

## CX, CXE



SCR output • 5Amp • 240, 380, 480 Vrms - AC Switching • SIP mount • AC/DC control • Ideal for replacing electromechanical relays.

- ▶ [Specification PDF](#)
- ▶ [Contact Us](#)
- ▶ [Find a Distributor](#)

| Product                             | Control Voltage Range | Load Current    | Switching Voltage Type | Turn On    | Load Voltage Range |
|-------------------------------------|-----------------------|-----------------|------------------------|------------|--------------------|
| <b>BUY</b> <a href="#">CX240D5</a>  | 3-15 Volts DC         | 0.06-5 Amps RMS | AC                     | Zero cross | 12-280 Volts RMS   |
| <b>BUY</b> <a href="#">CX240D5R</a> | 3-15 Volts DC         | 0.06-5 Amps RMS | AC                     | Random     | 12-280 Volts RMS   |

## CX-B



SCR output • 5Amp • 240, 480 Vrms - AC Switching • SIP mount • AC/DC control • Ideal for replacing electromechanical relays.

- ▶ [Specification PDF](#)
- ▶ [Contact Us](#)
- ▶ [Find a Distributor](#)

| Product                              | Control Voltage Range | Load Current    | Switching Voltage Type | Turn On    | Load Voltage Range |
|--------------------------------------|-----------------------|-----------------|------------------------|------------|--------------------|
| <b>BUY</b> <a href="#">CX240D5-B</a> | 3-15 Volts DC         | 0.06-5 Amps RMS | AC                     | Zero cross | 12-280 Volts RMS   |

- SCR Output
- Ultra High Surge Rating
- Crydom's Patented Design

Crydom's family of SPST-NO relays achieves the highest power switching capability in a PC-mounted air-cooled package. Advanced features include

exceptional steady state current, plus ultra-high surge ratings. Models are available to switch up to 660 Vrms with AC or DC control, and either zero-cross or random turn-on ("R") switching versions. Pinout is compatible with Series 6 and OAC type I/O modules.

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

| MODEL NUMBERS   | AC CONTROL | (120Vac)<br>(24Vac) | CX240A5<br>CXE240A5                            |                     |                     |
|---|------------|---------------------|--|---------------------|---------------------|
|   | DC CONTROL | (5Vdc)<br>(24Vdc)   | CX240D5<br>CXE240D5                            | CX380D5<br>CXE380D5 | CX480D5<br>CXE480D5 |
| <b>OUTPUT SPECIFICATIONS</b> ①  |            |                     |  |                     |                     |
| Operating Voltage (47-63 Hz) [Vrms]                                   |            |                     | 12-280   | 48-530              | 48-660              |
| Load Current Range [Arms]   |            |                     | .06-5  | .06-5               | .06-5               |
| Transient Overvoltage [Vpk]   |            |                     | 600  | 1200                | 1200                |
| Max. Surge Current, (16.6ms) [Apk]                                    |            |                     | 250  | 250                 | 250                 |
| Max. On-State Voltage Drop @ Rated Current [Vpk]                      |            |                     | 1.4  | 1.4                 | 1.4                 |
| Maximum I <sup>2</sup> t for Fusing, (8.3 msec.) [A <sup>2</sup> sec] |            |                     | 260  | 260                 | 260                 |
| Max. Off-State Leakage Current @ Rated Voltage [mArms]                |            |                     | 0.1  | 0.1                 | 0.1                 |
| Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec] ②                  |            |                     | 500  | 500                 | 500                 |
| Max. Turn-On Time ③   |            |                     | 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                 |

