

Scope: EXcite USER MANUAL BJB 125 / 150			BARTEC TECHNOR		
Date: 24.11.2014	Rev.: A	Checked by: T.H.	Approved by: EGT	Page: Page 1 of 5	Document no.: 60-DSP-5

TECHNICAL MANUAL

EXPLOSION PROOF JUNCTION BOX

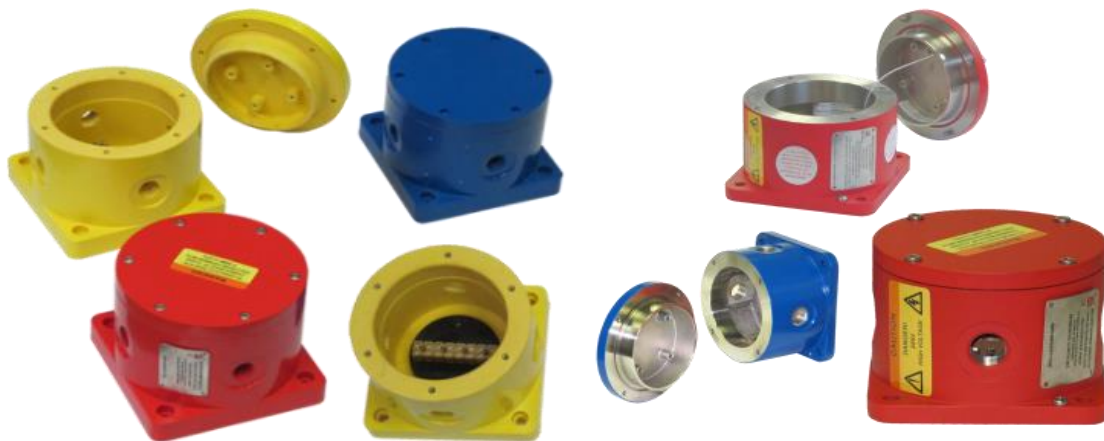
BJB 125 / 150

ATEX Marking:  II 2GD




Code: EPL Gb, Db

Ex d IIC T4/T5/T6 IP66

Ex tb IIIC Txxx°C



Marking details:

		Serial NO.:
 0470  II 2 GD	Presafe 14ATEX 5383X IECEx PRE 14.0046X	
Ex d IIC T6 Gb	IP66	
Ex tb IIIC T85°C		
T.amb: -40°C < Ta < +55°C		<input type="checkbox"/> VDC <input type="checkbox"/> AC 50/60Hz
WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT		
BARTEC TECHNOR		
STAVANGER NORWAY		

Alternative T class:

1;

Ex d IIC T5 Gb

Ex tb IIIC T100°C

T.amb: -40°C < Ta < +60°C

2;

Ex d IIC T4 Gb

Ex tb IIIC T135°C

T.amb: -40°C < Ta < +70°C

Please note that care has been taken to ensure the accuracy of our technical manual. We do not, however, accept responsibility for damage, loss or expense resulting from any error or omission. We reserve the right to make alterations in line with technical advances and industry standards.

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1.0 INTRODUCTION

BJB series Explosion-proof junction box is designed for use in Oil & Gas, Offshore Platform, Chemical, Petrochemical, Refinery and Marine Industries etc. Enclosure material is Stainless Steel (BJB 125) or GRP (BJB 150). The junction box can be used as termination box with terminals inside or equipped with other electro/ mechanical parts/ PCB etc. inside, or a combination of these.

2.0 EXPLOSION-PROOF LABELING

All products have a rating label, which carries the following important information:

Product order no.: e.g.
BJB12500ABK
(Refer to the datasheet for product order selection)

Max voltage rating: 240 VAC/VDC

Code: Ex d IIC Tx Gb
Ex tb IIIC Txxx°C

T.amb -40°C to +70°C

ATEX Marking: Gas Group and Category: II 2GD

CE Mark: 

Warning: **DO NOT OPEN WHEN AN EXPLOSIVE GAS ATMOSPHERE IS PRESENT**

Finish product serial no. (Include date of construction)

Note; exact information is given on the actual label, ref also example on page 1.

