

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx UL 16.0045X

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Certificate history:

Status: Current

Issue No: 2

Issue 1 (2018-06-29) Issue 0 (2016-03-21)

Date of Issue: 2021-06-28

Applicant: Schneider Electric Japan Holdings Ltd.

4-4-9 Kitahama Chuo-Ku, Osaka-shi Osaka 541-0041

Japan

Equipment: PS5000 Box iPC Modular, Box iPC and Display Panel

Optional accessory: AC Power Supply, PFXZPBPUAC2, and Fan Module, PFXZPBIUFAN2

Type of Protection: Intrinsic Safety "ic", Non-sparking "nA", Dust Protection by Enclosure "tc"

Marking: Ex nA IIC T4 Gc

Ex ic nA IIC T4 Gc Ex tc IIIC T135°C Dc

0°C ≤ Ta ≤ +55°C

Approved for issue on behalf of the IECEx

Certification Body:

Position:

Signature: (for printed version)

Date:

Katy A. Holdredge

Senior Staff Engineer

2021-06-28

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The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

UL LLC 333 Pfingsten Road Northbrook IL 60062-2096 United States of America





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Manufacturer: Schneider Electric Japan Holdings Ltd.

4-4-9 Kitahama Chuo-Ku, Osaka-shi Osaka 541-0041

Japan

Additional manufacturing locations:

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 equipment 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 60079-0:2011 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:6.0

IEC 60079-15:2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:4

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

This Certificate **does not** indicate compliance with 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 Reports:

US/UL/ExTR16.0049/00 US/UL/ExTR16.0049/01 US/UL/ExTR16.0049/02

Quality Assessment Report:

FR/INE/QAR16.0001/08



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Models PFXP Series are Touch Panel PC that shall be mounted in a suitable enclosure with a minimum ingress protection rating of at least IP54 in accordance with IEC 60079-15. They are provided with either a 4:3 15" or 15.6"W touch panel and Type A Box PC or Type B Box PC. The differences between Box PCs are size, CPU and number of expansion slot. The differences between panels are size, construction and touch function. Two optional DC fans and one optional USB expansion PCIE can be equipped with Type A Box PC. The front panels are evaluated and suitable for IP65.

The 4:3 15" panel is resistance type touch screen and meets intrinsically safe "ic". The 15.6"W panel is capacitance type touch screen. All non-sparking components are "nA". These devices are intended for indoor application only. These devices are intended to be front panel-mounted or installed in the end application with only the front touch panel accessible to the user.

Please see Annex for additional information.

SPECIFIC CONDITIONS OF USE: YES as shown below: For Box iPC Modular Models PFXPx27xxD, PFXPx2JxxD and Display Panel Models PFXPPD5700TA and PFXPPD5700WP:

- All front surfaces have been evaluated to the enclosure requirements for Ingress Protection to IP65 in accordance with IEC 60079-15 and IEC 60079-31
- The equipment shall only be used in an area of not more than pollution degree 2 as defined in IEC 60664-1.
- Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage at the supply terminals to the
 equipment.
- The equipment shall be mounted in an enclosure that provides a degree of protection not less than IP54 in accordance with IEC 60079-15 for category 3G Zone 2 or IP65 in accordance with EN 60079-31 for category 3D Zone 22.
- Do not expose to direct sunlight or UV light source.
- Equipment must be installed in a low risk of mechanical danger environment.
- The display panels shall be installed and supplied by Box iPC, PFXPx2B model series.(For Display Panel only)

For Box iPC Modular Models PFXPx27xxA and PFXPx27xxA:

- All front surfaces have been evaluated to the enclosure requirements for Ingress Protection to IP65 in accordance with IEC 60079-31.
- The equipment shall be mounted in an enclosure that provides a degree of protection not less than IP65 in accordance with IEC 60079-31 for category 3D Zone 22.
- Do not expose to direct sunlight or UV light source.
- Equipment must be installed in a low risk of mechanical danger environment.

For Box iPC Models PFXPL2B, PFXPU2B and PFXPP2B:

- The equipment shall be installed in an enclosure that provides a degree of protection not less than IP54 in accordance with IEC 60079-15.
- The equipment shall only be used in an area of not more than pollution degree 2 as defined in IEC 60664-1.
- Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage at the supply terminals to the equipment.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1: Adds models, changes company name.

