

HA / HD60 Series

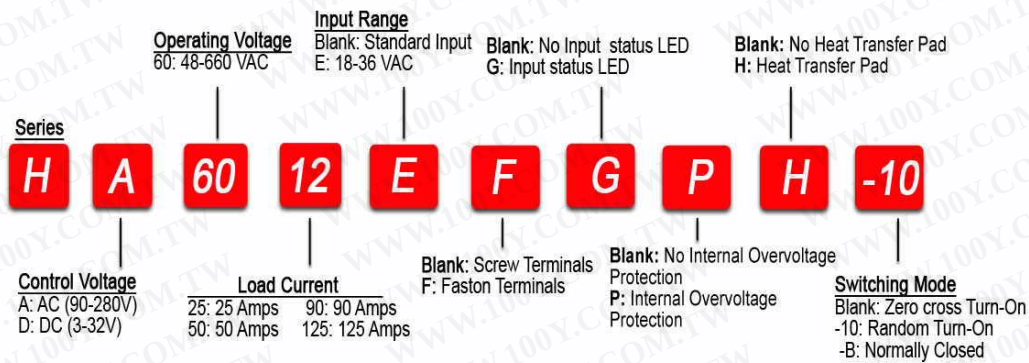


- Ratings from 25A to 125A @ 48-660 VAC
- SCR output for heavy industrial loads
- AC or DC control
- Zero-crossing (resistive loads) or random-fire (inductive loads) output

PRODUCT SELECTION

Control Voltage	25A	50A	90A	125A
3-32 VDC	HD6025	HD6050	HD6090	HD60125
90-280 Vrms	HA6025	HA6050	HA6090	HA60125
18-36 Vrms	HA6025E	HA6050E	HA6090E	HA60125E

AVAILABLE OPTIONS



OUTPUT SPECIFICATIONS (1)

Description	48-660	48-660	48-660	48-660
Operating Voltage (47-63Hz) [Vrms]	48-660	48-660	48-660	48-660
Transient Overvoltage [Vpk]	1200	1200	1200	1200
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	5	5	5	5
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] (2)	500	500	500	500
Maximum Load Current (3) [Arms]	25	50	90	125
Minimum Load Current [mArms]	40	40	40	150
Maximum Surge Current (16.6ms) [Apk]	250	625	1200	1750
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.7	1.7	1.7	1.7
Thermal Resistance Junction to Case (Rjc) [°C/W]	1.02	0.63	0.28	0.22
Maximum I ² t for Fusing (8.3 msec) [A ² sec]	260	1620	6000	12700
Minimum Power Factor (with Maximum Load)	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 Turn-On Voltage	3.0 VDC	90 Vrms	18 Vrms
Minimum Turn-Off Voltage	1.0 VDC	10 Vrms	4.0 Vrms
Maximum Reverse Voltage	-32 VDC	-	-
Typical Input Current	2.0 mA (6)	2 mA @ 120 Vrms, 4 mA @ 240 Vrms	3 mA @ 24 Vrms
Nominal Input Impedance [kOhms]	See Note 6	60	9.0
Maximum Turn-On Time [msec] (5)	1/2 Cycle	10	10
Maximum Turn-Off Time [msec]	1/2 Cycle	40	40

