



Installation and Operating Instructions for Temperature Switch TA...

EC-Type Test Certificate PTB 03 ATEX 1136 X

1 Application

The temperature switch TA... serves as thermostat, failure alarm and temperature fuse. It can be used in areas where potentially explosive gas/air or dust/air mixtures are likely to occur occasionally.

Types TAE., TAS.. and TAES.. are supplied with a connection cable. Series connection to an electric heater can be made in an Ex junction box.

Type TAI... is factory-connected in the connection cable of the heater.

The above temperature switches are approved for use in Zone 1 and Zone 2 hazardous areas, for explosion groups G/D, in temperature class T6.

EC Type Examination Certificate
PTB 03 ATEX 1136X with Schedule and
Supplements in German and English as well as
IEC Scheme Certificate IECEX PTB 07.0054X
please see www.intertec.info.

2 Technical Data

Rated voltage	max. 250 V or 400 V
Permissible operating voltage	max. 275 V or 400 V
Rated current	max. 10 A
Ambient temperature range	-60 to + 60 °C
Operating temperature range	-60 to + 180 °C

3 Installation Instructions

- The connection cable must be firmly installed and mechanically protected.
- If the connection is made in a hazardous area, the connection cable must be connected in a housing that meets the requirements of one of the types of ignition protection mentioned in EN 50014 Section 1.2
- When determining the operating temperature (max. 180°C), the maximum permissible ambient temperature, self-heating and, possibly, heat transfer (medium) must be considered.
- In the dust - hazardous area with the applicable requirements of the EN 60079-14 have to be observed.

4 Connection

The temperature switch and the heater must only be connected and secured in accordance with the label specifications "rated voltage" and "rated current":

Circuit breakers suitable for up to 16 A can be used for short circuit and line protection.

Additional potential equalization is required.

In a TT or TN system, a residual current operated protective device (RCD) must be used whose rated response fault current does not exceed 100 mA. Residual current devices with a rated response fault current of 30 mA are to be preferred.

In an IT system, an insulation monitor must be used that switches off the power supply as soon as the insulation resistance falls to 50 ohms per volt of the rated voltage or lower (see DIN EN 60079-14 2008; section 7.4).

5 Routine Check Tests

The following check tests have to be carried out on the installed heating system:

- Visual inspection to determine if the conditions specified under item 3 are met.
- Insulation Test.

6 Initial Operation

When the routine check tests are successfully completed, the device can be switched on.

7 Maintenance

Due to the type of construction, the temperature switch requires no maintenance.

Performance and safety tests can be conducted at intervals to be determined by the operator in compliance with current regulations.

Only the manufacturer can do repair work.

In the dust - hazardous area with the applicable requirements of the EN 60079-17 and the EN 60079-19 have to be observed.