

RTD and TC temperature sensors

TST/C 262, TST/C 264, TST/C 266



(en)

Safety instructions for electrical apparatus certified for use in explosion-hazardous areas

(it)

Istruzioni di sicurezza per apparecchiature elettriche certificate per l'utilizzo in aree con pericolo di esplosione

(de)

Sicherheitshinweise für elektrische Betriebsmittel für explosionsgefährdete Bereiche

(fr)

Conseils de sécurité pour matériels électriques destinés aux zones explosibles

(nl)

Veiligheidsinstructies voor elektrisch materieel in explosiegevaarlijke omgeving.
Wanneer u deze handleiding niet kunt lezen, kunt u een in uw landstaal vertaalde handleiding bij ons bestellen.

(es)

Instrucciones de seguridad de aparatos eléctricos homologados para su utilización en áreas expuestas a riesgos de deflagración. Si no entiende este manual, puede pedir un ejemplar en su idioma.

(fi)

Turvallisuusohjeita sähkölaitteille, jotka on vahvistettu käytettäväksi räjähdysvaarallisilla alueilla.
Jos et ymmärrä tätä käsikirjaa, voit tilata meiltä käännöksen omalla kansallisella kielelläsi.

(sv)

Säkerhetsföreskrifter för elektrisk utrustning certifierad för användning i explosionsfarliga områden.
Om du inte förstår denna manual, kan en översatt kopia på ditt eget språk beställas från oss.

(da)

Sikkerhedsforskrifter for elektriske apparater certificeret til brug i eksplosionsfarlige områder
Hvis du ikke forstår denne manual, kan en oversat kopi af den på dit eget sprog bestilles fra os.

(pt)

Instruções de segurança para dispositivos eléctricos certificados para utilização em áreas de risco de incêndio.
Se não compreender este manual, pode encomendar-nos directamente uma cópia na sua língua.

(el)

Οδηγίες ασφαλείας για ηλεκτρικές συσκευές που εγκρίνονται για χρήση σε περιοχές με κίνδυνο εκρήξεων.
Αν δεν μπορείτε να κατανοήσετε το περιεχόμενο του εγχειριδίου αυτού, μπορείτε να παραγγείλετε από την εταιρεία μας ένα αντίτυπο μεταφρασμένο στη γλώσσα σας.



Type of protection:
EEx-d Flameproof

Endress + Hauser

The Power of Know How



Dichiarazione di Conformità CE
EC Declaration of Conformity
EG-Konformitätserklärung
Déclaration de Conformité CE

Endress+Hauser Sicestherm S.r.l.
Via Martin Luther King 7/9
I - 20060 Pessano con Bornago (MI)



Dichiara sotto la propria responsabilità, che il prodotto
Declares in sole responsibility that the product
Erklärt in alleiniger Verantwortung, daß das Produkt
Déclare sous sa seule responsabilité que le produit



temperature sensor, type

OmniGrad S TST 262, TST 264, TST 266 ATEX version
TSC 262, TSC 264, TSC 266 ATEX version



E' conforme alle prescrizioni delle seguenti direttive europee:
Conform with the prescription of following European directives:
Mit den Vorschriften folgender europäischer Richtlinien übereinstimmt:
Est conforme aux prescriptions des directives européennes suivantes:



EMC 89/336/CEE

Direttiva Ex 94/9/EC



EMC 89/336/EEC

Ex Directive 94/9/EC



EMW 89/336/EEG

Ex Richtlinie 94/9/EG



EMC 89/336/CEE

Direttiva Ex 94/9/EC



Norme armonizzate e documenti normativi applicati:

Applied harmonised standards or normative documents:

Angewandte harmonisierte Normen oder normativer Dokumente:

Normes harmonisées ou documents normatifs appliqués:



EN61326 (1997)

EN50014 (1998)



EN61326/A1 (1998)

EN50018 (1998)



EN61326/A2 (2001)

EN50281-1-1 (1999)



