

Multiplexer MUX-RTD



Description

MUX-RTD enables to connect 8 temperature PT-100 sensors (3 wire) to one PLC analog input.

Command

The input is selected by 3 binary address lines.
Binary signal: 0 v - [0]; + 24 v - [1].

Address signal			Selected input
A	B	C	
0	0	0	1
1	0	0	2
0	1	0	3
	
0	1	1	7
1	1	1	8

Specifications

Power supply: 24 ±10%V DC, fuse - 0.25 A

Input: 8 Temp. sensors PT-100

Option: internal relay controlled by EN input enables to connect several MUX-RTD to one PLC analog input.

Output: Active 4-20mA, $R_{load\ max} = 450\ \Omega$

Command: selected input is by 3 binary address lines

Ambient Temp.: -10 ÷ +55 °C

Display: 8 LEDs indicate selected input

Enclosure: W90 × L160 × H73 mm plastic case

Connection: plug-in terminals

Mounting: 35mm DIN-rail Protection category: IP-40.

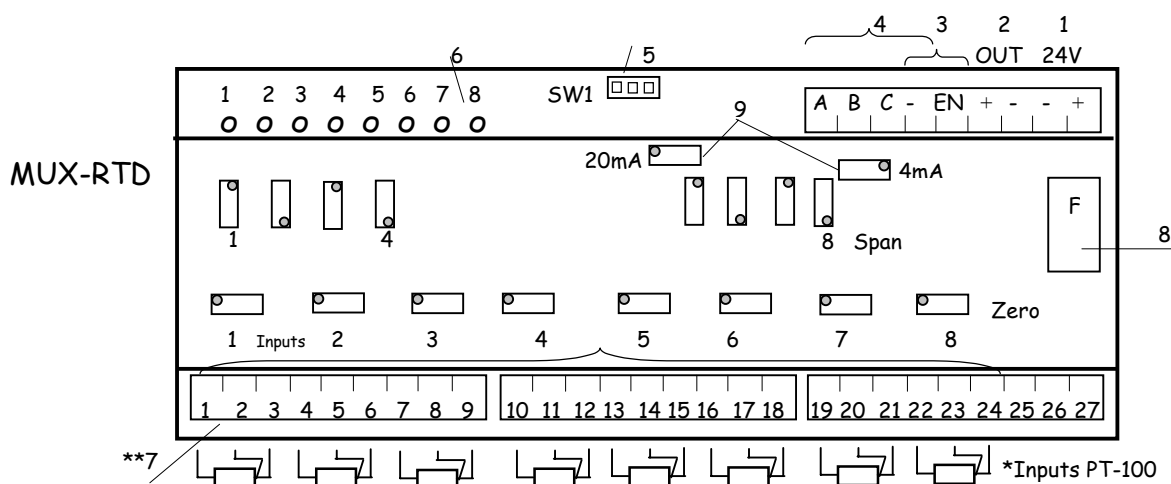
Calibration

The unit is calibrated according to customer required temperature range.

For each channel there are ZERO and SPAN potentiometers.

The output signal is adjusted by two potentiometers "4mA" and "20mA" (for all channels).

Connection



[1] Power terminals 24±10% VDC

[2] Output 4-20mA [3] EN terminals (option)

[4] Command terminals

[5] Jumper SW1 enables pullup resistors (connected to "+") or pulldown resistors (connected to "-") for the address lines (A,B,C).

It is used for dry contact (without external resistor).

[6] 8 LEDs indicate selected input

[7] Input terminals PT-100 [8] Fuse 0.25A

[9] Potentiometers "4mA" and "20mA" for output adjusting

* A 100Ω 1/4W resistor should be connected to each input without the sensor PT-100.

** The PT-100 connection cable should be shielded. All shields must be grounded at the MUX-RTD end while the other end shouldn't be ground.

Mux_Rtd -P-1-02-E