

## EU - TYPE EXAMINATION CERTIFICATE

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

- EU - Type Examination Certificate      **Baseefa07ATEX0036X – Issue 4**  
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.
- Product: **TOPBOX range of switches**
- Manufacturer: **Longvale Limited**
- Address: **Lancaster Park, Needwood, Burton-upon-Trent, Staffs, DE13 9PD**
- This re-issued certificate extends EC Type Examination Certificate No. **Baseefa07ATEX0036X** 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.
- 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. **See certificate history**
- 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 60079-18:2015+A1:2017 EN 60079-31:2013**
- except in respect of those requirements listed at item 18 of the Schedule.
- 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.
- 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.
- The marking of the product shall include the following:
- II 2 GD Ex eb mb IIC T6 Gb Ex tb IIIC T85°C Db IP66 Tamb -25°C to +70°C**  
**Ex eb mb IIC T5 Gb Ex tb IIIC T85°C Db IP66 Tamb -25°C to +75°C**

SGS Fimko Oy Customer Reference No. **5323**

Project File No. **21/0380**

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](mailto:sgs.fimko@sgs.com)  
web site [www.sgs.fi](http://www.sgs.fi)

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



Tuomas Hänninen  
SGS Fimko Oy

---

**13** **Schedule**

**14** **Certificate Number Baseefa07ATEX0036X – Issue 4**

**15** **Description of Product**

There are 2 switch types in the TOPBOX range:

TB- 103W – with 2 x Single Pole Normally Open contacts

TB- 203W – with 2 x Single Pole Change Over contacts

The TOPBOX consists of a powder coated aluminium enclosure 85 x 70 x 55mm high that houses the switch circuits. The enclosure has a lid and body and the lid is secured to the body by 4 off M4 fixing screws. A retained neoprene rubber o-ring in the lid groove provides an Ingress Protection rating of IP66. The enclosure is mounted to the equipment by 2 x M5 screws located under the lid.

The enclosure houses self contained reed switches and PCB's with a variety of different functions contained within a small plastic housing. The reed switches and PCB's are encapsulated inside the plastic housing using epoxy resin and the housing is located in a recess in the enclosure body. The plastic housing is secured in to the enclosure by a 6 way terminal block mounted above it and the terminal block is secured by 2 x screws in to the base of the body. Either 3 wires from the reed switch circuit for the TB-103W or 6 wires from the reed switch circuits for the TB-203W are terminated in to the 6 way terminal block

The switches have a maximum switching capacity for the TB-103W version of 3A (250V AC/DC, 60VA), and for the TB-203W version 1A (250V AC/DC, 20VA), using two reed switches.

The enclosure can have up to 2 x M20 (or equivalent and smaller) entry holes in the straight long face and 1 x M20 (equivalent and smaller) entry in either of the short side faces.

When required to suit customer applications, the TB-103W version TOPBOX may also incorporate up to 3 wire connections for auxiliary circuits in the 3 spare connections in the 6 way terminal block.

**16** **Report Number**

See certificate history.

**17** **Specific Conditions of Use**

1. The supply circuit shall be protected by a suitably rated fuse capable of interrupting a fault current of 1500 Amps.
2. When used under dust layers the maximum depth shall be no greater than 50mm.
3. Unused cable entries must be fitted with a suitable equipment certified stopping plug.
4. When auxiliary circuits are used in conjunction with the 3TB-103W version TOPBOX switch, the total current in the combined circuits shall not exceed 3 Amps.
5. The Weidmuller BK6 or MK3 terminal blocks shall be wired in accordance with the Special Conditions for Safe Use specified on certificate TUV18ATEX8209U. A copy of these instructions shall be supplied by Longvale Limited.
6. When auxiliary circuits are used in conjunction with the TB-103W – 4 wire version of the TOPBOX switch, the total current in the combined circuits shall not exceed 3 Amps.
7. Leads connected into the MK3 and BK6 terminal blocks shall be installed for the appropriate voltage and this insulation shall extend to within 1mm of the metal of the terminal throat.
8. All terminal screws in the MK3 and BK6 terminal blocks, used and unused, shall be tightened down to between 0.4Nm and 0.45Nm.
9. A suitable seal or gasket shall be fitted between the enclosure and the suitably certified cable gland or stopping plug.
10. To minimise the risk of electrostatic charging, clean only with a damp cloth.

