



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

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|---------------------|---|--------------|-----------------------------|
| Certificate No.: | IECEX BAS 14.0121X | Page 1 of 4 | <u>Certificate history:</u> |
| Status: | Current | Issue No: 10 | Issue 9 (2019-12-16) |
| Date of Issue: | 2021-12-06 | | Issue 8 (2018-11-06) |
| Applicant: | Longvale Limited Lancaster Park Needwood Burton-upon-Trent Staffordshire DE13 9PD United Kingdom | | Issue 7 (2018-04-18) |
| Equipment: | Euroswitch TYPE ES & FS Proximity Switches | | Issue 6 (2018-02-15) |
| Optional accessory: | | | Issue 5 (2016-09-08) |
| Type of Protection: | Flameproof & Dust (by Enclosure) | | Issue 4 (2016-08-09) |
| Marking: | Ex db IIC T6* Gb Ex tb IIIC T85°C* Db (-20°C ≤ Ta ≤ +70°C)* IP66/67 *alternative marking of T4/T135°C (-60°C ≤ Ta ≤ +120°C) and T3/T200°C (-20°C ≤ Ta ≤ +175°C) are permitted – See Schedule | | Issue 3 (2016-04-14) |
| | | | Issue 2 (2016-01-19) |
| | | | Issue 1 (2015-03-02) |
| | | | Issue 0 (2014-11-20) |

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Technical Manager

Signature:
(for printed version)

Date:

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2. This certificate is not transferable and remains the property of the issuing body.
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Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire, SK17 9RZ
United Kingdom





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Manufacturer: **Longvale Limited**
Lancaster Park
Needwood
Burton-upon-Trent
Staffordshire
DE13 9PD
United Kingdom

Additional
manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-1:2014-06](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[GB/BAS/ExTR14.0122/00](#)
[GB/BAS/ExTR16.0118/00](#)
[GB/BAS/ExTR18.0030/00](#)
[GB/BAS/ExTR19.0233/00](#)

[GB/BAS/ExTR14.0309/00](#)
[GB/BAS/ExTR16.0201/00](#)
[GB/BAS/ExTR18.0081/00](#)
[GB/BAS/ExTR21.0178/00](#)

[GB/BAS/ExTR15.0363/00](#)
[GB/BAS/ExTR16.0252/00](#)
[GB/BAS/ExTR18.0283/00](#)

Quality Assessment Report:

[GB/SIR/QAR07.0013/12](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Type ES Proximity Switches

The Euroswitch Type ES Proximity Switches are manufactured in stainless steel or brass and comprise a variety of switch tube shapes and sizes, each containing a potted reed switch assembly and fitted with an integral cable or flying leads.

The potted reed switch assemblies are intended to be operated by proximity to an external magnet. The reed switches may be provided in 20W, 1A or 3A ratings.

The switch tubes are available in a range of lengths, from 55mm to 147mm long, and may have an external M18 x1, or 5/8-18 UNF or 3/4-16 UNF or 3/8" UNF thread for mounting/positioning the unit. Alternatively the tube bore may be in a rectangular block with through holes for mounting.

Alternatively the unit is available in two flange mount options, designated CYL-B and CYL-C

A range of integral cables/leads may be fitted dependant on the ambient temperature and conditions of use. A PG9, M20 or 1/2" NPT female thread may also be provided at the rear of the switch tube for the attachment of a suitable conduit (or other cable protection system).

Type FS Proximity Switches

The Euroswitch Type FS Proximity Switches feature an internal switch that contain a switch assembly operated by an internal magnet and are fitted with an integral cable or flying leads.

The potted switch assemblies are intended to be operated by proximity to a ferrous metal sheet or plate.

In this form, the Type FS Proximity Switches are rated up to 24Vdc/3A, 110Vac/4A or 240Vac/2A

An alternative rectangular potted switch unit, complete with an integral cable, designated a Type ES-SS (Safety Switch) and incorporating multiple reed switches rated at 24Vdc, 100mA

A Type ES or FS switch assembly (as the shown above), complete with an integral bushing/adaptor fitted (converting the entry thread to a cylindrical flamepath), for fitting to a terminal enclosure as detailed in IECEx certificate No. IECEx BAS 14.0059 (or Baseefa14ATEX0120)

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. External earth bonding of the metal enclosure may be achieved via the external threaded or bolted mounting facility and/or the threaded cable entry (when provided).
2. The integral cables/conductors shall be physically protected from pulling, twisting and mechanical damage.
3. The PG9 rear entry thread (where provided) does not meet the flameproof requirements, and shall not be used for direct interface with flameproof enclosures"
4. When used in dust atmospheres the threaded cable protection arrangement (where threads are provided) shall be further sealed to maintain the IP6X rating of the enclosure.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 10.1

To assess the equipment listed above against IEC 60079-0:2017 Edition 7.0.

