



(1) **EC-TYPE-EXAMINATION CERTIFICATE**
(Translation)

(2) Equipment and Protective Systems Intended for Use in
Potentially Explosive Atmospheres - **Directive 94/9/EC**



(3) EC-type-examination Certificate Number:

PTB 08 ATEX 1064

(4) Equipment: Junction box, types 07-5103-.../... , 07-5105-.../... ,
07-5106-.../... and 07-5107-.../...

(5) Manufacturer: BARTEC Varnost d.o.o.

(6) Address: Cesta 9 avgusta 59, 1410 Zagorje ob Savi, Slovenia

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report PTB Ex 08-18212.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2006

EN 60079-7:2003

EN 60079-11:2007

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment shall include the following:

II 2 G Ex e ia/ib IIA, IIB or IIC T6 or T5

Zertifizierungsstelle Explosionsschutz

Braunschweig, September 18, 2008

By order:



Dr.-Ing. M. Phleps
Oberregierungsrat

SCHEDULE

(13)

(14) **EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1064**

(15) Description of equipment

The junction box, types 07-5103-.../..., 07-5105-.../..., 07-5106-.../... and 07-5107-.../..., is a polyester enclosure which is designed to type of protection Increased Safety "e" and is provided with cable entries. The junction box of types 07-5103-.../... and 07-5106-.../... houses explosion-proof cable entries, terminals of type of protection Increased Safety "e" and, optionally, terminals for intrinsically safe circuits. The latter are separated from the terminals of type of protection Increased Safety "e" and are marked, e.g. by a light-blue colour, for clear identification. The junction box of types 07-5105-.../... and 07-5107-.../... houses terminals for intrinsically safe circuits only. All the components designed to type of protection Increased Safety have been tested and certified under a separate examination certificate.

Technical data

Rated voltage*	up to	1100 V
Rated current*	max.	500 A
Rated cross section*	max.	300 mm ²

*) depending on the type of terminal used

Ambient temperature	depending on temperature class
	-55 °C to +40 °C, T6
	-55 °C to +55 °C, T5,
	and for the Ex ia/ib IIC T6 version

The ratings specified are maximum values, actual values will be subject to the electrical equipment used from case to case. Depending on the system conditions, the manufacturer will define the definitive ratings which will be within the range of these limiting values and will comply with the relevant standards.

The symbols "ia" or "ib" showing the type of protection, and the symbols "IIA" or "IIB" or "IIC" will be used if the junction box accommodates intrinsically safe circuits of equipment of category "ia" or category "ib" and for use in groups "IIA" or "IIB" or "IIC", and/or circuits of intrinsically safe electrical equipment of category "ia" or category "ib" and for use in groups "IIA" or "IIB" or "IIC".

The admissible temperature range of the installed elements must not be exceeded.

(16) Test report PTB Ex 08-18212

(17) Special conditions for safe use

None

Notes for manufacture and operation

Terminals for intrinsically safe circuits have to be installed in such a way that the clearance and creepage distances between intrinsically safe and non-intrinsically safe circuits and/or different intrinsically safe circuits and a circuit and earth as set forth in EN 60079-11 are met.

(18) Essential health and safety requirements

Met by compliance with the afore-mentioned Standards.

Zertifizierungsstelle Explosionsschutz

Braunschweig, September 18, 2008

By order:


Dr.-Ing. M. Thoenes
Oberregierungsrat



1st SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1064

(Translation)

Equipment: Junction box, types 07-5103-***/***, 07-5105-***/***,
07-5106-***/*** and 07-5107-***/***

Marking:  **II 2 G Ex e ia/ib IIA, IIB, IIC T6, T5**

Manufacturer: BARTEC Varnost d.o.o.

Address: Cesta 9 Avgusta 59, 1410 Zagorje ob Savi, Slovenia

Description of supplements and modifications

The junction boxes, types 07-5103-***/***, and 07-5105-***/***, may also be used in areas in which explosive atmospheres produced by dust/air mixtures may occasionally occur.

The junction boxes types 07-5103-***/***, 07-5105-***/***, 07-5106-***/*** and 07-5107-***/*** have been re-assessed according to EN 60079-0:2009, EN 60079-7:2007, EN 60079-11-2007 and EN 60079-31.

Thus the marking changes to:

 **II 2 G Ex e ia/ib IIA, IIB, IIC T6, T5 Gb** (Type 07-5103-***/*** and 07-5106-***/***)

 **II 2 G Ex ia/ib IIA, IIB, IIC T6, T5 Gb** (Type 07-5105-***/*** and 07-5107-***/***)

 **II 2 D Ex tb IIIC T80 °C, T95 °C Db IP65 / IP66** (Type 07-5103-***/*** and 07-5105-***/***)

 **II 2 D Ex ia/ib IIIC T80 °C, T95 °C Db** (Type 07-5105-***/***)

Degree of protection for junction boxes types 07-5103-***/***, and 07-5105-***/***, changed to IP65 resp. IP66.

