



Certificate of Compliance

Certificate: 1942161

Master Contract: 226078

Project: 70161234

Date Issued: May 17, 2018

Issued to: Fuji Electric Co., Ltd
1 Fuji-machi
Hino-City,
Tokyo 191-8502
Japan

Attention: Mr. Battut

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



Issued by: E Giusti
E Giusti

PRODUCTS

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

CLASS 2258 82 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations – Evaluated against US Standards

Class I, Groups C and D; Class II, Groups E, F and G; Class III:

Electronic pressure transmitters, Series FCX-AIII (or FCX-AII) / FCX-AIIIS (or FCX-AII-VG):

- Models FHA/FKA, FHB/FKB, FHC/FKC, FHD/FKD, FHE/FKE, FHG/FKG, FHH/FKH, FHM/FKM, FHP/FKP, FHW/FKW, FHX/FKX, FHY/FKY rated 42.4V dc, 4 to 20mA, maximum ambient temperature 85°C, Temperature code T6 @ 65 °C or T5 @ 85 °C, maximum working pressure 50MPa, and
- Models FDA, FDB, FDC, FDD, FDE, FDG, FDH, FDM, FDP, FDW, FDX, FDY rated 32V dc, maximum ambient temperature 85°C, Temperature code T6 @ 65 °C or T5 @ 85 °C, maximum working pressure 50MPa;
Single Seal Series FCX-AIII (or FCX-AII), Models F#C#11, F#C#22, F#C#23, F#C#25, F#C#26, F#C#33, F#C#35, F#C#36 & F#C#38: MWP 18MPa; F#P#01, F#P#02, F#P#03 & F#P#04: MWP 10MPa)
Enclosure Type 4X

Notes:

- Suffix letters and numbers are added to the model designation to denote measuring range, detecting unit materials, electronics variations and other variations.
- Only select models of the Series are rated Single Seal. The respective Single Seal MWP ratings are listed along with the specific models approved.



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Class I, Division 2; Groups A, B, C and D

Electronic pressure Transmitters, Series FCX-AIII (or FCX-AII) / FCX-AIIIS (or FCX-AII-VG):

- Models FHA/FKA, FHB/FKB, FHC/FKC, FHD/FKD, FHE/FKE, FHG/FKG, FHH/FKH, FHM/FKM, FHP/FKP, FHW/FKW, FHX/FKX, FHY/FKY, rated 42.4V dc, 4 to 20mA, Temperature code T4 @ 70 °C or T5 @ 50 °C and

- Models FDA, FDB, FDC, FDD, FDE, FDG, FDH, FDM, FDP rated 32V dc, Temperature code T4 @ 60 °C;

Single Seal Series FCX-AIII (or FCX-AII), Models F#C#11, F#C#22, F#C#23, F#C#25, F#C#26, F#C#33, F#C#35, F#C#36, F#C#38: MWP 18MPa; F#P#01, F#P#02, F#P#03 & F#P#04: MWP 10MPa.);

Enclosure Type 4X

- FaAbcdef-gshij-kl Absolute Pressure Transmitter
- FaBbcdef-gshij-kl Remote Seal Pressure Transmitter
- FaCbcddef-gshij-kl Differential Pressure Transmitter
- FaDbcdef-gshij-kl Remote Seal Differential Pressure Transmitter
- FaEbcdef-gshij-kl Level Transmitter
- FaGbcdef-gshij-kl Pressure Transmitter
- FaHbcde5-gshij-kl Direct Mounting Absolute Pressure Transmitter
- FaHbcdeF-gshij Direct Mounting Absolute Pressure Transmitter with remote seal
- FaMbcdef-gshij Remote Seal Absolute Pressure Transmitter
- FaPbcde5-gshij-kl Direct Mounting Pressure Transmitter
- FaPbcdeF-gshij Direct Mounting Pressure Transmitter with remote seal
- FaWbcdef-gshij-klmnopq-r Small Flange Remote Seal Pressure Transmitter
- FaXbcdef-gshij-kl-r Small Flange Remote Seal Differential Pressure Transmitter
- FaYbcdef-gshij-kl-r Small Flange Level Transmitter