EN61010-1 (2001)

EN50284 (2000)



Certificazione per esame di tipo CE N°: **CESI 03 ATEX114**

EC type-examination certificate No:

EG-Baumusterprüfbescheinigung Nr:

Numéro de l'attestation d'examen CE de type:



Organismo designato per la verifica di assicurazione qualità: **CESI (classification N°: 0722)**

Named organisation of quality assurance control:

Benannte Stelle für die QS-Überwachung:

Organisme notifié de contrôle du système de qualité:

Pessano con Bornago, 17.10.2003
(Place and Date)

Giuseppe Roberti
(Managing Director)

Endress + Hauser
Sicestherm



CONFORME A CE 05 EN 11

Overensstemmelseserklæring

Med denne overensstemmelseserklæring og tilføjelsen af CE-mærket, sikrer producenten Endress + Hauser Sicestherm, Pessano con Bornago (MI), at produktet er i overensstemmelse med bestemmelserne Directiv 94/9/EC.

Dokumentation for overensstemmelse gives ide standarder.

Declaração de Conformidade

Com esta Declaração de Conformidade e o anexo do CE-Mark o fabricante Endress+Hauser Sicestherm, Pessano con Bornago (MI), aos regulamentos da Directiva 94/9/EC. A prova da conformidade é apresentada segundo os padrões indicadas.

Δήλωση Συμμόρφωσης

Με αυτή την δήλωση συμμόρφωσης και την συνημμένη σήμανση CE, ηκατασκευάστρια εταιρεία Endress + Hauser Sicestherm, Pessano con Bornago (MI), Ιταλία βεβαιώνει ότι το προϊόν συμμορφώνεται σύμφωνα με τους κανονισμούς την Οδηγίας Προστασίας από Εκρήξεις 94/9/EE.

Το Αποδεικτικό της Συμμόρφωσης δίνεται μέσω των προτύπων πουαναφέρονται στη Δήλωση Συμμόρφωσης.

Conformiteitsverklaring

De leverancier Endress+Hauser Sicestherm, Pessano con Bornago (MI), waarborgt met deze verklaring en het aanbrengen van de CE-markering dat het product overeenstemt met de voorschriften richtlijn 94/9/EG. De overeenstemming wordt door het genoemde normen bewezen.

Declaración de conformidad

Por la presente declaración y la inclusión de la marca CE, el fabricante Endress + Hauser Sicestherm, Pessano con Bornago (MI), garantiza que el produc to cumple lo estipulado por la Directive 94/9/CE. La prueba de conformidad se presenta según las normas expuestas.

Varmennustodistus

Tällä varmennustodistuksella sekä CE-merkillä, valmistaja Endress+Hauser, Pessano con Bornago (MI), vakuuttaa, että tuote on direktiivin 94/9/EU mukainen.

Näyttö vastaavuudesta on annettu asiakirjoissa, jotka on listattu varmennus to distukseen.

Försäkran om överensstämmelse

Endress+Hauser Sicestherm, Pessano con Bornago (MI), försäkrar med denna försäkran om överensstämmelse och med CE-märknin-gen att produkten uppfyller bestämmelserna i det direktiv 94/9/EG. Överensstämmelsen påvisas genom attde standarder.

RTD and TC temperature sensors
TST/C 262, TST/C 264, TST/C 266

CESI 03ATEX114

Associated documentation

Technical Information:

TI 146T/02, TI 165T/02,

TI 147T/02, TI 164T/02,

TI 249T/02, TI 248T/02

Safety instructions**for electrical apparatus certified****for use in explosion-hazardous areas**Designation according to Directive 94/9/EC: CE Ex II 1/2 GD or CE Ex II 2 G

- For places other than mines susceptible to firedamp
- Sensor Category 1 / Housing Category 2
- For explosive atmospheres caused by gases, mist, vapours and dusts
- For places other than mines susceptible to firedamp
- Assembly Category 2
- For explosive atmospheres caused by gases, mist and vapours

