

TYPE EXAMINATION CERTIFICATE



[2] **Equipment or Protective System intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC**

[3] Type Examination Certificate Number: **DEMKO 16 ATEX 1673X Rev. 0**

[4] Equipment: **Box iPC Modular and Display, Models PFXP Series**

[5] Manufacturer: **Digital Electronics Corporation**

[6] Address: **4-4-9 Kitahama, Chuo-Ku, Osaka-shi, Osaka 541-0041 Japan**

[7] This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8] UL International Demko A/S certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of **Category 3** equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to the European Union Directive 94/9/EC of 23 March 1994.

The examination and test results are recorded in confidential report no. **4787339611**

[9] Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to Standards:

EN 60079-0:2012+A11:2013

EN 60079-11:2012

EN 60079-15:2010

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This Type examination certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.

[12] The marking of the equipment or protective system shall include the following:

 **II 3 G Ex ic nA IIC T4 Gc**

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Equipment described herein ("Certified Equipment") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Equipment Certification Program Requirements. This certificate and test results obtained apply only to the equipment sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured equipment. UL has not established Follow-Up Service or other surveillance of the equipment. The Manufacturer is solely and fully responsible for conformity of all equipment to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2016-03-21

Certification Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com



Schedule

TYPE EXAMINATION CERTIFICATE No.

DEMKO 16 ATEX 1673X Rev. 0

Report: 4787339611

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Description of Equipment:

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 EN 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.

The optical radiation output of the apparatus with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 94/9/EC is covered in this certificate

Nomenclature:

PFXP	P	2	7	X	C	D	4	Y	N	ZZZ	0
I	II		III	IV	V	VI	VII	VIII	IX	X	

- I. Prefix:
PFXP: Model type
- II. Model Designation:
U: Represent CPU, Haswell Celeron 2980U
P: Represent CPU, Haswell i7-4650U
- III. Display module:
7: Represent 4:3 15" display panel
J: Represent 15.6"W display panel
- IV. Combination of CPU, RAM and PCI slot
X can be any character to represent combination.
- V. Expansion slot configuration:
C or 7: Base unit
F or W: Expansion USB board and Fans Module
- VI. Power Supply:
D: DC power source.
- 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
- X. Combination of second storage type, Interface options and Software bundle:
Z can be any character to represent combination.

Electrical data

<u>Models</u>	<u>Electrical Rating</u>
PFXP Series	Input: 24 V dc, 4.2 A max.

Temperature range

The relation between ambient temperature and the assigned temperature class is as follows:

Ambient temperature range
0 °C to +55 °C

Temperature class
T4

Mounting instructions

Refer to "Instructions".

Schedule

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Routine tests
No Routine tests are necessary.

[14]

[16]

Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this Type Examination Certificate.

[17]

Special conditions for safe use:

- Both 4:3 15" and 15.6"W display front panel surface have been evaluated to the enclosure requirements for Ingress Protection to IP 65 in accordance with EN 60079-15.
- The equipment shall be installed in an enclosure that provides a degree of protection not less than IP54 in accordance with EN 60079-15.
- The equipment shall only be used in an area of not more than pollution degree 2 as defined in EN 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.
- Do not expose to direct sunlight or UV light source.
- Equipment must be installed in a low risk of mechanical danger environment.

[18]

Essential Health and Safety Requirements

Met by compliance with the standards EN 60079-0:2012+A11:2013, EN 60079-15:2010, EN 60079-11:2012.

The **Pro-face** will be used as the company identifier on the marking label.

Additional information

Both 4:3 15" and 15.6"W Front display panel have in addition passed the tests for Ingress Protection to IP 65 in accordance with EN60529:1991+A1:2000+A2:2013.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 94/9/EC of the European Parliament and the Council of 23 March 1994.