Where a = H, K or D specifying accuracy / communication,

b = alpha/numeric specifying conduit connection,

c = alpha/numeric specifying pressure rating, or span limit or flange material or static pressure,

d = numeric specifying span limit,

e = alpha specifying material of process cover, diaphragm, or wetted parts,

f = 5 or F or G or S specifying version – (note: G or S denotes the SIL version),

g = alpha/numeric specifying indicator or arrestor,

h = process connection, mounting bracket, diaphragm ext., options that do not affect protection type,

i = stainless steel parts,

j = special applications, treatment, fill fluid, options that do not affect protection type,

k = process cover gasket, vent/drain plug, bolt/nut, options that do not affect protection type,

l = bolt/nut, other options (mill sheet, high accuracy...) options that do not affect protection type,

m = process connection for FHW or FKW,

n = process connection for FHW or FKW,

o = adapter material for FHW or FKW,

p = adapter vent/drain for FHW or FKW,

q = adapter gasket for FHW or FKW,

r = optional specifications that do not affect protection type,

s = E, L or W specifying approvals.



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Notes:

- Only select models of the Series are rated Single Seal. The respective Single Seal MWP ratings are listed along with the specific models approved.
- The version incorporating the analog display is excluded from the listing for Class I, Division 2 because it cannot be marked for Class I, Division 2.

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations
CLASS 2258 84 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations—
Evaluated against US Standards

**Class I, Groups A, B, C and D; Class II, Groups E, F and G; Class III;
NI Class I, Division 2; Groups A, B, C and D**

Electronic pressure Transmitters, Series FCX-AIII (or FCX-AII) / FCX-AIIIS (or FCX-AII-VG):

- Models FHA/FKA, FHB/FKB, FHC/FKC, FHD/FKD, FHE/FKE, FHG/FKG, FHH/FKH, FHM/FKM, FHP/FKP, FHW/FKW, FHX/FKX, FHY/FKY, rated 42.4V dc, 4 to 20mA; intrinsically safe when connected per Drawing TC 522873. Entity Parameters: $V_{max} = 28V$, $I_{max} = 94.3\text{ mA}$, $P_{max} = 0.66\text{ W}$, $C_i = 36\text{ nF}$ with the Arrestor Board (26 nF without the Arrestor Board), $L_i = 0.7\text{ mH}$ with the Analog Meter (0.6 mH without the Analog Meter); Temperature Code T4 @ 70 °C or T5 @ 50 °C and
- Models FDA, FDB, FDC, FDD, FDE, FDG, FDH, FDM, FDP, rated 32V dc; intrinsically safe when connected per Drawing TC 522873, Entity Parameters: $V_{max} = 24V$, $I_{max} = 250\text{mA}$, $P_{max} = 1.2\text{W}$, $C_i = 4.04\text{nF}$, $L_i = 9.87\mu\text{H}$, or FISCO parameters $V_{max} = 17.5\text{V}$, $I_{max} = 380\text{mA}$, $P_{max} = 5.32\text{W}$, $C_i = 4.04\text{nF}$, $L_i = 9.87\mu\text{H}$; Temperature Code T4 @ 60 °C and
- SIL versions of models FKA, FKB, FKC, FKD, FKE, FKG, FKH, FKM, FKP, rated 42.4V dc max, 4-20mA; intrinsically safe when connected per Drawing TC 522873. Entity Parameters: $V_{max} = 28V$, $I_{max} = 110\text{mA}$, $P_{max} = 0.77\text{ W}$, $C_i = 39\text{ nF}$ with the Arrestor Board (26 nF without the Arrestor Board), $L_i = 0.7\text{ mH}$ with the Analog Meter (0.6 mH without the Analog Meter); Temperature Code T4 @ 70 °C or T5 @ 50 °C;

Single Seal Series FCX-AIII (or FCX-AII), Models F#C#11, F#C#22, F#C#23, F#C#25, F#C#26, F#C#33, F#C#35, F#C#36, F#C#38: MWP 18MPa; F#P#01, F#P#02, F#P#03 & F#P#04: MWP 10MPa.);
Enclosure Type 4X

- FaAabcdef-gshij-kl Absolute Pressure Transmitter
- FaBbcdef-gshij-kl Remote Seal Pressure Transmitter
- FaCbcddef-gshij-kl Differential Pressure Transmitter
- FaDbcdef-gshij-kl Remote Seal Differential Pressure Transmitter
- FaEbcdef-gshij-kl Level Transmitter
- FaGbcdef-gshij-kl Pressure Transmitter
- FaHbcde5-gshij-kl Direct Mounting Absolute Pressure Transmitter
- FaHbcdeF-gshij Direct Mounting Absolute Pressure Transmitter with remote seal
- FaMbcdef-gshij Remote Seal Absolute Pressure Transmitter
- FaPbcde5-gshij-kl Direct Mounting Pressure Transmitter



