



1 UNITED KINGDOM CONFORMITY ASSESSMENT UK TYPE EXAMINATION CERTIFICATE

Product Intended for use in Potentially Explosive Atmospheres
 UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1

3 Type Examination Certificate Number: ExVeritas 21UKEX0900X Issue: 1

4 Product: CYCLOPS Y Purge Indicators PSCY - a - b - c - d - e

5 Manufacturer: Purge Solutions, Inc.

6 Address: 592 Avenue E 1/2, Alvin, Texas 77511 USA

- 7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 8 ExVeritas Limited Approved Body number 2585, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended by UKSI 2019:696), 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.
- 9 Compliance with the applicable Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018

EN 60079-2:2014

EN 60079-11:2012

Except in respect of those requirements listed at section 16 of the schedule to this certificate.

- 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.
- This 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.
- The marking of the equipment shall include the following:

 $\cancel{\text{Ex}}$ II 2G Ex ib [pyb] IIC T4 Gb -40 °C \leq Ta \leq +65 °C

EN II 2D Ex ib [pyb] IIIC T135°C Db -40 °C ≤ Ta ≤ +65 °C



No. 8613

On behalf of ExVeritas

S Clarke CEng MSc FIET Managing Director

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The status of this certificate can be verified at www.exveritas.com

For help or assistance relating to this certificate, contact info@exveritas.com.

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Schedule

13 Description of Product

The CYCLOPS Y-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 Y-Purge Indicator monitors a 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 Y-Purge Indicator are made inside the purged enclosure and are made via linear suitably approved intrinsically safe barrier.

Type Description:

PSCY-a-b-c-d-e

- a Supply Voltage:
 - 1: Normal Voltage 12 Vdc
 - 2: Normal Voltage 24 Vdc
- b Indicator Material:
 - A Anodized 6061-T6 Aluminium 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

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Entity parameters:

Parameter	Power input – Un = 12 Vdc	Power input – Un = 24 Vdc	Alarm
Ui =	15 V	24 V	10 V
li =	150 mA	174 mA	19 mA
Pi =	0.56 W	1.00 W	0.04 W
Ci =	0 F	0 F	0 F
Li =	0 H	0 H	0 H

14 <u>Descriptive Documents</u>

14.1 Associated Report and Certificate History:

Report Number	Cert Issue Date	Issue	Comment
R3410/A/1	03/08/2021	0	Initial issue of the Prime Certificate
R4371/A/1	15/05/2023	1	Evaluation to add new encapsulation options for the manufacturer.

14.2 Compliance Drawings:

Title:	Drawing No.:	Rev. Level:	Date:
CUSTOMER WIRING DIAGRAM CYCLOPS Y OR Z -	DO-11009-F	F	2002/08/04
PURGE INDICATOR			
IOM MANUAL	DO-11146-I	1	2021/05/12
*GENERAL ASSEMBLY CYCLOPS Y&Z – PURGE	DO-11045-H	Н	2023/04/13
INDICATOR			
IS WIRING DIAGRAM FOR DIVISION 1 & ZONE 1	DO-11108-C	С	2008/03/31
INSTALLATIONS CYCLOPS Y – PURGE INDIVATOR			
PC BOARD SCHEMATICS CYCLOPS Y&Z – PURGE	EB-11021-C-1	С	2005/04/11
INDICATOR			
PC BOARD BARE CYCLOPS Y&Z – PURGE INDICATOR	EB-11021-C-2	С	2005/04/11
PC BOARD TRACE LAYOUT CYCLOPS Y&Z – PURGE	EB-11021-C-3	С	2005/04/11
INDICATOR			
PC BOARD GENERAL ASSEMBLY CYCLOPS Y&Z -	EB-11021-C-4	С	2005/04/11
PURGE INDICATOR			
PURGE SOLUTIONS ATEX & IECEX CASING LABEL	MM-10002-M-3	M	2002/12/27
LAYOUT CYCLOPS Y – PURGE INDICATOR			
CYCLOPS Y – PURGE INDICATOR CHECK OUT SHEET	DO-11194-C	С	2002/03/23

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

Certificate: ExVeritas 21UKEX0900X

Issue 1





Schedule

- 15 Specific Conditions of Use
- 15.1 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 and IEC 60079-2.
- 15.2 Routine tests
 - N/A
- 16 Essential Health and Safety Requirements (Regulations Schedule 1)

Essential Health and Safety Requirements are addressed by the standards listed in section 9 and where required the report listed in section 14.1

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