



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Ex COMPONENT CERTIFICATE

Certificate No.: IECEx PTB 15.0007U

Issue No: 1

Certificate history:

Status: **Current**

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Issue No. 1 (2019-09-09)

Issue No. 0 (2015-05-29)

Date of Issue: **2019-09-09**

Applicant: **IDEC Corporation**
6-64 Nishimiyahara 2-chome
Yodogawa-ku
Osaka, 532-0004
Japan

Ex Component: **Operators and lens units type EU2B-U***(*) and mounting hole plug type EU9Z-BP**

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **"eb", "tb"**

Marking:

Ex eb IIC Gb
Ex tb IIIC Db

Approved for issue on behalf of the IECEx
Certification Body:

Dr.-Ing. Detlev Markus

Position:

Head of Department Explosion Protection in Energy Technology

Signature:
(for printed version)

Date:

09.09.19

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

Physikalisch-Technische Bundesanstalt (PTB)
Bundesallee 100
38116 Braunschweig
Germany





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Manufacturer: **IDEC Corporation**
6-64 Nishimiyahara 2-chome
Yodogawa-ku
Osaka, 532-0004
Japan

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex Component covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The Ex Component and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2015 Edition:5.0	Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the Ex Component listed has successfully met the examination and test requirements as recorded in

Test Report:

[DE/PTB/ExTR15.0003/01](#)

Quality Assessment Report:

[NO/NEM/QAR10.0001/12](#)



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Schedule

Ex Component(s) covered by this certificate is described below:

Description

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 and aluminium. The fastening is made in the contact block adapter.

Technical data, Nomenclature and Schedule of Limitations see Annex.

SCHEDULE OF LIMITATIONS:

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.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

New test according to IEC 60079-0:2017 (Ed. 7), IEC 60079-7:2015 (Ed. 5), IEC 60079-31:2013 (Ed. 2)

Annex:

[COCA15.0007U-Issue 1.pdf](#)



Applicant: IDEC Corporation
6-64 Nishimiyahara 2-chome
Yodogawa-ku
Osaka, 532-0004
Japan

Electrical Apparatus: Operators and lens units, mounting hole plug
type EU2B-U***(*) and type EU9Z-BP

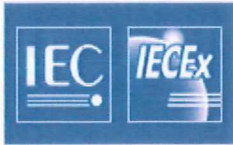
Description

The operators and lens units type EU2B-U***(*) and the 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

Approved Types	
Operator, flush pushbutton	Type EU2B-U B1**
Operator, extended pushbutton	Type EU2B-U B2**
Operator, mushroom pushbutton	Type EU2B-U B3**
Operator, selector	Type EU2B-U S***
Lens Unit	Type EU2B-U L10 *
Operator, emergency stop	Type EU2B-U BV**
Operator, key selector	Type EU2B-U SK**
Mounting hole plug	Type EU9Z-BP

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



Nomenclature

Operator for push button and emergency stop switch

EU2B-U	B1	00	**
1	2	3	4

- 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.

Operator for (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 / 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: May be followed by additional letters and / or number(s) for key



Lens unit for pilot light

EU2B-U	L1 0	**
1	2	3

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

Schedule of Limitations

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.