

CERTIFICATE NUMBER 18-YO1702045-PDA DATE 22 Jan 2018

ABS TECHNICAL OFFICE
Yokohama Engineering Services

CERTIFICATE OF

DESIGN ASSESSMENT

This is to certify that a representative of this Bureau did, at the request of

SCHNEIDER ELECTRIC JAPAN HOLDINGS LTD.

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: Monitor, Graphic Panels

Model: Pro-face SP5000 Series and FP5000 Series Magelis HMIGTU Series and

iDisplay Series

This Product Design Assessment (PDA) Certificate 18-YO1702045-PDA, dated 22/Jan/2018 remains valid until 21/Jan/2023 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

Motohiro Tamura
Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

SCHNEIDER ELECTRIC JAPAN HOLDINGS LTD.

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OSAKA-SHI OSAKA

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Email: yukihisa.fujimoto@schneider-electric.com

Web: www.pro-face.co.jp

Tier: 2 - PDA Issued

Product:

Monitor, Graphic Panels

Model:

Pro-face SP5000 Series and FP5000 Series Magelis HMIGTU Series and iDisplay Series

Intended Service:

Human Machine Interface for monitoring and control systems in marine applications.

Description:

Pro-face SP5000 Series and Magelis GTU Series: The 7 types of displays and 2 types of boxes may be used in any of the 14 combinations for use.

Pro-face FP5000 Series and Magelis iDisplay Series: Display stand alone as default specification.

Rating: Rated Input Voltage 12 to 24VDC

Surrounding Air Temperature 0 to 60 degree C or less

Service Restriction:

1. Unit Certification is required for Schneider Electric Japan Holdings Ltd. as the original supplier. Unit certification in accordance with 4-9-3/Table 2 of the Steel Vessel Rules is required by the user to customize this equipment where this equipment is used for Category II or III services in 4-9-3/Table 1 in presence of the Surveyor after assemblage. The tests are to be carried out preferably at the assembled plant before installation on-board. However, if it is impracticable, the tests may be carried out after installation on-board.

2. Failure analysis for safety related functions only and Analysis regarding existence and fulfillment of programming procedures for safety related functions in association with 4-9-3/Table 2 is to be additionally submitted when this component is used for systems assigned as Category III.

- 1) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
- 2) The computer-based system for the subject equipment is assigned to Category II.
 3) Evidence is required to be kept by the manufacturer in accordance with 4-9-3/Table 2 of the Rules regarding the computer-based system.

Notes/Drawing/Documentation:

- 1. Drawing No. 17RT-4RE00245, Technical Document, Revision 02, Pages 149, dated 27 November 2015, 2. Drawing No. 17RT-4RE00246, Technical Document, Revision 02, Pages 21, dated 27 November 2015, 3. Drawing No. 17RT-4RE00247, Technical Document, Revision 01, Pages 31, dated 13 December 2017, 4. Drawing No. 17RT-4RE00248, Quality document, Revision 01, Pages 219, dated 13 December 2017, 5. Drawing No. 17RT-4VE00183, Test Report, Revision 01, Pages 152, dated 13 December 2017, issued by Schneider Electric Japan Holdings Ltd.,
 6. Drawing No. 15RT-4VE00101, Test Report HMI system 1, Revision 02, Pages 51, dated 27 November 2015,

- o. Drawing No. 15RT-4VE00101, Test Report HMI system 1, Revision 02, Pages 51, dated 27 November 2015, issued by Schneider Electric Japan Holdings Ltd., 7. Drawing No. 15RT-4VE00102, Test Report HMI system 2, Revision 02, Pages 51, dated 27 November 2015, issued by Schneider Electric Japan Holdings Ltd., 8. Drawing No. 15RT-4VE00103, Test Report HMI system 3, Revision 02, Pages 51, dated 27 November 2015, issued by Schneider Electric Japan Holdings Ltd., 9. Drawing No. 15RT-4VE00104, Test Report HMI system 4, Revision 02, Pages 51, dated 27 November 2015, issued by Schneider Electric Japan Holdings Ltd.
- issued by Schneider Electric Japan Holdings Ltd., 10. Drawing No. 15RT-4VE00105, Test Report HMI system 5, Revision 02, Pages 51, dated 27 November 2015, issued by Schneider Electric Japan Holdings Ltd.,

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11. Drawing No. 15RT-4VE00106, Test Report HMI system 6, Revision 02, Pages 51, dated 27 November 2015, issued by Schneider Electric Japan Holdings Ltd.,

