

**TYPE APPROVAL CERTIFICATE****This is to certify:****That the Power supply unit**with type designation(s)  
**Skylla series**

Issued to

**Victron Energy B.V.**  
**Almere, Netherlands**

is found to comply with

**DNV GL 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 GL.**

<b>Voltage output</b>	<b>24 V DC</b>
<b>Power</b>	<b>720 to 2400 VA</b>
<b>Temperature class</b>	<b>B</b>
<b>Vibration class</b>	<b>A</b>
<b>Humidity class</b>	<b>B</b>
<b>Degree of protection</b>	<b>A</b>

Issued at **Høvik** on **2018-08-17**for **DNV GL**This Certificate is valid until **2023-03-02**.DNV GL local station: **Rotterdam, Product Certification /Verification**Approval Engineer: **Nicolay Horn****Marta Alonso Pontes**  
**Head of Section**

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.



Job Id:  
Certificate No:  
Revision No:

## Name and place of manufacturer

IRIICHI (M) Sdn. Bhd.13600 Prai, Penang  
MALAYSIA

## Product description

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

Type	Input current (at 230 V)	Recommended battery capacity	Maximum output current
Skylla-TG 24/30	4 A at 30 V / 30 A	100 – 200 Ah	30 A
Skylla-TG 24/50	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)
Frequency 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

## 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: TÜV Rheinland EPS B.V. no. 07051401.env Rev. 2.0 dated 2008-01-22

## Tests carried out

Guidelines for the Performance of Type Approvals, Chapter 2, Edition 2003

## 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