



EU-TYPE EXAMINATION CERTIFICATE

Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

Certificate Number: **Sira 13ATEX2012X** Issue: **3**

Equipment: **Pressure Transmitters, models;
IAPxxS – a bb c d ee – f (Absolute Pressure Transmitter),
IGPxxS – a bb c d ee – f (Gauge Pressure Transmitter) and
IDPxxS - a bb c d e ff – gg (Differential Pressure Transmitter)**

Applicant: **Schneider Electric Systems USA, Inc.**

Address: 38 Neponset Avenue
02035 Foxboro
Massachusetts
United States of America

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

Sira Certification Service, notified body number 0518 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 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 the confidential reports listed in Section 14.2.

Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

IEC 60079-0:2017 Edition 7.0 EN 60079-11:2012

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

The marking of the equipment shall include the following:



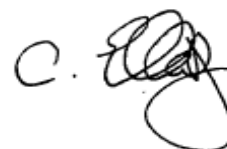
II 1GD
Ex ia IIC T4 Ga
Ex ia IIIC T85°C Da

Ta = -40°C to +80°C
Ta = -50°C to +80°C
(For model code
option 'J' only)



For Fieldbus models:

II 1GD
FISCO field device
Ex ia IIC T4 Ga
Ex ia IIIC T85°C Da
Ta = -40°C to +80°C
Ta = -50°C to +80°C
(For model code
option 'J' only)



Project Number 70160570

C Ellaby
Deputy Certification Manager

This certificate and its schedules may only be reproduced in its entirety and without change.

Sira Certification Service

Unit 6 Hawarden Industrial Park,
Hawarden, CH5 3US, United Kingdom

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: ukinfo@csagroup.org
Web: www.csagroupuk.org



SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

**Sira 13ATEX2012X
Issue 3**

13 DESCRIPTION OF EQUIPMENT

The product description was modified (**BOLD**) for accuracy. Modifications made to the product description are made in such a way that information which is pertinent to equipment already in the field is retained. The model codes have been removed from the product description to make it consistent with the IECEx certificate:

The **Pressure Transmitters** are intrinsically safe pressure measurement instruments. The equipment comprises two parts; the main enclosure and the sensor, which are not intended to be detached from each other by the user and are wired together by means of a ribbon cable. The equipment uses HART protocol for communications. The device is powered by means of a connection to a two-way terminal block and the measurement signal is transmitted to remote receivers over the same two wires that supply power to the transmitter electronics. The main enclosure comprises a painted aluminium or stainless steel enclosure with an optional display window. The enclosure contains a three-board stack (display board, encapsulated MAU board, and processor board) as well as the terminal block mounted on a board in a separate compartment. The pressure sensor assembly contains an encapsulated neck board.

The sensor is housed in a fully-welded stainless steel enclosure that screws into the underside of the electronics housing. Internally it comprises a diaphragm that, under the influence of applied process pressure, operates a rod which, in turn, acts on a resistive-bridge strain gauge on the neck board. The neck board and associated ribbon cable is the only electrical part of the sensor assembly.

The equipment has the following entity parameters:

Ui = 30 V Ii = 110 mA Pi = 0.8 W Ci = 2.4 nF Li = 1.4mH

Variation 1 - This variation introduced the following changes:

- i. The introduction of ½" NPT and M20 process connectors was recognised.
- ii. Removal of the Chinese and German manufacturing sites from drawing 10137FC and the certificate.
- iii. Minor drawing changes including, clarification of drawing revisions, change of company logo and the addition of the WEEE directive logo.
- iv. The marking was amended to show the ambient temperature range -40°C to +80°C that was omitted from the Issue 0 certificate.
- v. A change of Applicant address from, 33 Commercial Street, Foxboro, Massachusetts 02035, USA to 38 Neponset Avenue, 02035 Foxboro, MA, USA was recognised.

Variation 2 - This variation introduced the following changes:

- i. Recognise applicant name change from 'Invensys Systems Inc.' to 'Schneider Electric Systems USA, Inc.'
- ii. Recognise the addition of the IGP20S Intelligent Gauge Pressure Smart Transmitter model.
- iii. To allow a new Foundation FieldBus (FF) communication protocol electronics module and recognise the addition of new model for FieldBus communications.
- iv. Recognise the following modification/addition of model code identifications of the IA Series Pressure Transmitter the model nomenclature was amended to reflect this:
- v. To recognise addition of entity parameters for Fieldbus models. The Fieldbus models have the following entity parameters:



SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

**Sira 13ATEX2012X
Issue 3**

Ui = 17.5 V

Ii = 380 mA

Pi = 5.32 W

Ci = 2.4 nF

Li = 2 µH

Variation 3 - This variation introduced the following changes:

