

# 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 17 ATEX 11329U Issue 0
- [4] Product: Explosion-proof signal lamp with button module 20212 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 GL 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, and EN 60079-11:2012.
- [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



Date of issue: 2017-11-02

Bjørn Spongsveen  
For DNV GL Nemko Presafe AS

The Certificate has been digitally signed.  
See [www.presafe.com/digital\\_signatures](http://www.presafe.com/digital_signatures) for more info

*This certificate may only be reproduced in its entirety and without any change, schedule included.*

[13]

## Schedule

[14] EU-TYPE EXAMINATION CERTIFICATE No.:

Presafe 17 ATEX 11329U

Issue 0

[15] Description of Product

The Z0212 series explosion-proof signal lamp with button module is Ex component. It is provided with the function of a control switch. Types Z0212-□□□1□, Z0212-□□□3□ and Z0212-□□□4□ are with combined types of protection “d”, “e”. Alternatively, type Z0212-□□□0H is with type of protection “ia”. 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 match the input parameters. The installation method of Z0212 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.

### Type designation

Z	02	12	-	□	□	□	□	□
<p><b>Ambient temperature code:</b>  L: Ta≥- 40°C (for Ex d e only)  H: Ta≥- 55°C</p> <p><b>Voltage of signal lamp:</b>  0: 10~28 V a.c./d.c. (Ex ia)  1: 20~250 V a.c./d.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)</p> <p><b>Colour of signal lamp module:</b>  R: red W: white G: green B: blue Y: yellow 0: general</p> <p><b>Contact code of button</b>  3: NC  4: NO</p> <p><b>Mounting type:</b>  6: Board front rail type  7: Board back type  A7: Panel mounting (for Ex d e only)</p> <p>Design code of product  Year number of design and development of product  Abbreviation code of manufacturer name</p>								

### Electrical Data

#### Z0212-□□□1□:

Rated voltage for signal lamp: 20~250 V a.c./d.c.

Rated voltage and rated current for button: 250 V a.c./10 A or 24 V d.c./1 A

#### Z0212-□□□3□:

Rated voltage for signal lamp: 10~28 V a.c./d.c.

Rated voltage and rated current for button: 250 V a.c./10 A or 24 V d.c./1 A

## **Z0212-□□□4□:**

Rated voltage for signal lamp: 50~277 V a.c./d.c.

Rated voltage and rated current for button: 250 V a.c./10 A or 24 V d.c./1 A

## **Z0212-□□□0H:**

Input safety parameters for intrinsically safe connection of signal lamp, Group IIC, "Ex ia" : Ui: 28 V a.c./d.c., li: 93 mA, Pi: 0.651 W, Ci: 0.01 μF, Li: 2.2 mH;

Input safety parameters for intrinsically safe connection of button, Group IIC, "Ex ia" : Ui: 30 V a.c./d.c., li: 100 mA, Pi: 1 W, Ci: 0 μF, Li: 0 mH.

## **Degrees of protection (IP Code)**

IP20

## **Ambient temperature range**

-40°C to +60°C (for types Z0212-□□□1L, Z0212-□□□3L, Z0212-□□□4L)

-55°C to +60°C (for types Z0212-□□□1H, Z0212-□□□3H, Z0212-□□□4H)

-55°C to +55°C (for types Z0212-□□□0H)

## **Service temperature range**

-40°C to +90°C (for types Z0212-□□□□L)

-55°C to +90°C (for types Z0212-□□□□H)

## **Routine tests**

- For Z0212 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.:** 2017-9475, Rev.00

**Project No.:** PRJC-569723-2017-PRC-CHN

## **[17] Schedule of Limitations**

- The flameproof joints are not intended to be repaired.

- For type of protection "Ex d e", the Z0212 explosion-proof signal lamp with button module must be installed into a suitably certified enclosure with IP54 at least. When the signal lamp with button 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 match the input parameters. The installation of Z0212 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 Z0212 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 2017-9475.

**[20] Certificate History**

Issue	Description	Issue date	Report no.
0	Original issue	2017-11-02	2017-9475, Rev.00

END OF CERTIFICATE