



SPT 24

Control unit for PTC

Area of use

The SPT 24 is developed for use with inverters for temperature monitoring of ATEX fans. The SPT 24 turns off the fan if the temperature exceeds its allowed value. This type of regulation is mandatory when operating with frequency converter in ATEX areas, but can also be used together with contactor control.

Function

The SPT 24 is supplied with 24VDC from the frequency converter and breaks the emergency stop circuit in the frequency converter if the temperature in the fan motor gets too high. The SPT test kit simplifies the test that is mandatory at each commissioning and at least every year. The knob has an operating mode as well as three test modes, the reset button also has a built-in alarm lamp. If the alarm cannot be reset by any of the three test modes, the prescribed tests are passed. During testing, the system is automatically interlocked against start.

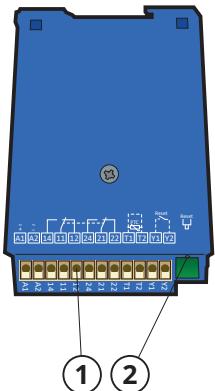


Fig. 1

Electrical installation

Remove jumper between P24 and STO in the inverter. The cable from P24 and COM in the inverter are connected to terminals A1 and A2 (1), see **Fig. 1**. A1 is bridged to 11, and STO from the inverter is connected to 14. For external indication of tripped protection, connect the LED-lamp between A2 and 12. For external reset, connect the reset button between Y1 and Y2.

A1-2, 24 V AC/DC (<2W)

11-24, Potential-free contact 250 V (Max 3A/AC eller 2A/DC)

T1-2, PTC <1mA

Y1-2, <30 VDC 1mA

Commissioning

After installation, the following tests must be carried out with voltage loose inverter: Measure resistance between T1 and T2, See wiring diagram. Mode operation ~150Ω. Mode test 1= 0Ω. Mode Test 2~17kΩ. Mode Test 3~ 1.9kΩ. Also measure resistance between 4 and 6. Mode operation= 0Ω. All test modes ≥ 3MΩ.

Technical data

Dimensions: 75 x 115 x 22,5 mm

Weight: 150 gr

Ambient temperature: -20° to +40°C

Current: 24 V AC/DC

Frequency: 50 Hz

Power: 0,1 A

Enclosure class: IP30

Wiring diagram

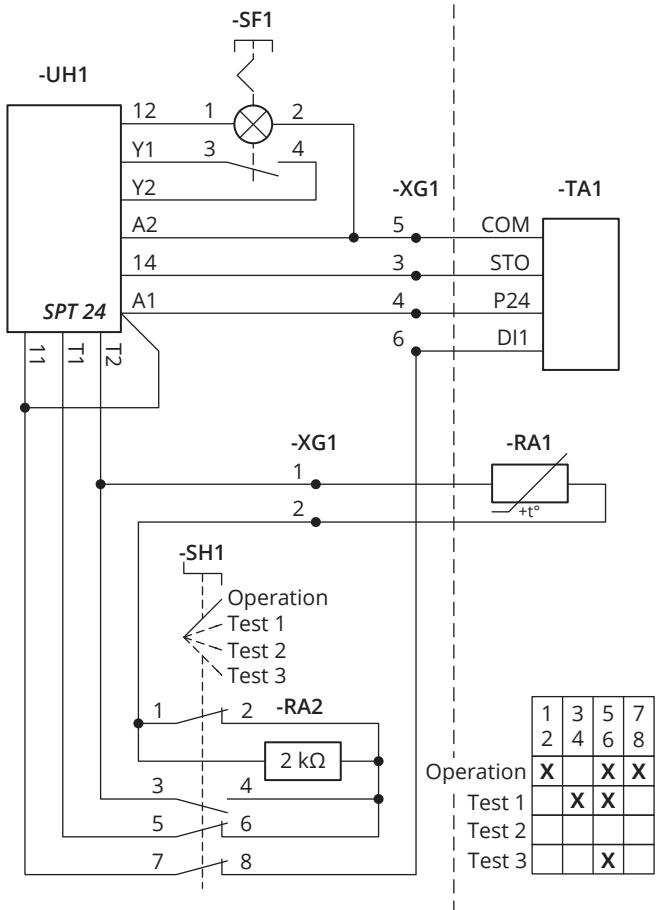


Fig. 2

Accessories

SPC, Enclosure for Control Unit SPT 24 test kit SPT TEST. Protection class IP 65.

SPK, Indication of tripped protection consisting of reset/indicator light, terminal block and knob with 4 positions.