

**POTVRDA O TIPNOM ODOBRENJU**
TYPE APPROVAL CERTIFICATEBr /No **02-001698/023573**

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:

ULTRAVIOLETNI STERILIZATOR VODE **TIP** **REP-1K;REP-1L;REP-2L;REP-3L;REP-4L;REP-10L**
ULTRAVIOLET WATER STERILIZER **TYPE****PROIZVOĐAČ:**
MANUFACTURER:**RAYDAR AB**Datavagen 41
SE-436 32 ASKIM

SWEDEN - ŠVEDSKA

PROIZVOD UDOVOLJAVA SLIJEDEĆIM PRAVILIMA/PROPISIMA:

THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

HRB: Pravila za statutarnu certifikaciju pomorskih brodova, Dio 20. – Zaštita pri radu i smještaj posade.**CRS:** Rules for statutory certification of sea-going ships, Part 20. – Protection at work and crew accommodation.**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: **2018-03-24**

APPROVAL IS VALID UNTIL:

Mjesto i datum: Split, 2014-03-24

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:

Sterilizacija vode namijenjene za piće, kuhanje i pranje proizvedene u isparivaču s tlakom manjim od atmosferskog.

Sterilisation of water intended for drinking, cooking and washing purposes produced by a fresh water generator operating at a pressure less than atmospheric.

Maksimalni radni tlak 6 bar
Maximum working pressure 6 bar

Tip <i>Unit type</i>	Protok <i>Flow rate</i>	Snaga UV lampe <i>UV Lamp effect</i>	Tip <i>Unit type</i>	Protok <i>Flow rate</i>	Snaga UV lampe <i>UV Lamp effect</i>
REP-1K	1,4 m ³ /h	40 W	REP-3L	8,1 m ³ /h	195 W
REP-1L	2,7 m ³ /h	65 W	REP-4L	11,0 m ³ /h	260 W
REP-2L	5,4 m ³ /h	130 W	REP-10L	27,0 m ³ /h	650 W

PODRUČJE PRIMJENE / POSEBNI GRANIČNI UVJETI:
APPLICATION / LIMITATIONS:

- Jedinica mora biti ugrađena u skladu s odobrenom dokumentacijom i uputama.**
Unit is to be fitted in accordance with approved drawings and detailed instructions.
- Priručnik za posluživanje, održavanje i ugradnju mora biti isporučen uz svaku jedinicu.**
Installation, operating and maintenance instructions are to be supplied with each unit.
- Sterilizator mora biti smješten u sustav slatke vode između tanka i mjesta potrošnje, što bliže mjestu potrošnje.**
Sterilizer is to be fitted in fresh water system between the storage tanks and the supply points as near as possible to the latter.
- Na uređaju ne smije biti predviđena mimohodna linija.**
A by-pass line is not to be provided to the unit.
- Predvidjeti sustav uzbunjivanja, napajan od nezavisnog sustava, koji se uključuje u slučaju nestanka napajanja ili kvara jedinice, uzrokujući zatvaranje magnetskog ventila.**
Alarm system, supplied from independent system, is to be provided to operate in case of power failure or any malfunction of the unit, causing shutting of solenoid operated valve.
- Za sprječavanje nedovoljnog tretiranja vode mora se predvidjeti automatski magnetski ventil, povezan s UV mjerlačem intenziteta. Minimalna energija radijacije je 16 mJ/cm².**
Automatic fail-safe solenoid valve coupled with UV intensity meter is to be provided to stop the flow of water in case of insufficient treatment of water. Minimum radiant energy is 16 mJ/cm².
- Predvidjeti ventil automatske kontrole protoka, koji ograničava protok u svim radnim uvjetima na vrijednost manju od nominalne.**
Automatic flow control valve is to be provided to restrict the flow under rated capacity of the unit under all operating conditions.
- Mjerač UV zračenja mora se predvidjeti za kontinuirano mjerenje istog.**
Ultraviolet intensity meter has to be provided for continuous measuring of ultraviolet radiation.
- Na upravljačkom mjestu moraju biti ugrađene vodonepropusne brtve. Čepovi i priključci moraju biti izvedeni u IP54 zaštiti. Mehanička zaštita upravljačkog ormara mora biti izvedena prema IP44 standardu.**
Watertight glands are to be installed on the control box. Plugs and sockets are to be in compliance with IP54 standard. Mechanical protection of the control box is to be in compliance with IP44 standard.
- Na brodovima s oznakom automatizacije, signalizacija UV sterilizatora mora biti priključena na sustav uzbunjivanja strojarne.**
On ships with class character denoting automation level, signalling of UV sterilizer has to be incorporated into the engine room alarm system.
- Nakon ugradnje u sustav slatke vode na brodu, u skladu s odobrenom shemom, UV sterilizator mora biti ispitan u prisustvu eksperta Hrvatskog registra brodova.**
Upon installation on board, in fresh water system, in accordance with the approved schematic diagram, UV sterilizer is to be examined in the presence of the surveyor of Croatian register of shipping.
- Potvrda o tipnom odobrenju za ultravioletni sterilizator vode tip REP-1K; REP-1L; REP-2L; REP-3L; REP-4L; REP-10L izdata je na osnovu Potvrde DEPARTMENT OF TRADE, LONDON od 14.07.1980.g. i pregleda rezultata ispitivanja i dokumentacije na osnovu koje je gore navedena potvrda izdata.**
Type approval certificate for Ultraviolet water sterilizer Type REP-1K; REP-1L; REP-2L; REP-3L; REP-4L; REP-10L has been issued on the basis of Certificate issued by DEPARTMENT OF TRADE, LONDON on 14th July 1980 and survey of testing results and documentation, on the basis of which the above mentioned certificate has been issued.

DOKUMENTACIJA ZA TIPNO ODOBRENJE:
TYPE APPROVAL DOCUMENTATION:

Nacrti: R4-306 odobreni dopisom br. 770/AP/1141/402804 od 1.11.1982.
Drawings: R3-214 approved with letter No. 770/AP/1141/402804 of 1st November 1982.

OZNAČAVANJE PROIZVODA:
MARKING OF PRODUCT:

- | | |
|----------------------|-------------------------|
| - oznaka proizvođača | - manufacturer's mark |
| - serijski broj | - serial No. |
| - godina izrade | - year of manufacturing |
| - tip | - type |

UVJETI ZA CERTIFIKACIJU:
CONDITIONS FOR CERTIFICATION:

-

Račlana

08.28

Zamjenjuje potvrdu

02-001391/022881