

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

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

|                                              | OAC5<br>(S)MOAC5<br>X4OAC5 | OAC15<br>(S)MOAC15<br>X4OAC15 | OAC24<br>(S)MOAC24<br>X4OAC24 | OAC5A<br>(S)MOAC5A<br>X4OAC5A | OAC15A<br>(S)MOAC15A<br>X4OAC15A | OAC24A<br>(S)MOAC24A<br>X4OAC24A |
|----------------------------------------------|----------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------------------|----------------------------------|
| Nominal Input Voltage [Vdc]                  | 5                          | 15                            | 24                            | 5                             | 15                               | 24                               |
| Min. Input Voltage @ pin 3 [Vdc] (X4 Series) | 3.0 (4)                    | 8.5 (10)                      | 16.5 (18)                     | 3.0 (4)                       | 8.5 (10)                         | 16.5 (18)                        |
| Max. Input Voltage @ pin 3 [Vdc] (X4 Series) | 8.0 (7.5)                  | 18.5 (20)                     | 29.0 (30.5)                   | 8.0 (7.5)                     | 18.5 (20)                        | 29.0 (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                            | 10                            | 10                            | 10                               | 10                               |
| Max. Input Current [mA <sub>dc</sub> ]       | 27                         | 20                            | 13.5                          | 27                            | 20                               |                                  |
| Nominal Input Resistance [ohm]               | 240                        | 900                           | 2.2K                          | 240                           | 900                              | 2.2K                             |

## OUTPUT SPECIFICATIONS

|                                                     |     |     |     |     |     |     |
|-----------------------------------------------------|-----|-----|-----|-----|-----|-----|
| Nominal Line Voltage [V <sub>rms</sub> ]            | 120 | 120 | 120 | 240 | 240 | 240 |
| Max. Line Voltage [V <sub>rms</sub> ]               | 140 | 140 | 140 | 280 | 280 | 280 |
| Min. Line Voltage [V <sub>rms</sub> ]               | 12  | 12  | 12  | 24  | 24  | 24  |
| Max. Peak Off-State Voltage [V <sub>peak</sub> ]    | 400 | 400 | 400 | 600 | 600 | 600 |
| Max. Off-State Leakage Current [mA <sub>rms</sub> ] | 2.5 | 2.5 | 2.5 | 4.5 | 4.5 | 4.5 |
| Static Off-State (dv/dt)[V/μs]                      | 200 | 200 | 200 | 200 | 200 | 200 |
| Max. On-State Current [A <sub>rms</sub> ]           | 3   | 3   | 3   | 3   | 3   | 3   |
| Min. On-State Current [mA <sub>rms</sub> ]          | 50  | 50  | 50  | 50  | 50  | 50  |
| Max. One Cycle Surge [A <sub>peak</sub> ]           | 100 | 100 | 100 | 100 | 100 | 100 |
| Peak On-State Voltage [V <sub>peak</sub> ]          | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 |
| Max. Turn-On Time [cycles]                          | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 |
| Max Turn-Off Time [cycles]                          | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 |
| Derating [mA per ° above 25° C]                     | 33  | 33  | 33  | 33  | 33  | 33  |
| Fuse Rating [fast-acting] (X4 Series Only)          | 4A  | 4A  | 4A  | 4A  | 4A  | 4A  |

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# crydom<sup>TM</sup> Series OAC, (S)MOAC, X40AC

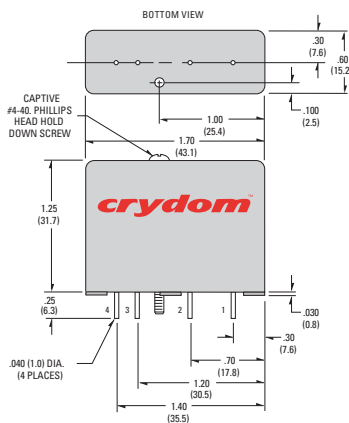
AC Output Modules

## GENERAL SPECIFICATIONS

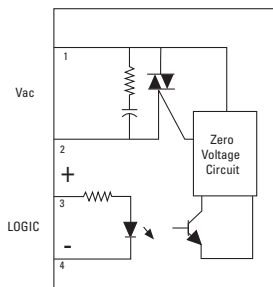
|                             |               |
|-----------------------------|---------------|
| Operating temperature range | -30 to +80°C  |
| Storage temperature range   | -40 to +100°C |
| Isolation                   | 4,000 Vrms    |
| Capacitance input to output | 8 pF          |
| Line frequency range        | 47 to 63 Hz   |
| Package Color               | Black         |

## WIRING & MECHANICAL DIAGRAMS

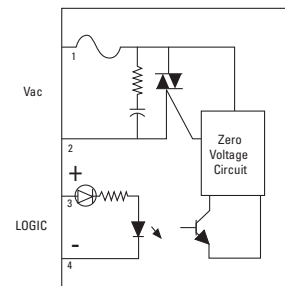
### Standard Series, OAC



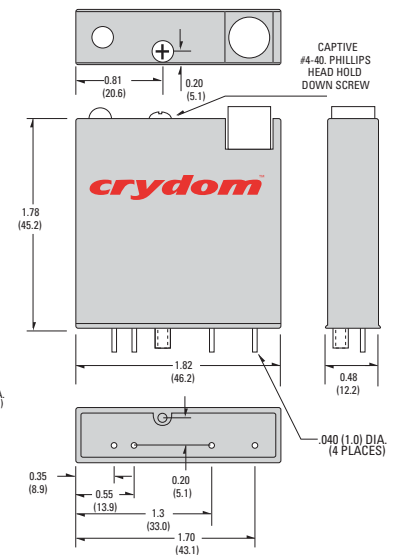
### Standard and Mini Pack



### X4 Series

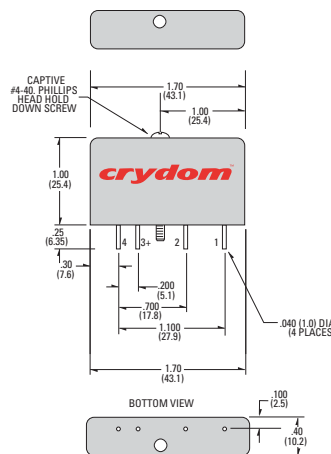


### X4 Series, X40AC

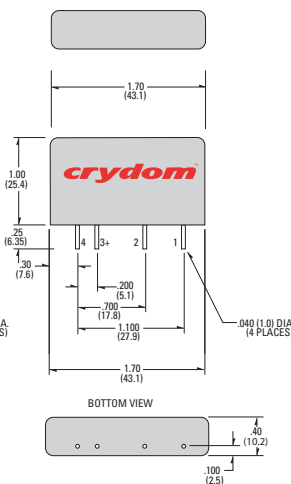


### MINI-PACK Series, (S)MOAC

#### 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境信息  
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            |

