

Certificate of Compliance

Certificate: 1067710

Master Contract: 160686 (LR 82598)

Project: 1162850

Date Issued: January 9, 2001

Issued to: ENDRESS + HAUSER FLOWTEC AG
Kaegenstrasse 7
Reinach, CH-4153
Switzerland
Attention: Mr. Utz Dette

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



Issued by: 
G. Lewis, CET

Authorized by: 
Brian Rossborough, P. Eng.
Operations Manager

PRODUCTS

CLASS 2258 04 – PROCESS CONTROL EQUIPMENT – Intrinsically Safe Entity – For Hazardous Location

Ex ia IIC, Zone 0:

Class I, Groups A, B, C and D; Class II, Groups E, F and G; Class III; Type 4X Enclosure:

- PROMAG 23H/Pa-bcdefNhiijklm (compact versions), supply rated 4-20 mA (30 Vdc max.), frequency output rated up to 250 mA (30 Vdc max.). Intrinsically safe with Entity Parameters, Temperature Codes and Maximum Ambient Temperatures per Drawing No. FES0038-0000.

Entity Parameters:

Terminals 1 (+) and 2 (-): Vmax, Ui = 30 V, Imax, Ii = 150 mA, Pi = 0.81 W, Ci = 5 nF, Li = negligible.

Terminals 3 (+) and 4 (-): Vmax, Ui = 30 V, Imax, Ii = 250 mA, Pi = 1 W, Ci = negligible, Li = negligible.

a in the Model No. may be any combination of two digit character or numeral representing a specific option.

b, c, d, e, f, h, i, j, k, l and m in the Model No. may be any character or numeral representing specific options.

CLASS 2258 02 – PROCESS CONTROL EQUIPMENT – For Hazardous Location

Ex nA II, Class I, Zone2:

Class I, Div.2, Groups A, B, C and D; Class II, Groups E, F and G; Class III; Type 4X Enclosure:

- PROMAG 23H/Pa-bcdefghijklm (compact versions), supply rated 4-20 mA (30 Vdc max.), frequency output rated up to 250 mA (30 Vdc max.). Suitable for Div.2 and Dust-Tight with Temperature Codes and Maximum Ambient Temperatures per Drawing No. FES0038-0000 and FES0040-0000.

a in the Model No. may be any combination of two digit character or numeral representing a specific option.

b, c, d, e, f, h, i, j, k, l and m in the Model No. may be any character or numeral representing specific options.

g = N or R

APPLICABLE REQUIREMENTS

- | | | |
|-----------------------------|---|---|
| CAN/CSA-E79-0-95 | - | Electrical Apparatus for Explosive Gas Atmospheres--Part 0: General Requirements |
| CAN/CSA-E79-11-95 | - | Electrical Apparatus for Explosive Gas Atmospheres--Part 11: Intrinsic Safety "i" |
| CAN/CSA-E79-15-95 | - | Electrical Apparatus for Explosive Gas Atmospheres--Part 15: Electrical Apparatus with Type of Protection "n" |
| CSA Std C22.2 No. 25-1966 | - | Enclosures for Use in Class II, Groups E, F and G Hazardous Locations |
| CAN/CSA-C22.2 No. 94-M91 | - | Special Purpose Enclosures |
| CSA Std C22.2 No. 142-M1987 | - | Process Control Equipment |
| CAN/CSA-C22.2 No. 157-92 | - | Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations |
| CSA Std C22.2 No. 213-M1987 | - | Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations |



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
1162850	January 9, 2001	Update to include to cover revisions to "main board" and "commodul C04 HART boards".
1143901	November 30, 2000	Update to include: 1. Alternative shunt diodes type BZG 03C15 TR for PROMAG 23F DN200 Sensor. 2. Revised drawings.
1067710	June 20, 2000	Original Certification.

