



Certificate of Compliance

Certificate: 2662675

Master Contract: 153857

Project: 80069544

Date Issued: 2022-02-23

Issued to: Vega Grieshaber KG
Am Hohenstein 113
Schiltach, Baden-Württemberg 77761
GERMANY

Attention: Thomas Roming

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



Issued by: Jared Gillespie

PRODUCTS

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT – For Hazardous Locations

CLASS 2258 82 - PROCESS CONTROL EQUIPMENT – For Hazardous Locations – Certified to US Standards

Class I, Division 2, Groups A, B, C and D T*;

Class II, Division 2, Groups F and G T*;

Class III;

Ex nA IIC T* Gc

Class I, Zone 2 AEx nA IIC T* Gc

VEGADIS 81 - External display and adjustment unit for plics® sensors – Model DIS81(*). *a A I d N f g h j.*

Electrical Ratings: 24 Vdc max, 1.7W max (supplied by VEGA Sensors); Enclosure Rating: Type 4X, 6P; IP66/IP68 (0.2 bar)

*Ambient Temperature ranges are as follows:

Temperature Class	T6	T5	T4, T3, T2, T1
Permissible temperature at the electronics	-40°C ... +46°C	-40°C ... +61°C	-40°C ... +80°C





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Model nomenclature VEGADIS 81 version DIS81(*). *a A I d N f g h †*

Where:

(*) = Electable parameter depending on the customer, options not affecting safety, one or two-digit alphanumeric variable referring to non-electrical properties.

a = scope: C (Canada) or F (US)

d = housing: A or H (aluminum), or V (stainless steel)

f = cable entry: N (½-14NPT / blind plug), D (M20x1.5 / blind plug), Q (½-14NPT / without), or 1 (M20x1.5 / without)

g = display / adjustment module PLICSCOM: X, A, F or K

h = mounting: A, C, D or E

† = May be followed by additional alphanumeric characters, not affecting CSA Certification.

Conditions of Acceptability:

1. This equipment may only be powered by a power supply unit with a limited energy electric circuit in accordance with CAN/CSA C22.2 No. 61010-1-12 and ANSI/UL 61010-1, or Class 2 as defined in the Canadian Electrical Code C22.1, Section 16-200 and/or National Electrical Code (NFPA 70), article 725.121.

Class I, Division 1, Groups A, B, C and D T6;

Class II, Division 1, Groups E, F and G T6;

Class III;

Ex db IIC T6 Gb;

Class I, Zone 1 AEx db IIC T6 Gb

VEGADIS 81 - External display and adjustment unit for plics® sensors – Model DIS81(*). *a b I d N f g h †*.

Electrical Ratings: 6.4 Vdc max, 500mW max (supplied by VEGA Sensors); Ambient Temperature Rating: -50°C to +60°C; Enclosure Rating: Type 4X, 6P; IP66/IP68 (0.2 bar),

Model nomenclature VEGADIS 81 version DIS81(*). *a b I d N f g h †*

Where:

(*) = Electable parameter depending on the customer, options not affecting safety, one or two-digit alphanumeric variable referring to non-electrical properties.

a = scope: C (Canada) or F (US)

b = approval: E or Q

d = housing: A or H (aluminum), or V (stainless steel),

f = cable entry: N (½-14NPT / blind plug), D (M20x1.5 / blind plug); Q (½-14NPT / without), or 1 (M20x1.5 / without)

g = display / adjustment module PLICSCOM: X, A, F or K

h = mounting: A, D or E

† = May be followed by additional alphanumeric characters, not affecting CSA Certification.

Conditions of Acceptability:

1. This equipment may only be powered by a power supply unit with a limited energy electric circuit in accordance with CAN/CSA C22.2 No. 61010-1-12 and ANSI/UL 61010-1, or Class 2 as defined in the Canadian Electrical Code C22.1, Section 16-200 and/or National Electrical Code (NFPA 70), article 725.121.



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Class II, Division 1 Group E, F, G; Class III; T75°C
Ex tb IIIC T75°C Db;
Zone 21 AEx tb IIIC T75°C Db;

VEGADIS 81 - External display and adjustment unit for plics® sensors – Model DIS81(*). *a R I d N f g h †*.
Electrical Ratings: 6.4 Vdc max, 500mW max (supplied by VEGA Sensors); Ambient Temperature Rating: -40°C to +60°C; Enclosure Rating: Type 4X, 6P; IP66/IP68 (0.2 bar)

Model nomenclature VEGADIS 81 version DIS81(*). *a R I d N f g h †*

Where:

(*) = Electable parameter depending on the customer, options not affecting safety, one or two-digit alphanumeric variable referring to non-electrical properties.

a = scope: C (Canada) or F (US)

d = housing: A or H (aluminum), or V (stainless steel),

f = cable entry: N (½-14NPT / blind plug), D (M20x1.5 / blind plug), Q (½-14NPT / without), or 1 (M20x1.5 / without)

g = display / adjustment module PLICSCOM: X, A, F or K

h = mounting: A, D or E

† = May be followed by additional alphanumeric characters, not affecting CSA Certification.

