

## 1 EU - Type Examination Certificate

- 2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 3 Certificate Number: ExVeritas 19ATEX0446X Issue: 0
- 4 Equipment: CYCLOPS Z Purge Indicators PSCZ a b c d e f
- 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 2585 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 60079-0:2012+A11:2013	EN 60079-7:2015	EN 60079-31:2014
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 to 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:
  - (Ex) II 3G Ex ec ic [pzc] IIC T6 Gc -40°C ≤ Ta ≤ +65°C
     (Ex) II 3D Ex ic [pzc] tc IIIC T79°C Dc IP66 -40°C ≤ Ta ≤ +65°C



No. 8613



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The certificate is only valid when it carries an original signature.

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## Schedule

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

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-f

- a Supply Voltage:
  - 1: Normal Voltage 12 Vdc
  - 2: Normal Voltage 24 Vdc
  - 3: Normal Voltage 115 Vac
  - 4: Normal Voltage 230 Vac
- b Enclosure Material:
  - A Anodized 6061-T6 Aluminum Machined Round Stock
  - S 316 Stainless Steel Machined Round Stock
- c Hazardous Area Type:
  - G Gas Hazardous Areas
  - D Dust Hazardous Areas
- d Alarm Contact Type:
  - O Normally Open
  - C Normally Closed
- e Maximum Enclosure Volume:
  - 1 Up to 25 Cubic Foot (708 Liters)
  - 2 Up to 100 Cubic Foot (2,832 Liters)
  - 3 Up to 200 Cubic Foot (5,663 Liters)
  - 4 Up to 300 Cubic Foot (8,495 Liters)
- f Protective Gas Inlet Kit Type:
  - C Continuous Dilution
  - L Leakage Compensation
  - N Not Needed, Customer to Supply

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## Schedule

- 14 <u>Descriptive Documents</u>
- 14.1 Associated Report and Certificate History:

Report Number	Cert Issue Date	Issue	Comment
R1649/A/2	05/06/2019	0	<ul> <li>Take over from DNV, reference certificate DNV 09 ATEX 52751X (Rev. 1).</li> <li>Updating of the ATEX Directive and standards standard EN 60079-15:2010 is replaced by the EN 60079-7:2015, where the protection concept "nA" is replaced by "ec" in accordance to the actual IEC concepts, the EN 60079-2 and IEC 60079-31 are updated to their new edition, IEC 60079-2:2014 and IEC 60079-31:2013 (EN 60079-31:2014).</li> </ul>

## 14.2 Compliance Drawings:

#### Issue 0

Title:	Drawing No.:	Rev. Level:	Date:
CUSTOMER WIRING DIAGRAM CYCLOPS Y OR Z – PURGE INDICATOR	DO-11009	F	2002/08/04
IOM MANUAL	DO-11011	W	2018/03/23
CYCLOPS Z – Purge Indicator Checkout Sheet	DO-11031	J	-
GENERAL ASSEMBLY CYCLOPS Y&Z – PURGE INDICATOR	DO-11045	G	2002/08/21
PC BOARD SCHEMATICS CYCLOPS Y&Z – PURGE INDICATOR	EB-11021-C-1	С	2005/04/11
PC BOARD BARE CYCLOPS Y&Z – PURGE INDICATOR	EB-11021-C-2	С	2005/04/11
PC BOARD TRACE LAYOUT CYCLOPS Y&Z – PURGE INDICATOR	EB-11021-C-3	С	2005/04/11
PC BOARD GENERAL ASSEMBLY CYCLOPS Y&Z – PURGE INDICATOR	EB-11021-C-4	С	2005/04/11
PURGE SOLUTIONS ATEX & IECEx CASING LABEL LAYOUT CYCLOPS Z – PURGE INDICATOR	MM-10002	К	2002/12/27
PURGE SOLUTIONS ATEX & IECEx CASING BRAND / LABEL LAYOUT CYCLOPS Z – PURGE INDICATOR	MM-10002	К	2002/12/27
DNV IECEx TEST REPORT	NO/DNV/ExTR09.007/00	2	2009/11/30

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Title:	Drawing No.:	Rev. Level:	Date:	
DNV IECEx TEST REPORT	NO/DNV/ExTR09.0007/01	-	2015/02/05	
Declaration EN 60079-0 (National differences)	-	2	2019/04/08	

#### 15 Conditions of Certification

## 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, 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.

# 15.2 Conditions for Use (Routine Tests)

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

#### 16 <u>Essential Health and Safety Requirements</u>

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.

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