



# Series IDC, (S)MIDC, X4IDC

## DC Input Modules

- Status Indicating LED on X4 Series
- 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

|                                    | IDC5<br>(S)MIDC5<br>X4IDC5 | IDC15<br>(S)MIDC15<br>X4IDC15 | IDC24<br>(S)MIDC24<br>X4IDC24 | IDC5D<br>(S)MIDC5D<br>X4IDC5D | IDC15D<br>(S)MIDC15D<br>X4IDC15D | IDC24D<br>(S)MIDC24D<br>X4IDC24D |
|------------------------------------|----------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------------------|----------------------------------|
| Nominal Input Voltage [Vdc]        | 24                         | 24                            | 24                            | 24                            | 24                               | 24                               |
| Min. Input Voltage [Vdc]           | 10                         | 10                            | 10                            | 3.3                           | 3.3                              | 3.3                              |
| Max. Input Voltage [Vdc]           | 60                         | 60                            | 60                            | 32                            | 32                               | 32                               |
| Nominal Input Resistance [ohm]     | -                          | -                             | -                             | 1K                            | 1K                               | 1K                               |
| Max. Input Current [mAdc]          | 60                         | 60                            | 60                            | 32                            | 32                               | 32                               |
| Drop Out Current [mAdc]            | 1.0                        | 1.0                           | 1.0                           | 1.0                           | 1.0                              | 1.0                              |
| Allowable Off-State Current [mAdc] | 1.0                        | 1.0                           | 1.0                           | 1.0                           | 1.0                              | 1.0                              |
| Allowable Off-State Voltage [Vdc]  | 2.0                        | 2.0                           | 2.0                           | 2.0                           | 2.0                              | 2.0                              |

### OUTPUT SPECIFICATIONS

|                                          | 5       | 15        | 24        | 5       | 15        | 24        |
|------------------------------------------|---------|-----------|-----------|---------|-----------|-----------|
| Nominal Logic Voltage [Vdc]              | 5       | 15        | 24        | 5       | 15        | 24        |
| Min. Logic Voltage [Vdc] (X4 Series)     | 1.5 (3) | 8.5 (10)  | 16.5 (18) | 1.5 (3) | 8.5 (10)  | 16.5 (18) |
| Max. Logic Voltage [Vdc] (X4 Series)     | 6.0 (7) | 18.5 (20) | 30.5 (32) | 5.5 (7) | 18.5 (20) | 30.5 (32) |
| Typical Logic Supply Current [mAdc]      | 10      | 10        | 10        | 10      | 10        | 10        |
| Max. Logic Supply Current [mAdc]         | 18      | 16        | 14        | 18      | 16        | 14        |
| Max. Logic Supply Leakage Current [μAdc] | 10      | 10        | 10        | 10      | 10        | 10        |
| Max. Output Voltage [Vdc]                | 30      | 30        | 30        | 30      | 30        | 30        |
| Max. Output Current [mAdc]               | 50      | 50        | 50        | 50      | 50        | 50        |
| Max. Output Leakage Current [μAdc]       | 10      | 10        | 10        | 10      | 10        | 10        |
| Max. Output Voltage Drop [mVdc]          | 200     | 200       | 200       | 200     | 200       | 200       |
| Max. Turn-On Time [μsec] ①               | 1000    | 1000      | 1000      | 300     | 300       | 300       |
| Max. Turn-Off Time [μsec] ①              | 1000    | 1000      | 1000      | 600     | 600       | 600       |

### GENERAL NOTES

① At nominal voltage and room temperature.

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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, Condor Close,  
 Woolsbridge Industrial Estate, Three-Legged Cross, Wimborne, Dorset, England BH21 6SJ  
**GERMANY:** (49) (0)6874 182580 • fax (49)(0)6874 182585 Crydom GmbH,  
 Gewerbegebiet Im Schachen, D-66687 Nunkirchen, Germany • e-mail: vertrieb@crydom.com





# Series IDC, (S)MIDC, X4IDC

## DC Input Modules

### GENERAL SPECIFICATIONS

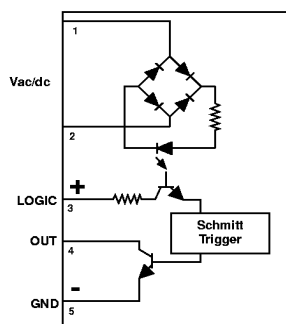
|                             |               |
|-----------------------------|---------------|
| Operating temperature range | -30 to +80°C  |
| Storage temperature range   | -40 to +100°C |
| Isolation                   | 4,000 Vrms    |
| Capacitance input to output | 8 pF          |
| Package Color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

