

**POTVRDA O TIPNOM ODOBRENJU**
TYPE APPROVAL CERTIFICATE

Br /No 03-001303/030968

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:

Marine Propulsion Engine Remote Control System**Cruise Command 785CE**

PROIZVOĐAČ: **ZF Marine Electronics, LLC**
MANUFACTURER: 12125 Harbour Reach Dr.
Mukilteo, WA 98275
United States of America (USA)



PROIZVOD UDOVOLJAVA SLIJEDEĆIM PRAVILIMA/PROPISIMA:
THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

Hrvatski registar brodova: **Pravila za klasifikaciju brodova,**
Dio 9. – Strojevi, Dio 13. – Automatizacija
Croatian Register of Shipping: Rules for the classification of ships,
Part 9. – Machinery, Part 13. – Automation
IACS UR E10 rev.4 May 2004

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: **2016-04-04**
APPROVAL IS VALID UNTIL:

Mjesto i datum: Split, 2012-04-04
Place and date:

M.P. _____
(Seal)

Goran Begović, 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:

Sustav upravljanja porivom, jedna ručica za upravljanje brzinom i spojkom sastoji se od:
Propulsion control system provides single lever control of Speed and Shift consists of:

- **Processor/Actuator** 785CE
- **Control Heads** MC2000-2, MC2000-4, 450-1&2/460-1&2

PODRUČJE PRIMJENE / POSEBNI GRANIČNI UVJETI:
APPLICATION / LIMITATIONS:

Rekreacijska plovila i manji brodovi do 90m duljine s dvostrukim sustavom poriva.
Odobrenje vrijedi za brodove kojima se dodjeljuje klasa automatizacije: AUT 1, AUT 2 i AUT 3.
Pleasure crafts and smaller commercial vessels up to 90m in length with dual propulsion.
Approval also valid for ships to be granted with class notations: AUT 1, AUT 2 and AUT 3.

DOKUMENTACIJA ZA TIPNO ODOBRENJE:
TYPE APPROVAL DOCUMENTATION:

- *Drawings 11432, by ZF Mathers, LLC, dated 08-12-01,*
- *ACME Testing Co. – Test Report 2001024, dated 27-02-2001,*
- *ACME Testing Co. – Test Report 2003045, dated 11-06-2003,*
- *Underwriters Laboratories Inc. – Environmental Test Report 0101-04A, dated 03-02-2002,*
- *ZF Marine Electronics, LLC – Qualitative Failure Analysis ENG-122 Ver.2.0, dated 06-06-06,*
- *ACME Testing Co. – Compass Safe Distance Testing Report 2004091, dated 19-08-2004.*

OZNAČAVANJE PROIZVODA:
MARKING OF PRODUCT:

U skladu s IEC60945 – Označavanje i identifikacija (Naziv proizvođača i tip proizvoda, serijski broj, datum proizvodnje, sigurna udaljenost od magnetskog kompasa, napon napajanja, programska verzija....)
In accordance with IEC60945 – Marking and identification (The Manufacturer and Type Designation of the product, serial number, date of manufacture, safe distance to magnetic compass, supply voltage, software version...).

UVJETI ZA CERTIFIKACIJU:
CONDITIONS FOR CERTIFICATION:

Za vrijeme pregleda, nakon instalacije potrebno je provjeriti ispravnost konfiguracije i postavki za svaku primopredaju u nazočnosti Registra.
Programske promjene treba zapisati za sve vrijeme upotrebe sustava na brodu. Zapis o programskim promjenama treba dostaviti HRB-u na odobrenje prije primjene.

NAPOMENA:

Sustav upravljanja sa samo jednom porivnom jedinicom može se prihvatiti jedino u kombinaciji s posebnim back-up sustavom upravljanja odobrenog tipa.

Correct configuration and set up for each delivery to be tested during commissioning, after installation, under the supervision of a Society Surveyor.

All changes in software are to be recorded as long as the system is in use on board. The records of all changes are to be forwarded to CRS for evaluation and approval before being installed.

NOTE:

The control for propulsion engine, with single engine application, is acceptable in combination with an additional back-up approved means for independent operation.

Raščlana

13.01.00

Zamjenjuje potvrdu

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