Issue 2: Adds alternate LCD modules, daughter board of display panel Model PFXPPD5700TA and PFXPPD5700WP; Add alternate touch screen of display panel Model PFXPPD5700WP; Add alternate main board, daughter boards, SSD, HDD of Box PC Model PFXPL2B and PFXPU2B; Add alternate main board, daughter boards, M.2 SSD, of Box PC Model PFXPP2B.

Annex:

Annex to IECEx UL 16.0045X Issue 2.pdf



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TYPE DESIGNATION

PS5000 Box iPC Modular, Box iPC and Display Panel Models PFXP Series are embedded application ready platform for industrial application:

| Product type: | Model Series: | Protection method | Description: | | | |
|--------------------|--|-------------------|---|--|--|--|
| Box iPC Modular | PFXPx27xxD (See Nomenclature for "x") | ic, nA | PFXPx27xxD are industrial touch iPC which assembled with following Box PC, PFXPL2B, PFXPU2B or PFXPP2B and Display, PFXPPD5700TA. | | | |
| | | tc | The device shall be mounted with a suitable enclosure with a minimum ingress protection rating of at least IP54 in accordance with EN 60079-15 for category 3G Zone 2 or IP65 in accordance with EN 60079-31 for category 3D Zone 22. | | | |
| | PFXPx27xxA (See Nomenclature for "x") | tc | PFXPx27xxA are industrial touch iPC which assembled with following Box PC, PFXPL2B, PFXPU2B or PFXPP2B, Display, PFXPPD5700TA and AC power supply, PFXZPBPUAC2. | | | |
| | | | The device shall be mounted with a suitable enclosure with a minimum ingress protection rating of at least IP65 in accordance with EN 60079-31 for category 3D Zone 22. | | | |
| | PFXPx2JxxD (See Nomenclature for "x") | nA | PFXPx2JxxD are industrial touch iPC which assembled with following Box PC, PFXPL2B, PFXPU2B or PFXPP2B and Display, PFXPPD5700WP. | | | |
| | | tc | The device shall be mounted with a suitable enclosure with a minimum ingress protection rating of at least IP54 in accordance with EN 60079-for category 3G Zone 2 or IP65 in accordance with EN 60079-31 for category 3D Zone 22. | | | |
| | PFXPx2JxxA (See Nomenclature for "x") | tc | PFXPX2JxxA are industrial touch iPC which assembled with following Box PC, PFXPL2B, PFXPU2B or PFXPP2B, Display, PFXPPD5700WP and AC power supply, PFXZPBPUAC2. | | | |
| | | | The device shall be mounted with a suitable enclosure with a minimum ingress protection rating of at least IP65 in accordance with EN 60079-31 for category 3D Zone 22. | | | |
| Box iPC | PFXPL2B PFXPU2B | nA | PFXPL2B, PFXPU2B and PFXPP2B are open type Box iPCs. | | | |
| | PFXPP2B | | The devices shall be installed in a suitable enclosure with a minimum ingress protection rating of at least IP54 in accordance with EN 60079-15. | | | |
| Display Panel | PFXPPD5700TA | ic, nA | PFXPPD5700TA is 4:3 15", resistance type touch panel which were evaluated and suitable for IP65 at front touch screens. | | | |
| | | tc | The device shall be mounted in a suitable enclosure with a minimum ingress protection rating at least IP54 in accordance with EN 60079-15 for category 3G Zone 2 or IP65 in accordance with EN 60079-31 for category 3D Zone 22. | | | |
| | PFXPPD5700WP | nA to | PFXPPD5700WP is 15.6" Width, capacitance type touch panel which were evaluated and suitable for IP65 at front touch screens. | | | |
| | | tc | The device shall be mounted in a suitable enclosure with a minimum ingress protection rating of at least IP54 in accordance with EN 60079-15 for category 3G Zone 2 or IP65 in accordance with EN 60079-31 for category 3D Zone 22. | | | |



