

CKR SERIES | 600 VAC

DIN RAIL MOUNT SOLID STATE RELAYS



Features

- Rating of 30 A @ 660 VAC
- Slim 22.5mm (width) package
- SCR output for heavy industrial loads
- LED input status indicator
- DC control
- Zero Voltage (resistive loads) turn-on output

PRODUCT SELECTION

Control Voltage	30 A
4-32 VDC Control	CKRD6030

SPECIFICATIONS

Output ⁽¹⁾

Description	30 A
Operating Voltage (47-63Hz) [Vrms]	48-660
Transient Overvoltage [Vpk]	1200
Maximum Off-State Leakage Current @ Rated Voltage [mA_{rms}]	1.0
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] ⁽²⁾	500
Maximum Load Current [A_{rms}]	30
Minimum Load Current [A_{rms}]	0.15
Maximum Surge Current (16.6ms) [A_{pk}]	1200
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.6
Maximum I² t for Fusing (8.3 msec) [A² sec]	6000
Minimum Power Factor (with Maximum Load)	0.5

Input ⁽¹⁾

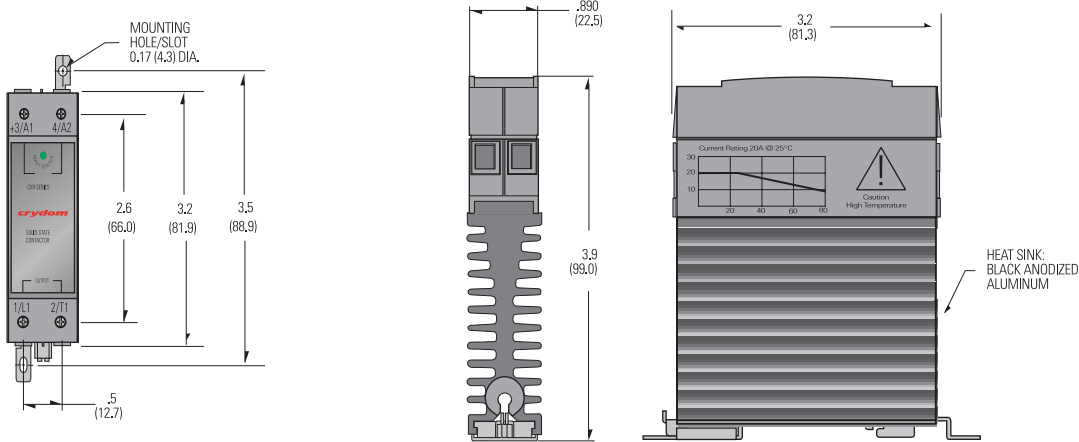
Description	CKRD60xx
Control Voltage Range	4.0-32 VDC
Minimum Turn-On Voltage	4.0 VDC
Must Turn-Off Voltage	1.0 VDC
Typical Input Current ⁽³⁾	8-12 mA
Maximum Turn-On Time [msec]	1/2 Cycle
Maximum Turn-Off Time [msec]	1/2 Cycle

General

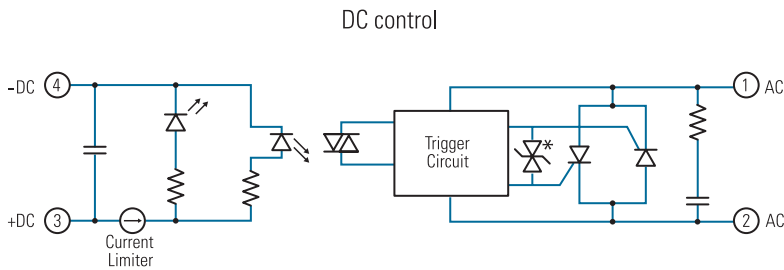
Description	Parameters
Dielectric Strength, Input/Output/Base (50/60Hz)	4000 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10 ⁹ Ohms
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80 °C
Ambient Storage Temperature Range	-40 to 125 °C
Status Indicator Display	Green LED
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 lb-in (0.6-0.7 Nm)
Min. Side by Side Spacing	0.8 inch (20mm)

MECHANICAL SPECIFICATIONS

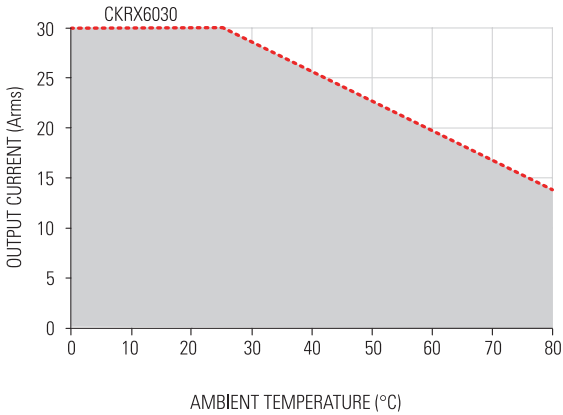
*All dimensions are in: inches [millimeters]



EQUIVALENTCIRCUITBLOCKDIAGRAMS



THERMAL DERATE INFORMATION



ORDERING OPTIONS

Example: CKRD6030

	CKR	D	60	30
Family	Required for valid part number	Required for valid part number	Required for valid part number	Required for valid part number
CKR	Required for valid part number	Required for valid part number	Required for valid part number	Required for valid part number
Control Voltage	Required for valid part number	Required for valid part number	Required for valid part number	Required for valid part number
D: 4-32 VDC	Required for valid part number	Required for valid part number	Required for valid part number	Required for valid part number
Operating Voltage	Required for valid part number	Required for valid part number	Required for valid part number	Required for valid part number
60: 48-660 VAC	Required for valid part number	Required for valid part number	Required for valid part number	Required for valid part number
Rated Load Current	Required for valid part number	Required for valid part number	Required for valid part number	Required for valid part number
30: 30 Amps	Required for valid part number	Required for valid part number	Required for valid part number	Required for valid part number

Required for valid part number
For options only and not required for valid part number

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) Input circuitry for DC control version incorporates active current limiter.

● AGENCY APPROVALS & CERTIFICATIONS

Designed in accordance with the requirements of IEC 62314



● WARNINGS



RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

Failure to follow these instructions can result in serious injury, or equipment damage.



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

Failure to follow these instructions will result in death or serious injury.

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