



MANUFACTURER'S DECLARATION

ABB No. 22-2006 X

Test Item, Tests, Test Results

Manufacturer: ABB Automation Products GmbH
Borsigstrasse 2
D-63755 Alzenau

Device Type: Temperature Sensor Type TSP...-B1... for use in
Zone 2 and Zone 22.

Type identification: TSP111, TSP121, TSP131
TSP311, TSP321, TSP331

Ordering Code: TSP111-B1..., TSP121-B1..., TSP131-B1...
TSP311-B1..., TSP321-B1..., TSP331-B1...

Electrical

Data: $U_n \leq 20$ V DC (functional low voltage PELV)
Maximum safe voltage $U_m = 30$ V
The preconnected transmitter must ensure that the rated voltage U_n of the sensor element (measuring insert) is not overshoot by more than 40% in case of transient interferences.
With mounted temperature transmitters of Category 3, the electrical data of configured transmitter including the special mounting condition of the corresponding EX -certificates must be taken in account.

Operation: The Temperature Sensor Series TSP...-B1... can be operated as electronic equipment in Category 3 for Zone 2 or Zone 22 with non-conducting dust particles.

Use of the connection head with/without built-in transmitter in atmosphere "G".

Temperature Class	T6	T5	T4 ...T1
Max. ambient Temperature (T_{amb})	-40°C*...+50°C	-40°C* ...+60°C	-40°C*...+85°C

* Option – 50°C





Use of the connecting head in atmosphere "D" T133 °C

Please refer to the rating plate shown below for the permissible process medium temperatures T_{med} .



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	Automation Products TSP_{xxx} Made in Germany GmbH, Alzenau
	ABB No. 22 - 2006 X II 3 G EEx nA II T1..T6 II 3 D IP6X T 133° C or T 200°C or T 300°C T1..T4 Tamb. = -40...+85°C; T1..T2 Tmed. = -40...+300°C (II 3D, T 300°C); T5 Tamb. = -40...+60°C; T6 Tamb. = -40...+50°C T3 Tmed. = -40...+200°C (II 3D, T300°C); T4 Tmed. = -40...+130°C (II 3D, T200°C); T5 Tmed. = -40...+95°C (II 3D, T200°C); T6 Tmed. = -40...+80°C (II 3D, T133°C)
	 
	CE 0102

Option -50°C

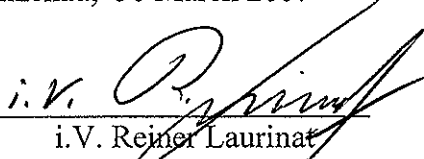
Installation: Installation according to DIN EN 60079-14 (VDE 0165 Part 1) for gas, and DIN EN 61241-14 (EN 50281-1-2) and/or (VDE 0165 Part2) for dust must be taken into account.

Application: The Resistance Thermometer / thermocouple is used to measure temperature, whereby a change in resistance (characteristic to DIN EN 60751) / thermo electric voltage (characteristic to DIN EN 60584 Part1) is measured in relation to the occurring temperature.

Mounting and Demounting: The Resistance Thermometer / Thermocouple must be mounted in a secure and safe manner corresponding to the application process. When demounting the Resistance Thermometer, care must be taken to ensure that the production process has been shut down, that no pressure exists and that no dangerous media can escape. The connection cable must be laid in such way that mechanical damage can be ruled out.

Maintenance: The function Temperature / Change of Resistance and/or Temperature / Thermo electric voltage. should be checked regularly. In case of malfunction, the measuring element or the transmitter must be replaced. Only original parts may be used.

Alzenau, 30 March 2007


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