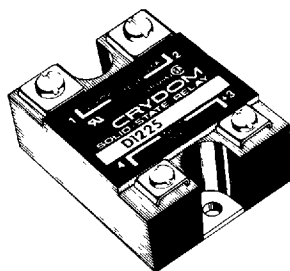


CRYDOM COMPANY

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 ($\leq 1\text{mA}$) 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	Rated 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	Rated 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