Allocation of hazardous zones at the mounting points to explosion protection category of the devices or sensors:

Hazardous Zone at the mounting point		Category as per Directive 94/9/EC
Hazard due to gases, mists or vapours	Zone 0	1G
Hazard due to gases, mists or vapours	Zone 1	1G, 2G
Hazard due to gases, mists or vapours	Zone 2	1G, 2G, 3G

Hazardous Zone at the mounting point		Category as per Directive 94/9/EC
Hazard due to dusts	Zone 20	1D
Hazard due to dusts	Zone 21	1D, 2D
Hazard due to dusts	Zone 22	1D, 2D, 3D

Designation of the explosion protection: **EEx d IIC T5 T6 T 100/85°C IP66**

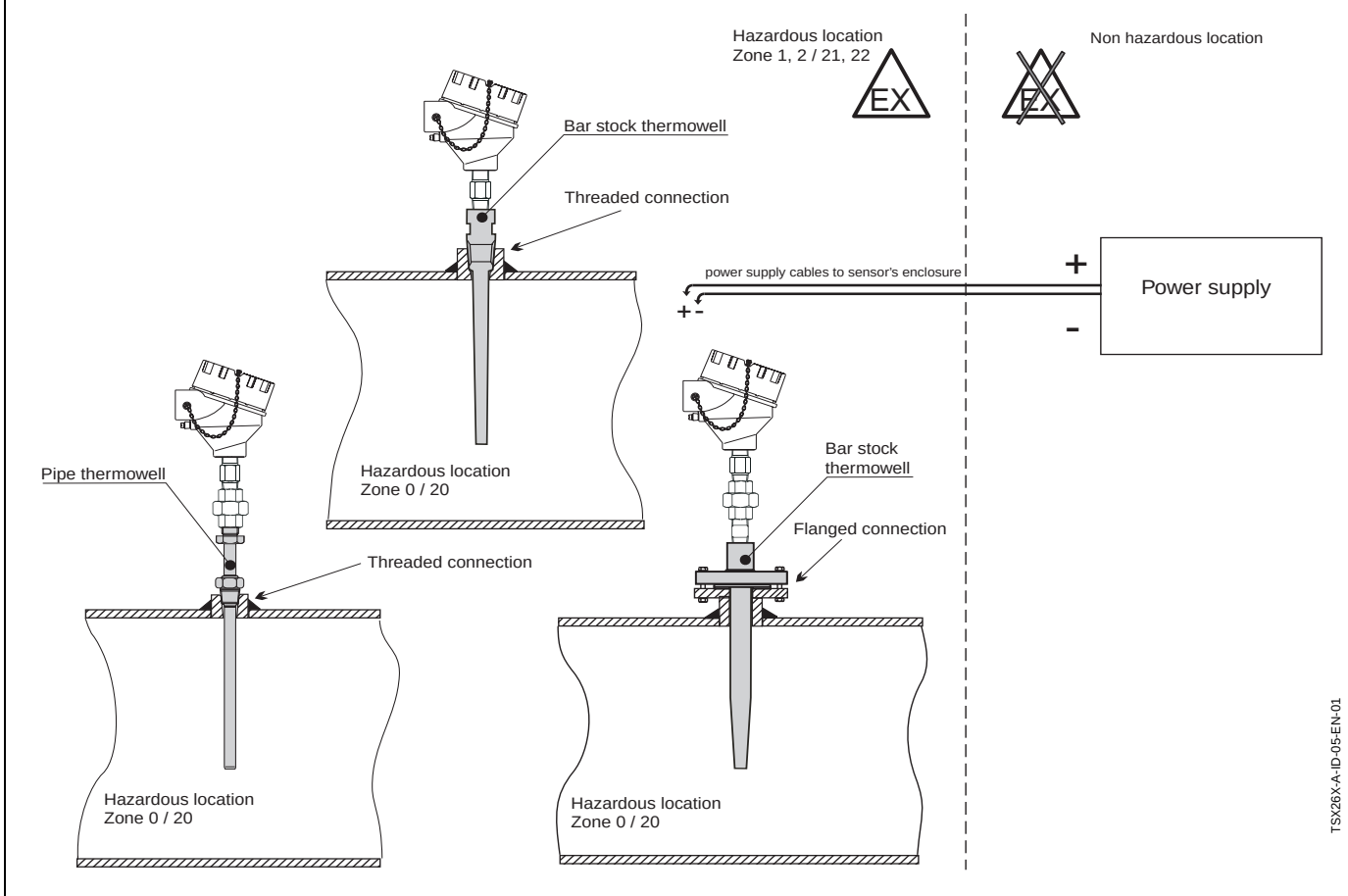
- Electrical apparatus with explosion protection to European standard
- Type of protection
- Explosion group
- Temperature class
- Temperature class
- Maximum surface temperature (for explosive atmospheres with dust)
- Degree of protection (for explosive atmospheres with dust)

