

Certificate of Compliance

Certificate: 70105058

Project: 70114736

Issued to: Pepperl+Fuchs GmbH Lilienthalstrasse 200 Mannheim, 68307 GERMANY Attention: Mr. Michael Hoegerle Master Contract: 221913

Date Issued: December 22, 2016

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:

Lyn Murray Lyn Murray

PRODUCTS

Class 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations Class 2258 82 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations– Certified to U.S. Standards

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

	Pulscon, series LTC5x; LTC50-fhegdIHcC1-i LTC51-fhegdIHcC1-i LTC57-fheedIHcC1-i
Product	Where c = B, D, E d = A2, A3 e = B, C, D f = 1, 5, 8, 9, L, P, 6, 7, A, B, C, D, 2, 3, M, Q, E, F, N, R, S, T, 4, G, H, K g = 2, 3, 4, 5 h = alphanumeric characters (not relevant for safety) i = additional alphanumeric characters (not relevant for safety)
	Note: Some option codes may be restricted for certain model types.



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Electrical Rating	35 Vdc, 22.5 mA	
Enclosure Rating	Type 4X/6P	
Temp. code and	T6-T1 with Ta of -40° C to $+ 80^{\circ}$ C with process temperature (-200 to $+450^{\circ}$ C); refer to	
ambient/process temperature	installation drawing for specific T-code and temperature ranges per model type	
	Maximum Working Pressure (MWP): LTC50; 40 bars	
MWP	LTC51; 40 bars, Dual Seal	
	LTC57; 16 bars	
Installation Drawing	116-0412	

Class II, Division 1, Groups E, F and G; Class III:

	Pulscon, LTC57-fhegdbcCD-i;		
Product	Where b = IH, ID, IE, PA, AH, DH c = B, D, E d = A2, A3 e = B, C, D f = L, P, A, B, C, D, 2, 3, M, Q, N, R, S, T, 4, G g = 3 h = alphanumeric characters (not relevant for safety) i = additional alphanumeric characters (not relevant for safety) Note: Some option codes may be restricted for certain model types.		
Electrical Rating	dependent on power supply, option code 'b'; refer to installation drawing for specifics		
Enclosure Rating	Type 4X/6P		
Temp. code and	T6-T1 with Ta of -40° C to $+ 80^{\circ}$ C with process temperature (-196 to $+450^{\circ}$ C); refer to		
ambient/process temperature	installation drawing for specific T-code and temperature ranges per model type		
MWP	Maximum Working Pressure (MWP): 16 bars		
Installation Drawing	116-0411 (HART) or 116-0413 (PA)		



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

Class 2258 83 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems – For Hazardous Locations– Certified to U.S. Standards

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

Product	Pulscon, series LTC5x; LTC50- fhegdbca-i LTC51- fhegdbca-i LTC57- fhegdbca-i Where a = C1, C2 b = IH, ID, IE, PA, AH, DH c = B, D, E		
	d = A2, A3 $e = B, C, D$ $f = 1, 5, 8, 9, L, P, 6, 7, A, B, C, D, 2, 3, M, Q, E, F, N, R, S, T, 4, G, H, K$ $g = 2, 3, 4, 5$ $h = alphanumeric characters (not relevant for safety)$ $i = additional alphanumeric characters (not relevant for safety)$ Note: Some option codes may be restricted for certain model types.		
Electrical Rating	dependent on power supply, option code 'b'; refer to installation drawing for specifics		
Enclosure Rating	Type 4X/6P		
Temp. code and	T6-T1 with Ta of -40° C to $+ 80^{\circ}$ C with process temperature (-196 to $+450^{\circ}$ C); refer to		
ambient/process temperature	installation drawing for specific T-code and temperature ranges per model type		
MWP	Maximum Working Pressure (MWP): LTC50; 40 bars, Dual Seal up to 6 bars* LTC51; 40 bars, Dual Seal LTC57; 16 bars, Dual Seal up to 6 bars* * Dual Seal rating applicable only for option code 'a' = C1		
Installation Drawing	Certification option code ' a ' = C1: 116-0412 (HART) or 116-0414 (PA) Certification option code ' a ' = C2: 116-0411 (HART) or 116-0413 (PA)		
Special conditions	 probe is intrinsically safe for Cl. I, II, III, Division 1 hazardous locations when Certification option code 'a' = C2, or supply/output option code 'b' = ID, IE, PA, AH, DH (refer to installation drawings for details) 		

