

# CROATIAN REGISTER OF SHIPPING



Certificate No. 03-001876/031579

## TYPE APPROVAL CERTIFICATE

This is to certify that this product complies with the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products.

TYPE AND DESCRIPTION OF PRODUCT:

**THREE-PHASE EXPLOSION PROOF ASYNCHRONOUS MOTORS**

**TYPE 5ABT 71-112**

MANUFACTURER:

**KONČAR-MES Ltd.**  
Fallerovo šetalište 22  
10000 Zagreb  
**CROATIA**

THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

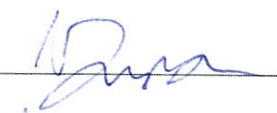
CRS RULES FOR THE CLASSIFICATION OF SHIPS, PART 12 - ELECTRICAL EQUIPMENT  
IEC 60034 series, IEC 60079-0 (2018), IEC 60079-1 (2014), IEC 60079-7 (2015)/A1(2018), IEC 60079-31 (2014).

FURTHER DETAILS OF THE PRODUCT AND CONDITIONS FOR CERTIFICATION ARE GIVEN OVERLEAF.

APPROVAL IS VALID UNTIL: **2026-03-13**

Place and date: Split, 2022-03-14



  
for Marinko Popović, dipl.ing.

NOTE: This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Croatian Register of Shipping of any modification or changes to the product in order to obtain a valid certificate.

**DETAILED PRODUCT DESCRIPTION:**

Product: Three-phase cage asynchronous motors with aluminium frame  
Design: Explosion proof asynchronous motors totally enclosed in marine design  
Type: 5ABT 71-80-90-100-112  
Rated voltage: to 750 V  
Maximum rated current: to 8,7 A  
Rated frequency: 50 / 60 Hz  
Synchronous speed: 750 to 3600 RPM  
Number of poles: 2 to 8  
Duty type: S1-S10  
Insulation class: F-H (with temperature rise: B class)  
Ambient temperature: -20°C to +80°C  
Rated power: at S1 duty to 4,5 kW  
Temperature rise of windings: to 90°K  
Degree of mechanical protection: IP 55, IP 65, IP 66, IP 67  
Efficiency class: IE1, IE2, IE3

**APPLICATION / LIMITATIONS:**

Motors are accepted for installation on all vessels classed by CRS.  
Ex-certification is not covered by this certificate.

**TYPE APPROVAL DOCUMENTATION:**

KONČAR-MES Catalogue Flameproof motors ver. 02/2020  
KONČAR-MES Technical description Nr. A69192 – Annex 7 Edition 2 dated 02/07/2021 and belonging drawings and test reports  
KONČAR-INSTITUT test report Nr. 21572-05/624 EI and Nr. 21572-05/625 EI  
KONČAR-MES test reports Nr. A15490/A688998  
EU-Type examination Certificate number: CESI 05 ATEX 110X/07 dated 12/07/2021

**MARKING OF PRODUCT:**

In accordance with IEC 60034-1

Additional marking:

II 2G Ex db IIB T3 Gb or II 2G db eb IIB T3 Gb

II 2G Ex db IIC T3, T4, T5, T6 Gb or II 2G Ex db eb IIC T3, T4, T5, T6 Gb

II 2D Ex tb IIIC T160°C, T130°C, T100°C Db

**CONDITIONS FOR CERTIFICATION:**

No

