CMA/CMD SERIES | 240 VAC

PANEL MOUNT SOLID STATE RELAYS



Features

- Ratings of 25A @ 24-280 VAC
- SCR output for heavy industrial loads
- DC control
- LED input status indicator
- Zero crossing (resistive loads) output
- IP20 touch-safe housing
- Standard box-clamp connections

PRODUCT SELECTION

Control Voltage	25 A
3-32 VDC	CMD2425

SPECIFICATIONS

Output (1)

Description	25 A
Operating Voltage (47-63Hz) [Vrms]	24-280
Transient Overvoltage [Vpk]	600
Maximum Off-State Leakage Current @ Rated Voltage [mA]	10
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/µsec] 2	500
Maximum Load Current [Arms] 3	25
Minimum Load Current [Arms]	0.15
Maximum Surge Current (50/60Hz, 1 Cycle) [Apk]	239/250
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.6
Thermal Resistance Junction to Case (Rjc) [°C/W]	1.02
Maximum I^2t for Fusing (50/60Hz, 1/2 cycle) [A^2 sec]	285/259
Minimum Power Factor (with Maximum Load)	0.5

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Input [(1)]

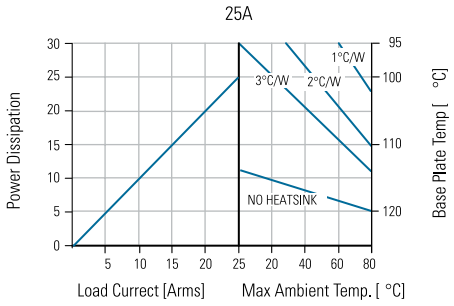
Description	CMD
Control Voltage Range	3-32 VDC
Maximum Reverse Voltage	32 VDC
Maximum Turn-On Voltage	3.0 VDC
Minimum Turn-On Voltage	1.0 VDC
Typical Input Current @ max turn-on voltage	30 mA[(4)]
Nominal Input Impedance [Ohms]	17 mA @ 5 VDC
Maximum Turn-On Time [msec]	1/2 Cycle
Maximum Turn-Off Time [msec]	1/2 Cycle

General

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)	3.0 oz (86.5 g)
Encapsulation	Thermally Conductive Epoxy
Terminals	Cage Type
Maximum Wire Size-Output:	AWG 8 (3.8mm)
Maximum Wire Size-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

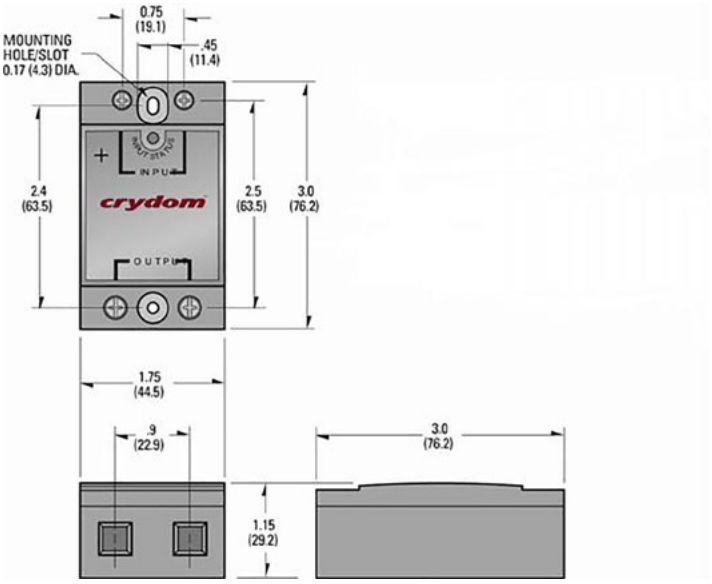
Current Derating Curves



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MECHANICAL SPECIFICATIONS

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



AVAILABLE OPTIONS

Example : CMD2425

CM	D	24	25
Series			
CM			
	Control Voltage		
	D: DC (4-32V)		
		Operating Voltage	
		24: 24-280 VAC	
			Load Current
			25: 25 Amps

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

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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] HEAT SINKING REQUIRED, FOR DERATING curves see page 3.
[4] Input circuitry incorporates active current limiter.

AGENCY APPROVALS & CERTIFICATIONS

Designed in accordance with the requirements of IEC 62314

E116949
E116950

LR 81689

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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Rev. 03/12/2024 ECN 21026 FDE-07-01 Rev. B

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