

## DC INPUT 2-WIRE ISOLATED TRANSMITTER ——— DCI-2

**HIGH ACCURACY**

**HIGH TEMPERATURE STABILITY**

**COMPLETE GALVANIC ISOLATION**

**3-YEAR WARRANTY**



The DCI-2, a 2-wire isolated transmitter, accepts input voltage of up to 400Vdc or input current up to 100mA, generating a proportional 4-20mA process output current.

Advanced auto-zero circuitry provide a unique degree of thermal stability.

Exceptional input to output high common mode rejection (CMR) and a high filtering level, eliminating false output signals and providing a low ripple output current.

The DCI-2 input spans of 4 to 100mV are calibrated via a DIP switch array. Span from 100mV to 100Vdc is

divided into three sub- ranges (100mV..2.5V, 2.5..60V and 60..400V) are selected by changing a coarse range resistor mounted on special pins.

Six DIP switches set the sub-coarse ranging while almost non-interactive Zero & Span potentiometers are used for fine tuning.

The unit is housed in a polycarbonate plastic enclosure mounted on a standard DIN rail.

To obtain high density installation DCI-2 units can be mounted side by side, with no wasted space.

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## SPECIFICATIONS

## DCI-2

INPUT: DC voltage or current

INPUT RANGES (for full span):

Low voltage range: 4mV to 100mV  
High voltage range: 100mV to 100V  
Current range: 4 $\mu$ A to 100mA

INPUT IMPEDANCE:

Low voltage range: >100 M $\Omega$   
High voltage range: >2 M $\Omega$   
Current input: 5 $\Omega$   
Protected current input  
(option): 70 $\Omega$

OUTPUT: 4 - 20 mA, 25 mA (limited)

LOOP RESISTANCE:

$$R_{\max}(\Omega) = (V_{\text{supply}} - 10) / .02$$

SUPPLY VOLTAGE: 10..40 Vdc

SUPPLY AND LOAD VARIATION EFFECT:

Less than  $\pm 0.03\%$  of span

ISOLATION: 1500 V dc or peak ac

RESPONSE TIME: 160 msec (0-98%)

ACCURACY

Including linearity, hysteresis and repeatability:  
 $< \pm 0.08\%$  of span

INPUT ZERO CHANGE:  $\pm 15\%$  of span

Zero Calibration: Three DIP switches and  
"Zero" potentiometer

INPUT SPAN CHANGE:  $\pm 15\%$  of span

Span Calibration: Three DIP switches and  
"Span" potentiometer

CMR: 127db typical dc to 60 Hz

TEMPERATURE STABILITY:  $< \pm 0.008\%$  /  $1^{\circ}\text{C}$  of span

OPERATION TEMPERATURE:  $-20$  to  $+70^{\circ}\text{C}$

Option:  $-30$  to  $+80^{\circ}\text{C}$

STORAGE TEMPERATURE:  $-30$  to  $+85^{\circ}\text{C}$

HUMIDITY: 5 to 95% relative, non-condensing

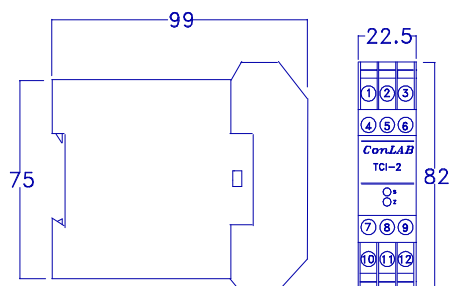
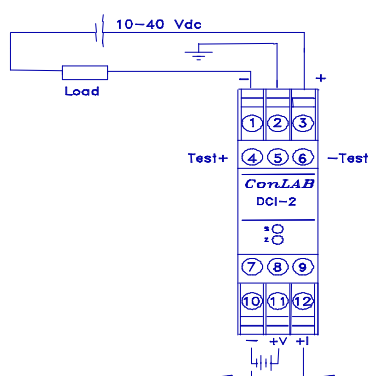
HOUSING: Plastic polycarbonate

Box: According to IP-40

Terminals: According to IP-20

MOUNTING: Standard 35 mm DIN rail

### Connection Diagram



### Ordering Information

DCI-2-V- 0-100- 1- S

Model \_\_\_\_\_  
Input: I-current, V-voltage \_\_\_\_\_  
Minimum \_\_\_\_\_  
Maximum \_\_\_\_\_  
Units (1-mV, 2-Volt, 3-mA) \_\_\_\_\_  
Operating temperature (S-standard, O- option) \_\_\_\_\_

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