| MODEL NUMBERS                           | DC CONTROL      |                    |   | AC CONTROL  |            |          |
|---|-----------------|--------------------|---|-------------|------------|----------|
|   | Nominal Voltage | 5Vdc               | 5Vdc  | 24Vdc       | 120Vac     | 24Vac    |
|   | CX240D5         | CX380D5<br>CX480D5 | CX240D5<br>CXE240D5<br>CXE380D5<br>CXE480D5 | CX240A5     | CX240A5    | CXE240A5 |
| Control Voltage Range                   | 3-15 Vdc        | 4-15 Vdc           | 15-32 Vdc                                   | 90-140 Vrms | 18-36 Vrms |          |
| Max. Turn-On Voltage                    | 3.0 Vdc         | 4.0 Vdc            | 15.0 Vdc                                    | 90.0 Vrms   | 18.0 Vrms  |          |
| Min. Turn-Off Voltage                   | 1.0 Vdc         | 1.0 Vdc            | 1.0 Vdc                                     | 10.0 Vrms   | 2.0 Vrms   |          |
| Nominal Input Impedance                 | 300 Ohm         | 240 Ohm            | 1500 Ohm                                    | 14.1k Ohm   | 2.1k Ohm   |          |
| Typical Input Current @ Nominal Voltage | 15 mAdc         | 15 mAdc            | 15 mAdc                                     | 10 mArms    | 10 mArms   |          |

### 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 0.1msec (DC Control Models).

© 2007 CRYDOM Inc., Specifications subject to change without notice.



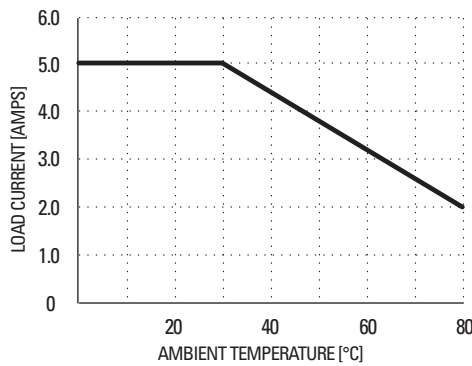
### GENERAL SPECIFICATIONS

|  |                     |
|--|---------------------|
| Dielectric Strength 50/60Hz Input/Output | 4000 Vrms           |
| Insulation Resistance (Min.) @ 500 Vdc   | 10 <sup>9</sup> Ohm |
| Max. Capacitance Input/Output            | 10 pF               |
| Ambient Operating Temperature Range      | -30 to 80°C         |
| Ambient Storage Temperature Range        | -30 to 125°C        |

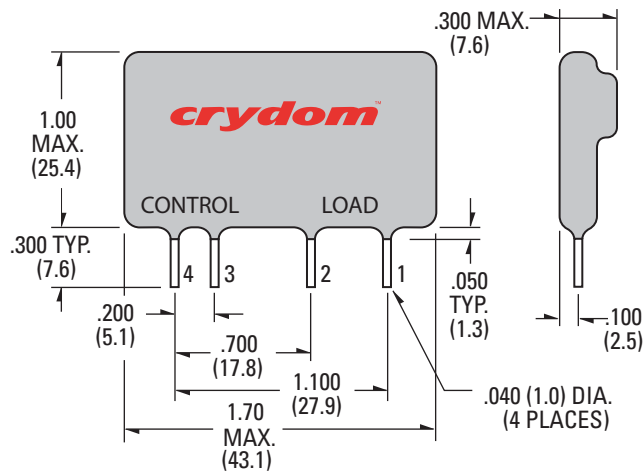
### MECHANICAL SPECIFICATIONS

|                   |                            |
|-------------------|----------------------------|
| Weight: (typical) | 0.4 oz. (11g)              |
| Encapsulation:    | Thermally Conductive Epoxy |

### CURRENT DERATING CURVE



Max. Load Current vs. Temp.



#### AC CONTROL

- PIN 1: AC LOAD
- PIN 2: AC LOAD
- PIN 3: AC CONTROL
- PIN 4: AC CONTROL

#### DC CONTROL

- PIN 1: AC LOAD
- PIN 2: AC LOAD
- PIN 3: +DC CONTROL
- PIN 4: -DC CONTROL

All dimensions are in inches (millimeters)

### AVAILABLE OPTIONS

- R** Random Turn-On Switching  
Example: **CX240D5R, CX240A5R**

### APPROVALS

UL E116949  
 CSA LR81689  
 VDE 70938  
 UG (240V, 380V, DC Control Only)

