



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx SEV 17.0001

Issue No: 2

Certificate history:

Status: **Current**

Issue No. 2 (2017-10-30)

Issue No. 1 (2017-08-22)

Date of Issue: **2017-10-30**

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Issue No. 0 (2017-03-07)

Applicant: **WEKA AG**
Schürlistrasse 8
8344 Bäretswil
Switzerland

Equipment: **Transmitter 29710-ND-05, 29710-ND-10, 32608-ND-05, 32608-ND-10, 29710-NI-05,
29710-NI-10, 32607-NI-05 and 32607-NI-10**

Optional accessory:

Type of Protection: **"i", "d", "t"**

Marking:

ND types:
Ex db IIC T6 Gb
Ex tb III C T85 °C Db

NI types:
Ex ia IIC T4 Gb
Ex ia III C T115 °C Db

*Approved for issue on behalf of the IECEx
Certification Body:*

Martin Plüss

Position:

Manager Product Certification

*Signature:
(for printed version)*

Date:

2017-10-30

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

Eurofins Electrosuisse Product Testing AG
Luppenstrasse 1
CH-8320 FEHRALTORF
Switzerland



**Electrosuisse
Product Testing**



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Manufacturer: **WEKA AG**
Schürlistrasse 8
8344 Bäretswil
Switzerland

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

CH/SEV/ExTR17.0001/01

Quality Assessment Report:

CH/SEV/QAR16.0005/00



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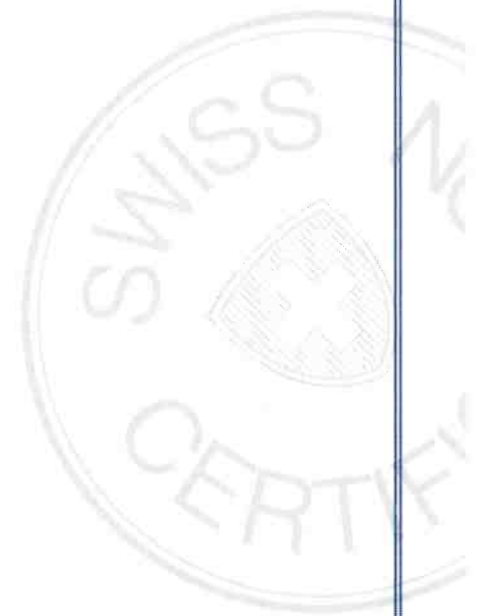
Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The transmitters are used as part of a measurement line for continuous monitoring of tank levels. They are installed along with visual level indicators (VLI) at liquid-filled tanks and serve as a sensor
Type 29710-NI-xx resp. 29710-ND-xx in 3-wire technology with resistance output or
Type 32607-NI-xx resp. 32608-ND-xx in 2-wire technology with current output.
See Annexe for Details.

SPECIFIC CONDITIONS OF USE: NO





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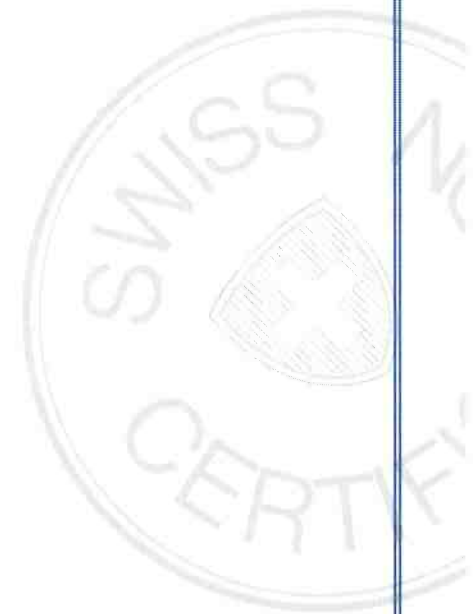
DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Correction of a type mismatch: 108 °C to 180 °C

For connection of the flameproof enclosure devices 32608-ND-xx also a cable of type ÖLFLEX HEAT 180°C MS with shield in combination with the cable gland BN16.10.116.SI.ON (IECEX INE 10.0010X) should be used.

Annex:

IECEX SEV 17.0001 Annexe Issue 2.pdf



Annexe to: **IECEX SEV 17.0001****Issue No.: 2**
page 1 of 2**Applicant Name:** **WEKA AG****Electrical Apparatus:** **Transmitter****Description of product**

The transmitters are used as part of a measurement line for continuous monitoring of tank levels. They are installed along with visual level indicators (VLI) at liquid-filled tanks and serve as a sensor
Type 29710-NI-xx resp. 29710-ND-xx in 3-wire technology with resistance output or
Type 32607-NI-xx resp. 32608-ND-xx in 2-wire technology with current output.

In the visual level indicator is a float located which contains a permanent magnet. This permanent magnet activates reed switches located inside the transmitter arranged in a 5 mm (xxxxx-xx-05) or 10 mm grid (xxxxx-xx-10), whereby a change in resistance occurs. The function of this device could be seen similar to a potentiometer.

Type 29710-xx-xx:

The output signal can either be directly the resistance value or the transmitter can be powered by an external electronics with a current, so that the resistance change is converted as a voltage at the output. The supply current for sensors shorter than 1 m should be maximum 4 mA and for sensors longer than 1 m should not exceed 1 mA.

Type 32607-NI-xx and type 32608-ND-xx:

The sensors work the same as the type 29710-xx-xx, but the electronics at the top of the transmitter converts the voltage signal into a 4...20 mA current signal (current sink) in 2-wire technology.

The "ND" in the type code describes the versions int type of protection "d" and "t", the "NI" stands for the intrinsically safe version.

Annexe to:
IECEX SEV 17.0001
Issue No.: 2

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Permissible ambient and medium temperature range:

Type 29710-ND-xx and type 32608-ND-xx

 Ex db IIC T6 Gb
 Ex tb IIIC T85 °C Db

The temperature class respective the maximum surface temperature of the equipment depends on the medium temperature and the ambient temperature and shall be taken from the following table:

Medium temperature	Ambient temperature	Temperature class of the equipment	Maximum surface temperature
-50 °C...+150 °C	-50 °C...+50 °C	T4	105 °C
-50 °C...+135 °C	-50 °C...+50 °C	T4	100 °C
-50 °C...+100 °C	-50 °C...+50 °C	T5	95 °C
-50 °C...+85 °C	-50 °C...+50 °C	T6	85 °C

Type 29710-NI-xx and type 32607-NI-xx

 Ex ia IIC T4 Gb
 Ex ia IIIC T115 °C Db

 Permissible ambient temperature range: -50 °C...+50 °C
 Permissible medium temperature range: -50 °C...+150 °C

Technical Data:

 Type 29710-ND-xx
 Measurement circuit

 Rated values:
 U = 15 VDC
 I = 4 mA

 Type 32608-ND-xx
 Measurement circuit

 U = 30 VDC
 I = 23 mA

 Type 29710-NI-xx
 Measurement circuit

 In type of protection Intrinsic safety Ex ia IIC respective IIIC.
 Only for connection to certified intrinsically circuits.

 Maximum values:
 U_i = 22.6 VDC
 I_i = 160 mA
 P_i = 900 mW

The maximum effective internal capacitance and inductance are negligible small.

 Type 32607-NI-xx
 Measurement circuit

 In type of protection Intrinsic safety Ex ia IIC respective IIIC.
 Only for connection to certified intrinsically circuits.

 Maximum values:
 U_i = 30.8 VDC
 I_i = 130 mA
 P_i = 790 mW
 C_i = 49 nF
 L_i ≈ 0 mH