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PROGRAMMABLE MONITOR FOR VOLTAGE, CURRENT AND TEMPERATURE

- version for DIN rail mounting
- output relay with changeover contact
- the easily set the switching value by means of a potentiometer or programmatically
- user configuration converter (input type, adjustability, hysteresis, mode switching) via PC-USB adapter AY
- 24V DC supply with or without isolation, or 230VAC with isolation

TS30DIN is a two-state switch for monitoring electrical or temperature values. The instrument can be used, for example, as a two-state temperature controller for various machines or technologies when an external sensor is connected. The control element for the setting and the programming connector is inside the housing. The RawetStudio program is intended for setup, but you need to purchase the AY-USB programming adapter (if you do not already own it).



Electrical parameters:

- Input according to design: Pt100, Pt1000, Ni1000, KTY, OV, Potentiometer, NTC 10kΩ
DC voltage to 1V, 0..10V, current 0-20mA,
Thermocouple J, K, L, T, S, B .etc. (for thermocouples settings only programmatically)
- operating temperature: -35...+ 80°C (for power 230V only -35...+50°C)
- parameters of the switching element: max. 250V AC, 2000VA - max. 8A, lifetime 2x10⁶ without load, 1x10⁵ with load (the switching circuit must be protected by max. 8A)
- supply variants: (only RTD,R)
without limits - 12V/24V DC ± 25% without galvanic isolation
without limits - 24V DC ± 10% with galvanic isolation 3kV
- 230V AC ± 10% (45 – 65 Hz) (transformer isolation 3,75 kV)
- consumption: max. 0,5VA
- covering: IP40 / IP10
- dielectric strength: supply against output contacts 500Vef, 50Hz/1 min (only basic isolation!!)
supply and output contacts against input 3750Vef, 50Hz/1 min (CLASS II)
- environment: pollution degree 2, overvoltage category III
- options: AY-USB programming adapter for easy PC configuration
- accuracy: 0,07% + 0,18°C

Mounting:

Mechanically, the transducers are mounted on a 35 mm DIN rail. After attaching the top edge of its, use the screwdriver to release the latch of the fastening mechanism and pushing the bottom part towards the rail. After locking, assembly is over. Disassembly is done in the opposite way.

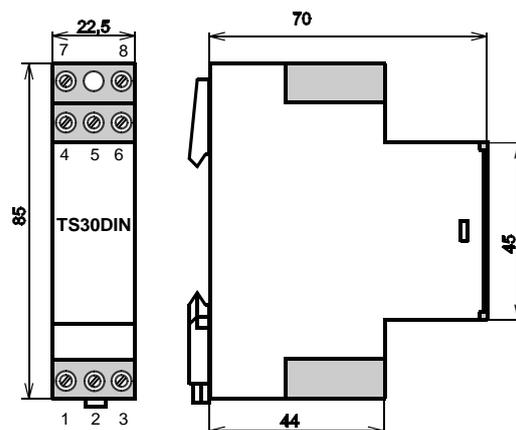
Connection: Terminals can be connected to 4mm² cross-sections. We recommend using a cable with a cross-sectional area from 0.5 mm². We recommend a shielded cable in a dirty environment.

Type test:

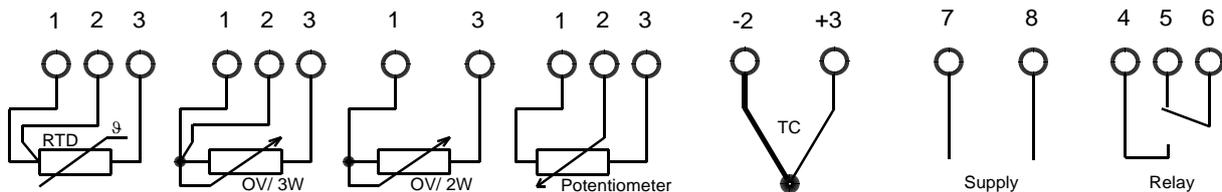
Basic type test: according by ČSN EN 60770-1 ed.2 EMC:
according by ČSN EN 61326-1 ed.2 Safety:
according by ČSN EN 61010-1 ed.2

Dimension and terminal connection:

- Input:
- 1,2 - 3: RTD (OV) 3W 1 - 3:
RTD (OV) 2W 1 - 2 - 3:
potentiometer
(centre= 2)
- 2 - 3(+): Tc (U)
- Supply:
- 7, 8 ... 12/24V DC (does not matter the polarity of the connection)
230V
- (+7),8 24V GO
- Relay:
- 4 ... contact NO
- 5 ... contact NC
- 6 ... COM



