



## Confirmation of Product Type Approval

**Company Name:** MECC ALTE UK LIMITED

**Address:** 6 LANDS' END WAY RUTLAND LE15 6RF United Kingdom

**Product:** Generator

**Model(s):** ECP32-3L/4, ECP34-1L/4, ECP34-2L/4, ECO38-1S/4, ECO38-3S/4, ECO38-1L/4, ECO38-2L/4, ECO38-3L/4, ECO40-1S/4

**Endorsements:**

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	22-2340714-PDA	04-JAN-2023	03-JAN-2028
Manufacturing Assessment (MA)	22-5105945	14-JAN-2022	17-JAN-2027
Product Quality Assurance (PQA)	NA	NA	NA

**Tier**

5 - Unit Certification Required

**Intended Service**

Power generation on board ABS Classed Vessels, Mobile Offshore Drilling Unit Rules or Facilities

**Description**

Steel casing, cast iron shield, C45 steel for shaft, three phases, two bearings

**Ratings**

ECP32-3L/4: 74 kVA @ 440 VAC, 60 Hz, 1800 rpm

ECP34-1L/4: 119 kVA @ 440 VAC, 60 Hz, 1800 rpm

ECP34-1L/4: 124 kVA @ 450 VAC, 60 Hz, 1800 rpm

ECP34-2L/4: 150 kVA @ 450 VAC, 60 Hz, 1800 rpm

ECO38-1S/4: 188 kVA @ 450 VAC, 60 Hz, 1800 rpm

ECO38-3S/4: 188 kVA @ 400 VAC, 50 Hz, 1500 rpm

ECO38-3S/4: 243 kVA @ 450 VAC, 60 Hz, 1800 rpm

ECO38-1L/4: 270 kVA @ 440 VAC, 60 Hz, 1800 rpm

ECO38-2L/4: 250 kVA @ 450 VAC, 60 Hz, 1800 rpm

ECO38-2L/4: 312.5 kVA @ 440 VAC, 60 Hz, 1800 rpm

ECO38-3L/4: 375 kVA @ 450 VAC, 60 Hz, 1800 rpm

ECO40-1S/4: 375 kVA @ 450 VAC, 60 Hz, 1800 rpm

ECO40-1S/4: 438 kVA @ 690 VAC, 60 Hz, 1800 rpm

Ambient Temperature 50° C

Degree of Protection IP 23

Insulation Class H

### **Service Restrictions**

- Unit Certification is required for this product as per 4-8-3/Table 3 of Marine Vessel Rules or 6-1-7/Table 2 of Mobile Offshore Unit Rules.

- Generators are for marine application in non-hazardous areas.

- 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**

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

### **Notes, Drawings and Documentation**

Drawing No. Vibration ECO 38-2

Drawing No. Vibration ECO 38-1

Drawing No. Vibration ECP-34

Drawing No. Balancing ECO38-1

Drawing No. Balancing ECP34

Drawing No. Generator ECO 38-N

Drawing No. Wirings ECO38

Drawing No. Wiring ECO38-2LN/4

Drawing No. Inter-tour windings

Drawing No. Shaft ECP-34

Drawing No. Alternator ECP-34

Drawing No. Shaft MD35-B3B14 Type S

Drawing No. Shaft Type L

Drawing No. Bearings ECP34-1

Drawing No. Bearings ECO38-1S

Drawing No. Bearings ECO38-2

Drawing No. Diagram V/A

Drawing No. Balancing Eco 38-2

Drawing No. Wirings ECP34-1L4

Drawing No. Wirings Type ECO 38-1SN/4

Drawing No. A5077 Rev.01 "Overall Dimensions Eco 38-N"

Drawing No. A5826 Rev.08 "Shaft ECO 38-N"

Drawing No. A5319 Rev.03 "Moments Of Inertia ECO 38-3LN/4"

Drawing No. A5297 (SCA1492) Rev.02 "Stator Windings ECO 38-3LN/4 (450)"

Drawing No. SCC0100 Rev.01 "Electrical Connection ECO Series"

Drawing No. 3004006773 (292381) Rev.00 "Data Sheet Specification ECO 38-3LN/4"

Drawing No. A5514 (SRP0114) Rev.00 "Rotor Windings"

