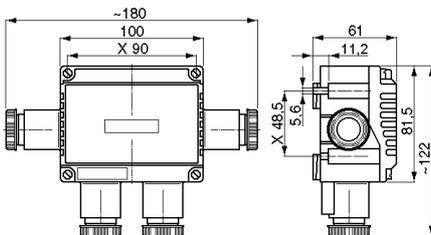


Junction box GHG 791 02

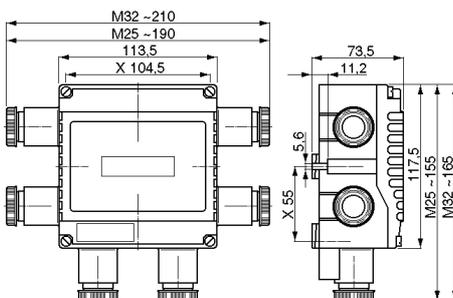


Dimensions in mm

Junction box GHG 791 01



Junction box GHG 791 02



X = fixing dimensions

1 Technical data

Junction box GHG 791 01/GHG 791 02

EC type examination certificate:	PTB 00 ATEX 3108	
Marking acc. to 94/9/EC and standard:	EN 60079-0	⊕ II 2 G Ex e d m ia IIC T6 ⊕ II 2 D Ex tD A21 IP 66 T80°C
IECEx certificate:	IECEx BKI 07.0034	
Category of application:	IEC60079-0	Ex e d m ia IIC T6 Ex tD A21 IP 66 T80°C
Rated voltage:	up to 690 V	
Rated current for GHG 791 01		
Rated current with	2.5 mm ² :	max. 22 A ⁽¹⁾
Rated current with	4.0 mm ² :	max. 30 A ⁽¹⁾
Rated current with	6.0 mm ² :	max. 39 A ⁽¹⁾
Rated current for GHG 791 02		
Rated current with	2.5 mm ² :	max. 22 A
Rated current with	4.0 mm ² :	max. 30 A ⁽¹⁾
Rated current with	6.0 mm ² :	max. 39 A ⁽¹⁾
Rated current with	10.0 mm ² :	max. 22 A (with pin cable lug)
Perm. ambient temperature:	-20° C up to +40° C (catalogue version)	
(Special versions permit deviating temperature ranges.)		
Perm. storage temperature in original packing:	-20° C up to +40° C	
Protection category acc. to EN/IEC 60529 :	IP 66 (catalogue version)	
Insulation class acc. to EC/IEC 61140:	I- with internal earth plate II- is complied with by the junction boxes	
Supply terminal:	1 mm ² up to 6 mm ² cross-section	
GHG 791 01	4 supply terminals + 1 PE (4x4mm ²)	
GHG 791 02	6 supply terminals + 2 PE (4x4mm ²) 2 supply terminals + 1 PE (2x10 mm ² with pin-terminal)	

Row terminals are possible in accordance to order and certification.		
Terminal capacity:	4 x 4 mm ² single-strand 3 x 4 mm ² multi-strand 3 x 6 mm ² single-strand	
Max terminal capacity:	1 x 10 mm ² single-strand with pin-terminal + 1 x 2.5 mm ² or 1 x 10 mm ² multi-strand with pin-terminal + 1 x 2.5 mm ²	

Cable entries GHG 791 01:	2x M25	Ø 10 – 17 mm
	4x M25	Ø 10 – 17 mm
with internal earth plate	4x M20 (drilling + 2 blanking plug)	
Cable entries GHG 791 02:	4x M25	
	6x M25	
	4x M32	
with internal earth plate	6x M20 (drilling + 4 blanking plug)	
Cable entries GHG 791 01 for 10 mm ²	4x M25 plastic / metal	
Cable diameter and test torques of cap nut:		
Silicon seal	M25	Ø 4- 11 mm 1.6 Nm
Silicon seal	M25	Ø 8- 17 mm 1.5 Nm
EPDM seal	M25	Ø 10- 17 mm 4.5 Nm
EPDM seal	M32	Ø 12- 21 mm 4.0 Nm

Test torques:		
Terminals:	2.5 Nm	
Cover screws:	1.2 Nm	
Cap nut of the M32 entry:	4.0 Nm	
Weight GHG 791 01:	2 x M25	approx. 0.29 kg
	4 x M25	approx. 0.32 kg
	with internal earth plate	approx. 0.22 kg
Weight GHG 791 02:	4 x M25	approx. 0.50 kg
	6 x M25	approx. 0.55 kg
	4 x M32	approx. 0.55 kg
	6 x M32	approx. 0.65 kg
	with internal earth plate	approx. 0.50 kg

(1) At ambient temperature >40 °C use temperature resistant cable.

