



## C4 | SERIES INPUT MODULES

I/O MODULES



### Features

- Plug into mounting boards for C4 Series modules
- AC Inputs (Yellow Case)
- DC Inputs (White Case)
- 4kV Optical isolation
- Open-collector Output
- Industry standard packaging
- Built-in LED Status Indicator



### SPECIFICATIONS <sup>1</sup>

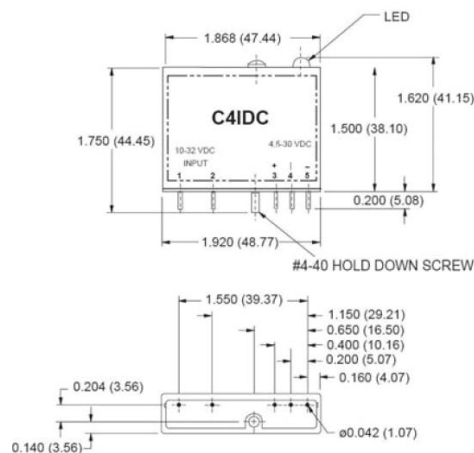
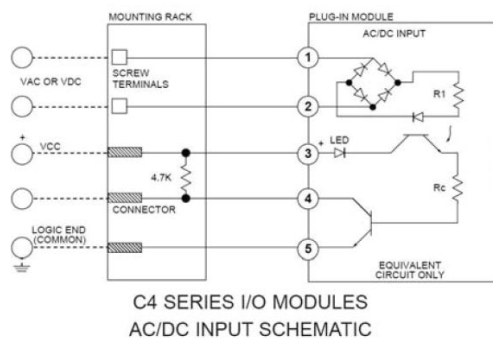
Part Number	C4IAC	C4IACA	C4IDC
Input			
Voltage Range	90-140 VAC	180-280 VAC	10-32 VDC
Maximum Current [mA] <sup>2</sup>	14	5	20
Resistance [Ohms] <sup>3,4</sup>	22 k	75 k	2 k
Drop-out Current [mA] <sup>5</sup>	3	1	1.5
Allowable Voltage for No Output [VAC/VDC] <sup>6</sup>	50	50	3.0
Allowable Current for No Output [mA] <sup>6</sup>	2.5	0.7	1.0
Output			
Maximum Logic Supply Voltage[VDC]	30	30	30
Maximum Output Voltage Drop [VDC] <sup>7</sup>	0.2	0.2	0.2
Minimum Logic Supply Voltage [VDC]	4.5	4.5	4.5
Logic Supply Voltage Range [VDC]	4.5-30	4.5-30	4.5-30
Maximum Current [mA] <sup>8</sup>	50	50	50
Maximum Logic Supply Current [mA] <sup>9</sup>	25.0	25.0	25.0
Maximum Logic Supply Leakage Current [µA] <sup>10</sup>	10.0	10.0	10.0
Maximum Supply Idle Current [µA] <sup>11</sup>	10.0	10.0	10.0
Maximum Turn-On Time [msec] <sup>12</sup>	20	20	5.0
Maximum Turn-Off Time [msec] <sup>12</sup>	20	20	5.0

Part Number	C4IDCB	C4IDCG	C4IDCK
<b>Input</b>			
Voltage Range	4-16 VDC	35-60 VDC	2.5-16 VDC
Maximum Current [mA] <sup>2</sup>	40	10	60
Resistance [Ohms] <sup>3,4</sup>	400	10 k	300
Drop-out Current [mA] <sup>5</sup>	2	1	2
Allowable Voltage for No Output [VAC/VDC] <sup>6</sup>	1	7	1
Allowable Current for No Output [mA] <sup>6</sup>	0.7	0.7	0.2
<b>Output</b>			
Maximum Logic Supply Voltage[VDC]	30	30	30
Maximum Output Voltage Drop [VDC] <sup>7</sup>	0.2	0.2	0.2
Minimum Logic Supply Voltage [VDC]	4.5	4.5	4.5
Logic Supply Voltage Range [VDC]	4.5-30	4.5-30	4.5-30
Maximum Current [mA] <sup>8</sup>	50	50	50
Maximum Logic Supply Current [mA] <sup>9</sup>	25.0	25.0	25.0
Maximum Logic Supply Leakage Current [ $\mu$ A] <sup>10</sup>	10.0	10.0	10.0
Maximum Supply Idle Current [ $\mu$ A] <sup>11</sup>	10.0	10.0	10.0
Maximum Turn-On Time [msec] <sup>12</sup>	0.05	10.0	0.025
Maximum Turn-Off Time [msec] <sup>12</sup>	0.1	10.0	0.025

**GENERAL SPECIFICATIONS**

Description	Parameters
Input/Output Isolation Voltage <sup>13</sup>	4000 Vrms
Input/Output Capacitance	8 pF
Operating Temperature Range	-30°C to 80°C
Storage Temperature Range	-40°C to 100°C
Weight	1.1 oz. (31.2g)

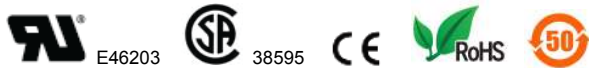
**EQUIVALENT CIRCUIT DIAGRAM / MECHANICAL SPECIFICATIONS**



## GENERAL NOTES

- (1) Specifications apply to an ambient temperature of -30 to 80 °C unless otherwise noted.
- (2) Measured at maximum specified input voltage, 25°C.
- (3) Resistance values for C4IAC modules are effective impedance values at 25 °C.
- (4) Resistance values are +/-10% at 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 voltage/current allowed through the module's input that will not switch the module's output state from "off" to "on".
- (7) At maximum output current and 25°C
- (8) Maximum allowable sinking current through open collector output transistor
- (9) At maximum logic supply voltage and 25°C.
- (10) At maximum output voltage and 25°C.
- (11) At maximum specified logic voltage and 25°C.
- (12) At 15 VDC logic, 30 VDC output, 50 mA, 25°C and nominal input voltage.
- (13) At 25°C for 1 second maximum duration.

## AGENCY APPROVALS & CERTIFICATIONS



## 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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