



Series H12D

25-90Amp • 480 Vac • AC Output

- 1200 Volt Blocking
- Panel Mount
- Up to 530 Vac
- Zero Voltage and Random Turn-On
- SCR Output
- Integrated Overvoltage Protection by Automatic Self Turn-On (Suffix P)

High voltage relays use IC driven circuits for switching loads up to 660 VAC. All models come with 1200 Volts blocking and are available with either AC or DC input (coil) control.

Manufactured in Crydom's ISO 9001 Certified facility for optimum product performance and reliability.

MODEL NUMBERS

H12D4825 H12D4850 H12D4875 H12D4890

OUTPUT SPECIFICATIONS ①

	H12D4825	H12D4850	H12D4875	H12D4890
Operating Voltage (47-63 Hz) [Vrms]	48-530	48-530	48-530	48-530
Max. Load Current ③ [Arms]	25	50	75	90
Min. Load Current, [mArms]	150	150	150	150
Transient Overvoltage [Vpk]	1200	1200	1200	1200
Max. Surge Current, (16.6ms) [Apk]	250	625	1000	1200
Max. On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6	1.6
Thermal Resistance Junction to Case (R _{JC}) [°C/W]	1.02	.63	.31	.28
Maximum I ² t for Fusing, (8.3 msec.) [A ² sec]	260	1620	4150	6000
Max. Off-State Leakage Current @ Rated Voltage [mArms]	10	10	10	10
Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec] ②	500	500	500	500
Max. Turn-On Time ④	1/2 Cycle	1/2 Cycle	1/2 Cycle	1/2 Cycle
Max. Turn-Off Time	1/2 Cycle	1/2 Cycle	1/2 Cycle	1/2 Cycle
Power Factor (Min.) with Max. Load	0.5	0.5	0.5	0.5

INPUT SPECIFICATIONS ①

Control Voltage Range	4-32Vdc
Max. Turn-On Voltage	4.0 Vdc
Min. Turn-Off Voltage	1.0 Vdc
Nominal Input Impedance	See Note 5
Typical Input Current	15 mA @ 5 Vdc ⑤

GENERAL NOTES

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- 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 Turn-on time for DC control random turn-on versions is 0.02 msec.
- ⑤ Input circuitry incorporates active current limiter.

For recommended applications and more information contact:
USA: (800) 8 CRYDOM • (800) 827-9366 • (619) 715-7200 • fax (619) 715-7280
 Crydom Corp, 9525 Chesapeake Drive, San Diego, CA 92123 • e-mail: sales@crydom.com
WEB SITE: <http://www.crydom.com> **FASTFAX Product Information:** (888) 267-9191
UK: (44)1202 812300 • fax (44)1202 812340 Crydom International Ltd., 85, Condor Close,
 Woolsbridge Industrial Estate, Three-Legged Cross, Wimborne, Dorset, England BH21 6SU
GERMANY: (49) (0)6874 182580 • fax (49)(0)6874 182585 Crydom GmbH,
 Gewerbegebiet Im Schachen, D-66687 Nunkirchen, Germany • e-mail: Vertrieb@crydom.com





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GENERAL SPECIFICATIONS

Dielectric Strength 50/60Hz Input/Output/Base	4000 Vrms
Insulation Resistance (Min.) @ 500 Vdc	10 ⁹ Ohm
Max. Capacitance Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125°C

MECHANICAL SPECIFICATIONS

Weight: (typical)	3.0 oz. (86.5g)
Encapsulation:	Thermally Conductive Epoxy
Terminals:	Screws and Saddle Clamps Furnished, Unmounted

Crydom Heat Sinks offer excellent thermal management and are perfectly matched to the load current ratings of Crydom panel mount relays. Request Crydom's Heat Sink specification sheet for all the details.