Drawing No. UNI 6604-69 Rev.Dec.1969 "Keys"

Drawing No. A4053 Rev.04 "Shaft ECO 40"

Drawing No. A4778 Rev.03 " Overall Dimensions ECO 40"

Drawing No. A3483 Rev.08 " Moments Of Inertia ECO 40-1S/4"

Drawing No. A1039 (SCA1100/02) Rev.05 " Stator Windings ECO 40-1S/4"

Drawing No. 68655/6 (EB1110294/5) Rev.00 " Data Sheet Specification ECO 40-1S/4"

Drawing No. 6519 (SRP0041) Rev.00 " Rotor Windings ECO 40"

Drawing No. A4895 Rev.03, "ECO 38-3S/4 Protection IP23 Drawing"

Drawing No. A5825 Rev.07, "ECO 38-3S/4 Shaft"

Drawing No. A9185 Rev.02, "ECO 38-3S/4 Overall dimension"

Drawing No. SCA1495 Rev.02, "ECO 38-3S/4 Stator Windings"

Drawing No. SCC0100 Rev.02, "ECO 38-3S/4 Connections Diagram"

Drawing No. SPECIF\_EB1510370," ECO 38-3S/4 Technical Specification Sheet"

Drawing No. SRP0114 Rev.00, "ECO 38-3S/4 Rotor Winding"

Drawing No. UTP\_new version, ECO38 new version

Drawing No. ECO38-3S/4 Name plate

Drawing No. ECO38-3S/4 Rotor details

Drawing No. 3293 3 1 MECC ALTE SPA, Shaft Certificate iaw EN 10204

Drawing No. A3595 Rev.02, DISC SAE 6 1-2

Drawing No. A3598 Rev.02, DISC SAE 7 1-2

Drawing No. A3599 Rev.02, DISC SAE 8

Drawing No. A3600 Rev.02, DISC SAE 10

Drawing No. A3601 Rev.02, DISC SAE 11 1-2

Drawing No. A5510 Rev.07, Disc Assembly Scheme ECP 32

Drawing No. A5548 Rev.01, Disc Blocking Ring

Drawing No. A6165 Rev.03, Steel Spacer Ring for Flywheel 8-10

Drawing No. ECP32\_4B-moment of inertia, ECP32\_4B-moment of inertia

Drawing No. Nameplate ECO38-1L\_4 270kVA

Drawing No. Nameplate ECP32-3L\_4B 74kVA

Drawing No. Nameplate ECP34-1L\_4 119kVA

Type Test Report No. GE992175 dated 06 May 2008 in Italy

Type Test Report No. VE955546 dated 18 February 2008 in Italy

Type Test Report No. VE1053567 dated 10 September 2008 in Italy

Type Test Report No. VE2043953 dated 23 September 2011 in Italy

Type Test Report No. VE2037422 dated 07 September 2011 in Italy

Type Test Report No. BO2711355 dated 11 September 2014 in Italy

Type Test Report No. BO2999238 dated 01 October 2015 in Italy

Type Test Report No. BO3253343B (ECO38-1L/4) dated 19 December 2016 in Italy

Type Test Report No. BO3253343A (ECP32-3L/4B) dated 12 December 2016 in Italy

Type Test Report No. BO3242099 (ECP34-1L/4) dated 21 November 2016 in Italy

Mecc Alte Test Report No. ECO381S4A 3004061134 U0433016 U043017 dated 19 April 2022 in UK

### **Term of Validity**

This Product Design Assessment (PDA) Certificate remains valid until 03/Jan/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.

### **ABS Rules**

2023 Rules for Conditions of Classification, 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2023 Marine Vessels Rules 4-8-3/3

2023 Rules for Conditions of Classification – Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2023 Mobile Offshore Unit Rules, 6-1-7/5

2023 Facilities on Offshore Installations 3-6/7

### **International Standards**

NA

**EU-MED Standards**

NA

**National Standards**

NA

**Government Standards**

NA

**Other Standards**

NA



A handwritten signature in dark ink, appearing to read "Joseph W. Wilson".

Corporate ABS Programs  
American Bureau of Shipping  
Print Date and Time: 05-Jan-2023 5:34

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.