12. Drawing No. 15RT-4VE00107, Test Report HMI system 7, Revision 02, Pages 51, dated 27 November 2015,

issued by Schneider Electric Japan Holdings Ltd.,
13. Drawing No. 15RT-4VE00108, Test Report HMI system 8, Revision 02, Pages 51, dated 27 November 2015,

issued by Schneider Electric Japan Holdings Ltd., 14. Drawing No. 15RT-4VE00109, Test Report HMI system 9, Revision 02, Pages 51, dated 27 November 2015, issued by Schneider Electric Japan Holdings Ltd., 15. Drawing No. 15RT-4VE00110, Test Report HMI system 10, Revision 02, Pages 51, dated 27 November 2015,

issued by Schneider Electric Japan Holdings Ltd.,

16. Drawing No. 15RT-4VE00111, Test Report HMI system 11, Revision 02, Pages 50, dated 27 November 2015, issued by Schneider Electric Japan Holdings Ltd.,

17. Drawing No. 15RT-4VE00112, Test Report HMI system 12, Revision 02, Pages 50, dated 27 November 2015, issued by Schneider Electric Japan Holdings Ltd.,

18. Drawing No. 15RT-4VE00111, Test Report HMI system 12, Revision 02, Pages 50, dated 27 November 2015, issued by Schneider Electric Japan Holdings Ltd.,

Terms of Validity:

This Product Design Assessment (PDA) Certificate 18-YO1702045-PDA, dated 22/Jan/2018 remains valid until 21/Jan/2023 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

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STANDARDS

ABS Rules:

2018 Steel Vessel Rules 1-1-4/7.7, 1-1-A3 & A4, 4-9-3 (Category II), 4-9-8/13; 2018 Mobile Offshore Drilling Units Rules 1-1-4/9.7, 1-1-A2 & A3, 4-3-4/5; 2018 Steel Vessels Under 90 Meters in Length 1-1-4/7.7, 1-1-A3 & A4, 4-7-2/9;

2018 Offshore Support Vessels 1-1-4/7.7, 1-1-A3 & A4, 4-9-3 (Category II), 4-9-8/13;

2018 High-Speed Craft 1-1-4/11.9, 1-1-A2 & A3, 4-7-8 (Category II), 4-7-9/15;

National:

NA

International:

NA

Government:

EUMED:

NA

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OTHERS:

IACS UR E10 (Rev.6 Oct 2014) and E22 (Rev.2 June 2016)

PDA Certificate No: 18-YO1702045-PDA Effective Date: 22 January 2018

Issue Date: Expire Date: 22 January 2018 21 January 2023

Company:

Schneider Electric Japan Holdings Ltd.

Product/Equipment: Monitor, Graphic Panels

Model:

Pro-face SP5000 Series and FP5000 Series Magelis HMIGTU Series and iDisplay Series

Description (Pro-face SP5000 Series and FP5000 Series)

| Model | Descriptions |
|---------------|--|
| PFXSP5500TPD# | Display unit that enables to use with box unit, 10.4-inch TFT, 16M colors, SVGA 800 x 600 pixels, Analog Touch Panel (Multi touch), Front USB A/mini-B I/F x 1 each, DC12-24V |
| PFXSP5600TPD# | Display unit that enables to use with box unit, 12.1-inch TFT, 16M colors, XGA 1024 x 768 pixels, Analog Touch Panel(Multi touch), Front USB A/mini-B I/F x 1 each, DC12-24V |
| PFXSP5660TPD# | Display unit that enables to use with box unit, 12.1-inch TFT, 16M colors, XGA 1024 x 768 pixels, Analog Touch Panel(Multi touch), Wireless LAN, Front USB A/mini-B I/F x 1 each, DC12-24V |
| PFXSP5700TPD# | Display unit that enables to use with box unit, 15-inch TFT, 16M colors, XGA 1024 x 768 pixels, Analog Touch Panel (Multi touch), Front USB A/mini-B I/F x 1 each, DC12-24V |
| PFXSP5400WAD# | Display unit that enables to use with box unit, 7.0-inch Wide TFT, WVGA 800 x 480 pixels, Analog Touch Panel, DC12-24V |
| PFXSP5500WAD# | Display unit that enables to use with box unit, 10.1-inch Wide TFT, WXGA 1280 x 768 pixels, Analog Touch Panel, DC12-24V |
| PFXSP5600WAD# | Display unit that enables to use with box unit, 12.1-inch Wide TFT, WXGA 1280 x 768 pixels, Analog Touch Panel, DC12-24V |
| PFXSP5B10# | Box unit that enables to use with display unit, Ethernet I/F x 2, COM I/F x 2, USB A I/F x 2, USB mini-B I/F, SD Card I/F x 2, AUX I/F, Expansion Unit I/F, DC12V from display unit |
| PFXSP5B40# | Box unit that enables to use with display unit, Ethernet I/F x 2, COM I/F x 2, USB A I/F x 3, USB mini-B I/F, CFast Card I/F x 2, SD Card I/F, AUX I/F, Expansion Unit I/F, DVI-D Out I/F, Audio In I/F, DC12V from display unit |
| PFXFP5600TPD# | Flat panel display unit, 12.1-inch TFT, 16M colors, XGA 1024 x 768 pixels, Analog Touch Panel (Multi touch), Front USB A x 1, DVI-D In I/F x 1, USB B I/F x 1, DC12-24V |
| PFXFP5700TPD# | Flat panel display unit, 15-inch TFT, 16M colors, XGA 1024 x 768 pixels, Analog Touch Panel (Multi touch), Front USB A I/F x 1, DVI-D In I/F x 1, USB B I/F x 1, DC12-24V |

