



CSA INTERNATIONAL

Certificate of Compliance

Certificate: 1390857 (LR 87970-12)

Master Contract: 180848

Project: 2071452

Date Issued: 2008/10/09

Issued to: ABB S.p.A.

ABB SACE Division
VAT Number IT 11988960156
Via Vaccani
Ossuccio, Como 22010
Italy
Attention: Walter Volo

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



Issued by: Wesley Van Hill, C.E.T.

Authorized by: Patricia Pasemko, Operations
Manager

PRODUCTS

- CLASS 2258 02** - PROCESS CONTROL EQUIPMENT - For Hazardous Locations
- CLASS 2258 03** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non -
Incendive Systems - For Hazardous Locations
- CLASS 2258 04** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For
Hazardous Locations

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

Class I, Division 1 and 2, Groups A, B, C and D; Class II, Groups E, F and G; Class III; Enclosure Type 4X, Ex d IIC:



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Pressure Transmitter, 2600T Series. Rated Input: 42 Vdc Max., Output: 4-20 mA; Max. Working Pressure 40BAR (565psi) or 620BAR (8992psi), Dual Seal; Temperature Codes as below:

Temp. Code T4, in ambient -40°C to +85°C

Temp. Code T4, in ambient -40°C to +70°C

Temp. Code T5, in ambient -40°C to +40°C

Temp. Code T6, in ambient -40°C to +40°C

The following models are covered under this section of the report:

26abcdefghijklmnpqrstu, where “a” through “u” can be characters as follows:

a = performance: 2 or 4 or 8

b = measure type and construction: B, D, H, J, N, P, V, A, G (For options A and G see Note 2)

c = application: C, D, G, H, L, P, R*, S, T, F, M, E, J or V (for option F see note 1).

d = upper range limits: A, B, C, D, E, F, G, H, L, M, N, P, Q, R, S, T, U, V, W, Z (For options C and F see Note 2)

e = static pressure range: 1, 2, 3, 4, C, M, S, T, Y, Z

f = TR: diaphragm & fluid: A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, T, U, V, W, Y, Z, 1, 2, 3, 4, 5, 6, 7, 8, 9, I

g = flange material & connection: A, B, C, D, E, F, G, H, L, Q, R, T, M, P, N, U, S, V, K, 1, 2, 3 or Z

h = connection material & type: A, B, C, D, E, F, G, H, K, M, N, P, Q, R, S, T, U, V, W, Y, Z, 1, 2, 3, L

i = connection gasket: 5, 6, 8, N

j = high side: flange, rating size: A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, T, U, V, W, Y, Z, 1, 2, 3, 4

l = high side: flange mat & form: A, B, D, E, G, L, P, Q, 2, 1, H, C, F, N, M, U, J, V

m = high side: ext size & material: 1, 2, 3, 4, 5, 6, 9, F

n = high side: isolating diaphragm: G, H, K, S, T, W, Y or U

o = high side: fill fluid: A, B, C, H, K, N, P, S, V, W, D

p = low side: diaphragm & fluid: A, B, C, D, F, H, K, L, M, N, P, Q, R, S, T, U, V, W, Y, 2, 5, 4

q = low side: flanges & connection: A, B, C, D, E, F, H, K, L, M, N, P, Q, R, S, T, U, V, Z, 1, 2, 3, 4, 5, 6, 7, 8, G



