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 switch module, type 07-3321-1*00, is used everywhere in almost all hazardous areas where machine functions are to be activated by pressing a button or actuating a switch. The switch module is equipped with self-cleaning contacts featuring positive break operation. The switch module is intended for fitting onto a mounting rail. Connection is established by means of terminals. The switch modules are flexible in use and offer a range of actuator elements. Each actuating element is fitted into a mounting hole on a control console or panel.

Explosion protection

ATEX

Ex type of protection

\[\text{II 2G Ex db eb IIC Gb}\]
\[\text{I M2 Ex db eb I Mb}\]

Certification

CML 17 ATEX 1105 U

IECEEx

Ex type of protection

Ex db eb IIC Gb
Ex db eb I Mb

Certification

IECEEx CML 17.0045U

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

Technical data

Protection class

Determined by actuating element and control unit enclosure. Terminals: IP 20

Weight

Approx. 70 g (0.15 lb)

Enclosure material

Thermoplastic

Contact material

AgSnO2

Rated insulation voltage

690 V

Rated voltage

AC 230 V and 400 V
DC 24 V and 110 V

Contacts

1 N/C contact and 1 N/O contact or 2 N/O contacts or 2 N/C contacts

Switching capacity

AC-15 400 V 10 A
AC-12 400 V 16 A
DC-13 24 V 1 A
DC-13 110 V 0,5 A

Conventional thermal current

16 A / +40 °C (+104 °F)
11 A / +60 °C (+140 °F)

Min. rated operating current

10 mA / 24 V

Connection

Terminal for 2.5 mm², fine-wire

Service life

Mechanical: > 10⁶ 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 switch module and its actuating element may be used only within the specified ambient and operating temperature range. Incorrect installation can cause malfunctioning and the loss of explosion protection.

Utilization 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.

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.

Transport and storage is permissible in original packaging only.

Store the switch module in a dry place.

Assembly, installation
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
Risk of serious accidents due to damaged parts.

Before assembly, ensure the perfect condition of the components.

Mounting the switch module:
- Make sure the switch module to be attached is intact (no cracks).
- Put the switch module on the mounting rail.
- Align the position of the switch module on the mounting rail at the actuating element.

Contact arrangements:

Type 07-3321-1100
2 N/C contacts

Type 07-3321-1200
2 N/O contacts

Type 07-3321-1400
1 N/O contact and 1 N/C contact

Note
The assembly of the actuating element is described in the operating instructions for actuating elements, type 05-0003-00*****.
Commissioning
Before commissioning, check that:

- The switch module has been mounted and installed in compliance with regulations.
- The switch module is not damaged.
- The connection has been established properly (make sure the cores are secure).
- Functional and recurring inspections must be conducted at regular intervals. The plant operator must define the test intervals for the respective application. The properties of AgSnO₂ contacts must be taken into account in the case of low supply voltage (DC 24V) and long periods between actuation. I.e. used in applications with low voltage/low current, such as PLC signal-switching, and in saline or other corrosive environments it is recommended to increase test interval frequency to minimum once per year.

Operation

DANGER
Death or serious injury through improper use.

- The switch 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 switch modules, actuating elements, actuators, screw fittings, sealings and cables regularly for cracks and damage. Make sure that they are properly established.
- Functional and recurring inspections must be conducted at regular intervals. The plant operator must define the test intervals for the respective application. The properties of AgSnO₂ contacts must be taken into account in the case of low supply voltage (DC 24V) and long periods between actuation. I.e. used in applications with low voltage/low current, such as PLC signal-switching, and in saline or other corrosive environments it is recommended to increase test interval frequency to minimum once per year.

Fault Clearance

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

- Use original parts only as replacements. 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 considering this operational instruction. Defective actuating elements can be removed from the switch module and replaced by functioning actuating elements of the same type.

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

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 switch module and the actuating element contain metal and plastic parts. Therefore the statutory requirements for disposing of electronic scrap must be observed.
## Switch module

**Type 07-3321-1*00**

### Operational Instruction (Translation)

**EU Konformitätbsbestimmung**  
**EU Attestation of Conformity**  
**Attestation UE de conformité**

<table>
<thead>
<tr>
<th>Wir</th>
<th>We</th>
<th>Nous</th>
</tr>
</thead>
<tbody>
<tr>
<td>erklären in alleiniger Verantwortung, dass das Produkt Schaltmodul Steuerschalter ComEx Schaltmodul, 4-polig</td>
<td>declare under our sole responsibility that the product Switch Module Control Switch ComEx Switch module, 4-pole</td>
<td>attestons sous notre seule responsabilité que le produit Élément de contact Interrupteur de commande Module de commutation, 4-pôle</td>
</tr>
</tbody>
</table>

Typ 07-3321-********, 07-3331-********, 07-3381-********

|---------------------------|----------------|----------------|

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

CML 17 ATEX 1105 U*, Issue 3  
2276, CML B.V., Hoogoorddreef 15, 1101BA Amsterdam, NL

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**The Ex-component is a part of an electrical apparatus or a module, marked with the symbol "E", which is intended to be used alone and requires additional consideration when incorporated into electrical apparatus or systems for use in explosive atmospheres.**

Le composant Ex est partie d'un matériel électrique ou d'un module, portant le symbole "E", qui ne devrait pas être utilisé seul et nécessite une certification complémentaire lorsqu'il est incorporé à un matériel électrique ou à un système pour atmosphères explosives.  

Les caractéristiques du composant ainsi que les conditions d'intégration dans des appareils ou des systèmes de protection sont décrites dans l'instruction d'emploi du composant.

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0044  
Bad Mergentheim, 23.08.2019

i.A. Simon Dühringer  
Product Manager Ex  

i.V. Cristian Olareanu  
Team Leader Certification Center