

Isolated Current Converter

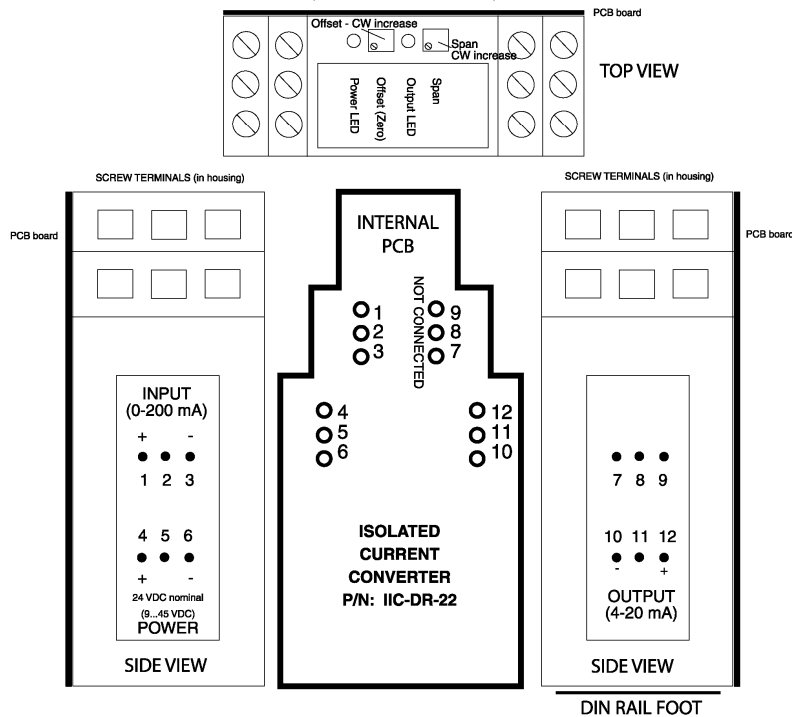
P/N: IIC-DR-22

Description: The Isolated Current Converter accepts a 24VDC power supply (nominal). A 0-200 mA input signal is converted to a 4-20 mA current output. Span and zero are user adjustable. Diagnostic LEDs indicate power and operational status. The output LED is on when the load, input signal and power supply are connected. The LED flashes when the load is disconnected. The load can be floating or grounded. The unit is available in a DIN rail mount housing.



Application: As part of a load management strategy for a marine propulsion system, the unit converts a 0-200 mA load signal from a diesel engine control computer to a 4-20 mA signal for a variable pitch propeller control system.

CONNECTION DIAGRAM
(DIN rail mount version)



Technical Specifications:

Typical at nominal input voltage and 25 degrees C unless otherwise specified

Ordering Part Number:	<i>IIC-DR-22</i>
Input Specifications:	
<i>Current Input</i>	0-200 mA
<i>Isolation</i>	Isolated from output and power supply.
Output Specifications:	
<i>Current Output</i>	4-20 mA
<i>Isolation</i>	Isolated from input and power supply.
<i>Response Time</i>	10 mSec.
<i>Non-linearity</i>	<0.1% without adjustments performed
General Specifications:	
<i>Power Supply</i>	24VDC nominal (9-45VDC operating range) Transient protection is provided.
<i>Power Consumption</i>	48 mA @ 12VDC 20.2 mA @ 24VDC
<i>Reverse Polarity Protection</i>	Provided
<i>Power LED Indicator</i>	ON = Power OK
<i>Output LED Indicator</i>	ON when load, input signal and power supply are connected. FLASHING when load is disconnected.
<i>Operating Conditions</i>	-40 to 85 degrees C (-40 to 185 degrees F)
<i>Electrical Connection</i>	Screw terminals accept 14-24 AWG wire
<i>Weight</i>	0.25 lbs. (0.113 kg)
<i>Protection</i>	PCB conformal coated IP40 rated housing, Terminals rated at IP20
<i>Packaging and Dimensions (W x H x D)</i>	DR12, 16 Amp max. current rating, Polycarbonate (75 x 98.5 x 22.5 mm or 2.95 x 3.87 x 0.88 inches) DIN rail mount for high profile DIN rail (35 mm)

Adjustments:	<i>Multi-turn trim pots (10 turns)</i>
<i>Zero</i>	CW = increasing Apply 0 mA input current and adjust the Zero trimpot to 4 mA output current.
<i>Span</i>	CW = increasing Apply 200 mA input current and adjust the Span trimpot to 20 mA current output.

CW = clockwise

Specifications are indicative and subject to change. Actual performance will vary depending on the application and operating conditions. Users should satisfy themselves that the product is suitable for use in the intended application. All our products carry a limited warranty against defects in material and workmanship. Please refer to our Warranty, Application Approvals/Limitations and Return Materials Process as described on www.axiomatic.com/service.html.

Form: TD2302AX-07/23/09