



#### Note on instructions

When working in hazardous areas, the safety of personnel and equipment depends on compliance with the relevant safety regulations. The people in charge of installation and maintenance bear a special responsibility. It is essential that they have an exact knowledge of the applicable rules and regulations.

The instructions provide a summary of the most important safety measures and must be read by everyone working with the product so that they will be familiar with the correct handling of the product.

The instructions have to be kept for future reference and must be available throughout the expected life of the product.

# Description

The illuminated buttons, type 07-3361-17\*0/\*\*\*\* and type 07-3361-18\*0/\*\*\*\*, signal command statuses by illuminating or extinguishing a light signal. The illuminated buttons are suitable for use in almost all potentially explosive areas in which the functional status of machinery needs to be visibly displayed.

The illuminated buttons are executed according to the requirements of type of protection "e increased safety" and "d flameproof enclosure". The illuminated button is designed for installation on a mounting rail. The conductor is connected using terminals with increased safety.

The illuminated button is combined with an illuminated pushbutton actuator. Each illuminated button actuator is inserted in a mounting hole on a control console or control panel.

# **Explosion protection**

#### ATEX

Ex type of protection (Ex) II 2 G Ex db eb IIC Gb

⟨Ex⟩ I M2 Ex db eb I Mb

Certification CML 17 ATEX 1106U

#### **IECEx**

Ex type of protection Ex db eb IIC Gb Ex db eb I Mb

Certification IECEx CML 17.0046U

Other approvals and certificates, see www.bartec-group.com

### Ambient temperature ranges

-55 °C to +50 °C (-67 °F to +122 °F) or +60 °C (+140 °F), if  $U_e = 12 \text{ V}$  to 24 V

#### Operating temperature ranges

-55 °C bis +85 °C (-67 °F bis +185 °F)

## Approved for zones

1 and 2

### Storage/transport temperature

-55 °C to +70 °C (-67 °F to +158 °F)

#### Technical data

#### Protection class

Determined by illuminated button actuator and control station enclosure. Terminals: IP 20

#### Weight

Approx. 110 g (0.24 lb)

# Rated insulation voltage

300 V

# Power consumption lamp module ≤1 W

# Rated voltage

AC 12 V to 250 V  $T_a < +50 \,^{\circ}\text{C} (+122 \,^{\circ}\text{F})$ DC 12 V to 60 V  $T_a < +50 \, ^{\circ}\text{C} \, (+122 \, ^{\circ}\text{F})$ AC/DC 12 V to 24 V  $T_a < +60 \, ^{\circ}\text{C}/ (+140 \, ^{\circ}\text{F})$ 

#### **Enclosure material**

Thermoplastic

#### Contacts

1 NC or 1 NO as snap switch element

#### Switching capacity contact element

AC-15 230 V 1 A DC-13 24 V 0.25 A

#### Connection

Terminal for 2.5 mm<sup>2</sup>, fine-wire

#### Lamp

LED (red, green, yellow, white, blue)

## Illumination

Very bright, visible angle up to 180°

#### Service life

Electrical: > 105 running hours Mechanical: > 105 switching cycles

#### Mounting

On mounting rail NS 35/7.5

#### Shock resistance

DIN EN 60068-2-27, 30 g 18 ms

#### **Dimensions**

See page 3

Safety Instructions

The illuminated button and its actuator may be used only within the specified ambient and operating temperature range.

Utilisation in areas other than those specified or the modification of the product by anyone other than the manufacturer will exempt BARTEC from liability for defects or any further liability.

Incorrect installation can cause malfunctioning and the loss of explosion protection.

Only service technicians who are authorized to work in potentially explosive atmospheres may do any of the assembly, disassembly, installation, commissioning, maintenance, and fault clearance work.

The generally applicable statutory rules and other binding directives relating to workplace safety, accident prevention and environmental protection must be adhered to.

When setting up or operating explosion-resistant electrical systems, the IEC/EN 60079-14 (NEC for USA/CEC for Canada) and all relevant installation and operating regulations must be observed.

The illuminated button may be used only if it is in a clean and undamaged condition. It is not permissible to modify the illuminated button in any way.

# Marking

Particularly important points in these instructions are marked with a symbol:

#### **⚠** DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

#### **⚠ WARNING**

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

#### **⚠** CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

#### NOTICE

NOTICE is used to address practices not related to personal injury.



Important instructions and information on effective, economical and environmentally compatible handling.

