

**POTVRDA O TIPNOM ODOBRENJU**
TYPE APPROVAL CERTIFICATE**Br /No** **03-001279/030951**

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:***Electronic Engine Control Module for
Caterpillar Engines
ADEM IV (A4:E4v3.1)****PROIZVOĐAČ:**
*MANUFACTURER:***DELPHI DELCO ELECTRONICS DE MEXICO S.A. de C.V.*****Delphi Electronics & Safety***

Carretera A, Matamoros KM 13.5

Parque Industrial Reynosa & Parque Industrial de Norte

Reynosa - Tamaulipas

88747

*MEXICO***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***PODRUČJE PRIMJENE/POSEBNI GRANIČNI UVJETI:***FIELD OF APPLICATION/SPECIAL OPERATIONAL LIMITS:*

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

Approval also valid for ships to be granted with class notations: AUT 1, AUT 2 and AUT 3.

ODOBRENJE VRIJEDI DO: **2015-11-17***APPROVAL IS VALID UNTIL:***UZ UVJETE NAVEDENE NA POLEDINI***SUBJECT TO CONDITION OVERLEAF***Mjesto i datum:** Split, 2011-11-17*Place and date:***M.P.***(Seal)*

Goran Begović, dipl.ing.

Odobrenje je valjano ako je ovaj proizvod izveden prema slijedećoj dokumentaciji:
The approval is valid if this product is manufactured in accordance with the following documentation:

PRODUCT DESCRIPTION:

ADEM IV - Engine Control Module A4:E4v3.1	C175 ACERT (Prop.)
System level schematics (with sensors and I/O)	263-6560_1
	263-6560_2
Control Gp. - ADEM IV	371-6444 380-1048
Air Cooled ECM Assembly Drawing	28087463
Air Cooled Housing	23003066
Schematic	24063410 (base)
	28087483 (chart)
Schematic - Power Supply	28037326 (base)
	28037327 (chart)
Board Assembly	28087483 (chart)
Board Assembly - Power Supply	28037327 (chart)
ECM Software Version	A4E4v3 December 2006
ECM Suffix Code	MC

TYPE APPROVAL DOCUMENTATION:

- *ADEM IV – (A4:E4v3) Electronic Control Module - Product Information Sheet,*
- *EC-29 Marine Society Test Plan for ADEM IV, Ver. 1.1- September 01,2006,*
- *Environmental Test Reports – Elite 37999-01,03,05,07,09,11,13,17,20,*
- *EMC Test Report – Elite 37724-02, March 26 – April 06, 2007,*
- *Performance Test Report with C175 - April 02-03, 2007,*
- *Witness Test Sign-off Sheets, April 04-06, 2007,*
- *A4E4v3.0 Pilot III to Prod I Whitepaper (Design differences), Version 1.0 – July 06, 2009,*
- *DELPHI Validation Testing Summary,*
- *CATERPILLAR Whitepaper Ver. 1.0 - 10/31/2011 showing the changes, dated November 7, 2011,*
- *ELITE Engineering Test Report for A4:E4v3.1 - No. 1102580-01.*

CLAUSE FOR APPLICATION SOFTWARE CONTROL:

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. Major changes in the software are to be approved before being installed in the computer.

NOTE:

Engines for single propulsion vessels and engines for emergency generator, shall be equipped with two ECM modules.

Ovo odobrenje ne isključuje zahtjev za nadzorom tijekom izradbe proizvoda kod proizvođača, u skladu s gore navedenim Pravilima.
This approval does not eliminate the need for inspection during manufacturing of the product into manufacturers shop in compliance with a.m. Rules.

Račlana

13.01.01

Zamjenjuje potvrdu

03-001200/030863