



MCX SERIES

PCB MOUNT



Features

- SIP SSR
- Ratings of 5 A @ 660 VAC
- SCR output for heavy industrial loads
- AC or DC control
- Zero-crossing (resistive loads) or random-fire (inductive loads) output
- Plastic encapsulated



PRODUCT SELECTION

Control Voltage	5 A	5 A	5 A
3-15 VDC	MCX240D4		
4-15 VDC		MCX380D5	MCX480D5
15-32 VDC	MCXE240D5		
18-36 VAC	MCXE240A5		
90-140 VAC	MCX240A5		



SPECIFICATIONS

Output ⁽¹⁾

Description	240 VAC	380 VAC	480 VAC
Operating Voltage (47-63Hz) [Vrms]	12-280	48-530	48-660
Transient Overvoltage [Vpk]	600	1200	1200
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	0.1	0.1	0.1
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] ⁽²⁾	500	500	500
Maximum Load Current [Arms] ⁽³⁾	5	5	5
Minimum Load Current [Arms]	0.06	0.06	0.06

Maximum Surge Current (16.6msec) [Apk]	250	250	250
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.4	1.4	1.4
Maximum I² t for Fusing (8.3msec) [A² sec]	260	260	260
Minimum Power Factor (at Maximum load)	0.5	0.5	0.25/0.18

Input ⁽¹⁾

Description	MCX240Dx	MCX380Dx	MCXExxDx	MCX240A5	MCXE240A5
Nominal Voltage	5 VDC	5 VDC	24 VDC	120 VAC	24 VAC
Control Voltage Range	3-15 VDC	4-15VDC	15-32VDC	90-140VAC	18-36VAC
Maximum Turn-On Voltage	3.0 VDC	4.0 VDC	15.0 VDC	90.0 Vrms	18.0 Vrms
Minimum Turn-Off Voltage	1.0 VDC	1.0 VDC	1.0 VDC	10.0 Vrms	2.0 Vrms
Input Current @ Nominal Voltage	15 mAdc	15 mAdc	15 mAdc	10 mArms	10 mArms
Nominal Input Impedance	300 Ohm	240 Ohm	1500 Ohm	14.1K Ohm	2.1K Ohm
Maximum Turn-On Time [msec] ⁽³⁾	1/2 Cycle	1/2 Cycle	1/2 Cycle	10	10
Maximum Turn-Off Time [msec]	1/2 Cycle	1/2 Cycle	1/2 Cycle	40	40

General ⁽¹⁾

Description	Parameters
Dielectric Strength, Input/Output/Base (50/60Hz)	4000 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10 g Ohms
Maximum Capacitance, Input/Output	10 pF
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 125°C
Weight (typical)	0.7 oz (20g)
Encapsulation	Thermally Conductive Epoxy Meets the requirements of IEC60335-1

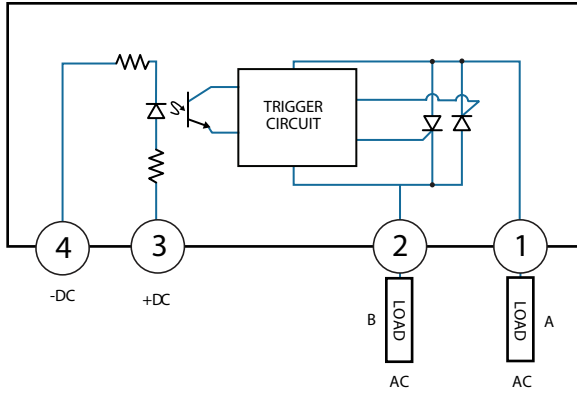


GENERAL NOTES

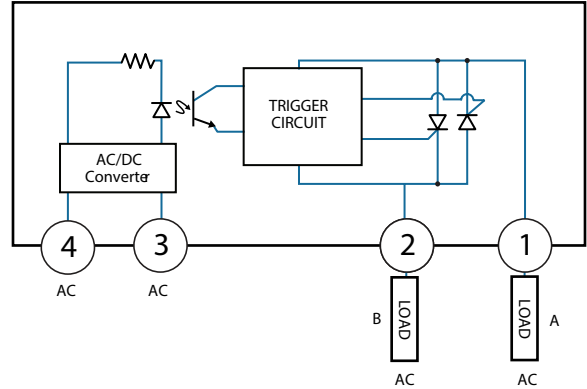
- ⁽¹⁾ All parameters at 25°C unless otherwise specified
⁽²⁾ Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1
⁽³⁾ Turn-On time for random turn-on versions is 0.01 msec (DC control Models).



