



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 FME 09.0003X issue No.: 0 Certificate history:

Status: **Current**

Date of Issue: 2009-07-24 Page 1 of 4

Applicant: **ABB SpA**
Via Statale 113
Lenno (Como) 22016
Italy

Electrical Apparatus: **2600T Pressure Transmitter, Model 266**
Optional accessory:

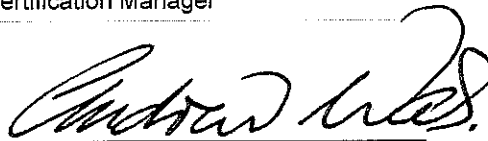
Type of Protection: **Intrinsic safety "i"**

Marking: **Ex ia IIC T***
Ex iaD 20 T85°C
Ex iaD 21 T85°C
FISCO
***see ratings for temperature class**
IP67

Approved for issue on behalf of the IECEx Certification Body: Andrew Was

Position: Certification Manager

Signature:
(for printed version)


24th July 2009.

Date:

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.

Certificate issued by:

FM Approvals Ltd
1 Windsor Dials
SL4 1RS Windsor
United Kingdom





IECEX Certificate of Conformity

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Issue No.: 0

Page 2 of 4

Manufacturer: **ABB SpA**
Via Statale 113
Lenno (Como) 22016
Italy

Manufacturing location(s):

**ABB Automation
Products GmbH**
Schillerstraße 72
32425 Minden
Germany

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 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-11 : 2006 Edition: 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-26 : 2004 Edition: 1	Electrical apparatus for explosive gas atmospheres - Part 26: Construction, test and marking of Group II Zone 0 electrical apparatus
IEC 60079-27 : 2005-04 Edition: 1.0	Electrical apparatus for explosive atmospheres- Part 27: Fieldbus intrinsically safe concept (FISCO) and Fieldbus non-incendive concept (FINCO)
IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-11 : 2005 Edition: 1	Electrical apparatus for use in the presence of combustible dusts - Part 11: Protection by intrinsic safety 'ID'

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:

GB/FME/ExTR09.0001/00

Quality Assessment Report:

DE/TUN/QAR06.0012/01

IT/CES/QAR07.0001/02



IECEx Certificate of Conformity

Certificate No.: IECEx FME 09.0003X

Date of Issue: 2009-07-24

Issue No.: 0

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The 2600T Pressure transmitter, Model 266 consists of an aluminium alloy or stainless steel housing with an internal partition which separates the enclosure into a terminal compartment and an electronics compartment. RF leadthroughs are fitted in the partition wall. The terminal 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 joints are locked against removal. The design includes a number of different configurations:

1. HART 4-20mA
2. Foundation Fieldbus/Profibus

There are 5 different terminal arrangements

1. 2 terminals with and without surge protection
2. 3 terminals with and without surge protection
3. 6 terminals with and without surge protection
4. 8 terminals with and without surge protection
5. 9 terminals with and without surge protection

CONDITIONS OF CERTIFICATION: YES as shown below:

The User shall permanently mark the protection type chosen. Once the type of protection has been marked it shall not be changed.



IECEX Certificate of Conformity

Certificate No.: IECEx FME 09.0003X

Date of Issue: 2009-07-24

Issue No.: 0

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EQUIPMENT(continued):

There are 2 different communications boards

1. HART
2. FieldBus

There are 5 different Front End boards

1. Inductive Type (DH3115)
2. P-Capacitive Type (9280309_3_P01)
3. DP-Piezo Resistive Type (3280301_4_P01)
4. P-Resistive Type (9280305_3_P01)
5. DP-Piezo Resistive HP Type (3280306_3_P01)

There is an optional second front end board and HMI display board Type B included in this examination.

Electrical ratings;

Entity/HART Version: $U_i = 30V_{dc}$ $C_i = 5 nF$ $L_i = 10 \mu H$

Profibus/ version: $U_i = 17.5 V_{dc}$ $I_i = 360mA$ $P_i = 2.52W$ $C_i = 5 nF$ $L_i = 10 \mu H$

FISCO Version: $U_i = 17.5 V_{dc}$ $I_i = 380mA$ $P_i = 5.32 W$ $C_i = 5 nF$ $L_i = 10 \mu H$

HART/Entity

T ClassGas	T ClassDust	minimum ambient °C	maximum ambient °C	I _{max} mA	PW
T4	T135°C	-50°C	+85°C	100	0.75
T4	T135°C	-50°C	+70°C	160	1
T5	T100°C	-50°C	+40°C	100	1.75
T6	T85°C	-50°C	+40°C	50	0.4