Junction box GHG 79101



Fig. 1



2 Safety instructions



The junction boxes are not suitable for Zone 0 and Zone 20 hazardous areas. The temperature class and explosion group marked on the junction boxes shall be observed.

The requirements of the IEC/EN 60079-14 regarding excessive dust deposits and temperature to be considered from the user.

They shall be used for their intended purpose and in perfect and clean condition.

Prior to taking the junction boxes into operation, they shall be checked in accordance with the instruction as per section 6.

Observe the national safety rules and regulations for prevention of accidents as well as the safety instructions included in these operating instructions and set in italics the same as this text!

3 Conformity with standards

They have been designed, manufactured and tested according to the state of the art and to DIN EN ISO 9001:2008 and EN ISO/IEC 80079-34:2011.

The apparatus are conform to the standards specified in the EC-Declaration of conformity, enclosed separately.

4 Field of application

The junction boxes GHG 791 01 and GHG 791 02 are suitable for use in Zones 1 and 2 as well as in Zones 21 and 22 hazardous areas acc. to IEC/EN 60 079-10-1 and IEC/EN 60 079-10-2!

The enclosure materials employed, including the exterior metal parts, are made of high-quality materials which ensure a corrosion protection and resistance to chemical substances corresponding to the requirements in a "normal industrial atmosphere":

- impact resistant polyamide
- special steel AISI 316 L

In case of use in an extremely aggressive atmosphere, please refer to manufacturer.

5 Use/Properties

The junction boxes are intended for the distribution of electrical energy (e.g. light circuits, heater circuits, control circuits etc.) in hazardous areas up to max. 39A (see technical data). The temperature class, explosion group and permissible ambient temperature, see technical data.

If the conductor cross-section in the junction box is reduced, the maximum ampacity of the conductor with the smallest cross-section and the rated current of the junction box must be taken into account.

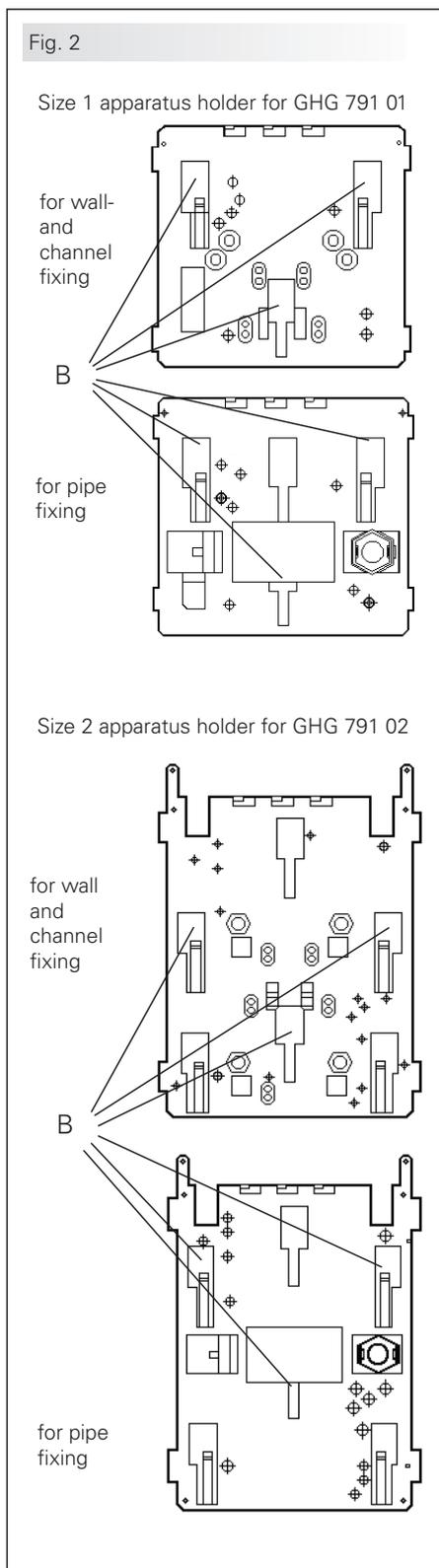
The junction boxes can also be used in a „normal industrial area“.

The data as per point 3 and 4 shall be taken into account with the use.

Applications other than described are not permitted without Cooper Crouse-Hinds's prior written consent.

For the operation, the instructions stated in section 7 of the operating instructions shall be observed.

The user alone is responsible for the appropriate use of this junction box in consideration of the basic conditions existing at the plant (see technical data).



6 Installation

For the mounting and operation, the respective national regulations as well as the general rules of engineering shall be observed. (IEC/EN 60079-14).

