



CSA INTERNATIONAL

# Certificate of Compliance

**Certificate:** 1157042

**Master Contract:** 150143

**Project:** 2105033

**Date Issued:** 2008/12/15

**Issued to:** Altronic Inc.

712 Trumbull Ave  
Girard, OH 44420  
USA

Attention: Mr. Glenn Terry

*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:** Andrew Sargent

**Authorized by:** Patricia Pasemko, Operations Manager

## **PRODUCTS**

**CLASS 4818 84** - SIGNAL APPLIANCES - Systems - For Hazardous Locations - Certified to US Standards

**CLASS 4818 04** - SIGNAL APPLIANCES - Systems - For Hazardous Locations

**Class I, Division 2, Groups C and D**



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• DD-40NTa-x series Digital Annunciator System. Input: 10-30V dc, 50 mA max., or ignition powered from Altronic Inc. ignition system: 100-400V. Ambient temperature -40°C to 85°C, temperature code T5.

Where “a” indicates firmware functionality, S or V, and “x” indicates output contacts arrangement, “O” or “U”.

System is comprised of the following:

(1) Annunciator Module, part number DD-40NTa-O or , DD-40NTa- U. Where “a” indicates the firmware feature set either “S” or “V”;

(2) Power Supply Module, part number 691200-x. Where “x” indicates diagnostic output function set 1 or 3, rated 12 to 24V dc;

(3) Terminal Board assembly, used only on -U units, part number 672169-1.

Notes:

1) This is OPEN type equipment that must be used within a suitable end-use system enclosure, the interior of which is accessible only through the use of a tool. The suitability of the enclosure is subject to investigation by the local Authority Having Jurisdiction at the time of installation.

2) Models identified as “-U” are provided with one or more terminal board assemblies having nonincendive field wiring for use only with passive switching components.

3) Except for the nonincendive switch circuits connected to the terminal board assembly of "-U" models, wiring to or from the equipment, which enters or leaves the system enclosure, must utilize wiring methods suitable for Class I, Division 2 Hazardous Locations, as appropriate for the installation.

### **APPLICABLE REQUIREMENTS**

CAN/CSA Standard C22.2 No. 0-M91 (Reaffirmed 2001) - General Requirements - Canadian Electrical Code, Part II

CSA Standard C22.2 No. 142-M1987 (Reaffirmed 2000) - Process Control Equipment



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CSA Standard C22.2 No. 213-M1987 (Reaffirmed 1999) - Non-incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations

UL 916 (Fourth Edition, Dated December 17, 2007) - Energy Management Equipment

UL 1604 (Third Edition, dated April 28, 1994. With revisions through and including February 3, 2004) - Electrical Equipment for Use in Class I and II, Division 2, and Class III Hazardous (Classified) Locations

### **MARKINGS**

The following markings are provided on a CSA Certified and UL Recognized, 0.015" thick polycarbonate adhesive label, which is suitable for indoor use on polymeric material, at a maximum service temperature of 90°C or higher. Nameplate is affixed to rear of housing.

- Manufacturers name: "Altronic", or CSA Master Contract Number "150143", adjacent to the CSA Mark in lieu of manufacturers name.
- Model number, as specified in the PRODUCTS section of this report.
- Electrical ratings: "IGN INPUT 100-400V, DC INPUT 10-30VDC, 50 mA MAX."
- Ambient temperature rating: "-40°C ≤ Ta ≤ 85°C", or "-40°C to 85°C", or "85°C max."
- Manufacturing date in MYY format, or serial number, traceable to month of manufacture.
- The CSA Mark with C and US indicators, as shown on the Certificate of Conformity.
- Hazardous Location designation: "Class I, Division 2, Groups C, D", or "Class I, Div. 2, GP C, D", or "CL I, DIV 2, GP C, D".
- Temperature code: "T5" (optional marking).
- The words "Connect per form DDNTS-II", or "Connect per form DD-40NTV II" (as appropriate for the model).

The following markings are provided on the same label as above, or a separate CSA Certified adhesive label (same type as above) affixed to the rear of the housing, adjacent to the terminals or connector:

- The words "WARNING - EXPLOSION HAZARD. Do not connect or disconnect unless power has been removed or the area is known to be nonhazardous."
- The following words on the power supply "WARNING – EXPLOSION HAZARD. Batteries must only be changed in an area known to be nonhazardous."

The following markings are provided on a separate CSA Certified adhesive label (same type as above) affixed on the



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Terminal Board assembly (used only on -U units), adjacent to the terminals:

- "NON-INCENDIVE FIELD WIRING ONLY".

An installation manual or data sheet shall be supplied with each unit, containing the following minimum marking information:

- Manufacturers name and address
- Electrical ratings: "IGN INPUT 100-400V, DC INPUT 10-30VDC, 50 mA MAX."
- Specification for ambient temperature rating: " $-40^{\circ}\text{C} \leq T_a \leq 85^{\circ}\text{C}$ ", or " $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$ ", or " $85^{\circ}\text{C}$  max."
- Specification for the mating connector or wiring harness (as appropriate), by Altronic part number, or manufacturers name and part number.
- Specification for appropriate wiring to the terminals and/or connectors (as appropriate), including definition of pin functions, and specification for wire gauge.
- Specification for replacement power supply battery, by manufacturers name and part number.
- Specification for nonincendive field wiring on terminal board assembly "NONINCENDIVE FIELD WIRING ONLY WHEN USED WITH PASSIVE SWITCH DEVICES", or equivalent wording.
- Mounting and installation instructions, including dimensions, and the following words, or equivalent:
  - o This device is OPEN type equipment that must be used within a suitable end-use system enclosure, the interior of which is accessible only through the use of a tool. The suitability of the enclosure is subject to investigation by the local Authority Having Jurisdiction at the time of installation.
  - o Except for the nonincendive switch circuits connected to the terminal board assembly of "-U" models, wiring to or from this device, which enters or leaves the system enclosure, must utilize wiring methods suitable for Class I, Division 2 Hazardous Locations, as appropriate for the installation.
- The following words, or suitable equivalent:
  - o This equipment is suitable for installation in Class I, Division 2, Group C, D hazardous locations or nonhazardous locations only.
  - o WARNING - Explosion Hazard. Do not connect or disconnect this equipment unless power has been removed or the area is known to be nonhazardous.
  - o WARNING - Explosion Hazard. Substitution of components may impair suitability for Class I, Division 2.

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



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of the Provincial Regulatory Authorities. It is the responsibility of the manufacturer to determine this requirement and have bilingual wording added to the "Markings".