Explosion-proof Junction Box

Installation and Operation Instructions



EX-SERIES

8500 Hansen Rd. Houston, TX 77075 USA Tel: (713) 943-0340 availinfra.com/rig-a-lite/



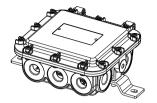












This product comply with below standard:

UL 50 / UL 50E / UL508

UL1203

UL121201

C22.2 No. 94.1

C22.2 No. 94.2

C22.2 No.25 / C22.2 NO.14

C22.2 No.30

C22.2 No.213

CSA/UL 60079-0

CSA/UL 60079-1

CSA/UL 60079-7

CSA/UL 60079-31

Certifications:

Class I. Division 1. Group B. C. D T6

Class I, Division 2, Group A, B, C, D T4A

Class II, Division 1, Group E, F, G

Class II. Division 2. Group F. G.

Class III

Fx db IIB+H2 T6 Gb

Ex eb IIC T4 Gb

Ex tb IIIC T80°C Db

Zone 1. AEx db IIB+H2 T6 Gb

Zone 1. AEx eb IIC T4 Gb

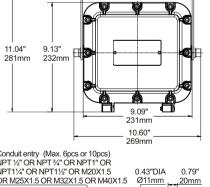
Zone 21. AEx tb IIIC T80°C Db

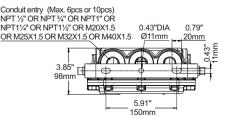
Type 4X IP66

Typical application sites are: Chemical plant, oil and gas refineries, drilling rigs, petrochemical facilities, pulp and paper plant, foundries, waste and sewage treatment plant, pharmaceutical plant, mining, power generation, paint spray booths and where flammable vapors, gases, ignitable dusts, fibers or flying are present.

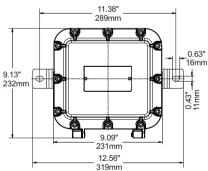
Physical Dimensions (Unit: mm/inch)

Trunnion Mount

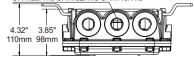




Ceiling Mount



Conduit entry (Max. 6pcs or 10pcs) NPT 1/2" OR NPT 3/4" OR NPT 1" OR NPT11/4" OR NPT11/2" OR M20X1.5 OR M25X1.5 OR M32X1.5 OR M40X1.5



Product Specifications

Model	EXJB02-X-XX		
Rated Voltage (V)	550		
Rated current (A)	20, 28, 36, 55, 62		
Max.Conductor cross section [mm2] (AWG)	4(12), 6(10), 10(8),16(6), 25(4)		
Outlook Dimensions mm (inch) (Does not include stand)	232x231x98 (9.13"x9.09"x3.85")		
Working Temperature	-60°C to +70°C (-76°F to +158°F)		
Storing Temperature	-60°C to +70°C (-76°F to +158°F)		

Model description



Installation and Operation Instructions

Dear Customers and Users:

Thank you very much for purchasing our product. In order to better understand how to use this product safely, please read this instruction patiently and carefully. And please keep the manual properly for future reference.

Warnings:

- DO NOT dismantle, modify or replace any internal electronic components. If you have any confusion during installation, please contact local dealer or contact us directly.
- 2. Please be sure to turn off the power before installation, maintenance or any other actions that may touch the Junction Box.
- 3. DO NOT install the product on the surface that is easy to be damaged and deformed.
- 4. Under no circumstances can this product be covered with thermal insulation or any other similar materials.
- 5. If emergency or abnormality occurs, please cut off the power firstly and contact your local dealer as soon as possible.
- 6. The product is suitable for both indoor and outdoor use.
- 7. Any installation and maintenance must be performed by certified electricians only.
- 8. Do not open the enclosure when the product is working.
- 9. WARNING DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT.

Safety Installation Guides

It's very important to cut off the power before removing the fixtures. Also, installer needs to be a qualified electrician.

· On-site installing

This manual is to provide the user with professional installation information, because the product is used in dangerous areas, so the qualified electrician is required. The inlet screw is NPT thread or metric thread (See the nameplate for details), cable entry must be installed with certified cable gland or blanking plug.

Use and setting-up

All wires need to be tested for proper connection and safe installation before use. In order to avoid the risk of electrical damage and installation safety problem, these jobs must be performed by a qualified electrician.

· Assembling and dismantling

Installer needs to read the instruction carefully before processing the assembling. Please feel free to contact the manufacturer if there is confusion during the installation.

. Training instructions for a safe use

Regards the wiring diagram please refers to installation detailed instruction below. Normally, brown (or black) wire connects to live wire, blue (or white) to nature wire, green with yellow (or green) strips to the grounding.

CAUTION: FOR CLASS I, DIVISION 1 SEAL ENTRIES WITHIN 450mm.

ATTENTION: POUR LA CLASSE I, DIVISION 1, SCELLER LES ENTRÉES DANS UN MÊME 450 mm. WARNING: POTENTIAL ELECTROSTATIC CHARGING HAZARD - SEE INSTRUCTIONS.

AVERTISSEMENT: RISQUE POTENTIEL DE CHARGE ÉLECTROSTATIQUE - VOIR LES INSTRUCTIONS.

