

Certificate of Compliance

Certificate:

1916893

Master Contract: 151079

Project:

2276678

Date Issued: March 29, 2010

Issued to:

Endress + Hauser Hauptstrasse 1 79689 Maulburg **GERMANY**

Attention:

Mr A. Steffan

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:

E. Giusti

Authorized by: M.H.J Hoendervangers

Area Director Europe

Mendevayor

PRODUCTS

CLASS - 2258-03 PROCESS CONTROL EQUIPMENT - Intrinsically safe and non incendive Systems -For hazardous Locations

CLASS - 2258-04 PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations

CLASS - 2258-83 PROCESS CONTROL EQUIPMENT - Intrinsically safe and non incendive Systems -For hazardous Locations-certified against US Standards.

CLASS - 2258-84 PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations-certified against US Standards.

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

SOLICAP M Models FTI55-LxxxxxxH/5/7 and FTI56-LxxxxxxH/5/7, Level limit switch with:

- FEI50H Electronic insert (with or without display). Input rated 4-20mA, 30Vdc (max), Intrinsically Safe per Control Drawing No 960008371-B. Ex ia IIC Tx (zone 0 and 1), Ex nL IIC Tx or Ex nA II Tx (zone 2)
- FEI55 Electronic insert. Input rated 36Vdc, 100 mA (8/16mA). Intrinsically Safe per Control Drawing No 960008371- B. Ex ia IIC Tx (zone 0 and 1), Ex nL IIC Tx or Ex nA II Tx (zone 2)

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- FEI58 Electronic insert. Input rated 18,0Vdc, 52 mA. Intrinsically Safe per Control Drawing No 960008371- B. Ex ia IIC Tx (zone 0 and 1), Ex nL IIC Tx or Ex nA II Tx (zone 2)

Dust-Tight with intrinsically safe probe, IP65/66/67, Type 4X Enclosure.

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

CLASS 2258 82 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations – certified against

US Standards

Class I, division 1, Groups A, B C and D Ex d[ia] IIC Tx

SOLICAP M FTI55-Mxxxxx2/4/5/H and FTI56-Mxxxxx2/4/5/H Level limit switch with

- FEI52 Electronic insert. Input rated 10-55Vdc, 0,1mA/Imax 350mA, Pmax=1,6W. Ex d[ia] IIC Tx (zone 1), Ex nA II Tx (zone 2).
- FEI54 Electronic insert. Input rated:19-253Vac or 19-55Vdc; 30 Vdc/4A; 125 Vdc/0,2A; 253 Vac/4A; Pmax=1,6W. Ex d[ia] IIC Tx (zone 1), Ex nA II Tx (zone 2).
- FEI55 Electronic insert. Input rated 14,4-30Vdc, 8 16mA. Ex d[ia] IIC Tx (zone 1), Ex nA II Tx (zone 2).
- FEI50H Electronic insert. Input rated 14,4-30Vdc, 4-20mA.. Ex d[ia] IIC Tx (zone 1), Ex nA II Tx (zone 2).
- FEI51 Electronic insert. Input rated :19-253Vac, 2 wires. Pmax=1,5W Ex d[ia] IIC Tx (zone 1), Ex nA II Tx (zone 2).

Explosion-Proof or Dust-Tight with intrinsically safe probe, IP65/66/67, Type 4X/Type 6P Enclosure.

Class II, division 1, Groups E, F and G DIP

SOLICAP M FTI55-Nxxxxxx2/4/5/7/H and FTI56-Nxxxxxx2/4/5/7/H Level limit switch with

- FEI52 Electronic insert. Input rated 10-55Vdc, 0,1mA/Imax 350mA, Pmax=1,6W., Ex nA II Tx (zone 2).
- FEI54 Electronic insert. Input rated:19-253Vac or 19-55Vdc; 30 Vdc/4A; 125 Vdc/0,2A; 253 Vac/4A; Pmax=1,6W, Ex nA II Tx (zone 2).
- FEI55 Electronic insert. Input rated 12-36Vdc, 8 16mA., Ex nA II Tx (zone 2).
- FEI57S Electronic insert. Input rated 16.1Vdc, 100 mA (PFM)
- FEI50H Electronic insert. Input rated 12-36Vdc, 4-20mA.., Ex nA II Tx (zone 2).
- FEI51 Electronic insert. Input rated:19-253Vac.., Ex nA II Tx (zone 2).
- FEI58 Electronic insert. Input rated :18,0Vdc, 52mA, 170mW.., Ex nA II Tx (zone 2).

Dust-Tight with intrinsically safe probe, IP65/66/67, Type 4X Enclosure.