WIRING DIAGRAM



Load can be wired in location A or B

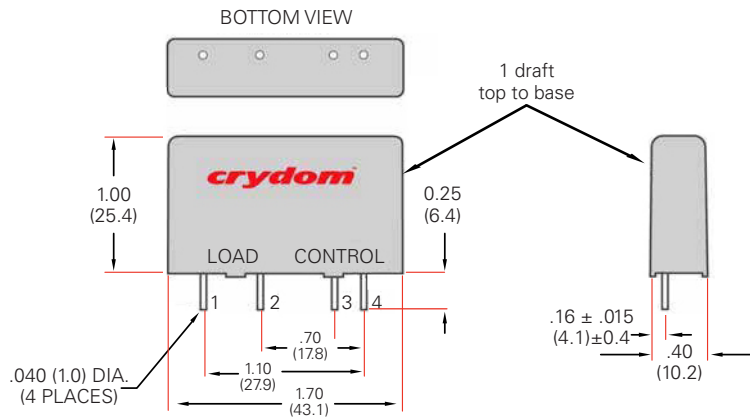


Load can be wired in location A or B

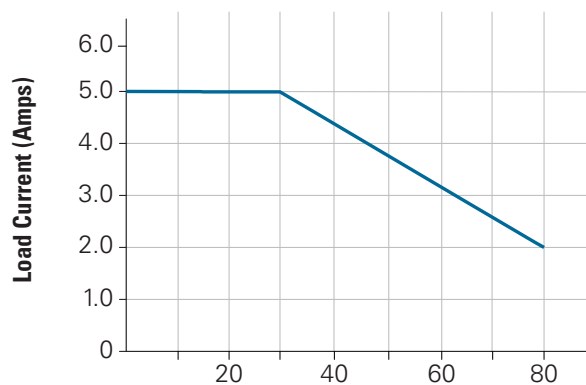


MECHANICAL SPECIFICATIONS

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



THERMAL DERATE INFORMATION

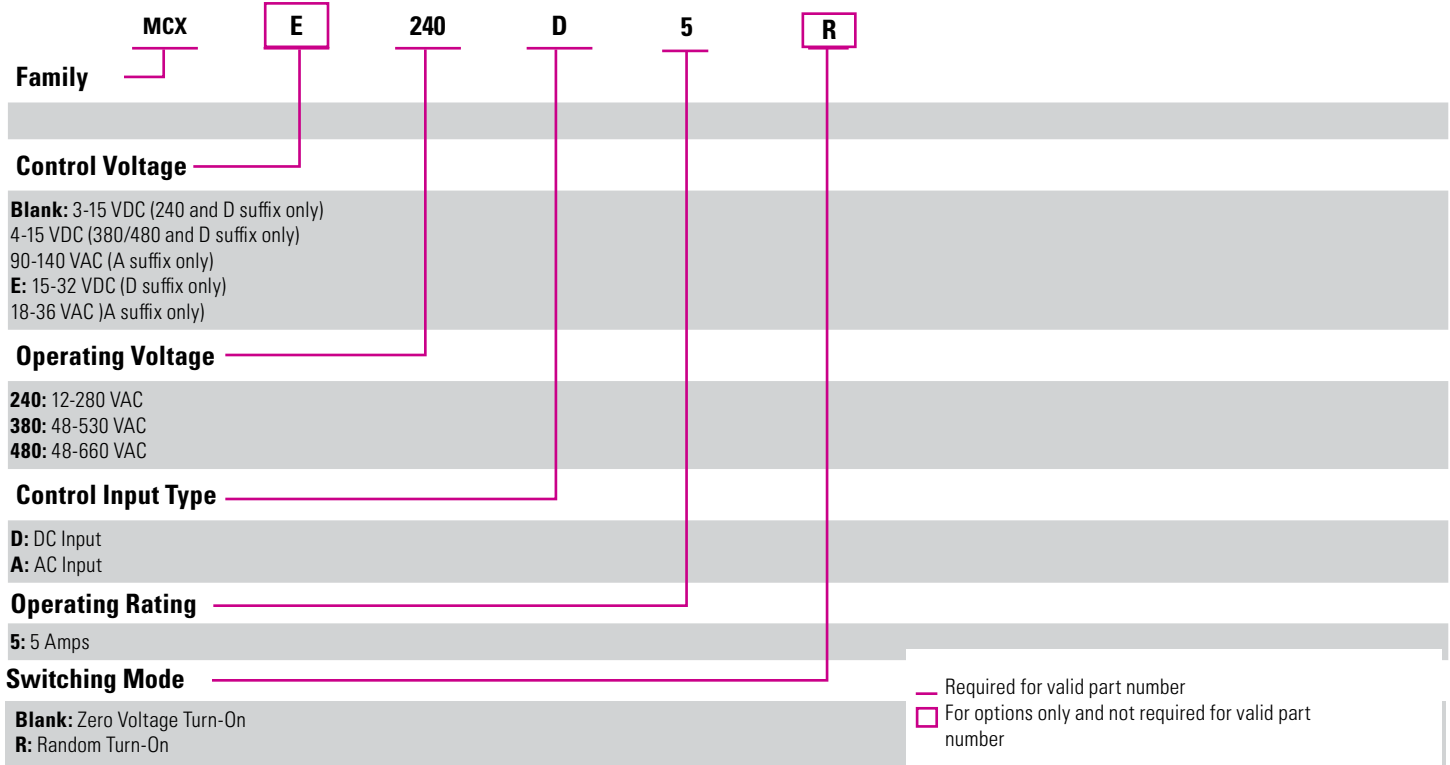


Max. Load Current vs. Temp.



ORDERING OPTIONS

Example : MCXE240D5R



AGENCY APPROVALS & CERTIFICATIONS

Designed in accordance with the requirements of IEC 62314
IEC60335-1: Resistance to heat and fire meets the requirements of section 30, evaluated by TUV SUD.
Glow Wire Test, per requirements of IEC/EN 60695-2-10 and IEC/EN 60695-2-11
Ball Pressure Test, per requirements of IEC/EN 60695-10-2





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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