



Description

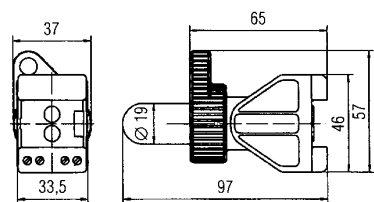
These lamp modules are used everywhere in hazardous areas Group IIc, Zone 1 where the functional status of the respective machine is to be visually displayed.

Each lamp module actuator is fitted into a mounting hole on a control console or panel. The respective lamp module is then attached without tools to the actuator and secured with a fixing nut (see following pages for assembly).

The easy installation of the actuators in the control console or panel allows conformance to a high IP degree of protection.

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

Dimensions in mm



Illuminated button with terminals for panel-mounted installation

Explosion protection

Ex protection type

II 2G Ex d IIC

I M2 Ex de I

Class I, Zone 1, AEx d IIC/Ex de IIC, T6

Class I, Div. 2, Groups A, B, C, D

CE 0044

Certification

PTB 97 ATEX 1064 U

Ambient temperature

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

Approved for Zone

1

Technical Data

Ambient temperature

Operation: see above

Storage, transport: -55 °C to +70 °C

Protection class

determined by actuating element and control station enclosure
terminals: IP 20

Weight

approx. 90 g

Rated insulation voltage

300 V

Power consumption

≤ 1 W

Rated voltage (U_e)

AC 12 V to 250 V ($T_a \leq +50\text{ °C}$)

DC 12 V to 60 V ($T_a \leq +50\text{ °C}$)

AC/DC 12 V to 24 V ($T_a \leq +60\text{ °C}$)

Enclosure material / manufacturing process

thermoplastic/injection moulding

Connection

terminal for 2.5 mm², fine-wire

Lamp

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

Illumination

very bright, visible angle up to 108°

Service life

electrical > 10⁵ running hours

Mounting

locked, by bayonet lock

Safety Instructions

The lamp module 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 lamp module may be connected and assembled only by qualified personnel who are authorised and trained to assemble electrical components in hazardous (potentially explosive) areas.

Always disconnect the lamp module from voltage before assembly/disassembly.

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

The lamp module may be used only if it is in a clean and undamaged condition.

Marking

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

DANGER

Non-observance leads to death or serious physical injury. The necessary safety measures must be taken.

CAUTION

Warning of damage to property and financial and penal disadvantages (e.g. loss of guarantee rights, liability etc.).

ATTENTION

Important instructions and information on preventing disadvantageous behaviour.

NOTE

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

Standards conformed to

EN 60079-0:2006
EN 60079-1:2004
EN 60079-7:2007
DIN EN 60068-2-27:1995, 30 g, 18 ms

Assembly and Commissioning

NOTE

The assembly of the lamp module and lamp module actuator is described in the operating instructions for actuating elements.

Assembly/disassembly

ATTENTION

Only authorised and qualified personnel may do any of the assembly, disassembly, installation and commissioning work.

The minimum centre-to-centre spacing between two mounting holes must be observed.

Make sure the lamp module to be fitted is intact (no cracks).

Position the lamp module's bayonet lock at the mounted actuating element and turn the locking bolt to connect it securely to the actuator.

Installation

In hazardous areas groups I and II the lamp module must be used in appropriate enclosures with "Ex e" increased safety type of protection or in an enclosure that corresponds to another approved type of protection specified in EN 60079-0 Section 1. When fitting into an enclosure with "Ex e" type of protection the clearance and creepage distances under EN 60079-7 Section 4.3, Section 4.4 and Table 1 must be observed.

Only suitable tools may be used for installation. It is not permissible to modify the module in any way.

ATTENTION

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

The ends of fine-stranded and multi-stranded conductors must be prepared. Wire end sleeves must be crimped with suitable crimping tools.

Supply cable, cross-sections:

0.75 - 2.5 mm² (one-wire)

0.75 - 1.5 mm² (fine-stranded, wire end ferrule)

The terminals must be tightened with a maximum torque of 2.5 Nm.

Terminal assignment

X1



X2

Commissioning

Before commissioning check that:

- the device has been installed correctly
- the device is not damaged
- the connection has been established properly

Operation, Maintenance and Fault Clearance

The operator of the lamp module must keep it in good condition, operate it properly, monitor it and clean it regularly. The lamp module, module actuator, sealings and cables must be checked regularly for cracks and damage.

NOTE

Dirty modules/actuators can be cleaned with compressed air.

The lamp module is defective if the LED cannot light up any more. Defective light modules cannot be repaired; they must be replaced.

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

Accessories, Spare Parts

See BARTEC catalogue also.

Disposal

The components in the lamp module and the actuator contain metal and plastic parts.

Therefore the statutory requirements for electrical scrap must be observed (e.g. disposal by an approved disposal company).

Service Address

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Erklärung der Konformität
Declaration of Conformity
Attestation de conformité

Nº 01-3350-7C0001_A

BARTEC

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

Wir

We

Nous

BARTEC GmbH,

erklären in alleiniger Verantwortung, dass das Produkt

declare under our sole responsibility that the product

attestons sous notre seule responsabilité que le produit

**Leuchtmodul mit
Klemmen**

**Lamp module with
terminals**

**Élément de
signalisation avec
bornes**

Typ 07-335*-11**

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

**ATEX-Richtlinie
94/9/EG**

to which this declaration relates is in accordance with the provision of the following **directives (D)**

**ATEX-Directive
94/9/EC**

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

**ATEX-Directive
94/9/CE**

und mit folgenden Normen oder normativen Dokumenten übereinstimmt

**EN 60079-0:2006
EN 60079-1:2004
EN 60079-7:2007
DIN EN 60068-2-27:1995,
30 g, 18 ms**

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

**EN 60079-0:2006
EN 60079-1:2004
EN 60079-7:2007
DIN EN 60068-2-27:1995,
30 g, 18 ms**

et est conforme aux normes ou documents normatifs ci-dessous

**EN 60079-0:2006
EN 60079-1:2004
EN 60079-7:2007
DIN EN 60068-2-27:1995,
30 g, 18 ms**

Kennzeichnung

Marking

Marquage

**II 2G Ex de IIC
I M2 Ex de I**

**Verfahren der EG-
Baumusterprüf-
bescheinigung**

**Procedure of Ex-
Type Examination**

**Procédure d'examen
CE de type**

PTB 97 ATEX 1064 U

0044

Bad Mergentheim, den 01.09.2009

ppa. Ewald Warmuth
Geschäftsleitung / General Manager