

- Low Leakage
- SCR Output
- Panel Mount
- Zero Voltage Switching
- Wide Control Range

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

CSW2410      CSW2425      CSW2450      CSW2475      CSW2490

## OUTPUT SPECIFICATIONS ①

	CSW2410	CSW2425	CSW2450	CSW2475	CSW2490
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 <sub>θJC</sub> ) [°C/W]	1.48	1.02	0.63	0.31	0.28
Maximum I <sup>2</sup> t for Fusing, (8.3 msec.) [A <sup>2</sup> 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

Control Voltage Range	3-32 Vdc
Max. Turn-On Voltage	3 Vdc
Min. Turn-Off Voltage	1.0 Vdc
Nominal Input Impedence	See note 4
Typical Input Current	10mA @ 12 Vdc

## GENERAL NOTES

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① Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1

② All parameters at 25°C unless otherwise specified.

③ Heat sinking required, for derating curves see page 2.

④ Input Circuit Incorporates Active Current Limiter.

## GENERAL SPECIFICATIONS

Dielectric Strength 50/60Hz , Input/Output/Base	4000 Vrms
Insulation Resistance (Min.) @ 500 Vdc	10 <sup>9</sup> 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

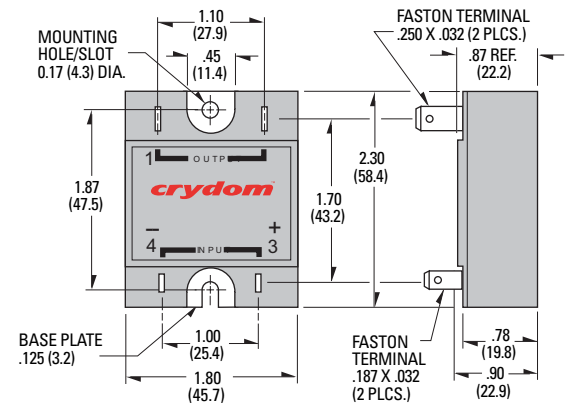
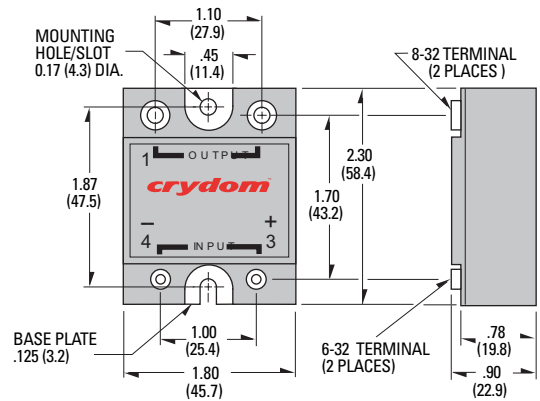
- F** Faston Terminals (Up to 50A Models)  
Example: **CSW2425F**
- G** Input Status LED.  
Example: **CSW2425G**
- P** Internal Overvoltage Protection.  
Relay Will Self Trigger Between  
450-600 Vpk. Not Suitable For Capacitive Loads.  
Example: **CSW2425P**
- 10** Phase Controllable  
Example: **CSW2425-10**
- H** Heat Transfer Pad (Attached)  
Example: **CSW2425H**

### 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.

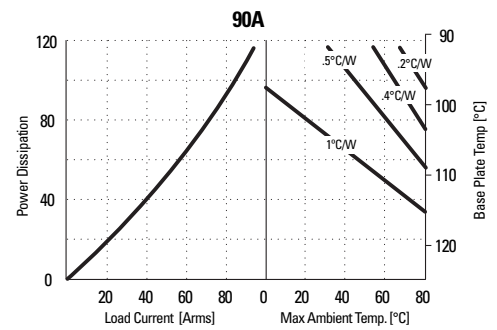
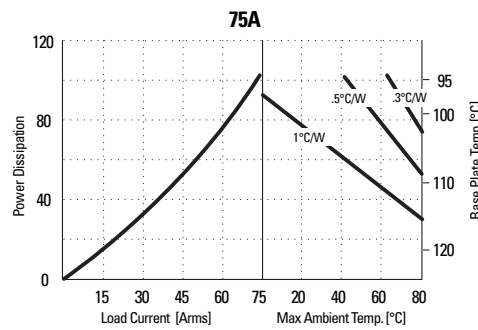
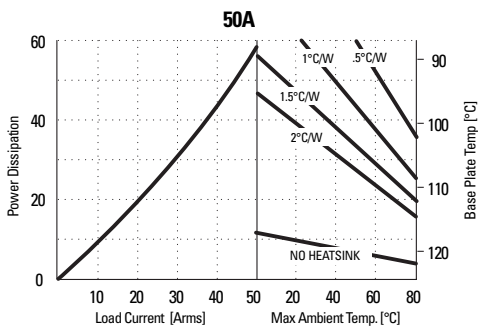
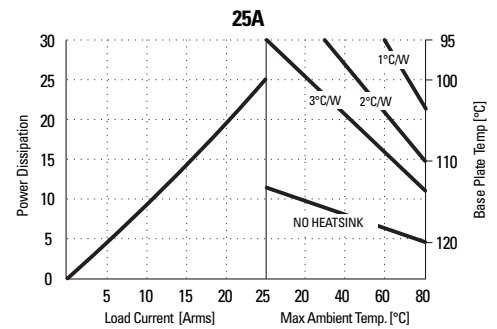
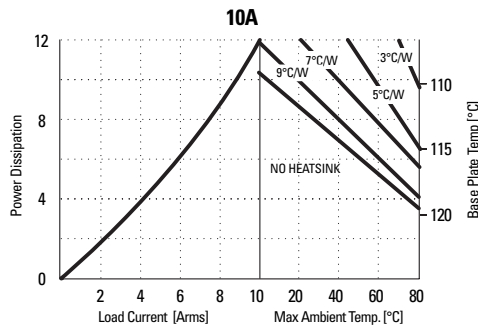
## EMC Compatibility

Input:	EN61000-4-2, Level 3	ESD
	EN61000-4-4, Level 3	Burst
Output:	EN61000-4-2, Level 3	ESD
	Level 4	ESD (with P option)
	EN61000-4-4, Level 3	Burst
	Level 4	Burst (with P option)
	EN61000-4-5, Level 4	Surge

## APPROVALS

UL E116949  
CSA LR 81689-10  
VDE 10143 UG

## CURRENT DERATING CURVES



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