NON HAZARDOUS LOCATION

Terminals 1 and 2:
Any apparatus with
supply voltage: max. 30 V
signal current : 4/ 20 mA
(max. 25 mA)

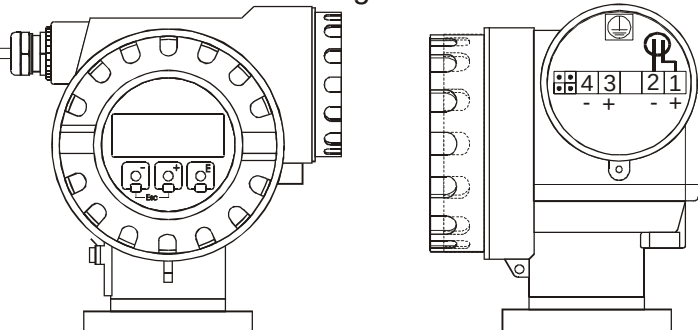
Terminals 1 and 2:
Any apparatus with
supply voltage: max. 30 V
signal current : 4/ 20 mA
(max. 25 mA)

Terminals 3 and 4:
Any apparatus with
supply voltage: max. 30 V
signal current : 250 mA
max. Power: 1 W

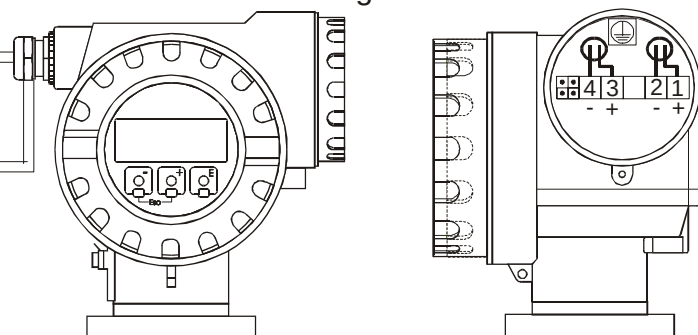
HAZARDOUS (CLASSIFIED) LOCATION

Class I, Zone 2, Ex nA II
Class I, Division 2, Groups A, B, C, D
Class II, Division 1, Groups E, F, G
Class III

Promag 23***-*****R*****W



Promag 23***-*****R*****A



Notes:

Class I Zone 2, Ex nA II

Class I, Division 2, Groups A, B, C, D and

**DUST-IGNITION-PROOF Class. II Division 1 Groups EFG and Class III
HAZARDOUS LOCATION INSTALLATION**

- 1) Install per Canadian Electrical Code using threaded conduit. For T-code see table.
Terminal 1 and 2
Supply voltage: 12 ... 30 VDC Signal current: 4 ... 20 mA (max. 25 mA)
Terminal 3 and 4
Pulse Output: Supply voltage 5 ... 30 VDC, max. 250 mA, max. 1 W
- 2) A dust tight seal must be used for conduit entry when the transmitter is used in a Class II or Class III Location.
- 3) **WARNING: EXPLOSION HAZARD** – Do not disconnect equipment unless the power has been switched off or the area is known to be Non-Hazardous.
- 4) **WARNING: EXPLOSION HAZARD – SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.**
- 5) **CAUTION:** Use only supply wires suitable for 5°C above Ta (T_{Medium} ≤ 100 °C) or suitable for 80 °C (T_{Medium} > 100 °C).

PROMAG 23H**_*****R***** / PROMAG 23P**-A****R***** /
PROMAG 23P**-B****R***** (PFA – Liner)

Temperature class	T6	T5	T4	T3C
T _{ambient}	40 °C	60 °C	60 °C	60 °C
T _{Medium}	80 °C	95 °C	130 °C	150 °C ¹⁾

¹⁾ 180 °C for PROMAG 23***-B****R*****

PROMAG 23 P**-E****N***** (PTFE – Liner)

Temperature class	T6	T5	T4
T _{ambient}	40 °C	60 °C	60 °C
T _{Medium}	80 °C	95 °C	130 °C

Änderungen:

A	17.11.00
B	
C	
D	
E	

F	
G	
H	
J	
K	

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Diese Zeichnung darf ohne unsere
Genehmigung weder vervielfältigt werden noch
dritten Personen und Konkurrenzfirmen
zugänglich gemacht werden.

Mat.-Nr.: 71040721

Ersatz für:
Ersteller: FES/UD

File: M:\ZEICHNUNG\...000215C.DOC **ID 1034**

CSA INSTALLATION DRAWING
PROMAG 23
2- and 4-WIRE VERSION
Class I, Div. 2 and Class II, III, Div. 1

Massstab

Gezeichnet	15.02.00	UD
Geprüft		
Ex-geprüft	17.11.00	UD
Gesehen		



Flowtec AG, Kaegenstrasse 7, CH-4153 Reinach BL1, Postfach

FES0040 A