Technical data

Rated voltage*	up to	1100 V
Rated current*	max.	500 A
Rated cross section*	max.	300 mm ²

*) depending on the type of terminal used

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Ambient temperature, depending on temperature class, gasket and inspection window	-20 °C to +40 °C: T6, EPDM gasket and inspection window(s) -55 °C to +40 °C: T6, T80 °C, silicone gasket -55 °C to +55 °C: T5, T95 °C, and for the Ex ia/ib IIC T6 Gb version with silicone gasket
Degree of protection according to EN 60529	IP66 with EPDM gasket IP65 with silicone gasket
Surface resistance	Type 07-5103-****/****: < 10 ⁹ Ohm Type 07-5105-****/****: < 10 ⁹ Ohm Type 07-5106-****/****: > 10 ¹² Ohm Type 07-5107-****/****: > 10 ¹² Ohm Inspection window: > 10 ¹⁴ Ohm

The ratings specified are maximum values, actual values will be subject to the electrical equipment used from case to case. Depending on the system conditions, the manufacturer will define the definitive ratings which will be within the range of these limiting values and will comply with the relevant standards.

The symbols "ia" or "ib" showing the type of protection, and the symbols "IIA" or "IIB" or "IIC" will be used if the junction box accommodates intrinsically safe circuits of equipment of category "ia" or category "ib" and for use in groups "IIA" or "IIB" or "IIC", and/or circuits of intrinsically safe electrical equipment of category "ia" or category "ib" and for use in groups "IIA" or "IIB" or "IIC".

The admissible temperature range of the installed elements must not be exceeded.

Notes for manufacture and operation

For enclosures and inspection windows with a surface resistance of >10⁹ Ohm potential electrostatic charging hazard exists. The enclosure must therefore carry the following warning:

"WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – Only wet cleaning - see instructions".

Terminals for intrinsically safe circuits have to be installed in such a way that the clearance and creepage distances between intrinsically safe and non-intrinsically safe circuits and/or different intrinsically safe circuits and a circuit and earth as set forth in EN 60079-11 are met.


Applied standards

EN 60079-0:2009, EN 60079-7:2007, EN 60079-11:2007, EN 60079-31:2009

Test report: PTB Ex 12-10073

Zertifizierungssektor Explosionsschutz
On behalf of PTB:


Braunschweig, 18. Oktober 2012


Dipl.-Phys. U. Völkel



2nd SUPPLEMENT
according to Directive 94/9/EC Annex III.6
to EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1064
(Translation)

Equipment: Junction boxes, types 07-5103-***/***, 07-5105-***/***, 07-5106-***/***, 07-5107-***/***

Marking:  **II 2 G Ex e ia/ib IIA, IIB, IIC T6, T5 Gb**
II 2 G Ex ia/ib IIA, IIB, IIC T6, T5 Gb
II 2 D Ex tb IIIC T80 °C, T95 °C Db,
II 2 D Ex ia/ib IIIC T80 °C, T95 °C Db





Manufacturer: BARTEC-VARNOST d.o.o.

Address: Cesta 9. avgusta 59, 1410 Zagorje ob Savi, Slovenia

Description of supplements and modifications

The junction boxes, types 07-5103-***/***, 07-5105-***/***, 07-5106-***/*** and 07-5107-***/***, have been re-examined on the basis of standard EN 60079-0:2012.

The marking changes to:

 II 2 G Ex e ia/ib IIA, IIB, IIC T6, T5 Gb	(type 07-5103-***/*** and 07-5106-***/***)
 II 2 G Ex ia/ib IIA, IIB, IIC T6, T5 Gb	(types 07-5105-***/*** and 07-5107-***/***)
 II 2 D Ex tb IIIC T80 °C, T95 °C Db	(types 07-5103-***/*** and 07-5105-***/***)
 II 2 D Ex ia/ib IIIC T80 °C, T95 °C Db	(type 07-5105-***/***)

When the silicone gasket is used, the protection against solid foreign objects, water and contact is changed to IP66.

Technical data

Rated voltage*	up to	1100 V
Rated current*	max.	500 A
Conductor size*	max.	300 mm ²

*) depending on the type of terminal that is used

Ambient temperature, subject to temperature class, gasket and sight glass	-20 °C to +40 °C: T6, EPDM gasket and sight glass -55 °C to +40 °C: T6, T80 °C, silicone gasket -55 °C to +55 °C: T5, T95 °C, and for the Ex ia/ib IIC T6 Gb version with silicone gasket
Degree of protection based on EN 60529	IP66 with EPDM gasket IP66 with silicone gasket
Surface resistance	Type 07-5103-****/****: < 10 ⁹ Ohm Type 07-5105-****/****: < 10 ⁹ Ohm Type 07-5106-****/****: > 10 ¹² Ohm Type 07-5107-****/****: > 10 ¹² Ohm Sight glass: > 10 ¹⁴ Ohm

Rated values are maximum values, the actual electrical values are determined by mounted 'Ex' components. Within these limiting values complying with the appropriate standards the manufacturer shall specify the final limiting values dependent on power supply specifications.

