



Digital measuring device IP-7-2-TK is designed for turbine destruction protection. It measures pressure difference and determinates relative power of turbine stage.

The device provides independent measurement and scaling of 2 current signals (different input and output range sensors are allowed).

- Two sensors connection.
- Relative step power displaying in %.
- Pressure displaying for both sensors.
- Built-in source for sensor supply.
- Two NO relays.
- False alarms protection for noises and power failures.
- Programmable DC-current output 0..5, 0..20 или 4..20 mA.
- RS-485 interface, Modbus (RTU) protocol.
- Five-digit green LED display with 20 mm symbol height.
- Supplies with remote console for device setting up.

SPECIFICATION

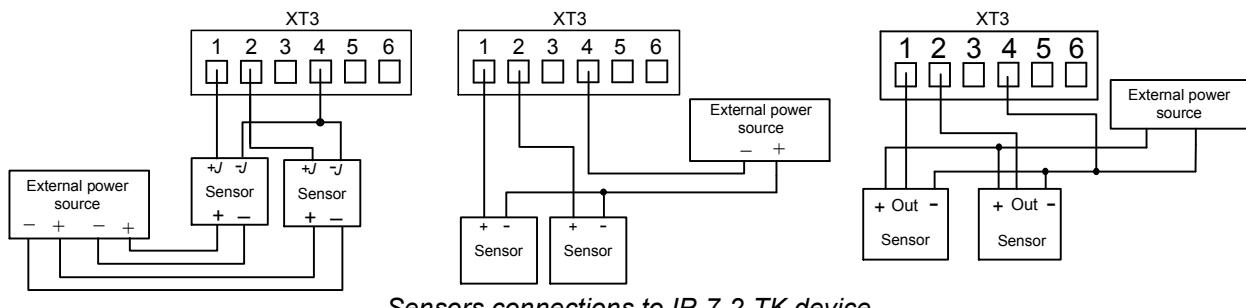
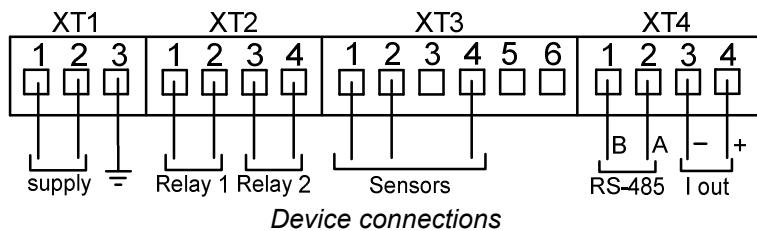
- Input current signal ranges, mA..... 0..5; 0..20; 4..20
- Relative stage power is defined by sum of two parameters, scaling and displaying in %.
- Reduced errors of conversion input signals to indication, %, up to:

| Displayed parameter | Input signal range, mA | | |
|---------------------|------------------------|-------|------|
| | 0..20 | 4..20 | 0..5 |
| Parameter value | ±0,5 | ±0,5 | ±1,0 |
| Sum parameter | ±0,8 | ±0,8 | ±1,5 |

- Reduced errors of conversion relative stage power to unified current output, mA, up to.... ±0.05
- Sensors voltage supply according to device voltage supply:
 - 220 VAC 15..28 VDC
 - (24±4) VDC (23±4) VDC
- Input resistance, Ohm 120



WIRING DIAGRAM



ADDITIONAL INFORMATION

- Operating temperature range $+5^{\circ}\text{C}..+50^{\circ}\text{C}$
- Protection type (IP code)..... IP41
- 2 relays, able to switch 30 VDC / 5 A to 125 VDC / 0.3 A circuits with resistive or reactive ($\tau \leq 40\text{ ms}$) load and up to 270 VAC / 3 A ($\cos\varphi \geq 0.4$) circuits. 220 VDC / 0.15 A circuits allowed with relay endurance reduced to 10000 operations.
- Current output load resistance, Ohm, up to:
 - output signal 0..5 mA..... 2000
 - output signal 0..20 mA, 4..20 mA..... 600
- Supply voltage (depends on model) 220VAC 50Hz / 24VDC
- Power consumption, VA, up to 8
- Overall dimensions (W×H×D), mm 144×74×120
- Mounting dimensions, mm:
 - cutout size 137×68
 - mounting depth 140

ORDERING DESIGNATION

Digital measuring device **IP-7-2-TK-XXX**, where

XXX – device power supply:

“24V” – 24VDC;

no marking – 220VAC, (50±1)Hz.