

1 **EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 EC - Type Examination Certificate Number: **Baseefa07ATEX0142X**

4 Equipment or Protective System: **OTB-122 Terminal Box**

5 Manufacturer: **Bartec GmbH**

6 Address: **Max-Eyth-Stasse 16, D-97980, Bad Mergentheim, Germany**

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Baseefa, Notified Body number 1180, in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system 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 confidential Report No. **GB/BAS/ExTR08.0056/00**

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

EN60079-0:2006 EN60079-7:2007 EN61241-0:2006 EN61241-1:2004

except in respect of those requirements listed at item 18 of the Schedule.

10 If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system 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 and construction of the specified equipment or protective system. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include the following :

Ex II 2 GD Ex e II Ex tD A21 T6 T85°C

This certificate may only be reproduced in its entirety, without any change, schedule included.


Baseefa Customer Reference No. **0112**

Project File No. **07/0255**

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa Ltd
Registered in England No. 4305578. Registered address as above.


P. S. SINCLAIR
DIRECTOR
On behalf of
Baseefa



13

Schedule

14

Certificate Number Baseefa07ATEX0142X

15 Description of Equipment or Protective System

The type OTB-122 polyester terminal box consists of a two part glass reinforced polyester resin box with either NMSFE400 or AD24 silicone seals. The ambient temperature range of the enclosures is -55°C to +65°C. When the enclosures are fitted with the AD24 gasket the ambient temperature range is reduced to -50°C to +65°C.

A silicone rubber 'O' ring gasket is fitted into a groove in the lid, this mates up with a raised rib around the top of the base and forms an IP66 seal.

The lid is secured to the base by means of four stainless steel M5 slotted head or four stainless steel M5 hexagon socket head cap screws. These locate into M5 threaded stainless steel or brass inserts that are moulded into the base. Stainless steel or brass M6 threaded inserts are fitted into a raised section in the floor of the base to allow for fixing of terminal rails, earth continuity plate, base plates etc.

Additional inserts may be fitted in the underside of the lid to provide fixings for components or optional flexible hinge or retaining strap arrangements. The enclosure is moulded with a fixing point situated on each corner of the enclosure.

Various entries can be put into the enclosure these can be tapped or clearance holes; the enclosure has permitted entry sizes and positions for each face. The terminal box may also be supplied with un-drilled walls and earth continuity plate.

The following components below are permitted to be installed in the terminal box. The corresponding operating temperature range and IP rating of the components is taken into account when marking the certification plate of the equipment and thus affects the overall IP rating and ambient temperature range of the terminal box accordingly.

Component Description / Manufacturer	Component Type	Certificate No.	Operating Temperature Range / IP rating
Terminal Block / Weidmuller	SAK 2.5	IECEX KEM 06.0014U	-50°C to +130°C (Melamine, KrG) -50°C to +80°C (Polyamide, PA 66)
	SAK 4		
	SAK 6N		
	SAK 10		
	SAK 16		
Protective conductor Terminal Block / Weidmuller	SAK 35		
	EK 2.5N		
	EK 4		
Terminal Block / Weidmuller	EK 10	IECEX ULD 05.0008U	-50°C to +100°C
	WDU 2.5N		
	WDU 2.5		
	WDU 4		
	WDU 6		
	WDU 10		
	WDU 16		
	WDU 35		
WDU 70N			



Component Description / Manufacturer	Component Type	Certificate No.	Operating Temperature Range / IP rating
Protective conductor Terminal Block / Weidmuller	WPE 2.5	IECEX ULD 05.0008U	-50°C to +100°C
	WPE 4		
	WPE 6		
	WPE 10		
Terminal Block / Weidmuller	BK 3	IECEX SIR 05.0035U	-50°C to +130°C
	BK 4		
	BK 6		
	BK 12		
Terminal Block / Weidmuller	MK 6/6	IECEX SIR 05.0037U	-50°C to +130°C
Terminal Block / Weidmuller	AKZA	IECEX SIR 05.0038U	-50°C to +130°C (Melamine, KrG)
Protective conductor Terminal Block / Weidmuller	AKE		-50°C to +90°C (Polyamide, PA 66)
Terminal Block / Weidmuller	DK4Q	IECEX SIR 05.0041U	-50°C to +90°C
Secured Mantle Terminal * / WECO	DFG-1 DFG-2 DFG-3 DFG-5	PTB 03 ATEX 1117U	-20°C to +130°C
Stopping Plug / Hummel	V-Ex 1.297.**** **	IECEX BVS 07.0021	-20°C to +90°C / IP68
Blanking Element / CEAG	GHG 960 663.P....	IECEX PTB 03.0000	-55°C to +95°C / IP66

* This terminal has a component certificate and is assessed to EN 50014:1997+A1+A2 & EN 50019:2000. The terminal has been assessed against the differences to IEC 60079-0:2004 Edition 4 and IEC 60079-7:2006 Edition 4 within this report.