- i. Recognise addition of a vented housing option for IGP10 transmitter.
- ii. Recognise addition of extended lower ambient of -50°C for 'J' option transmitter.
- iii. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, the documents previously listed, EN 60079-0:2012, EN 60079-11:2012 and EN 60079-26:2007 were replaced by IEC 60079-0:2017 and EN 60079-11:2012.
- iv. The IDP10S, IAP10S and IGP10S model code structures were expanded to include the Precision models, IDP05S, IDP10S, IDP50S, IAP05S, IAP10S, IAP50S, IGP05S, IGP10S and IGP50S.
- v. Subsequently the model code structure has been updated as below:

IAPxxS – a bb c d ee - f (Absolute Pressure Transmitter)

IGPxxS – a bb c d ee - f (Gauge Pressure Transmitter)

xx – Tier

05S = Value pressure transmitter

10S = Advanced pressure transmitter

50S = Premium pressure transmitter

a - Electronics Versions & Output Signals

T = HART® and 4 to 20 mA with SIL2

F = Foundation Fieldbus

bb - Structure Code (Process Sensor Material, Diaphragm Material, Fill Fluid, External Connection type, Internal connection type)

c - Range/Span Limits

d - Conduit Connections & Housing Materials

ee - Electrical Safety (EA or EM or EP)

f - Optional Selections

IDPxxS - a bb c d e ff - gg (Differential Pressure Transmitter)

xx – Tier

05S = Value pressure transmitter

10S = Advanced pressure transmitter

50S = Premium pressure transmitter

a - Electronics Versions & Output Signals

T = HART® and 4 to 20 mA with SIL2

F = Foundation Fieldbus

bb - Structure Code (Max Static Pressure, Process Cover Material, Diaphragm Material, Fill Fluid)

c - Range/Span Limits

d - Process connector

e - Conduit Connections & Housing Materials

ff - Electrical Safety (EA or EM or EP)

gg - Optional Selections



SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

**Sira 13ATEX2012X
Issue 3**

- vi. The product name has been modified to 'Pressure Transmitters, models; IAPxxS – a bb c d ee – f (Absolute Pressure Transmitter), IGPxxS – a bb c d ee – f (Gauge Pressure Transmitter) and IDPxxS – a bb c d e ff – gg (Differential Pressure Transmitter)
- vii. The IGP20S was renamed to IGPxxS Biplanar and introduction of IAPxxS Biplanar was recognised.
- viii. Introduction of the high pressure gauge transmitters (15,000psi and 30,000psi) was recognised.
- ix. The model codes drawings, 10128QC and 10137FC were replaced by 10125SN and 10125SS drawings for fieldbus and HART models respectively.
- x. The General assembly drawing, 10137ED has been replaced by the drawing, 10125VA.
- xi. The introduction of the marking drawings, D0202FE, D0202FF, D0202FU and D0202FV to include the new model.
- xii. Recognise addition of alternative colours for the enclosure has been permitted.
- xiii. Recognise modifications to the HART sensor and MAU boards to support newly added Precision models.
- xiv. Recognise modifications to Fieldbus MAU and Terminal boards to support newly added Precision models.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	22 May 2013	R29386A/00	The release of the prime certificate.
1	20 May 2016	R70066306A	This Issue covers the following changes: <ul style="list-style-type: none">• EC Type-Examination Certificate in accordance with 94/9/EC updated to EU Type-Examination Certificate in accordance with Directive 2014/34/EU. <i>(In accordance with Article 41 of Directive 2014/34/EU, EC Type-Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such EC Type-Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)</i>• The introduction of Variation 1.
2	07 November 2017	R70124927A	The introduction of Variation 2.
3	01 August 2018	R70160570A	The introduction of Variation 3.

15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)

- 15.1 Some models have the main electronics enclosure manufactured from aluminium alloy. In rare cases, ignition sources due to impact and friction sparks could occur. This shall be considered during installation, particularly if the equipment is installed in a zone 0 location.
- 15.2 When installed in flammable dust zones, under certain extreme circumstances an incendive electrostatic charge may build up on the painted surfaces, which are non-conducting. Therefore, the user/installer

This certificate and its schedules may only be reproduced in its entirety and without change.

Sira Certification Service

Unit 6 Hawarden Industrial Park,
Hawarden, CH5 3US, United Kingdom

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: ukinfo@csagroup.org
Web: www.csagroupuk.org



SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

Sira 13ATEX2012X
Issue 3

shall implement precautions to prevent the build-up of electrostatic charge, e.g. locate the equipment where a charge-generating mechanism (such as wind-blown dust) is unlikely to be present and clean with a damp cloth.

- 15.3 When installed in a flammable dust zone, the installer shall ensure that the cable entry maintains the dust-tightness (IP6X) of the enclosure.

16 **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)**

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 **CONDITIONS OF MANUFACTURE**

- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.
- 17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.

Certificate Annexe



Certificate Number: Sira 13ATEX2012X

Equipment: Pressure Transmitters, models;
IAPxxS – a bb c d ee – f (Absolute Pressure Transmitter),
IGPxxS – a bb c d ee – f (Gauge Pressure Transmitter) and
IDPxxS – a bb c d e ff – gg (Differential Pressure Transmitter)

Applicant: Schneider Electric Systems USA, Inc.

