

Control and signal device actuators and accessories

Type 07-3400-****/****



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Note on instructions

When working in hazardous areas, the safety of personnel, environment 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 every one 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

For the ComEx modules type 07-33**-****/**** there are a large number of control and signal device actuator are available in different versions. All control and signal device actuator are made of high-quality thermoplastic and can be used in almost all potentially explosive areas.

The Control and signal design devices enables easy and safe mounting and can be complemented by useful accessories. The components are developed and certified for global hazardous areas.

Explosion protection

Notified Body Number	CE 0044
Approved Body Number	UK 2503
ATEX/UKEX Ex protection type	Ⓜ II 2G Ex eb IIC Gb Ⓜ II 2D Ex tb IIIC Db
ATEX/UKEX Certification	CML21 ATEX31132U CML22 UKEX3332U
IECEX Ex type of protection	Ex eb IIC Gb Ex tb IIIC Db
IECEX certificate number	IECEX CML 21.0128U
CEC (UL Mark)	Ex eb IIC Gb Ex tb IIIC Db Class I, Division 2, Groups A, B, C, D Class II, Division 2, Groups F, G Class III, Division 2
CEC (UL Mark)	Class I, Zone 1, AEx eb IIC Gb Zone 21, AEx tb IIIC Db Class I, Division 2, Groups A, B, C, D Class II, Division 2, Groups F, G Class III, Division 2
UL certificate number	UL E184198
Operating temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Service temperature	-55 °C to +70 °C (-67 °F to +158 °F) (related to explosion protection acc. to EN IEC 60079-0)

For further approvals and certificates, see www.bartec.com

Technical data

Degree of protection	Up to IP67 acc. to EN 60529 and NEMA 4X acc. to UL 50E. Requires correct installation in a mounting hole on an enclosure with appropriate degree of protection.
Mounting	– Installation in enclosures with a wall thickness of 1mm to 6 mm (0.04 in to 0.24 in) – Suitable for through-holes 30.3 mm (1.19 in) – Torque fixing nut 2.8 to 3.4 Nm
Mechanical risk level	High
Dimensions	See selection chart on page 3
Weight	See selection chart on page 3



Safety Instructions

The control and signal device actuators may be used only within the specified service and operating temperature.

Utilisation in areas other than those specified and the modification of the product by any one 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, IEC/EN 60079-14 and all relevant installation and operating regulations must be observed.

The control and signal device actuators may be used only if it is in a clean and undamaged condition. It is not permissible to modify the actuators in any way.

Marking


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

	DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	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

Please see the Attestation of Conformity.

Transport, Storage


	NOTICE Control and signal device actuators damage through incorrect transport or incorrect storage. <ul style="list-style-type: none"> • Transport and storage is permissible in original packaging only. • Store the control and signal device actuators in a dry place.
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Assembly and Commissioning

	WARNING Risk of injury due to incorrect proceedings. <ul style="list-style-type: none"> • Only authorized and qualified personnel may do any of the assembly, disassembly, installation and commissioning work. • Use suitable tools.
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Assembly/Disassembly

	NOTICE Damage to control and signal device actuators due to incorrect installation dimensions. <ul style="list-style-type: none"> • The minimum spacing between the mounting holes must be observed.
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	NOTE Installation dimensions and assembly drawings, see page 5.
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Commissioning

Before commissioning, check that:

- The device has been installed correctly.
- The device is not damaged.

Installation

Schedule of Limitations

The following limitations relate to safe installation and/or use of the components.

- When the components are installed to electrical equipment, the service temperature of the components shall be within -55°C to +70 C.
- Under certain extreme circumstances, the component may be considered to be a potential electrostatic charging hazard. The risk of electrostatic discharge shall be minimized as stated in IEC 60079-0 clauses 7.4. and 7.4.3.
- The control and signal device actuators, type 07-3400-A***/**** (push button), and type 07-3400-P***/**** (mushroom push button), shall only be used in combination with the BARTEC modules type 07-332*-****/**** or type 07-3382-****/****.

- To confirm with IEC 60947-5-5 & UL 60947-5-5 the E-stop twist and pull to release actuators 07-3400-R***/**** & 07-3400-N***/****, have to be used in combination with the ComEx Modules. (combinations of E-stop twist with 4-pole ComEx switch module type 07-3382-* is not allowed. In addition, a yellow background is required, which can be created using the BARTEC background sticker 05-2144-1097 or protective collar 05-0032-0019.
- In the case of the pushbutton type 07-3400-A* and double pushbutton 07-3400-C*, it is absolutely necessary to attach an enclosed colored label.

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 and all relevant installation and operating regulations must be observed.

It is recommended to formulate a maintenance plan according to standards.

Maintenance

WARNING

Risk of serious accidents due to damaged parts.

- Check actuators regularly for cracks and damage. Make sure that they are properly established.