Terminals types SAK, EK, WDU, WPE and DK4Q fit on type TS32 and TS35 rail. Terminal types AKZA and AKE fit onto TS15 rail. These rails can be mounted horizontal or diagonally, these are then in turn mounted to the base of the enclosure via either an earth continuity plate or base plate.

Terminal types BK and MK are mounted either horizontal or diagonally directly to an earth continuity plate or base plate mounted to the base of the enclosure.

Various combinations of the terminals listed may be fitted within the terminal box, subject to calculation of the power dissipated within the enclosure. Power dissipated is calculated based on the actual rated currents, actual cable and terminal resistance values listed on the terminal schedule and with a cable length of 139mm per terminal. These values are then used in the following formula:

$$\text{Power} = I^2 \times N (R_t + R_c) \text{ Watts}$$

Where:

I = Actual current through the conductor up to the maximum permitted certified de-rated current of the terminal (Amps).

N = Number of terminals

R_t = Terminal resistance (Ohms at 20°C)

R_c = Resistance of one conductor (Ohms at 20°C) when using the maximum diagonal cable length
i.e. 139mm.



The maximum allowed power dissipation within the OTB-122 terminal box are as follows:

- +40°C Ambient Temperature = 3.2 Watts
- +55°C Ambient Temperature = 2 Watts
- +65°C Ambient Temperature = 1.2 Watts

When more than one type or size of terminal is fitted (i.e. terminals of different rated currents) then an adhesive label is fixed to the inside of the terminal box which states each type of terminal fitted with its corresponding maximum current and voltage allowed. When this optional label is fitted the current rating on the main certification plate is replaced with a '–' marking.

In addition to the power terminals at least one earth terminal is fitted of a size equal to or greater than the largest size of live terminals.

The following enclosure options are available:-

- earth continuity plates or bases may be fitted to the enclosure to provide continuity between cable glands. These can be moulded into the interior of the enclosure or retro-fitted after the enclosure has been moulded, when these optional earth continuity plates are used they can only be fitted into enclosures manufactured from the Menzolit material. Earth continuity plates are fitted with anti-rotation dimples. If these dimples are not fitted then a shake proof washer or similar device must be fitted between the gland locknut and the earth continuity plate.

- a Baretc QS earth bar may optionally be fitted to the enclosure. When the QS3 earth bar is fitted this must not be used in conjunction with the BK12 terminal block and can only be used with a horizontal rail. When insulated support pillars are used the temperature range of these pillars must be taken into account for the overall terminal box temperature range. The ambient range of the insulated pillars is -20°C to +65°C.

- RFI shielding material may be used to coat the inside and outside of the empty enclosure.

- internal/external M6 earth connection facilities can be fitted through any side face of the enclosure.

- a counter bored hole may be introduced into the side face of the enclosure, one per face maximum. When this hole is used the correct earth continuity plate must be fitted.

- Trade Agency markings can be incorporated into the certification plate, as per the relevant scheduled drawing. Permitted Trade Agency markings may also be embossed into the lid in a recess up to 1mm in depth. When this marking method is used an additional adhesive label is fitted to the underside of the lid showing required marking details.

- an electrostatic warning label can be fitted to the enclosure at the manufactures discretion.

16 Report Number

GB/BAS/ExTR08.0056/00

17 Special Conditions for Safe Use

1. All unused cable entries shall be fitted with a blanking element. The permitted blanking elements for this terminal box are listed on this certificate above.
2. The terminal box shall be limited to the temperature range of the terminal, blanking element or insulated pillar fitted. The component temperature ranges are listed in the equipment description of this certificate.
3. The end user must ensure that a minimum ingress protection of IP66 is achieved at each entry to the enclosure by use of a suitable certified blanking element or cable entry device.
4. When used in dust atmospheres any dust layers occurring shall have a maximum depth of no greater than 50mm.



5. The user may only drill entry holes into the terminal box faces and the earth continuity plate in the permitted positions according to the general arrangement drawings listed in this schedule. When the earth continuity plate is drilled with a clearance hole and thus the plate is provided with no anti-rotation dimples, the end user shall be responsible for ensuring that a shake proof washer or similar device is fitted between the earth plate and locknut.
6. All terminal screws, used or unused, shall be fully tightened down by the end user.
7. The insulation of installed conductors must extend to within 1mm of the metal part of the given terminal throat, unless otherwise specified on the terminal component certificate.
8. All terminals and associated accessories i.e. cross-connectors shall be installed in accordance with the instructions of the terminal manufacturer and the terminal box.
9. Only one single or stranded conductor shall be connected to either side of any terminal fitted within the terminal box, unless otherwise indicated on the relating terminal component certificate.
10. The maximum current, voltage and dissipated power specified on the rating label must not be exceeded for the terminal box. When there is more than one type of terminal fitted the maximum current and voltage given for each terminal must not be exceeded.
11. If a conductor is installed with a cross-sectional-area less than the rated cross-sectional-area for the given terminal (as shown on the terminal component certificate) then the maximum current value for the terminal shall be de-rated accordingly.

