

Certificate of Compliance

Certificate: 1221835 (95764-1) **Master Contract:** 155943

Project: 2305603 **Date Issued:** 2010/05/17

Issued to: Delta M Corporation

Bethel Valley Industrial Park

1003 Larsen Dr. Oak Ridge, TN 37830

USA

Attention: Julie Hebble

The products listed below are eligible to bear the CSA Mark shown



Scott Wallace

Issued by: Scott Wallace

PRODUCTS

CLASS 2258 02 - PROCESS CONTROL EOUIPMENT - For Hazardous Locations

Class I, Div. 1, Groups B, C and D; Class II, Div. 1, Groups E, F and G; Class III, Div. 1; Type 4:

• Versa-Switch Series Single Channel Level Switch, Models LS51SC- aaa-bb-ccc.cc-ddd-LE-ee (with integral Probe); or Remote version, Model LS51SC-000-00-000.00-ddd-RE-ee with Remote Probe, Model LS51SC-aaa-bb-ccc.cc -000-RP-ee; input rated 24/110/220 Vac, 50/60 hz, 200/84/43 mA; 24 Vdc, 175 mA; relay contact rating 250V ac, 5A max; Temp Code T4A @ Max ambient 40 Deg C; MWP 3000 psi.

Model Code:

LS51SC - Single Channel Level Switch series

aaa= Mounting/Process fitting (any alpha/numeric character, not relevant to certification)

bb= Wetted Process Material (S4=304 stainless steel, SL=304L stainless steel, S6=316L stainless steel, A2=alloy 20, HB=hastelloy B, HC=hastelloy C, IO=inconel 600, MN=monel, SM=special material, or TI=titanium)

ccc.cc= Insertion Length (from 000.50 (12.7mm) to 120.00 (3048mm))



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ddd= Electronics input power (24D=24Vdc, 24A=24Vac, 110=110Vac or 220=220Vac)

ee= Special Options (FA= failure alarm, HT= high temperature sensor, LT= live tap, MT, medium temperature sensor, RT= RTD output, SW= stainless steel housing w/window, TO= thermocouple output, XW= explosion proof window cover; other allowed markings but not relevant to certification: CA, CB, CO, EN, SH, SHF, SPL, TC, TEE, TG and VI).

Zeros in the part number are just place holders with no options available

Versa-Switch Series Single Channel Flow Switch, Models FS51SC-aaa-bb-ccc.cc-ddd-LE-ee (with integral Probe); or Remote version, Model FS51SC-000-00-000.00-ddd-RE-ee with Remote Probe, Model FS51SC-aaa-bb-ccc.cc-000-RP-ee; input rated 24/110/220 Vac, 50/60 hz, 200/84/43 mA; 24 Vdc, 175 mA; relay contact rating 250V ac, 5A max; Temp Code T4A @ Max ambient 40 Deg C; MWP 3000 psi.

Model Code:

FS51SC - Single Channel Flow Switch series

aaa= Mounting/Process fitting (any alpha/numeric character, not relevant to certification)

bb= Wetted Process Material (S4=304 stainless steel, SL=304L stainless steel, S6=316L stainless steel, A2=alloy 20, HB=hastelloy B, HC=hastelloy C, IO=inconel 600, MN=monel, SM=special material, or TI=titanium)

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• Versa-Switch Series Dual Channel Switch, Models VS5100- aaa-bb-ccc.cc-ddd-LE-ee (with integral Probe); or Remote version, Model VS5100-000-00-000.00- ddd-RE-ee with Remote Probe, Model VS5100- aaa-bb-ccc.cc-000-RP-ee; input rated 24/110/220 Vac, 50/60 hz, 200/84/43 mA; 24 Vdc, 175 mA; relay contact rating 250V ac, 5A max; Temp Code T4A @ Max ambient 40 Deg C; MWP 3000 psi.



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Model Code:

VS5100 - Dual Channel Switch series

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bb= Wetted Process Material (S4=304 stainless steel, SL=304L stainless steel, S6=316L stainless steel, A2=alloy 20, HB=hastelloy B, HC=hastelloy C, IO=inconel 600, MN=monel, SM=special material, or TI=titanium)

ccc.cc= Insertion Length (from 000.50 (12.7mm) to 120.00 (3048mm))

ddd= Electronics input power (24D=24Vdc, 24A=24Vac, 110=110Vac or 220=220Vac)

ee= Special Options (FA= failure alarm, HT= high temperature sensor, LT= live tap, MT, medium temperature sensor, RT= RTD output, SW= stainless steel housing w/window, TO= thermocouple output, XW= explosion proof window cover; other allowed markings but not relevant to certification: CA, CB, CO, EN, SH, SHF, SPL, TC, TEE, TG and VI).

Zeros in the part number are just place holders with no options available

Notes:

If the process fluid temperature exceeds 40°C, the device cannot be used in a process atmosphere that has an ignition temperature of 120°C increased by the difference of the fluid temperature and 40°C.

APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 0-M91 (R2006) - General Requirements - Canadian Electrical Code, Part II

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

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

MARKINGS

The Markings appear on painted and stamped aluminum nameplate and is a min. of 0.02 in thick, secured to the enclosure with screws or drive pins, in bottomed holes. The Certified enclosure nameplate (Killark, Adalet, or Akron) which bares all of the hazardous locations designations will remain fastened to the enclosure.



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CSA Monogram

- Company name: "Delta M Corporation" and/or file number "LR95764"
- Model designation: per the product section
- Date code/serial number or equivalent;
- Electrical ratings: per the product section
- Hazardous locations designations: "Class I, Div 1, Groups BCD; Class II, Div 1, Groups EFG; Class III, Div 1"
- Maximum Ambient Temperature
- Temperature Code Rating: "T4A"
- Maximum process pressure; "3000psi"
- Enclosure: "Type 4"
- WARNINGS
 - · "CONDUIT SEALS MUST BE INSTALLED WITHIN 18 INCHES OF THE ENCLOSURE" or equivalent and
 - "DISCONNECT ALL SUPPLY CURCUITS, AND INSURE THE AREA IS NON-HAZARDOUS BEFORE OPENING", "KEEP COVER TIGHTLY CLOSED WHEN IN OPERATION", or equivalent and

The following warning may be located on the field wiring connector plate:

"USE A SUPPLY WIRE SUITABLE FOR 10°C ABOVE AMBIENT"

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".



CERTIFICATE ADDENDUM

Issued by:

CSA INTERNATIONAL

<u>Note:</u> This Addendum supplements the descriptive details pertaining to the following Certificate and is a part thereof. It is to be attached to the Certificate identified below.

SUBMITTOR: Delta M Corporation

MASTER CONTRACT: 155943 FACTORY CONTRACT: 155944

CERTIFICATE/REPORT NO.: 1221835 PROJECT NO.: 2305603

PRODUCT: Versa Switch Series Switches **MODEL:** ALL

INITIATED BY: FIR DATE: July 28, 1020 ASSOCIATED INSPECTION OFFICE: Nashville

COPY TO: J.A. Hebble<jhebble@deltamcorp.com>

AUTHORIZED CHANGE: Class 2258-02

Report may be modified to include Panasonic Relay Part Numbers - JW1FSN-DC24V and - JW2SN-DC24V.

ISSUE DATE OF ADDENDUM:

March 8, 2011

FQPH NAME:

Note: Submittor is responsible for providing copies of this Addendum to the applicable factories.

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