Class I, Division 1, Groups A, B, C and D; Class II, Division 1, Groups E, F and G; Class III: Ex d [ia] IIC Tx: AEx d [ia] IIC Tx:

Pulscon, series LTC5x;	
LTC50- fhegdbca-i	
LTC51- fhegdbca-i	
LTC57- fhegdbca-i	
Where	
a = CC, C2	
	Pulscon, series LTC5X; LTC50- fhegdbca-i LTC51- fhegdbca-i LTC57- fhegdbca-i Where a = CC, C2



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	b = IH, ID, IE, PA, AH, DH $c = B, D, E$ $d = A2, A3$ $e = B, C, D$			
	f = 1, 5, 8, 9, L, P, 6, 7, A, B, C, D, 2, 3, M, Q, E, F, N, R, S, T, 4, G, H, K			
	g = 2, 3, 4, 5			
	h = alphanumeric characters (not relevant for safety)			
	i = additional alphanumeric characters (not relevant for safety)			
	Note: Some option codes may be restricted for certain model types.			
Electrical Rating	dependent on power supply, option code 'b'; refer to installation drawing for specifics			
Enclosure Rating	Type 4X/6P			
Temp. code and	T6-T1 with Ta of -40° C to $+80^{\circ}$ C with process temperature (-196 to $+450^{\circ}$ C); refer to			
ambient/process temperature	installation drawing for specific T-code and temperature ranges per model type			
· · · · ·	Maximum Working Pressure (MWP): LTC50; 40 bars, Dual Seal up to 6 bars			
MWP	LTC51; 40 bars, Dual Seal			
	LTC57; 16 bars, Dual Seal up to 6 bars			
Installation Drawing	116-0411 (HART) or 116-0413 (PA)			
Special conditions	- For option code $a' = CC$, device rated for Class I locations only.			
	- Devices are explosion proof with intrinsically safe probe for Cl. I, II, III, Division 1			
	hazardous locations.			
	- Factory Sealed, explosionproof conduit seals not required for terminal compartment.			



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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, Division 1, Groups A, B, C and D; Class II, Division 1, Groups E, F and G; Class III: Ex ia IIC Tx: AEx ia IIC Tx:

	Pulscon, series LTC5x;		
	LTC50- fhegdbca-i		
	LTC51- fhegdbca-i		
	LTC57- fhegdbca-i		
Product	Where		
	a = CB, C1		
	b = IH, ID, IE, PA		
	c = B, D, E		
	d = A1, A2, A3		
	e = A, B, C, D, I, M		
	f = 1589LP67ABCD23MOEENRST4GHK		
	g = 2 3 4 5		
	h = alphanumeric characters (not relevant for safety)		
	i = additional alphanumeric characters (not relevant for safety)		
	· · · · · · · · · · · · · · · · · · ·		
	Note: Some option codes may be restricted for certain model types.		
Electrical Rating	dependent on power supply, option code 'b'; refer to installation drawing for specifics		
Enclosure rating	Type 4X/6P		
Temp. code and	T6-T1 with Ta of -40° C to $+ 80^{\circ}$ C with process temperature (-196 to $+450^{\circ}$ C); refer to		
ambient/process temperature	installation drawing for specific T-code and temperature ranges per model type		
· · · ·	Maximum Working Pressure (MWP): LTC50; 40 bars		
MWP	LTC51; 40 bars		
	LTC57; 16 bars		
Installation Drawing	116-0412 (HART) or 116-0414 (PA)		
Special conditions	- For option code ' <i>a</i> ' = CB, device rated for Class I locations only.		



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Class 2252 03 - PROCESS CONTROL EQUIPMENT Class 2252 83 - PROCESS CONTROL EQUIPMENT (Certified to U.S. Standards)

• Pulscon, LTC5*x*-*fhegdbc*CG-*i*; electrical ratings dependent on I/O modules (supply/output option, suffix code b) as tabulated below; enclosure type 4X/6P; Ambient temp range -40C to +80C. Suffixes denote options for supply/output, display, housing, electrical connection, probe, seal, process connection and additional options (multiple additional options may be used).

