



PS48 | SERIES
PANEL MOUNT



Features

- Peak-fire SSR for high inductance applications; Ratings from 10 A to 90 A @ 380-530 VAC
- SCR output for heavy industrial loads
- DC control



PRODUCT SELECTION

Control Voltage	10 A	25 A	50 A	90 A
4-32 VDC	PSD4810	PSD4825	PSD4850	PSD4890



OUTPUT SPECIFICATIONS ¹

Description	10 A	25 A	50 A	90 A
Operating Voltage (47-63Hz) [Vrms]	380-530	380-530	380-530	380-530
Transient Overvoltage [Vpk]	1200	1200	1200	1200
Maximum Off-State Leakage Current @ Rated Voltage [mA _{rms}]	10	10	10	10
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] ²	500	500	500	500
Maximum Load Current [A _{rms}] ³	10	25	50	90
Minimum Load Current [A _{rms}]	40	40	40	40
Maximum 1 Cycle Surge Current (50/60Hz) [A _{pk}]	134/140	239/250	597/625	1145/1200
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6	1.6
Thermal Resistance Junction to Case (R _{jc}) [°C/W]	1.48	1.02	0.63	0.28
Maximum 1/2 cycle I ² t for Fusing (50/60Hz) [A ² sec]	89/81	285/259	1779/1621	6560/5976
Minimum Power Factor (with Maximum Load)	0.5	0.5	0.5	0.5



INPUT SPECIFICATIONS ¹

Description	DC Control
Control Voltage Range	4-32 VDC
Maximum Turn-On Voltage ²	4.0 VDC
Minimum Turn-Off Voltage	1.0 VDC
Maximum Reverse Voltage	-32
Typical Input Current ⁴	8 mADC
Nominal Input Impedance	See Note 4
Maximum Turn-On Time [msec]	1/2 Cycle
Maximum Turn-Off Time [msec]	1/2 Cycle



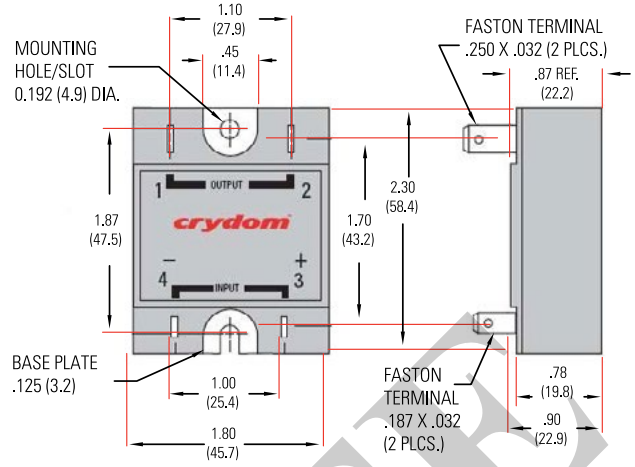
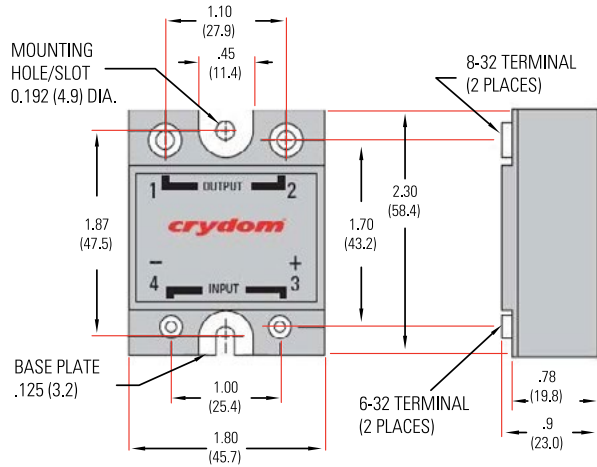
GENERAL SPECIFICATIONS ¹

Description	Parameters
Dielectric Strength, Input/Output/Base (50/60Hz)	4000 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10 ⁹ Ohms
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 25 A) Double pair* (50 A model only) *Caution: User must connect to both pairs

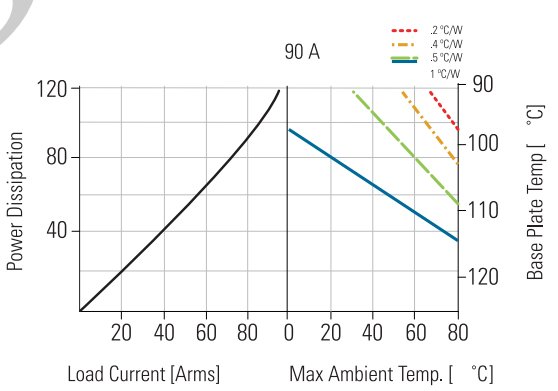
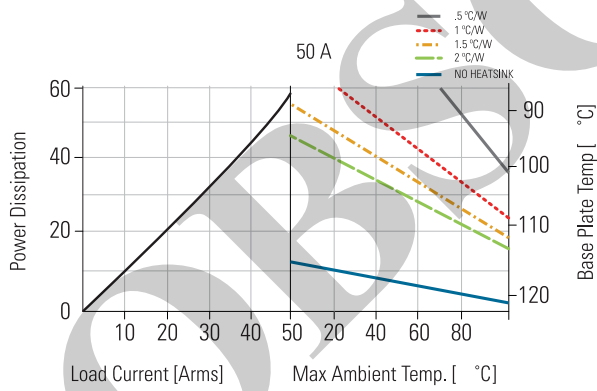
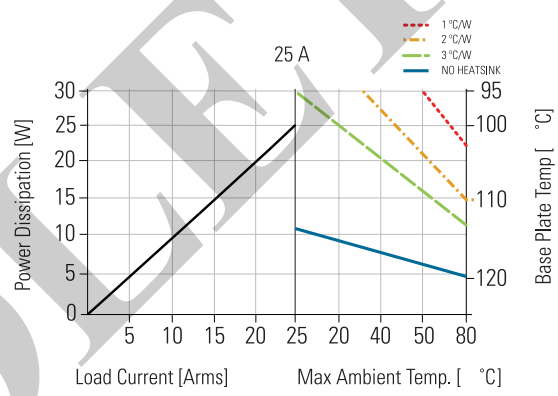
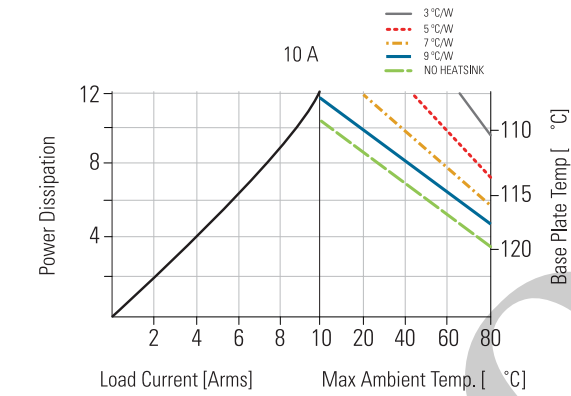