NOTICE

Damage to actuators due to incorrect cleaning.

- It is not allowed to clean control and signal device actuators with compressed air.

The operator of the control and signal device actuators 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 control and signal device actuators are defective if it no longer actuates the attached command equipment or if the illuminated disc becomes damaged. Defective actuators cannot be repaired.

Defective control and signal device actuators can be taken off and replaced by functioning actuators of the same type considering this operational instruction.

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 contain metal and plastic parts. Therefore the statutory requirements for disposing of electronic scrap must be observed.

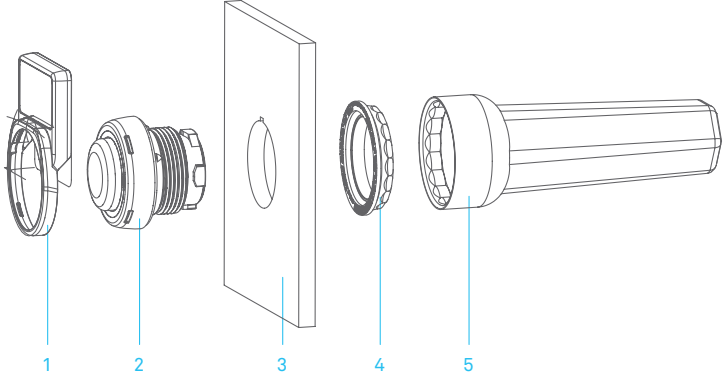
Service-Address

BARTEC GmbH
Max-Eyth-Str. 16
97980 Bad Mergentheim
Germany

Phone: +49 7931 597-0
info@bartec.com



Mounting of the actuators

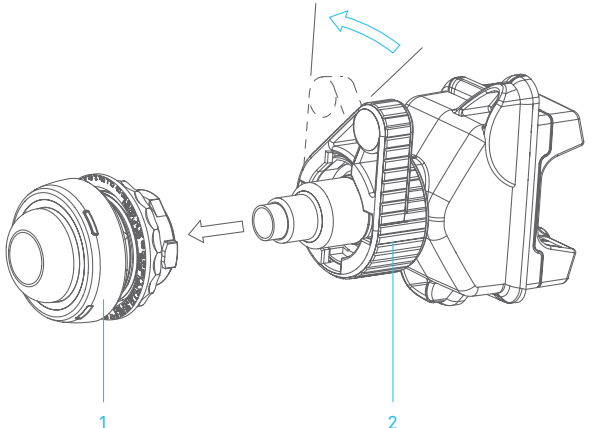


1	shield holder
2	Control and signal device actuator
3	Enclosure with wall thickness of 1 to 6 mm (0.04 to 0.24 in) with a mounting hole $30.3^{+0.3}$ mm (1.2+0.01 in)
4	Fixing nut, must be tight a torque of 2.8 - 3.4 Nm (2 - 2.5 lb.ft)
5	Torquing tool

The control and signal device actuators may optionally be provided with one of the following accessories:

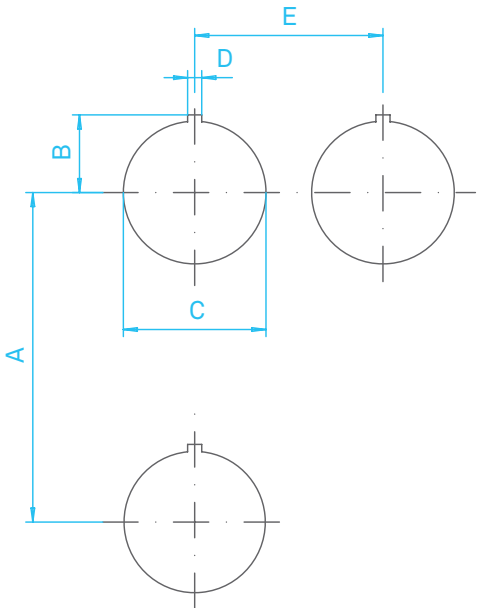
- protective collar
- locking device
- shield holder
- marking clip
- printed labels

Assembly of Functional Modules with Bayonet Fixing



1	Control and signal device actuator
2	ComEx module type 07-33**-* ^{***} / ^{****}

Installation Dimensions



	mm	in
A	70	2.95
B	$16.5^{+0.2}$	$0.65^{+0.008}$
C	$\varnothing 30.3^{+0.3}$	$\varnothing 1.2^{+0.01}$
D	$3^{+0.1}$	$0.12^{+0.004}$
E	40	1.6

Mounting hole with cut-out for anti-twist protection, typical position: top (12 o'clock position).