#### Illuminated button

Type 07-3361-17\*0/\*\*\*\* and 07-3361-18\*0/\*\*\*\*

# Standards conformed to

EN 60079-0:2012 +A11: 2013

EN 60079-1:2014

EN 60079-7:2015

EN 60068-2-27:2009

EN 61000-6-2:2005

EN 61000-6-4:2007 +A1:2011

IEC 60079-0:2011 Ed.6

IEC 60079-1:2014 Ed.7

IEC 60079-7:2015 Ed.5

IEC 60068-2-27:2008

IEC 61000-6-2:2005

IEC 61000-6-4:2006 + A1:2010

# Transport, Storage

#### NOTICE

Illuminated button damage through incorrect transport or incorrect storage.

- Transport and storage is permissible in original packaging only.
- Store the illuminated button in a dry place.

# Assembly, Installation

#### **⚠ WARNING**

Risk of serious injury due to incorrect proceedings.

- The IEC/EN 60079-14 and further national standards and locally applicable installation regulations have to be observed.
- Ensure that the voltage supply has been isolated or take suitable protective measures.

## Assembly

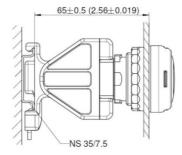
#### **⚠ WARNING**

Risk of serious accidents due to damaged parts.

Before assembly, ensure the perfect condition of the components.

Mounting the illuminated button:

- Make sure the illuminated button to be fitted is intact (no cracks).
- Position the illuminated button on the mounting rail.
- Align the position of the button on the mounting rail at the actuator.





The assembly of the illuminated button actuator is described in the operating instructions for actuating elements, type 05-0003-00../....

# **BARTEC**

#### Installation

In hazardous areas groups I and II, the illuminated button must be used:

- In appropriate enclosures with "Ex e" increased safety type of protection. The clearance and creepage distances under IEC/EN 60079-7 Section 4.3, Section 4.4 and Table 1 must be observed.
- In an enclosure that corresponds to another approved type of protection specified in IEC/EN 60079-0 Section 1.

# (i) Note

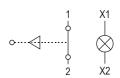
Avoid any capacitive influence from parallel conductors as well as any additional adverse heat effects on the cable.

Take care when connecting conductors:

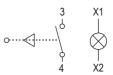
- Strip 40 mm (1.6 in) sheath off the conductor.
- Remove approx. 6 mm (0.2 in) conductor insulation from the cores.
- Prepare the ends of fine-stranded and multi-stranded conductors: Crimp wire end sleeves with suitable crimping tools. Connection cross-sections: 0.75-2.5 mm<sup>2</sup> (14-18 AWG).
- Release terminals.
- Insert conductors.
- Tight the terminals with a maximum torque of 0.4-0.7 Nm (0.3-0.5 lb.ft).

#### Terminal assignment:

Type 07-3361-17\*0/\*\*\*\* 1 N/C contact



Type 07-3361-18\*0/\*\*\*\* 1 N/O contact



# Operational Instruction (Translation)

# Commissioning

Before commissioning, check that:

- The illuminated button has been mounted and installed in compliance with regulations
- The illuminated button is not damaged.
- The connection has been established properly (make sure the cores are secure).

# **Betrieb**

#### **⚠** GEFAHR

Tod oder Verletzungsgefahr durch nicht bestimmungsgemäße Verwendung.

The illuminated button nur in den geltenden technischen Grenzen betreiben (siehe Seite 1).

### Maintenance and Fault Clearance

#### **⚠ WARNING**

Risk of serious injury due to incorrect proceedings

- IEC/EN 60079-17 must be observed. It is recommended to formulate a maintenance plan according to this standard.
- Ensure that the voltage supply has been isolated or take suitable protective measures.

#### Maintenance

#### **⚠ WARNING**

Risk of serious accidents due to damaged parts.

Check illuminated buttons, illuminated button actuators, actuators, screw fittings, sealings and cables regularly for cracks and damage. Make sure that they are properly established.

#### NOTICE

Illuminated button/actuator damage due to incorrect cleaning.

It is not allowed to clean illuminated buttons/actuators with compressed air.

The operator of the illuminated button must keep it in good condition, operate it properly, monitor it and clean it regularly.

The owner/managing operator must schedule maintenance intervals which will suit the respective conditions of use.

## Illuminated button

Type 07-3361-17\*0/\*\*\*\* and 07-3361-18\*0/\*\*\*\*

#### **Fault Clearance**

### **⚠ WARNING**

Risk of serious injury due to use of nonoriginal spare parts.

Use original parts only as replacements.

