



Distribution box Type 07-56.1- 1304

..../....

1 Product description

The metallic Ex e enclosure with flange Type 07-56.1-..../.... inspection station for the highly combustible range zone 1 and 2 are examined and certified of a designated EEC. They serve endangered range for the admission of certified components for the combustible one.

The walls of the Enclosure, lid/door and base consist of several edged and welded high-grade stainless steel of at least 1 mm thickness.

The flange plates with tapped holes for the cable and conduit entries are at least 3 mm thick. The cover is made of a lid and/or a door, which is fixed with hinges, under the span of sealing elements. The box cover is then tightened with screws with sealing elements. The enclosures are mounted with mounting brackets found outside of the enclosure wall.

The distribution boxes are used for connection with lights, devices and sensors.

The boxes meet the relevant standards EN 60079-0, EN 60079-7 and are developed, manufactured and examined in accordance with EN ISO 9001 and EN 60999.

The distribution boxes are also suitable for intrinsically safe electric circuit connections. For this application, special marking is required.

The BARTEC Varnost distribution boxes can be used in hazardous areas of both zone 1 and 2 with certified explosion sub-groups II.

2 Technical data

Material

High-grade steel 1.4404

Lid screws

Stainless Steel, captive

Seals

EPDM - 20°C to +100°C

Silicon - 55°C to +100°C

Mechanical strength acc. to EN 60079-0

Impact energy 7 Nm

Protection type acc. to EN 60529/IEC 60529

Max. IP 66

Installations

Installations for the highly combustible range must exhibit an EEC design inspection certificate. The installation of these components must take place in such a way, so that at least the enclosure remains IP 54.

Cable entries/Conduits

Connection of cables and conductors to equipment in hazardous areas require Ex-certified entries, which are suitable for respective cable and conductor types.

They must possess the protection type "e" and contain a suitable sealing gasket, so that the protection class of the control station remains at least IP 54. Metallic conductor entries must be connected to the ground. Unused holes for cable entries have to be sealed with Ex-certified plugs.

Ambient temperature range

-20 °C ≤ T_a ≤ +55 °

-55 °C ≤ T_a ≤ +55 °C with silicon seal

Explosion protection

Protection type



II 2 G Ex e II

Certification

IBExU99ATEX1118 U



3 Safety precautions

With electrical equipment, the installation and operating regulations are to be adhered (e.g. RL 1999/92/EG, RL94/9EG, IEC/EN 60079-14 and VDE0100).

The operator of the electrical equipment in hazardous area has to operate, supervise and maintain the equipment in good condition (EN 60079-14).

If any part of the equipment is damaged, it should be exchanged only with original parts (e.g. sealing gasket/cable glands).

Assembly/disassembly, operation and maintenance work should be done only by trained technical personnel.

All generally accepted legal rules and the other obligatory guidelines of industrial safety, accident prevention and environmental protection must be observed.

4 Assembly and operation

Assembly/disassembly

For assembly and operation of explosion-protected electrical equipment, relevant installation and operating regulations are to be adhered (IEC/EN 60079-14 and VDE 0100). The data on the label and the EEC design test data are to be observed. Further technical information of the Ex-distribution boxes are provided in the Bartec catalog and on the product itself.

For metallic enclosures in hazardous areas, an equipotential bonding of at least 4 mm² is necessary. The connections must be secured against self-loosening.

Metallic enclosures for intrinsically safe facilities do not have to be attached to an equipotential bonding system, except if it is required by equipment documentation.

Installation

For enclosures placed in outdoors, steps must be taken to ensure smooth operation, for example rain protected roofs, and if necessary, sufficient enclosure protection.

Operation

Each electrical equipment for a hazardous area must be selected according to the individual installation conditions. The operation of the equipment is to take place only in intact and clean condition. Electrical equipments, before putting into operation, and at certain time intervals, are to be subjected and to examination by an electrical expert. For metallic housing in hazardous areas a potential settlement with at least 4 mm² is required. The connections must be secured against accidental loosening.

Metallic housing for intrinsically safe equipment must not be connected to the potential equalization system, unless it requires the documentation of resources.

The BARTEC Varnost housing incl. installations can be used only in connection with an additional examination by a designated place into highly combustible ranges of the zone 1 and 2 according to the certified explosion sub-group II.



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5 Operating, maintenance and repair

The operator of the electrical equipment in hazardous area has to operate, supervise and maintain the equipment in good condition. (EN 60079-14).

Maintenance and repair work may be accomplished only by the technical experts.

If any part of the equipment is damaged, it should be exchanged only with original parts (e.g. sealing gasket/cable glands).

Before restarting the equipment, the applicable regulations and guidelines must be observed. For maintenance and/or repair the provided safety regulations are to be adhered.



(DO NOT OPEN WHEN ENERGIZED!)

6 Accessories, spare parts

Supplement and spare parts, refer to BARTEC catalog

7 Service address

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