

**POTVRDA O TIPNOM ODOBRENJU**
TYPE APPROVAL CERTIFICATEBr /No **02-002539/024542**

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:

Brodski reduktori za dizelski poriv**modeli DMT25AL, 50A, 90A, 100 HL, 100IV, 110A, 140H, 135HL, P5100***Marine Reduction Gearboxes for Diesel Propulsion**models DMT25AL, 50A, 90A, 100HL, 100IV, 110A, 140H, 135HL, P5100***PROIZVOĐAČ:**

MANUFACTURER:

1367-13, Namgang-ro, Jinju
Gyeongnam
Korea**PROIZVOD UDOVOLJAVA SLJEDEĆIM PRAVILIMA/PROPISIMA:**

THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

HRB: Pravila za klasifikaciju brodova, Dio 9. - Strojevi.*CRS: Rules for the classification of ships, Part 9. - Machines.***DETALJI O PROIZVODU I UVJETIMA CERTIFIKACIJE DANI SU NA POLEĐINI.**

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

ODOBRENJE VRIJEDI DO:**2023-01-08**

APPROVAL IS VALID UNTIL:

Mjesto i datum:

Split, 2019-01-08

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.

PODROBNIJI OPIS PROIZVODA:
DETAILED PRODUCT DESCRIPTION:

Brodski reduktori za poriv sa ugrađenom hidrauličkom spojkom, sa prekretnom
Marine reduction gearboxes for propulsion with built-in hydraulic clutches, and with reversing stage

PODRUČJE PRIMJENE / POSEBNI GRANIČNI UVJETI:
APPLICATION / LIMITATIONS:

Odobreno za pogonski faktor $K_A = 1,50$.
The approval status is based on application factor 1,50.

Model	Power, kW	RPM	Torque, Nm	Reduction Ratios
DMT 25AL	107.8	3500	294	1.64
	89.9		245	2.07, 2.52, 2.96, 3.32
DMT 50A	169.4	3000	539	1.61
	154.0		490	2.06
	135.6		431	2.45
	123.2		392	2.82
	110.9		353	3.12
	92.4		294	3.46
DMT 90A	246.5	3000	785	1.61
	231.1		736	2.06
	209.5		667	2.45
	178.7		569	2.82
	169.4		539	3.12
	154.0		490	3.46
DMT 100HL	274.2	3000	872.8	4.07, 4.50, 4.95
	265.0		843.4	5.29
	231.1		735.5	5.95
DMT 100IV	423.0	4000	1010	1.21, 1.54, 1.84, 2.12, 2.52
	398.0		951	2.74
	369.0		882	3.26
	328.0		784	3.76
DMT 110A	316.3	2800	1079	1.77
	287.5		981	2.09
	253.0		863	2.42, 2.82, 3.19
	186.9		637	3.81
DMT 140H	303.9	2800	1037	1.97, 2.57, 3.03, 3.46
DMT 135HL	376.7	2500	1284.7	4.07
	359.4		1225.9	4.50
	330.7		1127.8	4.95
DMT P5100	431.4	2500	1647.8	1.47, 1.76, 1.93
	385.1		1471.1	2.48
	295.2		1127.8	3.08
	199.2		761.0	3.46
	111.0	1800	585	Live P.T.O 1.00, 0.79

DOKUMENTACIJA ZA TIPNO ODOBRENJE:
TYPE APPROVAL DOCUMENTATION:

Nacrti i proračuni odobreni od HRB dopisom:
Drawings and calculations approved by CRS with letter:

1556/TSE/IA/024388 (2018-06-26)
 30/TSE/IA/024542 (2019-01-08)

Izveštaj o tipnom ispitivanju:
Type test report:

2017-01-16

OZNAČAVANJE PROIZVODA:
MARKING OF PRODUCT:

- **oznaka proizvođača** - *manufacturer's mark*
- **serijski broj** - *serial No.*
- **mjesto i godina izrade** - *location and year of manufacturing*
- **oznaka HRB** - *CRS mark*

UVJETI ZA CERTIFIKACIJU:
CONDITIONS FOR CERTIFICATION:

Proizvođač mora organizirati prisustvo inspektora Registra pregledu i ispitivanju u tvornici ili se mora obaviti odgovarajući pregled ako se odobri alternativni način prihvata. HRB Potvrda za svaki pojedini reduktor izdat će se nakon zadovoljavajućeg završetka postupka.

The manufacturer shall make arrangements for the CRS Surveyor to attend the relevant tests and examinations at manufacturer's works or to perform the relevant audits in case an alternative survey scheme has been approved. Relevant CRS certificate for each particular reduction gearbox will be issued after satisfactory completion of the procedure.