



(1) **EU-TYPE EXAMINATION CERTIFICATE**  
(Translation)

(2) Component Intended for Use in Potentially Explosive Atmospheres  
**Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number:

**PTB 08 ATEX 1003 U**

**Issue: 01**

(4) Product: Operators and lens units type EU2B-U\*\*\*(\*) and  
mounting hole plug type EU9Z-BP

(5) Manufacturer: IDEC Corporation

(6) Address: 6-64 Nishimiyahara 2-chome, 532-0004 Yodogawa-Ku, Osaka, Japan

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

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this component 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 the confidential test report PTB Ex 19-19001.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN IEC 60079-0:2018, EN 60079-7:2015 und EN 60079-31:2014**

(10) The sign "U" placed behind the certificate number indicates that this certificate should not be confounded with certificates issued for equipment or protective systems. This partial certification may be used as a basis for certification of an equipment or protective systems.


(11) This EU-Type Examination Certificate relates only to the design and construction of the specified component in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

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

 **II 2 G Ex eb IIC Gb**  
 **II 2 D Ex tb IIIC Db**

Konformitätsbewertungsstelle, Sektor Explosionsschutz  
On behalf of PTB:

Braunschweig, September 9, 2019

  
Dr.-Ing. D. Markus  
Direktor und Professor



sheet 1/4

EU-Type Examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

(13)

## SCHEDULE

(14) **EU-Type Examination Certificate Number PTB 08 ATEX 1003 U, Issue: 01**

(15) Description of Product

The operators and lens units type EU2B-U\*\*\* and mounting hole plug type EU9Z-BP, predominantly made of polyamide are intended for installation in lids of enclosures of electrical apparatus in the type of protection Increased Safety "eb" and Protection by Enclosure "tb". Accessory is a lock nut out of POM or Aluminium. The fastening is made in the contact block adapter.

Technical Data

Designation	Type
Operator, flush pushbutton	EU2B-U B1***
Operator, extended pushbutton	EU2B-U B2***
Operator, mushroom pushbutton	EU2B-U B3***
Operator, emergency stop	EU2B-U BV3***
Operator, selector	EU2B-U S***
Operator, key selector	EU2B-U SK**
Lens unit	EU2B-U L10 *
Mounting hole plug	EU9Z-BP

Ambient temperature	-20 °C to +50 °C
Service temperature range	-20 °C to +80 °C
Ingress protection	IP65 acc. EN 60529
Suitable for equipment of group II with a degree of mechanical hazard	high

Nomenclature

**Operators, push button and emergency stop switch**

EU2B-U	B1	00	*	*
1	2	3	4	5

1: Type

2: Operator style / function

B1: Flush pushbutton / Momentary

B2: Extended pushbutton / Momentary

B3: Mushroom pushbutton / Momentary

BV3: Mushroom / Emergency stop

3: Part of the type

4: Button color

R: Red, G: Green, B: Black, Y: Yellow, W: White, S: Blue, etc.

5: Additional letters and/or numbers

sheet 2/4

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**SCHEDULE TO EU-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1003 U, Issue: 01**

**Operators, (key) selector switch**

EU2B-U	S	**	00	*
1	2	3	4	5

- 1: Type
- 2: Operator style
  - S: Selector (Knob operator)
  - SK: Selector (Key operator)
- 3: Position and function
  - 2: 2-position / maintained
  - 2R: 2-position / maintained (overlap)
  - 2J: 2-position, maintained (special function)
  - 21: 2-position, spring return from right
  - 3: 3-position, maintained
  - 31: 3-position, spring return from right
  - 32: 3-position, spring return from right
  - 33: 3-position / spring return two-way
- 4: Part of the type
- 5: Additional letters and/or numbers

**Lens unit for pilot light**

EU2B-U	L1 0	**
1	2	3

- 1: Type
- 2: Type
- 3: Lens color

Changes with respect to previous editions

New test according to EN IEC 60079-0:2018, EN 60079-7:2015 and EN 60079-31:2014.

(16) Test report PTB Ex 19-19001

(17) Notes for manufacture, installation and operation

The type of protection IP65 is guaranteed only by compliance with the manufacturer's instructions and proper installation in the enclosure.

In order to avoid electrostatic charges, the operators and lens units have to be mounted on a metallic enclosure or conductive earthed frames.

Installation of electrical components requires a further assessment by an ExCB.

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(18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

According to Article 41 of Directive 2014/34/EU, EC-type examination certificates which have been issued according to Directive 94/9/EC prior to the date of coming into force of Directive 2014/34/EU (April 20, 2016) may be considered as if they were issued already in compliance with Directive 2014/34/EU. By permission of the European Commission supplements to such EC-type examination certificates and new issues of such certificates may continue to hold the original certificate number issued before April 20, 2016.

Konformitätsbewertungsstelle, Sektor Explosionsschutz  
On behalf of PTB:

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