18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

19 Drawings and Documents

Document No.	Sheets	Document Title	Issue	Date
1293/A4	1	Electrostatic Hazard Warning Label	C	22/06/07
1356/A4	1	General Arrangement of Bartec QS Earth Terminal	C	17/12/07
1750/A4	1	Approval Label for the OTB Range of Terminal Boxes	G	25/01/08
1751/A3	1	General Arrangement of OTB-122 Polyester Terminal Box (with Klippon/Phoenix rail mounted terminals – Horizontal rail)	B	07/04/08
1752/A3	1	General Arrangement of OTB-122 Polyester Terminal Box (with Klippon terminal blocks)	B	07/04/08
1754/A3	1	General Arrangement of OTB-122 Polyester Terminal Box (with Klippon/Phoenix rail mounted terminals – Diagonal rail)	B	07/04/08
1757/A3	1	TS 32 and TS 35 Terminal Rails for the OTB-122 Terminal Box	B	10/12/07
1811/A4	2	Special Lid Markings for the OTB-122 Terminal Box – Honeywell Trade Agency	F	01/04/08
1830/A3	3	Special Mounting Arrangements for QS Earth Bars	B	18/12/07
1836/A4	1	Approval Label for OTB-122 Terminal Box (ATEX) – Draeger Trade Agency Markings	F	31/01/08
1857/A4	1	Approval Label for OTB-122 Terminal Box (ATEX) – IGD Trade Agency Markings	D	14/02/08
1878/A4	1	Approval Label for OTB-122 Terminal Box (ATEX) – Draeger Safety UK Ltd Trade Agency Markings	F	14/02/08
1884/A4	1	Approval Label for OTB-122 Terminal Box with MSA Trade Agency Markings	D	10/12/07
1962/A4	1	Adhesive Approval Label for the OTB Range of Terminal Boxes	C	10/12/07



Document No.	Sheets	Document Title	Issue	Date
2016/A4	1	Range of Stopping Plugs available for the GB and OTB Terminal Boxes	A	14/04/08
2017/A3	8	Terminal Schedule for GB and OTB Terminal Boxes	1	16/04/08
2018/A3	6	Terminal Schedule for GB and OTB Terminal Boxes	1	16/04/08
2019/A3	8	Terminal Schedule for GB and OTB Terminal Boxes	1	16/04/08
2020/A4	3	Terminal Assembly Instructions for GB and OTB Terminal Boxes	1	14/04/08
2021/A4	1	Internal Label for use on Terminal Boxes with mixed Terminals	A	14/04/08

The above drawings and common to, and held on, IECEX BAS 07.0034X.



1 SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE

**2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 Supplementary EC - Type Examination Certificate Number: Baseefa07ATEX0142X/1

4 Equipment or Protective System: OTB-122 Terminal Box

5 Manufacturer: Bartec GmbH

6 Address: Max-Eyth-Strasse 16, D-97980, Bad Mergentheim, Germany

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa07ATEX0142X to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

This certificate may only be reproduced in its entirety, without any change, schedule included.


Baseefa Customer Reference No. 0112

Project File No. 09/0365

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa Ltd
Registered in England No. 4305578. Registered address as above.


P R S SINCLAIR
DIRECTOR
On behalf of
Baseefa



13

Schedule

14

Certificate Number Baseefa07ATEX0142X/1

15 Description of the variation to the Equipment or Protective System

Variation 1.1

To amend enclosure material designation details.

16 Report Number

GB/BAS/EXTR08.0123/00

17 Special Conditions for Safe Use

None additional to those listed previously

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
1811/A4	1	G	22/04/09	Special Lid Markings For The OTB-122 Terminal Box – Honeywell Trade Agency
1811/A4	2	B	22/04/09	Special Lid Markings For The OTB-122 Terminal Box – Honeywell Trade Agency

The above drawings are common to, and held on, IECEx BAS 07.0034X Issue1.



1 SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE

**2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 Supplementary EC - Type Examination Certificate Number: Baseefa07ATEX0142X/2

4 Equipment or Protective System: OTB-122 Terminal Box

5 Manufacturer: Bartec GmbH

6 Address: Max-Eyth-Strasse 16, D-97980, Bad Mergentheim, Germany

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa07ATEX0142X to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

This certificate may only be reproduced in its entirety, without any change, schedule included.


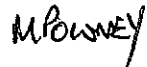
Baseefa Customer Reference No. **0112**

Project File No. **09/0249**

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa Ltd
Registered in England No. 4305578. Registered address as above.


