EU Type Examination Certificate CML 22ATEX2015 Issue 0

1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

2 Equipment **Liquid Level Sensor**

3 Manufacturer **SST Sensing Ltd.**

4 Address **5 Hagmill Crescent**
Shawhead Industrial Estate
Coatbridge, ML5 4NS, UK

5 The equipment is specified in the description of this certificate and the documents to which it refers.

6 CML B.V., Chamber of Commerce No 6738671, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, 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 equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.

7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.

8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018 EN 60079-11:2012

10 The equipment shall be marked with the following:

II 1 G

Ex ia IIC T4 Ga

Ta= -30°C to +80°C

11 Description

The product is an intrinsically safe liquid detection sensor used to detect the presence or absence of liquid in hazardous areas. It is powered from a 12VDC supply protected by an intrinsically safe barrier.

The product detects liquid using an Infrared LED and phototransistor pair. In air, light from the LED is reflected onto the phototransistor through the tip of the cone shaped sensor tip and this is detected by the microcontroller, which sets the output accordingly. In liquid, light escapes from the sensor tip. The sensor state is indicated by the supply current drawn.

The equipment has the following safety description:

Ui	=	12 VDC
Ii	=	130 mA
Pi	=	85 mW
Ci	=	1.08 µF
Li	=	0

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	06 Mar 2023	R14935A/00	Issue of Prime Certificate.

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

i. Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.

14 Specific Conditions of Use (Special Conditions)

None.

Certificate Annex

Certificate Number	**CML 22ATEX2015**
Equipment	**Liquid Level Sensor**
Manufacturer	**SST Sensing Ltd.**

The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
LL-FAB-0507	1 to 2	2	06 Mar 2023	LLIS-PCB-0507 Rev2 Fabrication Drawing
LLIS-MRK-0507	1 of 1	3	06 Mar 2023	LLIS Marking Specification
LLIS-XX-XX-XND	1 to 2	1B	06 Mar 2023	ATEX Liquid Level Sensor Assembly
LLIS-SCH-0507	1 of 1	3	06 Mar 2023	Intrinsically Safe Liquid Level Switch Schematic