EC-TYPE EXAMINATION CERTIFICATE



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

- [3] EC-Type Examination Certificate Number: DEMKO 99 ATEX 124572
- [4] Equipment or Protective System: 2-wire Programmable Transmitter type 5131 B..
- [5] Manufacturer: PR Electronics A/S

[1]

[2]

- [6] Address: Lerbakken 10, DK-8410 Rønde, Denmark
- [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.
- 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. 124572

- [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 50281-1-1:1998 incl. A1
- If the sign "X" is placed after the certificate number, it indicates that the equipment of protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- 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:

EEx ia IIC

On behalf of UL International Demko A/S

Herley, 1999-04-16 Revised 2003-12-04

Karina Christiansen
Certification Manager

UL International Demko A/S

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[13]

Schedule

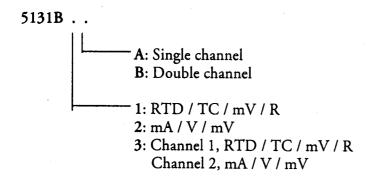
[14]

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[15] Description of Equipment of protective system:

> The programmable transmitter type 5131B.. is designed for mounting on a DIN rail in a nonclassified area. The transmitter can be configured to the actual application by means of a standard PC using the PR electronics configuration kit Loop Link 5905, connected directly into the COM port on the front cover. The product can be delivered in 1 and 2 channel versions with input for a wide range of temperature sensors. Furthermore a current / voltage input is a possibility.

Type variants comprised by the certificate:



The 2-wire Programmable Transmitter type 5131 B.. has been evaluated according to EN 50281-1-1: 1998 in order to include D (dust) in this certificate. Therefore the marking plate include the following:

€ II (1) GD

[16] Report No.

124572, 98-Report 02385.

124572 Report 124572-03.

Project is updated to EN 50014:1997 E incl. A1+A2 and EN 50020: 2002 E.

124572 Report 124572-04

Drawings:

The Schedule drawings are listed in the document entitled "5131G002" date 2003-10-07.

Schedule

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[17] Special conditions for safe use

Temperature range: $-20^{\circ}\text{C} \le \text{T}_{1} \le +60^{\circ}\text{C}$

Supply terminals: U_m: 250 V 11 and 21: supply -

13 and 23: supply +

12 and 22: test

Intrinsically safe specifications

All input terminals - channels 1 & 2 - got the following intrinsically safe entity parameters:

Terminal 41, 42, 43, 44 and

51, 52, 53, 54

U_o: 8.0 VDC

I₀: 10 mA DC P₀: 20 mW L₂: 200 mH

 $C_{o}: 1,0 \mu F$

Further safety conditions:

After installation the transmitter must only be PC-configured by means of an apparatus certified for this purpose.

For correct use and installation the manufacturers manual must be followed.

[18] Essential Health and Safety Requirements

All ESR are covered by LVD, EMC and Ex standards.

On behalf of UL International Demko A/S

Herley, 2003-11-25

Certification Manager