R S SINCLAIR 
DIRECTOR
On behalf of
Baseefa



13

Schedule

14

Certificate Number Baseefa07ATEX0142X/2

15 **Description of the variation to the Equipment or Protective System**

Variation 2.1

To include the use of the earth continuity plates with one of the optional IDI enclosure materials.

16 **Report Number**

GB/BAS/ExTR09.0228.00

17 **Special Conditions for Safe Use**

None additional to those listed previously

18 **Essential Health and Safety Requirements**

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 **Drawings and Documents**

None



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 Supplementary EC - Type Examination Certificate Number: **Baseefa07ATEX0142X/3**

4 Equipment or Protective System: **OTB-122 Terminal Box**

5 Manufacturer: **Bartec Varnost d.o.o.**

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

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa07ATEX0142X to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

This supplementary certificate shall be held with the original certificate.

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. **6609**

Project File No. **10/0980**

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com
Baseefa is a trading name of Baseefa Ltd
Registered in England No. 4305578. Registered address as above.


PP R S SINCLAIR 
DIRECTOR
On behalf of
Baseefa



13

Schedule

14

Certificate Number Baseefa07ATEX0142X/3

15 Description of the variation to the Equipment or Protective System

Variation 3.1

To permit the use of the Redapt PD-E-4 range of nylon blanking elements with the terminal boxes. The blanking elements have an operating temperature range of -20°C to +40°C or -5°C to +40°C when using the Viton seals.

16 Report Number

GB/BAS/ExTR10.0299/00

17 Special Conditions for Safe Use

None additional to those listed previously.

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
2016/A4	1 of 1	B	06/01/11	Range of Stopping Plugs available for GB and OTB Terminal Boxes



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

3 Supplementary EC - Type Examination Certificate Number: **Baseefa07ATEX0142X/4**

4 Equipment or Protective System: **OTB-122 Terminal Box**

5 Manufacturer: **Bartec Varnost d.o.o.**

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

7 This supplementary certificate extends EC – Type Examination Certificate No. **Baseefa07ATEX0142X** to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.


8 Item 9 of the original Certificate is replaced by "Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

IEC 60079-0: 2011 EN 60079-7: 2007 EN 60079-31: 2009

except in respect of those requirements listed at item 18 of the Schedule."

9 The marking of the equipment has changed from the original Certificate and shall include the following:

 **II 2G Ex e IIC T6 Gb**

 **II 2D Ex tb IIIC T85°C Db**

This certificate shall be held with the original certificate and may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. **6609**

Project File No. **11/1020**

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.


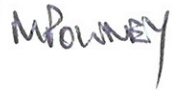
Baseefa

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ

Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601
e-mail info@baseefa.com web site www.baseefa.com

Baseefa is a trading name of Baseefa Ltd

Registered in England No. 4305578. Registered address as above.


P. S. SINCLAIR 
DIRECTOR
On behalf of
Baseefa



13

Schedule

14

Certificate Number Baseefa07ATEX0142X/4

15 Description of the variation to the Equipment or Protective System

Variation 4.1

To confirm that the equipment covered by this certificate has been reviewed against the requirements of IEC 60079-0: 2011 (State of the Art), EN 60079-7: 2007 and EN 60079-31: 2009 in respect of the differences from EN 60079-0: 2006, EN 61241-0: 2006 and EN 61241-1:2004, and the equipment has been assessed and is in compliance with the requirements of the latest standards.

The Marking will change as follows:

⊕ II 2G Ex e IIC T6 Gb

⊕ II 2D Ex tb IIC T85°C Db

Variation 4.2

To add Blanking Element:

Component Description / Manufacturer	Component Type	Certificate Number	Operating Temperature Range / IP Rating
Blanking Element	Size M63x1.5,	IECEx PTB 03.0000	-20°C to +80°C
Cooper Crouse Hinds GmbH	Type GHG960 1924 R0068		IP65

Variation 4.3

Amendment of Specific Condition of Use

16 Report Number

GB/BAS/ExTR12.0070/00

17 Specific Conditions of Use

As those listed previously and as follows:

1. Special Condition of Safe Use Number 1 on the Prime Certificate is now updated as follows:

Unused entry holes shall be fitted with stopping plugs/blanking elements as listed in this certificate or any other suitable stopping plugs having either a component or equipment certificate may be used subject to the confirmation by the end user/installer of the ingress protection rating and the permitted service temperature.

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation.



