

CERTIFICATE

(1) EU-Type Examination

(2) **Equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **DEKRA 24ATEX0020** Issue Number: **0**

(4) Product: **2 wire Programmable Transmitter Type 5131B****

(5) Manufacturer: **PR electronics A/S**

(6) Address: **Lerbakken 10, 8410 Rønde, Denmark**

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

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential test report mentioned in item (16).

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

EN IEC 60079-0 : 2018

EN 60079-11 : 2012

except in respect of those requirements listed at item 18 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

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



II (1) G [Ex ia Ga] IIC/IIB/IIA
II (1) D [Ex ia Da] IIIC

Date of certification: 4 December 2024

DEKRA Certification B.V.

R. Schuller
Certification Manager



Throughout this document, a point is used as the decimal separator.

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(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 24ATEX0020** Issue No. **0**

(15) **Description**

The 2 wire Programmable Transmitter type 5131B** 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 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.

Ambient temperature range -20 °C to +60 °C

Type designation

5131abc

a = Version:

B: Explosion safety

b = Input configuration for each channel:

1: Ch. 1: RTD / TC

Ch. 2: RTD / TC

2: Ch. 1: mA / V / mV

Ch. 2: mA / V / mV

3 (*): Ch. 1: RTD / TC

Ch. 2: mA / V / mV

(*) Available only as B: Double (both channels used)

c = Number of channels used:

A: Single

B: Double

Electrical data

Supply (supply - terminal 11, supply + terminal 13 (channel 1) and respectively supply – terminal 21, supply + terminal 23 (channel 2)): $U = 7.5 \dots 35 \text{ Vdc}$.

For all circuits above: $U_m = 250 \text{ V}$ (max. frequency 400 Hz).

Supply (supply + terminal 13, test terminal 12 (channel 1) and respectively supply + terminal 23, test terminal 22 (channel 2)): $U = 0 \text{ V}$.

For all circuits above: $U_m = 0 \text{ V}$.

Note: Only a hand held amp-meter (passive device) is allowed to be connected to these terminals.

Loop link interface (connectors J101, J301)

For all circuits above: $U_m = 60 \text{ V}$.

Note 1: Only Loop Link model 5909 is allowed to be connected to these terminals.

Note 2: No sensors are allowed to be connected when Loop Link interface is used.

Sensor circuits (terminals 41 ... 44 (channel 1) and respectively 51 ... 54 (channel 2)): in type of protection intrinsic safety Ex ia IIC/IIB/IIA/IIIC/I, with following maximum values (each channel):

$U_o = 8 \text{ V}$; $I_o = 10 \text{ mA}$; $P_o = 20 \text{ mW}$ (resistive limited);

$C_o = 8 \mu\text{F}$ (IIC) or $95 \mu\text{F}$ (IIB and IIIC) or $1000 \mu\text{F}$ (IIA);

$L_o = 350 \text{ mH}$ (IIC) or 1000 mH (IIB and IIIC) or 1000 mH (IIA);

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 24ATEX0020** Issue No. **0**

Installation instructions

The instructions provided with the product shall be followed in detail to assure safe operation.

(16) **Report Number**

NL/DEK/ExTR24.0020/00.

(17) **Specific conditions of use**

N/A

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

Test documentation

As listed in test report mentioned in item (16).