



- 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 |
|---|--|----------------------|----------------------|
| OUTPUT SPECIFICATIONS ① | | | |
| 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 ² t for Fusing, (8.3 msec.) [A ² 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 | 4.0-32 Vdc | 90-280 Vrms | 18-36 Vrms |
| Max. Turn-On Voltage | 4.0 Vdc | 90 Vrms | 18 Vrms |
| Min. Turn-Off Voltage | 1.0 Vdc | 10 Vrms | 4.0 Vrms |
| Typical Input Current Range ④ | 8-12mA | 2mA @ 120 Vrms, 4 mA @ 240Vrms | 10mA @ 24 Vrms |

GENERAL NOTES

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- 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.

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-54151736
勝特力电子(深圳) 86-755-83298787
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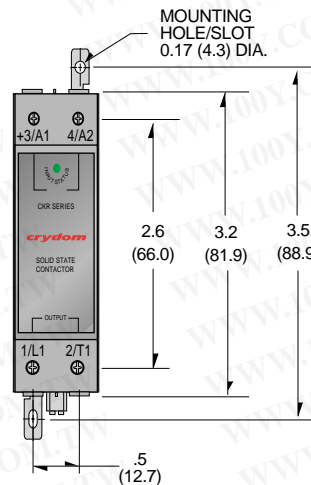
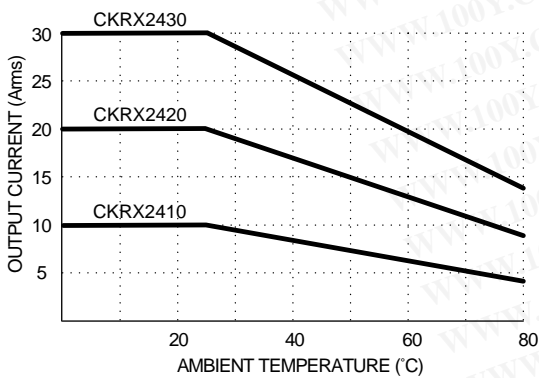
GENERAL SPECIFICATIONS

| | | |
|--|---------------------------|---------------------|
| Dielectric Strength | 50/60Hz Input/Output/Base | 4000 Vrms |
| Insulation Resistance (Min.) @ 500 Vdc | | 10 ⁹ Ohm |
| Max. Capacitance Input/Output | | 8 pF |
| 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

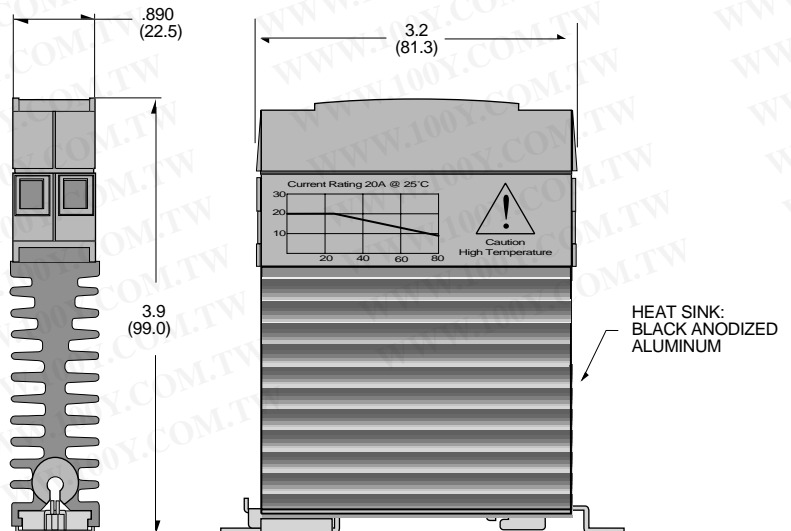


MECHANICAL SPECIFICATIONS

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**

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 Rev. 09122006
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