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TSx 266: examples of installation according to marking II 1/2 GD EEx d IIC T5/T6 T100/85°C IP66

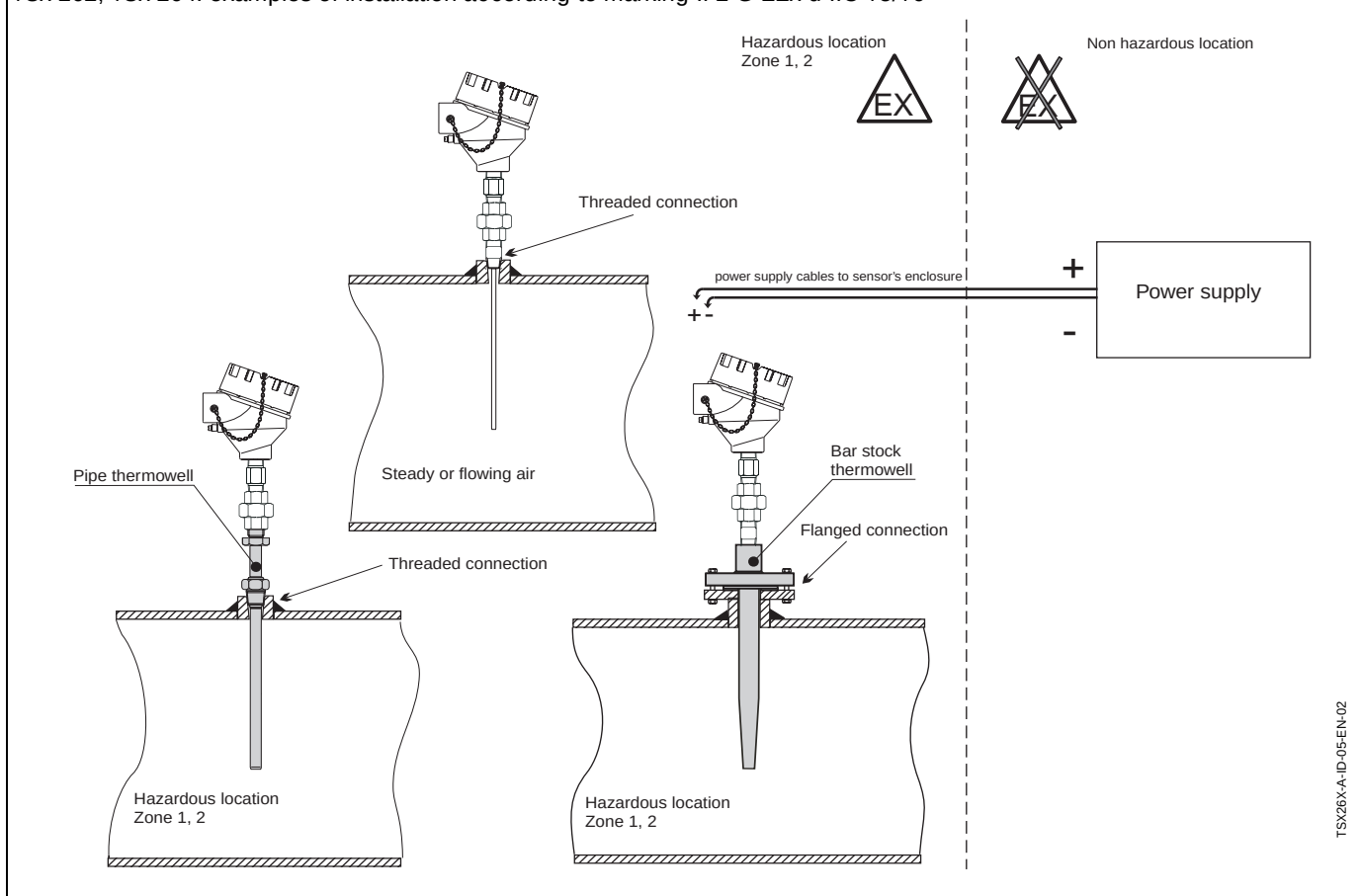


Safety instructions TSx 266

1. Install the unit according to the manufacturer's instructions and follow local norms and regulations.
 2. Avoid any spark due to impact, friction and installation. Antisparking wrenches shall be utilized (Directive 99/92/EC and EN 60074-14).
 3. The TSx 266 temperature sensor shall be connected to the power supply or other external circuit using the appropriate cable glands and pressure-tight enclosure "d" protection type wire entries.
 4. For ambient temperature higher than 70 °C, suitable cables, conduit and conductors must be used.
 5. Only use approved wire entries as specified in paragraph 10.3 of EN 60079-14 and EN 50018.
 6. When utilised in dust atmospheres, the connection between the housing, fittings and thermowell shall provide a minimum degree of Ingress Protection IP6x (IP65 for outdoor applications) in accordance to EN 60529. Liquid / gas sealants shall be used.
 7. For dust atmospheres choose cable gland types with an IP6x degree of protection according to EN 60529.
 8. If openings are not being used, they must be closed so that flameproof properties of the enclosures are maintained. Follow the instructions in paragraph 11.9 of EN 50018.
 9. With regard to Zone 0/20, refer to standard EN 50284.
- ⚠
