



Certificate of Compliance

Certificate: 2029512 (LR 52532)

Master Contract: 150863

Project: 2713034

Date Issued: March 26, 2014

Issued to: **Detector Electronics Corporation**

**6901 W 110th St
Minneapolis, MN 55438-2392
USA
Attention: Will Hosie**

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



Glenn Black

Issued by: Glenn Black

PRODUCTS

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

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

4828 01

Class I, Div. 1, Groups A, B, C & D (T5); Class I, Div. 2, Groups A, B, C & D (T4);

Class II/III, Div. 1/2, Groups E, F & G (T5); Type 4X

FlexVu (or AutoVu) Explosion Proof Universal Display Unit, Model UD10 (or AV10) abcde, 18-30Vdc, 2 - 7W maximum; operating temperature -55°C to +75°C; contacts rated 30Vdc/ 5A (resistive). The Display/ Control unit designed for gas detectors such as PIRECL, OPECL, or PIR9400 for use with any CSA certified 4-20mA stand-alone gas detection instruments, monitors 0-100% LFL gas in air atmospheres, for indoor and outdoor use. The control unit communicates to the detector head via a 4-20 mA signal with or without Hart. The control unit provides either a 4-20 mA signal with Hart, Foundation Field Bus, or Modbus.

Model Code:

UD10(or AV10)abcde, Universal Display Unit



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a = Enclosure Type: A or S

b = Thread Type: 5M or 5N

c = Output: 25, 27

d = Approval: A, AS, C, CS, T or W

e = Classification: 2

FlexVu (or AutoVu) Explosion Proof Universal Display Unit, Model UD10 (or AV10) abcdefwith CGS Smart Interface Circuit, 18-30Vdc, 11 W maximum; operating temperature -40°C to +75°C; contacts rated 30Vdc/ 5A (resistive). The Display/Control/Detector unit designed for Model CGS gas sensor, monitors 0-100% LFL gas in air atmospheres, for indoor and outdoor use. The control unit provides either a 4-20 mA signal with Hart, Foundation Field Bus, or Modbus.

Model Code:

UD10(or AV10)abcdef, Universal Display Unit

a = Enclosure Type: A or S

b = Thread Type: 5M or 5N

c = Output: 25, 27

d = Approval: A, C, or W

e = Classification: 2

f = Optional Conditioning board: C

FlexVu Explosion Proof Universal Display Unit, Model UD10abcdef, DCU/LON Version with or without CGS Smart Interface Circuit, 18-30Vdc, 2 - 6W maximum without CGS, 11W maximum with CGS; operating temperature -40°C to +75°C; LON interface for use with EQP Control Systems. The transmitter isdesigned for gas detectors/sensors such as PIRECL, OPECL, PIR9400 or CGS, or for use with any CSA certified 4-20mA stand-alone gas detection instruments, monitors 0-100% LFLgas in air atmospheres, for indoor and outdoor use. The UD10 transmitter communicates to the detector head via a 4-20 mA signal with or without Hart.

Model Code:



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UD10abcdef, Universal Display Unit

a = Enclosure Type: A or S

b = Thread Type: 5M or 5N

c = Output: 28

d = Approval: A, C, or W

e = Classification: 2

f = Optional Conditioning board: C or blank

4828 02

Class I, Div. 1, Groups A, B, C & D (T5); Class I, Div. 2, Groups A, B, C & D (T4);

Class II/III, Div. 1/2, Groups E, F & G (T5); Type 4X

FlexVu (or AutoVu) Explosion Proof Universal Display Unit, Model UD10 (or AV10) abcde, 18-30Vdc, 2 - 7W maximum; operating temperature -55°C to +75°C; contacts rated 30Vdc/ 5A (resistive). The Display/Control unit designed for toxic gas detectors such as GT3000, NTMOS, PIRECL CO2, or C7064E, or for use with any CSA certified 4-20mA stand-alone gas detection instruments. Displays engineering units of PPM gas atmospheres or percent by volume. The control unit communicates to the detector head via a 4-20 mA signal with or without Hart. The Display/Control unit provides either a 4-20 mA signal with Hart, Foundation Field Bus, or Modbus.

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b = Thread Type: 5M or 5N

c = Output: 25, 27

d = Approval: A, AS, C, CS, T or W

e = Classification: 2

FlexVu (or AutoVu) Explosion Proof Universal Display Unit, Model UD10 (or AV10) abcdef, 18-30Vdc, 2 - 7W maximum; operating temperature -55°C to +75°C; contacts rated 30Vdc/ 5A (resistive). The Display/



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Control unit designed for NTMOS toxic gas detectors with optional NTMOS conditioning board. Displays engineering units of PPM gas atmospheres or percent by volume. The control unit communicates to the detector head via a 4-20 mA signal with or without Hart. The Display/Control unit provides either a 4-20 mA signal with Hart, Foundation Field Bus, or Modbus.

Model Code:

UD10(or AV10)abcdef, Universal Display Unit

a = Enclosure Type: A or S

b = Thread Type: 5M or 5N

c = Output: 25, 27

d = Approval: A, C, or W

e = Classification: 2

f = Optional Conditioning board: N or blank

FlexVu Explosion Proof Universal Display Unit, Model UD10abcdef, DCU/LON Version, 18-30Vdc, 2 - 7 W maximum; operating temperature -40°C to +75°C; LON interface for use with EQP Control Systems. The Display/Control unit designed for toxic gas detectors such as GT3000, NTMOS, or C7064E, or for use with any CSA certified 4-20mA stand-alone toxic gas detection instruments. Displays engineering units of PPM gas atmospheres or percent by volume. The UD10 transmitter communicates to the detector head via a 4-20 mA signal with or without Hart.

Model Code:

UD10abcdef, Universal Display Unit

a = Enclosure Type: A or S

b = Thread Type: 5M or 5N

c = Output: 28

d = Approval: A, C, or W

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APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 0-M91 - General Requirements – Canadian Electrical Code, Part II

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

C22.2 No. 142-M1987 - Process Control Equipment

C22.2 No. 213-M1987 - Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations

CSA Std C22.2 No.152- 1984 - Combustible Gas Detection Instruments



Supplement to Certificate of Compliance

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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
2713034	Mar 26, 2014	Update to report 2029512 to add Autronica AutoVu Model AV10 as a Private Label to the Det-Tronics FlexVu Model UD10.
2511643	Oct 15, 2012	Update to report 2029512 to cover revised hardware and firmware.
2530892	Jun 4, 2012	Update to report 2029512 to cover revised hardware and firmware.
2440930	Jul 27, 2011	Update report 2029512 to cover revised firmware and construction
2411233	Apr 20, 2011	Update to report 2029512 to cover revised firmware for the microcontroller on the CGS interface PCB.
2349754	Oct 20, 2010	Revised Construction
2220666	Nov 11, 2009	Update to report 2029512 to add use of NTMOS sensor and revise firmware.
2198594	Aug 5, 2009	Firmware change
2166315	May 12, 2009	Update report 2029512 to cover revised firmware
2095817	Nov 10, 2008	Revised Firmware
2029512	Oct 20, 2008	Original Certification