

HA, HD Series

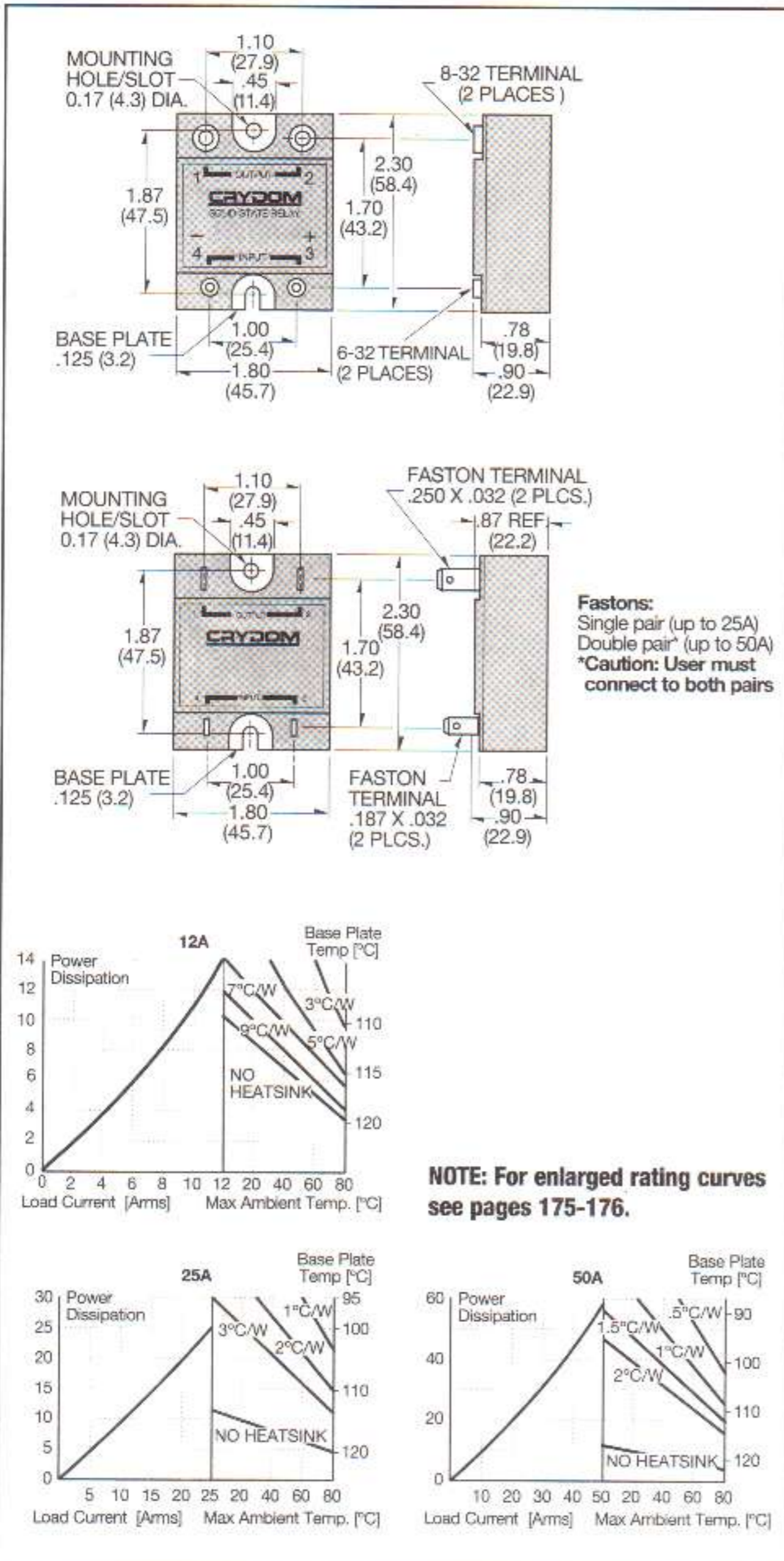
CRYDOM

Control over power

- Output – SCR AC switch
- Input – AC or DC control
- Zero cross turn-on
random turn-on
- 1200 V blocking capability
- Panel mount

UL	CSA	VDE	CE
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Product Description: These state-of-the-art panel mount relays have rugged back-to-back SCR outputs and are rated for use on AC lines up to 530Vrms. Both the HA (AC control) and HD (DC control) SPST-NO relays can withstand overvoltage transients up to 1200Vpk. The low control current needed for DC control is achieved by Crydom's unique active current limited input; this can reduce power supply requirements, particularly where multiple relays are used. Zero voltage and random (suffix '-10') turn-on versions are offered; DC control random turn-on relays are phase controllable. The standard AC control voltage is



SPECIFICATIONS

Models ▶
Control ▶

HD4812
DC

OUTPUT⁽¹⁾

Load Voltage Range (@ 47-63Hz)	48-530Vrms
Transient Overvoltage	1,200Vpk
Load Current Range ⁽⁵⁾	0.04-12Arms
Max Surge Current (16.6mS)	140Apk
Max Off-State Leakage Current @ Rated Voltage	10mArms
Min Off-State dv/dt @ Max Rated Voltage ⁽²⁾	500V/μS
Max On-State Voltage Drop @ Rated Current	1.7Vpk
Max Turn-On Time ⁽³⁾	1/2 cycle
Max Turn-Off Time	1/2 cycle
Max I ² t for Fusing (8.3mS)	81A ² S
Min Power Factor with Max Load	0.5
Thermal Resistance Junction to Case	1.48°C/W

INPUT⁽¹⁾

Control Voltage Range	3-32Vdc
Must Operate Voltage	3Vdc
Must Release Voltage	1Vdc
Max Reverse Voltage	-32Vdc
Nominal Input Impedance	(4)
Typical Input Current	2.0mAdc

GENERAL

Dielectric Strength (Input/Output/Base)	4,000Vrms
Min Insulation Resistance	10 ⁹ Ohms @ 500Vdc
Max Capacitance Input/Output	8.0pF
Ambient Operating Temperature Range	-40 to +80°C
Ambient Storage Temperature Range	-40 to +125°C
Weight (Typical)	86.5g/3oz

Screw Torque Requirements: 6-32 screws, - 10in./lbs, 8-32 and 10-32 screws, - 20in./lbs

Approvals UL E116949, CSA LR81689, VDE 10143 UG

Options: Suffix E, 24 Vac Input (18-36 Vac)

Example: HA4825E

Suffix -10, Random turn-on (AC and DC control) Phase controllable (DC control)

Example: HD4890-10

Suffix F, Faston terminals (up to 50amp models)