



Certificate of Compliance

Certificate: 2095819

Master Contract: 150863

Project: 80129537

Date Issued: 2022-08-17

Issued To: Detector Electronics Corporation (Det-Tronics)
6901 W 110th St
Minneapolis, Minnesota, 55438-2392
United States

Attention: Michael Farrell

The products listed below are eligible to bear the CSA Mark shown

Issued by: Konstantin Rybalko
Konstantin Rybalko



PRODUCTS

CLASS 4828 01 - SIGNAL APPLIANCES-Combustible Gas Detection Instruments-For Hazardous Locations

Class I, Div. 1, Groups B, C and D, T*;
Class I, Div. 2, Groups A, B, C and D, T*;
Ex db eb [ib] IIC T* Gb;
Ex db [ib] IIC T* Gb;
Ex db eb IIC T* Gb;
Ex db IIC T* Gb;

* Refer to table below for temperature code:

Configuration	Ex db eb	Ex db
Temperature range	(not explosion proof terminal compartment)	(explosion proof terminal compartment)
-50°C to +40°C	T5	-
-55°C to +40°C	-	T5
-50°C to +75°C	T4	-
-55°C to +75°C	-	T4



Certificate: 2095819

Project: 80129537

Master Contract: 150863

Date Issued: 2022-08-17

PointWatch Eclipse® stand-alone infrared (IR) hydrocarbon gas detector, Model PIRECL Series (SIL or Non-SIL), input voltage 18 to 32 Vdc, 24 Vdc nom., 10 W max., output 4-20 mA. Optional relays rated 30 Vdc/5A. Optional intrinsically safe output port for HART Communication per Drawing 007283-001. May be used with Termination Box, Model PIRTB Series and/or Universal Display Unit Model UD20 Series. Gas Performance certified for Methane, Propane, Butane and Ethylene.

AutoPoint stand-alone infrared (IR) hydrocarbon gas detector, Model HC200 Series, input voltage 18 to 32 Vdc, 24 Vdc nom., 10 W max., output 4-20 mA. Optional relays rated 30 Vdc / 5A. Optional intrinsically safe output port for HART Communication per Drawing 007283-002. May be used with Termination Box, Model PIRTB Series and/or Universal Display Unit Model UD20 (or AV20) Series.

Entity parameters: $U_o = 3.47 \text{ V}$, $I_o = 117 \text{ mA}$, $C_o = 1000 \text{ }\mu\text{F}$, $L_o = 2.3 \text{ mH}$

Conditions of Acceptability:

1. Enclosure with metric threads must be used with certified metric to NPT adaptor.
2. The Infrared Gas Detector model PIRECL shall be installed in places where there is a low risk of mechanical damage.
3. Potential electrostatic charging hazard - use a wrist grounding strap or similar method at all times to control accidental ESD when disassembling, programming, or reassembling the PIRECL gas detector.
4. Flameproof joints are not intended to be repaired.
5. Model PIRECL with [ib] HART communication port shall be powered from a Safety Isolating Transformer according to EN/IEC60742 or EN/IEC61588.
6. Model AutoPoint HC300PL is only to be used connected to the Autosafe system by the Power-Loop circuit.
7. The Hart communicator tools are not to be used for changing the alarm set points of the HC300PL. The HC300PL alarm setpoints are only to be changed by using the alarm set points programming tools on the Autosafe controller unit.
8. For Zones installations conduit seal shall be installed within 50mm from the enclosure.



Certificate: 2095819

Project: 80129537

Master Contract: 150863

Date Issued: 2022-08-17

CLASS 4828 02 - SIGNAL APPLIANCES- Toxic Gas Detection Instruments-For Hazardous Locations

Class I, Div. 1, Groups B, C and D T*;
Class I, Div. 2, Groups A, B, C and D T*;
Ex db eb [ib] IIC T* Gb;
Ex db [ib Gb] IIC T* Gb;
Ex db eb IIC T* Gb;
Ex db IIC T* Gb;

* Refer to table below for temperature code:

Configuration	Ex db eb	Ex db
Temperature range	(not explosion proof terminal compartment)	(explosion proof terminal compartment)
-50°C to +40°C	T5	-
-55°C to +40°C	-	T5
-50°C to +75°C	T4	-
-55°C to +75°C	-	T4

PointWatch Eclipse® stand-alone infrared (IR) Carbon Dioxide gas detector, Model PIRECL Series, input voltage 18 to 32 Vdc, 24 Vdc nom., 10 W max., output 4-20 mA. Optional relays rated 30 Vdc / 5A. Optional intrinsically safe output port for HART Communication per Drawing 011975-001. May be used with Termination Box, Model PIRTB Series.