WARNING: USE HEAT RESISTANT CABLES AND GLANDS (RATED 105°C).

AVERTISSEMENT: UTILISEZ DES CÂBLES ET DES PRESSE-ÉTOUPES RÉSISTANTSÀLACHALEUR

(ÉVALUÉ 105°C).

WARNING: DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHEREISPRESENT.

AVERTISSEMENT: NE PAS OUVRIR LORSQU'UNE ATMOSPHÈREEXPLOSIVEESTPRÉSENTE.

Mounting of product

Wiring Diagram

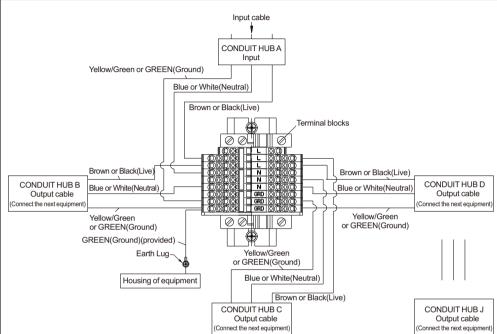
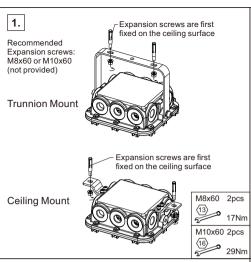


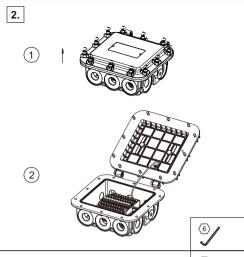
Table 1

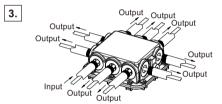
Terminal size	Max. Voltage	Max. Current	Max. Conductor cross section	Conductor cross section		Max. Number of cable cores	Max. Number of tapped entry/holes
2.5mm²	550V	20A	4 mm² (12AWG)	0.14-4 mm² (26-12AWG)	12	4	10
4mm²	550V	28A	6 mm² (10AWG)	0.2-6 mm² (24-10AWG)	12	4	10
6mm²	550V	36A	10 mm² (8AWG)	0.5-10 mm² (20-8AWG)	12	4	10
2.5mm²	550V	20A	4 mm² (12AWG)	0.14-4 mm² (26-12AWG)	15	5	10
4mm²	550V	28A	6 mm² (10AWG)	0.2-6 mm² (24-10AWG)	15	5	10
10mm²	550V	55A	16 mm² (6AWG)	0.5-16 mm² (20-6AWG)	10	5	10 or 6
16mm²	550V	62A	25 mm² (4AWG)	0.5-25 mm² (20-4AWG)	8	4	6
2.5mm²	550V	20A	4 mm² (12AWG)	0.14-4 mm² (26-12AWG)	10	5	10 or 6
4mm²	550V	28A	6 mm² (10AWG)	0.2-6 mm² (24-10AWG)	10	5	10 or 6
6mm²	550V	36A	10 mm² (8AWG)	0.5-10 mm² (20-8AWG)	10	5	10 or 6

Note:

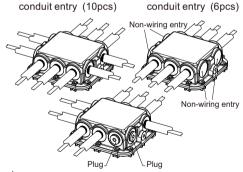
- 1. Select the cable that matches the terminal block according to Table 1.
- 2. The working current of the conductor is in accordance with Table 45.3 of UL508.
- 3. CONDUIT $\bar{\text{H}}\text{UB}$ B, C, ..., I and J can be used for Interconnect equipment. When not in use, they should be plugged with certified plugs.
- 4. This wiring diagram is a typical wiring diagram of the junction box. Customers can conduct wiring according to the local electrical regulations according to the number of terminals.
- 5. With the terminal size and number of terminals unchanged as shown in Table 1, the terminal arrangement and identification (including the model and number of Plug-in bridge) can be customized according to customer needs.







- 1. Customers can determine the specific entry and exit line locations according to their needs.
 - 2. In compliance with local electrical codes, refer to the wiring diagram for wiring.
 - 3. Available in versions with 6 conduit entries and 10 conduit
 - 4. For the conductor cross section range, please refer to the requirements on the product nameplate.

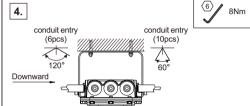


Conduit opening should be blocked with plugs when not in use.

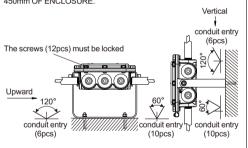
⚠ Notice:

- Corrosion inhibiting grease, such as high and low temperature grease 7017-1B, may be applied to joint surfaces before assembly. It does not harden because of aging, does not contain evaporating solvent and does not cause corrosion of joint surfaces.
- The protection level of conduit and the luminaire is above IP66.





The protection level of conduit and the product is above IP66. CAUTION: FOR CLASS I, DIVISION 1 SEAL ENTRIES WITHIN 450mm OF ENCLOSURE.



Adjustable mounting bracket angle (120° adjustable range for 6-conduit junction boxes, and 60° for 10-conduit junction boxes)