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- FaPbcdeF-gshij Direct Mounting Pressure Transmitter with remote seal
- FaWbcdef-gshij-klmnopq-r Small Flange Remote Seal Pressure Transmitter
- FaXbcdef-gshij-kl-r Small Flange Remote Seal Differential Pressure Transmitter
- FaYbcdef-gshij-kl-r Small Flange Level Transmitter

Where a = H or K or D specifying accuracy / communication,
b = alpha/numeric specifying conduit connection,
c = alpha/numeric specifying pressure rating, or span limit or flange material or static pressure,
d = numeric specifying span limit,
e = alpha specifying material of process cover, diaphragm, or wetted parts,
f = 5 or F or G or S specifying version – (note: G or S denotes the SIL version),
g = alpha/numeric specifying indicator or arrestor,
h = process connection, mounting bracket, diaphragm ext., options that do not affect protection type,
i = stainless steel parts,
j = special applications, treatment, fill fluid, options that do not affect protection type,
k = process cover gasket, vent/drain plug, bolt/nut, options that do not affect protection type,
l = bolt/nut, other options (mill sheet, high accuracy...) options that do not affect protection type,
m = process connection for FHW or FKW,
n = process connection for FHW or FKW,
o = adapter material for FHW or FKW,
p = adapter vent/drain for FHW or FKW,
q = adapter gasket for FHW or FKW,
r = optional specifications that do not affect protection type,
s = J, L or W specifying approvals.

Notes:

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APPLICABLE REQUIREMENTS

C22.2 No. 0-2010 (R2015)	General Requirements – Canadian Electrical Code Part II
C22.2 No. 25-2017	Enclosures for Use in Class II, Groups E, F and G Hazardous Locations
C22.2 No. 30-M1986 (R2016)	Explosion-Proof Enclosures for Use in Class I Hazardous Location
C22.2 No. 142-M1987 (R2014)	Process Control Equipment
C22.2 No. 157-92 (R2016)	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
C22.2 No. 213-2017	Non-Incendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations
C22.2 No. 94.2-2015	Enclosures for Electrical Equipment, Non-Environmental Considerations
ANSI/ISA 12.27.01-2011	Requirements for Process Sealing Between Electrical Systems and Flammable or Combustible Process Fluids
FM 3810: 2018	Approval Standard for Electrical Equipment for Measurement, Control, and Laboratory Use
ANSI/ISA-61010-1:2012	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1 General Requirements
ANSI/UL 121201:2017	Non-Incendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations
FM 3611:2018	Non-Incendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations
FM 3600:2018	Approval Standard for Electrical Equipment for Use in Hazardous (Classified) Locations - General Requirements
FM 3615: 2018	Explosionproof Electrical Equipment
FM 3616: 2011	Dust-Ignitionproof Electrical Equipment for Use in Hazardous (Classified) Locations
FM 3610: 2018	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, III, Division 1 and 2
UL50E: Ed.2 2015	Enclosures for Electrical Equipment, Non-Environmental Considerations



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MARKINGS

Product markings shall be in accordance with the related standards. In addition, it shall be the responsibility of the manufacturer to provide additional markings on the product to comply with the requirements of the local regulatory authorities. For example, in Canada, any caution and warning markings must be provided in French and English.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.

For CLASS 2258 02 and 2258-82:

- cCSAus Monogram;
- Company name and/or CSA master contract number;
- Model number;
- Serial number;
- Electrical rating;
- Maximum working pressure; (Pressure range for vacuum applications, otherwise MWP)
- The term “Single Seal” as applicable;
- Process Temperature Range as applicable;
- Hazardous locations designation as applicable;
- Maximum ambient temperature (as applicable);
- Caution ‘Do not open while energized’ / ‘Ne pas ouvrir sous tension’;
- “Seal within 18” of enclosure wall”/”Scellez à moins de 18” de l’enveloppe”

Nameplate drawing available as TC522284 or TC524117 (XP version)

For CLASS 2258 04 and 2258-84:

- cCSAus Monogram;
- Company name and/or CSA master contract number;
- Model number;
- Serial number;
- Electrical rating;
- Maximum Working Pressure (Pressure range for vacuum applications, otherwise MWP);
- The term “Single Seal”, as applicable;
- Process temperature range, as applicable;
- Hazardous locations designation as applicable;
- Temperature Code and the related maximum ambient temperature;
- Words "INTRINSICALLY SAFE/SECURITE INTRINSEQUE" or “Ex ia”
- Reference to Installation Drawings (as applicable);

Nameplate drawing available as TC524117, TC5228887 (IS version, and including the SIL options) and TC523496 (IS w/Fieldbus option).

