

[1]

EU-TYPE EXAMINATION CERTIFICATE

[2] Product Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

[3] EU-Type Examination Certificate Number: **Presafe 18 ATEX 13724X** **Issue 1**

[4] Product: **PAC 1278 2-wire IS.ALS subsystem**

[5] Manufacturer: **MISTRAS Group Inc.**

[6] Address: **195 Clarkesville Road,
Princeton Junction, New Jersey
USA**

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

[8] DNV Product Assurance AS, notified body number 2460, in accordance with Article 17 and Article 21 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 reports listed in item 16.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: **EN IEC 60079-0:2018 and EN 60079-11:2012**

Where additional criteria beyond those given here have been used, they are listed at item 18 in 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 in accordance to the Directive 2014/34/EU. 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:



II 1 G
II 1 D

Ex ia IIC T4 Ga -40 °C ≤ Ta ≤ +70 °C

Ex ia IIC T6 Ga -40 °C ≤ Ta ≤ +40 °C

Ex ia IIIC T135°C Da -40 °C ≤ Ta ≤ +70 °C

Date of issue:
2021-09-02



Ståle Sandstad
For DNV Product Assurance AS
The Certificate has been digitally signed.
See www.dnv.com/digitalsignatures for info



[13]

Schedule

[14]

EU-Type Examination Certificate No:

Presafe 18 ATEX 13724X

Issue 1

[15]

Description of Product

The ASL Subsystem comprises an electronic circuit housed in aluminium enclosure. The circuit is partially encapsulated in an epoxy resin. The input of the ASL Subsystem must be connected to a power supply via an EU Type certified Zener barrier with or without galvanic separation.

EU Type Examination Certified sensors that can be connected to the ASL subsystem output: ISR.45, ISR1.5, ISR3, ISR6, ISR15, ISR30, ISR50, ISWD, and ISD9203B.

Type designation

Model 1278

GDU 1278

The ASL Subsystem GDU 1278 has the following alternative Authorized Representative:

Groverley Detection Limited

Anchor Works, Groverley Road, Christchurch, Dorset, BH23 3HB UK

Electrical Data

$U_i = 30V$, $I_i = 100mA$, $P_i = 0.9W$, $L_i = 100 \mu H$, $C_i = 0.05 \mu F$

Degrees of protection (IP Code)

IP66

Ambient temperature:

$-40 \text{ }^\circ\text{C} \leq T_a \leq +70 \text{ }^\circ\text{C}$

[16]

Report No.: 2019-3010

Project No.: PRJC-449152-2013-PRC-USA

[17]

Specific Conditions of Use

The enclosure is made of aluminium, and care must be taken due to the potential risk of sparks. Avoid impact with iron or steel objects

[18]

Essential Health and Safety Requirements

Met by compliance with the requirements mentioned in item 9.

[19] Drawings and documents

Number	Title	Rev.	Date
1277-2011	Drill/fabrication drawing & Panel drawing 2-wire IS-ASL subsystem, (2 sheets)	0	2005-01-22
1278-2011	Drill/fabrication drawing & Panel drawing 2-wire IS-ASL subsystem, (2 sheets)	1A	2011-04-28
1278-2014-XX	Assembly Drawing, 2-wire IS-ASL subsystem	1B	2011-04-28
1278-5015-XXX	Assembly Drawing, 1278 2-wire IS-ASL subsystem	5	2021-04-30
1278-6000	1278 System Connections	3	2021-04-28
1278-3010	Schematic, 2-wire IS-ASL subsystem (3 sheets)	1B	2011-03-14
1277-2010	2-wire IS-ASL subsystem (PCB layout, 9 sheets)	0	2005-01-26
1278-2010	2-wire IS-ASL subsystem (PCB layout, 8 sheets)	1	2005-10-25
1278-5011	Silkscreen Drawing 2-wire IS-ASL subsystem	6	2021-04-28
1278-5012	Silkscreen Drawing 2-wire IS-ASL subsystem	6	2021-04-28
ISWD/ISD9203B-6001	Assembly, ISWD & ISD9203B	3	2021-08-11
ISR.45-6001	ISR.45 Assembly	2	2019-01-22
ISXXXXX-6001	ISR6, ISR15, ISR30, ISR50, ISF15, ISF30 & ISF50 Assembly	2	2019-01-22
ISR1.5/3-6001	ISR1.5 & 3 Assembly	2	2019-01-22
1110-2030	Sensor, Diode Protection Board Artwork (8 sheets)	0	1997-10-09
1110-2031	Drill Drawing IS Sensor Diode Protection Board (2 sheets)	0	2001-10-23
1110-2034	Top Assembly Drawing IS Sensor Diode Protection Board (2 sheets)	0A	2003-10-15
1110-3030	Schematic, IS Sensor Diode Protection Board	0	2001-10-29
IS9203B-3010	IS9203B Sensor Schematic	0	2003-04-10
ISR.45-3010	ISR.45 Sensor Schematic	0	2003-04-10
ISXXXX2-3010	ISWD, ISR1.5, ISR3 Sensor Schematic	0	2003-04-10
1278-5022	Label, Rear, Serial num date, 2 wire IS-ASL	0	2019-03-05

[20] Certificate History

Issue	Description	Issue date	Report no.
0	Original issue of Presafe certificate. Update of ATEX Directive, standards and minor drawing updates from previous certificate DNV-2005-OSL-ATEX-0327X.	2019-03-21	2019-3010
1	Update of notified body number, standards versions and drawing updates	2021-09-02	2019-3010

END OF CERTIFICATE