Prüf- und Zertifizierungsstelle

ZELM Ex

(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:

ZELM 04 ATEX 0203

(4) Equipment: **Multiplexer Type MU 5**

(5) Manufacturer: **Erich Ott**

(6) Address: **D-65189 Wiesbaden**

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Prüf- und Zertifizierungsstelle ZELM Ex, notified body No. 0820 in accordance with Article 9 of the Council Directive 94/9/EC 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 the confidential report ZELM Ex 0240415272.

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

EN 50 014: 1997+A1+A2 **EN 50 020: 2002**

(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, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this Certificate.

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

Ex **II (2) G [EEx ib] IIC**

Zertifizierungsstelle **ZELM Ex**

Dipl.-Ing. Harald Zelm

Zertifizierungs- und Prüf- stelle ZELM Ex

Braunschweig, May 4, 2004

Prüf- und Zertifizierungsstelle ZELM Ex • Siekgraben 56 • D-38124 Braunschweig

(13) # SCHEDULE

(14) ## EC-TYPE-EXAMINATION CERTIFICATE ZELM 04 ATEX 0203

(15) Description of equipment

The equipment is intended for the multiplexing of activ and passive driven certificated measuring systems.

The maximum allowable ambient temperatur is 0°C to +55°C.

Electrical data

Supply circuit (Contacts 2d and 2z, 8d/z)	230 V +10% - 15%, 48...62 Hz, approximately 9,9 VA
Controller input (Kontakte 6z, 2d)	for connection of an potential free contact Nominal Voltage 230 V
Output circuit (Contacts 4d, 4z)	affectiv switching contacts 250 VAC, 48...62 Hz, 6A
Sensor circuit (Contacts 14d to 32z) and Controller circuit (Contacts 10d, 12d, 14z)	type of protection Intrinsic Safety EEx ib IIC only for connection of certified intrinsically safe circuits The addition of all circuits and voltages of the connected circuits shall never exceed the following maximum values: U_i = 30 V, I_i = 500 mA The sum of all effective capacities and inductances is negligible.

Note:
The operating instructions have to be observed.

The intrinsically safe sensor circuits and controller circuits have to be considered as connected with each other under safety purposes. Those circuits are safely galvanic seperated from all further circuits up to a peak voltage of 375 V.

The multiplexer shall only be installed outside of explosions hazardous areas in an designated equipment shelf which secures the affordable distances according to EN 50020 and has an body protection type of minimum IP20 according to EN 60529. The frame connector shall not be connected to outer circuits but serves only as connection for the wiring of the appropriate equipment shelf via a fitting socket board. The concerning instructions in the operating instructions must be observed.

Schedule to EC-TYPE-EXAMINATION CERTIFICATE ZELM 04 ATEX 0203

(16) Report No.

ZELM Ex 0240415272

(17) Special conditions for safe use

not applicable

(18) Essential Health and Safety Requirements

met by standards

Zertifizierungsstelle **ZELM Ex**

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