Conditions of Acceptability:

1. This equipment may only be powered by a power supply unit with a limited energy electric circuit in accordance with CAN/CSA C22.2 No. 61010-1-12 and ANSI/UL 61010-1, or Class 2 as defined in the Canadian Electrical Code C22.1, Section 16-200 and/or National Electrical Code (NFPA 70), article 725.121.
2. The nonmetallic enclosure parts of this equipment may become a spark ignition hazard in the presence of static electricity. The enclosure shall be cleaned only with a damp cloth, and the equipment shall be mounted to avoid building static electric charge from nonconductive process flow, strong air currents, or other potential charging through friction.

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations

CLASS 2258 84 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups A, B, C and D T*;

Class II, Division 1, Groups E, F and G T*;

Class III;

Ex ia IIC T6 Ga or Ex ia IIC T* Gb;

Ex ia IIIC T6 Da or Ex ia IIIC T* Db;

Class I, Zone 0, AEx ia IIC T* Ga

Class I, Zone 1, AEx ia IIC T* Gb

Zone 20 AEx ia IIIC T85 Da

Zone 21 AEx ia IIIC T85 Db



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VEGADIS 81 - External display and adjustment unit for plics® sensors – Model DIS81(*). *a b I d N f g h †*. Entity Parameters $V_{max} = 6\text{ V}$, $I_{max} = 221.2\text{ mA}$, $P_i = 332\text{ mW}$, $C_i = 0\text{ }\mu\text{F}$, $L_i = 0$ when connected to the “Comm” Port of a Vega sensor per control drawing GE3338 within the instruction manual; Enclosure Rating: Type 6P; IP66/IP68 (0.2 bar)

EPL Ga installation:

*Ambient Temperature ranges are as follows:

Temperature Class	T6	T5	T4, T3, T2, T1
Permissible temperature at the electronics	-20°C ... +46°C	-20°C ... +60°C	-20°C ... +60°C

EPL Gb installation:

*Ambient Temperature ranges are as follows:

Temperature Class	T6	T5	T4, T3, T2, T1
Permissible temperature at the electronics	-40°C ... +46°C	-40°C ... +61°C	-40°C ... +80°C

Model nomenclature VEGADIS 81 version DIS81(*). *a b I d N f g h †*

Where:

(*) = Electable parameter depending on the customer, options not affecting safety, one or two-digit alphanumeric variable referring to non-electrical properties.

a = scope: C (Canada) or F (US)

b = approval: C or O

d = housing: A or H (aluminum), or V (stainless steel),

f = cable entry: N (½-14NPT / blind plug), D (M20x1.5 / blind plug), Q (½-14NPT / without), or 1 (M20x1.5 / without)

g = display / adjustment module PLICSCOM: X, A, F or K

h = mounting: A, C, D or E

† = May be followed by additional alphanumeric characters, not affecting CSA Certification.

Condition of Acceptability

1. This equipment may only be powered by a power supply unit with a limited energy electric circuit in accordance with CAN/CSA C22.2 No. 61010-1-12 and ANSI/UL 61010-1, or Class 2 as defined in the Canadian Electrical Code C22.1, Section 16-200 and/or National Electrical Code (NFPA 70), article 725.121.

APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 94.2:20	Enclosures for Electrical Equipment, Environmental Considerations
CAN/CSA C22.2 No. 61010-1-12	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use —



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	Part 1: General Requirements
CAN/CSA C22.2 No. 60079-0:19	Explosive atmospheres — Part 0: Equipment – General requirements
CAN/CSA C22.2 No. 60079-1:16	Explosive atmospheres — Part 1: Equipment protection by flameproof enclosures “d”
CAN/CSA C22.2 No. 60079-11:14 (R2018)	Explosive atmospheres — Part 11: Equipment protection by intrinsic safety “i”
CAN/CSA C22.2 No. 60079-15:12	Explosive atmospheres — Part 15: Equipment protection by non-sparking safety “n”
CAN/CSA C22.2 No. 60079-31:15	Explosive atmospheres — Part 31: Equipment dust ignition protection by enclosure “t”
CSA C22.2 No. 25-1966 (R2004)	Enclosures for Use in Class II Groups E, F, and G Hazardous Locations
CAN/CSA C22.2 No. 30:20	Explosion-proof equipment
CSA C22.2 No. 213-M1987 (R2004)	Non-incendive Electrical Equipment for Use in Class I and II, Division 2, and Class III Hazardous (Classified) Locations
ANSI/UL 61010-1-2018 Third Edition	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use — Part 1: General Requirements
ANSI/UL 50E-2020 Third Edition	Enclosures for Electrical Equipment, Environmental Considerations
ANSI/UL 1203-2006 Fourth Edition	Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations
ANSI/UL 913-2006 Fourth Edition	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division I, Hazardous (Classified) Locations
ANSI/UL 60079-0-2020 Seventh Edition	Explosive atmospheres — Part 0: Equipment – General requirements
ANSI/UL 60079-1-2015 Seventh Edition	Explosive Atmospheres — Part 1: Equipment Protection by Flameproof Enclosures “d”
ANSI/UL 60079-11-2018 Sixth Edition	Explosive Atmospheres — Part 11: Equipment Protection by Intrinsic Safety “i”
ANSI/ISA 60079-15-2009 Fifth Edition	Electrical Apparatus for Explosive Atmospheres — Part 15: Electrical Apparatus with Type of Protection “n”
ANSI/UL 60079-31-2015	Explosive atmospheres — Part 31: Equipment dust ignition protection by enclosure “t”
ANSI/ISA 12.12.01	Non-incendive Electrical Equipment for Use in Class I and II, Division 2, and Class III Hazardous (Classified) Locations

MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.



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Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

The following markings are provided on permanent on a 0.5-mm thick metal nameplate secured by drive pins or screws in blind holes, cast, etched, or engraved, or on a CSA Accepted adhesive-type nameplate, manufactured by Brady, P/N B-423, or Schreiner Colour Laser Film Black SA (39-06), P/N Polyscript Carbo ACE SA, mounted to bare stainless steel, Valox 357 Polymer, or painted aluminum.

- Manufacturer's name: "Vega Grieshaber KG", or CSA Master Contract Number "153857", adjacent to the CSA Mark in lieu of manufacturer's name.
- Model designation: As specified in the PRODUCTS section, above.
- Electrical ratings: As specified in the PRODUCTS section, above.
- Temperature rating: As specified in the PRODUCTS section, above.
- Manufacturing date in MMY format, or serial number, traceable to year and month of manufacture.
- Enclosure ratings: As specified in the PRODUCTS section, above.
- The CSA Mark, with or without the "C" and "US" indicators, as shown on the Certificate of Conformity.
- The manufacturing location shall be identified if the equipment can be produced in more than one facility.

For all models, except those shown in the PRODUCTS section under Class 2252 06/86:

- The designation "CSA 14CA2662675".
- Hazardous Location designation: As specified in the PRODUCTS section, above. The word "Class" may be abbreviated "CL", the word "Division" may be abbreviated "DIV", and the word "Groups" may be abbreviated "GRP" or "GP".
- Method of Protection markings (Ex -- markings): As specified in the PRODUCTS section, above. The word "Class" may be abbreviated "CL", the word "Zone" may be abbreviated "ZN".
- The words: "WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS" and "AVERTISSEMENT - RISQUE DE CHARGE ÉLECTROSTATIQUE POTENTIEL - VOIR LES INSTRUCTIONS", or suitable equivalent.

For models shown in the PRODUCTS section under Class 2258 02/82, the following words:

- "OPEN CIRCUIT BEFORE REMOVING COVER" or "KEEP COVER TIGHT WHILE CIRCUITS ARE ALIVE", AND "ATTENTION: NE PAS OUVRIR SAUF DE TENSION OU ZONE EST CONNU POUR ÊTRE NON DANGEREUX", or suitable equivalent.
- "SEAL REQUIRED WITHIN 18 INCHES", and "JOINT REQUIS À MOINS DE 18 POUÇES", or equivalent.
- Thread size and type shall be permanently marked adjacent to the threaded entries.

For models shown in the PRODUCTS section under Class 2258 04/84, the following words:

- "INTRINSICALLY SAFE" or "IS" or "I.S." or the symbol "Ex ia"
- "WARNING: SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY", and "AVERTISSEMENT: LA SUBSTITUTION DE COMPOSANTS PEUT COMPROMETTRE LA SECURITE INTRINSEQUE", or suitable equivalent.
- "Install per drawing GE3338", or the equivalent.



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- ISO 60417, Symbol \perp shall be permanently marked adjacent to the equipment ground (protective conductor) terminal on all models.
 - The equipment is permanently marked “Use wiring rated $\geq 90^{\circ}\text{C}$ ”, or equivalent. This may be marked in the wiring compartment.



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
80069544	2022-02-23	Update to report 2662675 to remove model VEGADIS61 and update Electrical Ratings and add Class II, Division 1, Groups E, F, G; Class III; T*; Ex tb IIIC T75°C Db; Zone 21 AEx tb IIIC T75°C Db.
70215802	2019-07-29	Update of CSA Certificate and Descriptive Report 2662675 for HAZLOC certification of VEGADIS81 for North America Addition of PLICSCOM3 assessed under Custom Testing Service Test Report No. 153857-70160903 to the CSA Test Report 2662675. Thermal data adjustments to accommodate PLICSCOM3 temperature rise. Deletion of plastic housing from the model code. Supplement of character for OEM customers in the model code. Addition and reference to CSA Safety Instructions.
70016923	2014-11-28	Revision to Existing Report 2662675-VEGADIS 81
2662675	2014-10-10	HAZ 130591: cCSAus certification of VEGADIS 81, Indicating and Adjustment Unit for Class I-III, Div.1 (IS) and Class I-III, Div. 1,(XP), Includes CSA Certification to Ordinary Locations 61010.