19 Drawings and Documents

Number	Sheet	Issue	Date	Description
073537	1	0	14/12/11	Type label 2 (Bartec Varnost)
073538	1	0	14/12/11	Type label 3 (Honeywell Analytics)
073539	1	0	14/12/11	Type label 4 (Drager)
073540	1	0	14/12/11	Type label 5 (IGD)
073541	1	0	14/12/11	Type label 6 (Draeger Safety UK Ltd)
073542	1	0	14/12/11	Type label 7 (MSA)
073543	1	0	14/12/11	Type label 8 (Bartec Varnost – Self adhesive)

1 **SUPPLEMENTARY EU - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU**

3 Supplementary EU - Type **Baseefa07ATEX0142X/5**
Examination Certificate Number:

3.1 In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

4 Product: **OTB-122 Terminal box**

5 Manufacturer: **Bartec Varnost d.o.o.**

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

7 This supplementary certificate extends EC – Type Examination Certificate No. **Baseefa07ATEX0142X** apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

8 SGS Baseefa, Notified Body number 1180, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that the product, as modified by this supplementary certificate, has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

9 Item 9 of the original Certificate is replaced by “Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 EN 60079-7:2015 EN 60079-31:2014

except in respect of those requirements listed at item 18 of the Schedule.”

12 The marking of the equipment has changed from the original Certificate and shall include the following:

 **II 2G Ex eb IIC T6 Gb**

 **II 2D Ex tb IIIC T85°C Db**

SGS Baseefa Customer Reference No. **6609**

Project File No. **18/0260**

This document is issued by the Company subject to its General Conditions for Certification Services accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and the Supplementary Terms and Conditions accessible at <http://www.sgs.com/SGSBaseefa/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company’s findings at the time of its intervention only and within the limits of Client’s instructions, if any. It does not necessarily indicate that the equipment may be used in particular industries or circumstances. The Company’s sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, schedule included, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Baseefa Limited

Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ

Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601

e-mail baseefa@sgs.com web site www.sgs.com www.sgs.com/uk/sgsbaseefa

Registered in England No. 4305578.

Registered address: Rossmore Business Park, Ellesmere Port, Cheshire, CH65 3EN



R S SINCLAIR

TECHNICAL MANAGER

On behalf of SGS Baseefa Limited

M POWNEY
Certification
Manager

13

Schedule

14

Certificate Number Baseefa07ATEX0142X/5

15 Description of the variation to the Product

Variation 5.1

To assess the OTB-122 Terminal box against the following standards EN IEC 60079-0: 2018, EN 60079-7: 2015 and EN 60079-31: 2014

16 Report Number

SGS Baseefa report No GB/BAS/ExTR 18.0270/00

17 Specific Conditions of Use

None additional to those listed previously

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is affected as follows.

Clause	Subject
1.4.1	External effects
1.4.2	Aggressive substances, etc.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
073537	1	A	06.03.2018	Type label 2
073538	1	A	06.03.2018	Type label 3
073539	1	A	06.03.2018	Type label 4
073540	1	A	06.03.2018	Type label 5
073541	1	A	06.03.2018	Type label 6
073542	1	A	06.03.2018	Type label 7
073543	1	A	06.03.2018	Type label 8

These drawings are common to, and held with the technical file associated with, IECEx BAS 07.0034X

1 EU - TYPE EXAMINATION CERTIFICATE

2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 EU - Type Examination Certificate **Baseefa07ATEX0142X – Issue 6**
Number:

3.1 In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

4 Product: **07-5128-****/**** Terminal Box**

5 Manufacturer: **Bartec GmbH**

6 Address: **Max-Eyth-Stasse 16, D-97980, Bad Mergentheim, Germany**

7 This re-issued certificate extends EC Type Examination Certificate No. **Baseefa07ATEX0142X** to apply to product designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

8 SGS Fimko Oy, Notified Body number 0598, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

8.1 The original certificate was issued by SGS Baseefa Ltd (UK Notified Body 1180). It, and any supplements previously issued by SGS Baseefa Ltd have been transferred to the supervision of SGS Fimko Oy (EU Notified Body 0598). The original certificate number is retained.

The examination and test results are recorded in confidential Report No. **GB/BAS/ExTR20.0183/00**

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


EN IEC 60079-0:2018 EN IEC 60079-7: 2015 + A1: 2018 EN 60079-31:2014


except in respect of those requirements listed at item 18 of the Schedule.

10 If the sign “X” is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

11 This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of the product shall include the following:

 **II 2G Ex eb IIC T6 Gb**

 **II 2D Ex tb IIIC T85°C Db**

SGS Fimko Oy Customer Reference No. **0112**

Project File No. **20/0574**

This document is issued by the Company subject to their General Conditions for Certification Services accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of their intervention only and within the limits of Client's instructions, if any. It does not necessarily indicate that the equipment may be used in particular industries or circumstances. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, schedule included, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Fimko Oy

Takomotie 8
FI-00380 Helsinki, Finland
Telephone +358 (0)9 696 361
e-mail sgs.fimko@sgs.com
web site www.sgs.fi

Business ID 0978538-5 Member of the SGS Group (SGA SA)

R S SINCLAIR
Authorised Signatory for SGS Fimko Oy

13 **Schedule**

14 **Certificate Number Baseefa07ATEX0142X – Issue 6**

15 **Description of Product**

The type 07-5128-****/**** Terminal Box consists of a two-part glass reinforced polyester resin box with either NMSFE400, AD24 or SIL 24 silicone seals. The ambient temperature range of the enclosures is -55°C to +65°C. When the enclosures are fitted with the AD24 or SIL 24 gaskets the ambient temperature range is reduced to -50°C to +70°C.

