

Victron Energy B.V.

Almere Haven

The quality management system of **Victron Energy B.V.** and the application thereof complies with the requirements as stipulated in the standard:

NEN-EN-ISO 9001:2015

Evaluation of the quality management system took place in accordance with TÜV Nederland's certification regulations for the field of application:

**Development, delivery and repair of chargers, inverters, converters,
and electrical devices.**

This certification is subject to annual evaluation by TÜV Nederland.

Registration number: 24574/2.2
Start date certificate: 16-07-2018
Certificate valid until: 06-07-2021
Date of first certificate: 06-07-2015
Date audit: 05-04-2018
Previous certificate valid until: 06-07-2018

Managing Director
Mr. E.W.A.C. Franken



THE NETHERLANDS
(N E D E R L A N D)

COMMUNICATION

Concerning⁽¹⁾:

- approval granted
- ~~approval extended~~
- ~~approval refused~~
- ~~approval withdrawn~~
- ~~production definitely discontinued~~

of a type of ~~electrical~~/electronic sub-assembly⁽¹⁾ with regard to Regulation number 10.**Approval number: E4-10R-053543****Extension number: 00**

1. Make (trade name of manufacturer) : Victron Energy B.V.
2. Type and general commercial description(s) : Inverter/Charger
Quattro 24/5000/120-100/100 230V
Identical products are:
Multiplus 24/5000/120-100 230V
Phoenix Inverter 24/5000 230V
3. Means of identification of type, if marked on the ~~vehicle/component~~/ separate technical unit⁽¹⁾ : Typeplate on enclosure
- 3.1. Location of that marking : Front Side Product
4. Category of vehicle : All
5. Name and address of manufacturer : Victron Energy B.V.
6. In the case of components and separate technical units, location and method of affixing of the approval mark : Front Side Product



Approval number: E4-10R-053543

Extension number: 00

7. Address(es) of assembly plant(s) : [Redacted]
8. Additional information (where applicable) : see Appendix below
9. Technical service responsible for carrying out the tests : TÜV Rheinland Nederland B.V.
10. Date of test reports : November 30, 2015 / April 30, 2014
11. Number of test report : 15080404.a01 / 13091801.a06
12. Remarks (if any) : see Appendix
13. Place : Zoetermeer
14. Date : 04-AUG-2016
15. Signature :



L. Vellekoop

16. The index to the information package lodged with the approval authority, which may be obtained on request, is attached.
17. Reasons for extension : Not applicable

⁽¹⁾ Strike out what does not apply.

APPENDIX

to type-approval communication form number: E4-10R-053543, Extension number: 00

concerning the type-approval of an ~~electrical~~/electronic sub-assembly⁽¹⁾ under Regulation number 10.

1. Additional information : See annex
- 1.1. Electrical system rated voltage : 24 V DC pos./neg. ground⁽¹⁾
- 1.2. This ESA can be used on any vehicle type with the following restrictions : None
- 1.2.1. Installation conditions, if any : n.a.
- 1.3. This ESA can be used only on the following vehicle types : All
- 1.3.1. Installation conditions, if any : See Installation manual, attached
- 1.4. The specific test method(s) used and the frequency ranges covered to determine immunity were : ESA Not Safety related. Tests not applicable
- 1.5. Laboratory accredited to ISO 17025 and recognized by the Approval Authority responsible for carrying out the tests : TÜV Rheinland Nederland B.V.
Eiberkamp 10
9351 VT Leek
The Netherlands
2. Remarks : Attached to this Type Approval:
1 Application form
1 Annex 2B form
1 Similarity Declaration (In EMC Report)
2 EMC Testreports
1 Manual
1 Installation Manual
Photos
BOM
Schematic Diagram
PCB Layout

⁽¹⁾ Strike out what does not apply.



THE NETHERLANDS
(N E D E R L A N D)

COMMUNICATION

Concerning ⁽¹⁾:

- approval granted
- ~~approval extended~~
- ~~approval refused~~
- ~~approval withdrawn~~
- ~~production definitely discontinued~~

of a type of ~~electrical~~/electronic sub-assembly ⁽¹⁾ with regard to Regulation number 10.**Approval number: E4-10R-043382****Extension number: 00**

1. Make (trade name of manufacturer) : Victron Energy B.V.
2. Type and general commercial description(s) : Inverter/Charger
Quattro 12/3000/120-50/50 230V
Similar to:
 - Multiplus 12/3000-120-16 230V
 - Multiplus 12/3000-120-50 230V
 - Phoenix Inverter 12/3000 230Vac
3. Means of identification of type, if marked on the ~~vehicle/component~~ separate technical unit ⁽¹⁾ : Typeplate on enclosure
- 3.1. Location of that marking : Front Side Product
4. Category of vehicle : All
5. Name and address of manufacturer : Victron Energy B.V.
De Paal 35
1351 JG Almere Haven
The Netherlands
6. In the case of components and separate technical units, location and method of affixing of the approval mark : Front Side Product

APPENDIX

to type-approval communication form number: E4-10R-043382, Extension number: 00

concerning the type-approval of an ~~electrical~~/electronic sub-assembly⁽¹⁾ under Regulation number 10.