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Optional Accessory:

| Accessory type: | Model: | Description: | | |
|-----------------------------|--------|--|--|--|
| AC Power Supply PFXZPBPUAC2 | | [Only used with Industrial Touch iPC models which are "tc" protection technique] Input: 100-240 V ac, 50-60Hz, 1.8-0.9 A or 1.6-0.9 A max. Output: 24 V dc, 5.5 A max. | | |
| Fan Module PFXZPBIUFAN2 | | [Only used with industrial Touch iPC models and Box iPC models] Rated 12 V dc, 684 mA (max.) | | |

Nomenclature: (Box iPC modular and Box iPC)

| PFXP | Р | 2 | 7 | Е | С | D | 4 | Υ | N | ZZZZZ |
|------|----|---|---|----|---|----|-----|------|----|-------|
| I | II | | Ш | IV | ٧ | VI | VII | VIII | IX | Х |

I. Prefix:

PFXP: Model type

- II. Model Designation:
 - L: ATOM (Optimized) (For Box PC Type E and Type F enclosure only)
 - U: Celeron 2980U (Universal) (For Box PC Type A and Type B enclosure only)
 - P: Haswell i7-4650U (Performance) (For Box PC Type A and Type B enclosure only)
- III. Display module:
 - B: Represent no display panel (Box PC only)
 - 7: Represent 4:3 15" display panel, PFXPPD5700TA
 - J: Represent 15.6"W display panel, PFXPPD5700WP
- IV. Combination of Box Type and modular
 - A, C, D, J or U: Box PC Type A enclosure, 4 slots

E, K, L, P, Q, R, S, T, V, W, X, Y or Z: Box PC Type B enclosure, 2 slots

1 or 3: Box PC Type F enclosure, 0 slot

2 or 4: Box PC Type E enclosure, 1 slot

V Expansion slot configuration:

B, C or 7: Base unit

F or W: Expansion USB board and Fans Module

VI. Power Supply:

D: DC power source.

A: AC power source



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VII. Memory:

4: 4GB

8: 8GB

A: 16GB

VIII. Operating system

Y can be any character to represent OS type.

IX. Storage type:

N: None

A: CFast

J or K: HDD

L, M or P: SSD

1, 2 or 3: M.2

X. Combination of second storage type, Interface options and Software bundle:

Z can be any character to represent combination.



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PARAMETERS RELATING TO THE SAFETY

| Model Series: Model Name Suffix: | | Protection Technical: | Electrical Rating: | | |
|----------------------------------|--|-----------------------|---|--|--|
| Box iPC Modular: | | | | | |
| PFXPU27xx | Follow with "D" | ic, nA | Input: 24Vdc, 4.2A max. | | |
| PFXPP27xx | | tc | 7 | | |
| (See Nomenclature for "x") | Follow with "A" (equipped with AC power supply, PFXZPBPUAC2) | tc | Input: 100-240Vac, 50-60Hz, 1.8-0.9A max. | | |
| PFXPU2Jxx PFXPP2Jxx | Follow with "D" | nA tc | Input: 24 Vdc, 4.2 A max. | | |
| (See Nomenclature for | Callany with "A" (a swing a d with | tc | Innut 400 240\/a = 50 00 I= 4.0 0.04 | | |
| "x") | Follow with "A" (equipped with AC power supply, PFXZPBPUAC2) | tc | Input: 100-240Vac, 50-60Hz, 1.8-0.9A max. | | |
| PFXPL27xx | Follow with "D" | ic, nA | Input 12 Vdc, 6 A max. or 24 Vdc, 2.62 A | | |
| (See Nomenclature for | | tc | max. | | |
| "x") | Follow with "A" (equipped with AC power supply, PFXZPBPUAC2) | tc | Input: 100-240Vac, 50-60Hz, 1.6-0.9A max. | | |
| PFXPL2Jxx | Follow with "D" | nA | Input 12 Vdc, 6 A max. or 24 Vdc, 2.62 A | | |
| (See Nomenclature for | | tc | max. | | |
| "X") | Follow with "A" (equipped with AC power supply, PFXZPBPUAC2) | tc | Input: 100-240Vac, 50-60Hz, 1.6-0.9A max. | | |
| Box iPC: | 1 | | 1 | | |
| PFXPL2B PFXPU2B | - | nA | Input: 24Vdc, 4.2A max. | | |
| PFXPP2B - | | nA | Input 12 Vdc, 6 A max. or 24 Vdc, 2.62 A max. | | |
| Display Panel: | - | • | • | | |
| PFXPPD5700TA | - | ic, nA | Input 12 Vdc | | |
| | | tc | 1 | | |
| PFXPPD5700WP | - | nA | Input 12 Vdc | | |

