

## Certificate of Compliance

Certificate:

212978

**Project:** 

1595868

Date Issued: November 9, 2004

Issued to:

Pepperl + Fuchs GmbH

Koenigsberger Allee 87 Mannheim 31, 68307

Germany

Attn: Mr. Högerle

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



Issued by:

K. Atkins

Authorized by:

perations Manager



## Class 2252 01 PROCESS CONTROL EQUIPMENT

- Level Gauge Probe, Type LGC\*\*\*\*\*-C1; -CG rated 30V dc, 4-20mA.
- Capacitive Limit Switch LCL1-\*\*K-\*\*\*\*-C\*; -CG DC version rated 10.8 45V dc, 225mA; AC/DC version rated 20-253V ac/0.15A, 20-55V dc, 12W, contacts rated 250V ac/V dc, 8A. Suffixes denote Certifications, process connections, inserts and housing types.
- Capacitive Limit Switch, Type LCL2-\*\*\*-C\*, DC version rated 10.8-45V dc, 200mA, AC/DC version rated 20-253V ac/0.15A, 20-55V dc/2W, contacts rated 250V ac/30V dc/4A, 250V dc/0.2A. Suffixes in model number denote Certifications, process connections, inserts and housing types.
- Ultrasonic Measuring Transmitters, Model LUC-T20-N5\*-\*\*\*-C, LUC-T20-N6\*-\*\*\*-C rated 12 to 36V dc 0.8W max (two wire version), Models LUC-T20-N5\*-\*\*\*-C, LUC-T20-N6\*-\*\*\*-C, LUC-T30-FA\*-\*\*\*-C\* rated 18 to 36V dc, 1.2W max 120/240V ac, 4.5VA, 50/60Hz (four wire version) and Models LUC-T20-N5\*-\*\*\*-C and LUC-T20-N6\*-\*\*\*-C, rated 120/240V ac, 4.5VA, 50/60Hz contacts rated 5A/250V ac, 100V dc/600VA (non-inductive). Suffixes in Model number denote Sensor size, Certifications, supply/communication options, housing/cable entry type, and display option.



Vibrating Limit Switch "Vibracon", Types LVL-M\*\*-\*\*-CG rated as follows: with FEL51 insert, 19-250V ac, 350mA; with FEL52 insert, 10-55V dc, 1.5W; with FEL54 insert, 19-250V ac or 19-55V dc, 1.8W; with FEL55 insert, 11-36V dc, 720mW; with FEL56 insert, 16V dc, 52mA; with FEL58 insert, 16V dc, 52mA; max ambient 70C.

Class 2258 02 PROCESS CONTROL EQUIPMENT - For Hazardous Locations

Class II, Div. 1, Groups E, F, G; Class III, Type 4X Enclosure:

Capacitive Limit Switch LCL1-\*\*K-\*\*\*\*-C\*, -CG; DC version rated 10.8-45V dc, 225mA;
 AC/DC version rated 20-253V ac/0.15A, 20-55V dc/2W, contacts rated 250V ac/V dc, 8A.
 Suffixes denote Certifications, process connections, inserts and housing types.

Class I, Div. 2, Groups A, B, C and D; Type 6 Enclosure:

- Ultrasonic Level Sensor Type LUC-T10-\*\*\*-PA\*-CS, rated 30V dc, 12mA. Suitable for Div.2 locations when connected per Installation Drawing No. 16-410CS-12. Suffixes in model denote Certifications, communication options, housing/cable entry type and display option.
- Ultrasonic Level Sensor Type LUC-T10-\*\*\*-\*\*-CS, rated 30V dc, 200mA. Suffixes in model denote Certifications, communication options, housing/cable entry type and display option.

Class II, Div. 1, Groups E, F, G; Type 6 Enclosure:

• Ultrasonic Level Sensor, Type LUC-T30-FA\*-\*\*\*-C1 rated 18 to 36V dc, 1.2W (max), 120/240V ac, 4.5VA, 50/60Hz. Suffixes in models denote Certifications, supply/communication options, housing/cable entry type and display option.

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

Vibrating Limit Switch "Vibracon", Types LVL-M\*\*-\*\*-CI/CX rated as follows: with FEL51 insert, 19-250V ac, 350mA; with FEL52 insert, 10-55V dc, 1.5W; with FEL54 insert, 19-250V ac or 19-55V dc, 1.8W; with FEL55 insert, 11-36V dc, 720mW; with FEL56 insert, 16V dc, 52mA; with FEL58 insert, 16V dc 52mA; max ambient 70C.

