



CMR SERIES | 480 VAC

DIN RAIL MOUNT SOLID STATE RELAYS



Features

- Ratings from 35A to 65A @ 530 VAC
- 45mm (width) package
- SCR output for heavy industrial loads
- LED input status indicator
- AC or DC control
- Zero-crossing (resistive loads)

PRODUCT SELECTION

Control Voltage	35A	45A	55A	65A
4-32 VDC	CMRD4835	CMRD4845	CMRD4855	CMRD4865
90-140 VAC		CMRA4845		CMRA4865

SPECIFICATIONS

Output ⁽¹⁾

Description	35A	45A	55A	65A
Operating Voltage (47-63Hz) [Vrms]	48-530	48-530	48-530	48-530
Transient Overvoltage [Vpk]	1200	1200	1200	1200
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	10	10	10	10
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] ⁽²⁾	500	500	500	500
Maximum Load Current [Arms]	35	45	55	65
Minimum Load Current [Arms]	0.15	0.15	0.25	0.25
Maximum Surge Current (50/60Hz, 1 Cycle) [Apk]	239/250	597/625	954/1000	1145/1200
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.7	1.7	1.7	1.7
Thermal Resistance Junction to Case (Rjc) [°C/W]	1.02	0.63	0.31	0.28
Maximum I ² t for Fusing (8.3 msec) [A ² sec]	285/259	1779/1621	4555/4150	4555/4150
Minimum Power Factor (with Maximum Load)	0.5	0.5	0.5	0.5

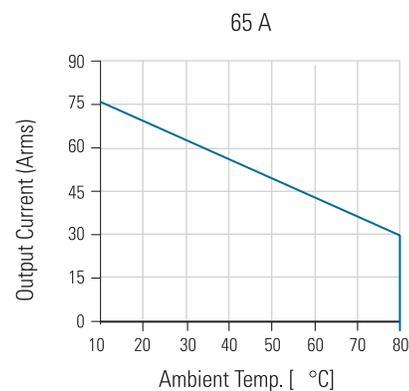
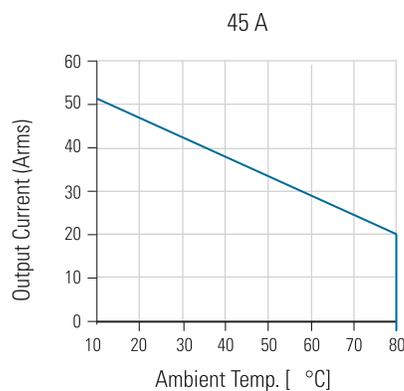
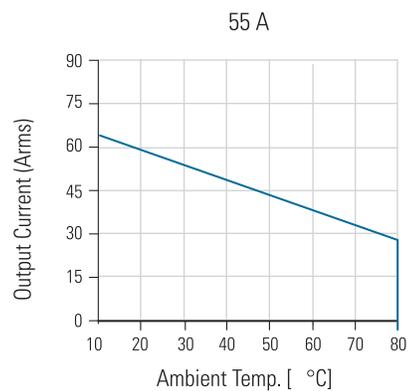
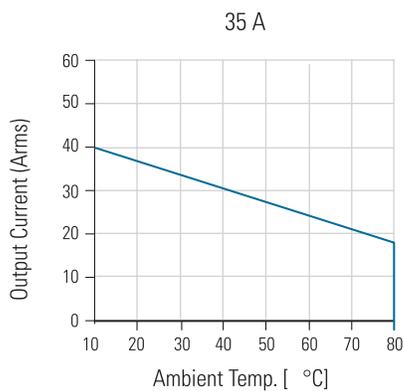
Input ⁽¹⁾

Description	CMRD48xx	CMRA48xx
Control Voltage Range	4-32 VDC	90-140 Vrms
Minimum Turn-On Voltage	4.0 VDC	90 Vrms
Maximum Turn-Off Voltage	1.0 VDC	10 Vrms
Maximum Reverse Voltage	32 VDC	-
Maximum Input Current	30 mA	-
Typical Input Current ⁽⁴⁾	14 mA @ 5 VDC	15 mA @ 120 Vrms
Maximum Turn-On Time [msec]	1/2 Cycle	10
Maximum Turn-Off Time [msec]	1/2 Cycle	40

