



Translation

(1) **Statement of Conformity**

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 94/9/EC**
- (3) **Statement of Conformity Number: TÜV 06 ATEX 553057 X**
- (4) for the equipment: Isolating Amplifier type IM35-**Ex-***i****/-**u****
- (5) of the manufacturer: **Hans Turck GmbH & Co. KG**
- (6) Address: Witzlebenstraße 7
D-45472 Mülheim an der Ruhr
- Order number: 8000553057
- Date of issue: 2006-11-27
- (7) This equipment or protective system and any acceptable variation thereto are specified in the schedule to this statement of conformity and the documents therein referred to.
- (8) The TÜV NORD CERT GmbH 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 No. 06 YEX 553057.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2004 EN 60079-15:2005
- (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 statement of conformity 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 3 G Ex nA [nL] IIC/IIB T4

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, accredited by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the certification body

Schwedt

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(13) **SCHEDULE**

(14) **Statement of Conformity No. TÜV 06 ATEX 553057 X**

(15) Description of equipment

The isolating amplifier type IM35-**Ex-***i****/-**u**** is used for the safe galvanic separation of the energy limited current-/voltage outputs and the non energy limited circuits. The isolating amplifier is executed with one or two channels.

The isolating amplifier is an associated electrical apparatus for installation outside of the explosion hazardous area (according to EN 50020) resp. an apparatus for use in Zone 2 explosion hazardous areas (according to EN 60079-15).

The permissible ambient temperature range is -25°C ... +70°C.

Electrical data

Supply circuit (Terminals 11 [+], 12 [-])
 U = 24 V d.c. (max. 35 V d.c.)
 P ≤ 3 W

Input circuits (Terminals 8 [+], 9 [-] resp. 7 [+], 10 [-])
 U ≤ 15 V, 50 mA

Output circuits (Terminals 1 [+], 2 [-] resp. 4 [+], 5 [-])
 energy limited circuits Ex nL IIC/IIB

IM35-Ex-***i******

Maximum values per circuit:

U_o = 15.9 V
 I_o = 60 mA
 R = 528 Ω
 P_o = 470 mW

Characteristic line: trapezoidal

Effective internal inductance: negligibly small

Effective internal capacitance: 5 nF

	Ex nL	IIC	IIB	
max. permissible external inductance	5.0 mH	0.5 mH	10 mH	0.5 mH
max. permissible external capacitance	290 nF	640 nF	1.7 µF	3.9 µF

Schedule Statement of Conformity No. TÜV 06 ATEX 553057 X

IM35-**Ex**u****

Maximum values per circuit:
 $U_o = 15.9 \text{ V}$
 $I_o = 54 \text{ mA}$
 $R = 584 \Omega$
 $P_o = 420 \text{ mW}$
 Characteristic line: trapezoidal

Effective internal inductance: negligibly small
 Effective internal capacitance: 5 nF

	IIC		IIB	
Ex nL				
max. permissible external inductance	5.0 mH	0.5 mH	10 mH	0.5 mH
max. permissible external capacitance	310 nF	650 nF	1.7 μF	3.9 μF

The maximum values of the tables are also allowed to be used up to the permissible limits as concentrated capacitances and as concentrated inductances.

The energy limited output circuits are safely galvanically separated from the non energy limited circuits up to a peak crest value of the voltage of 375 V.

(16) Test documents are listed in the test report No. 06 YEX 553057.

(17) Special conditions for safe use

- The isolating amplifier type IM35-**Ex-***j****/-**u**** has to be installed in a suitable housing according to EN 60079-15 in such a way, that a degree of protection of at least IP 54 according to EN 60529 is reached.
- The connecting and disconnecting of energised non energy limited circuits is only permitted if no explosion hazardous atmosphere exists.

(18) Essential Health and Safety Requirements

no additional ones

Konformitätserklärung Nr. 3123-1 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 Leitfadens 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

Trennverstärker Typ IM35-**Ex-***j****/-**u****

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

EN 61326 / 1998; A1 / 1999

und wo anwendbar
 and where applicable

EN 50014 + A1 +A2 / 1997 EN 50020 / 2002 EN 60079-15 / 2005

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

EMV - Richtlinie	/ EMC Directive	89 / 336 / EWG	3. Mai 1989
Richtlinie ATEX 100a	/ Directive ATEX 100a	94 / 9 / EG	23. März 1994
Niederspannungsrichtlinie	/ Low Voltage Directive	73 / 23 / EWG	19. Februar 1973

Weitere Normen
 additional standards

Aussteller der EG-Baumusterbescheinigung:

TÜV NORD CERT GmbH
 Am TÜV 1, D-30519 Hannover
 Kenn-Nr. 0044, Registriernummer: TÜV 03 ATEX 2311 TÜV 06 ATEX 553057 X

Mülheim, den 25.01.07



(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