

crydom

Panel Mount
DataSheet

HA / HD60 Series

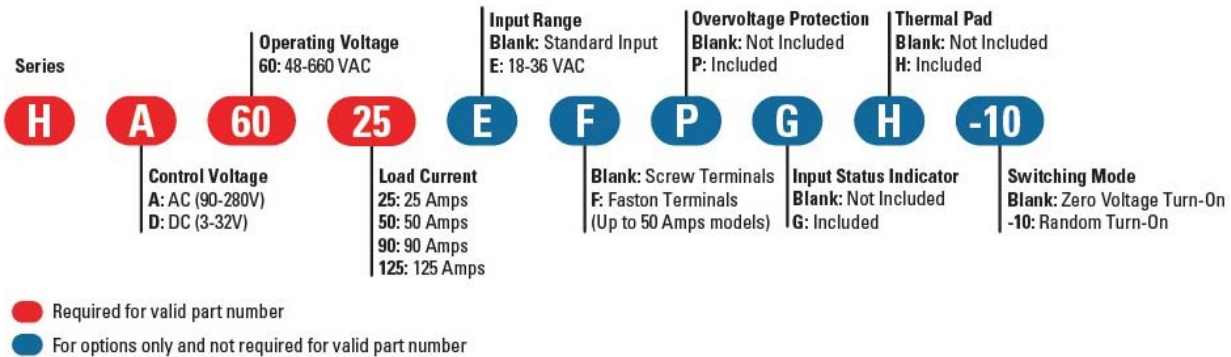


- Ratings from 25A to 125A @ 48-660 VAC
- SCR output for heavy industrial loads
- AC or DC control
- Zero-crossing (resistive loads) or random-fire (inductive loads) output
- Low Leakage (Snubberless)

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	50A	90A	125A
Operating Voltage (47-63Hz) [Vrms]	48-660	48-660	48-660
Transient Overvoltage [Vpk]	1200	1200	1200
Maximum Off-State Leakage Current @ Rated Voltage [mA _{rms}]	5	5	5
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] (2)	500	500	500
Maximum Load Current (3) [A _{rms}]	50	90	125
Minimum Load Current [mA _{rms}]	40	40	150
Maximum 1 Cycle Surge Current (50/60Hz) [A _{pk}]	597/625	1145/1200	1670/1750
Maximum On-State Voltage Drop @ Rated Current [V _{pk}]	1.7	1.7	1.7
Thermal Resistance Junction to Case (R _{jc}) [°C/W]	0.63	0.28	0.22
Maximum 1/2 Cycle I ² t for Fusing (50/60Hz) [A ² sec]	1779/1621	6560/5976	13950/12709
Minimum Power Factor (with Maximum Load)	0.5	0.5	0.5

INPUT SPECIFICATIONS (1)

Description	D PREFIX	A PREFIX	E SUFFIX
Control Voltage Range	3-32 VDC (7)	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

