**Explosion protection**

**ATEX**
- Ex type of protection
  - II 2G Ex e IIC T6/T5 Gb
  - II 2D Ex tb IIIc T80°C/T95°C Db

**Certification**
IBEExU13ATEX1001

**Environmental temperature range**
- -20°C≤T≤+55°C (T5 and EPDM Seal)
- -20°C≤T≤+40°C (T6 and EPDM Seal)
- -30°C≤T≤+55°C (T5 and Silicone Seal)
- -30°C≤T≤+40°C (T6 and Silicone Seal)

**Approved for zones**
1 and 2
21 and 22

**Technical data**

**Protection class**
(EN 60529/IEC 60529)
- Stainless steel enclosures: Max.IP 66 – enclosure with lid
- Max IP 65 – enclosure with doors
- Polyester enclosures: Max.IP 66

**Seals**
- Type 07-5H92
  - EPDM: - 20°C to + 80°C
  - Silicone: - 55°C to +100°C
- Type 07-5H95
  - Silicone: -30°C to + 80°C
  - Others: -20°C to + 80°C

**Mechanical strength**
- Impact energy: 7 Joule (in accordance with standard EN 60079-0:2009)

**Enclosure material**
- Stainless steel: Model 07-5H92
- Polyester black: Model 07-5H95

**Lid screws**
- Stainless Steel, cross-head (+)

**Recommended tightening torque**
- M4 screw: ca. 1.2 Nm
- M6 screw: ca. 1.4 Nm

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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 connection enclosures 6...10kV model 07-5H9.../... for use in potentially explosive atmosphere are made from Stainless Steel or from black Polyester. They are used to connect in-coming and out-going conductors near electrical equipment. Depending on the model, up to four live conductors are fed through the connection enclosure and connected on supporting terminals. Bartec Varnost connection enclosures may be deployed in areas with potentially explosive atmospheres as defined in Zones 1 and 2 of the certified explosion sub-group II and temperature class T5/T6 and as well as in Zones 21 and 22.

The enclosures conform to the relevant standards EN 60079-0:2009, EN 60079-7:2007 and EN 60079-31:2009 and were developed, produced and tested in accordance with ISO 9001:2008 and EN 60999.
Safety instructions
The supplied Ex empty enclosures are Un-certified components which serve as a basis for completely certified devices which then in their entirety must still be tested and approved by a specified agency for capability for use in potentially explosive areas.
The enclosure may be operated only if it is clean and not damaged in any way. Dust deposits > 5 mm (> 0.2 in) must be removed.
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 Varnost from liability for defects and any further liability.
The generally applicable statutory rules and other binding directives relating to workplace safety, accident prevention and environmental protection must be observed.
Observe the applicable laws and directives when commissioning or restarting operation.
Always follow the safety instructions on the operating equipment.

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
EN 60079-0:2012/IEC 60079-0:2011
EN 60079-7:2007/IEC 60079-7:2006-07

Transport, storage

Risk of injury due to heavy loads.
- Use an appropriate carrying aid or an appropriate means of transport (e.g. a forklift) with an adequate load-carrying ability.
- Ensure that the lifted load will not tip over or slip off.

NOTICE
Damage through incorrect transport or incorrect storage.
- Transport the empty enclosure in original packaging, handle with care, and do not drop.
- Store the empty enclosures dry in original packaging.

Assembly, installation, and commissioning

Risk of serious injury due to incorrect proceedings.
- Only qualified personnel who are authorized and trained to assemble electrical components in hazardous (potentially explosive) areas may do any of the assembly, disassembly, installation and commissioning work.
- For assembly and operation of explosion protected electrical equipment, relevant installation and operating regulations are to be observed (e.g. Betr.SichV, IEC/EN 60079-14 and series DIN VDE 0100).
- The data on the label and the EEC design test data are to be observed. Further technical information is provided in the Bartec catalog and on the product itself.
- Do not open the enclosure when energized.
- Follow the components mounting instructions/operating instructions.

Assembly / disassembly

Damage to elements due to incorrect installation dimensions.
- The minimum spacing between the mounting holes must be observed.

When processing the enclosures, attention must be paid to ensuring that there is suitable minimum spacing between individual boreholes and from the sealing edge of the enclosure so that enclosure with the fittings will be able to withstand an impact test.
The minimum spacing depends on the geometrical dimensions of the built-in components, a longer lever will require an increase in the minimum spacing and accordingly must be determined specially.
For accommodating use only components certified for the Ex areas such as terminals, switches, cable glands measuring instruments, control equipment and display units.

Check when assembling:
- Use suitable tools.
- Pay attention to the type of mounting required (for fitting into enclosure/attachment with junction box).
- For enclosures placed in outdoors, steps must be taken to ensure smooth operation, for example rain protected roofs, and if necessary, sufficient enclosure protection.

Installation

Risk of injury due to incorrect proceedings.
- Extensions or modifications to the enclosure are only permissible if the manufacturer’s approval is obtained first.
- The IEC/EN60079-14 must be observed.

