

# ComExflex Modules with junction box

Type 07-33.3-5.../....



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#### 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 ComEx<sup>flex</sup> Modules with junction box with cable gland is designed for combining with various function modules. Selection chart, see page 3.

Two screws are used to connect the junction box to the respective function module.

The ComEx<sup>flex</sup> Modules with junction box allows a conductor to be connected, which can be assembled either to order or by the customer.

#### **Explosion protection**

Notified Body Number	0044
Approved Body Number	2503
ATEX/UKEX Ex type of protection	<ul><li></li></ul>
	Lamp module or illuminaten button activated by intrinsically safe circuits   Il 2G Ex db eb ia IIC T6 Gb  Il 2D Ex tb ia IIIC T80°C Db*  (*only compliant with Type 05-0003-00**/****)
Certification	CML 17ATEX 1117X CML 21UKEX1716X
IECEx Ex type of protection	Ex db eb IIC T6 Gb Ex db eb ia IIC T6 Gb Ex tb IIC T80 °C Db Ex tb ia IIC t80 °C Db
Certification	IECEx CML 17.0055X
Ambient temperature ranges	-55 °C to +40 C°/+50 °C/+60 °C (-67 °F to 104 °F/+122 °F/140 °F)
	Depends on the function module; observe the specifications on the type label
Approved for zones	1, 2 and 21, 22

#### Technical data

Protection class	Function module with junction box and actuating element: Up to IP66/IP67
Weight	Approx. 40 g (0.09 lb)
Electrical parameters	See operational instruction of the respective function module
Cable gland clamping range	- 5 to 10 mm (0.2 to 0.39 in)
Enclosure material / manufacturing process	Thermoplastic / injection moulding
Mounting	Screwed to the function module
Shock resistance	DIN EN 60068-2-27:30 g 18 ms
Dimensions	See page 3.

### Safety Instructions

The ComEx<sup>flex</sup> Modules with junction box 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.

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

Before commissioning or restarting operation, check compliance with the applicable laws and directives.

The ComEx<sup>flex</sup> Modules with junction box may be used only if it is in a clean and undamaged condition. It is not permissible to modify the junction box 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.

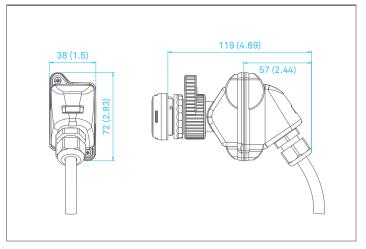


**NOTE** Important instructions and information on effective, economical and environmentally compatible handling.

#### Standards conformed to

Please See Attestations of Conformity.

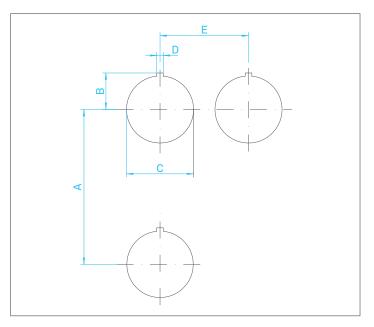
#### Dimensions in mm (in)





#### NOTE

Observe the minimum bending radii of the inserted cables.



#### **Dimensions**

	mm	in
A*	70	2.76
В	16.5 ± 0.2	0.65 ± 0.008
С	Ø30.3 + 0.3	Ø1.9 + 0.012
D	3 ± 0.1	0.12 ± 0.004
E*	40	1.58

 $<sup>^{\</sup>star}$  Recommended spacing for mushroom push-button, slam button, and: position selector switches with protective shroud: 100 mm (3.9 in).

# Transport, Storage



#### **NOTICE**

The ComEx  $^{\mbox{\scriptsize flex}}$  Modules with junction box damage through incorrect transport or incorrect storage.

Transport and storage is permissible in original packaging only.

# Commissioning

#### **WARNING**

#### Risk of serious injury due to incorrect proceedings.

- Only authorized and qualified personnel may do any of the assembly, disassembly, installation and commissioning work.
- Install the ComEx<sup>flex</sup> Modules with junction box as a stationary unit and protected it against the risk of mechanical damage as well as the risk of electrostatic charge.
- In potential explosive dust atmosphere the ComEx<sup>flex</sup>
  Modules with junction box shall be installed with a
  separately certified actuator element of type 05-000300\*\*/\*\*\*\* of BARTEC.
- · Install cable firmly.
- · Use suitable tools.

