



Certificate: 1636889

Master Contract: 161129

Project: 80230570

Date Issued: 2024-12-20

Model(s)	Part Number	Input Voltage (VDC)	Power (W max)	Output Current (mA)	Relay Contact Rating	Relay Contact Rating	Enclosure Type	Ambient Temp. Range (°C)
FL4000H	71296-a*	20 to 36	4.4	4-20	250 V ac or 24 V dc	8 A resistive	6P / IP67	-40 to +80

*a: 1 through 6, 19 through 24

Model(s)	Part Number	Input Voltage (VDC)	Power (W max)	Output Current (mA)	Relay Contact Rating	Relay Contact Rating	Enclosure Type	Ambient Temp. Range (°C)
FL5000	712802-a*	20 to 32	9.7 (heater 'ON')	4-20	24 V dc	8 A resistive	6P / IP67	-40 to +80

Model(s) (cont.)	Temperature Class
FL5000	T4

*a: 1

Class I, Div. 2, Groups A, B, C and D; Class II, Div. 2, Groups F and G

Model(s)	Part Number	Input Voltage (VDC)	Power (W max)	Output Current (mA)	Relay Contact Rating	Relay Contact Rating	Enclosure Type	Ambient Temp. Range (°C)
FL5000	712802-a*	20 to 32	9.7 (heater 'ON')	4-20	24 V dc	8 A resistive	6P / IP67	-40 to +80

Model(s) (cont.)	Temperature Class
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APPLICABLE REQUIREMENTS

CSA 22 No 251996 - Enclosures for use in Class II, Division 1, Groups E, F, and G hazardous locations

CSA C22.2 No. 30-M1986 - Third Edition - Explosion-proof enclosures for use in class I hazardous locations - General Instruction No. 1: November 1986; General Instruction No. 2: November 1988

CSA C22.2 No. 94-M91 - Fourth Edition - Special Purpose Enclosures Industrial Products -Fourth Edition

CSA C22.2 NO. 142-M1987 - Process Control Equipment

CSA C22.2 No. 25:17 - Fourth Edition - Enclosures for use in Class II, Division 1, Groups E, F, and G hazardous locations

CSA C22.2 No. 94.2:15 - Second Edition - Enclosures for electrical equipment, environmental considerations

CSA C22.2 No. 61010-1-12,UPD1:2015, UPD2:2016, AMD1:2018, UPD3:2023 - Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 1: General requirements - Third Edition; Update No. 1: July 2015; Update No. 2: April 2016; Update No. 3: June 2023

CSA C22.2 No. 213-17 - Third Edition - Including Update No. 3 - April 2021 - Nonincendive electrical equipment for use in Class I and II, Division 2 and Class III, Divisions 1 and 2 hazardous (classified) locations - Update No. 1: August 2018; Update No. 2: August 2019

Standards Notes

APPLICABLE REQUIREMENTS (for FL4000 model)

CSA Std. C22.2 No. 25-1966 Enclosures for Use in Class II, Groups E, F and G Hazardous Locations

CSA Std. 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. 142-M1987 Process Control Equipment

APPLICABLE REQUIREMENTS (for FL4000H)

CSA Std. C22.2 No. 25-17 Enclosures for Use in Class II, Groups E, F and G Hazardous Locations

CSA Std. C22.2 No. 30-M1986 Explosion-Proof Enclosures for Use in Class I Hazardous Locations

CAN/CSA-C22.2 No. 94.2-15

Special Purpose Enclosures

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

APPLICABLE REQUIREMENTS (FL5000 model)

CSA Std. C22.2 No. 25-17 Enclosures for Use in Class II, Groups E, F and G Hazardous Locations

CSA Std. C22.2 No. 30-M1986 Explosion-Proof Enclosures for Use in Class I Hazardous Locations

CAN/CSA-C22.2 No. 94.2-15

Special Purpose Enclosures

CSAC22.2 No. 61010-1-12, Rev May 11, 2012; Update No. 1 Rev July 15, 2015; Update No. 2, Rev April 29, 2016; Amendment 1, Rev November 16, 2018; Update No. 3, June 6, 2023 Safety Requirements For Electrical Equipment For Measureme



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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.

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, without any adjacent indicators, indicating that products have been manufactured to the requirements of Canadian Standards.

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FL4000:

Adhesive nameplates are attached to a bare metal surface. The markings appear on a CSA accepted nameplate material manufactured by Nelson Name Plate Co., type A- Heavy Duty, Pressure sensitive '300' , Clear Polyester, 3 mil to 4 mil.

FL4000H:

Adhesive nameplates are attached to a powder coated metal surface. The markings appear on a CSA accepted nameplate material manufactured by Nelson Name Plate Co.,AUTOTEX XE VELVET V150/V157 (0.006" POLYESTER) and Adhesive: 3M 9472LE 300 SERIES (0.005")

FL5000:

Adhesive nameplates are attached to a powder coated metal surface. The markings appear on a CSA accepted nameplate material manufactured by Nelson Name Plate Co.,AUTOTEX XE VELVET V150/V157 (0.006" POLYESTER) and Adhesive: 3M 9472LE 300 SERIES (0.005").