- | | | |
|--------|--|--|
| 1. | Additional information | : See annex |
| 1.1. | Electrical system rated voltage | : 12 V DC pos./neg. ground ⁽¹⁾ |
| 1.2. | This ESA can be used on any vehicle type with the following restrictions | : None |
| 1.2.1. | Installation conditions, if any | : n.a. |
| 1.3. | This ESA can be used only on the following vehicle types | : All |
| 1.3.1. | Installation conditions, if any | : See Installation manual, attached |
| 1.4. | The specific test method(s) used and the frequency ranges covered to determine immunity were | : ESA Not Safety related. Tests not applicable |
| 1.5. | Laboratory accredited to ISO 17025 and recognized by the Approval Authority responsible for carrying out the tests | : TÜV Rheinland Nederland B.V. |
| 2. | Remarks | : Attached to this Type Approval:
1 Application form
1 Annex 2B form
2 EMC Testreports
1 Manual
Installation Manual
Photos
BOM
Schematic Diagrams
PCB Layouts |

⁽¹⁾ Strike out what does not apply.



**THE NETHERLANDS
(N E D E R L A N D)**



COMMUNICATION

Concerning ⁽¹⁾:

- approval granted
- ~~approval extended~~
- ~~approval refused~~
- ~~approval withdrawn~~
- ~~production definitely discontinued~~

of a type of ~~electrical~~/electronic sub-assembly ⁽¹⁾ with regard to Regulation number 10.

Approval number: E4-10R-053544

Extension number: 00: Correction 01

1. Make (trade name of manufacturer) : Victron Energy B.V.
2. Type and general commercial description(s) : Inverter/Charger
Quattro 24/3000/70-50/50 230V
Identical/Similar Products:
MultiPlus 24/3000/70-16 230V
Multiplus 24/3000/70-50 230V
Phoenix Inverter 24/3000 230Vac
3. Means of identification of type, if marked on the ~~vehicle/component~~/separate technical unit ⁽¹⁾ : Typeplate on enclosure
- 3.1. Location of that marking : Front Side Product
4. Category of vehicle : All
5. Name and address of manufacturer : Victron Energy B.V.
6. In the case of components and separate technical units, location and method of affixing of the approval mark : Front Side Product

7. Address(es) of assembly plant(s) :
8. Additional information (where applicable) : see Appendix below
9. Technical service responsible for carrying out the tests : TÜV Rheinland Nederland B.V.
10. Date of test reports : November 30, 2015 / April 29, 2014
11. Number of test report : 15080403.a01 / 13091801.a05
12. Remarks (if any) : see Appendix
13. Place : Zoetermeer
14. Date : 27-JUL-2016
15. Signature :
16. The index to the information package lodged with the approval authority, which may be obtained on request, is attached.
17. Reasons for extension : Not applicable



L. Vellekoop

The image shows a handwritten signature in blue ink over a circular official stamp. The stamp features a coat of arms with two lions and a crown, with the text 'RDW' below it. The name 'L. Vellekoop' is printed below the signature.

⁽¹⁾ Strike out what does not apply.

APPENDIX

to type-approval communication form number: E4-10R-053544, Extension number: 00: Correction 01

concerning the type-approval of an ~~electrical~~/electronic sub-assembly⁽¹⁾ under Regulation number 10.

- | | | |
|--------|--|--|
| 1. | Additional information | : See annex |
| 1.1. | Electrical system rated voltage | : 24 V DC pos./neg. ground ⁽¹⁾ |
| 1.2. | This ESA can be used on any vehicle type with the following restrictions | : None |
| 1.2.1. | Installation conditions, if any | : n.a. |
| 1.3. | This ESA can be used only on the following vehicle types | : All |
| 1.3.1. | Installation conditions, if any | : See Installation manual, attached |
| 1.4. | The specific test method(s) used and the frequency ranges covered to determine immunity were | : ESA Not Safety related. Tests not applicable |
| 1.5. | Laboratory accredited to ISO 17025 and recognized by the Approval Authority responsible for carrying out the tests | : TÜV Rheinland Nederland B.V. |
| 2. | Remarks | : Attached to this Type Approval:
1 Application form
1 Annex 2B form
1 Similarity Declaration
1 ISO 900X
2 EMC Testreports
1 Manual
1 Installation Manual
Photos
BOM
Schematic Diagram
PCB Layout |

⁽¹⁾ Strike out what does not apply.





