

CKR SERIES | 480 VAC

DIN RAIL MOUNT SOLID STATE RELAYS



Features

- Rating from 20 A to 30 A @ 530 VAC
- Slim 22.5mm (width) package
- SCR output for heavy industrial loads
- LED input status indicator
- AC or DC control
- Zero Voltage (resistive loads) turn-on output

PRODUCT SELECTION

Control Voltage	20 A	30 A
4-32 VDC Control	CKRD4820	CKRD4830
110-280 VAC Control		CKRA4830
90-140 VAC Control		CKRB4830

SPECIFICATIONS

Output ⁽¹⁾

Description	20 A	30 A
Operating Voltage (47-63Hz) [Vrms]	48-530	48-530
Transient Overvoltage [Vpk]	1200	1200
Maximum Off-State Leakage Current @ Rated Voltage [mA _{rms}]	10	10
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] ⁽²⁾	500	500
Maximum Load Current [A _{rms}]	20	30
Minimum Load Current [A _{rms}]	0.15	0.15
Maximum Surge Current (16.6ms) [A _{pk}]	250	1200
Maximum On-State Voltage Drop @ Rated Current [V _{pk}]	1.6	1.6
Maximum I ² t for Fusing (8.3 msec) [A ² sec]	260	6000
Minimum Power Factor (with Maximum Load)	0.5	0.5

Input ⁽¹⁾

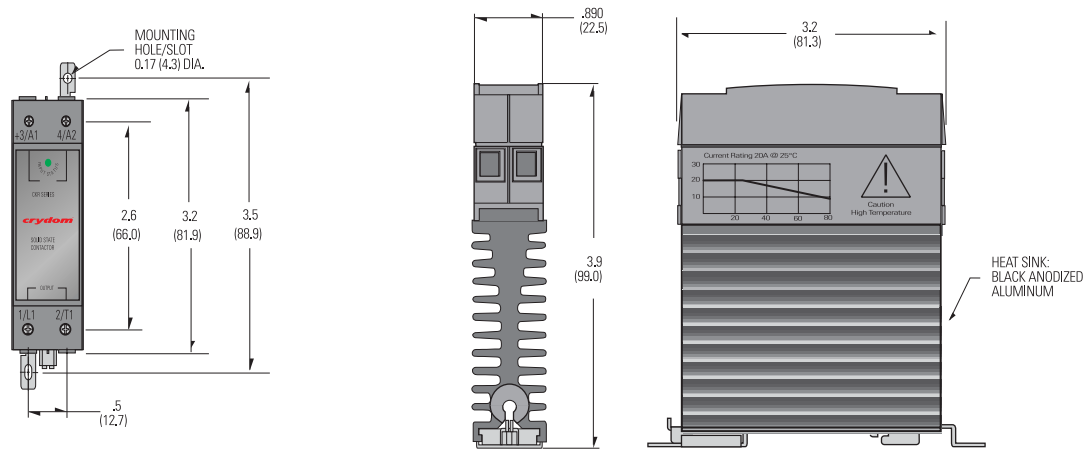
Description	CKRD48xx	CKRA48xx	CKRB48xx
Control Voltage Range	4.0-32 VDC	110-280 Vrms	90-140 Vrms
Minimum Turn-On Voltage	4.0 VDC	110 Vrms	90 Vrms
Must Turn-Off Voltage	1.0 VDC	10 Vrms	10 Vrms
Typical Input Current ⁽⁴⁾	8-12 mA	5 mA @ 240 Vrms	5 mA @ 120 Vrms
Maximum Turn-On Time [msec] ⁽³⁾	1/2 Cycle	10	10
Maximum Turn-Off Time [msec]	1/2 Cycle	40	40

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 in (20mm)

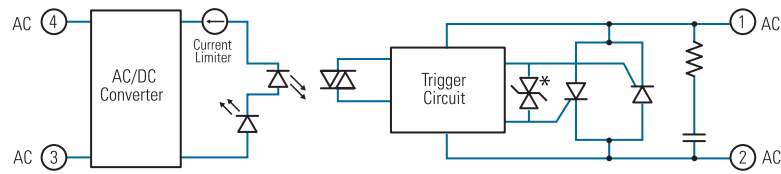
MECHANICAL SPECIFICATIONS

*All dimensions are in: inches [millimeters]



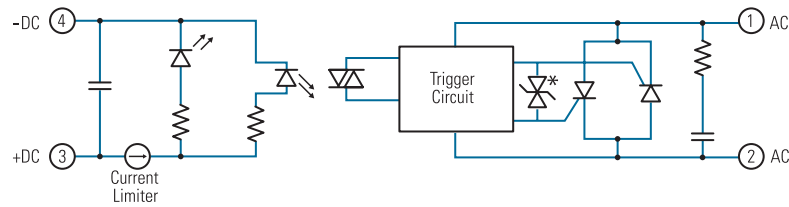
EQUIVALENTCIRCUITBLOCKDIAGRAMS

AC control

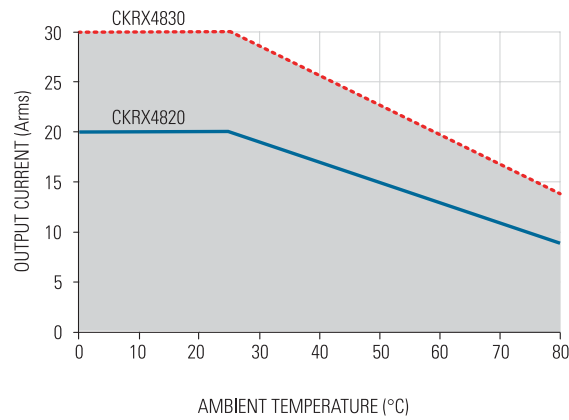


* With Option "P" suffix

DC control



THERMAL DERATE INFORMATION



AVAILABLE OPTIONS

Example: CKRD4830P

	CKR	D	48	20	P
Series					
CKR					
Control Voltage					
D: 4-32 VDC					
B: 90-140 VAC					
A: 110-280 VAC					
Operating Voltage					
48: 48-530 VAC					
Rated Load Current					
20: 20 Amps					
30: 30 Amps					
Oversvoltage Protection					
Blank: Not Included					
P: Included					

Required for valid part number

For options only and not required for valid part number

NOTE: Not all combinations are available.
Contact us for information on the availability of a specific 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) Turn-on time for DC control instantaneous turn-on versions is 0.02 msec
- (4) 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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