Optional Accessory:

| Accessory type: | Model: | Electrical Rating: | | |
|-----------------------------|--------------|--|--|--|
| AC Power Supply PFXZPBPUAC2 | | [Only used with industrial touch iPC models which are "tc" protection technique.] | | |
| | | Input: 100-240 V ac, 50-60Hz, 1.8-0.9 A or 1.6-0.9 A max. | | |
| | | Output: 24 V dc, 5.5 A max. | | |
| Fan Module | PFXZPBIUFAN2 | [Only used with industrial Touch iPC models and Box PC models] Rated 12 V dc, 684 mA | | |



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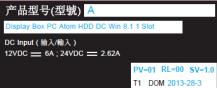
MARKING

Marking has to be readable and indelible; it has to include the following indications:

Box iPC Modular (DC):

PFXPL27xxD series





PFXPL2JxxD series





PFXPU27xxD and PFXPP27xxD series





PFXPU2JxxD and PFXPP2JxxD series







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Box iPC Modular (AC):

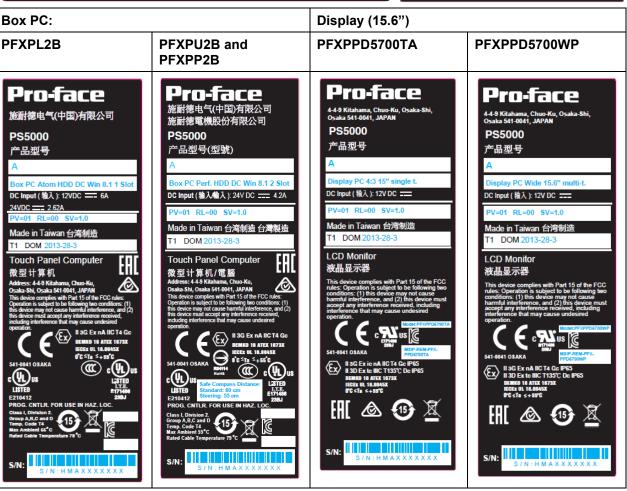
PFXPL27xxA and PFXPL2JxxA series





PFXPU27xxA, PFXPP27xxA, PFXPU2JxxA and PFXPP2JxxA series







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Accessory - AC Power

PFXZPBPUAC2 (P/N FSP132-1B48-C24)

Pro-face

Switching power supply Model: PFXZPBPUAC2 Manufactured P/N: FSP132-1B48-C24

Input: 100-240VAC, 50 -60Hz, 1.8-0.9Amax or 1.6-0.9Amax Output: 24VDC === 5.5A Ambient temperature: 0°C ≤ Ta ≤ 55°C

CAUTION

This power supply only use with

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System mode name:

PFXPx2xxxxAxxxxxxx series.

Where x may be any alphanumeric character, please see certified instruction reference No. 2003233220 for the details. certified instruction reference No. 2003233220 for the detail.

Accessory - PFXZPBPUFAN2 Warning **Pro-face**

Fan module Model: PFXZPBIUFAN2 Input: 12VDC \implies 0.684A Ambient temperature: $0^{\circ}C \le Ta \le 55^{\circ}C$ CAUTION This fan module only use with

(Ex) II 3G Ex ic nA IIC T4 Gc
II 3D Ex tc IIIC T135°C Dc Cert. No.: DEMKO 16 ATEX 1673X IECEx UL 16.0045X System mode name: PFXPx2xxFxxxxxxxxx PFXPx2xxWxxxxxxxx series. Where x may be any alphanumeric character, please see certified instruction reference No. 2003233220 for the detail. WARNING - Do not open the lid and use the USB connector in hazardous locations.