

1 EU-TYPE EXAMINATION CERTIFICATE



2 Equipment or Protective systems intended for use in Potentially
Explosive Atmospheres - Directive 2014/34/EU

3 EU-Type Examination Certificate No: FM18ATEX0017X

4 Equipment or protective system: AWT210 2-Wire Electrochemical Transmitters
(Type Reference and Name)

5 Name of Applicant: ABB Limited

6 Address of Applicant: Howard Road
Eaton Socon
St Neots,
Cambridgeshire, PE19 8EU,
UNITED KINGDOM

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.

8 FM Approvals Europe Ltd, notified body number 2809 in accordance with Article 17 of Directive 2014/34/EU of 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report number:

3053362 dated 8th March 2019

9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN 60079-0:2012 + A11:2013, EN 60079-11:2012 and EN 60529:1991 + A1:2000 + A2:2013

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.

11 This EU-Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include:



II 1 G Ex ia IIC T4 Ga Ta = -20 °C to +60 °C

 Digitally signed by
Richard Zammitt
DN: cn=Richard Zammitt,
o, ou=FM Approvals
Europe Limited,
email=richard.zammitt@
fmapprovals.com, c=IE

Richard Zammitt
Certification Manager, FM Approvals Europe Ltd.

Issue date: 27th March 2019

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

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SCHEDULE

to EU-Type Examination Certificate No. FM18ATEX0017X

13 Description of Equipment or Protective System:

The AWT210 2-wire transmitters are designed for use with a variety of electrochemical sensor for measurement of conductivity, or pH/ORP. There are four different type of sensors that can be used with the AWT210. The communications and the sensor circuits are modular designed for easy installation and replacement and fit to the baseplate inside the enclosure using quarter turn locking devices. All signal outputs use HART communications protocol. A display is fitted to the door of the enclosure

The AWT210 transmitter housing is made of plastic, or aluminium and has an ingress protection rating of IP66.

Operation Temperature Ranges:

The ambient operating temperature range of the AWT210 is -20 °C to 60 °C.

Electrical data:

The AWT210 transmitter has the following electrical ratings;

Energy limitation parameters:

$U_i \leq 30 \text{ V}$; $I_i \leq 100 \text{ mA}$; $P_i \leq 0.8 \text{ W}$; $C_i = 0.56 \text{ nF}$; $L_i = 3.3 \text{ mH}$

$U_o \leq 11.8 \text{ V}$; $I_o \leq 11.8 \text{ mA}$; $P_o \leq 35 \text{ mW}$; $C_o = 1.5 \text{ }\mu\text{F}$; $L_o = 1 \text{ H}$

AWT210abcH1efgh Electrochemical Transmitter

a = Reserved for future use

b = Enclosure Type: 1 or 2

c = sensor input: C2, C4, C1 or P1

e = Approvals: E3, E5 or E6

f = Mounting kits: A1, A2, A3 or A4

g = Cable entry options: U1, U2, U3, U4, U5, or U6

h = Documentation: Not relevant to safety

14 Specific Conditions of Use:

1. The ATW210 (enclosure option b = 2) contains aluminium and is considered to present a potential risk of ignition by impact or friction. Care shall be taken into account during installation and use to prevent impact or friction.
2. The ATW210 (enclosure option b = 1) may store electrostatic charge and become a source of ignition in applications with a low relative humidity <-30% relative humidity where the Lexan is relatively free of surface contamination such as dirt, dust, or oil. Guidance on protection against the risk of ignition due to electrostatic discharge can be found in IEC TS 60079-32-1. Cleaning of the surface shall only be done in accordance with the manufacturer's instructions.
3. Where the manufacturer of the equipment has not identified the variant of communication module and sensor module on the label, the user shall mark, on installation, the variant of communication module and sensor module on the label.

15 Essential Health and Safety Requirements:

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

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16 Test and Assessment Procedure and Conditions:

This EU-Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Europe Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Europe Ltd's ATEX Certification Scheme.

17 Schedule Drawings

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by the Notified Body.

18 Certificate History

Details of the supplements to this certificate are described below:

Date	Description
27 th March 2019	Original Issue.

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