



Certificate of Compliance

Certificate: 1427339

Master Contract: 219995

Project: 80103932

Date Issued: 2023-03-31

Issued To: R.C. Systems Co., Inc.
8621 Hwy 6
Hitchcock, Texas, 77563
United States

Attention: Joshua Carter

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: Sorin Tat
Sorin Tat



PRODUCTS

CLASS - C363104 – ELECTRICAL MEASUREMENT AND TEST EQUIPMENT

CLASS - C363184 – ELECTRICAL EQUIPMENT FOR MEASUREMENT USE - Certified to U.S. Standards

- 1) Sixteen or Eight Channel Controller, model ST-71, ViewSmart 1600 and 7100, rated 110-120/220-240 V, 50/60 Hz, 3.2/1.6 A, Rated output 24 V dc, 6.5 A or 100 – 240 V ac, 50 – 60 Hz, 1.1 A max. or 10 – 30 V dc, 150 W max.
- 2) Six Channel Controller, model ST-35, rated 100 – 240 V, 50/60 Hz, 2.0 A.

Operating temperature range –20 to +60 °C, relative humidity 0 to 90% (non-condensing).

Conditions of Certification:



Certificate: 1427339
Project: 80103932

Master Contract: 219995
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- 1) The equipment is intended to be connected to supply mains with a suitable conduit according to the applicable local and national (CEC & NEC) regulations. Power supply cord and its entry inside the enclosure was not part of the investigation.
- 2) The suitability of the combination for rack mounting must be determined during the end usage.
- 3) The unit is tested for electrical safety required to be used in ordinary location where no combustible, explosive, and ignitable material present. The Certification does not cover the use in the hazardous locations nor the use of equipment as a personal safety device.

CLASS - C482801 - SIGNAL APPLIANCES Combustible Gas Detection Instruments-For Hazardous Locations

CLASS - C482881 - SIGNAL APPLIANCES Combustible Gas Detection Instruments - For Hazardous Location - Certified to U.S. Standards

Class I, Div. 2, Groups A, B, C and D, T4;

Sixteen or Eight Channel Controller, Model: ST-71, ViewSmart 1600 and 7100; Rated Input: 100 – 240 V ac, 50 – 60 Hz, 1.1 A max. or 110-120/220-240 V, 50/60 Hz, 3.2/1.6 A, Rated output 24 V dc, 6.5 A or 10 – 30 V dc, 150 W max. Mechanical relay contacts rated 250Vac, 5.0A. Contains the following PCB's: Main I/O PCB with common relays # 10-0142. May be used with the following optional boards: Aux. Relay piggyback pcb # 10-0144, 4-20mA Analog output pcb # 10-0167, Analog input pcb # 10-0158, Catalytic Bead sensor input pcb # 10-0191(1000 ppm max input), Dual Channel Catalytic Bead Module # 10-0192, Discrete Relay PCB # 10-0195 and FHSS Wireless Interface boards 10-0357, 10-0358, 10-0364, 10-0365.

Model: ST-72, WX64, C64, HA72, ViewSmart 6400 (up to 64 channels) and ViewSmart 1600+ (up to 16 channels) Graphic Display and Alarm Controller, may be configured as a 16, 32 48 or 64 channel controller. Rated Input: 100 – 240 V ac, 50 – 60 Hz, 1.1 A max. or 10 – 30 V dc, 150 W max. or 110-120/220-240 V, 50/60 Hz, 3.2/1.6 A, Rated output 24 V dc, 6.5 A or with optional power supply Rated Input: 85-264 V, 50/60 Hz 8.5 A, Rated output 24 V dc, 600 Watts. Mechanical relay contacts rated 250Vac, 5.0A. Contains the following PCB's: Main CPU board # 10-0330, Button Board #10-0342, Card Reader Board #10-0343, Main I/O Board # 10-0331. May be used with the following optional boards: Comm expansion # 10-1279, Relay expansion board #10-0332, Analog input board #10-0334, Bridge input board #10-0347, (Catalytic Bead sensor 1000 ppm max), Dual Channel Bridge Module # 10-0192, Analog output board # 10-0248, Relay output board #10-0345, Programmable relay output board #10-0350 and FHSS Wireless Interface boards 10-0357, 10-0358, 10-0364, 10-0365.

Operating temperature range –20°C to 60°C

Conditions of Certification:

- 1) The equipment is intended to be connected to supply mains with a suitable conduit according to the applicable local and national (CEC & NEC) regulations. Power supply cord and its entry inside the enclosure was not part of the investigation.