Available Options

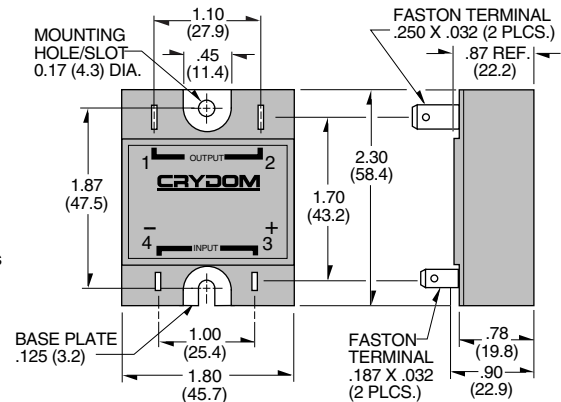
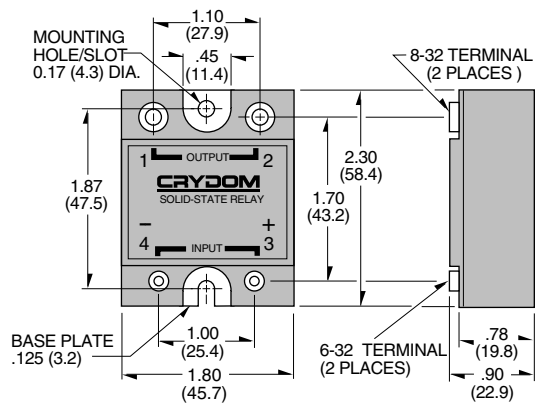
- F** Faston Terminals
(Up to 50 Amp Models)
- 10** Random Turn-On
Example: **H12D4850-10**
- P** Internal Overvoltage Protection.
Relay Will Self Trigger Between 900-1200Vpk. Not Suitable For Capacitive Loads.
Agencies Approval Pending.
Example: **H12D4850P**

Screw Torque Requirements:

6-32 Screws - 10 in./lbs.,
8-32 and 10-32 Screws - 20in./lbs.
(Screws dry without grease.)

Fastons:

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



All dimensions are in inches (millimeters)

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APPROVALS

UL E116949
CSA LR81689
VDE 10143 UG



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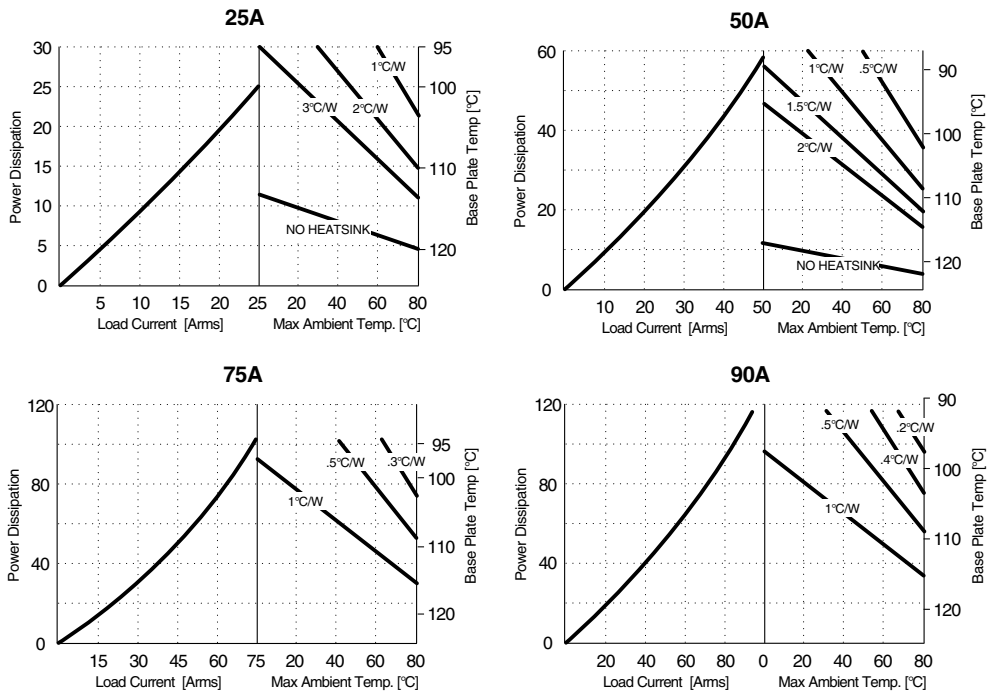
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CRYDOM

Control over power

CURRENT DERATING CURVES



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