#### Assembly/disassembly

#### NOTICE



#### Property damage due to incorrect tightening torques.

 Loose or excessive tightening of the thread or the cap nut can affect the type of protection, the density, or the strain relief. The tightening torques are dependent on the cables and conductors used. They have to be determined by the operator. The cable gland and the cap nut have to be tightened firmly.

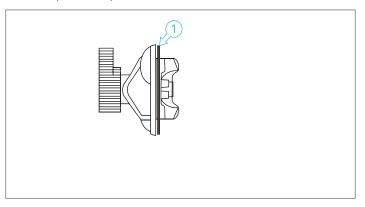


**NOTE** The switch module in the sketch serves as an example of all function modules.

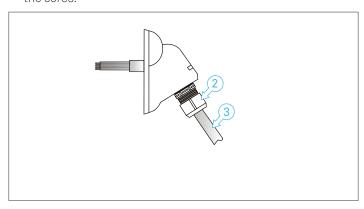
#### Mounting the junction box:

- Make sure the junction box and the sealings to be fitted are

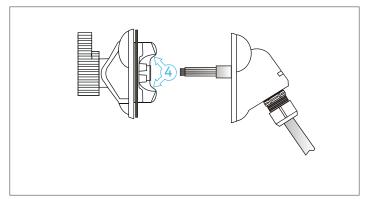
intact (no cracks).



- Put the sealing (1) with the round side facing downwards into the circumferential groove.
- Strip approx. 40 mm (1.58 in) from the length of the conductor and remove approx. 6 mm (0.24 in) conductor insulation from the cores.



- Open the cap nut (2) far enough to allow the conductor to be inserted.
- Feed the conductor (3) into the cable gland on the junction box until there is sufficient length available for preparing the conductor connection.
- Close the cap nut (2).

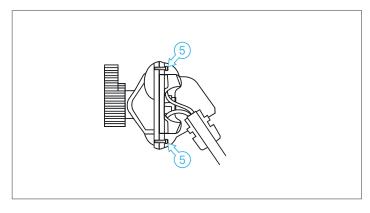


- Connect the conductors (4).

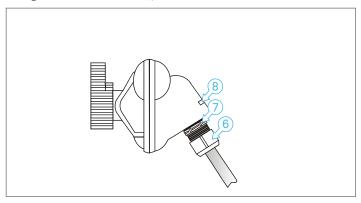


**NOTE** The conductor connection and the terminal assignment for the individual function modules are described in the operating instructions for each function module.

Push the junction box firmly onto the function module.



- Tight the screws (5). Torque 0,5 - 0,6 Nm (0,36-0,44 lb.ft).



- Tighten the cap nut (6) 1,3 Nm (0,96 lb.ft)(fixing nut (7), max. torque 2.0 Nm (1.46 lb.ft).
- Open the clip to take out the label (8), write on it and put it back in again.

#### Commissioning

Before commissioning, check that:

- The ComEx<sup>flex</sup> complete device has been installed in compliance with regulations.
- The ComEx<sup>flex</sup> complete device is not damaged.
- The connection has been established properly.

#### Maintenance and Fault Clearance



#### WARNING

#### $\label{lem:reconstruction} \textbf{Risk of serious injury due to incorrect proceedings.}$

- Only authorized qualified personnel may do any of the work relating to maintenance and fault clearance.
- IEC/EN 60079-17 must be observed.

The operator of the ComEx<sup>flex</sup> Modules with junction box must keep it in good condition, operate it properly, monitor it and clean it regularly.

#### Maintenance



#### WARNING

#### Risk of serious accidents due to damaged parts.

 Check junction boxes, sealings, and cables regularly for cracks and damage. Make sure that they are properly established.



#### NOTICE

# ComEx<sup>flex</sup> Modules with junction box damage due to incorrect cleaning.

ComEx<sup>flex</sup> Modules with junction box damage due to incorrect cleaning.

#### Fault Clearance



#### **WARNING**

#### Risk of serious injury due to use of nonorginal spare parts.

Use original parts only as replacements. The ComEx<sup>flex</sup>
Modules with junction box are defective if they have cracks
or other damage or if the cable no longer fits absolutely
securely. Defective ComEx<sup>flex</sup> Modules with junction box
cannot be repaired; They must be replaced considering this
operational instruction.

# Accessories, Spare Parts

For further accessories and spare parts, see BARTEC catalogue.

