



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

Br /No 03-001478/031183

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 BRODSKI MOTORI U  
 PROTUEKSPLOZIJSKOJ IZVEDBI**

**7ABT 132-315**

*SHIP'S USE THREE-PHASE ASYNCHRONOUS CAGE EXPLOSION PROOF MOTORS*

**PROIZVOĐAČ:**

*MANUFACTURER:*

**KONČAR-MES d.d.**

*Fallerovo šetalište 22*

**10000 ZAGREB • HRVATSKA - CROATIA**

**PROIZVOD UDOVOLJAVA SLJEDEĆIM PRAVILIMA/PROPISIMA:**

*THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:*

**RULES FOR THE CLASSIFICATION OF SHIPS: PART 12- ELECTRICAL EQUIPMENT**

**IEC 60034 series; IEC 60092-301; EN 60079-0(2012); EN 60079-1(2008); EN 60079-7(2007);  
 EN 60079-31(2014)**

**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: 2019-10-06**

*APPROVAL IS VALID UNTIL:*

**Mjesto i datum: Split, 2015-10-06**

*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:**

- 3 fazni kavezni indukcionni brodski motori/ 3 phase cage Induction MARINE motors – totally enclosed
- Tipovi zaštite/ Type of protection:  
 EX d IIC (motor i spojna kutija “d” ili motor “d” sa stalno spojenim kabelom/ EX d IIC (motor and terminal box “d” or motor “d” with permanently connected cables)  
 EX de IIC (motor “d” i spojna kutija “e”)/ Ex de IIC (motor “d” and terminal box “e”)
- Serie 7ABZ/ Series 7ABZ
- Hlađenje: zrak – metoda hlađenja IC411/ Cooling: Air – Cooling method IC 411
- Rotor: kratkospojini/ Rotor: Squirrel cage
- Napajanje – nazivni napon: 220 do 690 V/ Power supply – Rated voltage: 220 to 690 V
- Frekvencije: 50 Hz i 60 Hz/ Frequency: 50 Hz and 60 Hz
- Sinkrona brzina: 750 do 3600 RPM/ Synchronous speed: 750 to 3600 RPM
- Broj polova: 2 do 8/ Number of poles: 2 to 8
- Tip službe S1 do S10 u skladu s IEC normom/ Duty type S1 to S10 according to IEC standard
- Klasa izolacije: F-H/ Insulation class: F-H
- Temperaturna klasa: B/ Temperature rise class: B or F
- Temperatura okoline: -20°C do +60°C/ Ambient temperature: -20°C to +60°C
- Nazivna snaga za S1 službu: 4 kW do 225 kW/ Rated power at S1 duty: 4 kW to 225 kW
- Stupanj mehaničke zaštite: IP55-IP56-IP65-IP66/ Degree of protection: IP55-IP56-IP65-IP66

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

**Motori su namijenjeni za ugradnju na brodove u skladu s HRB Pravilima za klasifikaciju brodova.**  
*The motors intended for ship's use according to CRS Rules for Classification of Ships.*

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

Technical description N° A524200 Annex 7 dated 24.03.15.; A51420/11E; A51420/12E, A52420/A; A52420/B; A61903/E, A69129-5; A69192-6; Ex OB7.3.7.5/7; GREASE TECH. DATA; 122016/4A; 122016/4B; 122016/4F; 122016/4H; 122016/6A; 122016/6C4; 122016/7A1, 122016/7A2; 122016/7A3; 122016/7A4; 122016/7A5; 122016/7A7; 122016/7A8; 122016/7A9; 122016/7B1; 122016/7B2; 122016/7B3; 122016/7B4; 122016/7B5; 122016/7B6; 122016/7B7; 122016/7B8; 122016/7C2; 122016/7C3; 122016/7A6; A51420/8E; A51420/9E

Ex-Agencija test report HREx T 10.003x  
 CESI examination certificate CESI 03 ATEX 280X

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

7ABT 132S; 7ABT 132SA; 7ABT 132SB; 7ABT 132M; 7ABT 132MA; 7ABT 132MB; 7ABT 160M;  
 7ABT 160MA; 7ABT 160MB; 7ABT 160L; 7ABT 180M; 7ABT 180L; 7ABT 200L; 7ABT 200LA;  
 7ABT 200LB; 7ABT 225S; 7ABT 225M; 7ABT 250M; 7ABT 280S; 7ABT 280M; 7ABT 315S; 7ABT 315M; 7ABT  
 315LA; 7ABT 315LB

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

**Za el. strojeve bitnih službi mora se izvršiti pojedinačno ispitivanje u skladu s radnim uputama HRB QW-48.**  
*For el. machines intended for essential services shall be carried out routine test according to CRS working instruction QW-48.*

Raščlana

12.01.02

Zamjenjuje potvrdu

03-001469/031183