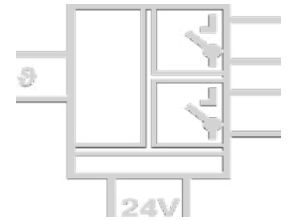


Temperature Alarm Unit IS 3600

Control and Monitor Pt-Temperature Signals



The Alarm Unit IS 3600 is used to monitor limit values and regulate simple automation processes in temperature measuring applications with Pt-Sensors.

High reliability and Protective Separation are essential characteristics that contribute to fault-free equipment operation.

Two switch channels can be separately configured. The switch point and the switch hysteresis can each be adjusted by means of their own 12-turn potentiometer located on the unit's front panel. The switch state is indicated by a yellow LED.

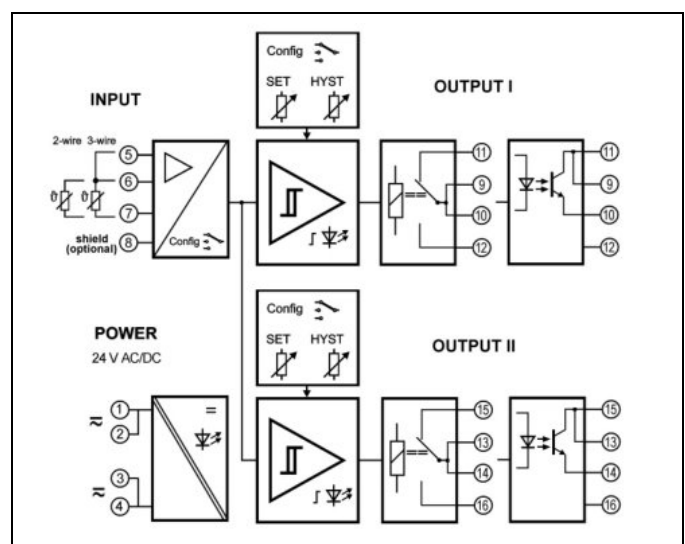
The direction of effect and the mode of operation can be switched by means of DIP switch settings. Both switch outputs can be set up as either MIN or MAX alarms. The relay contacts switch high power loads either as N.O. or N.C. contacts.

Protective Separation and the 24 V AC/DC power supply make the IS 3600 universally applicable for all measurement and industrial applications, as well as for building automation.

- **Easy selection of operating mode**
MIN / MAX alarm switch selectable, switch point and hysteresis adjustable on front panel
- **Relay with high power handling**
or wearless optocoupler switching output
- **True 4-port separation**
Protection against erroneous measurements due to parasitic voltages or ground loops
- **Switch state indicated by LED**
Easy to adjust the set point and hysteresis
- **Protective Separation acc. to EN 50178**
Protects service personnel and downstream devices against impermissibly high voltage
- **High reliability and long-term stability**
No maintenance costs
- **Unlimited use with 24 V AC/DC power supply**
Universally applicable for all measurement and industrial applications
- **5 Years Warrant**
Defects occurring within 5 years from delivery date shall be remedied free of charge at our plant (carriage and insurance paid by sender)



Block diagram



Technical Data

| Input | | | | | | |
|-----------------------------|------|---|--------|--------|--------|------------|
| Sensor Input | | Pt100 | Pt200 | Pt500 | Pt1000 | switchable |
| Sensor current | | 1 mA | 0,5 mA | 0,2 mA | 0,1 mA | |
| Sensor connection | | 3-wire connection / 2-wire connection, switchable | | | | |
| Wire resistor | | < 10 Ω per wire | | | | |
| Temperature measuring range | Zero | -100 °C | -50 °C | 0 °C | +50 °C | switchable |
| | Span | 100 K | 200 K | 300 K | 400 K | switchable |
| Set point range | | 0 ... 100 % of input range with 12-turn potentiometer, MIN/MAX-Alarm switchable | | | | |
| Hysteresis | | 0 ... 60 % of final value with 12-turn potentiometer | | | | |

| Output | | | |
|-------------------------|------------------------------|---|-----------------------------|
| IS 3600: Relay | Contact type | 2 SPDT relays, mode of operation switchable | |
| | Switching capability AC max. | 250 V / 6 A | 1500 VA |
| | Switching capability DC max. | 250 V / 0,2 A | 115 V / 0,3 A 30 V / 6 A |
| | | Recommended minimum load 300 mW / 5 V / 5 mA | |
| IS 3680: Optocoupler | Contact type | 2 optocoupler transistor switches, mode of operation switchable | |
| | Switching capability | 30 V DC, max. 50 mA | |
| Switch state indicator | | Yellow LED | |
| Response time | | Approx. 20 ms | |

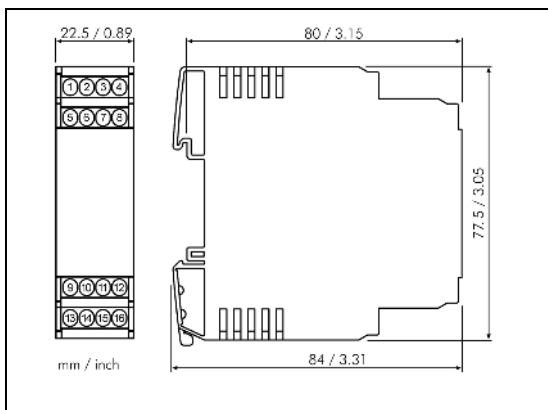
| General Data | |
|---|---|
| Set point error | < 0.2 % full scale |
| Temperature coefficient ¹⁾ | < 150 ppm/K |
| Test voltage | 4 kV AC, 50 Hz, 1 min. input against power supply against both switching outputs 2.5 kV AC, 50 Hz, 1 min. switching output I against switching output II |
| Working voltage (Basic Insulation) ²⁾ | 600 V AC/DC for overvoltage category III and pollution degree 2 acc. to EN 50178 between input, power supply and switching outputs. Up to 300 V AC/D between both switching outputs |
| Protection against electrical shock ²⁾ | Protective separation according to EN 50178 by reinforced insulation up to 300 V AC/DC for overvoltage category II and pollution degree 2 between input, power supply and switching outputs |
| Power supply | 24 V AC/DC, ± 15 % |
| | AC 48 ... 62 Hz, approx. 2 VA DC approx. 1 W |
| Ambient temperature | Operation |
| | Transport and storage |
| EMC ³⁾ | EN 61326 -1 |
| Construction | 22.5 mm (0.89") housing, protection class IP 20, mounting on 35 mm DIN rail acc. to EN 60715 |
| Weight | Approx. 100 g |

1) Average TC related to full scale value in specified operating temperature range, reference temperature 23 °C

2) For applications with high working voltages, ensure there is sufficient spacing or isolation from neighboring devices and protection against electric shocks.

3) Minor deviations possible during interference

Dimensions



Subject to change!

Product line

| Device | Order No. |
|---|-----------|
| Temperature Alarm Unit with relay contacts | IS 3600 |
| Temperature Alarm Unit with transistor switches | IS 3680 |