

# Certificate of Compliance

**Certificate:** 1015765 (LR 44092-128)

**Master Contract:** 152450

**Project:** 1368989 (Edition 13)

**Date Issued:** November 22, 2002

**Issued to:** **Micro Motion Incorporated**  
7070 Winchester Circle  
Boulder, CO 80301  
USA

*The products listed below are eligible to bear the CSA Mark shown  
with adjacent indicators 'C' and 'US'*



**Issued by:**



Marty Klaassen P. Eng.  
Product Certification Engineer



**Authorized by:** Terry Nagy  
Operations Manager

## CLASS

**2258 03** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems - For Hazardous Locations

**2258 83** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems - For Hazardous Locations - To US Requirements

## PRODUCTS

**Class I, Division 1, Groups C and D; Class I, Division 2, Groups A, B, C and D; Class II, Division 1, Groups E, F and G**

**Model D600 Flow meter**, rated 5-265Vac, 500mA, 50/60Hz; Associated Equipment, Provides I.S. Outputs for Connection to Various Flow Transmitters as per Installation Instructions CSA-D-IS. Maximum Ambient of 60°C and Maximum Process temperature of 100°C. The Booster Amp is marked with a T6 T-code for Div 1 and a T4 T-Code for Div 2 use. Enclosure Type 4X (Booster Amp and D600 Flow meter)

Note: With Process temperature greater than 60°C but less than or equal to 100°C or Air Ambient of greater than 60°C, the Booster Amp enclosure must be remotely mounted.

The 'C' and 'US' indicators adjacent to the CSA Mark signify that the product has been evaluated to the applicable CSA and ANSI/UL Standards, for use in Canada and the U.S., respectively. This 'US' indicator includes products eligible to bear the 'NRTL' indicator. NRTL, i.e. National Recognized Testing Laboratory, is a designation granted by the U.S. Occupational Safety and Health Administration (OSHA) to laboratories which have been recognised to perform certification to U.S. Standards.



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**Model CMF400 (Booster Amp Version) Flow meter**, rated 85-265Vac, 500mA, 50/60Hz; Associated Equipment, Provides I.S. Outputs for Connection to Various Flow Transmitters as per Installation Instructions CSA-D-IS; Maximum Ambient temperature 60°C and Maximum Process temperature of 200°C, T-Code T3. The Booster Amp is marked with a T6 T-code for Div 1 and a T4 T-Code for Div 2 use. Enclosure Type 4X (Booster Amp and CMF400 Flow meter)

Note: With Process temperature greater than 60°C but less than or equal to 200°C or Air Ambient of greater than 60°C, the Booster Amp enclosure must be remotely mounted..

**Booster Amp Retrofit Kit**, for use in Hazardous Locations when used and installed on Micro Motion Mass Flow Sensors Models CMF 400M\*\*\* (N or P) \* (1 or 2) or D600S\*\*\*S\* (1 or 2); Rated 85-265Vac, 700mA, 50/60Hz, provides Intrinsically Safe circuits when installed in accordance with Retrofit Booster Amplifier Installation Instructions.

**Model CMF300A Flow meter**; Provides Intrinsically Safe Connections to Various Flow Transmitters as per Installation Instructions CSA-D-IS.

#### **APPLICABLE REQUIREMENTS**

- |                             |           |   |  |
|-----------------------------|-----------|---|--|
| CSA Standard C22.2 No:      | 0-M1991   | - | General Requirements - Canadian Electrical Code Part II.   |
| CSA Standard C22.2 No:      | 30-M1986  | - | Explosion-proof Enclosures for Use in Class I Hazardous Locations.   |
| CSA Standard C22.2 No:      | 94-M1991  | - | Special Purpose Enclosures.  |
| CSA Standard C22.2 No:      | 142-M1987 | - | Process Control Equipment.   |
| CSA Standard C22.2 No:      | 157-M1992 | - | Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations.   |
| CSA Standard C22.2 No:      | 213-M1987 | - | Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations.   |
| UL 50, Eleventh Edition     |           | - | Enclosures for Electrical Equipment  |
| UL 508, Seventeenth Edition |           | - | Industrial Control Equipment.  |
| UL 913, Fifth Edition       |           | - | Intrinsically Safe Apparatus and Associated Apparatus for use in Class I, II, III, Division 1, Hazardous (Classified) Locations. |
| UL 1203, Second Edition     |           | - | Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations.                        |
| UL 1604, Third Edition      |           | - | Electrical Equipment for Use in Class I and II, Division 2, and Class III Hazardous (Classified) Locations.                      |



## Supplement to Certificate of Compliance

**Certificate:** 1015765 (LR 44092-128)

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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
LR 44092-128	1998-01-30	Original Certification
LR 44092-130	1998-04-30	Add Model CMF400 Flow meter
LR 44092-132	1998-08-10	Add Model CMF300A Flow meter
LR 44092-136	1999-03-31	Revise CMF400 Flow meter Construction
LR 44092-145	1999-05-07	Revise CMF300A Drive Coil Parameters
LR 44092-146	1999-07-16	Update -128 report to include revised trace layouts for Barrier Board
1015765	1999-11-22	Originally issued as 2500001204. Re-perform explosion pressure tests on the CMF 400 at manufacturer's request
1184081	2001-03-31	Update to 1015765 to include US Certification and Remote Booster Amp configuration for use with CMF 400 and D600 Sensors
1090285	2001-05-11	Update to include New Booster Amp Enclosure and Electronics Assembly and Remote Booster Amp for use with CMF400 and D600 Sensors
1242044	2002-04-26	Update to include BOOSTER AMP RETROFIT KIT
1347387	August 9,2002	Update to Report 1015765 to include corrections.
1362328	September 27, 2002	Update to file 1015765 to include optional Aluminum 700 processor enclosure
1368989	November 22, 2002	Update to file for Revisions to Booster Amp Retrofit Documentation