



# Certificate of Compliance

**Certificate:** 2007104

**Master Contract:** 223077

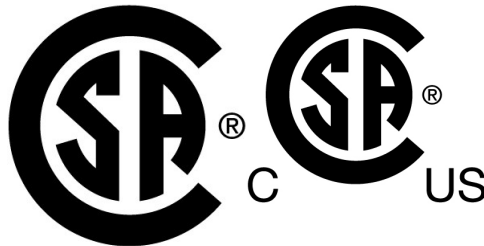
**Project:** 2650019

**Date Issued:** August 23, 2013

**Issued to:** Purge Solutions

2201 North Highway  
35 Bypass  
Suite C  
Alvin, TX 77511  
USA  
Attention: Wallace Trochesset

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.*



*Gino Surace*

**Issued by:** Gino Surace

## **PRODUCTS**

**CLASS 2258 03** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non - Incendive Systems - For Hazardous Locations

CLASS 2258 03 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems - For Hazardous Locations

**Class I, Division 1, Groups A, B, C and D; Class II, Division 1, Groups F,G**

CYCLOPS Y – Purge Indicator, rated 12 Vdc or 24 Vdc, 0.5W; T4,  $-40\text{ }^{\circ}\text{C} \leq T_{\text{amb}} \leq 65\text{ }^{\circ}\text{C}$ . Alarm relay contact rated 265Vac/150mA max, resistive. Intrinsically safe when installed per control drawing DO-11108-C.

- CYCLOPS Indicator Model PSCY-abc where a = 1 for 12 Vdc or 2 for 24 Vdc b = A for aluminum housing or S for stainless steel housing c = blank for gas applications or D for dust applications



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Note 1: The CYCLOPS Y – Purge Indicator is certified as a component only and must be mounted on a suitable enclosure so that the terminals require tool access and where its final combination is subjected to acceptance by CSA International.

Note 2: The actual purge flow and corresponding purge time must be verified once the protective gas system installation is completed.

Note 3: When using a small aluminum Gas Inlet Kit (PSO-SCD-A or PSO-SMLC-A), in combination with the CYCLOPS Y – Purge Indicator, the maximum pressure must be reduced from 300 psig to 150 psig for an ambient temperature above 52 °C.

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

CLASS 2258 82 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations - CERTIFIED TO U.S. STANDARDS

**Class I, Div 1 and Div2, Groups B, C and D; Class II, Division 1, Groups E,F,G**

CYCLOPS X – Purge Controller and TRYCLOPS X – Purge Controller, rated 115Vac/25 A max or 230Vac/12.5 A max, 50/60Hz; alarm relay contacts rated 265Vac, 125 mA; switched load rated 115Vac/25 A or 230Vac/12.5 A resistive only. Temperature Code T4,  $-40\text{ °C} \leq T_{amb} \leq 65\text{ °C}$ .

- CYCLOPS Controller Model PSC1-ab where a = 1 for 115 Vac or 2 for 230 Vac b = A for aluminum housing or S for stainless steel housing c = blank for gas applications or D for dust applications
- TRYCLOPS Controller Model PST-abc where a = 1, 2 or 3 to designate the number of pressurized enclosure that can be monitored b = 1 for 115 Vac or 2 for 230 Vac c = A for aluminum housing or S for stainless steel housing

Note 1: The actual purge flow and corresponding purge time must be verified once the protective gas system installation is completed.

Note 2: When monitoring more than one pressurized enclosure with a TRYCLOPS Controller, only one enclosure may have a Inlet Kit with a solenoid and only one enclosure may be powered directly from the TRYCLOPS Controller.



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Note 3: When using the small aluminum Gas Inlet Kit (PSO-SALC-D1A, PSO-SALC-D2A, PSO-SCD-A, and PSO-SMLC-A) in combination with the TRYCLOPS or CYCLOPS X – Purge Controllers, XP Version, the maximum pressure must be reduced from 300 psig to 150 psig for an ambient temperature above 52 °C.