Certificate: 1427339
Project: 80103932

Master Contract: 219995
Date Issued: 2023-03-31

- 2) The suitability of the combination for rack mounting must be determined during the end usage.
- 3) Performance verified using Analog input board #10-0344 or Analog input PCB # 10-0158, 4-20mA input and configured in LEL mode.
- 4) When equipped with LRS-150F-24 power supply, the current consumption of the external devices powered by the equipment at 24 V dc shall not exceed 2 A.

CLASS - C482802 - SIGNAL APPLIANCES Toxic Gas Detection Instruments - For Hazardous Locations
CLASS - C482882 - SIGNAL APPLIANCES Toxic Gas Detection Instruments- For Hazardous Locations -
Certified to U.S. Standards

Class I, Div. 2, Groups A, B, C and D, T4;

Sixteen or Eight Channel Controller, Model: ST-71, ViewSmart 1600 and 7100; Rated Input: 100 – 240 V ac, 50 – 60 Hz, 1.1 A max. or 110-120/220-240 V, 50/60 Hz, 3.2/1.6 A, Rated output 24 V dc, 6.5 A or 10 – 30 V dc, 150 W max. Mechanical relay contacts rated 250Vac, 5.0A. Contains the following PCB's: Main I/O PCB with common relays # 10-0142. May be used with the following optional boards: Aux. Relay piggyback pcb # 10-0144, 4-20mA Analog output pcb # 10-0167, Analog input pcb # 10-0158, Discrete Relay PCB # 10-0195 and FHSS Wireless Interface boards 10-0357, 10-0358, 10-0364, 10-0365.

Model: ST-72 WX64, C64, HA72, ViewSmart 6400 (up to 64 channels) and ViewSmart 1600+ (up to 16 channels) Graphic Display and Alarm Controller, may be configured as a 16, 32 48 or 64 channel controller. Rated Input: 100 – 240 V ac, 50 – 60 Hz, 1.1 A max. 10 – 30 V dc, 150 W max. or 110-120/220-240 V, 50/60 Hz, 3.2/1.6 A, Rated output 24 V dc, 600 Watts or with optional power supply Rated Input: 85-264 V, 50/60 Hz 8.5 A, Rated output 24 V dc, 600 Watts. Mechanical relay contacts rated 250Vac, 5.0A. Contains the following PCB's: Main CPU board # 10-0330, Button Board #10-0342, Card Reader Board #10-0343, Main I/O Board # 10-0331. May be used with the following optional boards: Comm expansion # 10-1279, Relay expansion board #10-0332, Analog input board #10-0334, Bridge input board #10-0347, Dual Channel Bridge Module # 10-0192, Analog output board # 10-0248, Relay output board #10-0345, Programmable relay output board #10-0350 and FHSS Wireless Interface boards 10-0357, 10-0358, 10-0364, 10-0365.

Operating temperature range –20°C to 60°C

Conditions of Certification:

- 1) The equipment is intended to be connected to supply mains with a suitable conduit according to the applicable local and national (CEC & NEC) regulations. Power supply cord and its entry inside the enclosure was not part of the investigation.
- 2) The suitability of the combination for rack mounting must be determined during the end usage.
- 3) When equipped with LRS-150F-24 power supply, the current consumption of the external devices powered by the equipment at 24 V dc shall not exceed 2 A.



Certificate: 1427339
Project: 80103932

Master Contract: 219995
Date Issued: 2023-03-31

APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 1010.1-92	- Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use, Part 1: General Requirements
ANSI/ISA S82.02.01-99	- Safety Standard for Electrical and Electronic Test, Measuring, Controlling, and Related Equipment – General Requirements
C22.2 No. 142-M1987*	- Process Control Equipment
CAN/CSA-C22.2 No.152-M1984	- Combustible Gas Detection Instruments
ANSI/ISA-12.13.01-2000	- Performance Requirements for Combustible Gas Detectors.
CSA-C22.2 No. 213-M1987	- Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
ANSI/ISA-12.12.01-2010	- Non-Incendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations.

*ST-72, WX64, C64 and HA72

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 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.

Models, ST-71 and 7100

- 1) Submitter's Name or registered trademark, factory identification, CSA Monogram (cCSAus mark) or master contract 219995 adjacent to CSA monogram; model number.
- 2) Month and year of manufacture or serial number traceable to manufacturing date.
- 3) Electrical ratings as per product section.
- 4) Safety related symbols (ISO 3864, No. B.3.6  and No. B.3.1 )



Certificate: 1427339
Project: 80103932

Master Contract: 219995
Date Issued: 2023-03-31

- 5) Hazardous location designation as per product section;
 - 6) Ambient temperature range as per product section;
 - 7) The words "C22.2 No 152 for combustible detection";
- All units are shipped with an instruction manual.

Models ST-72, WX64, C64 and HA72

Appear on Brady #B-428 metallized polyester with a permanent acrylic adhesive backing. Thermal transfer printable. UL recognized/ CSA Approved.

