

- 1200 Volt Blocking
- Panel Mount
- Up to 660 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. Type H12WD is a snubberless (reduced leakage current). Manufactured in Crydom's ISO 9001 Certified facility for optimum product performance and reliability.

| MODEL NUMBERS | H12WD4825 | H12WD4850 | H12WD4875 | H12WD4890 | H12WD48125 ^⑥ |
|---|-----------|-----------|-----------|-----------|-------------------------|
| OUTPUT SPECIFICATIONS ① | | | | | |
| Operating Voltage (47-63 Hz) [Vrms] | 48-660 | 48-660 | 48-660 | 48-660 | 48-660 |
| Max. Load Current ③ [Arms] | 25 | 50 | 75 | 90 | 125 |
| Min. Load Current, [mArms] | 150 | 150 | 150 | 150 | 150 |
| Transient Overvoltage [Vpk] | 1200 | 1200 | 1200 | 1200 | 1200 |
| Max. Surge Current, (16.6ms) [Apk] | 250 | 625 | 1000 | 1200 | 1750 |
| Max. On-State Voltage Drop @ Rated Current [Vpk] | 1.6 | 1.6 | 1.6 | 1.6 | 1.7 |
| Thermal Resistance Junction to Case (R _{θJC}) [°C/W] | 1.02 | .63 | .31 | .28 | .22 |
| Maximum I ² t for Fusing, (8.3 msec.) [A ² sec] | 260 | 1620 | 4150 | 6000 | 12700 |
| Max. Off-State Leakage Current @ Rated Voltage [mArms] | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec] ② | 500 | 500 | 500 | 500 | 500 |
| Max. Turn-On Time ④ | 1/2 Cycle | 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 | 1/2 Cycle |
| Power Factor (Min.) with Max. Load | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |

INPUT SPECIFICATIONS ①

| | |
|-------------------------|-----------------|
| Control Voltage Range | 4-32 Vdc |
| 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.
- ⑥ CE Compliant only.

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 |

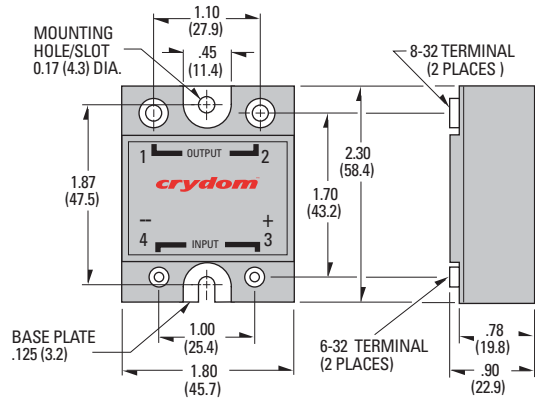
Crydom Heat Sinks offer excellent thermal management and are perfectly matched to the load current ratings of Crydom panel mount relays. Request Crydom's Heat Sink specification sheet for all the details.

Available Options

- F** Faston Terminals.
(Up to 50 Amp Models)
Example: **H12WD4850F**
- G** Input Status LED.
Agencies Approval Pending
Example: **H12WD4850G**
Note: Control Voltage Range 5.5-32 Vdc
- P** Internal Overvoltage Protection.
Relay Will Self Trigger Between 900-1200Vpk. Not Suitable For Capacitive Loads.
Agencies Approval Pending.
Example: **H12WD4850P**
- 10** Random Turn-On.
Example: **H12WD4850-10**
- H** Heat Transfer Pad (Attached)
Example: **H12WD4850H**

Ordering System: Combination of the suffixes should be made in the following order:
FPG-10.

Example: **H12WD4850FPG-10**

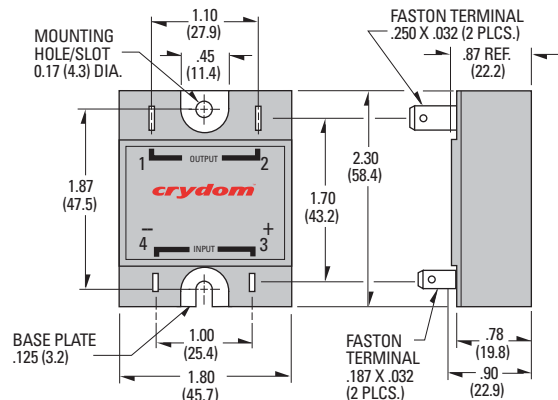


Screw Torque Requirements:

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)

