



# Certificate of Compliance

**Certificate:** 2362352

**Master Contract:** 151079

**Project:** 70092535

**Date Issued:** 2016-11-17

**Issued to:** Endress + Hauser GmbH + Co. KG  
Hauptstrasse 1  
Maulburg, Baden-Württemberg 79690  
GERMANY  
Attention: Steve Czaniecki

*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:** Anil Sodhi  
Anil Sodhi

## PRODUCTS

**CLASS 2258 02** - PROCESS CONTROL EQUIPMENT- For Hazardous Locations

**CLASS 2258 82** - PROCESS CONTROL EQUIPMENT- For Hazardous Locations - Certified to US Standards

**Class I, Div 2, Groups A, B, C and D; Class II, Div. 2, Groups F and G; Class III:**

- SWA70-C12abcde, Wireless HART-Adapter, battery operated (battery pack p/n BU191); temperature code T4/T3C, ambient temp -40C to +50/60C; CSA Enclosure Type 4X. Suffix code 'a' denotes housing type and may be B (F33, CSA Type 4X); or C (F39, CSA Type 4X); Suffix code 'd' = 3 or 4; all other suffices may be variables not pertinent to the Certification.



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**CLASS 2258 04** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations  
**CLASS 2258 84** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations – Certified to U.S. Standards

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

**Ex ia IIC**

**Class I, Zone 1, AEx ia IIC**

- SWA70-C12abcde, Wireless HART-Adapter, battery operated (Battery pack p/n BU191); intrinsically safe with entity parameters of  $U_o$  ( $V_{oc}$ ) = 28V;  $I_o$  ( $I_{sc}$ ) = 99mA;  $P_o$  = 692mW;  $C_o$  ( $C_a$ ) = 70 nF;  $L_o$  = 3.45mH and  $U_i$  ( $V_{max}$ ) = 30V;  $I_i$  ( $I_{max}$ ) = 100mA;  $P_i$  = 751mW;  $C_i$  = 24 nF;  $L_i$  = 426 uH, and additional for LP Interface  $U_{OLPI}$  ( $V_{oc}$ ) = 7.8V;  $I_{OLPI}$  ( $I_{sc}$ ) = 1.03A;  $P_{OLPI}$  = 1.22W;  $C_{OLPI}$  ( $C_a$ ) = 9.18 uF;  $L_{OLPI}$  = 21.51 $\mu$ H, when installed per IS **Control drawing 960018577**; temperature code T4/T3C, ambient temperature range resp. -40C to +50/60C. Suffix code 'a' denotes housing type and may be A (F32 housing, CSA Type 4), B (F33, CSA Type 4X); or C (F39, CSA Type 4X); 'b' may be 1 or 5 denoting power supply; 'c' may be any variable denoting version; 'd' may be 1-4, or 8 denoting cable entry type; 'e' may be any variable not relevant to certification.

**Notes:**

1. The enclosure shall not be opened when an explosive dust atmosphere is present
2. Suffix code 'a' shall not be 'A' for Class II and Class III Hazardous locations.
3. Only the battery pack type BU191 produced by Endress+Hauser shall be used.



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**APPLICABLE REQUIREMENTS**

CAN/CSA-C22.2 No. 0-M91	General Requirements – Canadian Electrical Code, Part II
CSA C22.2 No. 25-1966 (R2004)	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. 213-M1987	Non-incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
CAN/CSA-C22.2 No. 157-92	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
CAN/CSA-C22.2 No 60079-0-11	Explosive Atmospheres - Part 0: Equipment – General Requirements
CAN/CSA C22.2 No. 60079-11:14	Explosive Atmospheres - Part 11: Equipment protection by intrinsic safety "i"
CAN/CSA-C22.2 No. 61010-1-12	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements
ANSI/UL Std. No. 61010-1-12	Safety Standards for Electrical and Electronic Test, Measuring, Controlling and Related Equipment - General Requirements
FMRC 3600 - 2011	Electrical Equipment for Use in Hazardous (Classified) Locations, General Requirements
FMRC 3610 - 2015	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1 Hazardous (Classified) Locations
FMRC3611 - 2004	Nonincendive Electrical equipment for Use in Class I and Class II, Division 2, and Class III, Division 1 and 2 Hazardous (Classified) Locations
FMRC 3810 - 2005	Electrical and Electronic Test, Measuring, and Process Control Equipment
ANSI/ISA-60079-0 2013	Electrical Apparatus for Explosive Gas Atmospheres – Part 0: General Requirements
ANSI/ISA-60079-11 (12.02.01)-2009	Electrical Apparatus for Explosive Gas Atmospheres Part 11: Intrinsic Safety "i"
ANSI/NEMA 250 - 1991	Enclosures for Electrical Equipment



## *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**

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<b>Project</b>	<b>Date</b>	<b>Description</b>
70092535	2016-11-17	Update to CSA Report 2362352 to include Rev. 4 of the SWA70 device to assess revised electronics and a new enclosure. The Hazloc testing and assessment was conducted within IECEx Test Reports issued by Dekra Exam. The ordinary locations testing and assessment was conducted by the manufacturer under the CPC program.
2637140	2013-07-30	Update to report to include minor revision to electronics and battery pack BU191.
2500805	2012-04-09	Update of Report 2362352 to add new OEM models.
2362352	2010-11-09	Original Certification