Supply/Output option (suffix code, <i>b</i> =)	Characteristic	Input voltage	Power
IH	2-wire; 4-20mA HART	35 Vdc	0.9 W
ID	2-wire; 4-20mA HART, PFS = Status Output	35 Vdc	1.5 W
IE	2-wire; 4-20mA HART, 4-20mA	30 Vdc	1.4 W
РА	2-wire; 4-20mA PROFIBUS PA, PFS = Status Output	35 Vdc	1.2 W
AH	4-wire; 90-253VAC, 4-20mA HART	90-250 Vac	6 VA
DH	4-wire; 10,4-48VDC, 4-20mA HART	10.4-48 Vdc	1.3 W

For option code b' = IH, ID, IE, PA: To be supplied by Class 2 or limited-energy source in accordance with CSA 61010-1-04



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APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 0-10	-	General Requirements - Canadian Electrical Code, Part II
CSA Std C22.2 No. 25-1966 (R2009)	-	Enclosures for Use in Class II, Groups E, F and G Hazardous Locations
C22.2 No. 30-M1986 (R2007)	-	Explosion-Proof Enclosures for Use in Class I Hazardous Locations
CAN/CSA-C22.2 No. 94-M91 (R2011)	-	Special Purpose Enclosures
CSA C22.2 No. 157-92 (R2006)	-	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous
		Locations
CSA Std C22.2 No. 213-M1987 (R2008)	-	Non-Incendive Electrical Equipment for Use in Class I, Division 2
		Hazardous Locations
CAN/CSA C22.2 No. 61010-1-04	-	Safety Requirements for Electrical Equipment for Measurement,
		Control, and Laboratory Use - Part 1: General Requirements - Second
		Edition
CAN/CSA-C22.2 No. 60079-0:07	-	Electrical apparatus for explosive gas atmospheres - Part 0: General
		requirements
CAN/CSA-C22.2 No. 60079-1:07	-	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof
		enclosures "d"
CAN/CSA-E60079-11:02	-	Electrical apparatus for explosive gas atmospheres -
		Part 11: Intrinsic Safety "i"
CAN/CSA-E60079-15:02	-	Electrical apparatus for explosive gas atmospheres -
		Part 15: Type of Protection "n"
ANSI/IEC-C22.2 No. 60529:05	-	Degrees of protection provided by enclosures (IP Code)
FMRC 3600 – 1998	-	Electrical Equipment for Use in Hazardous (Classified) Locations,
		General Requirements
FMRC3610 – 2007	-	Intrinsically Safe Apparatus for Use in Class I, II & III, Division 1, and
		Class I, Zone 0 & 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 3615 – 2006	-	Explosionproof Electrical Equipment, General Requirements
FMRC 3810 - 2005	-	Electrical and Electronic Test, Measuring, and Process Control
		Equipment
ANSI/ISA 60079-0 (12.00.01) -2009	-	Explosive atmospheres - Part 0: Equipment - General Requirements
ANSI/ISA 60079-1 (12.22.01) -2009	-	Explosive Atmospheres - Part 1: Equipment Protection by Flameproof
		Enclosures "d"
ANSI/ISA 60079-11 (12.02.01) -2011	-	Explosive Atmospheres - Part 11: Equipment Protection by intrinsic
		safety "i"
ANSI/ ISA-61010-1 (82.02.01): 2004	-	Safety Requirements for Electrical Equipment for Measurement,
		Control, and Laboratory Use - Part 1 General Requirements
ANSI/NEMA 250 – 1997	-	Enclosures for Electrical Equipment
ANSI/IEC 60529:2004	-	Degrees of Protection Provided by Enclosures (IP
		Code)
ANSI/ISA 12.27.01-2003	-	Requirements for Process Sealing Between Electrical Systems and
		Flammable or Combustible Process Fluids



MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

Nameplate adhesive label material approval information:

Markings are printed on following nameplates:

- Wölco Type 3105 2008 or
- Eltex Type LAZRetch PM-200 (Top-Script 101 720) or
- stainless steel

Surface material:

- powder coated aluminum IGP Type Durapol 6403A or
- stainless steel
- plastics PBT