

DATA SHEET page 1

Form 448-961004

description

AC input modules are used for sensing ON/OFF alternating current (AC) voltage levels. All AC input modules are designed with filtering on the input and a hysteresis amplifier for high noise rejection and transient-free "clean" switching.

Each module provides 4,000 V_{rms} of optical isolation between the field inputs and the logic output of the circuit.

Typical uses and applications include sensing the presence or absence of voltage or sensing contact closures from sources such as:

- Proximity Switches
- Limit Switches
- Float Switches
- Selector Switches
- Push Button
- Toggle Switches
- Thermostats

Part Numbers	Description
IDC5*	DC Input 10-32 VDC, 5 VDC Logic
IDC5G*	DC Input 35-60 VDC, 5 VDC Logic
IAC5	AC Input 90-140 VAC, 5 VDC Logic
IAC5A	AC Input 180-280 VAC, 5 VDC Logic
IDC15*	DC Input 10-32 VDC, 15 VDC Logic
IAC15	AC Input 90-140 VAC, 15 VDC Logic
IAC15A*	AC Input 180-280 VAC, 15 VDC Logic
IDC24*	DC Input 10-32 VDC, 24 VDC Logic
IAC24	AC Input 90-140 VAC, 24 VDC Logic
IAC24A	AC Input 180-280 VAC, 24 VDC Logic

* These DC input modules can be used for AC input signals. See table on page 2.



specifications

General

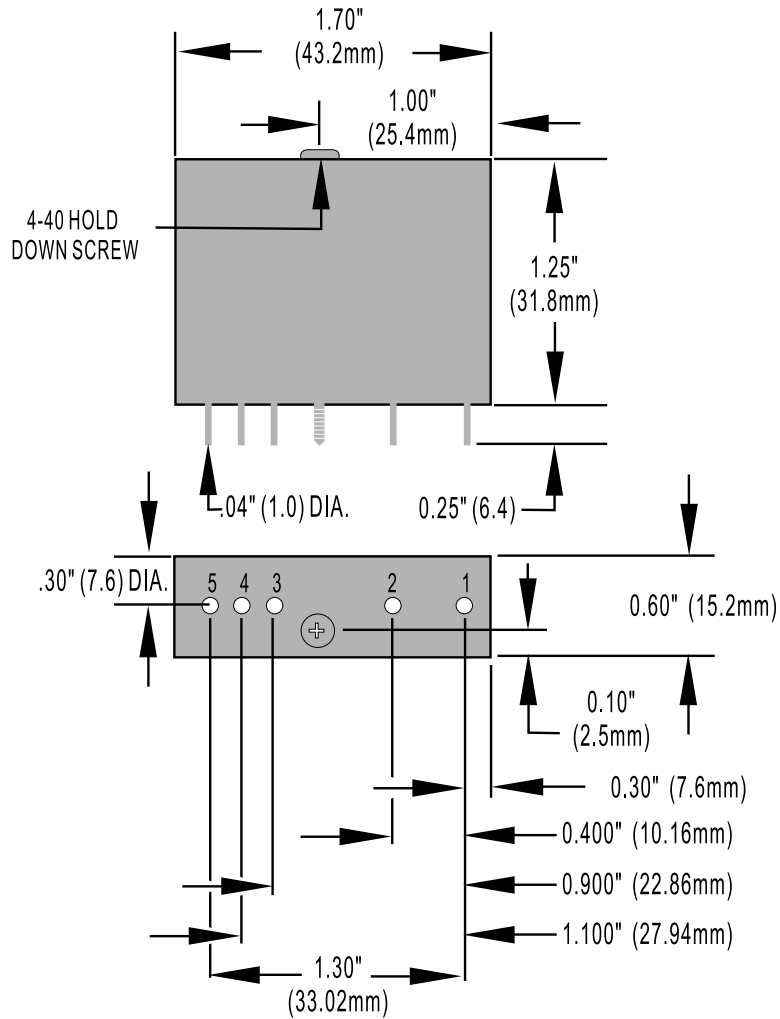
Operating Ambient	-30° to 70° C
Isolation Input-to-Output	4,000 Vrms
Output Voltage Drop	0.4 volts @ 50 milliamps
Output Current	50 milliamps
Output Leakage With No Input	100 microamps @ 30 VDC
Output Transistor	30 volts breakdown

AC Input Module Specifications

	Units	IDC5	IDC5G	IDC15	IDC24	IAC5	IAC15	IAC24	IAC5A	IAC15A	IAC24A
Input Voltage Range	VAC	12-32	35-60	12-32	12-32	90-140	90-140	90-140	180-280	180-280	180-280
Input Current @ Max Line	mA	25	6	25	25	11	11	11	5.0	5.0	5.0
Turn-on Time	msec	5	10	5	5	20	20	20	20	20	20
Turn-off Time	msec	5	15	5	5	20	20	20	20	20	20
Input Allowed for No Output	mA, V	1, 3	0.7, 7	1, 3	1, 3	3, 45	3, 45	3, 45	1, 45	1, 45	1, 45
Output Supply Voltage-Nominal	VDC	5	5	15	24	5	15	24	5	15	24
Output Supply Voltage-Range	VDC	4.5-6	4.5-6	12-18	20-30	4.5-6	12-18	20-30	4.5-6	12-18	20-30
Output Supply Current @ Nominal Logic Voltage	mA	12	12	15	15	12	15	15	12	15	15
Input Resistance (R1 in Schematic Diagram)	W	1.5K	10K	1.5K	15k	14K	14K	14K	70K	70K	70K
Control Resistance (Rc in Schematic Diagram)	W	220	220	1K	2.2K	220	1K	2.2K	220	1K	2.2K

dimensions

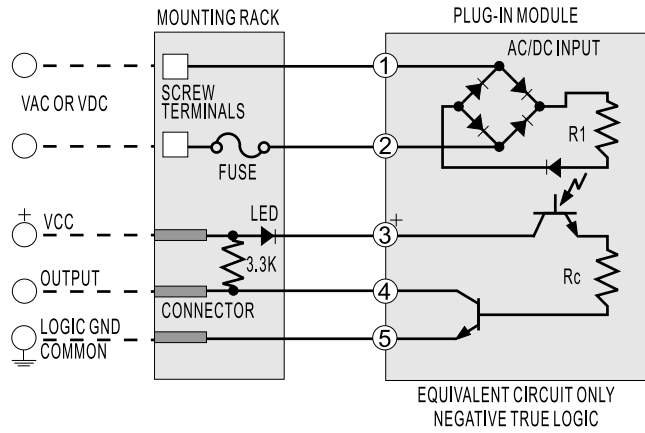
AC INPUT MODULE DIMENSIONS



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schematics

AC INPUT SCHEMATIC



connections

AC INPUT CONNECTION DIAGRAM

