STANDARD SERIES | INPUT MODULES

DIGITAL I/O MODULES



Features

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

SPECIFICATIONS

Output [1]

Part Number	IAC5	IAC5A	IAC24	IAC24A
Maximum Voltage [VDC] [9]	30	30	30	30
Maximum Voltage Drop [VDC] [12]	0.2	0.2	0.2	0.2
Nominal Logic Supply Voltage [VDC]	5.0	5.0	24	24
Logic Supply Voltage Range [VDC]	3.0-6.0	3.0-6.0	20-30	20-30
Maximum Current [mA] [10]	50	50	50	50
Maximum Logic Supply Current [mA] [7]	16.0	16.0	16.0	16.0
Maximum Logic Supply Leakage Current [µA] [8]	10.0	10.0	10.0	10.0
Maximum Leakage Current [µA] [11]	10.0	10.0	10.0	10.0
Maximum Turn-On Time [msec] [13]	20	20	20	20
Maximum Turn-Off Time [msec] [13]	20	20	20	20

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Part Number	IDC5	IDC5F	IDC5N	IDC24
Maximum Voltage [VDC] (9)	30	30	30	30
Maximum Voltage Drop [VDC] (12)	0.2	0.2	0.2	0.2
Nominal Logic Supply Voltage [VDC]	5.0	5.0	5.0	24
Logic Supply Voltage Range [VDC]	3.0-6.0	3.0-6.0	3.0-6.0	20-30
Maximum Current [mA] (10)	50	50	50	50
Maximum Logic Supply Current [mA] (7)	16.0	16.0	16.0	16.0
Maximum Logic Supply Leakage Current [µA] (8)	10.0	10.0	10.0	10.0
Maximum Leakage Current [µA] (11)	10.0	10.0	10.0	10.0
Maximum Turn-On Time [msec] (13)	1.0	0.05	8.0	1.0
Maximum Turn-Off Time [msec] (13)	1.0	0.10	7.0	1.0

Input (1)

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

Part Number	IDC5	IDC5F	IDC5N	IDC24
Voltage Range	3.3-32 VDC/AC	4-32 VDC	10-48 VDC/AC	3.3-32 VDC/AC
Maximum Current [mA] (4)	34	68	34	34
Resistance [Ohms] (2) (3)	500	500	1k	1k
Drop-Out Current [mA] (5)	1.0	1	1	1
Voltage for No Output [VAC/VDC] (6)	2.0	2	4	2
Allowable Current [mA]	1.5	1.5	1.5	1.5

General (1)

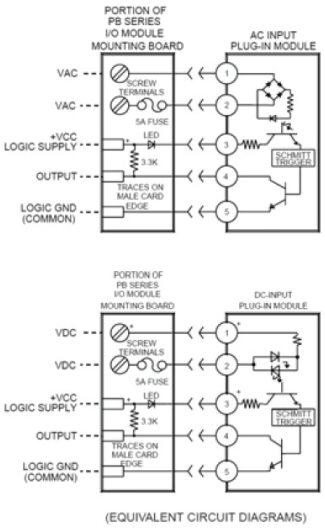
Input/Output Isolation Voltage (14)	4000 Vrms
Input/Output Capacitance	8 pF
Operating Temperature Range	-30 to 80°C
Storage Temperature Range	-40 to 80°C
Line Frequency Range	47 to 63 Hz
Weight	1.1 oz. (31.2g)

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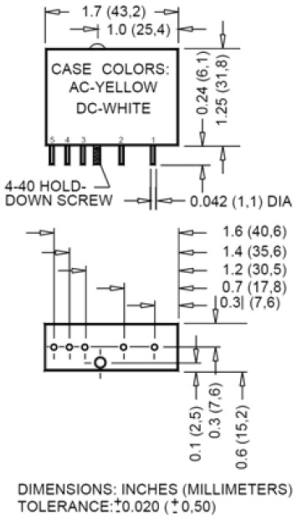
GENERAL NOTES

[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 specifi ed 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

EQUIVALENT CIRCUIT BLOCK AND WIRING DIAGRAMS



(EQUIVALENT CIRCUIT DIAGRAMS)



DIMENSIONS: INCHES (MILLIMETERS)
TOLERANCE: ±0.020 (±0,50)

AGENCY APPROVALS & CERTIFICATIONS

E46203 38595 RoHS

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WARNINGS



RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE
- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

Failure to follow these instructions can result in serious injury, or equipment damage.



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH
- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

Failure to follow these instructions will result in death or serious injury.

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Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA

CONTACT US

Americas
+1 (877) 502 5500 – Option 2
sales.crydom@sensata.com
Europe, Middle East & Africa
+44 (1202) 416170
ssr-info.eu@sensata.com
Asia Pacific
sales.isasia@list.sensata.com
China +86 (21) 2306 1500
Japan +81 (45) 277 7117
Korea +82 (31) 601 2004
India +91 (80) 67920890
Rest of Asia +886 (2) 27602006 ext 2808

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