

1 **United Kingdom ‘Ex’ Conformity Assessment**

2 **Product Intended for use in Potentially Explosive Atmospheres
UKSI 2016:1107 (as amended by UKSI 2019:696)**

3 Certificate Number: **ExVeritas 21UKEX0901X** Issue: **1**
4 Product: **CYCLOPS Z Purge Indicators PSCZ - a - b - c - d - e**
5 Manufacturer: **Purge Solutions, Inc.**
6 Address: **592 Avenue E 1/2, Alvin, Texas 77511 United States of America**

7 This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to. The assessments are recorded in ExVeritas project file number EX4370A.



8 The product has been assessed against the following Standards and found to comply:

EN IEC 60079-0: 2018 EN 60079-2: 2014 EN 60079-7:2015
EN 60079-11:2012 EN 60079-31:2014

9 If the sign “X” is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

10 ExVeritas takes no responsibility for the validity of any information or data supplied by the manufacturer on which parts of the assessment may be based upon.

11 The marking of the equipment shall include the following:

 II 3G Ex ec ic [pzc] IIC T6 Gc
 II 3D Ex ic [pzc] tc IIIC T79°C Dc
 $T_{amb} -40\text{ °C} \leq T_a \leq +65\text{ °C}$



No. 8613

On behalf of ExVeritas



S Clarke CEng MSc FIET
Managing Director

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Schedule

12 Description of Product

The CYCLOPS Z-Purge Indicators provide evidence of pressurization for a customer supplied enclosure with either leakage compensation or continuous dilution sources of protective gas. The unit comes in one casing style, which is available in either stainless steel or anodized aluminium, machined from bar stock. The CYCLOPS Z-Purge Indicator monitors one pressure point and is flange mounted to the outer side wall of the enclosure it will be monitoring. All electrical and alarm connections to the CYCLOPS Z-Purge Indicator are made inside the purged enclosure.

Type Description:

PSCZ - a - b - c - d - e

a - Supply Voltage:

1: Normal Voltage 12 Vdc

2: Normal Voltage 24 Vdc

3: Normal Voltage 115 Vac

4: Normal Voltage 230 Vac

b - Indicator Material:

A - Anodized 6061-T6 Aluminum Machined Round Stock

S - 316 Stainless Steel Machined Round Stock

c - Maximum Enclosure Volume:

1 - Up to 25 Cubic Foot (708 litres)

2 - Up to 100 Cubic Foot (2,832 litres)

3 - Up to 200 Cubic Foot (5,663 litres)

4 - Up to 300 Cubic Foot (8,495 Litres)

d - Hazardous Area Type:

G - Gas Hazardous Areas

D - Dust Hazardous Areas

e - Alarm Contact Type:

O - Normally Open

C - Normally Closed

13 Descriptive Documents

13.1 Associated Report and Certificate History:

Report Number	Cert Issue Date	Issue	Comment
R3410/A/2	03/08/2021	0	Initial issue of the Prime Certificate
R4370/A/1	12/05/2023	1	Evaluation to add new encapsulation options for the manufacturer.

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Issue 1

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13.2 Compliance Drawings:

Title:	Drawing No.:	Rev. Level:	Date:
CUSTOMER WIRING DIAGRAM CYCLOPS Y OR Z – PURGE INDICATOR	DO-11009-F	F	2002/08/04
CYCLOPS Z – PURGE INDICATOR IOM MANUAL	DO-11011-Y	Y	2021/05/12
CYCLOPS Z – Purge Indicator Checkout Sheet	DO-11031-J	J	2002/03/23
*GENERAL ASSEMBLY CYCLOPS Y&Z – PURGE INDICATOR	DO-11045-H	H	2023/04/13
PC BOARD SCHEMATICS CYCLOPS Y&Z – PURGE INDICATOR	EB-11021-C-1	C	2005/04/11
PC BOARD BARE CYCLOPS Y&Z – PURGE INDICATOR	EB-11021-C-2	C	2005/04/11
PC BOARD TRACE LAYOUT CYCLOPS Y&Z – PURGE INDICATOR	EB-11021-C-3	C	2005/04/11
PC BOARD GENERAL ASSEMBLY CYCLOPS Y&Z – PURGE INDICATOR	EB-11021-C-4	C	2005/04/11
PURGE SOLUTIONS ATEX, IECEx & UKEX CASING LABEL LAYOUT CYCLOPS Z – PURGE INDICATOR	MM-10002-M-1	M	2002/12/27

*Note: An * is included before the title of documents that are new or revised.*

14 Specific Conditions of Use

14.1 Special Conditions for Safe Use

- When the purge indicator is used with a pressurized enclosure, the assembly shall be evaluated according to the requirements of IEC 60079-0, IEC 60079-2 and IEC 60079-31 (as applicable).
- The terminals blocks are approved as “ec” for Group II and “tc” for Group III, therefore, their installation compartment shall comply with the requirements of IEC 60079-7 and IEC 60079-31, as applicable.

14.2 Routine tests

- Dielectric strength test according to document DO-11031-J to be performed in all units covered by this approval.

15 Essential Health and Safety Requirements

Essential Health and Safety Requirements are addressed by the standards listed in section 8 and where required the report listed in section 13.1

The manufacturer shall inform the ExVeritas of any modifications to the design of the product described by this schedule.

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Issue **1**

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