Profibus/Fieldbus

Temperature ClassGas	Temperature ClassDust	Lower Limit Of Ambient Temperature	Upper Limit Of Ambient Temperature
T4	T135°C	-50°C	+85°C
T5	T100°C	-50°C	+40°C
T6	T85°C	-50°C	+40°C



IECEX Certificate of Conformity

Certificate No.: IECEx FME 09.0003X

Date of Issue: 2010-03-11

Issue No.: 1

Page 2 of 5

Manufacturer: **ABB SpA**
Via Statale 113
Lenno (Como) 22016
Italy

Manufacturing location(s):

**ABB Automation
Products GmbH**
Schillerstraße 72
32425 Minden
Germany

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IEC 61241-0 : 2004 Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
IEC 61241-11 : 2005 Edition: 1	Electrical apparatus for use in the presence of combustible dusts - Part 11: Protection by intrinsic safety 'ID'

*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:

GB/FME/ExTR09.0001/00

Quality Assessment Report:

DE/TUN/QAR06.0012/01

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IECEX Certificate of Conformity

Certificate No.: IECEx FME 09.0003X

Date of Issue: 2010-03-11

Issue No.: 1

Page 3 of 5

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The 2600T Pressure transmitter, Model 266 consists of an aluminium alloy or stainless steel housing with an internal partition which separates the enclosure into a terminal compartment and an electronics compartment. RF leadthroughs are fitted in the partition wall. The terminal 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 joints are locked against removal. The design includes a number of different configurations:

1. HART 4-20mA
2. Foundation Fieldbus/Profibus

There are 5 different terminal arrangements

1. 2 terminals with and without surge protection
2. 3 terminals with and without surge protection
3. 6 terminals with and without surge protection
4. 8 terminals with and without surge protection
5. 9 terminals with and without surge protection

CONDITIONS OF CERTIFICATION: YES as shown below:

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Date of Issue: 2010-03-11

Issue No.: 1

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EQUIPMENT(continued):

There are 2 different communications boards

1. HART
2. FieldBus

There are 5 different Front End boards

1. Inductive Type (DH3115)
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3. DP-Piezo Resistive Type (3280301_4_P01)
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5. DP-Piezo Resistive HP Type (3280306_3_P01)

There is an optional second front end board and HMI display board Type B included in this examination.

Electrical ratings;

Entity/HART Version: $U_i = 30V_{dc}$ $C_i = 5 nF$ $L_i = 10 \mu H$

Profibus/ version: $U_i = 17.5 V_{dc}$ $I_i = 360mA$ $P_i = 2.52W$ $C_i = 5 nF$ $L_i = 10 \mu H$

FISCO Version: $U_i = 17.5 V_{dc}$ $I_i = 380mA$ $P_i = 5.32 W$ $C_i = 5 nF$ $L_i = 10 \mu H$

HART/Entity

T ClassGas	T ClassDust	minimum ambient °C	maximum ambient °C	I _{max} mA	PW
T4	T135°C	-50°C	+85°C	100	0.75
T4	T135°C	-50°C	+70°C	160	1
T5	T100°C	-50°C	+40°C	100	1.75
T6	T85°C	-50°C	+40°C	50	0.4

Profibus/Fieldbus

Temperature ClassGas	Temperature ClassDust	Lower Limit Of Ambient Temperature	Upper Limit Of Ambient Temperature
T4	T135°C	-50°C	+85°C
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Issue No.: 1

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

- 1) Minor change of layout for Front End
- 2) Minor changes on Hart communication board
- 3) Minor changes on FF and PA communication board
- 4) Addition of self adhesive safety plate (alternative for the stainless steel version)
- 5) Removal of Ceramic Isolator in the inductive type pressure sensors



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Certificate No.: IECEx FME 09.0003X issue No.: 2

Status: Current

Certificate history:
Issue No. 2 (2010-8-20)
Issue No. 1 (2010-3-11)
Issue No. 0 (2009-7-24)

Date of Issue: 2010-08-20 Page 1 of 5

Applicant: **ABB SpA**
Via Statale 113
Lenno (Como) 22016
Italy

Electrical Apparatus: 2600T Pressure Transmitter, Model 266
Optional accessory:


Type of Protection: Intrinsic safety "i"

Marking: Ex ia IIC T*
Ex iaD 20 T85°C
Ex iaD 21 T85°C
FISCO
*see ratings for temperature class
IP67

Approved for issue on behalf of the IECEx Certification Body: Ron Webb

Position: Deputy Certification Manager

Signature:
(for printed version)



20th August 2010

Date:

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Certificate issued by:

FM Approvals Ltd
1 Windsor Dials
SL4 1RS Windsor
United Kingdom



Member of the UKAS Group



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

1. Addition of alternative HMI Type B display with Touch Key