



Series CS

10-90Amp • 120/240 Vac • AC OUTPUT

- Low Leakage
- SCR Output
- Panel Mount
- Zero Voltage Switching

The Series CS has an SCR AC switch output featuring low off-state leakage (1mA, snubberless), zero-voltage switching and a broadened operating range (24-280Vac). This wide range permits optimum performance at both 120Vac and 240Vac line voltages.

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

MODEL NUMBERS	CSD2410 CSE2410	CSD2425 CSE2425	CSD2450 CSE2450	CSD2475 CSE2475	CSD2490 CSE2490
OUTPUT SPECIFICATIONS^①					
Operating Voltage (47-63 Hz) [Vrms]	24-280	24-280	24-280	24-280	24-280
Load Current Range ^③ [Arms]	0.15-10	0.15-25	0.15-50	0.25-75	0.25-90
Transient Overvoltage [Vpk]	600	600	600	600	600
Max. Surge Current, (16.6ms) [Apk]	120	250	625	1000	1200
Max. On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6	1.6	1.6
Thermal Resistance Junction to Case (R _{θJC}) [°C/W]	1.48	1.02	0.63	0.31	0.28
Maximum I ² t for Fusing, (8.3 msec.) [A ² sec]	60	260	1620	4150	6000
Max. Off-State Leakage Current @ Rated Voltage [mA]	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	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	DC CONTROL (CSD PREFIX)	DC CONTROL (CSE PREFIX)
Control Voltage Range	3.5-15 Vdc	15-32 Vdc
Max. Turn-On Voltage	3.5 Vdc	15.0 Vdc
Min. Turn-Off Voltage	1.0 Vdc	1.0 Vdc
Nominal Input Impedence	300 Ohm	2k Ohm
Typical Input Current	15 mA @ 5 Vdc	7mA @ 15 V

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.





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GENERAL SPECIFICATIONS

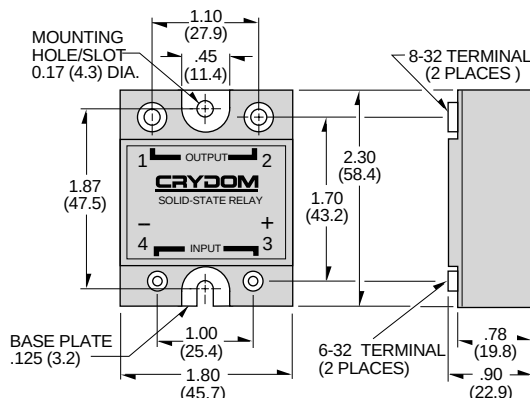
Dielectric Strength 50/60Hz , Input/Output/Base	4000 Vrms
Insulation Resistance (Min.) @ 500 Vdc	10 ⁹ Ohm
Max. Capacitance Input/Output	10 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125°C

MECHANICAL SPECIFICATIONS

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

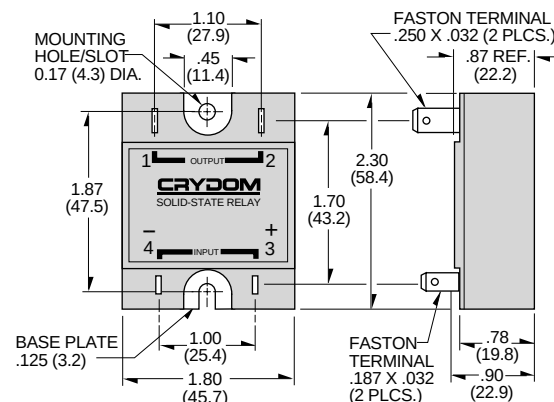
AVAILABLE OPTIONS

- F** Faston Terminals (Up to 50A Models)
Example: **CSD2425F**
- G** Input Status LED.
Agencies Approval Pending
Example: **CSD2425G**
Note: Control Voltage Range 5-15Vdc
for CSD Models.
- P** Internal Overvoltage Protection.
Relay Will Self Trigger Between
450-600 Vpk. Not Suitable For Capacitive Loads.
Agencies Approval Pending.
Example: **CSD2425P**
- 10** Random Turn-On (AC & DC Control)
Phase Controllable (DC Control)
Example: **CSD2425-10**



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)

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.

APPROVALS

UL E116949
CSA LR81689
VDE 10143 UG



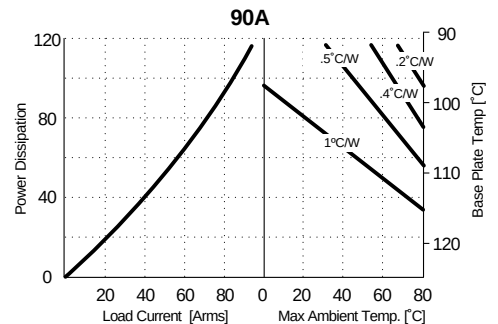
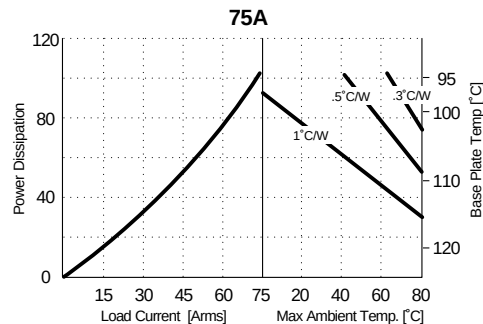
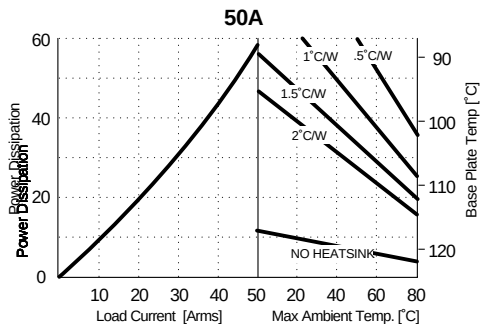
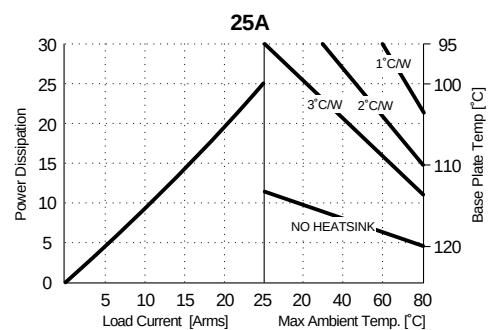
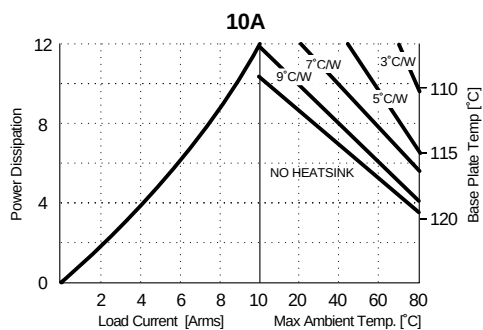
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CRYDOM

Control over power

CURRENT DERATING CURVES



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