

## 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.

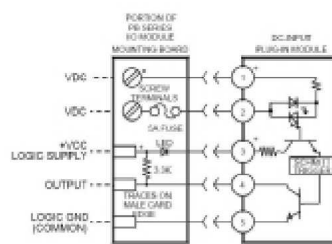
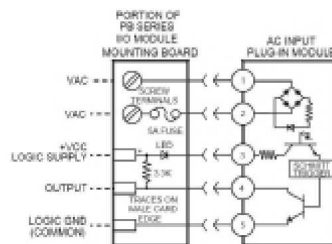
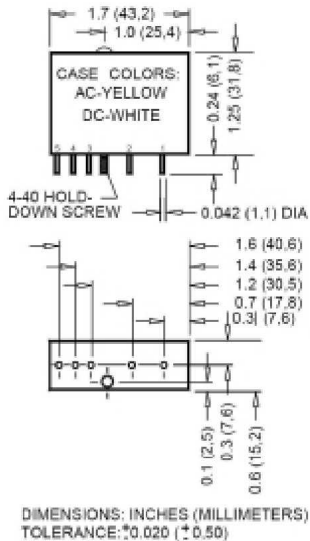
## AGENCY APPROVALS

UL E46203  
CSA 38595



Rev. 072808

## MECHANICAL SPECIFICATIONS



(EQUIVALENT CIRCUIT DIAGRAMS)

**ANNEX - ENVIROMENTAL 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	○	○	○	○	○
Solder	X	○	○	○	○	○

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	○	○	○	○	○
焊接点	X	○	○	○	○	○