

**TYPE APPROVAL CERTIFICATE****This is to certify:****That the Personal Computer**with type designation(s)  
**Computer PS5000 series**

Issued to

**SCHNEIDER ELECTRIC FRANCE**  
**Carros, France**is found to comply with  
**DNV GL rules for classification – Ships, offshore units, and high speed and light craft****Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****Location classes:**

<b>Temperature</b>	<b>D</b>
<b>Humidity</b>	<b>B</b>
<b>Vibration</b>	<b>A</b>
<b>EMC</b>	<b>B</b>
<b>Enclosure</b>	<b>Required protection according to relevant rules shall be provided upon installation on board</b>

This Certificate is valid until **2021-05-08**.Issued at **Høvik** on **2017-07-21**DNV GL local station: **Kobe**Approval Engineer: **Nils Jarem**for **DNV GL**

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**Odd Magne Nesvåg**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Job Id: **262.1-020563-2**  
 Certificate No: **TAA000008R**  
 Revision No: **2**

## Product description

PS5000 Series Modular PC																				
Character	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Part number	P	F	X	P																
	Modular box Core i7				P															
Product	Second generation				2															
Modular Panel type	None						B													
	Display PC 4:3 15" - XGA						7													
	Display PC W15" - WHD						J													
Box Type							*													
CPU type	Core i7-4650U								7											
Power supply	230VAC- TG14-0135-01 optional switch									A										
	24 VDC									D										
RAM size											*									
Operating system												*								
Storage device	None												N							
	Flash drive (SSD)												*							
	CFast card CF												*							
Options	None													0						
	Interface													*						
Second storage	None														N					
	Flash drive (SSD)														*					
	CFast card CF														*					
Software bundle															*					
Customization																*				
Spare																	*			

\*Any value.

Tested firmware versions: 1.13

Compass safe distances:

Standard: 80 cm;  
 Steering: 55 cm

## Place of manufacture

1, Alley 20, Lanc 26, Rueiguang Road, Neihu District, Taipei 114, Taiwan

## Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

### Product certificate

If specified in the Rules, ref. Pt.4 Ch.9 Sec.1, the control and monitoring system in which the above listed hardware is used shall be delivered with a product certificate. For each such delivery the certification test is to be performed at the manufacturer of the application system before the system is shipped to the yard. The test shall be done according to an approved test program. After the certification the clause for application software control will be put into force.

### Clause for application software control

All changes in software are to be recorded as long as the system is in use on board. The records of all changes are to be forwarded to DNV GL for evaluation and approval. Major changes in the software are to be approved before being installed in the computer.

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## Type Approval documentation

	Document:	Revision:
Data sheet:	PFXPP2BJ7D80N0NN00 1st Edition 2015	
	PFXPP2BK7D80N0NN00 1st Edition 2015	
Manual:	PS5000 Series (Modular Type) User Manual, Preliminary.	
Test reports:	EN150925C03	2015-10-21
	150514001C	2015-10-20
	160616001C	2016-12-20
Witnessed tests		2015-11-17
	15-07-EAT-072-E00	--
	VS-TV-041101-11	2015-11-01
	VS-TV-041101-12	2015-11-01
	VS-TV-041101-13	2015-11-01
	VS-TV-041101-14	2015-11-01
	VS-TV-050201-01	2016-02-01
	VS-TV-051122-06	2016-11-22
	17-03-EAT-070-E00	2017 (witnessed)

Type approval initial assessment report, DNV GL Kaohsiung 2015-11-26.

## Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2015

Applicable tests for protected equipment according to IEC 60945, 4<sup>th</sup> edition (2002), except salt mist test.

## Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number

## Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed at least every second year and at renewal of this certificate.

END OF CERTIFICATE