

# CERTIFICATION RECORD

The company named below has been authorized by CSA International to represent the products listed in this record as "CSA Certified" and to affix the CSA Mark to these products according to the terms and conditions of the CSA Service Agreement and applicable CSA program requirements (including additional Markings).

File No: 042965\_0\_000

Class No: 4818 84 SIGNAL APPLIANCES Systems - For Hazardous Locations - Certified

to US Standards

# **SUBMITTOR**

Altronic Inc.

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Girard, OH 44420

**USA** 

#### **FACTORIES**

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March 12, 2014 (Replaces: March 3, 2014)

# Class I, Div. 2, Groups C:

- Annunciator System DD-NT Series comprised of Annunciator Part Numbers DD-20NT-O, -C; DD-40NT-O, -C; DD-20NTL-O, -C; or DD-40NTL-O, -C with Power Supply Part Numbers 691150-1 rated 100-350Vdc or 691160-1, 691155-1 or 691180-1, rated 12-24Vdc.
- Adapters; Loss of Ignition Power, Part Number 691054; Class B Isolator, Part Number 691055 and Loss of 24V Power, Part Number 691098 for use with Certified Annunciator Panels, Series 650 and Certified Power Supply, Part Number 691155-1, rated 12-24Vdc.
- Annunciator Panels, 650 Series, comprised of Certified Altronic Power Supply, Annunciator, Safety Barrier unit and/or Tachometer/Hourmeter, Overspeed trigger devices; Temperature and Pressure gauges with passive switch contacts may also be mounted in the panel.

# Class I, Division 2, Groups C and D

• 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. Were "a" indicates the firmware feature set either "S" or "V".;
- (2) Power Supply Module, part number 691200-x. Were "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

# Class I, Division 2, Groups C and D:

- Annunciator System, DE-2000 Series, comprised of Display Module Model
  DE-2000, Power Supply Module Part Number 691122-1, rated 12-24Vdc, Sensor Input Terminal
  Module Part Number 691123-1, CD Ignition or Fuel Valve Output Module Part Number 691124,
  Industry Standard Output Modules 691125, 691056, 691065, 691066 or any equivalent Certified
  Output Module. Temp. Code T4
- Controller System, DE-25xx Series, comprised of Display Module Model DE-25xx, Power Supply Module Part Number 691122-1, rated 12-24Vdc and 200mA max, Terminal Module Part Number 691127-x, CD Ignition or Fuel Valve Output Module Part Number 691124, Industry Standard Output Modules 691125, 691056, 691066, 691065, or any equivalent Certified Output Module. Input Pressure Transducers 691204-x, 691201-x, and Temperature Transducers 691202-x, 691203-x, 691212-x, and 691213-x. Temp. Code T4. Note: This equipment shall be powered by a suitable Certified Class 2 power supply.
- DE-2200 Compressor Monitor System, comprised of Display Module Model DE-2200, Power Supply Module Part Number 691122-1 rated 12-24Vdc, Terminal Module Part Number 691136-1, CD Ignition or Fuel Valve Output Module Part Number 691124, Industry Standard Output Modules 691125, 691056, 691 066, 691065 or any equivalent Certified Output Module. Input

Pressure Transducers 691204-x, 691201-x and Temperature Transducers 691202-x, 691203-x, 69212-x and 691213-x. Temp. Code T4

Note: Equipment to be installed inside a Control Panel. Final installation to be approved by local authorities having jurisdiction.

• Control System DE-15xx Series comprised of Display Module, Model Part Number DE-15xx, Terminal Module Part Number 691142-x rated 12-24Vdc Class 2, 500 mA max, Input Pressure Transducers 691204-x, 691201-x, 691206-x and Temperature Transducers 691202-x, 691203-x, 691213-x.

#### Notes:

1) This system consists of 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) Wiring to or from this system, which enters or leaves the system enclosure, must utilize wiring methods suitable for Class I,

Division 2 Hazardous Locations, as appropriate for the installation.

Note: Equipment to be installed inside a Control Panel. Final installation to be approved by local authorities having jurisdiction.