The illuminated button is defective if the switching unit does not perform switching functions any longer or the LED cannot light up any more. Defective illuminated buttons cannot be repaired; they must be replaced considering this operational instruction.

Defective actuators can be removed and replaced by functioning actuators of the same type.

# (i) Note

For original parts, contact the firm of Bartec GmbH at the service address.

# Accessories, Spare Parts

For accessories and spare parts, see BARTEC catalogue.

# Disposal



(i) Note

Environmental damage can be caused by incorrect waste disposal. When in doubt, local authorities or specialist disposal companies can provide information on environmentally friendly disposal.

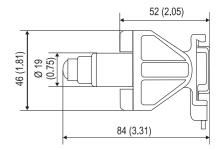
The components in the illuminated button and the illuminated button actuator contain metal and plastic parts. Therefore the statutory requirements for disposing of electronic scrap must be observed.

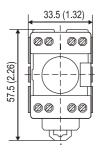
# Service Address

**BARTEC GmbH** Max-Eyth-Straße 16 97980 Bad Mergentheim Germany

+49 7931 597-0 Tel.: +49 7931 597-119 Fax:

# Dimensions in mm (in)







EU Konformitätsbescheinigung EU Attestation of Conformity Attestation UE de conformité **BARTEC** 

№ 01-3300-7C0002 C

Wir	We	Nous
	BARTEC GmbH Max-Eyth-Straße 16 97980 Bad Mergentheim Germany	
erklären in alleiniger Verantwortung, dass das Produkt Leuchtmodul Leuchttaster	declare under our sole responsibility that the product Lamp module Illuminated button	attestons sous notre seule responsabilité que le produit Module de signalisation, Bouton-pousoir lumineux
	Typ 07-335*-****/****, 07-336*-****/****	
auf das sich diese Erklärung	to which this declaration relates is in	se référant à cette attestation

auf das sich diese Erklärung bezieht den Anforderungen der folgenden Richtlinien (RL) entspricht

ATEX-Richtlinie 2014/34/EU RoHS-Richtlinie 2011/65/EU RoHS-Richtlinie 2015/863/EU

und mit folgenden Normen oder normativen Dokumenten übereinstimmt to which this declaration relates is in accordance with the provision of the following directives (D)

ATEX-Directive 2014/34/EU RoHS-Directive 2011/65/EU RoHS-Directive 2015/863/EU

and is in conformity with the following standards or other normative documents

se référant à cette attestation correspond aux dispositions des directives (D) suivantes

Directive ATEX 2014/34/UE Directive RoHS 2011/65/UE Directive RoHS 2015/863/UE

et est conforme aux normes ou documents normatifs ci-dessous

EN 60079-0:2012 + A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-11:2012 EN 60068-2-27:2009 EN 61000-6-2:2005 EN 61000-6-4:2007 + A1:2011

Verfahren der EU-Baumusterprüfung / Benannte Stelle Procedure of EU-Type Examination / Notified Body Procédure d'examen UE de type / Organisme Notifié

CML 17 ATEX 1106 U(\*), Issue 2

2276, CML B.V., Hoogoorddreef 15, 1101BA Amsterdam, NL

<sup>(9)</sup> Die Ex-Komponente ist Teil eines elektrischen Betriebsmittels oder eines Moduls, gekennzeichnet mit dem Symbol "U", das nicht für sich allein verwendet werden darf und über dessen Einbau in elektrische Betriebsmittel oder Systeme zur Verwendung in explosionsgefährdeten Bereichen gesondert entschieden werden muss.

Merkmale dieser Komponente sowie die Bedingungen für ihren Einbau in Geräte und Schutzsysteme siehe Betriebsanleitung der Komponente. <sup>(9)</sup> The Ex-component is a part of an electrical apparatus or a module, marked with the symbol "U", which is not intended to be used alone and requires additional consideration when incorporated into electrical apparatus or systems for use in explosive atmospheres.

Characteristics and how the component must be incorporated into equipment or protective systems see operation manual of the component. (9) Le composant Ex est partie de matériel électrique ou de module, marquée du symbol « U », ne devant pas être utilisée seule et nécessitant une certification complémentaire lorsqu'elle est incorporée a un matériel électrique ou à un système pour atmosphères explosives.

Les caractéristiques du composant ainsi que les conditions d'incorporation dans des appareils ou des systèmes de protection regarde voir l'instruction d'emploi du composant.

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Bad Mergentheim, 23.08.2019

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i.V. Cristian Olareanu

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