Wording as follows:

- 1) Submitter's Name or registered trademark, factory identification, CSA Monogram (cCSAus mark) or master contract 219995 adjacent to CSA monogram; model number.
- 2) Month and year of manufacture or serial number traceable to manufacturing date.
- 3) Electrical ratings as per product section.

- 4) Safety related symbols (ISO 3864, No. B.3.1 )
 - 5) Hazardous location designation as per product section;
 - 6) The words "C22.2 No 152 for combustible detection";
 - 7) Ambient temperature range as per product section
- All units are shipped with an instruction manual.

ALTERATIONS

Models ST-35, ST-71 and 7100

- 1) Proper locking of the enclosure is addressed in the warning section of the instruction manual. A shock hazard symbol  is provided on the enclosure.
- 2) Accessible conductive part is either reliably bonded to incoming mains ground. A proper protective ground symbol  (IEC 417, No. 5019, table 1 of ISA S82.02.01 standard) sticker is placed at the power supply terminal block.
- 3) All safety related statements are provided in the official language of the applicable country (e.g. in Canada, English and French).

- 4) Rating label is readily visible to the user.
- 5) If applicable, hazards related to the location and placement of the unit is advised in the manual dealing with hazardous materials like flammable gas as well as corrosion issues, etc.
- 6) The documentation/instruction manual contains proper installation and intended usage with detail description of mains connection. Since the equipment was not evaluated for gas detection performance and for safety in classified areas, all references to use of this equipment in the hazardous locations are removed from the Instruction Manual
- 7) A warning symbol  is provided on the enclosure, which covers all the pertinent warnings in the manual.
- 8) The fuse in the power supply is to have a rubber cover to clamp the fuse in place.

Models ST-72, WX64, C64 and HA72

1. All screws and nuts need to have locktight applied during assembly. The antenna connection wiring to the radios (if equipped) will require locktight.

Following information is provided in the instruction manual:

Models ST-35, ST-71 and 7100

- a) Operating temperature range, relative humidity (Clause 5.4.2).
- b) Maximum altitude of operation (for normal environmental condition, up to 2000 m).
- c) Cleaning procedure if any (Clause 5.4.4).
- d) Warning related to the usage of external CERTIFIED power switch or circuit breaker with adequate ratings to work as mains disconnect device as per applicable local and national regulations with the recommendation that the switch is to be provided to the close proximity of the equipment. Recommendations also for the marking of the switch with 'I' for 'power on' and 'O' for 'power off' (Clause 6.12.2.1, see also Table 1).
- e) Warning related to the requirements of CERTIFIED over-current protective device (if circuit breaker is not used) with adequate ratings or recommendation of the usage of protective device in building installation as per applicable national and local regulations (Clause: 5.4.3, 9.6).
- f) Usage of CERTIFIED mains supply cord with adequate ratings as per applicable local and national regulations.

Certificate: 1427339
Project: 80103932

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- g) Detail instructions with necessary warnings for the user replaceable parts e.g. fuse. The following equivalent statements is provided: “WARNING – To avoid fire hazard, replace fuse with same type and ratings.”
- h) A technical specification sheet is provided in the manual which will include at least the following information:
- supply ratings
 - operating temperature range
 - relative humidity
 - dimension
 - weight
 - altitude
- i) Manual includes warnings related to the proper
- proper mounting procedure
 - suitable conduit connection through the usage of CERTIFIED hubs with same environmental ratings
 - proper grounding of conduit connections if applicable
- j) An equivalent statement is included. “WARNING - If the equipment is not used as prescribed by the manufacturer, the overall safety may be impaired.”

Notes:

Products certified under Class C482801, C482802, C482881, C482882 have been certified under CSA’s ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC).
www.scc.ca



Products certified under Class C482801, C482802, C482881, C482882 have been certified under CSA’s ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC).
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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
80103932	2023-03-31	Update to CSA report 1427339 (last project 80018218) for small drawings updates.
80018218	2020-03-11	Update to report 1427339 for alternate construction of model ST-72, addition of "ViewSmart 1600+" 16 channel version, alternate power supply, alternate names for models ST-71 and ST-72.
70101335	2016-10-04	Update to Certificate 1427339 for non-conformance issues as noted in FIR dated Sept. 15, 2016 (FC# 233742) Label difference, report update for input ratings
2380426	2012-01-26	Update of report 1427339 to cover new Models ST-72, WX64, C64 and HA72 and add radio modules to the Div. 2 versions of the ST-71 and 7100.
1562822	2004-07-29	Update report 1427339 to cover new model 7100
1458712	2004-05-18	Update report 1427339 to include performance testing and division 2