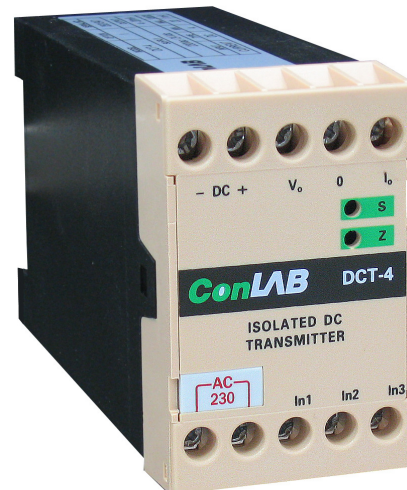


## DC INPUT

## 4-WIRE ISOLATED TRANSDUCER

## DCT-4

- FOUR ZONE GALVANIC ISOLATION
- EXCELLENT ACCURACY
- MINIMUM INPUT SPAN 1.5mV
- MULTI RANGE
- 3-YEAR WARRANTY



The DCT-4 is a four-wire transducer which \*converts the measuring voltage or current into a standardized load-independent signal which is linearly proportional to the input signal.

The DCT-4 transducer is designed to measure DC voltages at span of 1.5mV to 300Vdc, and currents from 2 $\mu$ A to 100mA.

The DCT-4 unit can be powered either from 230/115Vac or 12 to 30Vdc.

The transducer four zones: Input, Output, Mains supply, and DC supply, are galvanically isolated from each other.

The DCT-4 is provided with two

simultaneous outputs: current output and voltage output. The current output can be configured as: 4-20mA, or 0-20mA.

The voltage output can be configured as: 0-5V, 0-10V, 1-5V or 2-10V.

The DCT-4 is configured by a resistor header located beyond the front panel. A proper combination of the resistors installed plus fine tuning by Zero and Span potentiometers provide an ultimate accuracy calibration of the transducer.

The DCT-4 transducer is housed in a polycarbonate enclosure. Front terminal accessibility allows maximal stackability of the units for maximum space saving.

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## Specifications

**DCT-4**

INPUT MODE: DC voltage or DC current

INPUT TERMINALS:

In1: High voltage range  
In2: Low voltage range and current  
In3: Common

INPUT RANGES (for full span):

Low Voltage Range: 1.5mV to 100mV  
High Voltage Range: 100mV to 300V  
Current Range: 2µA to 100mA

OUTPUT

Current: 0-20/4-20 mA  
Voltage: 0-5/1-5/0-10/2-10Vdc

OUTPUT LOADS

Voltage Mode: for 0-5/1-5V > 500Ω  
0-10/2-10V > 1000Ω

Current Mode:

For Mains supply (-10%) <630Ω, Typical <820Ω  
For DC Supply: 12V: <280Ω  
24V: <920Ω  
30V: <1100Ω

POWER SUPPLY

200 – 265Vac/ 100 – 130Vac; 45-70Hz, 12 – 30 Vdc

POWER CONSUMPTION

2.3W @ nominal AC supply, 1.6W @ 30Vdc

SUPPLY AND LOAD VARIATION EFFECT  
< 0.03% of span (for full change)

ISOLATION (Input/Output/Mains/DC supply): 1K Vdc or peak AC

RESPONSE TIME < 320mS (0-98%)

ACCURACY (Combined effect of linearity, hysteresis and repeatability): < ±0.04% of span

LINEARITY: Better than ±0.03% of span

ADJUSTABILITY:

Zero: ±35% of span  
Span: ±30% of span

CMR: 132 db typical

TEMPERATURE STABILITY

Zero drift: typ. 0.1µV/°C, 0.0075%/°C whichever is greater  
Span drift: typ. < 0.01µV/°C

OPERATION TEMPERATURE: 0-70°C std. -30 to 80°C (opt)

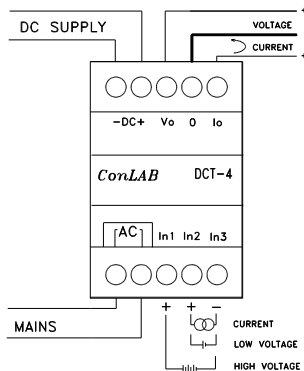
HOUSING: Polycarbonate

Box: IP50 DIN 40050  
Terminals: IP20 DIN 40050

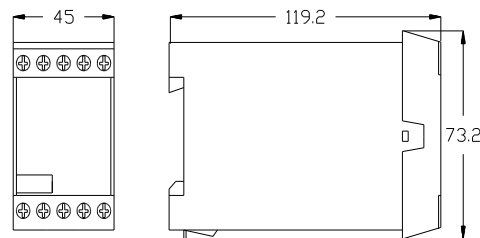
MOUNTING: Standard DIN rail

DIMENSIONS: 45(W)x73.2(H)x119.2(D)

## Connection Diagram



## Dimensions



## Ordering Information

**DCT-4 - V - 0 - 100 - V - A**

Product Type \_\_\_\_\_  
Input Mode (V-Voltage, I-Current) \_\_\_\_\_  
Min range \_\_\_\_\_  
Max range \_\_\_\_\_  
Units (M-mV/mA, V-volt, U-µA,) \_\_\_\_\_  
Output Mode (A: 4-20mA, B: 0-20mA  
C: 1-5V, D: 2-10V, E: 0-5V, F: 0-10V)

data subject to change without notice

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