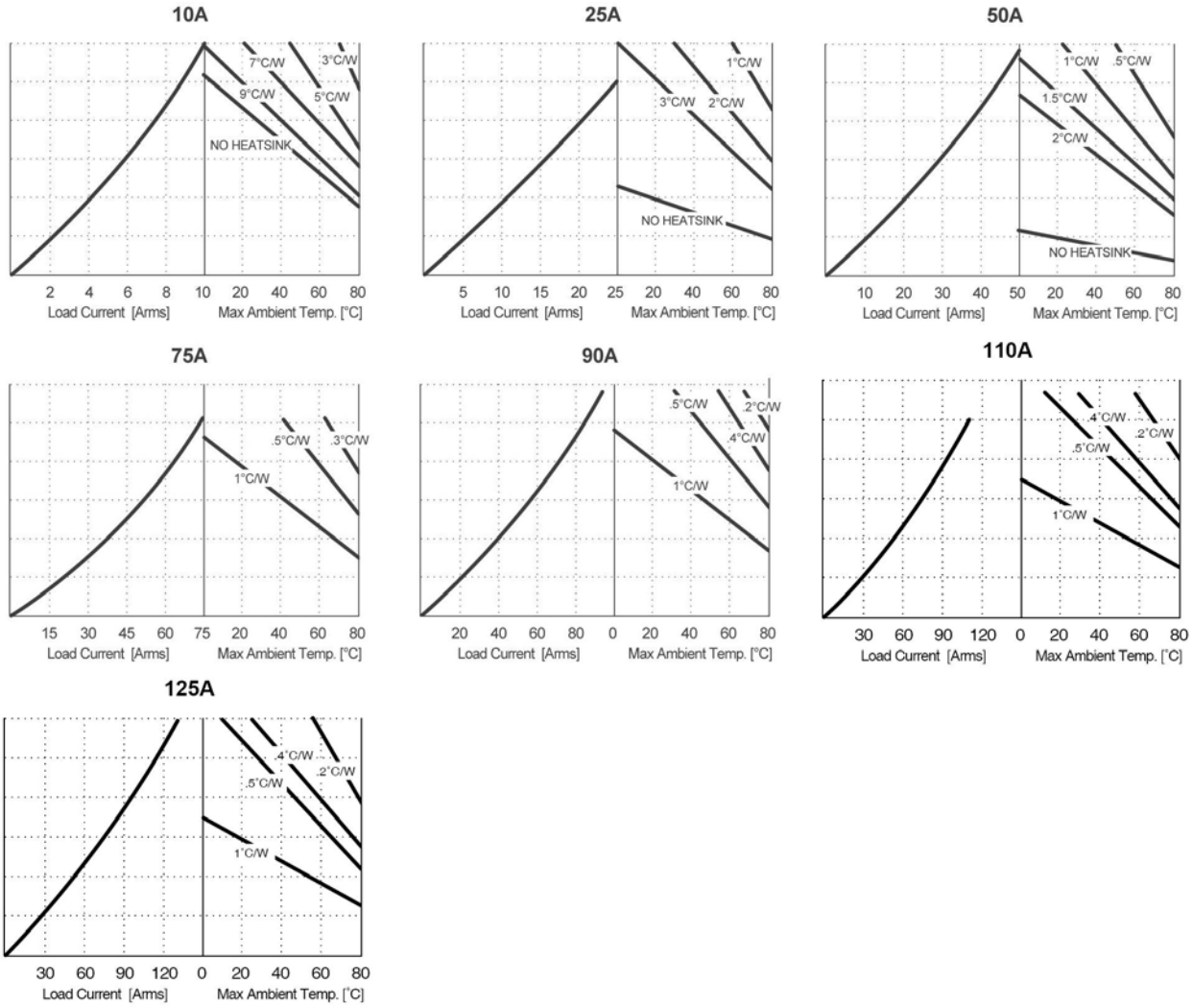


MECHANICAL SPECIFICATIONS





THERMAL DERATE INFORMATION



AGENCY APPROVALS

EN60950 : Meets the requirements of sections1.5: 1,7: 2.9: 2.10.5.3: 4.2: 4.5: 4.7:

E116949 LR81689 10143 UG (Not Applicable: -B and 4D)

Rev. 062211