Note - Jurisdictions in Canada may require these markings to also be provided in French language. It is the responsibility of the manufacturer to provide bilingual marking, where applicable, in accordance with the requirements of the Provincial Regulatory Authorities. It is the responsibility of the manufacturer to determine this requirement and have bilingual wording added to the "Markings".

The following markings appear on the instrument:

- Company name;
- Model number;
- Serial number;
- Electrical rating;
- Hazardous locations designation;
- CSA Monogram;
- Caution re keeping cover tight while circuits are live;
- Caution re: Do not open when an explosive atmosphere is present;
- Caution re: Read and understand instruction manual before operating or servicing;
- Ambient Temperature;
- Special Purpose Enclosure Designation "Type 6P"; and "IP67"



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- For Class I Div.1 Installation: The words “A conduit seal must be installed within 18 inches of the enclosure”;
 - The words “Relay ratings see manual”

INSTALLATION MANUAL AND DOCUMENTATION

An installation manual, data sheet, or other documentation supplied with each unit contains the following information:

- A recapitulation of the information with which the equipment is marked, except for the serial number.
- Manufacturer’s name and address
- A description of the intended use of the equipment.
- A statement that if the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- Mounting and installation instructions, including dimensions.
- Specification for ambient temperature rating: as specified in the PRODUCTS section, above
- Electrical ratings: as specified in the PRODUCTS section, above
- Specification for appropriate wiring to the connector, including definition of pin functions, and specification for wire gauge.
- Instructions for proper grounding of the equipment.
- A description of all input and output connections.
- Specification that 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.
- Specific commissioning instructions and, if necessary for safety, warnings against hazards which could arise during installation or commissioning of the equipment.
- Where applicable, Conditions of Use –This information should not be hidden in the text and should be placed within the instructions in a highlighted way, often as a special chapter;
- Explanation of symbols related to safety which are used on the equipment.
- ISO 3864 Symbol B.3.1  or ISO 7000 symbol 0434  (triangle with exclamation point) with a statement that the manual must be consulted in all cases where this symbol is marked, in order to find out the nature of the potential HAZARDS and any actions which have to be taken to avoid them.
- Instructions for interconnection to accessories and other equipment, including indication of suitable accessories, detachable parts and any special materials.
- Identification and description of operating controls or parameter setting and their use in all operating modes.
- Information about verifications / tests prior to the (first) use of the equipment as required by the Type of Protection(s) – together with the sequence of conducting such verifications / tests;
- Detailed information about any special installation requirements for the Type of Protection(s) employed.
- Details which allow an informed decision to be made as to whether the equipment can be used safely in the intended area under the expected operating conditions;
- Instructions for cleaning and decontamination of the equipment.
- Instructions in sufficient detail to permit safe maintenance and inspection of the equipment, including requirements for the maintenance of the explosion protection, and to ensure continued safety of the equipment after the maintenance and inspection procedure.
- Where necessary, the essential characteristics of tools which may be used with the equipment; such as a special screwdriver for trimming.
- Specification of any parts which are required to be examined or supplied only by the manufacturer or his agent.
- Specification that: This equipment is certified for process control use only.

Conditions Of Acceptability



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1. The device may only be powered by a power supply unit with a limited energy electric output rated in accordance with CAN/CSA-C22.2 No. 61010-1-12 / UL Std. No. 61010-1 (3rd Edition) chapter 6.3.1/6.3.2 and 9.4 or class 2 according to CSA 223/UL 1310.
 2. This certificate does not cover performance of flame detection.
 3. This equipment is certified for process control use only.
 4. The model FL4000H and FL5000 were evaluated for outdoors use, Pollution Degree 4.



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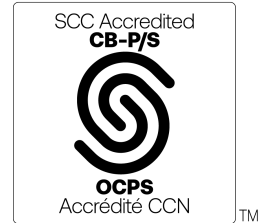
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Notes:

Products certified under Class(es) C481803 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

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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
80230570	2024-12-20	Update to report 1636889 to revise select drawings for model FL4000H. Additionally, all drawings for model FL5000 are replaced with a single approval drawing.
80107789	2023-10-30	Update CSA report #1636889 to add a new model FL5000 for Class I and II Div.1 and 2 certification.
70184902	2018-05-17	Update to report 1636889 for minor construction and editorial changes.
70009741	2015-02-05	Update to Report 1636889 includes revised drawings for label and minor PCB and housing changes.
2472821	2011-11-09	Update to report 1636889 to cover revised construction.
2383684	2011-01-11	Update to report 1636889 to cover revised construction
2303259	2010-06-16	revised construction
2254850	2009-12-17	Update to report 1636889 to cover revised construction and documents.
2174203	2009-07-21	Update to report 1636889 to include new model FL4000H.
2129724	2009-01-13	Revised construction
1636889	2005-09-19	Original Certification