A silicone rubber ‘O’ ring gasket is fitted into a groove in the lid, this mates up with a raised rib around the top of the base and forms an IP66 seal.

The lid is secured to the base by means of four stainless steel M5 slotted head or four stainless steel M5 hexagon socket head cap screws. These locate into M5 threaded stainless steel or brass inserts that are moulded into the base. Stainless steel or brass M6 threaded inserts are fitted into a raised section in the floor of the base to allow for fixing of terminal rails, earth continuity plate, base plates etc.

Additional inserts may be fitted in the underside of the lid to provide fixings for components or optional flexible hinge or retaining strap arrangements. The enclosure is moulded with a fixing point situated on each corner of the enclosure.

Various entries can be put into the enclosure these can be tapped or clearance holes; the enclosure has permitted entry sizes and positions for each face. The terminal box may also be supplied with un-drilled walls and earth continuity plate.

The following components below are permitted to be installed in the terminal box. The corresponding operating temperature range and IP rating of the components is taken into account when marking the certification plate of the equipment and thus affects the overall IP rating and ambient temperature range of the terminal box accordingly.

Component Description / Manufacturer	Component Type	Certificate No.	Operating Temperature Range / IP rating
Terminal Block / Weidmuller	SAK 2.5 SAK 4 SAK 6N SAK 10 SAK 16 SAK 35	IECEX KEM 06.0014U	-50°C to +130°C (Melamine, KrG) -50°C to +80°C (Polyamide, PA 66)
	Protective conductor Terminal Block / Weidmuller		
Terminal Block / Weidmuller	WDU 2.5N WDU 2.5 WDU 4 WDU 6 WDU 10 WDU 16 WDU 35 WDU 70N	IECEX ULD 05.0008U	-50°C to +100°C

Component Description / Manufacturer	Component Type	Certificate No.	Operating Temperature Range / IP rating
Protective conductor Terminal Block / Weidmuller	WPE 2.5	IECEX ULD 05.0008U	-50°C to +100°C
	WPE 4		
	WPE 6		
	WPE 10		
Terminal Block / Weidmuller	BK 3	IECEX SIR 05.0035U	-50°C to +130°C
	BK 4		
	BK 6		

	BK 12		
Terminal Block / Weidmuller	MK 6/6	IECEX SIR 05.0037U	-50°C to +130°C
Terminal Block / Weidmuller	AKZ4	IECEX SIR 05.0038U	-50°C to +130°C (Melamine, KrG)
Protective conductor Terminal Block / Weidmuller	AKE		-50°C to +90°C (Polyamide, PA 66)
Terminal Block / Weidmuller	DK4Q	IECEX SIR 05.0041U	-50°C to +90°C
Secured Mantle Terminal / WECO	DFG-1 DFG-2 DFG-3 DFG-5	PTB 03 ATEX 1117U	-20°C to +130°C
Stopping Plug / Hummel	V-Ex 1.297.****.**	IECEX BVS 07.0021	-20°C to +90°C / IP68
Blanking Element / Cooper Crouse Hinds GmbH	GHG 960 663.P....	IECEX PTB 03.0000	-55°C to +95°C / IP66
	Type GHG960 1924 R0068 Size M63x1.5,		-20°C to +80°C / IP65
Blanking Element / Redapt	PD-E-4	IECEX SIR 05.0042U	-20°C to +40°C (-5°C to +40°C with Viton seals) IP66/X8

Terminals types SAK, EK, WDU, WPE and DK4Q fit on type TS32 and TS35 rail. Terminal types AKZ4 and AKE fit onto TS15 rail. These rails can be mounted horizontal or diagonally, these are then in turn mounted to the base of the enclosure via either an earth continuity plate or base plate.

Terminal types BK and MK are mounted either horizontal or diagonally directly to an earth continuity plate or base plate mounted to the base of the enclosure.

Various combinations of the terminals listed may be fitted within the terminal box, subject to calculation of the power dissipated within the enclosure. Power dissipated is calculated based on the actual rated currents, actual cable and terminal resistance values listed on the terminal schedule and with a cable length of 139mm per terminal. These values are then used in the following formula:

$$\text{Power} = I^2 \times N (R_t + R_c) \text{ Watts}$$

Where:

I = Actual current through the conductor up to the maximum permitted certified de-rated current of the terminal (Amps).

N = Number of terminals

R_t = Terminal resistance (Ohms at 20°C)

R_c = Resistance of one conductor (Ohms at 20°C) when using the maximum diagonal cable length i.e. 139mm.