10. Warning: do not disconnect equipment unless power has been switched off or the area is not hazardous.

TST/C 266		II 1/2 GD EEx d IIC T6/T5 T85°C/T100°C IP66
Temperature class		Ambient temperature
	T6	T _a = -40 °C...+70 °C
	T5	T _a = -40 °C...+80 °C

TSx 262, TSx 264: examples of installation according to marking II 2 G EEx d IIC T5/T6



Safety instructions TSx 262, TSx 264

1. Install the unit according to the manufacturer's instructions and follow local norms and regulations.
2. Avoid any spark due to impact, friction and installation. Antisparking wrenches shall be utilized (Directive 99/92/EC and EN 60074-14).
3. The TSx 262/4 temperature sensor shall be connected to the power supply or other external circuit using the appropriate cable glands and pressure-tight enclosure "d" protection type wire entries.
4. For ambient temperature higher than 70 °C, suitable cables, conduit and conductors must be used.
5. Only use approved wire entries as specified in paragraph 10.3 of EN 60079-14 and EN 50018.
6. If openings are not being used, they must be closed so that flameproof properties of the enclosures are maintained. Follow the instructions in paragraph 11.9 of EN 50018.



7. Warning: do not disconnect equipment unless power has been switched off or the area is not hazardous.

TST/C 262, TST/C 264		II 2 G EEx d IIC T6/T5
Temperature class	T6	Ambient temperature $T_a = -40\text{ °C} \dots +70\text{ °C}$
	T5	$T_a = -40\text{ °C} \dots +80\text{ °C}$



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