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r = bolts and gasket: 1, 2, 3, 4, 5, 6, N, R, 7, 8, C, 9, S

s = electronic housing: A, B, D, H, L, N, S, T, V, G, Z, E, J, K, P, R, W, Y, 1, C, M or U (For options J, K, W, Y, 1 see Note 3)

t = communication: 1, H, 4, F, 3, P, 2, S, 8, T (option S, 8, T and 4 are for model 268 only)

u = Options: A1, A2, A3, B1, B2, B3, B4, B5, B8, B9, C1, C2, C3, C4, C5, C6, C7, C8, C9, CA, CB, CC, CD, CE, CF, CG, CH, CL, CM, CN, CJ, CP, CQ, CR, D1, D2, D3, D4, D5, D6, D7, D8, E4, EN, EA, EB, EC, ER, EJ, F1, G1, G2, G3, G4, G5, H1, H2, H3, H4, I1, I2, J1, J2, J3, J4, J5, J6, J7, J8, J9, JA, JB, JC, JD, JE, JF, K1, K2, K3, K4, K5, K6, K7, L1, L2, L3, M1, M2, M3, M4, M5, M6, M7, M8, M9, MA, MB, N1, N2, N3, N4, N5, N6, P1, P2, P3, P4, P5, Q1, Q2, R1, R2, R3, R4, R5, R6, R7, R8, S1, S2, T1, T2, T3, T4, T5, T6, T7, T8, T9, TA, TB, U1, U2, U3, U4, U5, V1, V2, V3, V4, V5, V6, V7, V8, V9, VA, VB, VC, Z1

Asteryx "*" on character denotes remote seal elements, specified by the S26 code derived from the previous S6 code of the 600T Series.

Note 1: - if digit "c" is F option, the pressure transmitter is not explosion proof.

Note 2: - if digit "b" is A option or G option and if digit d is C or F, the pressure transmitter is not explosion proof.

Note 3: - if digit "s" is J, K, W, Y, 1, the pressure transmitter is not explosion proof.

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

Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; Class III; Enclosure Type 4X, Ex nL IIC

Pressure Transmitter, 2600T Series with HART or FIELDBUS or PROFIBUS protocol,

Rated Input: 42 Vdc Max., Output: 4-20 mA; Max. Working Pressure 40BAR (565psi) or 620BAR (8992psi)

Provides Non-incendive field wiring when installed per installation Drawing

DH 3003 with HART protocol or

DH 3036 with HART protocol or

DH 3106 with HART Protocol (with option t = 8 or T) or

DH 3017 with FIELDBUS & PROFIBUS protocol

Temperature Codes as below:



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Temp. Code T4, in ambient -40°C to +85°C

Temp. Code T4, in ambient -40°C to +70°C

Temp. Code T5, in ambient -40°C to +40°C

Temp. Code T6, in ambient -40°C to +40°C

Note: For the FIELDBUS & PROFIBUS versions, Temperature Code T4 only at Maximum Ambient Temperature of 80°C, which shall be marked on the main nameplate.

The following models are covered under this section of the report:

2600T Series for Division 2

26abcdefghijklmnpqrstu, where “a” through “u” can be characters as follows:

a = performance: 2 or 4 or 8

b = measure type and construction: B, D, H, J, N, P, V, A, G (For options A and G see Note 2)

c = application: C, D, G, H, L, P, R*, S, T, F, M, E, J, V (for option F see note 1).

d = upper range limits: A, B, C, D, E, F, G, H, L, M, N, P, Q, R, S, T, U, V, W, Z (For options C and F see Note 2)

e = static pressure range: 1, 2, 3, 4, C, M, S, T, Y, Z

f = TR: diaphragm & fluid: A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, T, U, V, W, Y, Z, 1, 2, 3, 4, 5, 6, 7, 8, 9, I

g = flange material & connection: A, B, C, D, E, F, G, H, L, Q, R, T, M, P, N, U, S, V, K, 1, 2, 3, Z

h = connection material & type: A, B, C, D, E, F, G, H, K, M, N, P, Q, R, S, T, U, V, W, Y, Z, 1, 2, 3, L

i = connection gasket: 5, 6, 8, N

j = high side: flange, rating size: A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, T, U, V, W, Y, Z, 1, 2, 3, 4

l = high side: flange mat & form: A, B, D, E, G, L, P, Q, 2, 1, H, C, F, N, M, U, J, V

m = high side: ext size & material: 1, 2, 3, 4, 5, 6, 9, F

n = high side: isolating diaphragm: G, H, K, S, T, W, Y, U

o = high side: fill fluid: A, B, C, H, K, N, P, S, V, W, D

p = low side: diaphragm & fluid: A, B, C, D, F, H, K, L, M, N, P, Q, R, S, T, U, V, W, Y, 2, 5, 4