The maximum allowed power dissipation within the 07-5128-****/**** Terminal Box are as follows:

- +40°C Ambient Temperature = 3.2 Watts
- +55°C Ambient Temperature = 2 Watts
- +65°C Ambient Temperature = 1.2 Watts

When more than one type or size of terminal is fitted (i.e. terminals of different rated currents) then an adhesive label is fixed to the inside of the terminal box which states each type of terminal fitted with its corresponding maximum current and voltage allowed. When this optional label is fitted the current rating on the main certification plate is replaced with a ‘-‘ marking.

In addition to the power terminals at least one earth terminal is fitted of a size equal to or greater than the largest size of live terminals.

The following enclosure options are available:

- earth continuity plates or bases may be fitted to the enclosure to provide continuity between cable glands. These can be moulded into the interior of the enclosure or retrofitted after the enclosure has been moulded, when these optional earth continuity plates are used, they can only be fitted into enclosures manufactured from the Menzolit or IDI G8B 7245-2 materials. Earth continuity plates are fitted with anti-rotation dimples. If these dimples are not fitted, then a shake proof washer or similar device must be fitted between the gland locknut and the earth continuity plate.
- a Baretc QS earth bar may optionally be fitted to the enclosure. When the QS3 earth bar is fitted this must not be used in conjunction with the BK12 terminal block and can only be used with a horizontal rail. When insulated support pillars are used the temperature range of these pillars must be taken into account for the overall terminal box temperature range. The ambient range of the insulated pillars is -20°C to +65°C.
- RFI shielding material may be used to coat the inside and outside of the empty enclosure.
- internal/external M6 earth connection facilities can be fitted through any side face of the enclosure.
- a counter bored hole may be introduced into the side face of the enclosure, one per face maximum. When this hole is used the correct earth continuity plate must be fitted.
- Trade Agency markings can be incorporated into the certification plate, as per the relevant scheduled drawing. Permitted Trade Agency markings may also be embossed into the lid in a recess up to 1mm in depth. When this marking method is used an additional adhesive label is fitted to the underside of the lid showing required marking details.
- an electrostatic warning label can be fitted to the enclosure at the manufacture's discretion.

16 Report Number

SGS Baseefa report GB/BAS/ExTR20.0183/00

17 Specific Conditions of Use

1. Unused entry holes shall be fitted with stopping plugs/blanking elements as listed in this certificate or any other suitable stopping plugs having either a component or equipment certificate may be used subject to the confirmation by the end user/installer of the ingress protection rating and the permitted service temperature.
2. The terminal box shall be limited to the temperature range of the terminal, blanking element or insulated pillar fitted. The component temperature ranges are listed in the equipment description of this certificate.
3. The end user must ensure that a minimum ingress protection of IP66 is achieved at each entry to the enclosure by use of a suitable certified blanking element or cable entry device.
4. When used in dust atmospheres any dust layers occurring shall have a maximum depth of no greater than 50mm.
5. The user may only drill entry holes into the terminal box faces and the earth continuity plate in the permitted positions according to the general arrangement drawings listed in this schedule. When the earth continuity plate is drilled with a clearance hole and thus the plate is provided with no anti-rotation dimples, the end user shall be responsible for ensuring that a shake proof washer or similar device is fitted between the earth plate and locknut.
6. All terminal screws, used or unused, shall be fully tightened down by the end user.
7. The insulation of installed conductors must extend to within 1mm of the metal part of the given terminal throat, unless otherwise specified on the terminal component certificate.
8. All terminals and associated accessories i.e. cross-connectors shall be installed in accordance with the instructions of the terminal manufacturer and the terminal box.
9. Only one single or stranded conductor shall be connected to either side of any terminal fitted within the terminal box, unless otherwise indicated on the relating terminal component certificate.

10. The maximum current, voltage and dissipated power specified on the rating label must not be exceeded for the terminal box. When there is more than one type of terminal fitted the maximum current and voltage given for each terminal must not be exceeded.
11. If a conductor is installed with a cross-sectional-area less than the rated cross-sectional-area for the given terminal (as shown on the terminal component certificate) then the maximum current value for the terminal shall be de-rated accordingly.

18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
1.4.1	External effects
1.4.2	Aggressive substances, etc.