Issue 0

Drawing No.	Sheets	Rev.	Date (Sira stamp)	Title
10111CK	1 to 4	K	11 Apr 13	Schematic - display board
10111DR	1 of 1	J	11 Apr 13	Schematic - terminal block board
10111QA	1 to 2	E	11 Apr 13	Schematic – neck board
10111XS	1 to 9	B	11 Apr 13	Schematic – MAU board
10111ZV	1 to 10	A	11 Apr 13	Schematic – processor sensor interface board
10137ED	1 to 10	A	14 May 13	General assembly
10137ES	1 to 4	B	11 Apr 13	IS sector diagram and critical component list
10137ET	1 to 5	B	11 Apr 13	Artwork - MAU board
10137FC	1 to 6	A	30 Apr 13	Marking, IECEx/ATEX
D0159SF	1 of 1	B	11 Apr 13	Fabrication - MAU board

Issue 1

Drawing	Sheets	Rev.	Date (Sira stamp)	Description
10137FC	1 to 6	C	21 Apr 16	Marking
10137ED	1 to 10	D	13 Apr 16	General assembly

Issue 2

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
10128QC	1 to 7	A	10 Oct 17	FF Marking ATEX and IECEx
10137FC	1 to 7	D	10 Oct 17	Marking ATEX and IECEx
10137ED	1 to 10	E	10 Oct 17	General assembly
10111QX	1 to 2	F	10 Oct 17	Schematic-Terminal block board-Fieldbus
10125JK	1 to 9	F	10 Oct 17	Schematic-MAU board for Fieldbus
10125QC	1 to 10	H	10 Oct 17	Schematic-processor sensor interface board for Fieldbus
10125SG	1 to 4	A	10 Oct 17	IS sector diagram and critical component list for Fieldbus
10125SH	1 to 4	A	10 Oct 17	Artwork – MAU board for Fieldbus
D0177DR	1 of 1	C	10 Oct 17	Fabrication MAU board for Fieldbus
D0177DQ	1 to 4	F	10 Oct 17	BOM for FISCO MAU

Issue 3

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
10125SN	1 to 26	A	18 Jul 18	FF model codes_Marking
10125SS	1 to 26	A	18 Jul 18	HART model codes_marking
10125VA	1 to 15	A	23 Jul 18	General Assembly drawing
D0202FA	1 of 1	A	31 Jul 2018	ATEX HART label(AA and AN)
D0202FB	1 of 1	A	31 Jul 2018	ATEX HART label (AA,AN and AD)
D0202FQ	1 of 1	A	31 Jul 2018	ATEX Fieldbus label (AA and AN)
D0202FR	1 of 1	A	31 Jul 2018	ATEX Fieldbus label (AA,AN and AD)
D0177DR	1 of 1	E	18 Jul 18	Fabrication MAU board for Fieldbus
10111QX	1 to 2	G	18 Jul 18	Terminal block schematic

This certificate and its schedules may only be reproduced in its entirety and without change.

Sira Certification Service

Unit 6 Hawarden Industrial Park,
Hawarden, CH5 3US, United Kingdom

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: ukinfo@csagroup.org
Web: www.csagroupuk.org

Certificate Annexe



Certificate Number: Sira 13ATEX2012X

Equipment: Pressure Transmitters, models;
IAPxxS – a bb c d ee – f (Absolute Pressure Transmitter),
IGPxxS – a bb c d ee – f (Gauge Pressure Transmitter) and
IDPxxS - a bb c d e ff – gg (Differential Pressure Transmitter)

Applicant: Schneider Electric Systems USA, Inc.

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
10125JK	1 to 9	G	18 Jul 18	MAU board schematic
D0149HP	1 of 1	E	18 Jul 18	Fieldbus Terminal board layout
D0149HN	1 to 2	G	18 Jul 18	Fieldbus Terminal board BOM
D0177DQ	1 to 4	G	18 Jul 18	Fieldbus MAU BOM
10128PJ	1 to 10	A	18 Jul 18	HART sensor board schematic
D0159TX	1 to 4	A	18 Jul 18	HART sensor board BOM
10128PL	1 to 9	A	18 Jul 18	HART MAU board schematic
D0159VA	1 to 4	A	18 Jul 18	HART MAU BOM
D0159VB	1 of 1	A	18 Jul 18	HART MAU fabrication
10125SH	1 to 5	B	18 Jul 18	Fisco MAU board PCB Assembly
10137ET	1 to 5	C	18 Jul 18	HART MAU board PCB layout
10137ES	1 to 4	C	18 Jul 18	HART Pressure transmitter block diagram

This certificate and its schedules may only be reproduced in its entirety and without change.

Sira Certification Service

Unit 6 Hawarden Industrial Park,
Hawarden, CH5 3US, United Kingdom

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: ukinfo@csagroup.org
Web: www.csagroupuk.org