## **Resistance Transducer**

## **Istructions**

#### CE-R01-5\*MS3-0.5

#### 1 Overview

The product is a resistance transmitter, can linearly convert the input resistance signal into a standard electrical signal. Input is the resistance signal, the output is the two-way independent 4-20mA signal. The power supply is isolated from the input. The product can be directly used for resistance measurement, it can also use with a variety of resistive sensors, such as resistive displacement sensors, resistive valve position sensors, etc. It can be widely used in telecommunications, electricity, machinery, railways, industrial control and other fields.

### 2 Part Number

CE-R01-5\*MS3: resistance input / 4-20mA output,

"\*" for 2, 3, 4, 9 indicates power supply are +12V DC, +15V DC,

+24V DC and 220V AC.

# 3 Specifications

Test conditions: auxiliary power: 220V (AC/DC)

Input range: 0~ (100 $\Omega$ ~ 1K $\Omega$ )

Output:  $4\sim 20\text{mA}$  (two-way)

Power supply: 220V (AC/DC)

Accuracy: 0.5class (With reference error)

Operating temperature:  $0\sim50^{\circ}$ C Temperature drift: 250ppm/°C Isolation voltage: 2500V DC Load capacity:  $100\sim300\Omega$ 

Response time: ≤250 mS

Rated power consumption: ≤500mW

Output ripple: None;

Frequency response range: None

Surge Immunity: None Burst immunity: None

## **4 Connections Diagram** (figure 1)

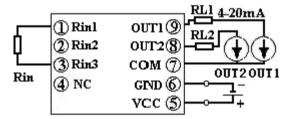


Figure 1, reference wiring diagram

Terminal 1: Rin1, resistance input 1;

Terminal 3: Rin3, Resistance input;

Terminal 5: VCC, power supply positive;

Terminal 6: GND, power supply negative;

Terminal 7: COM, Output common;

Terminal 8: OUT2, the second way output;

Terminal 9: OUT1,the first way output.

Other undefined pins cannot be used by the user.

## **5 Product Size**

The product uses S3 case structure and its size is as follows: (Fig. 2)

S3 case: Long \*wide X\*high = 36\*83\*76

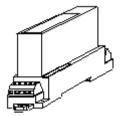


Figure 2 Product Outline

#### 6 Installations

Use DIN35 rail mounting or screw mounting. Terminal space is 5.08 mm, the installation size shown in Figure 3.

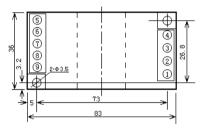


Figure 3 DIN rail or screw mounting plan

### 7 Notes

- 1 The power supply voltage must meet the nominal value, in particular, +12 V and +15 V products cannot access +24 V power supply, otherwise it will burn the product.
- 2 When measuring the voltage or current with the multimeter test pen, the terminal screw should be screwed to the end, otherwise it may not measure the voltage or current output value.
- 3 Verify the part number and description are correct according to the packing list and product labels.
- 4 Apply power to the transducers only after a through checking the



input signal and power supply according to connections diagram.

- 5 The transducer should only be used in environment having no static electricity, excessive dust, corrosive or explosive gases.
- 6 If a group of transducers are mounted together, keep a space more than 10mm between adjacent units.
- 7 The transducers have been calibrated before delivery, please contact the company if readjustments are required.
- 8 Transducer for the integrated structure, not removable, and should avoid collision and fall. Do not remove and destroy the product labels.
- 9 There is no lightning protection circuit inside the transducers. Please pay attention to lightning protection when the input and output feeders of the transducers are exposed to adverse weather conditions.