TYPE APPROVAL CERTIFICATE for product

Name: Inverters, converters, transformers

Manufacturer: Victron Energy B.V. *at 1 IC Water 11x en 33,105, The Netherlands*

Technical documentation is approved by Ref. No. МФ-22-1130 of 26.06.2013

Victron Energy
Specifications ТУ ЮВ-001-13 Victron Energy electrical equip-
ment

Techniques of tests ПМИ ТУ ЮВ-001-13

The prototype model is tested and surveyed according to the program approved by Russian River Register.

On the basis of checks and test results this is to certify that the structure, properties, parameters and characteristics of type product meet the requirements of Russian River Register Rules.

Application and limitations:

As electrical equipment intended for installation on vessels with a class of the Russian River Register

This Certificate is valid since 08.07.2013 г. till 08.07.2018

No 09-11.1-4.3-0179



Director of Moscow Branch Office of Russian River Register

(/ position)

(/ signature)

S. Presnov

(/ name)



Technical data:

Type	/Power W	A/Current A	B./Voltage V	Fre- quency Hz	Pro- tection
Isolation trans- former / Isolation transformer	2000 - 3600B τ		115/230	50	IP21
Isolation trans- former / Isolation transformer	7000B τ		230/230	50	IP21
Phoenix inverter / Phoenix inverter	180-5000BA		12;24;48;96/230	50	IP20
Orion DC/DC convertor / Orion DC/DC convertor		5 - 70	18-35; 9-18/12; 24	-	IP20

This Type Approval Certificate does not substitute a Certificate or similar document of Russian River Register issued for a specific product.

This Type Approval Certificate becomes invalid in cases stipulated by Russian River Register Rules.



TYPE APPROVAL CERTIFICATE for product

Name: Battery charges

Manufacturer: Victron Energy B.V.

Technical documentation is approved by Ref. No. МФ-22-1130 of 26.06.2013

Victron Energy
Specifications ТУ ЮВ-001-13 Victron Energy electrical equip-
ment

Techniques of tests ПИИ ТУ ЮВ-001-13

The prototype model is tested and surveyed according to the program approved by Russian River Register.

On the basis of checks and test results this is to certify that the structure, properties, parameters and characteristics of type product meet the requirements of Russian River Register Rules.

Application and limitations:

As electrical equipment intended for installation on vessels with a class of the Russian River Register

This Certificate is valid since 08.07.2013 г. till 08.07.2018

No 09-11.1-4.3-0180



Director of Moscow Branch Office of Russian
River Register

position)

signature)

S. Presnov

name)



Technical data:

Тип, марка/Type	B./Power V	A/Current A	Fre- quency Hz	Protec- tion
Blue Power battery charger / Blue Power battery charger	180-265/12-24	7-25	50	IP20
Blue Power battery charger / Blue Power battery charger	230/12-24	7-25	50	IP65
Centaur charger / Centaur charger	90-265/12-24	20-200	50	IP20
Phoenix battery charger / Phoenix battery charger	90-265/12-24	16-50	50	IP20
Skylla-i battery charger / Skylla-i battery charger	230/12-24	80-100	50	IP21
Skylla-TG battery charger / Skylla-TG battery charger	90-265/12-24	30-100	50	IP21
Skylla-TG battery charger / Skylla-TG battery charger	400/24	50-100	50	IP21

This Type Approval Certificate does not substitute a Certificate or similar document of Russian River Register issued for a specific product.

This Type Approval Certificate becomes invalid in cases stipulated by Russian River Register Rules.



TYPE APPROVAL CERTIFICATE for product

Name: Inverter/ chargers

Manufacturer: Victron Energy

Technical documentation is approved by Ref. No. МФ-22-1130 of 26.06.2013

Victron Energy
Specifications ТУ ЮБ-001-13 Victron Energy electrical equip-
ment

Techniques of tests ПМИ ТУ ЮБ-001-13

The prototype model is tested and surveyed according to the program approved by Russian River Register.

On the basis of checks and test results this is to certify that the structure, properties, parameters and characteristics of type product meet the requirements of Russian River Register Rules.

Application and limitations:

As electrical equipment intended for installation on vessels with a class of the Russian River Register

This Certificate is valid since 08.07.2013 г. till 08.07.2018

No 09-11.1-4.3-0181



Director of Moscow Branch Office of Russian
River Register

position


signature

S. Presnov
name



Technical data:

Type	B./Voltage V	/Power VA	Fre- quency Hz	Protec- tion
MultiPlus inverter/charger / MultiPlus inverter/charger	12;24;48/187-265	800/5000	50	IP21
Quattro inverter/charger /Quattro inverter/charger	12;24;48/187-265	3000-10000	50	IP21

This Type Approval Certificate does not substitute a Certificate or similar document of Russian River Register issued for a specific product.