### APPLICATION NOTES

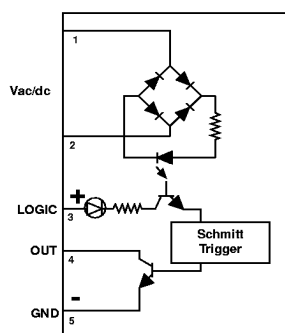
- Do not install or remove modules in live (electrically hot) circuits. High voltage may be present.
- An externally located commutating diode must be installed across inductive loads
- I/O module boards also available

### WIRING & MECHANICAL DIAGRAMS

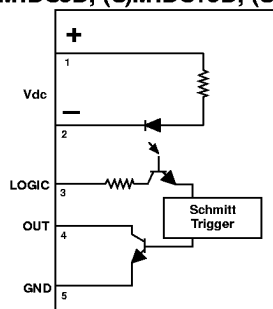
IDC5, IDC15, IDC24  
(S)MIDC5, MIDC15, MIDC24



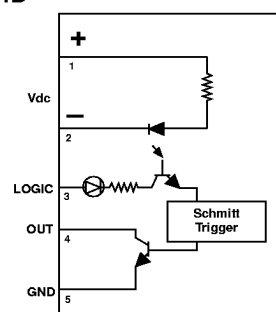
X4IDC5, X4IDC15, X4IDC24



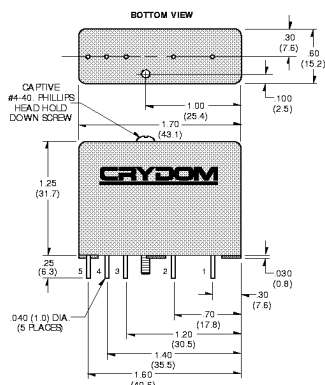
IDC5D, IDC15D, IDC24D  
(S)MIDC5D, (S)MIDC15D, (S)MIDC24D



X4IDC5D, X4IDC15D, X4IDC24D

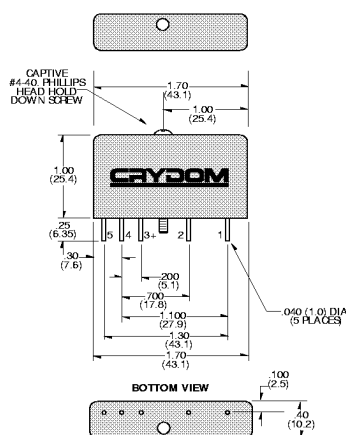


Standard Series, IDC

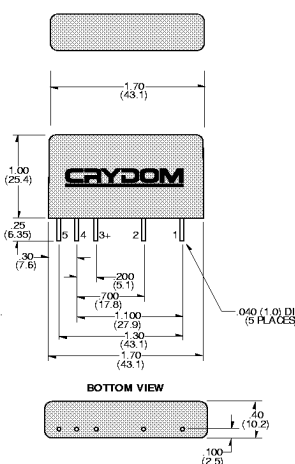


MINI-PACK Series, (S)MIDC

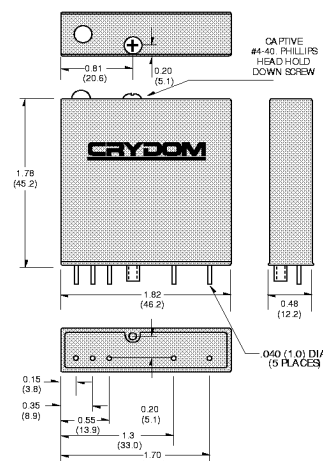
SM Prefix



M Prefix



X4 Series, X4IDC



All dimensions are in inches (millimeters)

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Woolbridge Industrial Estate, Three-Legged Cross, Wimborne, Dorset, England BH21 6SU  
GERMANY: (49) (0)6874 182580 • fax (49)(0)6874 182585 Crydom GmbH,  
Gewerbegebiet Im Schachen, D-66687 Nunkirchen, Germany • e-mail: vertrieb@crydom.com

