

# **Certificate of Compliance**

**Certificate:** 2075554 **Master Contract:** 156625 (091712\_0\_000)

**Project:** 70199100 **Date Issued:** 2018-10-15

**Issued to:** Greyline Instruments Incorporated

16456 Sixsmith Dr.

Long Sault, Ontario K0C 1P0

**CANADA** 

Attention: Michael Blackadder

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: Dimcho Genov

#### **PRODUCTS**

CLASS - C225205 - PROCESS CONTROL EQUIPMENT

CLASS - C225285 - PROCESS CONTROL EQUIPMENT-Certified to US Standards

Level and Flow meter models DFM, AVFM, AVMS, SLT, OCF, PSL, SFM, DLT and TTFM input rated 100-240Vac, 50/60Hz, 30 Watts or 115Vac, 50/60Hz, 30 Watts or 230Vac, 50/60Hz, 30 watts or 9-32Vdc, 9 Watts max; relay contacts rated 5A, 240Vac; Enclosure rated Type 4X; Ambient -23 to 60°C, Installation Category II, Pollution Degree 4, Altitude up to 5000 meters

#### Notes:

- 1) Model number may be followed by up to 9 suffix characters denoting options.
- 2) Models AVFM, DFM, OCF, PSL and SLT have additional suffix 5.0, 5.1 or 6.1
- 3) Model AVMS has additional suffix 5.0, 5.1
- 4) Model DLT has additional suffix 2.0 or 6.1
- 5) Model SFM has additional suffix 6.1
- 6) Model TTFM have additional suffix of 1.0 or 6.1

DQD 507 Rev. 2016-02-18



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CLASS - C225803 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems - For Hazardous Locations

CLASS - C225883 - PROCESS CONTROL EQUIPMENT-Intrinsically Safe and Non-Incendive-Systems-For Hazardous Locations-Certified to U.S. Standards

Class I, Groups C and D; Class II, Groups E, F and G; Class III:

Level and Flow meter models DFM, AVFM, AVMS, SLT, OCF, PSL, DLT, SFM and TTFM; for mounting in non-hazardous locations; input rated 100-240Vac, 50/60Hz, 30 Watts or 115Vac, 50/60Hz, 30 Watts or 230Vac, 50/60Hz, 30 watts or 9-32Vdc, 9 Watts max; relay contacts rated 5A, 240Vac; providing Intrinsically Safe Circuits to Greyline Sensors, P/N's QZ02 series, PZ series or SE series when connected as per drawings GN3SPEC-ISB-XX; Enclosure rated Type 4X; Ambient -23 to 60°C, Installation Category II, Pollution Degree 4, Altitude up to 5000 meters

#### Notes:

- 1) Model number may be followed by up to 9 suffix characters denoting options.
- 2) Models AVFM, DFM, OCF, PSL and SLT have additional suffix 5.0, 5.1 or 6.1
- 3) Model AVMS has additional suffix 5.0, 5.1
- 4) Model DLT has additional suffix 2.0 or 6.1
- 5) Model SFM has additional suffix 6.1
- 6) Model TTFM have additional suffix of 1.0 or 6.1

CLASS - C225804 - PROCESS CONTROL EQUIPMENT-Intrinsically Safe, Entity - For Hazardous Locations-CLASS - C225884 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity-- For Hazardous Locations - Certified to US Standards

Level and Flow meter models DFM, AVFM, AVMS, SLT, OCF, PSL, DLT, SFM and TTFM; for mounting in non-hazardous locations; input rated 100-240Vac, 50/60Hz, 30 Watts or 115Vac, 50/60Hz, 30 Watts or 230Vac, 50/60Hz, 30 watts or 9-32Vdc, 9 Watts max; relay contacts rated 5A, 240Vac; providing Intrinsically Safe Circuits with Entity Parameters, when connected as per drawings GN3SPEC-ISB-XX; Enclosure rated Type 4X; Ambient -23 to 60°C, Installation Category II, Pollution Degree 4, Altitude up to 5000 meters

#### Notes:

- 1) Model number may be followed by up to 9 suffix characters denoting options.
- 2) Models AVFM, DFM, OCF, PSL and SLT have additional suffix 5.0, 5.1 or 6.1
- 3) Model AVMS has additional suffix 5.0, 5.1
- 4) Model DLT has additional suffix 2.0 or 6.1
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### **APPLICABLE REQUIREMENTS**

CAN/CSA-C22.2 No. 61010-1-04 - Safety Requirements for Electrical Equipment for Measurement, Control,

and Laboratory Use, Part 1: General Requirements

ISA 61010-1 (82.02.01) 2<sup>nd</sup> - Safety Standards for Electrical and Electronic Test, Measuring,

Controlling and Related Equipment - General Requirements.

UL 61010-1 2<sup>nd</sup> - Safety Requirements for Electrical Equipment for Measurement, Control,

and Laboratory Use, Part 1: General Requirements

CSA-C22.2 No. 157-92 - Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous

Locations

UL Std. No 913-97 - Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I,

II and III, Division 1, Hazardous Locations



## Supplement to Certificate of Compliance

**Certificate:** 2075554 **Master Contract:** 156625 (091712\_0\_000)

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
70199100	2018-10-15	Update report 2075554 to add an alternate power supply and revise construction of the card guard assembly.
70157090	2018-01-24	Update to report 2075554 to cover the addition of an alternate stainless steel enclosure, new model SFM 6.1 and new modules.
2682183	2014-01-06	Update report to cover the addition of model AVMS 5.Added a new suffix option for models AVFM 5, DFM 5, OCF 5, PSL 5, SLT 5, DLT, TTFM and BTU.
2591900	2013-02-01	Update report to cover an update of drawings 12405, 12410 and 12412 with the latest revisions. Added a new certified IS barrier and new circuit board I2C (p/n 12210). Added a new model DFM 5.1, which is identical to model DFM 5.0.
2537828	2012-06-28	Update to report 2075554 to cover alternate construction and addition of similar model BTU 1.0
2392269	2011-01-25	Update to 2075554 to cover typo corrections
2346708	2011-01-14	Update to 2075554 to cover alternate construction of model GN3
2162986	2009-08-12	Update to cover alternate construction, addition of IS Barriers
2075554	2008-12-12	Original Certification- Evaluation of models DFM to C22.2 no. $61010$ -1-04 and UL $61010$