

- **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 surrounding temperatures of 25° C.

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

MODEL NUMBERS	CKRD6010 CKRA6010	CKRD6020 CKRA6020	CKRD6030 CKRA6030
OUTPUT SPECIFICATIONS ①			
Operating Voltage (47-63 Hz) [Vrms]	48-660	48-660	48-660
Max. Load Current @ 25°C Surrounding Temperature [Arms]	10	20	30
Min. Load Current, [Arms]	0.15	0.15	0.15
Transient Overvoltage [Vpk]	1200	1200	1200
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 ² t for Fusing, (8.3 msec.) [A ² sec]	60	260	1620
Max. Off-State Leakage Current @ Rated Voltage [mArms]	1.0	1.0	1.0
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	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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For recommended applications and more information contact:
USA: Sales Support (877) 502-5500 **Tech Support** (877) 702-7700 FAX (619) 710-8540
 Crydom Corp, 2320 Paseo de las Americas, Ste. 201, San Diego, CA 92154
Email: sales@crydom.com **WEB SITE:** http://www.crydom.com
UK: +44 (0)1202 365070 • **FAX** +44 (0)1202 365090 Crydom International Ltd., 7 Cobham
 Road, Ferndown Industrial Estate, Ferndown, Dorset BH21 7PE, Email: intsales@crydom.com.
GERMANY: +49 (0)180 3000 506



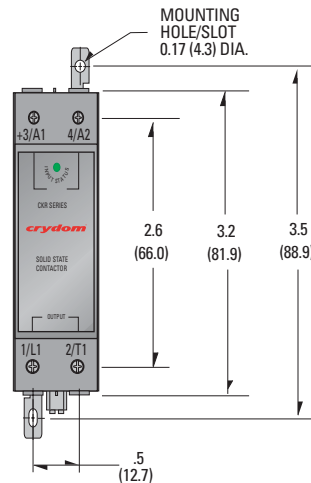
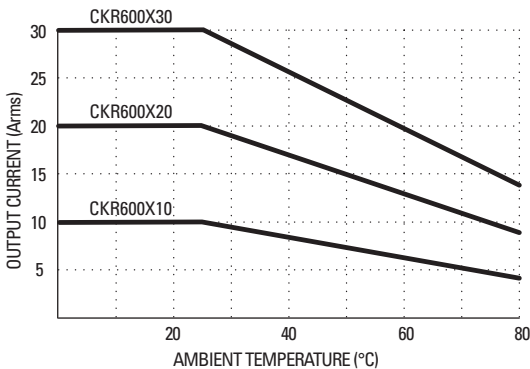
GENERAL SPECIFICATIONS

Dielectric Strength	50/60Hz Input/Output/Base	4000 Vrms
Insulation Resistance (Min.) @ 500 Vdc		10 ⁹ Ohm
Max. Capacitance Input/Output		8 pF
Surrounding Operating Temperature Range		-40 to 80°C
Surrounding 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

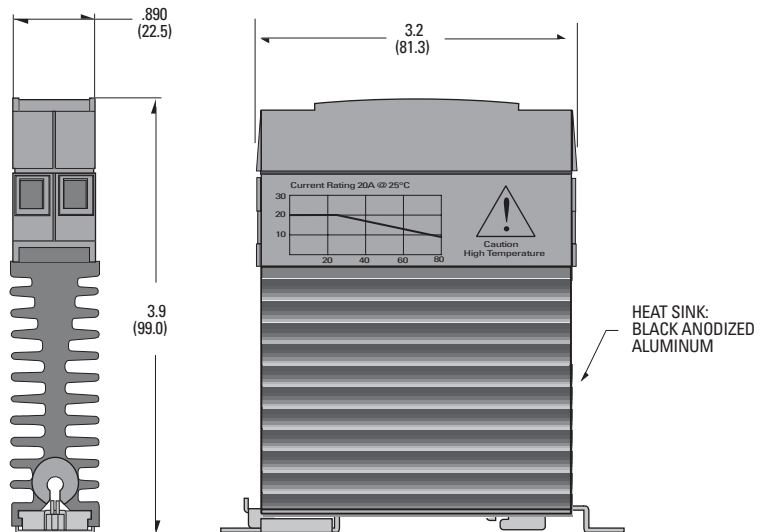


MECHANICAL SPECIFICATIONS

All dimensions are in inches (millimeters)

AVAILABLE OPTIONS

- E** 24 Vac Input (18-36 Vac)
Example: **CKRA6010E**
- P** Internal Overvoltage Protection.
Relay Will Self Trigger Between 900-1200 Vpk.
Not Suitable For Capacitive Loads.
Example: **CKRD6010P** (AC & DC Control)
- 10** Random Turn-On (AC & DC Control)
Phase Controllable (DC Control)
Example: **CKRD6010-10**



APPROVALS

UL E116950
CSA LR81689
VDE 129156UG



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Rev. 091406
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Email: sales@crydom.com **WEB SITE:** http://www.crydom.com
UK: +44 (0)1202 365070 • **FAX** +44 (0)1202 365090 Crydom International Ltd., 7 Cobham Road, Ferndown Industrial Estate, Ferndown, Dorset BH21 7PE, Email: intsales@crydom.com.
GERMANY: +49 (0)180 3000 506

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