

## 0.6" SERIES INPUT MODULES



- Plug into mounting boards for 0.6" modules
- AC Inputs for 24 V, 120 V, 240 V
- DC Inputs for 3.3 to 32 V, 10 to 48 V
- 4kV Optical isolation
- Open-collector Output
- Industry standard packaging

### SPECIFICATIONS (1)

#### Input

Part Number	IAC5	IAC5A	IAC24	IAC24A	IDC5
Voltage Range	90-140 VAC/DC	180-280 VAC/DC	90-140 VAC/DC	180-280 VAC/DC	3.3-32 VDC/AC
Maximum Current [mA](4)	6	5	6	5	34
Resistance [Ohms](2)(3)	28 k	75 k	28 k	75 k	500
Drop-out Current [mA](5)	2	1.5	2	1.5	1.0
Voltage for No Output [VAC/VDC](6)	50	50	50	50	2.0
Allowable Current [mA]	2.5	2	2.5	2	1.5

#### Output

Maximum Voltage[VDC](9)	30	30	30	30	30
Maximum Voltage Drop [VDC](12)	0.2	0.2	0.2	0.2	0.2
Nominal Logic Supply Voltage [VDC]	5.0	5.0	5.0	5.0	5.0
Logic Supply Voltage Range [VDC]	3.0-6.0	3.0-6.0	20-30	20-30	3.0-6.0
Maximum Current [mA](10)	50	50	50	50	50
Maximum Logic Supply Current [mA](7)	16.0	16.0	16.0	16.0	16.0
Maximum Logic Supply Leakage Current [µA](8)	10.0	10.0	10.0	10.0	10.0
Maximum Leakage Current [µA](11)	10.0	10.0	10.0	10.0	10.0
Maximum Turn-On Time [msec] (13)	20	20	20	20	1.0
Maximum Turn-Off Time [msec] (13)	20	20	20	20	1.0

### SPECIFICATIONS (1)

#### Input

Part Number	IDC24	IDC5F	IDC24F	IDC5N	IDC24N
Voltage Range (VAC or VDC)	3.3-32 VDC/AC	4-32 VDC	4-32 VDC	10-48 VDC/AC	10-48 VDC/AC
Maximum Current [mA](4)	34	68	68	34	34
Resistance [Ohms](2)(3)	1 k	500	500	1 k	1 k
Drop-out Current [mA](5)	1	1	1	1	1
Voltage for No Output [VAC/VDC](6)	2	2	2	4	4
Allowable Current [mA]	1.5	1.5	1.5	1.5	1.5

#### Output

Maximum Voltage[VDC](9)	30	30	30	30	30
Maximum Voltage Drop [VDC](12)	0.2	0.2	0.2	0.2	0.2
Nominal Logic Supply Voltage [VDC]	5.0	5.0	5.0	5.0	5.0
Logic Supply Voltage Range [VDC]	3.0-6.0	3.0-6.0	20-30	3.0-6.0	20-30
Maximum Current [mA](10)	50	50	50	50	50
Maximum Logic Supply Current [mA](7)	16.0	16.0	16.0	16.0	16.0
Maximum Logic Supply Leakage Current [µA](8)	10.0	10.0	10.0	10.0	10.0
Maximum Leakage Current [µA](11)	10.0	10.0	10.0	10.0	10.0
Maximum Turn-On Time [msec] (13)	1.0	0.05	0.05	8.0	8.0
Maximum Turn-Off Time [msec] (13)	1.0	0.10	0.10	7.0	7.0

## GENERAL SPECIFICATIONS

### Description

Input/Output Isolation Voltage (14)	4000
Input/Output Capacitance	8
Operating Temperature Range	-30 to 80°C
Storage Temperature Range	-40 to 80°C
Line Frequency Range	47 to 63
Weight	1.1 oz. (31.2g)

### GENERAL NOTES:

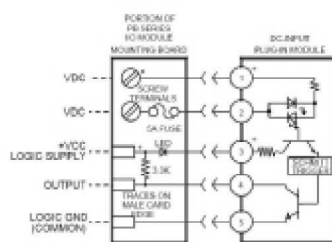
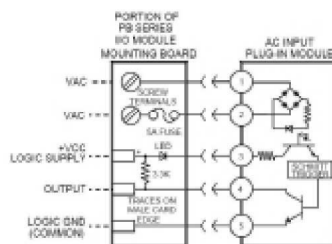
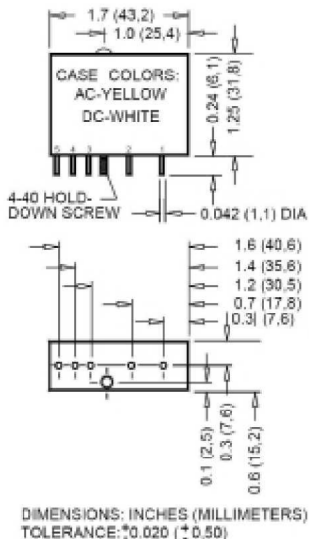
- (1) Specifications apply to an ambient temperature of -30 to 80 °C unless otherwise noted.
- (2) Resistance values for IAC modules are effective impedance values at 25 °C.
- (3) Resistance values are +/-10% at 25 °C.
- (4) Measured at maximum specified input voltage, 25°C.
- (5) Defined as the maximum current allowed through the module's input to guarantee that the output will switch from "on" to "off". Higher currents may result in the output remaining in the "on" state.
- (6) Defined as the maximum current allowed through the module's input that will not switch the module's output state from "off" to "on".
- (7) With external LED status indicator at maximum specified logic supply voltage and 25°C. 18mA without external LED.
- (8) At maximum specified logic voltage and 25°C.
- (9) Applied across open collector output transistor.
- (10) Sinking current through the open collector output transistor.
- (11) At maximum output voltage and 25°C.
- (12) At maximum output current and 25°C.
- (13) At nominal logic supply voltage, 25mA output sinking current, nominal input voltage and 25°C.
- (14) At 25°C for 1 second maximum duration.

## AGENCY APPROVALS

UL E46203  
CSA 38595



## MECHANICAL SPECIFICATIONS



(EQUIVALENT CIRCUIT DIAGRAMS)