The installation and operating manual, including electrical drawings is provided with each product

The installation instructions shall include the bilingual caution and warning for use in hazardous locations, the following statement:

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- “WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT WHILE CIRCUIT IS LIVE UNLESS AREA IS KNOWN TO BE NON-HAZARDOUS” and “AVERTISSEMENT: RISQUE D’EXPLOSION. NE PAS DÉBRANCHER TANT QUE LE CIRCUIT EST SOUS TENSION, À MOINS QU’IL NE S’AGISSE D’UN EMPLACEMENT NON DANGEREUX”, or equivalent.
- “WARNING: SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY”
- AVERTISSEMENT. LA SUBSTITUTION DE COMPOSANTS PEUT COMPROMETTRE LA SÉCURITÉ INTRINSÈQUE

Notes:




Jurisdictions in Canada may require these markings to also be provided in French language. It is the responsibility of the manufacturer to provide bilingual marking, where applicable, in accordance with the requirements of the Provincial Regulatory Authorities. It is the responsibility of the manufacturer to determine this requirement and add bilingual wording to the "Markings".




Nameplate adhesive label material approval information: N/A.

Markings are engraved on metallic nameplate riveted in place.




Example of nameplate: XP version

IS and/or Div2 version

FOX-AII Tag No. 	
Model _____	XP CL I DIV 1 GPS CD CL II GPS EFG ; CL III T6 (-40°C ≤ Ta ≤ +65°C) T5 (-40°C ≤ Ta ≤ +85°C)
Range Limit _____	SEAL WITHIN 18" OF ENCLOSURE WALL / SCELLEZ A MOINS DE 18" DE L'ENVELOPPE
<input type="radio"/> Power Supply 42.4 Vdc max	DO NOT OPEN WHILE ENERGIZED NE PAS OUVRIR SOUS TENSION
Output 4-20 mA OAN _____	<input checked="" type="checkbox"/> SINGLE SEAL (-40°C to +85°C)
M.W.P. _____ Mfd _____	  226028
Ser.No. _____	Type 4X C US
Fuji Electric France S.A.S. F-63039 Clermont-Ferrand 338xxxx	

FOX-AII Tag No. 	
Model _____	<input type="checkbox"/> IS CL I DIV 1 GPS ABCD Ex ia CL II GPS EFG ; CL III
Range Limit _____	<input type="checkbox"/> NI CL I DIV 2 GPS ABCD IS / NI PER CTRL DWG TC522873
<input type="radio"/> Power Supply 42.4 Vdc max	<input type="checkbox"/> CL I DIV 2 GPS ABCD T4 (40°C ≤ Ta ≤ +70°C) T5 (40°C ≤ Ta ≤ +50°C)
Output 4-20 mA OAN _____	<input checked="" type="checkbox"/> SINGLE SEAL (40°C to +85°C)
M.W.P. _____ Mfd _____	  226028
Ser.No. _____	Type 4X C US
Fuji Electric France S.A.S. F-63039 Clermont-Ferrand 338xxxx	

Combination of XP and IS/Div2 versions:

FOX-AIII Tag No. 	
Model _____	<input type="checkbox"/> Ex ia IIC T4 / T5 Ga Ex ia IIIC T100°C / T135°C Db Ta= -40°C/+70°C - T4/ T135°C Ta= -40°C/+50°C - T5/ T100°C DEKRA 13ATEX0222 X Ex II 1 GD IECEX CSA 08.0005X UI ≤ 28 Vdc; Ii ≤ 94.3 mA; Pi ≤ 0.66 W Ci = 26 nF/36 nF; Li ≤ 0.0 nH/0.7 mH
Range _____	<input type="checkbox"/> Ex d IIC T5 / T6 Gb Ex tb IIC T85°C / T100°C Db Ta= -40°C/+65°C - T5/ T100°C Ta= -40°C/+85°C - T6/ T85°C DEKRA 13ATEX0220 X Ex II 2 GD IECEX CSA 08.0004X CABLE TEMP SHALL BE Ta +5°C
<input type="radio"/> Power Supply 42.4 Vdc max	  226028
Output 4-20 mA OAN _____	IP66/67
M.W.P. _____ Mfd _____	
Ser.No. _____	
Fuji Electric Co.,Ltd. (191-8502 - Japan) Assembled in France 338xxxx	