Installations for the highly combustible range must exhibit an EEC design inspection certificate. Installation of these components must take place in such way, so that at least the enclosure remains IP54.
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 protection class of the enclosure remains at least IP54.
Metallic conductor entries must be connected to the ground. Unused holes for cable entries must be sealed with EC-certified plugs.
Operational Instruction

High voltage distribution boxes 6..10kV
Type 07-5184-… und 07-5185-….

Maintenance

![WARNING]
Risk of serious injury due to electrostatic charging.

The operator of the enclosure must keep it in good condition, monitor it and clean it regularly. He has to determine the maintenance intervals depending on the conditions of use.

Within the scope of maintenance:
- Check enclosure, actuating elements, cable entries, sealings, and cables regularly for cracks and damage.
- Make sure that they are properly established.

Fault clearance

The device is defective if the encapsulation is damaged and/or if one of the components does not function any longer.

In this case:
- Replace defective parts in the encapsulation with original parts immediately.
- Replace or repair the defective components with original parts.

Maintenance and fault clearance

![WARNING]
Risk of serious injury due to damaged parts.
- If any part of the equipment is damaged, it should be exchanged only with original parts (e.g. sealing gasket/cable glands' terminals).

![WARNING]
Risk of serious injury due to incorrect proceedings.
- Only authorized qualified personnel are allowed to do any of the work relating to maintenance and fault clearance.
- IEC/EN 60079-17 must be observed.
- Do not open the enclosure when energized.

Accessories, spare parts

For accessories and spare parts, see BARTEC catalogue.

Disposal

Note

Ensure environmentally friendly disposal of all components according to legal regulations.

The enclosures and its components 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).

Service Address

BARTEC VARNOST d.o.o.
Cesta 9.avgusta 59
1410 Zagorje ob Savi Slovenia
Tel.: +386 59 221 471
Fax: +386 59 221 470

Take care when connecting conductors:

- Always use suitable crimping tools when crimping the wire-end ferrules to ensure a consistent quality of pressing each time.
- NOTICE! Take care not to damage the individual wires.
- Tighten all terminal points securely (including those not in use).

Commissioning

Before commissioning, check that:
- The device has been installed in compliance with regulations.
- The device is not damaged.
- The connection has been established properly.
- The cables have been laid correctly.
- All screws have been tightened securely.
- The device functions perfectly.

Operation

![DANGER]
Death or serious injury through improper use.
- The device may be operated only within the technical limits that apply to it (see page 1).

Maintenance

![WARNING]
Risk of serious injury due to environmental conditions.
- Taking care of the enclosure, actuating elements, cable entries, sealings, and cables.
- Make sure that they are properly established.

Fault clearance

The device is defective if the encapsulation is damaged and/or if one of the components does not function any longer.

In this case:
- Replace defective parts in the encapsulation with original parts immediately.
- Replace or repair the defective components with original parts.

Maintenance and fault clearance

![WARNING]
Risk of serious injury due to environmentally damaged parts.
- If any part of the equipment is damaged, it should be exchanged only with original parts (e.g. sealing gasket/cable glands' terminals).

![WARNING]
Risk of serious injury due to incorrect granulations.
- Only authorized qualified personnel are allowed to do any of the work relating to maintenance and fault clearance.
- IEC/EN 60079-17 must be observed.
- Do not open the enclosure when energized.

Accessories, spare parts

For accessories and spare parts, see BARTEC catalogue.

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Note

Follow the components mounting instructions/operating instructions to replace or repair the components.
High voltage distribution boxes 6..10kV
Type 07-5184-.... und 07-5185-....

Wir erklären in alleiniger Verantwortung, dass das Produkt...

Verbindungsgehäuse 6-10 kV
High voltage distribution boxes 6-10 kV
Boîtes de distribution haute tension 6-10 kV

Typ: 07-5H9-....

auf das sich diese Erklärung bezieht den Bestimmungen der folgenden Richtlinien entspricht
to which this declaration relates is in accordance with the provision of the following directives
se se référant à cette attestation correspond aux dispositions des directives suivantes

94/9/EG
94/9/EC
94/9/CE

und mit folgenden Normen oder normativen Dokumenten übereinstimmt
and is in conformity with the following standards or other normative documents
et est conforme aux normes ou documents normatifs ci-dessous

EN 60079-0:2009
EN 60079-7:2007
EN 60079-31:2009

Kennzeichnung Marking Marquage

II 2G Ex e IIIC T6/T5 Gb
II 2D Ex tb IIIC T80°C/T95°C Db

-55 °C/-30 °C/-20 °C ≤ Ta ≤ 40 °C/+55 °C

Verfahren der EG Baumerkterprüfung/ Benannte Stelle Procedure of EC - Type Examination / Notified Body Procédure d’examen CE de type / Organisme Notifié

IBExU13ATEX1001
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CE 1304

Zagorje, date 29.01.2013

Janez Gojduš
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