CLASS 2252-03 PROCESS CONTROL EQUIPMENT – CLASS 2252-83 PROCESS CONTROL EQUIPMENT – certified against US standards

SOLICAP M Models FTI55-LxxxxxxH/5/7 and FTI56-LxxxxxxH/5/7, Level limit switch with:

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- FEI50H Electronic insert (with or without display). Input rated 4-20mA, 30Vdc (max),

- FEI55 Electronic insert. Input rated 36Vdc, 100 mA (8/16mA).

- FEI57S Electronic insert. Input rated 16,1Vdc, 100 mA (PFM).

- FEI58 Electronic insert. Input rated :18,0Vdc, 52mA, 170mW...

APPLICABLE REQUIREMENTS

CSA Std C22.2 No.	0-M-1982		General requirements
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.	30-1986	-	Explosion-Proof Enclosures for Use in Class I Hazardous Locations
CAN/CSA C22.2 No.	94-M91	-	Special Purpose Enclosures
CSA Std C22.2 No.	61010-1	-	Process Control Equipment
CAN/CSA C22.2 No.	157-2006	-	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous
			Locations
CAN/CSA-E	60079-0-04		Electrical Apparatus for Explosive Gas Atmospheres
CAN/CSA-E	60079-1-04		Part 0: General Requirements Electrical Apparatus for Explosive Gas Atmospheres
CAIV/CSA-L	000/9-1-04		Part 1: Flameproof enclosures.
CAN/CSA-E	60079-15-04		Electrical Apparatus for Explosive Gas Atmospheres
			Part 15: Non Incendive equipments.
CAN/CSA-E	60079-11-04		Electrical Apparatus for Explosive Gas Atmospheres
CCA CALCOO ON-	212 1/1007		Part 11: Intrinsic safety requirements.
CSA Std C22.2 No.	213-M1987	-	Non-Incendive Electrical Equipment for Use in Class I, Division 2
CAN/CSA C22.2 No	520.05		Hazardous Locations
FMRC 3600	529-05 Nov. 1008		Degree of protection provided by enclosures (IP code).
	Nov. 1998		General requirements
FMRC 3615	March 1989		Explosionproof Electrical Equipment
FMRC 3610	Oct. 1999		Intrinsically Safe Apparatus and Associated Apparatus for Use in
FMRC 3611	April 1986		Class I, II & III, Division 1, and Class I, Zone 0 and 1 Hazardous Non-Incendive Electrical Equipment for Use in Class I, Division 2
TWINC JUIT	April 1900		Locations
ANSI/NEMA 250	1997		Special Purpose Enclosures
ISA-82.02.01	2004		Process Control Equipment
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MARKINGS

The following marking appears on the nameplate respectively in the nameplate drawings; 960008373 and 960008374.

- cCSAus Monogram
- Submittor Identification (Company Name or CSA File Number)
- Model Number
- Serial Number, Date Code or Month and Year of Manufacture
- Electrical Rating
- Hazardous Location Designation
- Certificate number: CSA 07.xxxxxx
- Entity Parameters when applicable

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- Temperature Code

- Maximum Ambient Temperature
- Special Purpose Enclosure Designation
- The words INTRINSICALLY SAFE/SECURITE INTRINSEQUE
- The Symbol Exia
- Reference to Installation Instructions

The specifications on the nameplates are printed, embossed, engraved or written using a laser technique. The material used for the nameplate is aluminum (Mg < 6%), stainless steel or brass. The nameplate is fixed with screws or rivets.

Warnings

For all products:

Versions with PTFE fully or partly insulated rods and plastic coated process connection, are marked with the warning "Avoid electrostatic charge" for group IIC and IIB (zone concept): "Do not rub with dry cloth; Do not install within the process flow" The label is mounted to the enclosure by a keyring or chain. The warning is also provided to the user in the safety instruction.

For Explosion proof and Dust tight products:

The window cover is marked with "Do not remove cover while circuits are alive!" (see dwg. 960007055 and 960007057).

For Intrinsically safe products:

"Substitution of components may impair intrinsic safety"

For Non Incendive Products:

"Substitution of components may impair suitability for Class I, Division 2"

For Class I, Division 2 products:

"Do not disconnect equipment unless power has been switched off or the area is known to be non hazardous".

These warnings can be presented on the installation drawing 960008371-A.

Installation drawing

Part A, for Class I, Division 1 and 2 applications:

The installation drawing 960008371-A is supplied which each capacitive level transmitter.

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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
2276678	March 29, 2010	Update to report 1916893 to include new insert FEI58 (NAMUR).
2003850	12 March 2008	Update to report 1916893 to include US standards and new insert FEI51.
1916893	23 May, 2007	Original CSA certification for Level limit switch Solicap M

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