

Series CM D24/ CM A24

25-125Amp • 240 Vac • AC Output

- **Zero Voltage and Random Turn-On Switching**
- **Panel Mount**
- **Status Indicating LED**
- **DC or AC Control**

Featuring state-of-the-art Surface Mount Technology, these SPST-NO relays deliver proven reliability in the most demanding applications. Output consists of an SCR AC switch and is available in zero-cross or random turn-on versions.

Manufactured in Crydom's ISO 9002 Certified facility for optimum product performance and reliability.

MODEL NUMBERS	CM D2425 CMA2425	CM D2450 CMA2450	CM D2475 CMA2475	CM D2490 CMA2490	CM D24110 CMA24110	CM D24125 CMA24125
OUTPUT SPECIFICATIONS ①						
Operating Voltage (47-63 Hz) [Vrms]	24-280	24-280	24-280	24-280	24-280	24-280
Max. Load Current ③ [Arms]	25	50	75	90	110	125
Min. Load Current, [Arms]	0.15	0.15	0.25	0.25	0.25	0.25
Transient Overvoltage [Vpk]	600	600	600	600	600	600
Max. Surge Current, (16.6ms) [Apk]	250	625	1000	1200	1500	1750
Max. On-State Voltage Drop @Rated Current [Vpk]	1.6	1.6	1.6	1.6	1.6	1.6
Thermal Resistance Junction to Case ($R_{\theta JC}$) [$^{\circ}C/W$]	1.02	0.63	0.31	0.28	0.25	0.22
Maximum $I^2 t$ for Fusing, (8.3 msec.) [$A^2 sec$]	260	1620	4150	6000	9340	12700
Max. Off-State Leakage Current @Rated Voltage [mA rms]	10	10	10	10	10	10
Min. Off-State dv/dt @Max. Rated Voltage [V/ μsec] ②	500	500	500	500	500	500
Max. Turn-On Time ④	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	0.5	0.5	0.5

INPUT SPECIFICATIONS ①	DC CONTROL	AC CONTROL
Control Voltage Range	3-32 Vdc	90-140 Vrms
Max. Reverse Voltage	32 Vdc	—
Max. Turn-On Voltage	3.0 Vdc	90 Vrms
Min. Turn-Off Voltage	1.0 Vdc	10 Vrms
Max. Input Current	30.0mA ⑤	—
Typical Input Current	17mA @5 Vdc	15mA @120 Vrms

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 $^{\circ}C$
Ambient Storage Temperature Range	-40 to 125 $^{\circ}C$
Status Indicating Display	Green LED

GENERAL NOTES

- ① All parameters at 25 $^{\circ}C$ 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 2.
- ④ Turn-on time for DC control random turn-on versions is 0.02msec.
- ⑤ Input circuitry incorporates active current limiter.

MECHANICAL SPECIFICATIONS

Weight: (typical)	3.0 oz. (86.5g)
Encapsulation:	Thermally Conductive Epoxy
Terminals:	Cage Type
Maximum Wire Size- Output: AWG 6 (4.1mm) Input: AWG10 (2.6mm)	

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For recommended applications and more information contact:

USA: (800) 8 CRYDOM • (800) 827-9366 • (619) 715-7200 • fax (619) 715-7280

Crydom Corp, 9525 Chesapeake Drive, San Diego, CA 92123 • e-mail: sales@crydom.com

WEB SITE: <http://www.crydom.com> FASTFAX Product Information: (888) 267-9191

UK: (44)1202 812300 • fax (44)1202 812340 Crydom International Ltd., 85, Concor Close,

Woolbridge Industrial Estate, Three-Legged Cross, Wimborne, Dorset, England BH21 6SU

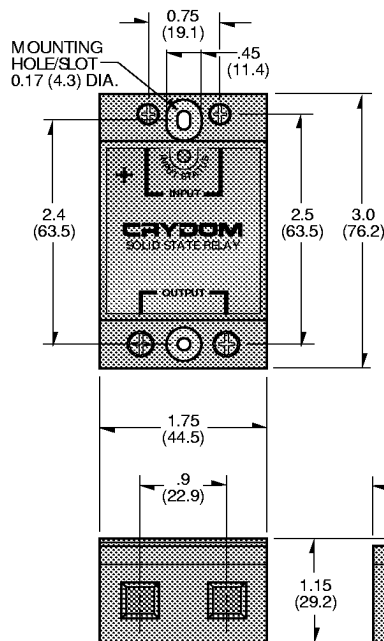
GERMANY: (49) (0)6874 182580 • fax (49)(0)6874 182585 Crydom GmbH,