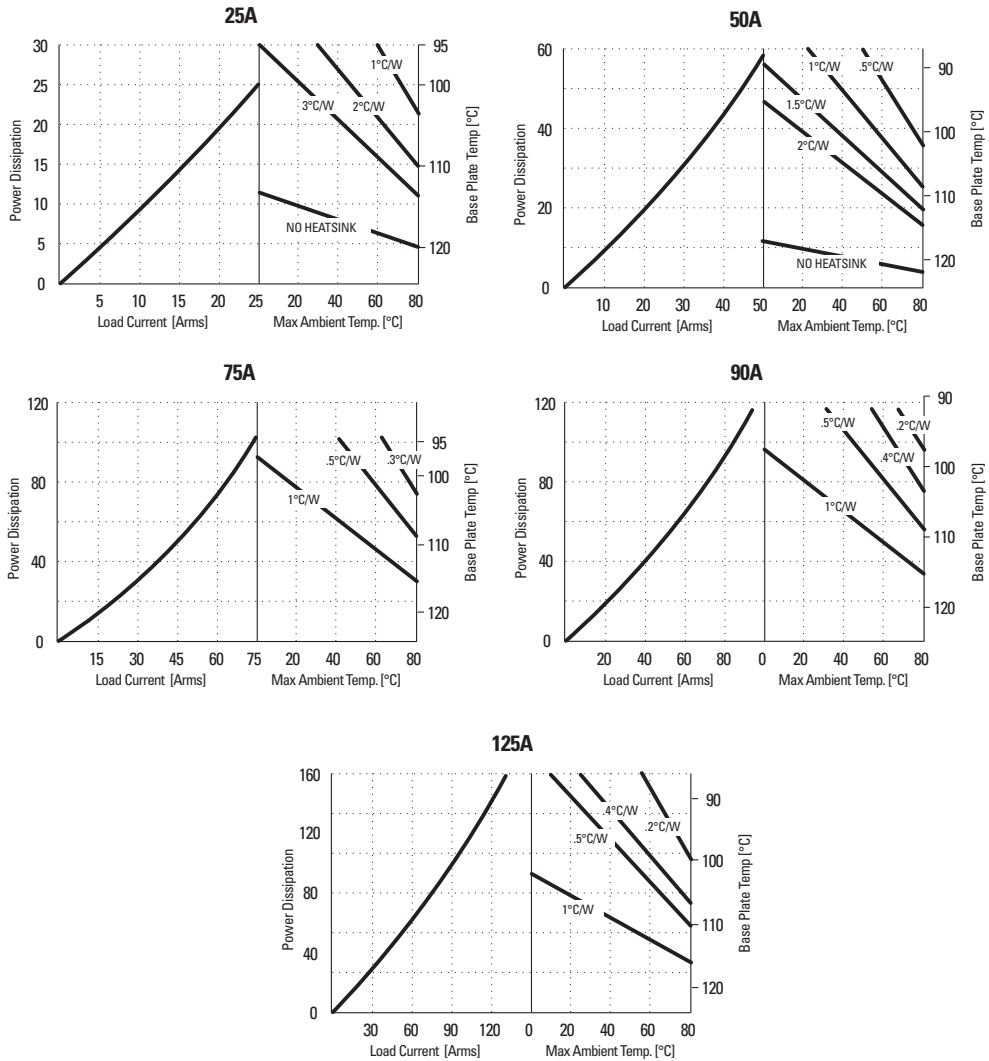
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APPROVALS

UL E116949
CSA LR81689
VDE 10143 UG



CURRENT DERATING CURVES



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ANNEX – ENVIRONMENTAL INFORMATION:

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

| Part Name | Toxic or hazardous Substance and Elements | | | | | |
|-------------------|---|--------------|--------------|-------------------------------|--------------------------------|---------------------------------------|
| | Lead (Pb) | Mercury (Hg) | Cadmium (Cd) | Hexavalent Chromium (Cr (VI)) | Polybrominated biphenyls (PBB) | Polybrominated diphenyl ethers (PBDE) |
| Semiconductor die | X | O | O | O | O | O |
| Solder | X | O | O | O | O | O |

附件 - 环保信息:

此附件所标示的包括电子信息产品污染图标的环保信息符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**, 电子信息产品污染控制标识要求

| 部件名称 | 有毒有害物质或元素 | | | | | |
|-------|-----------|--------|--------|---------------|------------|--------------|
| | 铅 (Pb) | 汞 (Hg) | 镉 (Cd) | 六价铬 (Cr (VI)) | 多溴联苯 (PBB) | 多溴二苯醚 (PBDE) |
| 半导体芯片 | X | O | O | O | O | O |
| 焊接点 | X | O | O | O | O | O |

