

# TYPE APPROVAL CERTIFICATE

Certificate No: TAE000031J Revision No: 1

This is to certify:

That the Power supply unit

with type designation(s) Skylla series

Issued to

Victron Energy B.V.

Almere, Flevoland, Netherlands

is found to comply with

DNV rules for classification - Ships, offshore units, and high speed and light craft

## Application:

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Voltage output 24 V DC

Power 720 to 2400 VA

Temperature class B Vibration class A Humidity class B Degree of protection A

Issued at Høvik on 2023-05-22

This Certificate is valid until 2028-03-02.

DNV local unit: Netherlands CMC

Approval Engineer: Nicolay Horn



for DNV

Digitally Signed By: Elter, Frederik Tore Location: DNV Høvik, Norway

Frederik Tore Elter Head of Section

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This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



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## **Product description**

Fully automatic charger for 24 V batteries according to the IUoUo characteristic.

Type	Input current	Recommended battery	Maximum output
	(at 230 V)	capacity	current
Skylla-TG 24/30 GMDSS	4 A at 30 V / 30 A	100 - 200 Ah	30 A
Skylla-TG 24/50 GMDSS	4.4 A at 230 V AC	100 - 200 Ah	50 A
Skylla-TG 24/80*	6.4 A at 230 V AC	300 - 600 Ah	80 A
Skylla-TG 24/100-G*	8.8 A at 230 V AC	500 - 1000 Ah	100 A

Input voltage :	230 V AC (range 185-265 V AC)
मिष्यक्षेप्रधेषेख्यु Boost charge voltage:	28.5 V DC
Floate charge voltage :	26.5 V DC
Output voltage range :	24 - 33 V DC
Ingress protection :	IP21
Software version :	020114.HEX
Environmental Classes :	Temperature: B, Humidity: B, Vibration: A
EMC:	Class B / Class A*

### Application / limitation

Only the types Skylla-TG 24/30 and Skylla-TG 24/50 comply with the EMC requirements in DNV-CG-0339 August 2021.

## Type Approval documentation

User manuals: TG 24/30+24/50 TI01170gb dated 2004-02-12.TG 24/80+24/100 TI02170 dated 2004-09-30

Test reports: TÛV Rheinland EPS B.V. no. 07051401.env Rev. 2.0 dated 2008-01-22

NL22S48R 001 dated 2022-05-13 & NL225U2N 002 dated 2022-04-12

#### Tests carried out

Guidelines for the Performance of Type Approvals, Chapter 2, Edition 2003. DNV-CG-0339 August 2021 (EMC only)

#### Marking of product

Victron Energy B.V- model no. - charger input - charger output.

#### Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- ☐ Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

**END OF CERTIFICATE** 

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