19 Drawings and Documents

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
1293/A4	1	C	22/06/07	Electrostatic Hazard Warning Label
1356/A4	1	C	17/12/07	General Arrangement of Bartec QS Earth Terminal
1750/A4	1	G	25/01/08	Approval Label for the OTB Range of Terminal Boxes
1751/A3	1	B	07/04/08	General Arrangement of OTB-122 Polyester Terminal Box (with Klippon/Phoenix rail mounted terminals – Horizontal rail)
1752/A3	1	B	07/04/08	General Arrangement of OTB-122 Polyester Terminal Box (with Klippon terminal blocks)
1754/A3	1	B	07/04/08	General Arrangement of OTB-122 Polyester Terminal Box (with Klippon/Phoenix rail mounted terminals – Diagonal rail)
1757/A3	1	B	10/12/07	TS 32 and TS 35 Terminal Rails for the OTB-122 Terminal Box
1811/A4	1	G	22/04/09	Special Lid Markings for the OTB-122 Terminal Box – Honeywell Trade Agency
1811/A4	2	B	22/04/09	Special Lid Markings for the OTB-122 Terminal Box – Honeywell Trade Agency
1830/A3	3	B	18/12/07	Special Mounting Arrangements for QS Earth Bars
1836/A4	1	F	31/01/08	Approval Label for OTB-122 Terminal Box (ATEX) – Draeger Trade Agency Markings
1857/A4	1	D	14/02/08	Approval Label for OTB-122 Terminal Box (ATEX) – IGD Trade Agency Markings
1878/A4	1	F	14/02/08	Approval Label for OTB-122 Terminal Box (ATEX) – Draeger Safety UK Ltd Trade Agency Markings
1884/A4	1	D	10/12/07	Approval Label for OTB-122 Terminal Box with MSA Trade Agency Markings
1962/A4	1	C	10/12/07	Adhesive Approval Label for the OTB Range of Terminal Boxes
2016/A4	1	B	06/01/11	Range of Stopping Plugs available for GB and OTB Terminal Boxes
2017/A3	8	1	16/04/08	Terminal Schedule for GB and OTB Terminal Boxes
2018/A3	6	1	16/04/08	Terminal Schedule for GB and OTB Terminal Boxes
2019/A3	8	1	16/04/08	Terminal Schedule for GB and OTB Terminal Boxes
2020/A4	3	1	14/04/08	Terminal Assembly Instructions for GB and OTB Terminal Boxes
2021/A4	1	A	14/04/08	Internal Label for use on Terminal Boxes with mixed Terminals

Number	Sheet	Issue	Date	Description
073537	1	A	06.03.2018	Type label 2 (Bartec Varnost)
073538	1	A	06.03.2018	Type label 3 (Honeywell Analytics)
073539	1	A	06.03.2018	Type label 4 (Drager)
073540	1	A	06.03.2018	Type label 5 (IGD)
073541	1	A	06.03.2018	Type label 6 (Draeger Safety UK Ltd)
073542	1	A	06.03.2018	Type label 7 (MSA)
073543	1	A	06.03.2018	Type label 8 (Bartec Varnost – Self-adhesive)

The above drawings are common to, and held on, IECEx BAS 07.0034X

20 Certificate History

Certificate No.	Date	Comments
Baseefa07ATEX0142X	23 April 2008	The release of the prime certificate for the OTB-122 Terminal Box. The associated test and assessment against the requirements of EN60079-0:2006, EN60079-7:2007, EN61241-0:2006 and EN61241-1:2004 is documented in Test Report No. GB/BAS/ExTR08.0056/00.
Baseefa07ATEX0142X Issue 1	18 June 2009	Amendment of enclosure material designation details. The associated assessment is documented in Test Report GB/BAS/ExTR08.0123/00.
Baseefa07ATEX0142X Issue 2	19 January 2010	This issue of the certificate permits the use of earth continuity plates with one of the optional IDI enclosure materials. The associated assessment is documented in Test Report GB/BAS/ExTR09.0228/00.
Baseefa07ATEX0142X Issue 3	3 February 2011	This issue of the certificate permits the use of the Redapt PD-E-4 nylon blanking elements with the equipment. The blanking elements have an operating temperature range of -20°C to +40°C or -5°C to +40°C with using Viton seals. The associated assessment is documented in Test Report GB/BAS/ExTR10.0299/00.
Baseefa07ATEX0142X Issue 4	14 August 2012	This issue of the certificate assessed the equipment against the requirements of IEC 60079-0: 2011 (State of the Art), EN 60079-7: 2007 and EN 60079-31: 2009, along with the associated change to the marking. An additional blanking element option was included along with an amendment of Specific Condition of Use number 1. The associated test and assessment are documented in Test Report GB/BAS/ExTR12.0070/00.
Baseefa07ATEX0142X Issue 5	30 October 2018	This issue of the certificate assessed the equipment against the requirements of EN IEC 60079-0: 2018, EN 60079-7:2015 and EN 60079-31: 2014. The associated test and assessment are documented in Test Report GB/BAS/ExTR18.0270/00.
Baseefa07ATEX0142X Issue 6	9 December 2020	This issue of the certificate incorporates previously issued primary & supplementary certificates into one certificate and confirms the current design meets the requirements of EN IEC 60079-7: 2015 + A1: 2018. A product name change and manufacturing location is also incorporated. The associated test and assessment are documented in Test Report GB/BAS/ExTR20.0183/00.

For drawings applicable to each issue, see original of that issue.