



CERTIFICATE NUMBER	25-0327499-PDA-DUP
EFFECTIVE DATE	30-Jun-2025
EXPIRY DATE	29-Jun-2030
ABS TECHNICAL OFFICE	Singapore Engineering Services

CERTIFICATE OF

Product Design Assessment

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

DELTA ELECTRONICS INDIA PRIVATE LIMITED - SEZ UNIT

located at

SY NO 16/1B2B PART AND 16/1B2A PART, PLOT NO 1
INDUSTRIAL PARK KURUBARAPALLI VILLAGE KRISHNAGIRI
DIST, , TAMIL NADU, India, 635115

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: DRM-24V120W1PX(y), X = Any alphanumeric except Y and Z or blank, (y) = Any alphanumeric or blank.
Endorsements:
Tier: 3 - Type Approved, unit certification not required

This Product Design Assessment (PDA) Certificate remains valid until 29/Jun/2030 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

guanying

Guanying Wu, 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)

DELTA ELECTRONICS INDIA PRIVATE LIMITED - SEZ UNIT

SY NO 16/1B2B PART AND 16/1B2A PART

PLOT NO 1 INDUSTRIAL PARK KURUBARAPALLI VILLAGE KRISHNAGIRI DIST

India 635115

Telephone: +91 04344 247555

Fax:

Email: Apsara.Vahini@deltaww.com

Web: www.deltaww.com

Tier: 3 - Type Approved, unit certification not required

Product: Power Supply Unit

Model: DRM-24V120W1PX(y), X = Any alphanumeric except Y and Z or blank, (y) = Any alphanumeric or blank.

Endorsements:

Intended Service:

CliQ M DIN-rail mounting power supply units for automation systems on ships and offshore units.

Description:

DIN-rail mounted power supply modules for installation in consoles and cabinets, located in general power distribution zones.

Rating:

Nominal Input Voltage: Single-phase: 100-240VAC/110-300VDC

Nominal Input Frequency: 50-60Hz

Nominal Output Voltage: 24Vdc (Adjustable 24Vdc-28Vdc)

Output Continuous Current: 5A @ 24VDC/ 4.286A @ 28Vdc

Degree of Protection: IP 20

Service Restriction:

1) Unit Certification is not required for the product covered in this certificate. However, unit certification in accordance with Marine Vessel Rules 4-9-3/Table 5, Marine Vessel Rules 4-9-9/15.7 Table 2, Marine Vessel Rules 4-9-14/19.1.6 is required for the system, where this equipment is part of Category II or III computer-based systems as described in Marine Vessel Rules 4-9-3/7.1 Table 1 or part of systems that falls within the scope of Marine Vessel Rules 4-9-13/5.

2) If the manufacturer or purchaser requests an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

1) Safe area application only, not to be used in hazardous location.

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

3) This approval is limited to the hardware only. Each particular application/installation and the used application software is to be specifically approved in conjunction with the relevant system in which the units are being used in accordance with Marine Vessel Rules 4-9-3, 4-9-13 and 4-9-14 and other application specific requirements.

Notes/Drawing/Documentation:

Drawing No.: DRM-24V120W1PXy, Technical Datasheet, Revision: -, Pages: 14

Drawing No.: PD-DRM-24V120W1PN, Mechanical drawing, Revision: 0, Pages: 2

Drawing No.: DRM-24V120W1PN, Schematic circuit, Revision: S1, Pages: 8

Test Report No.: 06E2Q03R-04, Environment test data by Delta Electronics, Dated: 29-Jan-2015, Laboratory: Delta Electronics, Dated: 2015-01, Revision: S2, Pages: 14

Test Report No.: DRM-24V120W1PN_ABS, Surveyor Witness Test Report for ABS, Dated: 07-Jul-2015, Laboratory: Delta Electronics, Dated: 2015-07, Revision: -, Pages: 19

Test Report No.: DRM-24V120W1PXy_FC, Electrical functional test in-house, Dated: 25-Dec-2014, Laboratory: Delta Electronics, Dated: 2014-12, Revision: -, Pages: 224

Test Report No.: T211-0117/15, Function and Environment test report by SIQ, Dated: 24 Mar 2015, Laboratory: SIQ, Dated: 2015-04, Revision: -, Pages: 21

Test Report No.: T251-0224_15, EMC for GL by SIQ, Dated: 23-Apr-2015, Laboratory: SIQ, Dated: 2015-04, Revision: -, Pages: 96

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Test Report No.: T251-0412/21, EMC Test Report, Laboratory: SIQ, Dated: 2021-07, Revision: -, Pages: 24

Terms of Validity:

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STANDARDS

ABS Rules:

Rules for Conditions of Classification (2025) – 1A-1-4/7.7, 1A-1-A3, 1A-1-A4, which covers the following:

Rules for Building and Classing Marine Vessels: 4-8-3/1.3, 4-8-3/1.7, 4-8-3/1.9, 4-8-3/1.11, 4-8-3/1.17, 4-9-9/3, 4-9-9/15.7 Table 1

Rules for Conditions of Classification – Offshore Units (2025) – 1B-1-4/9.7, 1B-1-A2, 1B-1-A3, which covers the following:

Rules for Building and Classing Offshore Units: 4-3-1/9, 4-3-1/11, 4-3-1/15, 4-3-1/17.1

ABS Rules for Conditions of Classification – Light and High Speed Craft (2025) – 1C-1-4/11.9, 1C-1-A2, 1C-1-A3, which cover the following:

Rules for Building and Classing High Speed-Craft: 4-6-1/9, 4-6-1/11, 4-6-1/15, 4-6-1/17.1, 4-7-9/3, 4-7-9/15.1

National:

NA

International:

IACS UR E10 Rev.9 (2023)

Government:

NA

EUMED:

NA

OTHERS:

NA



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DELTA ELECTRONICS (DONGGUAN) CO., LTD.

located at

**NO. 33, PANTAO ROAD, SHIJIE TOWN, DONGGUAN,
GUANGDONG, , China**

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National:

NA

International:

IACS UR E10 Rev.9 (2023)

Government:

NA

EUMED:

NA

OTHERS:

NA