is may be followed by any letter or number that indicates color, PCBA coating, memory size or software combinations.

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Schneider Electric Japan Holdings Ltd. Company:

Monitor, Graphic Panels Product/Equipment:

Pro-face SP5000 Series and FP5000 Series

Model:

Magelis HMIGTU Series and iDisplay Series

Ratings and General Specifications (Pro-face SP5000 Series and FP5000 Series)

| · · | Rated Input Voltage | Input Voltage Limits | Power Consumption | Surrounding Air Temperature | Surrounding Air Kumidity | External Dimensions | Weight | Structure |
|---------------|---------------------------------------|-------------------------|----------------------|--------------------------------|-----------------------------|--------------------------|----------------|--------------------------------|
| PFXSP5500TPD# | 12-24 V DC | 10.8-28.8 Vdc | 50W or less | O60 °C | 1090%RH | W272.5 x H214.5 x D67 mm | 2.7 kg or less | IP65F ** |
| PEXSP5600TPD# | | | 56W or less | (32140 °F) | (non-condensing) | W315 x H241 x D67 mm | 3 kg or less | IP67F ** IP66F *** |
| PFXSP5660TPD# | | | 58W or less | | | W315 x H241 x D67 mm | 3 kg or less | * |
| PFXSP5700TPD# | | | 57W or less | | | W397 x H296 x D67 mm | 4.5 kg or less | |
| PFXSP5400WAD# | | | 41W or less | | | W203.6 x H148.6 x D36 mm | 1.2 kg or less | IP66F |
| PFXSP5500WAD# | | | 43W or less | | | W268.5 x H198.5 x D67 mm | 2.5 kg or less | 1P6/F |
| PFXSP5600WAD# | | | 45W or less | | | W308.5 x H230.5 x D67 mm | 3 kg or less | |
| | 12 V DC Power from | 1 | 20W or less | | | W188 x H131 x D45 mm | 0.9 kg or less | IP20 |
| 1 | 12 V DC Power from Display unit | ı | 28W or less | | | W188 x H131 x D45 mm | 0.9 kg or less | IP20 |
| PFXFP5600TPD# | 12-24 V DC | 10.8-28.8 Vdc | 17W or less | | | W315 x H241 x D67 mm | 3.9 kg or less | IP65F ** |
| PFXFP5700TPD# | | | 21W or less | | | W397 x H296 x D67 mm | 5.2 kg or less | IF6/F *** P66F *** * |

* on the front panel when properly installed in an enclosure.

** When using a factory-installed Front USB Cover (without screw type)

*** When using a Front USB Cover as an option (with screw type)

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Expire Date: Company:

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Product/Equipment: Monitor, Graphic Panels

Schneider Electric Japan Holdings Ltd.

Model:

Pro-face SP5000 Series and FP5000 Series Magelis HMIGTU Series and iDisplay Series

Description (Magelis HMIGTU Series and iDisplay Series)