General ⁽¹⁾

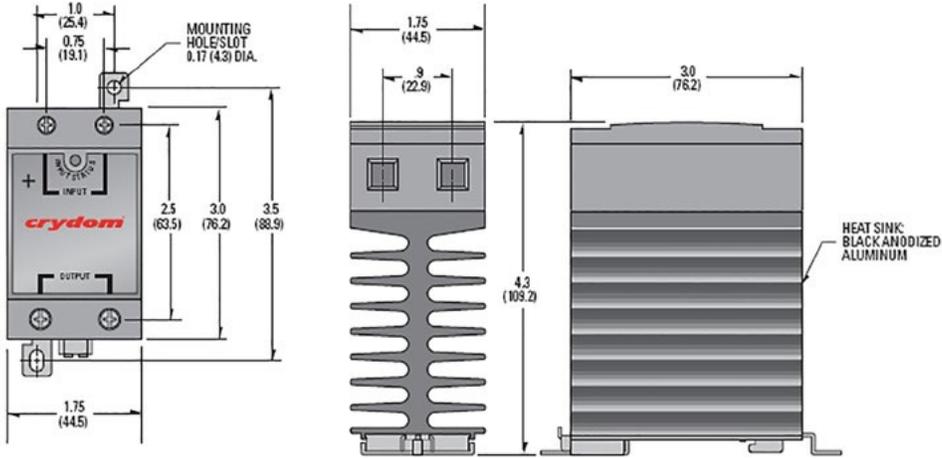
Description	Parameters
Dielectric Strength, Input/Output (50/60Hz)	4000 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10 ⁹ Ohms
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80 °C
Ambient Storage Temperature Range	-40 to 125 °C
Status Indicator Display	Green LED
Weight (typical)	16.8 oz. (476g)
Encapsulation	Thermally Conductive Epoxy
Terminals	Cage Type
Maximum Wire Size	Output: AWG 8 (4.8mm) Input: AWG 12(2.5mm)
Recommended Terminal Screw Torque Range	Output:10-15 lb-in (1.1-1.7 Nm) Input: 5-6 lb-in (0.6-0.7 Nm)

THERMAL DERATE INFORMATION



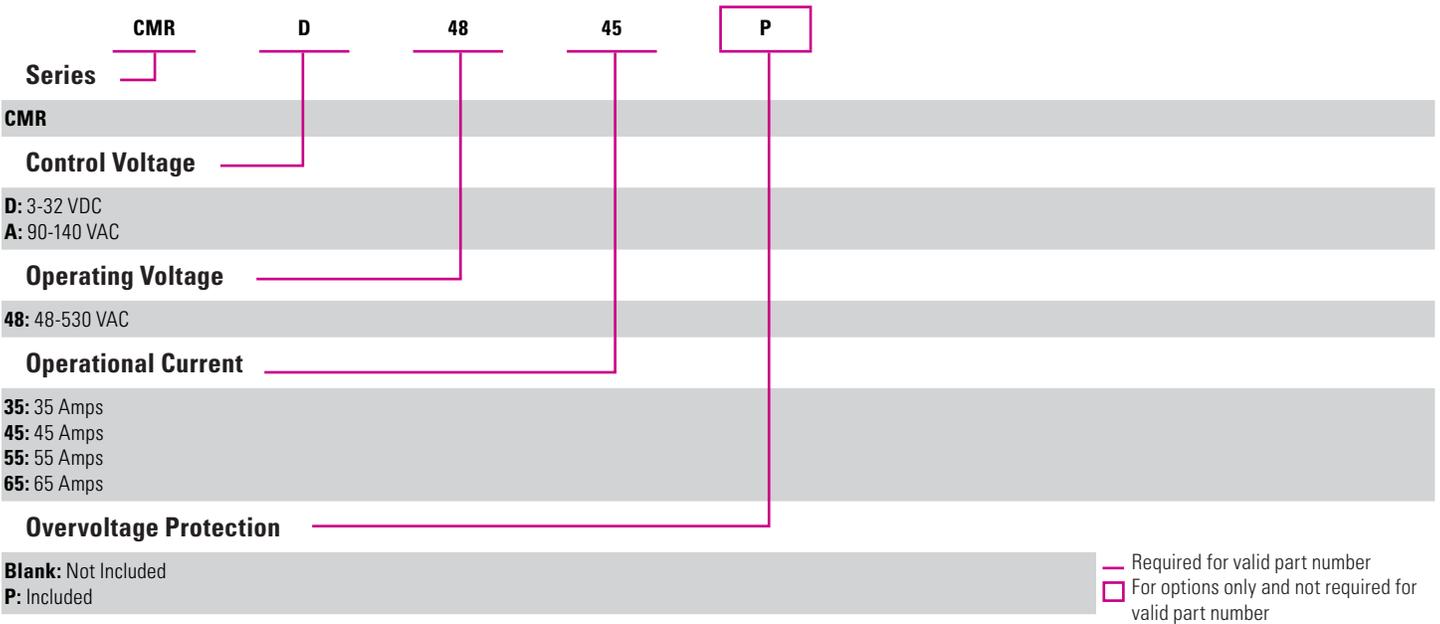
MECHANICAL SPECIFICATIONS

* Tolerances: ±0.02 in / 0.5 mm All dimensions are in: inches [millimeters]



AVAILABLE OPTIONS

Example : CMRD4845P



NOTE: Not all combinations are available. Consult factory 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) 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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