

CERTIFICATE NUMBER 19-YO1937788-PDA

EFFECTIVE DATE

15-October-2019

EXPIRATION DATE

14-October-2024

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

## **IDEC IZUMI TAIWAN CORPORATION**

located at

### KAOHSIUNG CITY, Taiwan

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 Power Supply Unit** 

Model **PS6R Series** 

This Product Design Assessment (PDA) Certificate remains valid until 14/Oct/2024 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)

#### IDEC IZUMI TAIWAN CORPORATION

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Tier: 3 - Type Approved, unit certification not required

**Product:** 

**Power Supply Unit** 

Model:

**PS6R Series** 

**Intended Service:** 

Switching Power Supplies installed on Marine, Offshore Vessels and MODU.

**Description:** 

Power Supply, PS6R Series

PS6R Series consist of the Power Supply Unit, DC-DC Converter Unit and Expansion Terminal Unit.

Application Models are below.

1) Power Supply Unit PS6R-F24, PS6R-G24, PS6R-J24 2) DC-DC Converter Unit

PS9Z-6RM1, PS9Z-6RM2, PS9Z-6RM3, PS9Z-6RM4, PS9Z-6RM5, PS9Z-6RM6

3) Expansion Terminal Unit

PS9Z-6RS1

Rating:

1)Power Supply Unit

Model Number Input Voltage/Output Voltage/Output Current/ Ambient Temperature/Frequency

AC100V - AC240V/DC24V/5A/0 to +60/50Hz/60HzPS6R-F24

PS6R-G24 AC100V - AC240V/DC24V/10A/0 to +60/ 50Hz/60Hz

AC100V - AC240V/DC24V/20A/0 to +60/ 50Hz/60Hz PS6R-J24

2)DC-DC Converter Unit

Model Number Input Voltage/Input Current/Output Voltage/Output Current/Ambient Temperature/ Maximum

Output Power

PS9Z-6RM1 DC24V/DC0.5A/DC5V/DC2A/0 to +60/10W

PS9Z-6RM2 DC24V/DC0.55A/DC12V/DC1A/0 to +60/12W

PS9Z-6RM3 DC24V/DC0.52A/DC5V/DC1A and DC-5V/DC1A/0 to +60/10W (5W+5W)

DC24V/DC0.58A/DC15V/DC0.4A and DC-15V/DC0.4A/0 to +60/12W (6W+6W) PS9Z-6RM4

PS9Z-6RM5 DC24V/DC0.53A/DC5V/DC1A and DC12V/DC0.5A/0 to +60/11W (5W+6W)

PS9Z-6RM6 DC24V/DC0.58A/DC12V/DC0.5A and DC-12V/DC0.5A/0 to +60/12W (6W+6W)

3) Expansion Terminal Unit

Model Number Output Voltage/Output Current/Ambient Temperature PS9Z-6RS1 DC24V/DC10A/0 to +60

#### **Service Restriction:**

Unit certification is not required for this product.

If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be defined. Detail of each particular application including wiring diagram, location/installation of sensors are to be specifically approved by ABS.

#### **Comments:**

(1) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

(2) Unless specially directed by Administration, this approval is not to be constructed as a substitute for flag Administration's approval.

(3) If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the

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specification or standard, including inspection standards and tolerances, must be defined.

(4) This certificate may not be used for EU and US flagged vessels (if MED and/or USCG have their own specific requirements).

Notes/Drawing/Documentation:

1) ABS Surveyor Report No. KO2662799 dated 29 August 2014.

2) IDEC Corporation Power Supply PS6R Series Test Report No. NSH-14006-19 dated 9 September 2014.

Referred Drawings are as below,

NSH-14006-09 Rev. 00 Product catalog

NSH-14006-10 Rev. 00 Product specifications

NSH-14006-11 Rev. 00 Instruction manual

NSH-14006-14 Rev. 00 Performance criteria

3) NSH-19026-08 Type test report dated 5 December 2019, issued by JQA.

Terms of Validity:

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#### **STANDARDS**

#### **ABS Rules:**

2019 Steel Vessel Rules 1-1-4/7.7, 1-1-A3 & A4 and 4-9-8/13, 2019 Marine Vessel Rules 1-1-4/7.7, 1-1-A3 & A4 and 4-9-9/13,

2019 Mobile Offshore Drilling Units Rules 1-1-4/9.7, 1-1-A2 & A3,

2019 Mobile Offshore Units 1-1-4/9.7, 1-1-A2 & A3,

2019 Steel Vessels (Under 90M) in Length 1-1-4/7.7, 1-1-A3 & A4, 4-7-2/17 and 4-7-4/3,

2019 Offshore Support Vessels 1-1-4/7.7, 1-1-A3 & A4 and 4-9-8/13,

2019 High-Speed Craft 1-1-4/11.9, 1-1-A2 & A3 and 4-7-9/15,

#### National:

NA

#### International:

#### **Government:**

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#### **EUMED:**

NA

#### **OTHERS:**

IACS UR E10 (Rev.7 Oct 2018)