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q = low side: flanges & connection: A, B, C, D, E, F, H, K, L, M, N, P, Q, R, S, T, U, V, Z, 1, 2, 3, 4, 5, 6, 7, 8, G

r = bolts and gasket: 1, 2, 3, 4, 5, 6, N, R, 7, 8, C, 9, S

s = electronic housing: A, B, D, H, L, N, S, T, V, G, Z, E, J, K, P, R, W, Y, 1 C, M, U (For options J, K, W, Y, 1 see Note 3)

t = communication: 1, H, 4, F, 3, P, 2, S, 8, T (option S, 8, T and 4 are for model 268 only)

u = Options: A1, A2, A3, B1, B2, B3, B4, B5, B8, B9, C1, C2, C3, C4, C5, C6, C7, C8, C9, CA, CB, CC, CD, CE, CF, CG, CH, CL, CM, CN, CJ, CP, CQ, CR, D1, D2, D3, D4, D5, D6, D7, D8, E4, EN, EA, EB, EC, ER, EJ, F1, G1, G2, G3, G4, G5, H1, H2, H3, H4, I1, I2, J1, J2, J3, J4, J5, J6, J7, J8, J9, JA, JB, JC, JD, JE, K1, K2, K3, K4, K5, K6, K7, L1, L2, L3, M1, M2, M3, M4, M5, M6, M7, M8, M9, MA, MB, N1, N2, N3, N4, N5, N6, P1, P2, P3, P4, P5, Q1, Q2, R1, R2, R3, R4, R5, R6, R7, R8, S1, S2, T1, T2, T3, T4, T5, T6, T7, T8, T9, TA, TB, U1, U2, U3, U4, U5, V1, V2, V3, V4, V5, V6, V7, V8, V9, VA, VB, VC, Z1

Asteryx "*" on character denotes remote seal elements, specified by the S26 code derived from the previous S6 code of the 600T Series.

Note 1: - if digit "c" is F option, the pressure transmitter is not explosion proof.

Note 2: - if digit "b" is A option or G option and if digit d is C or F, the pressure transmitter is not explosion proof.

Note 3: - if digit "s" is J, K, W, Y, 1, the pressure transmitter is not explosion proof.

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

Class I, Division 1 and 2, Groups A, B, C and D; Class II, Groups E, F and G; Class III; Enclosure Type 4X, Ex ia IIC

Pressure Transmitter, 2600T Series with HART or FIELDBUS or PROFIBUS protocol

Rated Input: 42Vdc Max., Output: 4-20mA; Max. Working Pressure 40BAR (565psi) or 620BAR (8992psi)

Intrinsically Safe with Entity parameters listed below, when installed per installation Drawing

DH 3003 with HART protocol or

DH 3036 with HART protocol or

DH 3106 with HART Protocol (with option t = 8 or T) or

DH 3017 with FIELDBUS & PROFIBUS protocol or



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Temperature Codes as below:

Temp. Code T4, in ambient -40°C to $+85^{\circ}\text{C}$, $I_{\text{max}} = 100 \text{ mA}$, $P_i = 0.75\text{W}$

Temp. Code T4, in ambient -40°C to $+70^{\circ}\text{C}$, $I_{\text{max}} = 160 \text{ mA}$, $P_i = 1.00\text{W}$

Temp. Code T5, in ambient -40°C to $+40^{\circ}\text{C}$, $I_{\text{max}} = 100 \text{ mA}$, $P_i = 0.75\text{W}$

Temp. Code T6, in ambient -40°C to $+40^{\circ}\text{C}$, $I_{\text{max}} = 50 \text{ mA}$, $P_i = 0.40\text{W}$

