

- Status Indicating LED on X4 Series and 4A Fuse
- UL, CSA, and CE

Solid state I/O switching modules deliver an electrically clean, photo-isolated, noise-free "output" interface from logic level control systems to external loads such as motors, valves, solenoids, etc. -- or an "input" interface from the load or sensors to microprocessor or computer-based logic level systems. Designed for long, reliable service in demanding industrial environments.

## INPUT SPECIFICATIONS

|  | ODC5<br>(S)MODC5<br>X4ODC5 | ODC15<br>(S)MODC15<br>X4ODC15 | ODC24<br>(S)MODC24<br>X4ODC24 | ODC5A<br>(S)MODC5A<br>X4ODC5A | ODC15A<br>(S)MODC15A<br>X4ODC15A | ODC24A<br>(S)MODC24A<br>X4ODC24A |
|--|----------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------------------|----------------------------------|
| Nominal Input Voltage [Vdc]                  | 5                          | 15                            | 24                            | 5                             | 15                               | 24                               |
| Min. Input Voltage @ pin 3 [Vdc] (X4 Series) | 2.5 (4)                    | 8.5 (10)                      | 16.5 (18)                     | 2.5 (4)                       | 8.5 (10)                         | 16.5 (18)                        |
| Max. Input Voltage @ pin 3 [Vdc] (X4 Series) | 7.5 (7.5)                  | 20 (20)                       | 30.5 (30.5)                   | 7.5 (7.5)                     | 20 (20)                          | 30.5 (30.5)                      |
| Must Turn Off Voltage [Vdc]                  | 1.0                        | 1.0                           | 1.0                           | 1.0                           | 1.0                              | 1.0                              |
| Typical Input Current [mA <sub>dc</sub> ]    | 10                         | 10                            | 11                            | 10                            | 10                               | 11                               |
| Max. Input Current [mA <sub>dc</sub> ]       | 27                         | 20                            | 15                            | 27                            | 20                               | 15                               |
| Nominal Input Resistance [ohm]               | 240                        | 900                           | 2.2K                          | 240                           | 900                              | 2.2K                             |

## OUTPUT SPECIFICATIONS

|  |                |     |     |                |     |     |
|--|----------------|-----|-----|----------------|-----|-----|
| Nominal Line Voltage [Vdc]                         | 24             | 24  | 24  | 100            | 100 | 100 |
| Max. Line Voltage [Vdc]                            | 60             | 60  | 60  | 200            | 200 | 200 |
| Min. Line Voltage [Vdc]                            | 3              | 3   | 3   | 5              | 5   | 5   |
| Max. Peak Off-State Voltage [V]                    | 60             | 60  | 60  | 200            | 200 | 200 |
| Max. Off-State Leakage Current [mA <sub>dc</sub> ] | 1.0            | 1.0 | 1.0 | 2.0            | 2.0 | 2.0 |
| Max. On-State Current [A <sub>dc</sub> ]           | 3              | 3   | 3   | 1              | 1   | 1   |
| Min. On-State Current [mA <sub>dc</sub> ]          | 10             | 10  | 10  | 10             | 10  | 10  |
| Max. One Second Surge [A peak]                     | 5              | 5   | 5   | 5              | 5   | 5   |
| Max. On-State Voltage @ 25C [V peak]               | 1.5            | 1.5 | 1.5 | 1.5            | 1.5 | 1.5 |
| Max. Turn-On Time [µsec]                           | 50             | 50  | 50  | 50             | 50  | 50  |
| Nominal Turn-On Time [µsec]                        | 10             | 10  | 10  | 10             | 10  | 10  |
| Max. Turn-Off Time [µsec]                          | 100            | 100 | 100 | 100            | 100 | 100 |
| Derating [mA per °C]                               | 33 Above 25° C |     |     | 20 Above 60° C |     |     |
| Fuse Rating [fast-acting] (X4 Series Only)         | 4A             | 4A  | 4A  | 4A             | 4A  | 4A  |

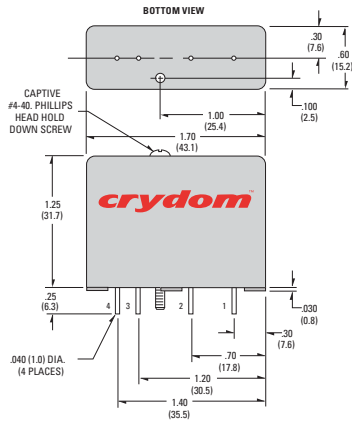
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## GENERAL SPECIFICATIONS

