

CERTIFICATE NUMBER 23-2354729-PDA

EFFECTIVE DATE 10-February-2023

EXPIRATION DATE 9-February-2028

ABS TECHNICAL OFFICE Yokohama Engineering Services

## **CERTIFICATE OF**

# **Product Design Assessment**

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

# SCHNEIDER ELECTRIC JAPAN HOLDINGS LTD.

located at

## OSAKA CITY, Japan

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 / Harmony HMIGTU Series and iDisplay Series

This Product Design Assessment (PDA) Certificate remains valid until 9-February-2028 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping

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 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.

SCHNEIDER ELECTRIC OSAKA BUILDING, 4-4-9 KITAHAMA, CHUO-KU

OSAKA-SHI OSAKA

Japan 541-0041

Telephone: +81-6-7166-0232

Fax: +81-6-6208-3143

Email: Hajime.ichiki@se.com Web: www.proface.co.jp

Tier: 2 - PDA Issued

**Product:** Monitor, Graphic Panels

**Model:** Pro-face SP5000 Series and FP5000 Series

Magelis / Harmony HMIGTU Series and iDisplay Series

## **Endorsements:**

#### **Intended Service:**

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

#### **Description:**

Pro-face SP5000 Series and Magelis / Harmony 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 / Harmony 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 not required for Schneider Electric Japan Holdings Ltd. as the original supplier.

However, unit certification in accordance with 4-9-3/Table 2 of the Marine 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 of the Marine Vessel Rules 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 of the Marine Vessel Rules is to be additionally submitted when this component is used for systems assigned as Category III.

#### **Comments:**

- 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 Marine Vessels 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, issued by Schneider Electric Japan Holdings Ltd.,

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- 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., 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.,
- 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. 19RT-4VE00235, Test Report IACS UR E10 Rev.7, Revision 00, Pages 64, dated 19 March 2019, issued by Labotech International Co., Ltd.,
- 19. Drawing No. 21RT-4VE00320, Test Report IACS UR E10 Rev.7, Revision 00, Pages 60, dated 17 May 2021, issued by Labotech International Co., Ltd.,
- 20. Drawing No. 22RT-4VE00343, Test Report IACS UR E10 Rev.8, Revision 00, Pages 42, dated 31 October 2022, issued by Labotech International Co., Ltd.,

#### **Terms of Validity:**

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Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

## **STANDARDS**

#### ABS Rules:

2023 Marine Vessel Rules 1-1-4/7.7, 1-1-A3 & A4, 4-9-3 (Cat II) and 4-9-9/3 and 13;

2023 High-Speed Craft 1-1-4/11.9, 1-1-A2 & A3, 4-7-8 (Cat II) and 4-7-9/15,

2023 Mobile Offshore Units 1-1-4/9.7, 1-1-A2 & A3 and 4-3-4/5;

#### **National:**

NA

## Electronically published by ABS Yokohama. Reference T2354729, dated 10-FEB-2023.

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Tier: 2 - PDA Issued

## **International:**

NA

## **Government:**

NA

## **EUMED:**

NA

## **OTHERS:**

As of 10/Feb/2023

IACS UR E10 (Rev.7 Oct. 2018 & Rev.8 Feb 2021) IACS UR E22 (Rev.2 June 2016 Complete Revision)

Design Assessed Page 3 of 3

PDA Certificate No: 23-2354729-PDA
Effective Date: 10 February 2023
Expire Date: 9 February 2028

Company: Schneider Electric Japan Holdings Ltd.

**Product/Equipment:** Monitor, Graphic Panels

Model: Pro-face SP5000 Series and FP5000 Series

Magelis / Harmony HMIGTU Series and iDisplay Series

Revision No: 4

## **Description (Pro-face SP5000 Series and FP5000 Series)**

| Descriptions  |
|---|
| 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            |
| 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            |
| 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  |
| 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            |
| Display unit that enables to use with box unit, 7.0-inch Wide TFT, WVGA 800 x 480 pixels,     |
| Analog Touch Panel, DC12-24V  |
| Display unit that enables to use with box unit, 10.1-inch Wide TFT, WXGA 1280 x 768           |
| pixels, Analog Touch Panel, DC12-24V  |
| Display unit that enables to use with box unit, 12.1-inch Wide TFT, WXGA 1280 x 768           |
| pixels, Analog Touch Panel, DC12-24V  |
| 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         |
| 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  |
| 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                |
| 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            |
|   |

<sup>#</sup> is may be followed by any letter(s) or number(s) or symbol(s) that indicates color, PCBA coating, memory size or software combinations.

