

- SCR Output
- 10A, 20A & 30A Models
- Ground Terminal Included
- Zero Voltage and Random Turn-On Switching
- Low Leakage
- Integral Heatsink (22.5 mm)
- DIN Rail & Panel Mount
- Status Indicating LED
- DC or AC Control
- Integrated Overvoltage Protection by Automatic Self Turn-On (Suffix P Option)

The Series CKR Solid State Relays utilize Crydom's proprietary thermal management technology providing a compact and efficient design. Built-in DIN Rail attachment, easy-to-use Box Clamp type terminals and integral heat sinking complete the package. This compact new design offers up to 30Arms in ambient temperatures of 25°C.

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

MODEL NUMBERS	CKRD2410 CKRA2410	CKRD2420 CKRA2420	CKRD2430 CKRA2430
<b>OUTPUT SPECIFICATIONS ①</b>			
Operating Voltage (47-63 Hz) [Vrms]	24-280	24-280	24-280
Max. Load Current @ 25°C Ambient Temperature [Arms]	10	20	30
Min. Load Current, [Arms]	0.15	0.15	0.15
Transient Overvoltage [Vpk]	600	600	600
Max. Surge Current, (16.6ms) [Apk]	120	250	625
Max. On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6
Maximum I <sup>2</sup> t for Fusing, (8.3 msec.) [A <sup>2</sup> sec]	60	260	1620
Max. Off-State Leakage Current @ Rated Voltage [mArms]	10	10	10
Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec] ②	200	500	500
Max. Turn-On Time ③	1/2 Cycle (DC Control), 10.0 msec (AC Control)		
Max. Turn-Off Time	1/2 Cycle (DC Control), 40.0 msec (AC Control)		
Power Factor (Min.) with Max. Load	0.5	0.5	0.5

INPUT SPECIFICATIONS ①	DC CONTROL	AC CONTROL Standard	AC CONTROL (E Suffix)
Control Voltage Range	4.5-32 Vdc	90-280 Vrms	18-36 Vrms
Max. Turn-On Voltage	4.5 Vdc	90 Vrms	18 Vrms
Min. Turn-Off Voltage	1.0 Vdc	10 Vrms	4.0 Vrms
Typical Input Current ④	15mA @ 12 Vdc, 20mA @ 24Vdc	2mA @ 120 Vrms, 4 mA @ 240Vrms	10mA @ 24 Vrms

## GENERAL NOTES

- 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 Turn-on time for DC control random turn-on versions is 0.02msec.  
 ④ Input circuitry for DC control version incorporates active current limiter.

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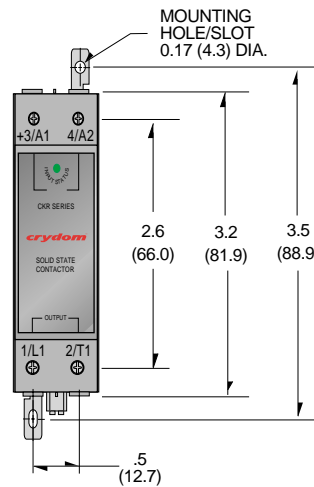
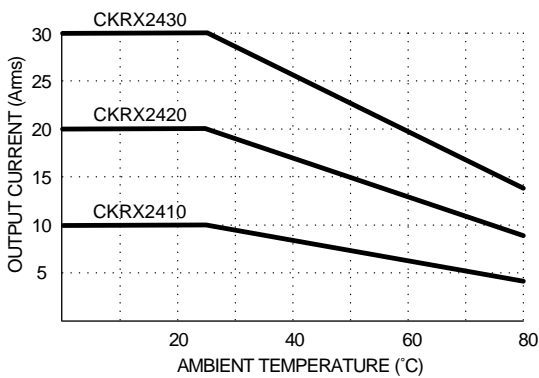
## GENERAL SPECIFICATIONS

Dielectric Strength	50/60Hz Input/Output/Base	4000 Vrms
Insulation Resistance (Min.) @ 500 Vdc		10 <sup>9</sup> Ohm
Max. Capacitance Input/Output		8 pF
Ambient Operating Temperature Range		-40 to 80°C
Ambient Storage Temperature Range		-40 to 125°C
Status Indicating Display		Green LED

## MECHANICAL SPECIFICATIONS

Weight: (typical)		10 oz. (280g)
Encapsulation:		Thermally Conductive Epoxy
Terminals:		Box Clamp Type
Maximum Wire Size:		AWG #10 (3mm)
Recommended Terminal Screw Torque Range:		5.0-6.0 in lb (0.6-0.7Nm)
Min. Side by Side Spacing		0.8 inch (20mm)

## CURRENT DERATING CURVES

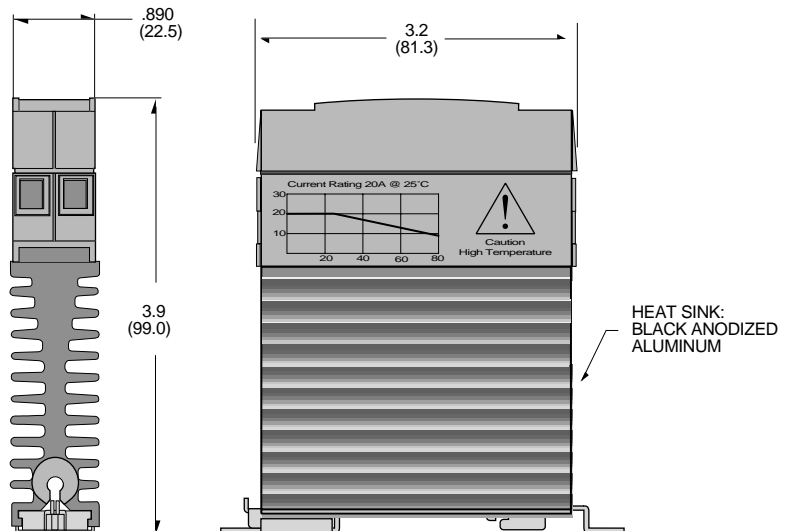


## MECHANICAL SPECIFICATIONS

All dimensions are in inches (millimeters)

## AVAILABLE OPTIONS

- E** 24 Vac Input (18-36 Vac)  
Example: **CKRA2410E**
- P** Internal Overvoltage Protection.  
Relay Will Self Trigger Between 450-600 Vpk.  
Not Suitable For Capacitive Loads.  
Example: **CKRD2410P** (AC & DC Control)
- 10** Random Turn-On (AC & DC Control)  
Phase Controllable (DC Control)  
Example: **CKRD2410-10**



## APPROVALS

UL E116950  
CSA LR81689  
VDE 129156ÜG **CE**

CKR240  
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