

# EC-TYPE EXAMINATION CERTIFICATE

- (1) EC-TYPE EXAMINATION CERTIFICATE
- (2) Equipment and protective systems intended for use in potentially explosive atmospheres - **Directive 94/9/EC**
- (3) EC-Type Examination Certificate Number



**TÜV 03 ATEX 2379 X**

- (4) Equipment: Terminal resistance type RS...-TR-Ex
- (5) Manufacturer: Hans Turck GmbH & Co. KG
- (6) Address: Witzlebenstr. 7  
D-45472 Mülheim an der Ruhr
- (7) This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV NORD CERT GmbH & Co. KG, TÜV CERT-Certification Body, notified body number N° 0032 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential report N° 03 YEX 550622.

- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 50014:1997 + A1 + A2**

**EN 50020:2002**

**EN 50284:1999**

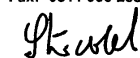
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

- (11) This EC-type examination certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

- (12) The marking of the equipment or protective system must include the following:

 **II 1 G EEx ia IIC T6**

TÜV NORD CERT GmbH & Co. KG  
TÜV CERT-Certification Body  
Am TÜV 1  
D-30519 Hannover  
Tel.: 0511 986-1470  
Fax: 0511 986-2555

  
Head of the  
Certification Body



Hanover, 2004-01-14

TÜV CERT A4 04.02.10.000 L6

This certificate may only be reproduced without any change, schedule included.  
Excerpts or changes shall be allowed by the TÜV NORD CERT GmbH & Co. KG

name 1/3

## SCHEDULE

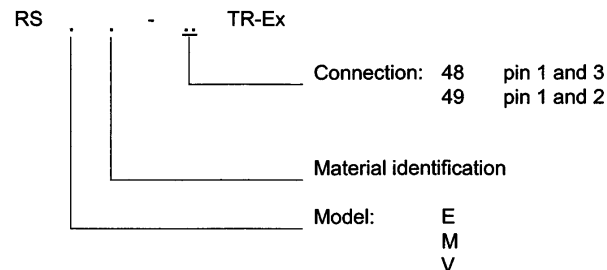
(13)

(14) **EC-TYPE EXAMINATION CERTIFICATE N° TÜV 03 ATEX 2379 X**

(15) Description of equipment

The terminal resistances type RS...-TR-Ex are used in intrinsically safe field bus systems according to the "FISCO" model for the line termination and may be installed in hazardous explosive areas that require apparatus of category 1 or 2.

Type designation



The permissible ambient temperature ranges in dependence on the type, the category and the temperature class have to be taken from the following table.

| Type              | RSE...-TR-Ex<br>RSM...-TR-Ex | RSE...-TR-Ex<br>RSM...-TR-Ex | RSV...-TR-Ex  | RSV...-TR-Ex  |
|-------------------|------------------------------|------------------------------|---------------|---------------|
| Temperature-class | T6 to T5                     | T4 to T1                     | T6 to T5      | T4 to T1      |
| Category          |                              |                              |               |               |
| 1                 | -20°C to 40°C                | -20°C to 60°C                | -20°C to 30°C | -20°C to 60°C |
| 2                 | -40°C to 40°C                | -40°C to 70°C                | -40°C to 40°C | -40°C to 70°C |

Electrical data

Signal circuit  
(plug)

in type of protection Intrinsic Safety EEx ia IIC/IIB  
resp. EEx ib IIC/IIB

Only for the connection to certified intrinsically safe circuit  
with the following maximum values:

| Type           | RSE...-TR-Ex<br>RSM...-TR-Ex | RSV...-TR-Ex |
|----------------|------------------------------|--------------|
| U <sub>i</sub> | 16.2 V                       | 25 V         |
| I <sub>i</sub> | 500 mA                       | 250 mA       |
| P <sub>i</sub> | 1.8 W                        | 1.2 W        |



(16) Test documents are listed in the test report No.: 03 YEX 550622.

(17) Special conditions for safe use

The terminal resistances are only provided with the marking for small apparatus.  
Electrical data, temperature classes, ambient temperature classes and hints for the erection have to be taken from the operation instructions.

**Only for the installation of type RSM... and RSV... in areas that require apparatus of category 1**

Devices with metallic enclosure:

- Isolated metallic parts have to be electrostatical earthed.

Devices with plastic enclosure (only for gas group IIC):

- The terminal resistances have to be protected against electrostatic charging.

(18) Essential Health and Safety Requirements

no additional ones

## Konformitätserklärung Nr. 3130 M Declaration of Conformity



Diese Konformitätserklärung entspricht der Europäischen Norm EN 45014 "Allgemeine Kriterien für Konformitätserklärungen von Anbietern". Die Grundlage der Kriterien sind internationale Dokumente, insbesondere ISO/IEC Leitfaden 22, 1982: "Information on manufacturer's declaration of conformity with standards or other technical specifications".

This "Declaration of Conformity" complies with the European Standard EN 45014 "General criteria for a supplier's declaration of conformity". These criteria are based on the relevant international documentation, particularly the ISO/IEC Guide 22, 1982: "Information on the manufacturer's declaration of conformity with standards or other technical specifications".

Wir/ We **HANS TURCK GMBH & CO KG**  
**WITZLEBENSTR. 7, D - 45472 MÜLHEIM A.D. RUHR**

erklären in alleiniger Verantwortung, dass die Produkte  
declare under our sole responsibility that the products

**Abschlußwiderstand Typ RS...-TR-Ex**

auf die sich die Erklärung bezieht, mit den folgenden Normen übereinstimmen  
to which this declaration relates are in conformity with the following standards

und wo anwendbar  
and where applicable

**EN 50014 + A1 + A2 / 1997 EN 50020 / 2002 EN 50284 / 1999**

Gemäß den Bestimmungen der Richtlinie (falls zutreffend)  
Following the provisions of Directive (if applicable)

|                             |                       |                       |                      |
|-----------------------------|-----------------------|-----------------------|----------------------|
| <b>EMV - Richtlinie</b>     | / EMC Directive       | <b>89 / 336 / EWG</b> | <b>3. Mai 1989</b>   |
| <b>Richtlinie ATEX 100a</b> | / Directive ATEX 100a | <b>94 / 9 / EG</b>    | <b>23. März 1994</b> |

Weitere Normen  
additional standards

Aussteller der EG-Baumusterbescheinigung:

**TÜV Nord Cert GmbH Co KG, TÜV-CERT-Zertifizierungsstelle**  
**Am TÜV 1, D-30519 Hannover**  
**Kenn-Nr. 0032, Registriernummer: TÜV 03 ATEX 2379 X**

**Mülheim, den 06.02.04**

*(i.V. W. Stoll)*

Ort und Datum der Ausstellung /  
Place and date of issue

Name und Unterschrift des Befugten /  
Name and signature of authorized person