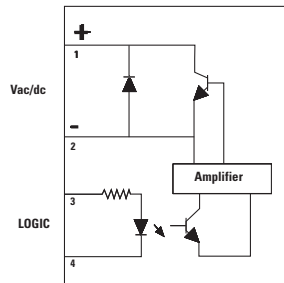
|                             |               |
|-----------------------------|---------------|
| Operating temperature range | -30 to +80°C  |
| Storage temperature range   | -40 to +100°C |
| Isolation                   | 4,000 Vrms    |
| Capacitance input to output | 8 pF          |
| Package Color               | Red           |

## WIRING & MECHANICAL DIAGRAMS

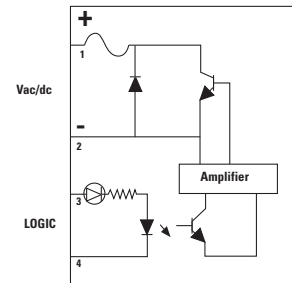
### Standard Series, ODC



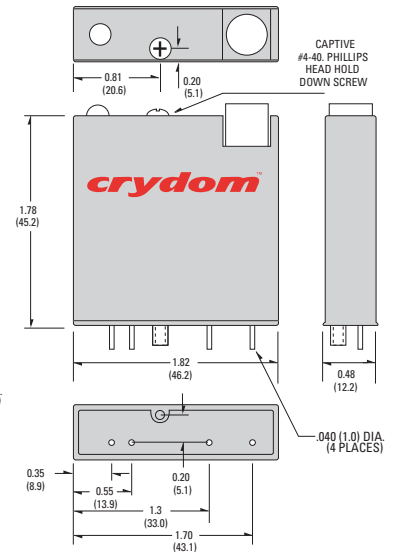
### Standard and Mini Pack



### X4 Series

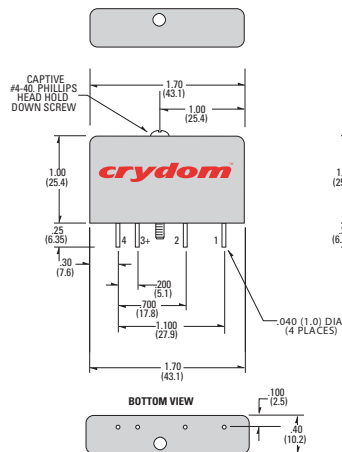


### X4 Series, X4ODC

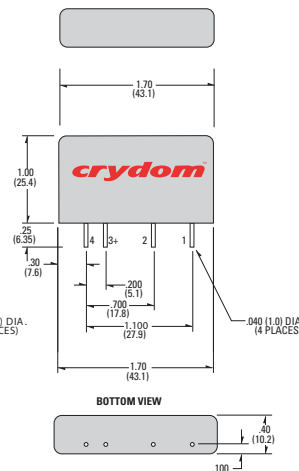


### MINI-PACK Series, (S)MODC

#### SM Prefix



#### M Prefix



## APPLICATION NOTES

- Do not install or remove modules in live (electrically hot) circuits. High voltage may be present.
- An externally located commutating diode must be installed across inductive loads
- I/O module boards also available

All dimensions are in inches (millimeters)

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For recommended applications and more information contact:  
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## ANNEX – ENVIRONMENTAL INFORMATION:

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People's Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

| Part Name         | Toxic or hazardous Substance and Elements |              |              |                               |                                |                                       |
|-------------------|---|--------------|--------------|-------------------------------|--------------------------------|---------------------------------------|
|                   | Lead (Pb)                                 | Mercury (Hg) | Cadmium (Cd) | Hexavalent Chromium (Cr (VI)) | Polybrominated biphenyls (PBB) | Polybrominated diphenyl ethers (PBDE) |
| Semiconductor die | X   | O            | O            | O                             | O                              | O                                     |
| Solder            | X   | O            | O            | O                             | O                              | O                                     |

### 附件 - 环保信息:

此附件所标示的包括电子信息产品污染图标的环保信息符合中华人民共和国电子行业标准 **SJ/T11364 - 2006**, 电子信息产品污染控制标识要求

| 部件名称  | 有毒有害物质或元素 |        |        |               |            |              |
|-------|-----------|--------|--------|---------------|------------|--------------|
|       | 铅 (Pb)    | 汞 (Hg) | 镉 (Cd) | 六价铬 (Cr (VI)) | 多溴联苯 (PBB) | 多溴二苯醚 (PBDE) |
| 半导体芯片 | X         | O      | O      | O             | O          | O            |
| 焊接点   | X         | O      | O      | O             | O          | O            |