# Disposal

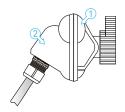
The components in the ComEx<sup>flex</sup> Modules with junction box contain metal and plastic parts. Therefore the statutory requirements for disposing of electronic scrap must be observed (e.g. disposal by an approved disposal company).



#### Combinations with modules

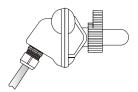
#### Illustration

#### Description and type/order number



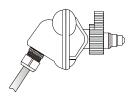
#### ComExflex Switch Module with Junction Box

 $\label{eq:comex} \mbox{ComEx}^{\mbox{\tiny flex}} \mbox{ Switch Module (1) Type } \mbox{07-3323-4***/**** (details see } \mbox{\bf Link}) \\ \mbox{ComEx}^{\mbox{\tiny flex}} \mbox{ Junction Box (2) Type } \mbox{05-0042-0050}$ 



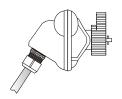
#### ComExflex Illuminated Indicator Module with Junction Box

 $\label{eq:comExflex} ComEx^{\text{flex}} \ Illuminated \ Indicator \ Module \ (1) \ Type \ 07-3353-4***/***** (details see \ \underline{\textbf{Link}}) \\ ComEx^{\text{flex}} \ Illuminated \ Indicator \ Module \ Ex \ i \ (2) \ Type \ 05-0042-0050$ 



#### ComEx<sup>flex</sup> Illuminated Push Button with Junction Box

 $\label{lem:comExflex} ComEx^{\rm flex} \ Illuminated \ Push \ Button (1) \ Type \ 07-3363-4***/**** \ (details see \ \underline{Link}) \ ComEx^{\rm flex} \ Illuminated \ Push \ Button \ Ex \ i \ (2) \ Type \ 05-0042-0050$ 



#### $\textbf{ComEx}^{\textbf{flex}}\,\textbf{Control}\,\textbf{and}\,\textbf{switching}\,\textbf{unit}\,\textbf{with}\,\textbf{Junction}\,\textbf{Box}$

 $\label{lower_control} ComEx^{\rm flex} \mbox{ Control and switching unit (1) Type 07-3373-4***/**** (details see $$\underline{\text{Link}}$)$ $ComEx^{\rm flex}$ Junction Box (2) Type 05-0042-0050$ 

# Service Address

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Phone: +49 7931 597 0 Fax: +49 7931 597 119 EU Konformitätserklärung EU Declaration of Conformity Déclaration UE de conformité Nº 01-3300-7C0001-C

Verfahren der EU-Baumuster-

prüfung / Benannte Stelle



Wir We Nous **BARTEC GmbH** Max-Eyth-Straße 16 97980 Bad Mergentheim Germany erklären in alleiniger declare under our sole attestons sous notre seule Verantwortung, dass das Produkt responsibility that the product responsabilité que le produit Steuer-, Schalt- und Control, Switching and Commande, commutation et Anzeigemodul **Display Module** module afficheur Typ 07-33\*3-5\*\*\*/\*\*\*\* auf das sich diese Erklärung to which this declaration relates is in se référant à cette attestation bezieht den Anforderungen der folgenaccordance with the provision of the correspond aux dispositions des direcden Richtlinien (RL) entspricht following directives (D) tives (D) suivantes ATEX-Richtlinie 2014/34/EU ATEX-Directive 2014/34/EU Directive ATEX 2014/34/UE EMV-Richtlinie 2014/30/EU EMC-Directive 2014/30/EU Directive CEM 2014/30/UE RoHS-Richtlinie 2011/65/EU RoHS-Directive 2011/65/EU Directive RoHS 2011/65/UE and is in conformity with the und mit folgenden Normen oder noret est conforme aux normes ou documativen Dokumenten following standards or other ments normatifs ci-dessous normative documents übereinstimmt EN IEC 60079-0:2018 EN 60079-31:2014 EN 60079-1:2014 EN 61000-6-2:2005 EN 60079-7:2015/A1:2018 EN 61000-6-4:2007/A1:2011

Notified Body
CML 17ATEX1117X - Issue 2

Procedure of EU-Type Examination /

2776, CML B.V., Hoogoorddreef 15, 1101BA Amsterdam, NL

**C**€<sub>0044</sub>

Bad Mergentheim, 19.07.2022

Product Manager Ex e

i.A. Simon Dyhringer

EN 60079-11:2012

Certification Manager R&D

Procédure d'examen UE de type / Organisme Notifié

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