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3.0 TYPE APPROVAL STANDARD

The BJB series products have been approved according the following standards:

IEC/ EN 60079-0 General Requirements

IEC/ EN 60079-1 Flameproof Enclosure 'd'

IEC/ EN 60079-31 Dust atmosphere "t"

4.0 ZONES, GASGROUP, CATEGORY AND TEMPERATURE CLASSIFICATION

The BJB series products have been certified Ex d IIC T4~T6. This means that the units can be installed in locations with the following conditions:

Area Classification:

Zone 1: Explosive gas air mixture likely to occur in normal operation.

Zone 2: Explosive gas air mixture not likely to occur, and if it does, it will only exist for a short time.

Gas Groupings: Group IIA Propane
 Group IIB Ethylene Group
 Group IIC Hydrogen and Acetylene

Equipment Category: 2GD

EPL: Gb / Db

Temperature Range: - See label, ref page 1

5.0 INSTALLATION

General Requirement

Selection, Installation, Maintenance and repair of electrical apparatus for use in potentially explosive atmosphere should be done in according to IEC/ EN 6079-14/ -17/ -19. Product installation must be carried out in accordance with any local codes that may apply and should only be carried out by a competent electrical engineer.

Location

The unit should only be fixed to services that can carry the weight of the unit.

Mounting

The product should be mounted on a vertical surface using 4 fixing holes in the base. The fixing holes are designed to fit M5 Allen screw. Use of stainless steel fastener is recommended by Bartec Technor. The junction box can be operated in any attitude. If you need mounting plate, please contact Bartec Technor for the installation drawing of the mounting plate.

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USER MANUAL
BJB 125 / 150

BARTEC **TECHNOR**

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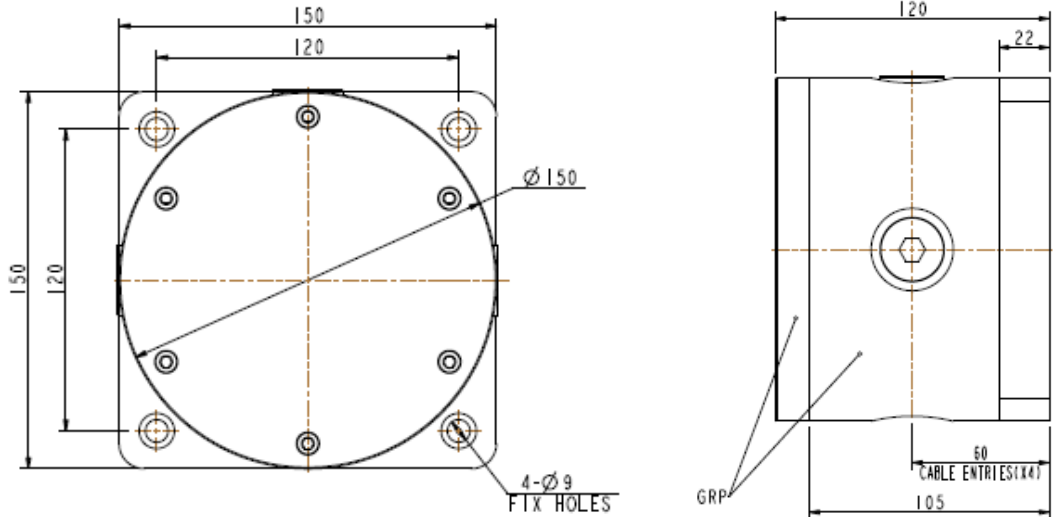
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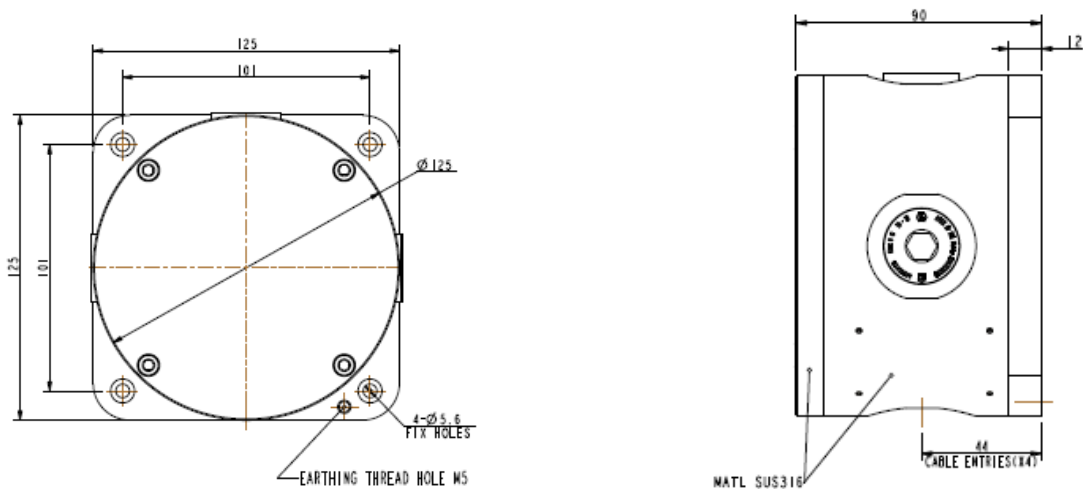
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BJB 150 (6 lid screws for BJB 150)