• Altronic, Exacta RX 2000 Control System, rated 24V dc, 2A; Temperature Code T4 at Max ambient 85°C; Non-incendive when installed per installation drawing Form RX2000 IOM.

Note: The RX2000 is certified as component only and is required to be mounted in a suitable enclosure where its combination and final installation is subjected to acceptance by local authorities having jurisdiction.

• Display Module – Part numbers 691170- x, and 691174-x. (Where x is any alphanumeric digit indicating firmware/software version.) Rated 5Vdc, 500mA max. Ambient temperature -40°C to +85°C, Temperature Code T4A.

#### 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) Wiring to or from this 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.

### Class I, Division 2, Groups C, D:

• Digital Annunciation System - Model DE-30aa. Rated 12 to 32Vdc, 500mA. Ambient temperature -40°C to 80°C, Temperature Code T4. Where:

aa = is two numerics representing assembly build and software.

Option: Model DE-3000 CSI. Rated 12 to 32Vdc, 500mA. Ambient temperature -40°C to 80°C, Temperature Code T4.

System Consists of the following CSA Certified component assemblies:

• I/O Terminal Modules - p/n 691171-x and/or 691172-x and/or 691175-x.

May also use Certified p/n 691217-x, where "-x" indicates software version and label

May also use non Certified p/n 691217-x

• Display module - p/n 691170- x and/or 691174-x.

With, or without:

• Power Supply Module - p/n 691122-x.

With, or without:

• CD Ignition or Fuel Valve Output Module - p/n 691124-x.

With, or without:

 $\bullet$  Industry Standard Module - p/n 691125-x or 691056- x or 691066-x or 691065-x or any equivalent Certified Output module.

With, or without:

• Pressure Transducer - p/n 691204-x or 691201-x or any equivalent Certified Pressure Transducer.

With, or without:

- $\bullet$  Temperature Transducer p/n 691212-x or 691213- x or 691202- x or 691203- x or any equivalent Certified Temperature transducer.
- GTI Digital Annunciation System Models GPN2010V, GPN2212V, GPN2213V, GPN2214V, GPN2011V, GPN2012V, GPN2015V, and GPN2020V. Part numbers 691173-x, or 691176-x, or 691177-x, 691178-x, 691216-x, 691219-x and 691729-x respectively. Rated 10 to 32Vdc, 1A. Where x is any alphanumeric character indicating the software/firmware version.

- System may be supplied with one or more of the following harnesses assemblies: Part number 693118-x, 693119-x, 693120-x, 693121-x, 693122-x, 693123-x, 693125-x, 693126-x, 693127-x, 693128-x, 693132-x and/or 693208-x. (Where x represents the harness length, in feet)
- System may be supplied with optional vibration transducers: Part number 691205-x or any equivalent Certified Vibration, Pressure, or Temperature Transducers. (Where x represents the harness length, in feet)

#### Notes:

- These systems are 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) Wiring to or from this 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.

# Class I, Division 1, Group D

- DE 3000 System rated 12-32 VDC, 500mA. Consists of the following system components: o Explosion proof Division 1 power supply (691350-1); Temperature Code T6; Ambient temperature range -50°C to +40°C
- o DE-3000 Terminal Board (691171-3); Temperature Code T2 Ambient temperature range -50°C to +85°C
- o DE-3000 Display (691170-3); Temperature Code T1; Ambient temperature range -50°C to +85°C

Terminal Board, Display and accessories are considered Intrinsically Safe when installed in accordance with I.S. Installation drawing 690 255

# I.S. Barrier parameters:

Vmax = 8.787V Imax = 5.84A Ca =  $730\mu$ F La =  $8.34\mu$ H

#### Conditions of acceptability:

- 1. Conduit seal shall be installed within 3" of conduit entries.
- 2. Accessories connected to the terminal board must contain less than the combination of  $288.1\mu F$  of capacitance and less than the combination of  $8.34\mu H$  inductance.
- 3. Acceptability of the final installation shall be subject to the authority having local jurisdiction.