Note: For the FIELDBUS & PROFIBUS versions, Temperature Code T4 only at Maximum Ambient Temperature of 80°C , which shall be marked on the main nameplate

Entity Parameters:

1. HART

$V_{\text{max.}} = 30 \text{ V}$

$I_{\text{max}} = 160 \text{ mA}$

$C_i = 0 \text{ mF}$ without output meter; $C_i = 13 \text{ nF}$ with output meter

$L_i = 0 \text{ mH}$ without output meter; $L_i = 0.22 \text{ mH}$ with output meter

2. FIELDBUS

$V_{\text{max.}} = 24 \text{ V}$

$I_{\text{max.}} = 250 \text{ mA}$

$C_i \leq 5 \text{ nF}$

$L_i \leq 20 \text{ mH}$

$P_i = 1.2 \text{ W}$

2a. FIELDBUS, FISCO concept

$V_{\text{max.}} = 17.5 \text{ V}$

$I_{\text{max.}} = 380 \text{ mA}$



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$C_i \leq 5 \text{ nF}$

$L_i \leq 10 \text{ mH}$

$P_i = 5.32 \text{ W}$

3. PROFIBUS

$V_{\text{max.}} = 17.5 \text{ V}$

$I_{\text{max.}} = 360 \text{ mA}$

$C_i \leq 5 \text{ nF}$

$L_i \leq 20 \text{ mH}$

3a. PROFIBUS, FISCO concept

$V_{\text{max.}} = 17.5 \text{ V}$

$I_{\text{max.}} = 380 \text{ mA}$

$C_i \leq 5 \text{ nF}$

$L_i \leq 10 \text{ mH}$

$P_i = 5.32 \text{ W}$

4. HART [SAFETY (SIL 2)]

$V_{\text{max}} = 30 \text{ V}$

$I_{\text{max}} = 100 \text{ mA}$

$C_o = 0 \text{ } \mu\text{F}$ without output meter

$C_i = 13 \text{ nF}$ with output meter

$L_o = 0 \text{ mH}$ without output meter

$L_i = 0.22 \text{ mH}$ with output meter



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The following models are covered under this section of the report:

2600T Series for Intrinsically Safe with entity parameters

26abcdefghijklmnpqrstu, where “a” through “u” can be characters as follows:

a = performance: 2 or 4 or 8

b = measure type and construction: B, D, H, J, N, P, V, A, G (For options A and G see Note 2)

c = application: C, D, G, H, L, P, R*, S, T, F, M, E, J, V (for option F see note 1).

d = upper range limits: A, B, C, D, E, F, G, H, L, M, N, P, Q, R, S, T, U, V, W, Z (For options C and F see Note 2)

e = static pressure range: 1, 2, 3, 4, C, M, S, T, Y, Z

f = TR: diaphragm & fluid: A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, T, U, V, W, Y, Z, 1, 2, 3, 4, 5, 6, 7, 8, 9, I

g = flange material & connection: A, B, C, D, E, F, G, H, L, Q, R, T, M, P, N, U, S, V, K, 1, 2, 3

h = connection material & type: A, B, C, D, E, F, G, H, K, M, N, P, Q, R, S, T, U, V, W, Y, Z, 1, 2, 3, L

i = connection gasket: 5, 6, 8, N

j = high side: flange, rating size: A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, T, U, V, W, Y, Z, 1, 2, 3, 4

l = high side: flange mat & form: A, B, D, E, G, L, P, Q, 2, 1, H, C, F, N, M, U, J, V

m = high side: ext size & material: 1, 2, 3, 4, 5, 6, 9, F

n = high side: isolating diaphragm: G, H, K, S, T, W, Y, U

o = high side: fill fluid: A, B, C, H, K, N, P, S, V, W, D

p = low side: diaphragm & fluid: A, B, C, D, F, H, K, L, M, N, P, Q, R, S, T, U, V, W, Y, 2, 5, 4

