

1 **UK-TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres**
UKSI 2016:1107 (as amended) – Schedule 3A, Part 1

3 UK-Type Examination Certificate Number: **BAS21UKEX0430X**

4 Product: **Type B Float Switches**

5 Manufacturer: **Cynergy3 Components Ltd**

6 Address: **7 Cobham Road, Ferndown Industrial Estate, Wimborne, Dorset,
BH21 7PE**

7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 SGS Baseefa, Approved Body number 1180, in accordance with Regulation 43 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), 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 Schedule 1 of the Regulations.


The examination and test results are recorded in confidential Report No. **18(C)0309**

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN IEC 60079-0:2018 EN 60079-11:2012
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 UK-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations 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 1GD Ex ia IIC T4 Ga Ex ia IIC T₂₀₀110°C Da (Ta = -50° to +100°C) B** **≠ 35 models**

 **1 M1 Ex ia I Ma B35 models**

SGS Baseefa Customer Reference No. **7692**

Project File No. **18/0309**

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R S SINCLAIR
TECHNICAL MANAGER

On behalf of SGS Baseefa Limited

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Schedule

14

Certificate Number BAS21UKEX0430X

15 Description of Product

The Type B Float Switch comprises a cylindrical enclosure with a spigoted cover attached by four A4-80 stainless steel screws. It uses the Intrinsic Safety protection concept. The enclosure and cover can be cast or machined from brass or stainless steel.

The base which may be threaded or provided with a welding spigot for attachment to the process media, is drilled to house a stem tube containing up to four hermetically sealed reed switches or thermal switches, or a combination of both.

The type B35 float switch has up to four separate intrinsically safe circuits.

Each circuit is rated $U_i = 30V$, $I_i = 100mA$. P_i is not specified because it is not a limiting factor. It is EPL Ma.

The type B## (## \neq 35) float switch is similar but is EPL Ga & EPL Da.

16 Report Number

18(C)0309

17 Specific Conditions of Use

1. Float Switches manufactured from aluminium shall be mounted in a manner that protects them from impact when in Zone 0 areas.
2. The selected cable entries (whether gland or conduit) shall be suitably certified and shall be installed so as to maintain the enclosure's ingress protection of IP6X.
3. The cable and cable entries shall be capable of operating in an ambient temperature range of $-50^{\circ}C$ to $+100^{\circ}C$.
4. Where the equipment contains more than one supply, the supplies shall be installed as separate intrinsically safe circuits having a common safety earth.
5. The plastic material of the floats is not static dissipative so is a potential electrostatic discharge risk. This part of the equipment should be cleaned only with a damp cloth and should not be mounted in high airflow dust laden atmospheres.

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
1.2.3	Enclosed structures to prevent leaks
1.4.1	External effects
1.4.2	Aggressive substances, etc.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
2001	3	AA	21/07/17	Flameproof float switch, displacer, temperature & mechanically linked head, stem and switch assembly design for use on intrinsically safe circuits. Labels
B35-219-106	3	AA	21/7/17	Float switch, labels for Swinging arm float switch for Group I mining.

These drawings are associated with SGS21ATEX0117X.

For all other drawings see SGS21ATEX0117X.