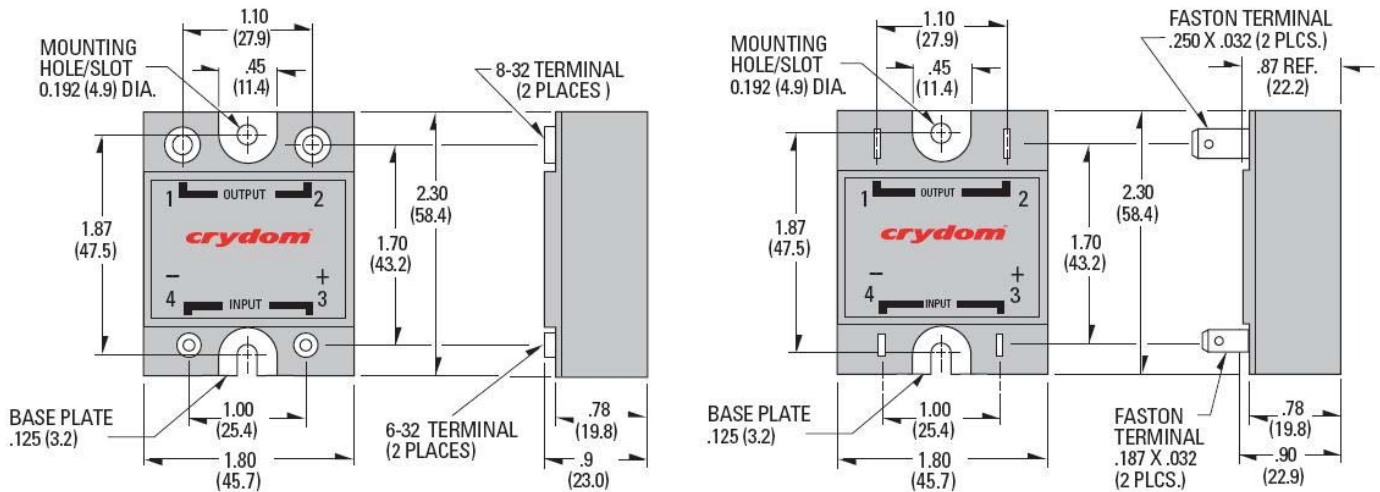
GENERAL SPECIFICATIONS

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.
Fastons:	Single pair (up to 25A) Double pair* (50A model only) *Caution: User must connect to both pairs

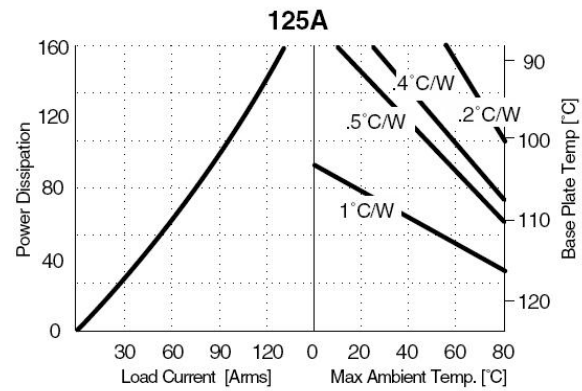
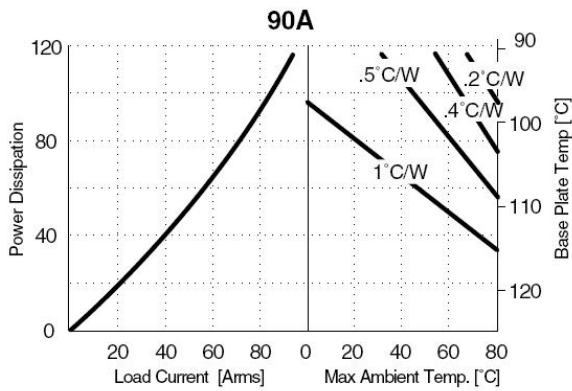
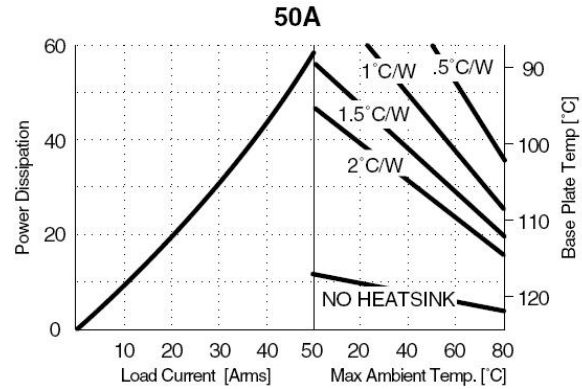
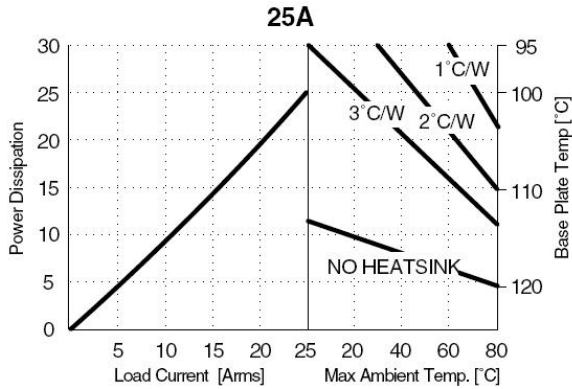
GENERAL NOTES

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

MECHANICAL SPECIFICATIONS






THERMAL DERATE INFORMATION



AGENCY APPROVALS

Designed in accordance with the requirements of IEC 62314

 E116950
  LR81689
  10143 UG




Rev. 120211