MECHANICAL SPECIFICATIONS

*Tolerances: ±0.02 in / 0.5 mm All dimensions are in: inches [millimeters]



THERMAL DERATE INFORMATION

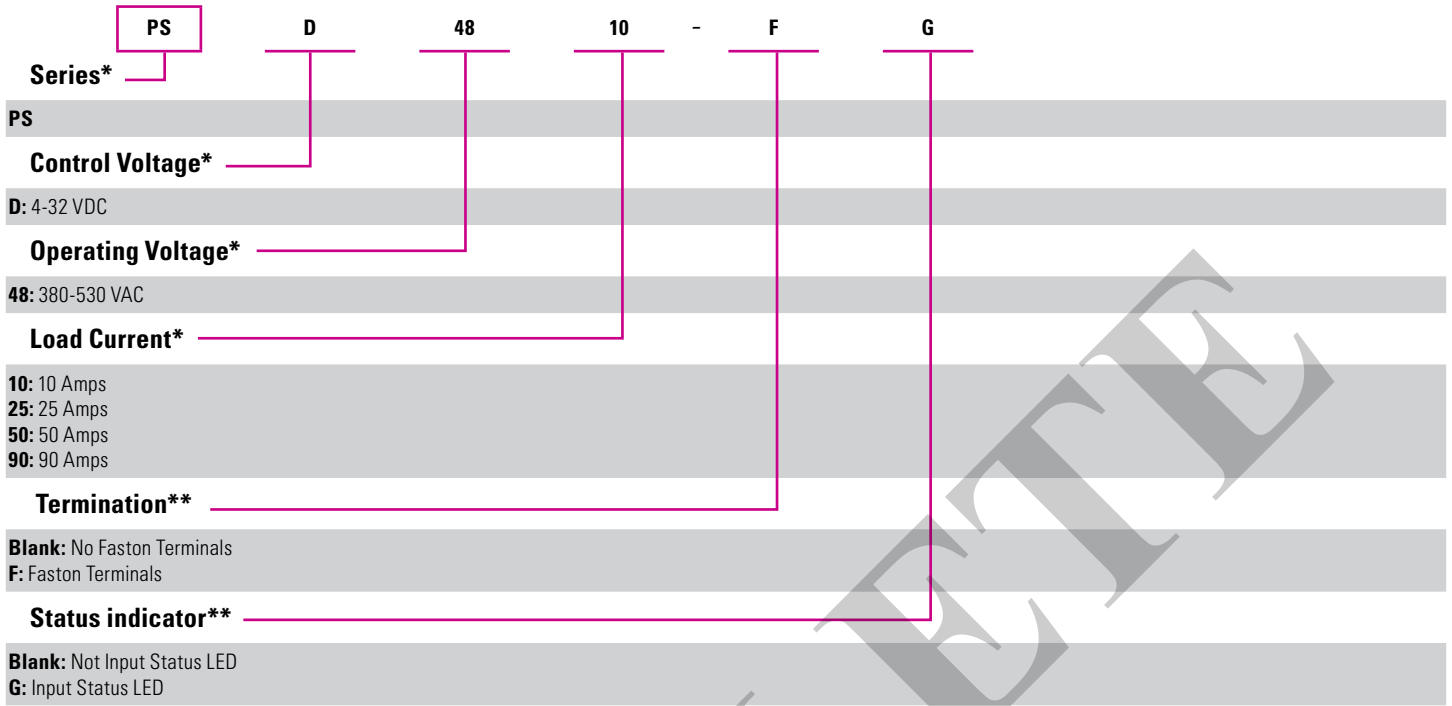




AVAILABLE OPTIONS

Example : PSD4810-FG

Not all part number combinations are available.
Contact Crydom Technical Support for information on the availability of a specific part number.



* Required for valid part number

**For options only and not required for valid part number

OBSOLETE



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 3.
- (4) Input circuit incorporates active current limiter



AGENCY APPROVALS & CERTIFICATIONS

Designed in accordance with the requirements of IEC 62314



WARNINGS



RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
 - Follow proper mounting instructions including torque values
 - Do not allow liquids or foreign objects to enter this product
- Failure to follow these instructions can result in serious injury, or equipment damage.**



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
 - Verify all connections and replace all covers before turning on power
- Failure to follow these instructions will result in death or serious injury.**

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