Class I, Div. 1, Groups A, B, C and D; Class II, Div. 1, Groups E, F and G, Class III; Type 4X:

• Vibrating Limit Switch "Vibracon", Types LVL-M\*\*-\*\*-CX rated as follows: with FEL51 insert, 19-250V ac, 350mA; with FEL52 insert, 10-55V dc, 1.5W; with FEL54 insert, 19-250V ac or 19-55V dc, 1.8W; with FEL55 insert, 11-36V dc, 720mW; with FEL56 insert, 16V dc, 52mA; with FEL58 insert, 16V dc 52mA; max ambient 70C.



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

Exia IIC, Class I, Zone 0: Class I, Groups A, B, C and D:

• Level Gauge Probe, Type LGC \*\*\*\*\*-\*\*\*-C1; rated 30V dc, 4-20mA; intrinsically safe when connected per Installation Drawing No 16-402CS-12.

Class I, Groups A, B, C and D; Class II, Groups E, F and G; Class III; Type 6:

- Ultrasonic Level Sensor, Type LUC-T10-\*\*\*-\*\*-CS, rated 30V dc, 200mA, intrinsically safe when connected per installation instructions 16-399CS-12. Temp Code T5 (at max ambient 80C). Suffixes in model number denote Certifications, communications options, housing/cable entry type and display option.
- LUC-T10-\*\*\*-PA\*-CS rated 17.5V dc, 280mA; intrinsically safe when connected per installation instructions 16-410CS-12. Temp Code T6 (at max ambient 60C), Temp Code T5 (at max ambient 80C). Suffixes in model number denote Certifications, communications options, housing/cable entry type and display option.

Ex ia IIC; Class I, Zone 0: Class I, Groups A, B, C and D; Class II, Groups E, F and G; Class III, Type 4X:

• Vibrating Limit Switch "Vibracon", Types LVL-M\*\*-\*\*-CI rated as follows: with FEL55 insert, 11-36V dc, 720mW; with FEL56 insert, 16V dc 52mA; with FEL58 insert, 16V dc, 52mA; intrinsically safe when connected per installation drawing No. 16-425CS-12a; max ambient 70C.

Note: the device LVL-M\*\*-\*\*-P2\*-CI is suitable for Ex ia IIC; Class I, Zone 0; Class I, Groups A, B, C and D; Class II, Group G and Coal Dust; Class III hazardous locations.

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

Exia IIC: Class I, Zone 0: Class I, Groups A, B, C and D:

• Level Gauge Probe, Type LGC\*\*\*\*\*-C1; rated 30V dc, 4-20mA. intrinsically safe when connected per Installation Drawings 16-402CS-12.

Class II, Div. 1, Group G and Coal Dust; Class III; Type 4X Enclosure:

Capacitive Level Limit Switch LCL2-\*\*\*-\*\*\*-C\*, DC version rated 10.8-45V dc, 200mA; AC/DC version rated 20-253V ac/0.15A, 20-55V dc/2W, contacts rated 250V ac/30V dc/4A, 250V dc/0.2A; provides intrinsically safe circuits to integral cable connected probe. Suffixes in model number denote Certifications, process connections, inserts and housing types.



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

• Vibrating Limit Switch "Vibracon", Types LVL-M\*\*-\*\*-CI rated as follows: with FEL55 insert, 11-36V dc, 720mW; with FEL56 insert, 16V dc 52mA; with FEL58 insert, 16V dc, 52mA; intrinsically safe when connected per installation drawing No. 16-425CS-12a; max ambient 70C.

Note: the device LVL-M\*\*-\*\*-P2\*-CI is suitable for Ex ia IIC; Class I, Zone 0; Class I, Groups A, B, C and D; Class II, Group G and Coal Dust; Class III hazardous locations.

Class I, Groups A, B, C and D; Class II, Groups E, F and G; Class III; Type 6:

Ultrasonic measuring transmitter, Model LUC-T10-\*\*\*-CS; rated 30V dc, 200mA; intrinsically safe
when connected per installation instructions 16-399CS-12, temp code T5 at max ambient 80 Deg C.
Suffixes in Model number denote certifications, communication options, housing/cable entry type, and
display option.

## APPLICABLE 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 <b>-M</b> 91 -	Special Purpose Enclosures
CSA Std C22.2 No.	142-M1987	- Process Control Equipment
CAN/CSA C22.2 No.	157-92	<ul> <li>Intrinsically Safe and Non-Incendive Equipment for Use in</li> </ul>
		Hazardous Locations
CSA Std C22.2 No.	213-M1987	- Non-Incendive Electrical Equipment for Use in Class I,
		Division 2 Hazardous Locations
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"

## **MARKINGS**

The CSA Mark, company name, tradename, identification, file number 212978, model designation, and any 'Cautions' or other information as specified in the Certification Report.