BJB 125 (4 lid screws for BJB 125)

6.0 WIRING

General Requirement

BARTEC TECHNOR recommends that all cables and cores should be fully identified (suggest using cable from 2.0 to 2.5 mm²). Ensure that all nuts, bolts and screws are secured. Ensure that only the right and certified cable glands are used and earthed correctly. Ensure that only the right and certified stopping plugs are used to blank off unused gland entry points. In order to maintain the IP rating of the product, we recommend SS316L for this application.

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7.0 CABLE GLAND

The BJB series product has four cable gland entries. Only cable glands approved for Ex 'd' applications can be used, which must be suitable for the type of cable being used and also meet the requirements of the Ex 'd' flameproof installation standard IEC/ EN 60079-14.

SAFETY WARNING: If the BJB is used at high ambient temperatures, i.e. over +40°C, then the cable entry temperature may exceed +70°C and therefore suitable heat resisting cable glands must be used, with a rated service temperature of at least 95°C.

If a high IP (Ingress Protection) rating is required, a suitable sealing washer must be fitted under the cable gland. When only one cable entry is used, the other one must be closed with an Ex 'd' flameproof blanking plug, which must be suitably approved for the installation requirements.

8.0 MAINTENANCE

During working life of the product, little or no maintenance is required. GRP are resistant to most of the acids, alkalis and chemicals. If abnormal or unusual environmental conditions occur due to accident etc., visual inspection is recommended.

As to avoid electrostatic charge build-up, only exterior of the product can be cleaned with damp cloth. If spare parts are required, these can be supplied by BARTEC TECHNOR.

If any failure occurs but not caused by human factor, the product can be returned to Bartec Technor for free repair or replacement during warranty period.

9.0 CONDITIONS FOR SAFETY USE

- i. This apparatus is suitable to be used only in ambient temperature as stated below at the label
- ii. Other than product manufacturer, painting and surface finishing are not permitted by the third party.
- iii. When used in dusty atmosphere, flameproof cable entry devices or stopping plugs have to be selected and installed carefully in order to maintain the IP rating (IP66) of the product.
- iv. The maximum power of equipment installed inside is 50W but consideration should be taken to the service temperature as well as the temperature class for the junction box as well as associated apparatus.

Max. voltage; 240 VAC/ VDC