| Model | Descriptions |
|---------------|--|
| HMIDT542# | Display unit that enables to use with box unit, 10.4-inch TFT, 16M colors, SVGA 800 x 600 pixels, Analog Touch Panel (Multi touch), Front USB A/mini-B I/F x 1 each, DC12-24V |
| HMIDT642# | Display unit that enables to use with box unit, 12.1-inch TFT, 16M colors, XGA 1024 x 768 pixels, Analog Touch Panel(Multi touch), Front USB A/mini-B I/F x 1 each, DC12-24V |
| HMIDT643# | Display unit that enables to use with box unit, 12.1-inch TFT, 16M colors, XGA 1024 x 768 pixels, Analog Touch Panel(Multi touch), Wireless LAN, Front USB A/mini-B I/F x 1 each, DC12-24V |
| HMIDT732# | Display unit that enables to use with box unit, 15-inch TFT, 16M colors, XGA 1024 x 768 pixels, Analog Touch Panel (Multi touch), Front USB A/mini-B I/F x 1 each, DC12-24V |
| HMIDT351# | Display unit that enables to use with box unit, 7.0-inch Wide TFT, WVGA 800 x 480 pixels, Analog Touch Panel, DC12-24V |
| HMIDT551# | Display unit that enables to use with box unit, 10.1-inch Wide TFT, WXGA 1280 x 768 pixels, Analog Touch Panel, DC12-24V |
| HMIDT651# | Display unit that enables to use with box unit, 12.1-inch Wide TFT, WXGA 1280 x 768 pixels, Analog Touch Panel, DC12-24V |
| HMIG3U# | Box unit that enables to use with display unit, Ethernet I/F x 2, COM I/F x 2, USB A I/F x 2, USB mini-B I/F, SD Card I/F x 2, AUX I/F, Expansion Unit I/F, DC12V from display unit |
| HMIG5U# | Box unit that enables to use with display unit, Ethernet I/F x 2, COM I/F x 2, USB A I/F x 3, USB mini-B I/F, CFast Card I/F x 2, SD Card I/F, AUX I/F, Expansion Unit I/F, DVI-D Out I/F, Audio In I/F, DC12V from display unit |
| HMIDID64DTD1# | Flat panel display unit, 12.1-inch TFT, 16M colors, XGA 1024 x 768 pixels, Analog Touch Panel (Multi touch), Front USB A x 1, DVI-D In I/F x 1, USB B I/F x 1, DC12-24V |
| HMIDID73DTD1# | Flat panel display unit, 15-inch TFT, 16M colors, XGA 1024 x 768 pixels, Analog Touch Panel(Multi touch), Front USB A I/F x 1, DVI-D In I/F x 1, USB B I/F x 1, DC12-24V |

[#] is may be followed by any letter or number that indicates color, PCBA coating, memory size or software combinations.

18-YO1702045-PDA PDA Certificate No:

22 January 2018 22 January 2018 21 January 2023 Effective Date:

Issue Date:

Expire Date:

Schneider Electric Japan Holdings Ltd. Company:

Monitor, Graphic Panels Product/Equipment:

Pro-face SP5000 Series and FP5000 Series

Model:

Magelis HMIGTU Series and iDisplay Series

Ratings and General Specifications (Magelis HMIGTU Series and iDisplay Series)

| | Rated Input Voltage | Input Voltage Limits | Power Consumption | Surrounding Air Temperature | Surrounding Air Humidity | External Dimensions | Weight | Structure |
|--|---------------------------------------|--------------------------|----------------------|--------------------------------|-----------------------------|--------------------------|----------------|-----------|
| HMIDT542# | 12-24 V DC | 12-24 V DC 10.8-28.8 Vdc | 50W or less | D. 09 0 | | W272.5 x H214.5 x D67 mm | 2.7 kg or less | IP67F |
| HMIDT642# | | | 56W or less | (32140 °F) | (non-condensing) | W315 x H241 x D67 mm | 3 kg or less | IP60F |
| HMIDT643# | | | 58W or less | | | W315 x H241 x D67 mm | 3 kg or less | |
| HMIDT732# | | | 57W or less | | | W397 x H296 x D67 mm | 4.5 kg or less | |
| HMIDT351# | | | 41W or less | | | W203.6 x H148.6 x D36 mm | 1.2 kg or less | IP66F |
| HMIDT551# | | | 43W or less | | | W268.5 x H198.5 x D67 mm | 2.5 kg or less | 1. to / t |
| HMIDT651# | | | 45W or less | | | W308.5 x H230.5 x D67 mm | 3 kg or less | |
| HMIG3U# | 12 V DC | ı | 20W or less | | | W188 x H131 x D45 mm | 0.9 kg or less | IP20 |
| | Power from Display unit | | | | | | ì | |
| HMIG5U# | 12 V DC Power from Display unit | • | 28W or less | | | W188 x H131 x D45 mm | 0.9 kg or less | IP20 |
| HMIDID64DTD1# 12-24 V DC 10.8-28.8 Vdc | 12-24 V DC | 10.8-28.8 Vdc | 17W or less | | | W315 x H241 x D67 mm | 3.9 kg or less | IP67F |
| HMIDID73DTD1# | 1. | | 21W or less | | | W397 x H296 x D67 mm | 5.2 kg or less | IFOOF |

* on the front panel when properly installed in an enclosure.
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