q = low side: flanges & connection: A, B, C, D, E, F, H, K, L, M, N, P, Q, R, S, T, U, V, Z, 1, 2, 3, 4, 5, 6, 7, 8, G

r = bolts and gasket: 1, 2, 3, 4, 5, 6, N, R, 7, 8, C, 9, S

s = electronic housing: A, B, D, H, L, N, S, T, V, G, Z, E, J, K, P, R, W, Y, 1, C, M, U (For options J, K, W, Y, 1 see Note 3)

t = communication: 1, H, 4, F, 3, P, 2, S, 8, T (option S, 8, T and 4 are for model 268 only)

u = Options: A1, A2, A3, B1, B2, B3, B4, B5, B8, B9, C1, C2, C3, C4, C5, C6, C7, C8, C9, CA, CB, CC, CD, CE,



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CF, CG, CH, CL, CM, CN, CJ, CP, CQ, CR, D1, D2, D3, D4, D5, D6, D7, D8, E4, EN, EA, EB, EC,ER, EJ, F1, G1, G2, G3, G4, G5, H1, H2, H3, H4, I1, I2, J1, J2, J3, J4, J5, J6, J7, J8, J9, JA, JB, JC, JD, JE, K1, K2, K3, K4, K5, K6, K7, L1, L2, L3, M1, M2, M3, M4, M5, M6, M7, M8, M9, MA, MB, N1, N2, N3, N4, N5, N6, P1, P2, P3, P4, P5, Q1, Q2, R1, R2, R3, R4, R5, R6, R7, R8, S1, S2, T1, T2, T3, T4, T5, T6, T7, T8, T9, TA, TB, U1, U2, U3, U4, U5, V1, V2, V3, V4, V5, V6, V7, V8, V9, VA, VB, VC, Z1

Asteryx "*" on character denotes remote seal elements, specified by the S26 code derived from the previous S6 code of the 600T Series.

Note 1: - if digit "c" is F option, the pressure transmitter is not explosion proof.

Note 2: - if digit "b" is A option or G option and if digit d is C or F, the pressure transmitter is not explosion proof.

Note 3: - if digit "s" is J, K, W, Y, 1, the pressure transmitter is not explosion proof.

APPLICABLE REQUIREMENTS

CSA Standard C22.2 No. 0-M1991 - General Requirements □ Canadian Electrical Code Part II.

CSA Standard C22.2 No. 0.4-M2004 - Bonding and Grounding of Electrical Equipment (Protective Grounding)

CSA Standard C22.2 No. 0.5-M1982 - Threaded Conduit Entries

CSA Standard C22.2 No. 25-M1966 - Enclosures for Use in Class II Groups E, F and G Hazardous Locations

CSA Standard C22.2 No. 30-M1986 - Explosion-proof Enclosures for Use in Class I Hazardous Locations

CSA Standard C22.2 No. 94-M1991 - Special Purpose Enclosures

CSA Standard C22.2 No. 157-M1992 - Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations

CSA Standard C22.2 No. 213-M1987 - Non- Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations

CAN/CSA-C22.2 No.61010-1: 04 - Safety Requirements for Electrical Equipment for Measure Control and Laboratory Use - Part 1 - General Requirement

CAN/CSA E60079-0: 07 - Electrical apparatus for explosive gas atmospheres. PART 0: General requirements.

CAN/CSA E60079-1: 07 - Electrical apparatus for explosive gas atmospheres. PART 1: Construction and verification test of flameproof enclosures of electrical apparatus.

CAN/CSA E60079-11: 02 - Electrical apparatus for explosive gas atmospheres. PART 11: Intrinsic safety "i".



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CAN/CSA E60079-15: 02 - Electrical apparatus for explosive gas atmospheres. PART 15: Type of protection “n”

ANSI/ISA-12.27.01: 2003 - Requirements for Process Sealing Between Electrical Systems and Flammable or Combustible Process Fluids.