



(1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**

(3) EC-type-examination Certificate Number:

PTB 08 ATEX 1003 U



(4) Component: Operator and Lens Unit Type EU2B-U***

(5) Manufacturer: IDEC Corp.

(6) Address: 7-31 Nishimiyahara 1-chome, Yodogawa-ku,
Osaka, 532-8550, Japan

(7) This component and any acceptable variation thereto are 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 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this component 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 the confidential report PTB Ex 08-18026.

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

EN 60079-0:2006

EN 60079-7:2007

(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 Component Certificate only serves as a basis for the issuing of certificates for equipment or protective systems.


(11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified component in accordance to the Directive 94/9/EC. 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 e II**

Zertifizierungsstelle Explosionsschutz

By order:


Dr.-Ing. M. Thedens
Oberregierungsrat



Braunschweig, March 14, 2008

sheet 1/2

EC-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)

EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1003 U

(15) Description of component

The operators and lens units type EU2B-U***, predominantly made of polyamid are intended for installation in lids of enclosures of electrical apparatus in the type of protection Increased Safety "e". 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 *

Ambient temperature	- 20 °C bis +50 °C
Protection against foreign bodies and ingress of water	IP65 nach EN 60529
Suitable for equipment of group II with a degree of mechanical hazard	high

(16) Test report PTB Ex 08-18026

(17) Notes for manufacture, installation and operation

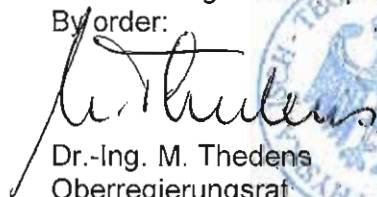
None

(18) Essential health and safety requirements

Met by compliance with the aforementioned Standards

Zertifizierungsstelle Explosionsschutz

By order:



Dr.-Ing. M. Thedens
Oberregierungsrat



Braunschweig, March 14, 2008

sheet 2/2

1. SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1003U

(Translation)

Equipment: Operator and Lens Unit Type EU2B-U***

Marking:  II 2 G Ex e II

Manufacturer: IDEC Corp.

Address: 7-31 Nishimiyahara 1-chome, Yodogawa-ku,
Osaka, 532-8550, Japan

Description of supplements and modifications

The operators and lens units type EU2B-U*** are supplemented by following types:

- Emergency stop switch type EU2B-U BV**
- Key selector switch type EU2B-U SK**
- Mounting hole plug type EU9Z-BP

The operators and lens units may also be used in areas in which explosive atmospheres produced by dust/air mixtures may occasionally occur.

The marking will thus change to:

 II 2 G Ex e II

 II 2 D Ex tD A21 IP65

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 *
Emergency stop switch	Type EU2B-U BV**
Key selector switch	Type EU2B-U SK**
Mounting hole plug	Type EU9Z-BP

Braunschweig und Berlin

1 SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1003U

Ambient temperature	max. - 20 °C to +50 °C
Protection against foreign bodies and ingress of water	IP65 according to EN 60529
Suitable for equipment of group II with a degree of mechanical hazard	high

Applied standards

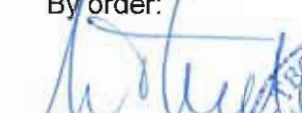
EN 60079-0:2006 EN 60079-7:2007 EN 61241-0:2006 EN 61241-1:2004

Assessment and test report: PTB Ex 09-19155

Zertifizierungssektor Explosionsschutz

By order:

Braunschweig, October 26, 2009


Dr.-Ing. M. Thedens
Oberregierungsrat





2. SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1003 U

(Translation)

Equipment: Operator and Lens Unit Type EU2B-U***

Marking:  II 2 G Ex e II
 II 2 D Ex tD A21 IP65

Manufacturer: IDEC Corp.

Address: 7-31 Nishimiyahara 1-chome, Yodogawa-ku, Osaka, 532-8550, Japan


Description of supplements and modifications

For the operators and lens units type EU2B-U*** can be used alternatively a lock nut out of POM.

The operators and lens units have been tested according to the standards EN 60079-0:2009 and EN 60079-31:2009.

Therefore the marking changes to:

 II 2 G Ex e IIC Gb

 II 2 D Ex tb IIC Db IP65

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
Protection against foreign bodies and ingress of water	IP65 according to EN 60529
Suitable for equipment of group II with a degree of mechanical hazard	high

Sheet 1/2

EC-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.

2. SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1003 U

Notes for manufacture and operation

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

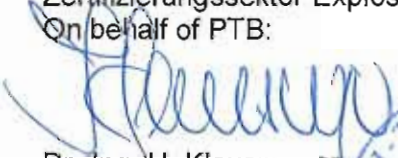
Applied standards

EN 60079-0:2009, EN 60079-7:2007, EN 60079-31:2009

Test report: PTB Ex 12-11054

Zertifizierungssektor Explosionsschutz
On behalf of PTB:


Braunschweig, April 27, 2012


Dr.-Ing. U. Klausmeyer
Direktor und Professor



3rd SUPPLEMENT
according to Directive 94/9/EC Annex III.6
to EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1003U
(Translation)

Equipment: Operator and Lens Unit type EU2B-U***(*) and EU9Z-BP

Marking:  **II 2 G Ex e IIC Gb**

 **II 2 D Ex tb IIC Db IP65**

Manufacturer: IDEC Corporation

Address: 6-64 Nishimiyahara 2-chome, 5320004 Yodogawa-Ku, Osaka, Japan

Description of supplements and modifications

The operators and lens units type EU2B-U***(*) and EU9Z-BP are changed in following points:

- 1) The address of the manufacturer is changed to: IDEC Corporation, 6-64 Nishimiyahara 2-chome , 5320004 Yodogawa-Ku, Osaka, Japan.
- 2) The operators and lens units have been tested according to the standards EN 60079-0:2012 and EN 60079-31:2014.

Therefore the marking changes to:

 **II 2 G Ex e IIC Gb**

 **II 2 D Ex tb IIC Db**

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

Sheet 1/2

EC-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.

3rd SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1003U

Ambient temperature	-20 °C to +50 °C
Rated service temperature range	-20 °C to +80 °C
Protection against foreign bodies and ingress of water	IP65 according to EN 60529
Suitable for equipment of group II with a degree of mechanical hazard	high

Notes for manufacture 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.

Applied standards

EN 60079-0:2012, EN 60079-7:2007, EN 60079-31:2014

Test report: PTB Ex 15-14134

Konformitätsbewertungsstelle, Sektor Explosionsschutz
On behalf of PTB:

Braunschweig, 3 June 2015


Dr.-Ing. U. Klausmeyer
Direktor und Professor

