



### Description

These switch modules are used everywhere in hazardous areas in Group IIc, Zone 1 where machine functions are to be activated by pressing a button or operating a switch.

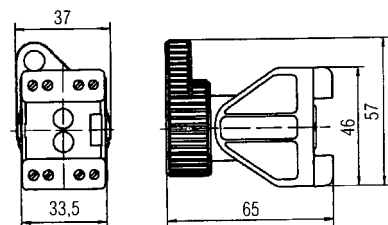
The switch module is equipped with self-cleaning contacts featuring positive break operation.

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

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

Connection is established by means of terminals at the back of the module.

### Dimensions in mm



### Switch module with terminals for front mounting

#### Explosion protection

##### Ex protection type

II 2G Ex d IIC

I M2 Ex de I

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

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

##### Certification

PTB 99 ATEX 1043 U

UL E184198

##### Ambient temperature

-40 °C to +60 °C

##### Approved for Zone

1

#### Technical data

##### Ambient temperature

Operation: see above

Storage, transport: -55 °C to +70 °C

##### Protection class

determined by the actuating element and

ComEx enclosure

Terminals: IP 20

##### Weight

Approx. 87 g

##### Rated insulation voltage

690 V

##### Rated operating voltage (U<sub>e</sub>)

AC 230 V and 400 V

DC 24V and 110 V

##### Enclosure material / manufacturing process

Thermoplastic/injection moulding

##### Contact material

AgSnO<sub>2</sub>

##### Contacts

all contacts self-cleaning and with positive break operation

1 NC and 1 NO or

2 NC or

2 NO

AC-12: 16 A, 400 V

AC-15: 10 A, 400 V

AC: 10 A, 230 V

DC-12: 0.5 A, 110 V

DC-13: 1 A, 24V

##### Conventional thermal current I<sub>the</sub>

16 A/+40 °C, 11 A/+60 °C

##### Connection

Terminals for 2.5 mm<sup>2</sup>, fine stranded

Mounting

locked, by bayonet lock

##### Service life

mechanical: > 10<sup>5</sup> switching cycles

## Safety Instructions

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

Always disconnect from voltage before assembling/disassembling switch modules.

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

The switch 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 switch module and actuating element is described in the operating instructions for the 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 switch module to be attached is intact (no cracks).

Position the switch module's bayonet lock at the mounted actuating element and turn the closing latch to connect it securely to the actuating element.

### Installation

In hazardous areas groups I and II the switch 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 on fine-stranded and multi-stranded conductors must be prepared. Wire end sleeves must be crimped with suitable crimping tools.

Supply cable, cross-section:  
0.75 - 2.5 mm<sup>2</sup>

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

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

### NOTE

Dirty modules/actuators can be cleaned with compressed air.

The switch module is defective if the switching unit does not perform switching functions any longer. Defective switch modules cannot be repaired; they must be replaced.

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

## Accessories, Spare Parts

See BARTEC catalogue also.

## Disposal

The components in the switch module contain metal and plastic parts.

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

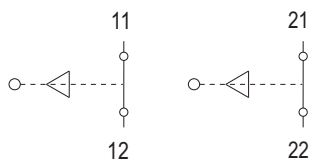
## Service Address

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

## Contact arrangements for switch modules

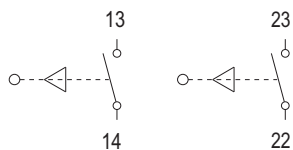
### Type 07-3323-1100

2 NC



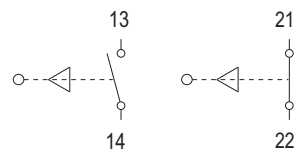
### Type 07-3323-1200

2 NO



### Type 07-3323-1400

1 NC + 1 NO



01-3323-7D0001 - BARTEC Advertising Agency

Erklärung der Konformität  
Declaration of Conformity  
Attestation de conformité

N° 01-3320-7C0001\_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

**Schaltmodul mit  
Klemmen**

**Switch module with  
terminals**

**Élément de contact  
avec bornes**

**Typ 07-332\*-1\*\*\***

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

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

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

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

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

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

und mit folgenden Normen oder normativen Dokumenten übereinstimmt

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

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**

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

**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 99 ATEX 1043 U**

**0044**

Bad Mergentheim, den 01.09.2009

ppa. Ewald Warmuth  
Geschäftsleitung / General Manager