The "ia" or "ib" symbols for the type of protection and the "IIA" or "IIB" or "IIC" symbols are used, if the junction box houses intrinsically safe circuits of category "ia" or "ib" for the corresponding equipment and for use in groups "IIA" or "IIB" or "IIC", and/or circuits for intrinsically safe electrical equipment of category "ia" or "ib" and for use in groups "IIA" or "IIB" or "IIC".

The permissible temperature range for the installed elements must not be exceeded.

Notes for manufacturing and operation

For the enclosure and the window with a surface resistance of >10⁹ Ohm there is a risk of electrostatic discharge. The enclosure must therefore carry the following warning:

"Warning! Risk of electrostatic discharge. Only clean with moist cloth. See instructions for operation."

Terminals for intrinsically safe circuits shall be installed so that the clearances and creepage distances between intrinsically safe and non-intrinsically safe circuits, and/or different intrinsically safe circuits, and between a circuit and earth, which are specified in EN 60079-11, are maintained.

Applied standards

EN 60079-0:2012, EN 60079-7:2007, EN 60079-11:2007, EN 60079-31:2009

Test report: PTB Ex 13-12307

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, May 29, 2013

Dr.-Ing. U. Klausmeyer
Direktor und Professor



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EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

3rd SUPPLEMENT
 according to Directive 94/9/EC Annex III.6
 to EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1064
 (Translation)

Equipment: Junction box, type 07-5103-***/***, 07-5105-***/***, 07-5106-***/***,
 and 07-5107-***/***

Marking:  **II 2 G Ex e ia/ib IIA, IIB, IIC T6, T5 Gb,**
 **II 2 G Ex ia/ib IIA, IIB, IIC T6, T5 Gb**
 **II 2 D Ex tb IIIC T80 °C, T95 °C Db,**
 **II 2 D Ex ia/ib IIIC T80 °C, T95 °C Db**

Manufacturer: BARTEC-VARNOST d.o.o.

Address: Cesta 9. Avgusta 59, 1410 Zagorje ob Savi, Slovenia

Description of supplements and modifications

The junction box, type 07-5103-***/***, 07-5105-***/***, 07-5106-***/***, and 07-5107-***/***, has been re-examined on the basis of standard EN 60079-31:2014.

Technical data

Rated voltage* up to 1100 V
 Rated current * max. 500 A
 Rated cross section * max. 300 mm²

*) depending on the type of terminal that is used

Ambient temperature, subject to temperature class, gasket and inspection window	-20 °C to +40 °C: T6, EPDM gasket and inspection window -55 °C to +40 °C: T6, T80 °C, silicone gasket -55 °C to +55 °C: T5, T95 °C, and for the Ex ia/ib IIC T6 Gb version with silicone gasket
Degree of protection in accordance with EN 60529	IP66 with EPDM gasket IP66 with silicone gasket
Surface resistance	Type 07-5103-****/****: < 10 ⁹ ohms Type 07-5105-****/****: < 10 ⁹ ohms Type 07-5106-****/****: > 10 ¹² ohms Type 07-5107-****/****: > 10 ¹² ohms Inspection window: > 10 ¹⁴ ohms

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3rd SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1064

Rated values are maximum values, the actual electrical values are determined by mounted 'Ex' components. Within these limiting values complying with the appropriate standards the manufacturer shall specify the final limiting values dependent on power supply specifications.

The "ia" or "ib" symbols for the type of protection and the "IIA", "IIB" or "IIC" symbols are used, if the junction box houses intrinsically safe circuits of category "ia" or "ib" for the corresponding equipment and for use in groups "IIA", "IIB" or "IIC", and/or circuits for intrinsically safe electrical equipment of category "ia" or "ib" and for use in groups "IIA", "IIB" or "IIC".

The permissible temperature range for the installed elements must not be exceeded.

Notes for manufacturing and operation

For the enclosure and the window with a surface resistance of $>10^9$ ohms there is potential electrostatic charging hazard. The enclosure must therefore carry the following warning: "Warning- potential electrostatic charging hazard. Only wet cleaning. See instructions."

The maximum number of conductors for each enclosure size, which is subject to the cross section and the permissible continuous current, is shown in the supplements.

Terminals for intrinsically safe circuits shall be installed so that the clearances and creepage distances between intrinsically safe and non-intrinsically safe circuits, and/or different intrinsically safe circuits, and between a circuit and earth, which are specified in EN 60079-11, are maintained.

When connecting more than one intrinsically safe circuit, the rules and regulations for interconnection must be observed.

Applied standards

EN 60079-0:2012, EN 60079-7:2007, EN 60079-11:2012, EN 60079-31:2014

Test report: PTB Ex 15-15052

Konformitätsbewertungsstelle, Sektor Explosionsschutz
On behalf of PTB:

Braunschweig, July 6, 2015


Dr.-Ing. D. Markus
Oberregierungsrat



Sheet 2/2

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.