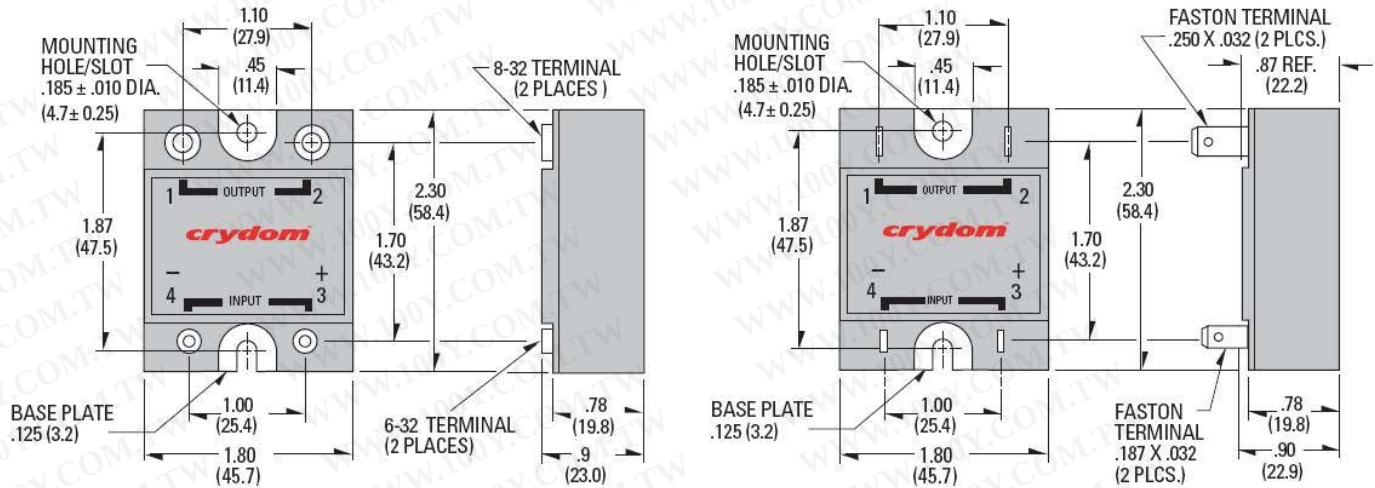
GENERAL SPECIFICATIONS

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)	3.0 oz (86.5 g)
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. (Screws dry without grease)
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 2.
- 4) 24 VAC Input option, E suffix
- 5) Turn-on time for random turn-on versions is 0.02 msec (DC control Models)
- 6) Input circuitry incorporates active current limiter.

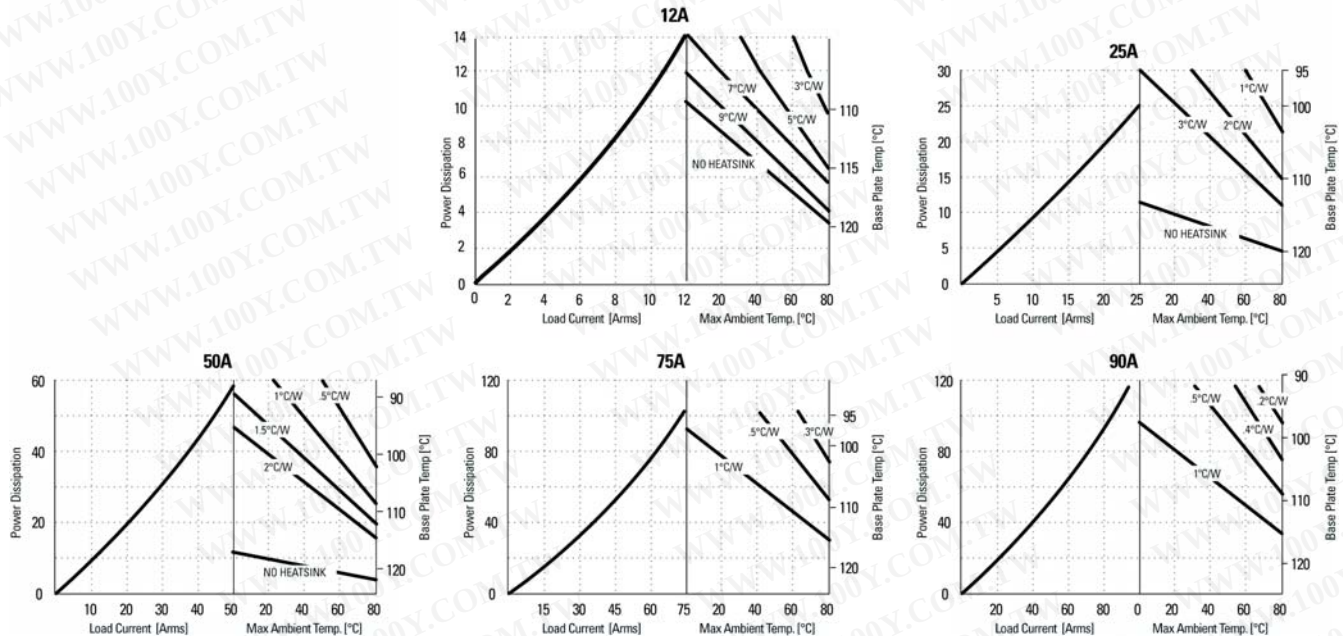
MECHANICAL SPECIFICATIONS



All dimensions are in inches (millimeters)

THERMAL DERATE INFORMATION

CURRENT DERATING CURVES



AGENCY APPROVALS

UL E116949
CSA LR81689
VDE 10143 UG