**MENTIONS EN
DEHORS DU CHAMP
D'APPLICATION DE
CES CERTIFICATS**

**INFORMATION
OUTSIDE THE SCOPE
OF THESE
CERTIFICATES**

<input type="checkbox"/> IS CL I DIV 1 GPS ABCD Ex ia CL II GPS EFG ; CL III
<input type="checkbox"/> NI CL I DIV 2 GPS ABCD IS / NI Per Ctrl Dwg TC522873
<input type="checkbox"/> CL I DIV 2 GPS ABCD T4 (40°C ≤ Ta ≤ +70°C) T5 (40°C ≤ Ta ≤ +50°C)
<input type="checkbox"/> XP CL I DIV 1 GPS CD CL II GPS EFG ; CL III T6 (-40°C ≤ Ta ≤ +65°C) T5 (-40°C ≤ Ta ≤ +85°C)
Seal within 18" of enclosure wall Scellez à moins de 18" de l'enveloppe DO NOT OPEN WHEN ENERGIZED NE PAS OUVRIR SOUS TENSION
<input type="checkbox"/> SINGLE SEAL (-40°C to +85°C)
Type 4X C US 338xxxx



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IS and/or Div2 version w/Fieldbus option:

For Combination (of XP and IS/Div2) w/Fieldbus option

FOX-AII Tag No. FE	
Model _____	<input type="checkbox"/> IS CL I DIV 1 GPS ABCD Ex ia CL II GPS EFG; CL III
Range Limit _____	<input type="checkbox"/> NI CL I DIV 2 GPS ABCD
<input type="radio"/> Power Supply <u>32 Vdc Max.</u>	IS / NI PER CTRL DWG TC522873
Output <u>H1</u> OAN _____	<input type="checkbox"/> CL I DIV 2 GPS ABCD T4 (-40°C ≤ Ta ≤ +60°C)
M.V.P. _____ Mfd _____	<input checked="" type="checkbox"/> SINGLE SEAL (-40°C to +85°C)
Ser.No. _____ CE	SP ® 226028 Type 4X C US
Fuji Electric France S.A.S. F-63039 Clermont-Ferrand 338xxxx	

<input type="checkbox"/> IS CL I DIV 1 GPS ABCD Ex ia CL II GPS EFG; CL III
<input type="checkbox"/> NI CL I DIV 2 GPS ABCD
<input type="checkbox"/> IS / NI Per Ctrl Dwg TC522873
<input type="checkbox"/> CL I DIV 2 GPS ABCD T4 (-40°C ≤ Ta ≤ +60°C)
<input type="checkbox"/> XP CL I DIV 1 GPS CD CL II GPS EFG; CL III
<input type="radio"/> T6 (-40°C ≤ Ta ≤ +85°C)
<input type="radio"/> T5 (-40°C ≤ Ta ≤ +85°C)
Seal within 18" of enclosure wall Scellez à moins de 18" de l'enveloppe DO NOT OPEN WHEN ENERGIZED NE PAS OUVRIR SOUS TENSION
<input type="checkbox"/> SINGLE SEAL (-40°C to +85°C)
SP ® 226028 Type 4X C US 338xxxx



Supplement to Certificate of Compliance

Certificate: 1942161

Master Contract: 226078

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
70161234	May 17, 2018	Update of Report 1942161 to add new SIL version
70105546	August 14, 2017	Update of Report 1942161 to add new FISCO model.
70065326	July 14, 2016	Update of Report 1942161 to assess compliance to Class I, Division 2.
70030381	September 18, 2015	Update of Report 1942161 to : 1 - Include US requirements 2 - Harmonize electrical ratings between the different existing certificates 3 - Add an alternate material for the transmitter enclosure and update drawings 4 - Merge flameproof (1942161) and intrinsically safe (2033192) reports into one single certification report
2113306	April 15, 2009	Update of Report 1942161 to include Single Seal certification and update the documentation
1942161	April 10, 2008	Original Certification.