



## 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 lamp module, type 07-3351-11\*0/\*\*\*\*, indicates command modes by lighting up or going out.

The lamp module is used everywhere in almost all hazardous areas where the functional status of the respective machine is to be visually displayed.

The lamp module is designed for mounting onto a mounting rail. The connection is established by means of terminals.

The lamp module is combined with a lamp module actuator. The lamp module actuator is fitted into a mounting hole on a control console or panel.

## Explosion protection

### ATEX

Ex type of protection

⊕ II 2 G Ex db eb IIC Gb

⊕ 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](http://www.bartec-group.com)

### Ambient temperature ranges

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

### 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 actuating element and control unit enclosure.

Terminals: IP 20

### Weight

Approx. 90 g (0.2 lb)

### Rated 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

Thermoplastic

### 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 > 10<sup>5</sup> running hours

### Mounting

On mounting rail NS 35/7.5

### Schock resistance

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

### Dimensions

See page 3

## Safety Instructions

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

Utilization in areas other than those specified or the modification of the product by anyone other than the manufacturer is not permitted and will exempt BARTEC from liability for defects and 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 observed.

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 lamp module may be used only if it is in a clean and undamaged condition. It is not permissible to modify the lamp module 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.

### **i Note**

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

## 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**

Lamp module damage through incorrect transport or incorrect storage.

- Transport and storage is permissible in original packaging only.
- Store the lamp module 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

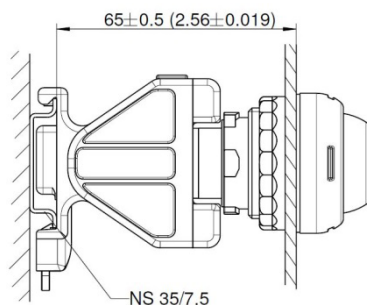
### **⚠ WARNING**

Risk of serious accidents due to damaged components.

- Before assembly, ensure the perfect condition of the components.

Mounting the lamp module:

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



### **i Note**

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

## 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. 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:



## Commissioning

Before commissioning, check that:

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

## Operation

### **⚠ DANGER**

Death or serious injury through improper use.

- The lamp module may be operated only within the technical limits that apply to it (see page 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 lamp modules, lamp module actuators, screw fittings, sealings and cables regularly for cracks and damage. Make sure that they are properly established.

**NOTICE**

Lamp module/actuator damage due to incorrect cleaning.

- It is not allowed to clean dirty lamp modules/actuators with compressed air.

The operator of the lamp module 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.

## Fault Clearance

**WARNING**

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

- Use original parts only as replacements.

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

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

**i** Note

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

## Accessories, 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.

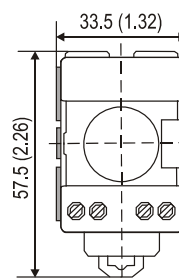
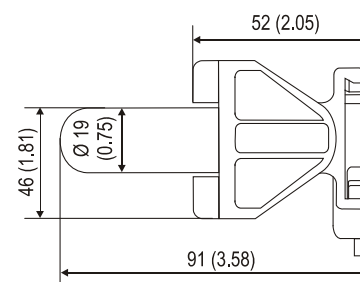


The components in the lamp module and the lamp module actuator contain metal and plastic parts. Therefore the statutory requirements for disposing of electronic scrap must be observed.

## Service Address

BARTEC GmbH  
Max-Eyth-Straße 16  
97980 Bad Mergentheim  
Germany  
Tel.: +49 7931 597-0  
Fax: +49 7931 597-119

## Dimensions in mm (in)



EU Konformitätsbescheinigung  
EU Attestation of Conformity  
Attestation UE de conformité

BARTEC

Nº 01-3300-7C0002\_C

| Wir  | We   | Nous   |
|--|--|--|
| <b>BARTEC GmbH</b><br>Max-Eyth-Straße 16<br>97980 Bad Mergentheim<br>Germany                               |  |  |
| erklären in alleiniger<br>Verantwortung, dass das Produkt<br><br><b>Leuchtmodul</b><br><b>Leuchttaster</b> | declare under our sole<br>responsibility that the product<br><br><b>Lamp module</b><br><b>Illuminated button</b> | attestons sous notre seule<br>responsabilité que le produit<br><b>Module de signalisation,</b><br><b>Bouton-pousoir</b><br><b>lumineux</b> |

Typ 07-335\* - \*\*\*\*/\*\*\*\*, 07-336\* - \*\*\*\*/\*\*\*\*

|   |  |  |
|---|--|--|
| auf das sich diese Erklärung<br>bezieht den Anforderungen der folgen-<br>den Richtlinien (RL) entspricht<br><b>ATEX-Richtlinie 2014/34/EU</b><br><b>RoHS-Richtlinie 2011/65/EU</b><br><b>RoHS-Richtlinie 2015/863/EU</b><br>und mit folgenden Normen oder nor-<br>mativen Dokumenten<br>übereinstimmt | to which this declaration relates is in<br>accordance with the provision of the<br>following directives (D)<br><b>ATEX-Directive 2014/34/EU</b><br><b>RoHS-Directive 2011/65/EU</b><br><b>RoHS-Directive 2015/863/EU</b><br>and is in conformity with the<br>following standards or other<br>normative documents | se référant à cette attestation<br>correspond aux dispositions des direc-<br>tives (D) suivantes<br><b>Directive ATEX 2014/34/UE</b><br><b>Directive RoHS 2011/65/UE</b><br><b>Directive RoHS 2015/863/UE</b><br>et est conforme aux normes ou docu-<br>ments normatifs ci-dessous |
|---|--|--|

EN 60079-0:2012 + A11:2013

EN 60068-2-27:2009

EN 60079-1:2014

EN 61000-6-2:2005

EN 60079-7:2015

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

EN 60079-11:2012

|  |   |  |
|--|---|--|
| Verfahren der EU-Baumuster-<br>prüfung / Benannte Stelle | Procedure of EU-Type Examination /<br>Notified Body | Procédure d'examen UE de type /<br>Organisme Notifié |
|--|---|--|

CML 17 ATEX 1106 U<sup>(\*)</sup>, Issue 2

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

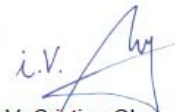
|  |   |   |
|--|---|---|
| <p>(*) Die Ex-Komponente ist Teil eines elektrischen Betriebsmittels oder eines Moduls, gekennzeichnet mit dem Symbol „U“, das nicht für sich allein verwendet werden darf und über dessen Einbau in elektrische Betriebsmittel oder Systeme zur Verwendung in explosionsgefährdeten Bereichen gesondert entschieden werden muss.</p> <p>Merkmale dieser Komponente sowie die Bedingungen für ihren Einbau in Geräte und Schutzsysteme siehe Betriebsanleitung der Komponente.</p> | <p>(*) 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.</p> <p>Characteristics and how the component must be incorporated into equipment or protective systems see operation manual of the component.</p> | <p>(*) 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 à un matériel électrique ou à un système pour atmosphères explosives.</p> <p>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.</p> |
|--|---|---|

0044

Bad Mergentheim, 23.08.2019

  
i.A. Simon Dyhringer

Product Manager Ex e



i.V. Cristian Olareanu

Team Leader Certification Center

FB-0171d

Seite / page / page 1 von / of / de 1