Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

(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 1066

(4) Equipment: Junction box, types 07-5109-****/**** and 07-5110-****/****

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

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

(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 08-18214.

(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:

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

Zertifizierungsstelle Explosionsschutz
By order:

Dr.-Ing. M. Thedens
Oberregierungsrat

Braunschweig, September 18, 2008

(13) # SCHEDULE

(14) ## EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1066

(15) Description of equipment

The junction box, type 07-5109-****/**** and type 07-5110-****/**** , has polyester enclosures of different sizes, designed to Increased Safety "e" type of protection. It houses terminals of increased Safety "e" type of protection and, if required, terminals for intrinsically safe circuits. The box area for intrinsically safe circuits is marked, e.g. by a light-blue colour.

Connection is by means of Ex-type cable entries. The enclosure as well as the mounted components of Increased Safety "e" type of protection have been tested and certified under a separate examination certificate.

Technical data

Sizes:	Width	Height	Depth
Smallest	200 mm	300 mm	150 mm
Largest	800 mm	1000 mm	300 mm

Rated voltage*	up to	1000	V AC/DC
Rated current*	max.	500	A
Rated cross section*	max.	300	mm^2

*) depending on the type of terminal used

Ambient temperature ..... -20 °C to +40 °C, T6
..... -20 °C to +55 °C, T5, or
..... for Ex ia/ib IIC T6

Protection against contact, foreign bodies and water ..... IP54 according to EN 60529 as a minimum

Rated values are maximum values, the actual electrical values are determined by mounted electrical apparatus. Within these limiting values complying with the appropriate standards the manufacturer specifies the final limiting values dependent on power supply specifications, operating mode, utilization category, etc.

The composition of the protection symbol is based on the types of protection of the components actually used.

(16) Test report PTB Ex 08-18214

(17) Special conditions for safe use

None

Notes for manufacture and operation

For the maximum number of conductors for each enclosure size, which is subject to the cross section and the permissible continuous current, reference is made to the companion sheets.

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.

If the clearance requirements are not complied with, terminals and wiring of Increased Safety "e" standard shall also be used for the intrinsically safe circuits.

(18) Essential health and safety requirements

Met by compliance with the afore-mentioned Standards.

Zertifizierungsstelle Explosionsschutz
By order:

Dr.-Ing. M. Thedens
Oberregierungsrat

Braunschweig, September 18, 2008

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

1st SUPPLEMENT

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

to EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1066 (Translation)

Equipment: Junction box, types 07-5109-****/**** and 07-5110-****/****

Marking: Ⓔx **II 2 G Ex e ia/ib II, IIC T6 resp. T5**

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 07-5109-****/**** and type 07-5110-****/**** was modified in the following respects:

1) The junction box can be used in areas in which a potentially explosive dust/air atmosphere occasionally occurs.
2) The minimum ambient temperature is reduced to -30 °C.
3) The junction box has been re-assessed according to EN 60079-0:2012, EN 60079-7:2007, EN 60079-11:2007 and EN 60079-31:2009.

Thus the marking changes to:

Ⓔx **II 2 G Ex e ia/ib IIC T6 resp. T5 Gb**

Ⓔx **II 2 D Ex tb IIIC T80 °C, T95 °C Db**

Ⓔx **II 2 D Ex ia/ib IIIC T80 °C Db**

Technical data

Sizes:	Width	Height	Depth
Smallest	200 mm	300 mm	150 mm
Largest	800 mm	1000 mm	300 mm

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Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

1st SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 1066

Rated voltage*	up to	1000 V AC/DC
Rated current*	max.	500 A
Rated cross section*	max.	300 mm^2

*) depending on the type of terminal used

Ambient temperature ..... -30 °C up to +40 °C, T6
..... -30 °C up to +55 °C, T5 and Ex ia/ib IIC T6

Ingress protection ..... IP66 according to EN 60529

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 composition of the protection symbol is based on the types of protection of the components actually used.

Notes for manufacture and operation

For the maximum number of conductors for each enclosure size, which is subject to the cross section and the permissible continuous current, reference is made to the supplementary sheets.

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.

If the clearance requirements are not complied with, terminals and wiring of Increased Safety “e” standard shall also be used for the intrinsically safe circuits.

Applied standards

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

Test report: PTB Ex 13-12237

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Dipl.-Phys. U. Völkel

Braunschweig, December 17, 2013

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