Terminal connection:



Ordering:

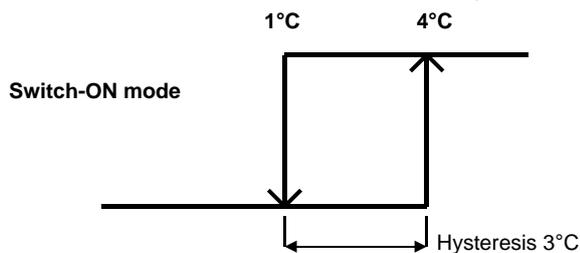
The order must include:

- type device (TS30DIN)
- supply (230V AC, 24V DC GO, 12V DC or 24V DC)
- type input
- supervised value S (ON point) or R (OFF point)
- hysteresis H (difference between switching on and off) fixed, expressed in units
- adjustability (if you require) of the PN is done by means of a trimmer inside the instrument.
 - in units: difference between Max. switch-ON point value and Min. switch-OFF point value
 - in units: difference between Max. switch-OFF point value and Min. switch-ON point value
 - in% for switch-ON: the entered value is added to the switch-ON point and subtracts from the switch-OFF point - we get Max. and Min. PN value
 - in% for switch-OFF: the entered value is added to the switch-OFF point and subtracted from the switch-ON point - we get Max. and Min. PN value
- quantity

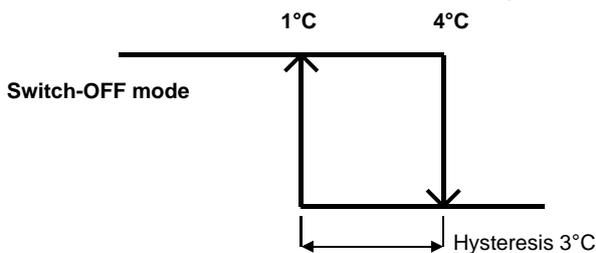
Examples of orders:

- TS30DIN, 24VDC; Pt100; **S** 135°C; **H** 5°C; **PN** 25% 5 pc
 - TS30DIN, 24VDC GO; 4-20mA; **S** 2mA; **H** 8mA; **PN** 4mA 1 pc
 - TS30DIN, 230VAC; Pt1000; **S** 4°C; **H** 3°C; **PN** 0 2 pc
- When entering S or R = 0, the value in% can not be used for PN.

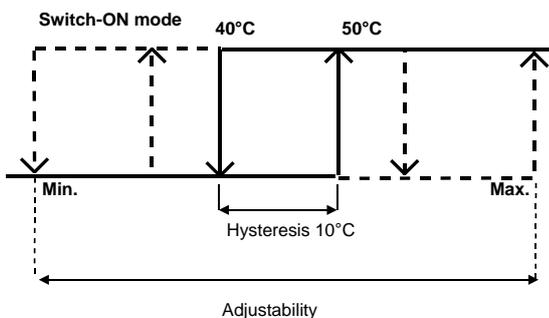
TS30DIN, 230VAC; Pt1000; **S** 4°C; **H** 3°C; **PN** 0 2 pc



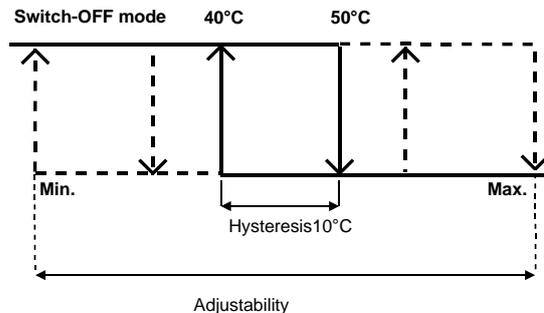
TS30DIN, 230VAC; Ni1000; **R** 4°C; **H** 3°C; **PN** 0 2 pc



TS30DIN, 24VDC; Pt100; **S** 50°C; **H** 10°C; **PN** 30°C 1 pc



TS30DIN, 24VDC GO; Ni1000; **R** 50°C; **H** 10°C; **PN** 20% 3 pc



Dispose of disposal after end of life by separate collection..
Rawet s.r.o. member of RETELA association www.retela.cz

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