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MECHANICAL SPECIFICATIONS

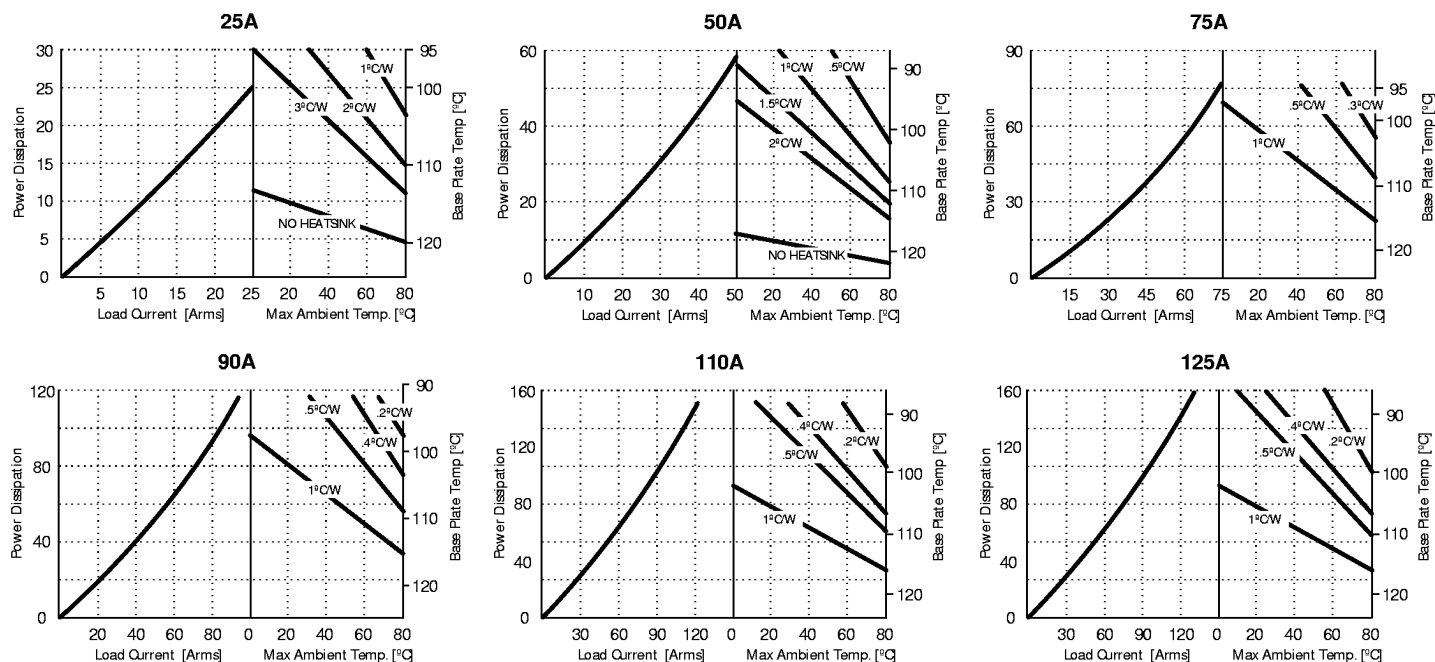
All dimensions are in inches (millimeters)

CM RD24/ CM RA24 available with factory mounted heat sink and DIN rail mounting clip. Specifications available via FastFax, request document No. 171.

AVAILABLE OPTIONS

- 10 Random Turn-On, Phase Controllable
Example: **CM D2450-10**
- E 24 Vac Input (18-36 Vac)
Example: **CM A2450E**

CURRENT DERATING CURVES



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APPROVALS

UL PENDING
CSA PENDING
VDE PENDING



FastFax Document No. 170
CMD/CMA.060398, PAGE 2 OF 6

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