

1 EU-TYPE EXAMINATION CERTIFICATE



2 **Equipment or Protective systems intended for use in Potentially
Explosive Atmospheres - Directive 94/9/EC**

3 **EC-Type Examination Certificate No: FM14ATEX0007X**

4 **Equipment or protective system: 2600T Pressure transmitter, Model 266 Wireless
(Type Reference and Name)**

5 **Name of Applicant: ABB SpA**

6 **Address of Applicant: Via L. Vaccani 4
Tremezzina (Co) Loc. Ossuccio 22016
Italy**

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 Ltd, notified body number 1725 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:

3048996 dated 24th July 2014

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 + A11:2103, EN 60079-11:2012 and EN 60529:1991 + A1:2000

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe 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 -50 °C ≤ Ta ≤ 70 °C

II 1/2 G Ex ia IIC T4 -50 °C ≤ Ta ≤ 70 °C

Mick Gower
Certification Manager, FM Approvals Ltd.

Issue date: 29th September 2016

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

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SCHEDULE



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to EU-Type Examination Certificate No. FM14ATEX0007X

13 Description of Equipment or Protective System:

The 2600T Pressure transmitter, Model 266 Wireless Pressure Transmitter is a battery powered device which consists of an aluminium alloy or stainless steel housing with an internal partition which separates the enclosure into a battery compartment and an electronics compartment. RF leadthroughs are fitted in the partition wall. The battery compartment is fitted with a flat threaded cover and the electronics compartment is fitted with a window cover having a cemented-in flat glass window. The housing is also provided with a threaded opening on the electronics side to accommodate a pressure sensor (primary) which can be of gauge or differential design and having various sensor types. All joints are sealed using 'O' rings and all threaded covers are locked against removal.

The enclosure meets the requirements for IP67.

Operation Temperature Ranges:

The ambient operating temperature range of the 2600T Pressure transmitter, Model 266 Wireless is -50°C to 70°C. Process temperature range is -50°C to 135°C.

266 bcdefghimnoqrs9u Model 266 Wireless Pressure Transmitter

b = measure type and construction: D, H, N, P, or V

c = application: D**, H, L, R**, or S

d = performance: Single digit not relevant to safety

e = upper range limits: A, B, E, F, G, H, M, P, Q, S, or W

f = static pressure range: H or S

g = transducer diaphragm material and fill fluid: 4, 5, 8, 9, A, B, C, D, H, I, K, L, M, P, Q, R, S or T

h = process flanges material & connection: 1, 2, 3, A, B, C, D, E, F, G, K, M, N, P, R or T.

i = Blank

m (only for 266 DLH and 266 DHH) = high pressure side process flange standard rating – size: A, B, D, E, M, N or L

n (only for 266 DLH and 266 DHH) = high pressure side process flange material-form finish: A, D, G or L

o (only for 266 DLH and 266 DHH) = low pressure side diaphragm material and fill fluid: 4, 5, A, B, C, D, F, H, K, L, M, P, Q, S or T

q (only for 266 DLH) = low pressure side seal type and capillary length: 1, 2, 3, 4, 5, 6, 7, 8, M, N, Q, S, T, U, V or Z

r = bolts and gasket: 1, 2, 3, 4, 8, 9 or N

s = electronic housing: B or T

u = option blank or A1, A2, B+, C+, D+, E1, F+, H+, I+, L1, L5, L9, M+, N+, P+, T+, V1, V2, V3, V4, V5, V6, V7, V8, V9, VA, VB, VC, W+, Y+ or Z1.

** Note 1: if on option "c" is D or R denotes remote seal elements.

+Note 2: Any single letter or number.

Code of remote seal:

S6 for 600TEN series

S26 for 2600T series

14 Specific Conditions of Use:

1. The Model 266 enclosure contains aluminium and is considered to present a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction.

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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.

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 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 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
25 th July 2014	Original Issue.
10 th December 2014	Issue 2 of Original: Correction to Special Conditions of Use
02 nd December 2015	<u>Supplement 1:</u> Report Reference: RR203023 dated 25 th November 2015 Description of the Change: 1) Address change from: Via Stalale 113, Lenno (Como) 22016, Italy.
29 th September 2016	<u>Supplement 2:</u> Report Reference: RR206443 dated 28 th September 2016 Description of the Change: 1) Addition of 700 Bar option

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Blueprint Report

ABB SpA (100002443)

Class No 3610

Original Project I.D. 3049000

Certificate I.D. FM14ATEX0007X

<u>Drawing No.</u>	<u>Revision Level</u>	<u>Drawing Title</u>	<u>Last Report</u>	<u>Electronic Drawing</u>
3KXP000001U0121	0	BOM front end wireless	3049000	Yes (pdf)
3KXP000001U0122	0	Layout front end wireless	3049000	Yes (pdf)
3KXP000001U0123	0	Front end wireless circuit diagram	3049000	Yes (pdf)
3KXP004000U0009	2	2600T Series 266 Wireless Safety Plates	RR203023	Yes (pdf)
3KXP004000U0109	0	266 wireless top work assembly drawing for Ex ia	3049000	Yes (pdf)
3KXP004002U0101 / 1	1	Wireless Hart Power Management	3049000	Yes (pdf)
3KXP004002U0110 / 1	1	Wireless Hart Power Management	3049000	Yes (pdf)
3KXP004002U0123	0	Wireless hart power management PCB	3049000	Yes (pdf)
3KXT670731U0101	2.03	wireless communication board hart PCB	3049000	Yes (pdf)
3KXT670731U0102	F	communication board PCB specification	3049000	Yes (pdf)
3KXT670732G0009	1.11	block diagram	3049000	Yes (pdf)
3KXT670732U0101	2.03	assembly drawing communication board	3049000	Yes (pdf)
3KXT670732U0106	3	communication board coat area on PCB	3049000	Yes (pdf)
3KXT670732U0111	02.03.01	wireless communication board hart schematic	3049000	Yes (pdf)
3KXT670733U0101	02.00	wireless Front end board temperature PCB drawing	3049000	Yes (pdf)
3KXT670733U0102	C	front end board PCB specification	3049000	Yes (pdf)
3KXT670734U0101	02.00	assembly drawing Front end board temperature	3049000	Yes (pdf)
3KXT670734U0106	3	front end board coat area on PCB	3049000	Yes (pdf)
3kxp004002u0122	0	Wireless hart power management schematic	3049000	Yes (pdf)
DH0013	2	primary transducer differential Tx inductive type	3049000	Yes (pdf)
DH0014	2	primary transducer gauge Tx inductive type	3049000	Yes (pdf)
DH3198	0	primary transducer gauge Tx inductive type (FE covered by potting) (flameproof device standard)	3049000	Yes (pdf)
DH3199	0	primary transducer gauge Tx inductive type (FE covered by potting) (flameproof device for automatic assembly)	3049000	Yes (pdf)
DH3200	0	primary transducer gauge Tx inductive type (FE covered by plastic cover) (flameproof device standard)	3049000	Yes (pdf)
DH3201	0	primary transducer gauge Tx inductive type (FE covered by plastic cover) (flameproof device for automatic assembly)	3049000	Yes (pdf)
DH3223	0	primary transducer differential Tx inductive type EDM solution 2	3049000	Yes (pdf)
DH3245	21/02/2014	transducer gauge 700 bar with glass insulator	RR206443	Yes (pdf)
IN1877	A	WI TEMP / WI PRESSURE ANTENNA	3049000	Yes (pdf)
OI_266HART-EN-H-03	1	2600T Series Pressure Transmitters 266 Models WirelessHART	17-Oct-14	Yes (pdf)