Minimum spacing for the mounting boreholes:

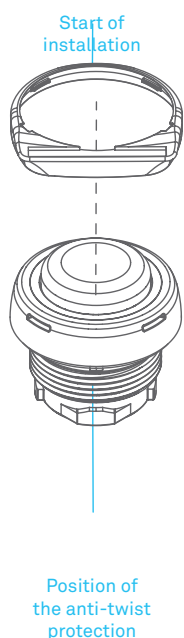
- horizontal 40 mm (1.6 in)
- vertical 70 mm (2.8 in)

Chamfer or rounding from 0.1 mm up to 0.3 mm (0.004 up to 0.01 in) on outer surface of hole is required.

If the control and signal device actuators and modules are not placed directly below each other in a grid structure, the row spacing of 75 mm must be maintained.

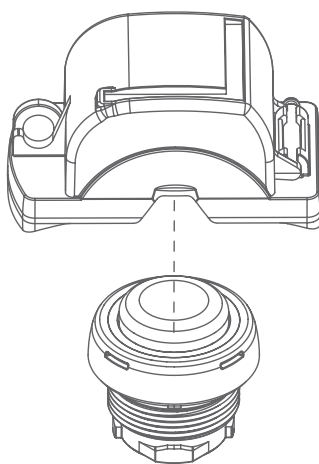
Mounting information

Marking clip/Shield holder



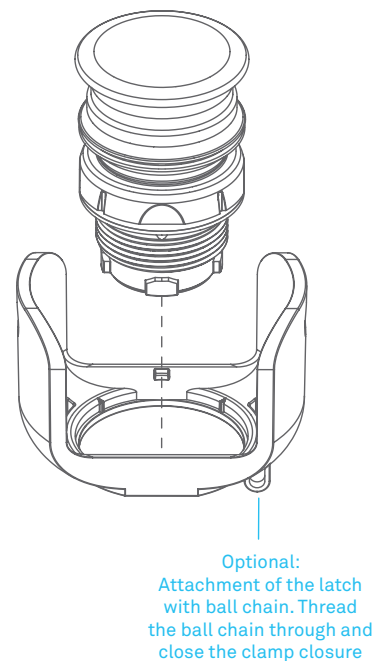
When mounting, first hook the marking clip/shield holder into the attachment from above on the marked side and then latch it into place by pressing it into the opposite side. Note the position relative to the anti-rotation device.

Locking device



Attach the holding frame of the locking device to the actuator from above.

Protective collar



Slide the protective collar onto the actuator from below as far as it will go. Note the position relative to the anti rotation protection. Optionally, the seal of the actuator can also be removed and reattached after sliding on the protective collar.

Konformitätsbescheinigung
 Attestation of Conformity
 Attestation de conformité



Nº 01-3400-7C0001

Wir	We	Nous
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BARTEC GmbH
 Max-Eyth-Straße 16
 97980 Bad Mergentheim
 Germany

erklären in alleiniger Verantwortung, dass das Produkt Betätigungsvorsätze	declare under our sole responsibility that the product Control and signal device actuators	attestons sous notre seule responsabilité que le produit Têtes de commande
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Typ 07-3400-**/******

auf das sich diese Erklärung bezieht den Anforderungen der folgen- den Richtlinien (RL) entspricht ATEX-Richtlinie 2014/34/EU RoHS-Richtlinie 2011/65/EU und mit folgenden Normen oder nor- mativen Dokumenten übereinstimmt	to which this declaration relates is in accordance with the provision of the following directives (D) ATEX-Directive 2014/34/EU RoHS-Directive 2011/65/EU and is in conformity with the following standards or other normative documents	se référant à cette attestation correspond aux dispositions des directives (D) suivantes Directive ATEX 2014/34/UE Directive RoHS 2011/65/UE et est conforme aux normes ou docu- ments normatifs ci-dessous
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EN IEC 60079-0:2018
EN IEC 60079-7:2015/A1:2018

EN 60079-31:2014

Verfahren der EU-Baumuster- prüfung / Benannte Stelle	Procedure of EU-Type Examination / Notified Body	Procédure d'examen UE de type / Organisme Notifié
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CML 21ATEX31132 U^(*) Issue 0
2776, CML B.V., Hoogoorddreef 15, 1101BA Amsterdam, NL

(*) 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. Merkmale dieser Komponente sowie die Bedingungen für ihren Einbau in Geräte und Schutzsysteme siehe Betriebsanleitung der Komponente.	(*) 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. Characteristics and how the component must be incorporated into equipment or protective systems see operation manual of the component.	(*) 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 a un matériel électrique ou à un système pour atmosphères explosives. 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.
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Bad Mergentheim, 26.07.2023

i.A. Simon Dyhringer
 i.A. Simon Dyhringer

Product Manager Ex e

S. Mika
 i.A. Steffen Mika

Team Leader Certification
 Management R&D ESS

BARTEC

BARTEC GmbH
Max-Eyth-Str. 16
97980 Bad Mergentheim
Germany

Phone: +49 7931 597-0
info@bartec.com

bartec.com