

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 124571

[4] Equipment or Protective System: **Transmitter type 5114B..**

[5] Manufacturer: **PR electronics A/S**

[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.

[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. 124571

[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

[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 (1)GD [EEx ia] IIC

On behalf of UL International Demko A/S

Herlev, 15 March 1999
Revised 2003-12-04


Karina Christiansen
Certification Manager

UL International Demko A/S

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Certificate: 99 ATEX 124571

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Schedule

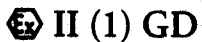
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- [13]
- [14]
- [15] [15] Description of Equipment or protective system:

The programmable transmitter type 5114B_ _ is designed for mounting on a DIN rail in a non-classified area. The transmitter can be configured to the actual application by means of a standard PC using the configuration kit Loop Link 5905 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:

Type	Specification
5114B1A	RTD/TC input 1 channel
5114B1B	RTD/TC input 2 channel
5114B2A	V / mA input 1 channel
5114B2B	V / mA input 2 channel
5114B3B	RTD / TC input channel 1, V/mA input channel 2

- The Programmable Transmitter 5114B_ 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:


- [16] Report No.:

124571 Report 124571-01
124571 Report 124571-02
124571 Report 124571-03
124571 Report 124571-04
124571 Report 124571-05
Project is updated to EN50014: 1997 E incl. A1+A2 and EN50020: 2002 E.
124571 Report 124571-06

Drawings:

The Schedule drawings are listed in the document entitled "5114Gxxx".

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.

UL International Demko A/S

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Certificate: 99 ATEX 124571
Report: 124571-06

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Schedule

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[17] Special conditions for safe use:

- Temperature range: $-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$
- For correct use and installation the manufacturers manual must be followed.
- After installation the transmitter must only be PC-configured by means of an apparatus certified for this purpose.

Intrinsically safe specifications

All Types:

Terminals 31, 32 and 33: $U_m: 250 \text{ V}$

Type 5114B1:

Terminal 44,42,41 to 43:
 $U_o: 7,5 \text{ V}$
 $I_o: 6,0 \text{ mA}$
 $P_o: 11,25 \text{ mW}$
 $L_o: 200 \text{ mH}$
 $C_o: 6,0 \mu\text{F}$

Type 5114B2:

Terminal 44 to 41
and 54 to 51:
 $U_o: 28 \text{ V}$
 $I_o: 87 \text{ mA}$
 $P_o: 0,62 \text{ W}$
 $L_o: 4,2 \text{ mH}$
 $C_o: 0,08 \mu\text{F}$

Terminal 42, 43 to 41
and 52, 53 to 51:
 $U_o: 7,5 \text{ V}$
 $I_o: 6,0 \text{ mA}$
 $P_o: 11,25 \text{ mW}$
 $L_o: 200 \text{ mH}$
 $C_o: 6,0 \mu\text{F}$

Type 5114B3:

Terminal 44, 42, 41 to 43
and 53, 52 to 51:
 $U_o: 7,5 \text{ V}$
 $I_o: 6,0 \text{ mA}$
 $P_o: 11,25 \text{ mW}$
 $L_o: 200 \text{ mH}$
 $C_o: 6,0 \mu\text{F}$

Terminal 54 to 41:
 $U_o: 28 \text{ V}$
 $I_o: 87 \text{ mA}$
 $P_o: 0,62 \text{ W}$
 $L_o: 4,2 \text{ mH}$
 $C_o: 0,08 \mu\text{F}$

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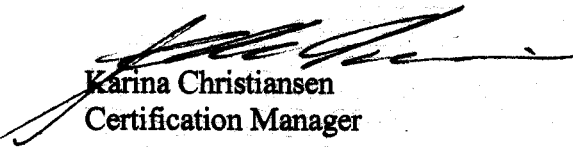
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[18] Essential Health and Safety Requirements

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

On behalf of UL International Demko A/S

Herlev, 2003-11-25


Karina Christiansen
Certification Manager

