



Confirmation of Product Type Approval

Company Name: DIKO ELEKTRIKLI CIHAZLAR SANAYI VE TICARET A.S.

Address: ESENSEHIR MAH. KURU SOK. NO 36, UMRANIYE ISTANBUL 34776 Türkiye

Product: Heater, Water

Model(s): Series: DSSY-XM

Endorsements:

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	24-2501959-PDA	21-FEB-2024	20-FEB-2029
Manufacturing Assessment (MA)	19-IS3629967	07-MAY-2019	06-MAY-2024
Product Quality Assurance (PQA)	NA	NA	NA

Tier

5 - Unit Certification Required

Intended Service

Marine and Offshore Applications -Electric Water Heaters with Electrical Command Panel.

Description

Electric Storage Tank Water Heater, Capacity: 80, 120, 175, 200, 250, 300, 400 & 500 Gallons.

Electrical heating Power: 6, 12, 18, 36, 40, 60, 80, 100, 120 & 150 kW.

Standard Equipment:

Stainless Steel Cr/Ni-304 or Incolloy Heating Elements

Safety Thermostat

Heater Group Switches and Signal Lamps

Circulation Pump Switch and Signal Lamp

Heater Group Fuses

Heater Group Switches and Signal Lamps

Circulation Pump Switch and Signal Lamp

Heater group Fuses

Thermic Magnetic Main Breaker and 24V AC Reduced Command Voltage

Leakage Current Relay Human Life Protection

Power Steps Control

Electrical Command Panel with Polyurethane cast gasket cover

Fan Coolant System

Flag Gate Command Panel

Temperature and Pressure T&P Valve set at 99deg or at max pressure of 10.4 bar.

Ratings

Maximum Allowable Working Pressure: 10 bar (145 psi)

Design pressure: 10.34 bar (150 psi)

Maximum Design Temperature: 99°C

Storage Capacity: 80 to 500 Gallons (U.S.) or 303 to 1893 Liters

Heating Element: 6 to 150 kW

Electrical Enclosure Rating: IP55/NEMA 12

Supply voltage: 380, 440, 480, 600, and 690V

Single or Three Phases, 60 HZ

Service Restrictions

Unit Certification is required for the storage tank in accordance with the requirements of 4-4-1/7 of the Marine Vessels Rules.

Comments

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

Notes, Drawings and Documentation

Drawing No. 01_DSSY-XM_ENG, Product Brochure and Manual, Revision: -, Pages: 17

Drawing No. DIKO ISO 9001_2008-2017 ENG, DIKO ISO 9001 Certification, Revision: -, Pages: 1

Drawing No. 5840.PY.PV.01E, Page 1 of 4, Product View MG Anode, Revision .-, Pages:1;

Drawing No. ,5840.PY.PV..01E, Page 2 of 4, Product View Heater, Revision: -, Pages: 1

Drawing No. 5840.PY.PV.01E, Page 3 of 4, Product View Probe Tube, Revision .-, Pages:1

Drawing No. 5840.PY.PV.01E, Page 4 of 4, Product View Water Level Sensor, Revision .-, Pages: 1

Drawing No 5840.PY.GAP.01E, Sheet 1 of 2, General Arrangement 200 gallon PV, Revision: -, Pages: 1

Drawing No. 5840.PY.ITGAP.01E, Page 2 of 2, Inner Tank Dimensional Drawing-200 GALLON PV, DSSY-XM-757-36-440-3-P316, Revision: -, Pages: 1

Drawing No. DSSY-XM-1893-36-440.3-P316L Inner Tank Arrangement, 500 Gallon PV, Rev. -, Pages: 1

Drawing No.DSSY-XM-303-36-440-3-P316L Inner Tank Arrangement, 80 Gallon PV, Rev. -, Pages: 1

Drawing No. DIN 28 013, Elliptical Heads, Revision:-, Pages: 1

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 20/Feb/2029 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.

ABS Rules

2024 Marine Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-4-1, 4-8-2/7.19, 4-8-3/1.7, 4-8-3/1.11, 4-8-3/Table 2

2024 Mobile Offshore Units 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-3-1/15, 4-3-3/Table 1

International Standards

NA

EU-MED Standards

NA

National Standards

NA

Government Standards

NA

Other Standards

NA



A handwritten signature in blue ink, appearing to read 'Joseph W. ...', is written over the printed name and title.

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 23-Feb-2024 5:39

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

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 prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations

regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.