AutoPoint stand-alone infrared (IR) Carbon Dioxide gas detector, Model HC200 Series, input voltage 18 to 32 Vdc, 24 Vdc nom., 10 W max., output 4-20 mA. Optional relays rated 30 Vdc / 5A. Optional intrinsically safe output port for HART Communication per Drawing 007283-002. May be used with Termination Box, Model PIRTB Series.

Entity parameters: $U_o = 3.47 \text{ V}$, $I_o = 117 \text{ mA}$, $C_o = 1000 \text{ }\mu\text{F}$, $L_o = 2.3 \text{ mH}$

Conditions of Acceptability:

1. Enclosure with metric threads must be used with certified metric to NPT adaptor.
2. The Infrared Gas Detector model PIRECL shall be installed in places where there is a low risk of mechanical damage.
3. Potential electrostatic charging hazard - use a wrist grounding strap or similar method at all times to control accidental ESD when disassembling, programming, or reassembling the PIRECL gas detector.
4. Flameproof joints are not intended to be repaired.
5. Model PIRECL with [ib] HART communication port shall be powered from a Safety Isolating Transformer according to EN/IEC60742 or EN/IEC61588.
6. Model AutoPoint HC300PL is only to be used connected to the Autosafe system by the Power-Loop circuit.

Certificate: 2095819**Project:** 80129537**Master Contract:** 150863**Date Issued:** 2022-08-17

-
7. The Hart communicator tools are not to be used for changing the alarm set points of the HC300PL. The HC300PL alarm setpoints are only to be changed by using the alarm set points programming tools on the Autosafe controller unit.
 8. For Zones installations conduit seal shall be installed within 50mm from the enclosure.

APPLICABLE REQUIREMENTS

C22.2 No. 30-M1986	- Explosion-Proof Enclosures for Use in Class I Hazardous Locations
CAN/CSA-C22.2 No. 94-M91	- Special Purpose Enclosures
CSA Std. C22.2 No.152-M1984	- Combustible Gas Detection Instruments
CAN/CSA-C22.2 No.157-92	- Intrinsically Safe and Non-incendive Equipment for Use in Hazardous Locations
C22.2 No. 213-M1987	- Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
C22.2 No 60079-0: 2015 Ed. 6	- Explosive atmospheres - Part 0: General requirements
C22.2 No 60079-1: 2016 Ed. 7	- Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
C22.2 No 60079-7: 2015 Ed. 5	- Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
C22.2 No 60079-11: 2014 Ed. 6	- Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
C22.2 No 60079-29-1: 2012 Ed. 1	- Explosive Atmospheres - Part 29-1: Gas Detectors - Performance requirements of detectors for flammable gases
CAN/CSA-C22.2 No. 61010-1-12 UPD1: 2015, UPD2: 2016, AMD1: 2018	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements

Notes:

Products certified under Class C482801, C482802 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca





Supplement to Certificate of Compliance

Certificate: 2095819

Master Contract: 150863

*The products listed, including the latest revision described below,
are eligible to be marked in accordance with the referenced Certificate.*

Product Certification History

Project	Date	Description
80129537	2022-08-17	Update to CSA report 2095819 for PointWatch Eclipse® stand-alone infrared (IR) hydrocarbon gas detector to replace obsolete components on interface boards and updates to firmware outlined in document DEC3023-233.
70152530	2017-10-25	Update Report 2095819 for addition of Zone approval based on US/UL/EXTR16.0182/00
70127763	2017-04-25	Update to report 2095819 to include Fast Response firmware update.
70119007	2017-02-22	Update to report 2095819 for RoHS compliance and minor drawings revision.
70042467	2015-12-23	Update to the Report 2095819 for Firmware change to include HART 7 functionality
70031993	2015-08-24	Update to Report 2095819 for drawings update to model PIRECL.
70024910	2015-04-07	Update Report 2095819 to replace hydrophobic filter material used in weather baffle for PIRECL detector, and update drawings and manual with minor revisions.
2663025	2013-10-29	Update to report 2095819 to include revised firmware.
2615609	2013-08-29	Update to report 2095819 to cover revised LON board construction.
2530890	2012-06-04	Update to report 2095819 to include hardware and firmware changes and increase ambient temperature range.
2484899	2012-02-14	Update to report 2095819 to add a CO2 version.
2434408	2011-09-21	Update to report 2095819 to cover the addition of a Butane version.
2423553	2011-06-08	Update to report 2095819 to cover acceptance of propane and ethylene versions.



2413956	2011-04-29	Update to report 2095819 to cover revised construction.
2310530	2010-06-17	Update to report 2095819 to cover minor revised construction of processing board.
2235267	2010-04-12	Update to report 2095819 to cover revised Firmware and an alternative sub D connector.
2095819	2009-03-24	Update to cover revised firmware and addition of Model without HART