ExTR: **GB/BAS/ExTR21.00178/00**

File Reference: **21/0380**

Annex:

[IECEX BAS 14.0121X Annex 3.pdf](#)

| Switch Type/Description | XX | - | X | X | X | X | - | X |
|--|-----------|----------|----------|----------|----------|----------|----------|----------|
| Euroswitch | ES | - | | | | | - | |
| Ferro switch | FS | - | | | | | - | |
| Safety switch | ES | - | | | | | - | |
| 90 x 30 x 23 rectangular switch | ES only | - | 0 | | | | - | |
| 80 x 20 x 25 rectangular switch | ES only | | 1 | | | | - | |
| 55 x 20 x 25 rectangular switch | ES only | - | 2 | | | | - | |
| M18 x 1 x 80 cylindrical switch | ES only | - | 3 | | | | - | |
| M18 x 1 x 55 cylindrical switch | ES only | - | 4 | | | | - | |
| 5/8" UNF x 92 cylindrical switch | ES only | - | 5 | | | | - | |
| M18 x 1 x 92 cylindrical switch | ES only | - | 6 | | | | - | |
| 5/8" UNF x 110 cylindrical switch | ES only | - | 7 | | | | - | |
| M18 x 1 x 110 cylindrical switch | ES only | - | 8 | | | | - | |
| 5/8" UNF x 71 cylindrical switch | ES only | - | 9 | | | | - | |
| M18 x 1 x 71 cylindrical switch | ES only | - | 10 | | | | - | |
| 5/8" UNF x 81 cylindrical switch | ES only | - | 11 | | | | - | |
| M18 x 1 x 81 cylindrical switch | ES only | - | 12 | | | | - | |
| 3/8" UNF x 100 cylindrical switch | ES only | - | 13 | | | | - | |
| M12 x 1 x 100 cylindrical switch | ES only | - | 14 | | | | - | |
| 3/8" UNF x 86 cylindrical switch | ES only | - | 15 | | | | - | |
| M12 x 1 x 86 cylindrical switch | ES only | - | 16 | | | | - | |
| 91 x 22 x 36 rectangular safety switch | ES only | - | SS | | | | - | |
| M18 x 1 x 80 cylindrical switch | FS only | - | A | | | | - | |
| 5/8" UNF x 92 cylindrical switch | FS only | - | B | | | | - | |
| M18 x 1 x 92 cylindrical switch | FS only | - | C | | | | - | |
| 5/8" UNF x 110 cylindrical switch | FS only | - | D | | | | - | |
| M18 x 1 x 110 cylindrical switch | FS only | - | E | | | | - | |
| 3/4"-16 UNF x 148 cylindrical switch | FS only | - | F | | | | - | |
| 5/8" UNF x 95 cylindrical switch | FS only | - | H | | | | - | |
| M18 x 1 x 95 cylindrical switch | FS only | - | I | | | | - | |
| 5/8" UNF x 71 cylindrical switch | FS only | - | J | | | | - | |
| M18 x 1 x 71 cylindrical switch | FS only | - | K | | | | - | |
| 5/8" UNF x 81 cylindrical switch | FS only | - | L | | | | - | |
| M18 x 1 x 81 cylindrical switch | FS only | - | M | | | | - | |
| 3/8" UNF x 100 cylindrical switch | FS only | - | N | | | | - | |
| M12 x 1 x 100 cylindrical switch | FS only | - | O | | | | - | |
| 3/8" UNF x 86 cylindrical switch | FS only | | P | | | | - | |
| M12 x 1 x 86 cylindrical switch | FS only | | Q | | | | - | |
| Flange mount s/w x 108 | FS only | - | CYL-B | | | | - | |
| Flange mount s/w x 108 | FS only | - | CYL-C | | | | - | |
| 90 x 30 x 23 rectangular | FS only | - | Z | | | | - | |
| ATEX Markings | | - | | 0 | | | - | |
| IECEx & ATEX Markings | | - | | 3 | | | - | |
| ATEX & IECEx Markings | | - | | A | | | - | |
| ATEX/IECEx & UL/CSA Markings | | - | | B | | | - | |
| ATEX & UL/CSA Markings | | - | | C | | | - | |

| | | | | | | | | |
|--|---------|---|--|-------|---|----|---|------------------|
| Multiple Certification Markings (Exd only) | | - | | D | | | - | |
| Other regional Exd certification | | | | F - Z | | | | |
| Brass housing (rectangular only except SS) | | - | | | 1 | | - | |
| Stainless steel housing | | - | | | 2 | | - | |
| PVC cable | | - | | | | 1 | - | |
| PVC Leads | | | | | | 1L | | |
| Polyolefin cable | | - | | | | 2 | - | |
| Teflon leads | | - | | | | 4L | - | |
| Peek leads | | | | | | 5L | - | |
| Options (may be combined eg -DE) | | | | | | | | |
| 1A Switching (2000, 4000, 6000 series) | ES only | - | | | | | - | A |
| 20W Reed (1000, 3000, 5000 series) | ES only | - | | | | | - | B |
| 3A switching N/O (1000, 3000 series) | ES only | - | | | | | - | C |
| DPDT | | - | | | | | - | D |
| Earth wire | | - | | | | | - | E |
| Latching/bi-stable | ES only | - | | | | | - | F |
| 5000 psi pressure resistant end cap | | - | | | | | - | 5K |
| 10000 psi pressure resistant end cap | | - | | | | | - | 10K |
| Male adaptor thread M20 or ½"NPT or ¾" NPT | | - | | | | | - | (M), (N) or (N3) |

Customer specials

| | | | |
|---|---------|---|----------|
| 80 x 20 x 25 rectangular switch 5m PVC cable | ES only | - | HLS-25d |
| 80 x 20 x 25 rectangular switch 10m PVC cable | ES only | - | HLS-210d |