

1 EU - Type Examination Certificate

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

3 Certificate Number: ExVeritas 19ATEX0450X Issue: 2

4 Equipment: 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 equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- 8 ExVeritas, Notified Body number 2804 in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems for use in potentially explosive atmospheres given in Annex II to the Directive
- 9 Compliance with the applicable Essential Health and Safety Requirements has been assured by compliance with the following Standards and section 16 of this certificate:

EN IEC 60079-0: 2018 EN 60079-2:2014 EN 60079-11:2012

- 10 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 EU-Type Examination Certificate relates only to the design, construction, examination and tests of the specified equipment or protective system in accordance with the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- 12 The marking of the equipment shall include the following:

ᢄ II 2G Ex ib [pyb] IIC T4 Gb -40 °C ≤ Ta ≤ +65 °C

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



On behalf of ExVeritas



Peter Lauritzen Managing Director



Schedule

13 <u>Description of Equipment or Protective System</u>

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



Schedule

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
R1649/A/1	05/06/2019	0	 Take over from DNV, reference certificate DNV 09 ATEX 48607X (Rev. 1). Inclusion of version rated to 24 Vdc. Updating of the ATEX Directive and standard IEC 60079-2 is updated to its new edition.
R3410/A/1	03/08/2021	1	 Upgrade to EN IEC 60079-0:2018 ATEX certificate issued by ExVeritas ApS, Denmark Notified Body. Minor administrative changes to the General product information and manufacturer's technical documents.
R4371/A/1	15/05/2023	2	Evaluation to add new encapsulation options for the manufacturer.



Schedule

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	EB-11021-C-2	С	2005/04/11
INDICATOR			
PC BOARD TRACE LAYOUT CYCLOPS Y&Z -	EB-11021-C-3	С	2005/04/11
PURGE 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	М	2002/12/27
LAYOUT CYCLOPS Y - PURGE INDICATOR			
CYCLOPS Y – PURGE INDICATOR CHECK OUT	DO-11194-C	С	2002/03/23
SHEET			

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

15 <u>Conditions of Certification</u>

- 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 Conditions for Use (Routine tests)
 - N/A
- 16 Essential Health and Safety Requirements

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 Notified Body of any modifications to the design of the product described by this schedule.

Certificate: ExVeritas 19ATEX0450X

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