## **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:

<b>Clause</b>	<b>Subject</b>
1.2.7	LVD type requirements
1.2.8	Overloading of equipment (protection relays, etc.)
1.4.1	External effects
1.4.2	Aggressive substances, etc.

## **19 Drawings and Documents**

New drawings submitted for this issue of certificate:

<b>Number</b>	<b>Sheet</b>	<b>Issue</b>	<b>Date</b>	<b>Description</b>
LAB002		02	28.10.21	Label Layout For Topbox
BOD2		4	03.11.2021	Topbox Dimensions
FA22		05	03/11/2021	Topbox General Assembly

Current drawings which remain unaffected by this issue:

<b>Number</b>	<b>Sheet</b>	<b>Issue</b>	<b>Date</b>	<b>Description</b>
FA 20		01	20/10/13	Potting Box/PCB general assembly – 3 wire version
FA 21		01	20/10/13	Potting Box/PCB general assembly – 6 wire version
LID 1		03	29/10/13	Lid component
FA 23		00	10/01/08	Final Assembly for TB-103- 4 wire

All drawings are common to BAS21UKEX0760X and are held with IECEx BAS 07.0009X

## **20 Certificate History**

<b>Certificate No.</b>	<b>Date</b>	<b>Comments</b>
Baseefa07ATEXX0036X	21 March 2007	The release of the prime certificate. The associated test and assessment against the requirements of EN 60079-0:2006, EN 60079-7:2007 EN 60079-18:2004, EN 61241-0:2006 and EN 61241-1:2004 is documented in Test Report No. GB/BAS/ExTR07.0013/00.
Baseefa07ATEXX0036X/1	26 March 2008	To allow the enclosure to be manufactured in stainless steel. To allow the use of an alternative smaller 6 way terminal block, Weidmuller type MK3. To allow the use of alternative captive lid fixing screws. To include a 4 wire version of the TB-103W switch. Baseefa certification report GB/BAS/ExTR08.0075/00 refers.
Baseefa07ATEXX0036X/2	3 December 2008	To allow the use of IECEx certified 6 way terminal blocks: Weidmuller type MK3 to SIRA certificate IECEx SIR 05.0036U, Weidmuller type BK6 to SIRA certificate IECEx SIR 05.0035U. Baseefa certification report GB/BAS/ExTR08.0221/00 refers.

Certificate No.	Date	Comments
Baseefa07ATEXX0036X/3	5 December 2013	To confirm that the equipment covered by this certificate has been reviewed against the requirements of EN 60079-0: 2012, EN 60079-18: 2009 and IEC 60079-31: 2013. To allow the use of a new encapsulant and lid gasket and allow the use of any suitable equipment certified stopping plug. To extend the ambient range and update the marking to the requirements of the latest standards. Baseefa certification report GB/BAS/ExTR13.0300/00 refers.
Baseefa07ATEXX0036X Issue 4	3 December 2021	To assess the equipment against EN IEC 60079-0:2018, EN IEC 60079-7:2015+A1:2018 and EN 60079-18:2015+A1:2017. To allow the use of BK6 and MK3 terminal blocks afforded TUV18ATEX8209U and remove the BK6 terminals afforded Sira01ATEX3247U and MK3 terminals afforded Sira01ATEX3248U. SGS Baseefa certification report GB/BAS/ExTR21.0181/00 refers.
For drawings applicable to each issue, see original of that issue.		