



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 9002 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 ($R_{\theta JC}$) [$^{\circ}C/W$]	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 [$V/\mu sec$] 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 Impedance	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.

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



CRYDOM

Control over power

Series CS

10-90Amp • 120/240 Vac • AC OUTPUT

GENERAL SPECIFICATIONS

Dielectric Strength 50/60Hz, Input/Output/Base 4000 Vrms

Insulation Resistance (Min.) @500 Vdc 10⁹ 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

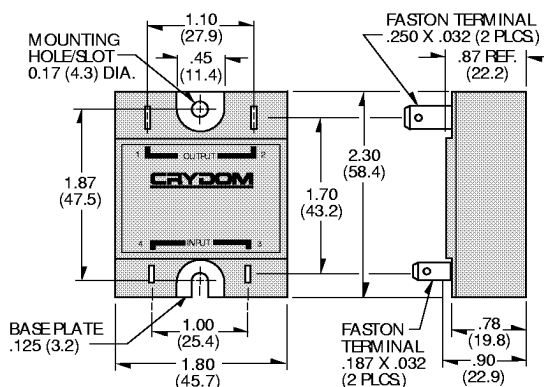
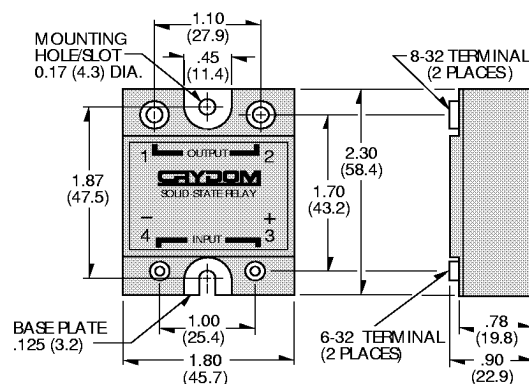
Terminals: Screws and Saddle Clamps Furnished, Unmounted

AVAILABLE OPTIONS

- F** Faston Terminals
(Up to 50Amp Models)

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

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APPROVALS

UL E116949
CS LR81689
VDE 10143 UG



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SERIES CS.032698, PAGE 2 OF 3

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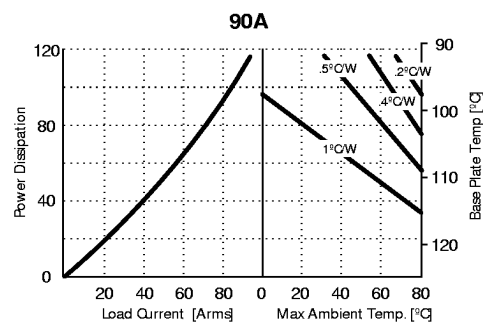
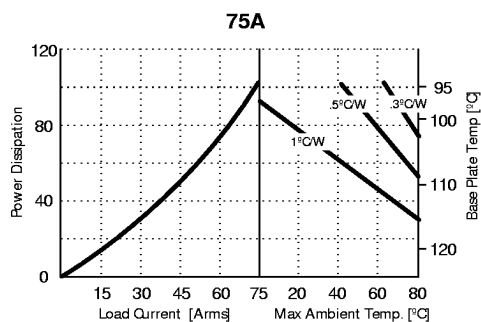
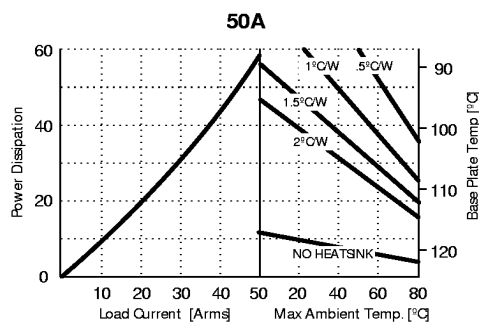
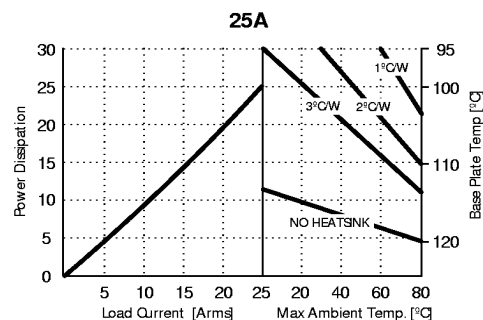
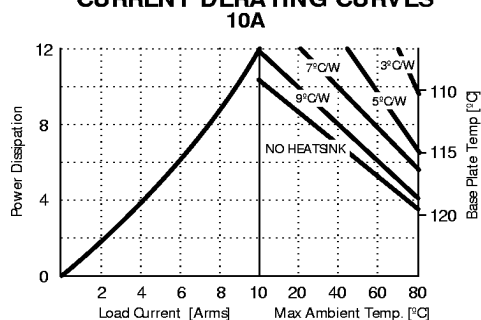
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CURRENT DERATING CURVES



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