


**POTVRDA O TIPNOM ODOBRENJU**  
**TYPE APPROVAL CERTIFICATE**

|        |                  |
|--------|------------------|
| Br /No | 03-001629/031352 |
|--------|------------------|

Potvrđuje se da je ovaj proizvod, u skladu s Pravilima za klasifikaciju brodova, Dio 1. - Opći propisi, Odjeljak 3. - Tipno odobrenje proizvoda, odobren za ugradnju na brodove i postrojenja pod nadzorom Hrvatskog registra brodova.  
*This is to certify that this product, on the basis of the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products, is approved for use on board ships and installations under supervision of the Croatian Register of Shipping.*

**TIP I OPIS PROIZVODA:**

TYPE AND DESCRIPTION OF PRODUCT:

**TROFAZNI ASINKRONI KAVEZNI MOTOR BRODSKE ZATVORENE IZVEDBE**  
**SHIP'S USE THREE-PHASE ASYNCHRONOUS CAGE MOTORS CLOSED CONSTRUCTION**
**5 ABT 71-112****U PROTUEKSPLOZIVNOJ ZAŠTITI OZNAKE:**

IN EXPLOSION PROTECTION MARKING:

|  |           |  |
|--|-----------|--|
| <b>II 2G Ex db IIB T3 Gb;</b>              | <b>or</b> | <b>II 2G Ex db eb IIB T3 Gb</b>              |
| <b>II 2G Ex db IIC T3, T4, T5, T6* Gb;</b> | <b>or</b> | <b>II 2G Ex db eb IIC T3, T4, T5, T6* Gb</b> |
| <b>II 2D Ex tb IIIC T130°C, T160°C Db</b>  |           |  |

(\*not for all motors)

**PROIZVOĐAČ:**

MANUFACTURER:

**KONČAR-MES d.d.**

Fallerovo šetalište 22

10000 ZAGREB • HRVATSKA - CROATIA

**PROIZVOD UDOVOLJAVA SLIJEDEĆIM PRAVILIMA/PROPISIMA:**

THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

**Hrvatski registar brodova: PRAVILA ZA KLASIFIKACIJU BRODOVA, ELEKTRIČNA OPREMA, DIO 12**  
**Croatian Register of Shipping: RULES FOR THE CLASSIFICATION OF SHIPS, ELECTRICAL EQUIPMENT, PART 12**
**IEC 60034 series, IEC 60072****EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-31****DETALJI O PROIZVODU I UVJETIMA CERTIFIKACIJE DANI SU NA POLEDINI.**

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

**ODOBRENJE VRIJEDI DO:**

2022-03-13

APPROVAL IS VALID UNTIL:

**Mjesto i datum:**

Split, 2018-05-03

Place and date:

M.P.

(Seal)

Marinko Popović, dipl.ing.

**NAPOMENA: Ova potvrda nije valjana ako se proizvod ili način njegove proizvodnje promijenio u odnosu na tipno ispitani proizvod. Proizvođač treba obavijestiti Hrvatski registar brodova o bilo kojoj izmjeni na proizvodu kako bi ishodio valjanu potvrdu.**
*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.*

**PODROBNJI OPIS PROIZVODA:**  
*DETAILED PRODUCT DESCRIPTION:*

Type: 5 ABT 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 56, IP 66, IP67  
Efficiency class: IE1, IE2, IE3

**PODRUČJE PRIMJENE / POSEBNI GRANIČNI UVJETI:**  
*APPLICATION / LIMITATIONS:*

**Motori su namijenjeni za ugradnju na brodove, u skladu s HRB Pravilima za klasifikaciju brodova.**  
*Motors are intended for ship's use according to CRS Rules for Classification of Ships.*  
**Ovaj certifikat ne pokriva ex-certifikaciju.**  
*Ex-certification is not covered by this certificate.*

**DOKUMENTACIJA ZA TIPNO ODOBRENJE:**  
*TYPE APPROVAL DOCUMENTATION:*

A69192 (Annex 6), A69192 rev.A, A69192-S rev.B, A69192-11 rev.B, A69192-12 rev.B, A69192-13 rev.B,  
A69192-14 rev.B, A69192-15 rev.B, A69192-2 rev.A, A69192-31 rev.B, A69192-32 rev.B, 122016/6C4 rev.C,  
A69192-5 rev.B, A69192-6 rev.C, A49192/6A rev.C, A67850 rev.B

**Odobreni:** 2018-05-03  
*Approved:*

**Izveštaj ispitivanju:** "KONČAR" – INSTITUT 21572-05/624 EI  
*Specific test report:* "KONČAR" – MES A15490 A/A688998

"12 TR 0515" dated 18/01/2013  
"13 TR 0190" dated 10/04/2013  
"13 TR 0218" dated 13/05/2013

**Supplementary EU-Type examination Certificate number: CESI 05 ATEX 110X/06 dated 24/02/2017**

**OZNAČAVANJE PROIZVODA:**  
*MARKING OF PRODUCT:*

**U skladu s normom IEC 60079-0**  
*In conformity to standard IEC 60079-0*

**UVJETI ZA CERTIFIKACIJU:**  
*CONDITIONS FOR CERTIFICATION:*

Ne / No