EU-Type Examination Certificate

[2] **COMPONENT INTENDED FOR USE ON/IN AN EQUIPMENT OR PROTECTIVE SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 2014/34/EU**

[3] **EU-Type Examination Certificate Number:** **Presafe 16 ATEX 9156U** **Issue 0**

[4] **Product:** **Explosion-proof signal lamp module Z0202 series**

[5] **Manufacturer:** **INDEX ELEKTRO BV**

[6] **Address:** **Harregatplein 15**
3214 VP Zuidland
Netherlands

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

[8] **DNV Nemko Presafe AS, notified body number 2460, 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 reports listed in section 16.

[9] **Compliance with the Essential Health and Safety Requirements has been assured by compliance with: EN 60079-0:2012/A11:2013, EN 60079-1:2014, EN 60079-7:2015, EN 60079-11:2012 and EN 60079-26:2015.**

[10] **The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.**

[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 2 G Ex db eb IIC Gb or
II 1 G Ex ia IIC Ga

Asle Kaastad
For DNV Nemko Presafe AS
Information on electronic signature www.presafe.com

NORSK AKKREDITERING
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This certificate replaces previous certificate issued by DNV.

DNV Nemko Presafe AS, Gaustadalléen 30, 0373 Oslo, Norway

EU-Type Examination Certificate

[13] Schedule

[14] EU-TYPE EXAMINATION CERTIFICATE No.: **Presafe 16 ATEX 9156U** Issue 0

[15] Description of Product

The Z0202 explosion-proof signal lamp module with combined type of protection “d”, “e” can be installed in hazard area zone 1 and zone 2. Alternatively, Z0202 with type of protection “ia” can be installed in zone 0, zone1 and zone 2. For type of protection “d” and “e”, the lamp compartment is protected by “d”, and terminals are protected by “e”. For type of protection “ia”, the circuit is intrinsically safe when the input is connected to an ATEX certified safety barrier with specified output parameters that matches the input parameters. The installation method of Z0202 is divided into three types: board front, board back and panel mounting. Type board front is used to install with rail, type board back is used to install behind panel. For type board front two connection screws for external circuit are in the same direction of the lamp and for type board back type these two screws are in the opposite direction of the lamp. The enclosure of Z0202 explosion-proof signal lamp module is plastic.

Type designation

Z 02 02 - ☐ ☐ ☐ ☐

☐	**Ambient temperature code:** L: Ta≥- 40℃ (for Ex d e only) H: Ta≥- 55℃
☐	**Voltage of signal lamp:** 0: 10~28 V a.c./d.c. (Ex ia) 1: 20~250 V a.c./d.c. (Ex d e) 2: 380~400 V a.c. (Ex d e) 3: 10~28 V a.c./d.c. (Ex d e) 4: 50~277 V a.c./d.c. (Ex d e)
☐	**Colour of signal lamp module:** R: red W: white G: green B: blue Y: yellow 0: general
☐	**Mounting type:** 6: Board front rail type 7: Board back type A7: Panel mounting (for Ex d e only)
02	Design code of product
02	Year number of design and development of product
Z	Abbreviation code of manufacturer name

Electrical Data

Rated service voltage, “Ex d e”: 10~28 V a.c./d.c., 20~250 V a.c./d.c., 380~400 V a.c., 50~277 V a.c./d.c.
Input safety parameters for intrinsically safe connection, Group IIC, “Ex ia” :
Ui: 28 V a.c./d.c., Ii: 93 mA, Pi: 0.651 W, Ci: 0.01 µF, Li: 2.2mH.

Degrees of protection (IP Code)
IP20

Ambient temperature range
-40°C to +60°C (for types Z0202-☐☐1L, Z0202-☐☐3L, Z0202-☐☐4L)
-55°C to +60°C (for types Z0202-☐☐1H, Z0202-☐☐3H, Z0202-☐☐4H)
-40°C to +50°C (for types Z0202-☐☐2L)
-55°C to +50°C (for types Z0202-☐☐2H)
-55°C to +55°C (for types Z0202-6☐0H, Z0202-7☐0H)

Service temperature range
-40°C to +90°C (for types Z0202-☐☐☐L)
-55°C to +90°C (for types Z0202-☐☐☐H)

Routine tests
- For Z0202 explosion-proof signal lamp module with combined types of protection “d” and “e”, a dielectric strength test shall be carried out according to requirements of clause 7.1 of EN 60079-7:2015.

[16] **Report No.:** 2011-3010, Rev.01
Project No.: PRJC-242107-2010-PRC-CHN

[17] **Schedule of Limitations**

- The flameproof joints are not intended to be repaired.

- For type of protection “Ex d e”, the Z0202 explosion-proof signal lamp module must be installed into a suitably certified enclosure with IP54 at least. When the signal lamp modules are installed in an enclosure of the type of protection Increased Safety “e” in compliance with standard IEC/EN 60079-7, the clearance and creepage distances according to Section 4.3 and 4.4 and Table 2 must be fulfilled.

- For type of protection “Ex ia”, the power supply must be from an appropriate safety barrier with specified output parameters that matches the input parameters. The installation of Z0202 must be inside an appropriate housing in such a way that the clearance and creepage distances specified in IEC/EN 60079-11 between intrinsically safe and non-intrinsically safe circuits must be complied with. Under the ambient temperature 55°C, the temperature class of Z0202 with type of protection “Ex ia” is T4.

[18] **Essential Health and Safety Requirements**

Essential Health and Safety Requirements (EHSRs) are covered by the standards listed at item 9.

[19] Drawings and Documents

As listed in confidential report 2011-3010 rev 01.

[20] Certificate History

Issue	Description	Issue date	Report no.
0	Original issue (Replaces DNV 10 ATEX 87331U)	2017-02-03	2010-3010, Rev.01

END OF CERTIFICATE