6.1 Mounting

The junction boxes can be mounted without opening their enclosure.

In case the junction boxes are mounted directly onto the wall, they may rest evenly only at the respective fastening points. The chosen screw shall match the fastening hole (see dimensional drawing) and it must not damage the hole (e. g. use of a washer).

The device shall be fastened diagonally with at least 2 screws.

If the screws are overtightened, the apparatus can be damaged.

The junction boxes are suitable for fixing onto Cooper Crouse-Hinds apparatus holders size 1+ 2 by means of self-cutting screws (see fig. 2, fixing point "B").

The respective mounting instructions shall be observed.

6.2 Opening the device/ Electrical connection

Before opening the apparatus, it is necessary to ensure that there is no voltage or to take suitable protective measures.

The electrical connection of the device may only be carried out by skilled staff (IEC/EN 60079-14).

The insulation of the conductors shall reach up to the terminal. The conductor itself shall not be damaged.

The properly bared conductors of the cables shall be connected, taking into account the respective regulations.

The connectible min. and max. conductor cross-sections shall be observed (see technical data).

All screws and/or nuts of the supply terminals, also of those remaining unused, shall be tightened down.

The conductors shall be connected with special care in order to maintain the explosion category.

The supply terminals are designed for the connection of copper conductors.

If multi- or fine-wire connecting cables are used, the wire ends will have to be handled in acc. with the applicable national and international rules (e. g. use of ferrules).

If more than 4 cables are introduced into the GHG 791 02 junction box, one terminal block is to be fitted with the PE bridge joined.

6.3 Cable entries (KLE); blanking plugs

To maintain the minimum degree of protection all unused entries are to be closed using the Cooper Crouse-Hinds certified blanking plugs which are supplied loose inside of the junction box (see page 4, fig. 1).

In case of sealing inserts that are cut out, it shall be ensured that the insert is properly adapted to the cable diameter. Care has to be taken that when fitting the cable entries, sealing inserts appropriate to the cable diameter are used.

When using cable entries for fixed cables it is necessary to ensure that no inadmissible high mechanical stress is applied to the cable entry or its seal.

In order to ensure the required minimum protection category, the cable glands are to be tightened down.

Overtightening might impair the protection category.

If metal glands are being used, the junction box version with the internal metal frame is to be used. To maintain the minimum degree of protection a sealing washer is to be used under the metal gland.

When using metal cable entries with a lower IP protection than that which applies to the device (see page 7, technical data), the IP protection of the whole device will be reduced.

The mounting directives applicable to the cable entries used shall be observed.

Attention: The metal frame and metal glands are to be integrated into the potential equalization.

6.4 Closing the device/ cover closure

Any foreign matter shall be removed from the apparatus.

In order to ensure the required minimum protection category, the cover screws are to be tightened down.

Overtightening might impair the protection category.

6.5 Taking into operation

Prior to taking the apparatus into operation, the tests specified in the relevant national regulations will have to be carried out.

Apart from that, the correct functioning and installation of the apparatus in accordance with these operating instructions and other applicable regulations will have to be checked.

Incorrect installation and use of the junction boxes can invalidate the guarantee.

7 Maintenance/Serviceing

The relevant national regulations which apply to the maintenance/serviceing of electrical apparatus in explosive atmospheres, shall be observed (IEC/EN 60079-17).

Before opening the enclosure make sure that the apparatus is disconnected from the voltage, or take the appropriate protective measures.

The required maintenance intervals depend on the respective application and will therefore have to be determined by the user dependent on the conditions of use.

When servicing the apparatus, particularly those parts that are decisive for the type of protection against explosion, will have to be checked.



Cleaning:

Because of the risk of an electrostatic charge, the junction boxes shall only be cleaned with a damp, non fibrous cloth or sponge!

When servicing the apparatus, particularly those parts that are decisive for the type of protection against explosion, will have to be checked (e. g. intactness of enclosure, cable glands, efficacy of the cover gaskets).

If during servicing repairs prove to be necessary, section 8 of these operating instructions will have to be observed.

8 Repairs / Overhaul / Modification

Repairs may only be carried out with genuine Cooper Crouse-Hinds spare parts.

Repairs that affect the explosion protection, may only be carried out by Cooper Crouse-Hinds or a qualified electrician in compliance with the applicable national rules. (IEC/EN 60079-19).

Modifications to the apparatus or changes of its design are not permitted.

9 Disposal / Recycling

When the apparatus is disposed of, the respective national regulations on waste disposal will have to be observed.

In order to facilitate the recycling of individual components, plastic parts have been provided with the identification mark of the plastic material used.

Subject to modifications or supplement of the product range.