



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 button, type 07-3363-4.../...., is used everywhere in almost all hazardous areas where machine functions are to be activated at the touch of a button and the corresponding functional status is to be visually displayed.

The connection is established by means of terminals at the back of the illuminated button.

The illuminated button is designed for combining with different illuminated button actuators and a junction box. It is attached without tools to the illuminated button actuator.

The illuminated button actuator is inserted into a mounting hole in an Ex e enclosure, a control console or control panel.

The easy installation of the actuator allows conformance to a high IP degree of protection.

When inserted into a control console or control panel, there is the option of mounting the junction box. This is connected to the illuminated button by means of two screws.

Explosion protection

ATEX

Ex protection type

II 2G Ex de IIC Gb

I M2 Ex de I Mb

Certification

PTB 97 ATEX 1064 U

IECEX

Ex protection type

Ex de IIC Gb

Ex de I Mb

Certification

IECEX PTB 10.0014U

Ambient temperature ranges

-55 °C to +50 °C (-67 °F to +122 °F)

or +60 °C (+140 °F),

if $U_e = 12\text{ V to }24\text{ V}$

Approved for zones

1 and 2

Technical data

Protection class

Determined by illuminated button actuator and control station enclosure.

Terminals: IP 20

With junction box and illuminated button actuator: up to IP 67

Weight

Approx. 110 g (0.243 lb)

Rated insulation voltage

300 V

Power consumption

≤1 W

Rated voltage (U_e)

AC 12 V to 250 V

$T_a < +50\text{ °C (+122 °F)}$

DC 12 V to 60 V

$T_a < +50\text{ °C (+122 °F)}$

AC/DC 12 V to 24 V

$T_a < +60\text{ °C (+140 °F)}$

Enclosure material / manufacturing process

Thermoplastic / injection moulding

Contacts

1 N/C or 1 N/O

AC-15: 1 A, 230 V

DC-13: 0.25 A, 24 V

Connection

Terminal for 2.5 mm², 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

Locked, by bayonet lock

Dimensions

See page 3

Safety Instructions

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

Utilisation in areas other than those specified or the alteration 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.

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

Before commissioning or restarting operation, check compliance with the applicable laws and directives.

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.

Note

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

Standards conformed to

IEC 60079-0:2007

EN 60079-0:2009

IEC/EN 60079-1:2007

IEC 60079-7:2006

EN 60079-7:2007

DIN EN 60068-2-27:2009, 30 G, 18 ms

Assembly, Installation, and Commissioning

WARNING

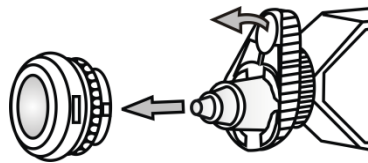
Risk of injury due to incorrect proceedings.

- Only authorized and qualified personnel may do any of the assembly, disassembly, installation and commissioning work.
- Pay attention to the type of mounting required (for fitting into enclosure/attachment with junction box).
- Use suitable tools.

Assembly/disassembly

Mounting the illuminated button:

- Make sure the illuminated button to be fitted is intact (no cracks).
- Position the illuminated button's bayonet lock at the mounted illuminated button actuator.
- Turn the locking bolt to connect the illuminated button securely to the illuminated button actuator.



Note

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

Installation

For fitting into enclosure

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.

With junction box

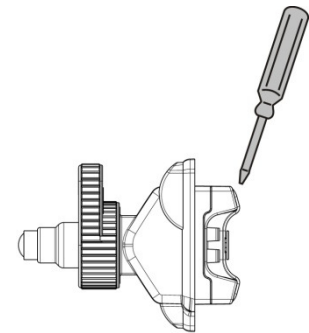
The illuminated button must be installed as a stationary unit and with protection against the risk of mechanical damage.

Note

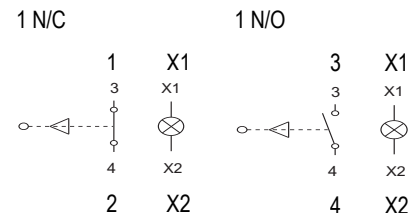
Avoid any capacitive influence from parallel conductors as well as any additional adverse heat effects on the cable.

Take care when connecting conductors:

- Strip 40 mm (1.575 in) sheath off the conductor.
- Remove approx. 6 mm (0.236 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 mm² (14-18 AWG).
- Release terminals.
- Insert conductors diagonally.
- Tight the terminals with a maximum torque of 0.4-0.7 Nm, while holding the screwdriver slightly at an angle.



Terminal assignment:



Commissioning

Before commissioning, check that:

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

Transport, Storage

NOTICE

Illuminated button damage through incorrect transport or incorrect storage.

- Transport and storage is permissible in original packaging only.

Maintenance and Fault Clearance

WARNING

Risk of injury due to incorrect proceedings.

- Only authorized qualified personnel may do any of the work relating to maintenance and fault clearance.
- IEC/EN 60079-17 must be observed.

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

Maintenance

WARNING

Risk of serious accidents due to damaged parts.

- Check illuminated buttons, illuminated button actuators, actuators, 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.

Fault Clearance

WARNING

Risk of serious injury due to use of non-original 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.

A defective actuator can be taken off the illuminated button and replaced by a functioning actuator of the same type.

Accessories, Spare Parts

Note

The illuminated button can be connected to a junction box. Information on the junction box and junction box assembly is described in the Operating Instructions for the junction box, order number 05-0042-0050.

For further accessories and spare parts, see BARTEC catalogue.

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 (e.g. disposal by an approved disposal company).

Service Address

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

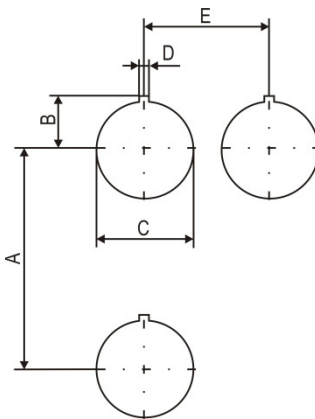
Tel.: +49 7931 597-0
Fax: +49 7931 597-119

Installation dimensions

NOTICE

Damage to elements due to incorrect installation dimensions.

- The minimum spacing between the mounting holes must be observed.



Dimensions:

	mm	in
A*	70	2.8
B	16.5	0.65
C	∅ 30.3	∅ 1.9
D	3	0.12
E*	40	1.6

*Recommended spacing for mushroom push-button, slam button, and: position selector switches with protective shroud: 100 mm (3.9 in).

Dimensions in mm (in)

