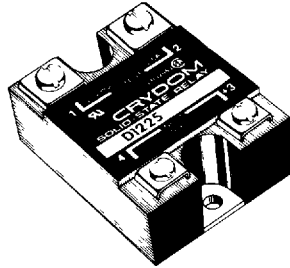




**SOLID-STATE RELAYS AND INPUT/OUTPUT SWITCHES**

**SERIES 1**



**2.5 TO 90 AMP, 120, 240 AND 480 VAC SCR AC OUTPUT, PANEL MOUNT SOLID-STATE RELAYS**

These Crydom SSRs make it possible to switch AC power loads up to 47 kw. Output circuit consists of inverse-parallel (back-to-back) dual SCRs to meet the most demanding requirements. Features include zero voltage switching, phase control and normally closed models available. UL recognized, CSA certified & VDE approved.

**AC Control Models—SCR Output**

Crydom Model No.	Line VAC (47-63 Hz)	Max. Load Current, Amps (RMS)	One-Cycle Surge, Amps (PK)
A1202	24-140	2.5	22.5
A1210	24-140	10	120
A1225	24-140	25	250
A1240	24-140	40	625
A2402	48-280	2.5	22.5
A2410	48-280	10	120
A2425	48-280	25	250
A2440	48-280	40	625
A2450	48-280	50	625
A2475	48-280	75	1000
*HA4812	80-530	12	140
*HA4825	80-530	25	250
*HA4840	80-530	40	625
*HA4850	80-530	50	625
*HA4875	80-530	75	1000
*HA4890	80-530	90	1200

\*HA = 1200 VPK Blocking

**General Specifications**

Isolation Voltage: 4000 VAC Std. (Input to Output)  
Operating Temperature Range: -30°C to 80°C.

**DC Input Control Models**

Control Signal Range ..... 3-32 VDC  
Must Operate Voltage ..... 3 VDC Max  
Must Release Voltage ..... 1 VDC Min  
Input Current ..... 4 mA max @ 5 VDC

**AC Input Control Models**

Standard "E" Suffix  
Control Signal Range ..... 90-280 VAC ..... 18-36 VAC  
Must Operate Voltage ..... 90 VAC Max ..... 18 VAC MAX  
Must Release Voltage ..... 10 VAC Min ..... 4 VAC Min  
Input Current ..... 2 mA max @ 120 VAC ..... 2.4 mA @ 24 VAC

**DC Control Models—SCR Output**

Crydom Model No.	Line VAC (47-63 Hz)	Max. Load Current, Amps (RMS)	One-Cycle Surge, Amps (PK)
D1202	24-140	2.5	22.5
D1210	24-140	10	120
D1225	24-140	25	250
D1240	24-140	40	625
D2402	48-280	2.5	22.5
D2410	48-280	10	120
D2425	48-280	25	250
D2440	48-280	40	625
D2450	48-280	50	625
D2475	48-280	75	1000
*HD4812	80-530	12	140
*HD4825	80-530	25	250
*HD4840	80-530	40	625
*HD4850	80-530	50	625
*HD4875	80-530	75	1000
*HD4890	80-530	90	1200

\*HD = 1200 VPK Blocking

**ADDITIONAL DC INPUT MODELS AVAILABLE:**

"NORMALLY CLOSED" — B SUFFIX  
"NON-ZERO SWITCH" — 10 SUFFIX  
"400 Hz" — 4 PREFIX

**50 & 90 AMP, 48-660 VAC AC OUTPUT SOLID-STATE RELAYS 1200V BLOCKING**

The highest power rated SSRs, up to 59 kw, 4000V of isolation with the highest available blocking voltages (1.2 KV) below which the SSRs will not mistrigger. The wide margin between operating and blocking voltages permits the proper use of transient suppression (MOV) devices on the 480V line. Features include high dv/dt and zero voltage switching. UL & CSA

**General Specifications**

Control Signal Range "C", "WD" 4 to 32 VDC  
"CA" . . . . .90 to 140 VAC  
Input Current @ 5 VDC . . . . .15 mA max.  
Isolation Voltage 50/60 Hz . . . . .4000 VRMS  
Operating Temperature Range . . . . . -30°C to 80°C

Crydom Model No.	Line VAC (47-63 Hz)	Max. Load Current Amps (RMS)	One Cycle Surge Amps (pk)
H12CA4850	48-660	50	625
H12CA4890	48-660	90	1200
H12WD4850	48-660	50	625
H12WD4890	48-660	90	1200

**7.0 TO 40 AMP, 100 TO 500 VDC CMOS DC OUTPUT SOLID STATE RELAYS**

This new Crydom series of DC power SSRs incorporates a power MOSFET as the output device in the classic Crydom package. The input can be driven from most logic circuits, requiring less than 1.6 mA at 5 VDC.

**General Specifications**

Control Signal Range . . . . .3.5 to 32 VDC  
Input Current @ 5 VDC . . . . .1.6 mA max.  
Isolation Voltage 50/60 Hz . . . . .2500 VRMS  
Operating Temperature Range . . . . . -30°C to 80°C

Crydom Model No.	Line VDC	Max. Load Current @ 40°C Amps	10MS Surge Amps
D1D07	0-100	7.0	15
D1D12	0-100	12	28
D1D20	0-100	20	42
D1D40	0-100	40	106
D2D07	0-200	7.0	22
D2D12	0-200	12	27
D4D07	0-400	7.0	17
D4D12	0-400	12	36
D5D07	0-500	7.0	19
D5D10	0-500	10	29

**10 TO 75 AMP, 120-240V DC CONTROLLED, AC OUTPUT SSRs FEATURE IC DRIVEN, LOW LEAKAGE (≤ 1mA) W/O INTEGRAL SNUBBER**

Combining integrated circuit technology and the proven Crydom series 1 high power dissipation output system results in superior SSRs.

**SCR OUTPUT**

Crydom Model No.	Input Control Voltage	Output Load Current	Ratings Volts (RMS)
CSD2410	3.5-15 VDC	10A	120/240
CSD2425	3.5-15 VDC	25A	120/240
CSD2440	3.5-15 VDC	40A	120/240
CSD2450	3.5-15 VDC	50A	120/240
CSD2475	3.5-15 VDC	75A	120/240
CSE2410	15-32 VDC	10A	120/240
CSE2425	15-32 VDC	25A	120/240
CSE2450	15-32 VDC	50A	120/240

**TRIAC OUTPUT**

Crydom Model No.	Input Control Voltage	Output Load Current	Ratings Volts (RMS)
CTD2410	3.5-15 VDC	10A	120/240
CTD2425	3.5-15 VDC	25A	120/240

**SERIES 1—HEATSINK SELECTION GUIDE**

Maximum Operating Current (SSR Rating)	Crydom Heatsink Type	Maximum Ambient Temperature (@ Max. Current)
10A	HS-1	40°C
20A	HS-2	40°C
50A	HE-54	40°C

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