

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



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

[3] **EEC-Type Examination Certificate Number: DEMKO 00 ATEX 128567**

[4] **Equipment: Signal Calculator type 5115B\_B**

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

[6] **Address: Lerbakken 10, 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. 128567**

[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:**

**Ex II (1)GD [EEx ia] IIC**

On behalf of UL International Demko A/S

Herlev, 2000-08-24

Revised 2003-12-04

  
Karina Christiansen  
Certification Manager

**UL International Demko A/S**

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Certificate: 00 ATEX 128567

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## Schedule

[14]

### EC-TYPE EXAMINATION CERTIFICATE No. DEMKO 00 ATEX 128567


[15] Description of Equipment or protective system:

The Signal Calculator type 5115B\_ is designed for mounting on a DIN rail in a non-classified area. The Signal Calculator 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 is delivered as a 2-channel version 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
5115B1	RTD/TC input 2 channel
5115B2	V / mA input 2 channel
5115B3	RTD / TC input channel 1, V/mA input channel 2

- The Signal Calculator 5115B\_ 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.:

128567 Report 128567-01  
128567 Report 128567-02

128567 Report 128567-03  
Project is updated to EN 50014:1997 E incl. A1+A2 and EN 50020: 2002 E.  
128567 Report 128567-04  
Project is updated to include Dust according to EN 50281-1-1: 1998.

Drawings:

The Schedule drawings are listed in the document entitled "5115Gxxx".

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.

[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 Signal Calculator must only be PC-configured by means of an apparatus certified for this purpose.

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# Schedule

## EC-TYPE EXAMINATION CERTIFICATE No. DEMKO 00 ATEX 128567

### Intrinsically safe specifications

#### All Types:

Terminals 31, 32 and 33:

$U_m$ : 250 V

#### Type 5115B1:

Terminal 44,42,41 to 43:

$U_o$ : 7,5 V  
 $I_o$ : 6,0 mA  
 $P_o$ : 11,25 mW  
 $L_o$ : 200 mH  
 $C_o$ : 6,0  $\mu$ F

#### Type 5115B2:

Terminal 44 to 41  
and 54 to 51:

$U_o$ : 28 V  
 $I_o$ : 87 mA  
 $P_o$ : 0,62 W  
 $L_o$ : 4,2 mH  
 $C_o$ : 0,08  $\mu$ F

Terminal 42, 43 to 41  
and 52, 53 to 51:

$U_o$ : 7,5 V  
 $I_o$ : 6,0 mA  
 $P_o$ : 11,25 mW  
 $L_o$ : 200 mH  
 $C_o$ : 6,0  $\mu$ F

#### Type 5115B3:

Terminal 44, 42, 41 to 43  
and 53, 52 to 51:

$U_o$ : 7,5 V  
 $I_o$ : 6,0 mA  
 $P_o$ : 11,25 mW  
 $L_o$ : 200 mH  
 $C_o$ : 6,0  $\mu$ F

Terminal 54 to 41:

$U_o$ : 28 V  
 $I_o$ : 87 mA  
 $P_o$ : 0,62 W  
 $L_o$ : 4,2 mH  
 $C_o$ : 0,08  $\mu$ F

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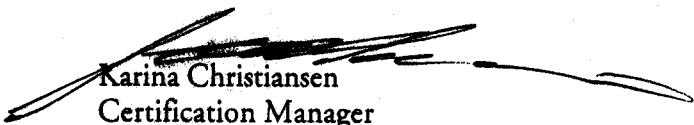
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[18] Essential Health and Safety Requirements

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

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