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 Number:	**SGS21ATEX0117X**
4	Product:	**Type B Float Switches**
5	Manufacturer:	**Cynergy3 Components Ltd**
6	Address:	**7 Cobham Road, Ferndown Industrial Estate, Wimborne, Dorset, BH21 7PE, UK**

7 This product and any acceptable variation thereto is specified in the schedule 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.

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 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:

Ⓔx II 1GD Ex ia IIC T4 Ga Ex ia IIIC T_{200}110°C Da (Ta = -50° to +100°C) B ** ≠ 35 models**

Ⓔx 1 M1 Ex ia I Ma (Ta = -50° to +100°C) B35 models

SGS Fimko Oy Customer Reference No. **7692** Project File No. **18/0309**

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)

Mikko Välimäki
Authorised Signatory for SGS Fimko Oy

13 # Schedule

14 ## Certificate Number SGS21ATEX0117X

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 Ui = 30V, Ii = 100mA. P_i is not specified because it is not a limiting factor. It is EPL Ma.

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

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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°C to +100°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	1, 2, 4, 5, 6	AA	21/07/17	Flameproof float switch, displacer, temperature & mechanically linked head, stem and switch assembly design for use on intrinsically safe circuits.
*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.
**5003/6/3	1 & 2	AC	26/2/15	Large flameproof & I.S. enclosure body casting drawing.
**DT197/1 to **DT197/4	1	AA	26/04/13	Aluminium weatherproof enclosure casting & machining details for intrinsically safe enclosure and lid
**DT796	1	AA	07/08/19	Enclosure - st. steel head machined for I/S use used on B35-219-106
**DT850	1	AA	21/07/17	Tav product drawing numbers
**DT1400 & **DT1401	1	AA	28/7/17	Flameproof & I.S. head and cover machining drawing from casting
**DT1404 & **DT1405	1	AA	30/11/18	Flameproof & I.S. head and cover machining drawing from bar
**DT1533	1	AB	6/6/2017	Flameproof & I.S. cover machined from bar to be used with DT1400*
B35-219-106	1	AA	21/7/17	Float switch, dual level, side entry square flange model for use on I.S. circuits.
B35-219-106	2	AA	21/7/17	Float switch, dual level, side entry square flange model for use on I.S. circuits. Wiring details
*B35-219-106	3	AA	21/7/17	Float switch, labels for Swinging arm float switch for Group I mining.

*These drawings are common to BAS21UKEX0430X.

**These drawings are common to SGS21ATEX0116X