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Magelis / Harmony HMIGTU Series and iDisplay Series

Revision No: 4

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

|               | Rated Input<br>Voltage                | Input Voltage<br>Limits | Power<br>Consumption | Surrounding Air<br>Temperature | Surrounding Air<br>Humidity | External Dimensions      | Weight               | Structure                         |                       |
|---------------|---------------------------------------|-------------------------|----------------------|--------------------------------|-----------------------------|--------------------------|----------------------|-----------------------------------|-----------------------|
| PFXSP5500TPD# | 12-24 V DC                            | 10.8-28.8 Vdc           | 50W or less          | 060 °C                         | 1090%RH                     | W272.5 x H214.5 x D67 mm | 2.7 kg or less       | IP65F **                          |                       |
| PFXSP5600TPD# |                                       |                         | 56W or less          | (32140 °F)                     | (32140 °F) (non-co          | (non-condensing)         | W315 x H241 x D67 mm | 3 kg or less                      | IP67F **<br>IP66F *** |
| PFXSP5660TPD# |                                       |                         | 58W or less          |                                |                             | W315 x H241 x D67 mm     | 3 kg or less         | IP66F<br>IP67F<br>*               |                       |
| 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       |                                   |                       |
| PFXSP5500WAD# |                                       |                         | 43W or less          |                                |                             | W268.5 x H198.5 x D67 mm | 2.5 kg or less       |                                   |                       |
| PFXSP5600WAD# |                                       |                         | 45W or less          |                                |                             | W308.5 x H230.5 x D67 mm | 3 kg or less         |                                   |                       |
| PFXSP5B1#     | 12 V DC<br>Power from<br>Display unit | -                       | 20W or less          |                                |                             | W188 x H131 x D45 mm     | 0.9 kg or less       | IP20                              |                       |
| PFXSP5B4#     | 12 V DC<br>Power from<br>Display unit | -                       | 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 **<br>IP67F **<br>IP66F *** |                       |
| PFXFP5700TPD# |                                       |                         | 21W or less          |                                |                             | W397 x H296 x D67 mm     | 5.2 kg or less       |                                   |                       |

<sup>\*</sup> on the front panel when properly installed in an enclosure.

<sup>\*\*</sup> When using a factory-installed Front USB Cover (without screw type)

<sup>\*\*\*</sup> When using a Front USB Cover as an option (with screw type)

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Magelis / Harmony HMIGTU Series and iDisplay Series

Revision No: 4

## **Description (Magelis / Harmony 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   |

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Magelis / Harmony HMIGTU Series and iDisplay Series

Revision No: 4

## Ratings and General Specifications (Magelis / Harmony HMIGTU Series and iDisplay Series)

|               | Rated Input<br>Voltage                | Input Voltage<br>Limits | Power<br>Consumption | Surrounding Air<br>Temperature | Surrounding Air<br>Humidity | External Dimensions      | Weight         | Structure           |
|---------------|---------------------------------------|-------------------------|----------------------|--------------------------------|-----------------------------|--------------------------|----------------|---------------------|
| HMIDT542#     | 12-24 V DC                            | 10.8-28.8 Vdc           | 50W or less          | 060 °C<br>(32140 °F)           | 1090%RH<br>(non-condensing) | W272.5 x H214.5 x D67 mm | 2.7 kg or less | IP67F<br>IP66F      |
| HMIDT642#     |                                       |                         | 56W or less          |                                |                             | W315 x H241 x D67 mm     | 3 kg or less   |                     |
| 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<br>IP67F<br>* |
| HMIDT551#     |                                       |                         | 43W or less          |                                |                             | W268.5 x H198.5 x D67 mm | 2.5 kg or less |                     |
| HMIDT651#     |                                       |                         | 45W or less          |                                |                             | W308.5 x H230.5 x D67 mm | 3 kg or less   |                     |
| HMIG3U#       | 12 V DC<br>Power from<br>Display unit | -                       | 20W or less          |                                |                             | W188 x H131 x D45 mm     | 0.9 kg or less | IP20                |
| HMIG5U#       | 12 V DC<br>Power from<br>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           | 17W or less          |                                |                             | W315 x H241 x D67 mm     | 3.9 kg or less | IP67F               |
| HMIDID73DTD1# |                                       |                         | 21W or less          |                                |                             | W397 x H296 x D67 mm     | 5.2 kg or less | IP66F<br>*          |

<sup>\*</sup> on the front panel when properly installed in an enclosure.

<sup>#</sup> is may be followed by any letter(s) or number(s) or symbol(s) that indicates color, PCBA coating, memory size or software combinations