Translation only valid with German certificate! (13)

TÜV - CERT

(14)

EC-Type Examination Certificate

(15)

Equipment and protective systems intended for use in potentially explosive atmospheres Directive 94/9/EC –

(3) No. of EC-Type Examination Certificate

TÜV 97 ATEX 1183X

(4) **Equipment:** **Switching Device Type MC 96-...Ex0...**

(5) **Manufacturer:** **Hans Turck GmbH & Co.KG.**

(6) **Address:** **D-45472 Mülheim an der Ruhr, Witzlebenstraße 7**

(7) The design and construction of this equipment and any acceptable variation thereto are specified in the schedule to this type examination certificate.

(8) The certification body of TÜV Hannover/Sachsen-Anhalt e.V., TÜV CERT-Zertifizierungsstelle, notified body no. 0032 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment 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 confidential test and assessment report no. 44/97/2073.

(9) The Essential Health and Safety Requirements are assured by compliance with:

EN 50 014: 3.94 **EN 50 020: 4.96**

(10) If the sign „X“ is placed after the certificate number, it indicates that the equipment 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 and construction of the specified equipment. Further requirements of Directive 94/9/EC apply to the manufacture and placing on the market of this equipment.

(12) The marking of the equipment shall include the following:

⟨Ex⟩ **II 1 G [EEx ia] IIC**

TÜV Hannover/Sachsen Anhalt e.V.Hannover, 1997-05-26
TÜV CERT-Zertifizierungsstelle
Am TÜV 1
D-30519 Hannover

Ströwold
Der Leiter

TÜV Hannover/Sachsen-Anhalt e.V. **TÜV NORD**

Appendix to

EC-Type Examination Certificate TÜV 97 ATEX 1183 X

Description

The switching device MC 96-...Ex0... is designed for operation of a sensor in an explosion hazardous area, which is used for flow rate and temperature monitoring.

The switching device must be installed outside the explosion hazardous area.

Electrical parameters

Power supply circuit
(terminals zd4, zd2) $U \leq 28$ VDC; approx. 2.3 W

Control circuit
(terminals d26,d28,d30, d32)
Protection type „intrinsic safety” EEx ia IIC with the following maximum values:
$U_0 = 13.65$ V
$I_0 = 200$ mA
$P_0 = 0.69$ W
$R_i = 68.5\ \Omega$
Characteristic curve: trapezoidal
Maximum external capacitance $C_0 = 150$ nF
Maximum external inductance $L_0 = 0.87$ mH

Contact circuits:
(Terminals z10, z12 d12 and z6, z8, d8)

	Maximum values	
	AC	DC
Voltage	30 V	36 V
Current	2 A	2 A
Power	60 VA	50 W

The control circuit is galvanically isolated from all other circuits up to a peak value of the nominal voltage of 375 V.

(16) The test documents, consisting of 2 pages, are listed in the test report.
It is required to implement a barrier between the intrinsically safe and non-safe connections of the switching device to ensure a minimum spacing of 50 mm (thread measure) or to cover each connection with a firm shrink-sleeve. Alternatively it is also possible to apply Crimp connections.

Hannover, dated 13.09.2000

(17) Special conditions for safe use
none

(18) Basic safety and health requirements

Fulfilled by application of above mentioned standards