

CERTIFICATE

(1) Type Examination

(2) **Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC**

(3) Type Examination Certificate Number: **KEMA 05ATEX1044 X** Issue Number: 2

(4) Equipment: **Loop Powered LCD Indicator, type 5531A and 5531B1**

(5) Manufacturer: **PRelectronics A/S**

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

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

(8) DEKRA Certification B.V., certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the 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 test report no. 215363200.

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

EN 60079-0 : 2009

EN 60079-11 : 2007

EN 60079-26 : 2007

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This Type Examination Certificate relates only to the design, examination and tests of the specified equipment and not to the manufacturing process and supply of this equipment.

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



II 3G Ex ic IIC T6 Gc (Type 5531A and Type 5531B1)
II 3D Ex ic IIIC T85°C Dc (Type 5531B1)

This certificate is issued on 24 May 2012 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

DEKRA Certification B.V.


C.G. van Es
Certification Manager

Page 1/2

© Integral publication of this certificate and adjoining reports is allowed. This Certificate may only be reproduced in its entirety and without any change.

All testing, inspection, auditing and certification activities of the former KEMA Quality are an integral part of the DEKRA Certification Group

DEKRA Certification B.V. Utrechtseweg 310, 6812 AR Arnhem P.O. Box 5185, 6802 ED Arnhem The Netherlands
T +31 26 3 56 20 00 F +31 26 3 52 58 00 www.dekra-certification.com Registered Arnhem 09085396

(13) **SCHEDULE**

(14) **to Type Examination Certificate KEMA 05ATEX1044 X**

Issue No. 2

(15) **Description**

The Loop Powered LCD indicator Type 5531A and Type 5531B1 is used for local readout of 4...20 mA current signals scaled directly in process units.

For application in explosive dust atmospheres, LCD Indicator Type 5531B1 is built into a metal enclosure providing a degree of protection of at least IP6X.

Ambient temperature range -20 °C ... +60 °C for gas.

Ambient temperature range -5 °C ... +60 °C for dust.

Electrical data

Supply and input circuit:

in type of protection intrinsic safety Ex ic IIC, Ex ic IIIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:

$U_i = 45 \text{ V}$; $I_i = 120 \text{ mA}$; $P_i = 0,9 \text{ W}$; $C_i = 0 \text{ nF}$; $L_i = 0 \text{ mH}$.

Installation instructions

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

(16) **Test Report**

No. 215363200.

(17) **Special conditions for safe use**

For applications in explosive dust atmospheres, the Loop Powered LCD Indicator shall be installed in such a way that the risk of mechanical danger is low, and that it is protected from exposure to UV light.

Electrostatic charging of the plastic display and the label shall be avoided.

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

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 215363200.