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

**Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F,G**

CYCLOPS Z – Purge Indicator - rated 12 Vdc, 24 Vdc, 115 Vac or 230 Vac, 0.5VA; T6, -40 °C ≤ Tamb ≤ 65°C. Alarm relay contact rated 265Vac/150mA max, resistive.

- CYCLOPS Indicator Model PSCZ-abc where a = 1 for 12 Vdc, 2 for 24 Vdc, 3 for 115 Vac or 4 for 230 Vac. b = A for aluminum housing or S for stainless steel housing c = blank for gas applications or D for dust applications

Note 1: The Cyclops Z-Purge Indicator is certified as component only and must be mounted on a suitable enclosure so that the terminals require tool access and where its final combination is subjected to acceptance by CSA International.

Note 2: The actual purge flow and corresponding purge time must be verified once the protective gas system installation is completed.

Note 3: When using the small aluminum Gas Inlet Kit (PSO-SCD-A, and PSO-SMLC-A) in combination with the CYCLOPS Z – Purge Indicator, the maximum pressure must be reduced from 300 psig to 150 psig for an ambient temperature above 52 °C.

**APPLICABLE REQUIREMENTS**

CYCLOPS Y – Purge Indicator and CYCLOPS Z – Purge Indicator

CAN/CSA-C22.2 No. 0-M91	General Requirements – Canadian Electrical Code, Part II
CSA C22.2 No. 142-M1987	Process Control Equipment
CAN/CSA-C22.2 No. 157-92	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
CSA C22.2 No. 213-M1987	Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations



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CAN/CSA-C22.2 No. 60529:05	Degree of protection provided by enclosures (IP Code)
NFPA 496 – 2008 2013	Purged and Pressurized Enclosures for Electrical Equipment

CYCLOPS X – Purge Controller , XP Version and TRYCLOPS X – Purge Controller, XP Version

CAN/CSA C22.2 No. 0-M91 (R2001)	General Requirements - Canadian Electrical Code, Part II
CSA C22.2 No. 142-M1987	Process Control Equipment
CSA C22.2 No. 30-M1986	Explosion-Proof Enclosures for Use in Class I Hazardous Locations
CAN/CSA-C22.2 No. 60529:05	Degree of protection provided by enclosures (IP Code)
NFPA 496-2013	Purged and Pressurized Enclosures for Electrical Equipment
UL No. 508, 17th Ed., Revs to Jul 2005	Industrial Control Equipment
UL No. 913, 7th Ed.	Intrinsically Safe Apparatus and Associated Apparatus for Use in  Class I, II, and III, Division 1, Hazardous (Classified) Locations
UL No. 916, 3rd Ed. March 2006	Energy Management Equipment
UL No. 1203, 4th Ed. Sept. 2006	Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations

**MARKINGS**

All CYCLOP AND TRYCLOPS models

- Manufacturer’s name or CSA Master Contract Number “223077”, adjacent to the CSA Mark in lieu of manufacturer’s name.
- Model number: As specified in the PRODUCTS section, above.
- Electrical ratings: As specified in the PRODUCTS section, above.
- Ambient temperature rating: As specified in the PRODUCTS section, above.
- Manufacturing date in MMY format, or serial number, traceable to month of manufacture.
- Hazardous Location designation, as specified in the PRODUCTS section, above.
- Temperature code: As specified in the PRODUCTS section, above.

CYCLOPS Y – Purge Indicator and CYCLOP Z-Purge Indicator

- The CSA Mark, as shown on the Certificate of Conformity.
- The symbol “Exia” for Div 1 version;
- Reference to installation instructions for Division 1 version; and
- Division 2 version - Caution: “Do not disconnect unless power is switched-off or the area is known to be non-hazardous location”

CYCLOPS X – Purge Controller , XP Version and TRYCLOPS X-Purge Controller, XP Version



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- The CSA Mark with “C” and “US” indicators, as shown on the Certificate of Conformity.
- Caution: “Enclosure Shall Not Be Opened Unless Power Is Removed or Area Is Known to Be Non-Hazardous”; and
- Caution: “Conduit Must Be Sealed Within 18 inches of Purge Controller”