

[1] **EC-TYPE EXAMINATION CERTIFICATE**



[2] **Equipment or Protective System intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC**

[3] EC-Type Examination Certificate Number: **DEMKO 03 ATEX 134605X**

[4] Equipment: **TRZ**

[5] Manufacturer: **Moore Industries International**

[6] Address: **16650 Schoenborn Street Sepulveda CA-91343-6196 , California United States**

[7] This equipment or protective system and any acceptable variation there to is specified in the schedule to this certificate and the documents therein referred to.

[8] UL International Demko A/S, notified body number 0539 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to 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 report no. 134605

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50014: 1997 E incl. A1+A2 EN 50020: 2002 E EN 50284: 1999 E

[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.

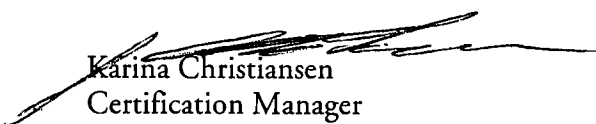
[11] This EC-Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system.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

[12] The marking of the equipment or protective system shall include the following:

⊕ II 1G EEx ia IIC T5-T6

On behalf of UL International Demko A/S

Herlev, 2003-05-23


Karina Christiansen
Certification Manager

UL International Demko A/S

Lyskaer 8, P.O. Box 514
DK-2730 Herlev, Denmark
Telephone: +45 44856565
Fax: +45 44856500

Certificate: 03 ATEX 134605X

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Schedule

[13]

[14]

EC-TYPE EXAMINATION CERTIFICATE No. DEMKO 03 ATEX 134605X

[15]

Description of Equipment or protective system

TRZ is a 4...20 mA loop-powered, configurable universal transmitter with galvanic isolation between input and output. The input can be configured for RTD or T/C sensors, resistance, current or voltage signals. Either 2-,3- or 4-wire connection can be selected for the resistance input. The HART communication feature on-line process calibration and adjustment, transmitter configuration and multiple control in 2-wire networks. The configuration can be established from a standard HART® configurator.

TRZ is embedded in silicone . TRZ has a 6 mm center hole for fast sensor replacement.

Temperature range

Ambient temperature range

-40 °C to +85 °C

-40 °C to +50 °C

Temperature class

T5

T6

Electrical data

Intrinsically safe specifications:

The equipment must be electrically connected (terminal 1 and 2) via an certified isolating interface/ zener barrier having double or reinforced insulation and shall placed outside the hazardous area.

U_i : 30 V

I_i : 100 mA

P_i : 0,75 W

L_i : 15 μ H

C_i : 5 nF

Output terminals (sensor terminal 3,4,5 and 6):

U_o : 6,6V

I_o : 17 mA

P_o : 30 mW

L_o : 99 mH

C_o : 3 μ F

UL International Demko A/S

Lyskaer 8, P.O. Box 514
DK-2730 Herlev, Denmark
Telephone: +45 44856565
Fax: +45 44856500

Certificate: 03 ATEX 134605X

Report: 134605-02

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Schedule

EC-TYPE EXAMINATION CERTIFICATE No. DEMKO 03 ATEX 134605X

[16] Descriptive Documents.

Project Report No.: 134605-02

The scheduled drawings are listed below:

Document	Rev.	Date	Description
55 11-537	B1	2006-05-18	List of components with relevance for Ex security
20 08-558	B1	2006-06-13	Ex type label for TRZ – Moore Industries. ATEX
55 51-494	F1	2005-02-04	Komponent placering FlexTop 2211/2221 CPU
55 35-494	F1	2005-02-04	Print Layout 2211/2221 CPU
55 20-526	A1	2006-05-03	Ex Block Diagram
55 03-947	A1	2006-05-29	TRZ, Moore, Samling og etikettering

[17] Special conditions for safe use:

- The equipment must be electrically connected via an certified isolating interface/ zener barrier having double or reinforced insulation and shall placed outside the hazardous area.
- The apparatus must be installed in an enclosure having an Ingress Protection for the actual use and with an Ingress Protection of at least IP20.
The requirement from EN50284 § 4.4.3 (The chargeable non-conductive surface or its projection shall be limited to 4 cm² for apparatus of Group IIC) is not fulfilled. When mounted in Ex-compatible enclosures, such as junction boxes or DIN Standard Head, the requirements is fulfilled.

18] Essential Health and Safety Requirements

Concerning ESR this Schedule verifies compliance with the Ex standards only. The manufacturer's Declaration of Conformity declares compliance with other relevant Directives.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 94/9/EC of the European Parliament and the Council of 23 March 1994.

On behalf of UL International Demko A/S

Herlev, 2006-05-29


Marina Christensen
Certification Manager

UL International Demko A/S

Lyskaer 8, P.O. Box 514
DK-2730 Herlev, Denmark
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