This Type Approval Certificate becomes invalid in cases stipulated by Russian River Register Rules.



CERTIFICATE OF TYPE APPROVAL

Name: Inverters, converters, transformers

Manufacturer: B.V. De Paal

Technical documentation is approved by Ref. No. МФ-22-1130 of 26.06.2013

Victron Energy
Specifications ТУ ЮВ-001-13 Victron Energy electrical equipment

Techniques of tests ПМИ ТУ ЮВ-001-13

The model is tested and surveyed according to the program approved by Russian River Register.

On the basis of checks and test results this is to certify that the structure, properties, parameters and characteristics of the type product meet the requirements of the Technical regulations on the safety of inland water transport objects.

Application and limitations:

As electrical equipment intended for installation on vessels with a class of the Russian River Register

This Certificate is valid since 08.07.2013



No. 09-11.4-4.3-0179

Director of Moscow Branch Office of Russian River Register

position

signature)

S. Presnov

name, surname





CERTIFICATE OF TYPE APPROVAL

Name: Battery chargers

Manufacturer: Victron Energy

Technical documentation is approved by Ref. No. МФ-22-1130 of 26.06.2013

Victron Energy
Specifications ТУ ЮБ-001-13 Victron Energy electrical equip-
ment

Techniques of tests ПМИ ТУ ЮБ-001-13

The model is tested and surveyed according to the program approved by Russian River Register.

On the basis of checks and test results this is to certify that the structure, properties, parameters and characteristics of the type product meet the requirements of the Technical regulations on the safety of inland water transport objects.

Application and limitations:

As electrical equipment intended for installation on vessels with a class of the Russian River Register

This Certificate is valid since

08.07.2013



No. 09-11.4-4.3-0180

Director of Moscow Branch Office of Russian River Register

position)

signature

S. Presnov

name, surname)



Technical data:

Type	B./Voltage V	A/Current A	Гц./Frequency Hz	Pro-tection
Blue Power battery charger / Blue Power battery charger	180-265/12-24	7-25	50	IP20
Blue Power battery charger / Blue Power battery charger	230/12-24	7-25	50	IP65
Centaur charger / Centaur charger	90-265/12-24	20-200	50	IP20
Phoenix battery charger / Phoenix battery charger	90-265/12-24	16-50	50	IP20
Skylla-i battery charger / Skylla-i battery charger	230/12-24	80-100	50	IP21
Skylla-TG battery charger / Skylla-TG battery charger	90-265/12-24	30-100	50	IP21
Skylla-TG battery charger / Skylla-TG battery charger	400/24	50-100	50	IP21

This Certificate of Type Approval does not substitute a Certificate or similar document of Russian River Register issued for a specific product.

This Certificate of Type Approval becomes invalid in cases stipulated by the Technical regulations on the safety of inland water transport objects.



CERTIFICATE OF TYPE APPROVAL

Name: Inverter/ chargers

Manufacturer: Victron Energy B.V.

Technical documentation is approved by Ref. No. МФ-22-1130 of 26.06.2013

Victron Energy
Specifications ТУ ЮВ-001-13 Victron Energy electrical equip-
ment

Techniques of tests ПМИ ТУ ЮВ-001-13

The model is tested and surveyed according to the program approved by Russian River Register.

On the basis of checks and test results this is to certify that the structure, properties, parameters and characteristics of the type product meet the requirements of the Technical regulations on the safety of inland water transport objects.

Application and limitations:

As electrical equipment intended for installation on vessels with a class of the Russian River Register

This Certificate is valid since 08.07.2013



№
No. 09-11.4-4.3-0181

Director of Moscow Branch Office of Russian
River Register

position

signature

S. Presnov

name, surname





RECOGNITION CERTIFICATE

№ 09572

This is to certify that Russian River Register recognizes **Victron Energy B.V., The Netherlands** being capable of performing in accordance with the Russian River Register Rules:

-designing, manufacturing, installation, service and repair of inverters, converters, transformers, battery charges and inverters / chargers in accordance with documentation approved by Russian River Register.

Form of technical supervision — technical supervision by technical staff of organization on the basis of agreement or contract between organization and Russian River Register

Commencement date 26 August 2013 .

Expiry date 25 August 2015 .

Director of Moscow Branch Office of
Russian River Register




signature)

S. Presnov
name, surname)



Declaration of Conformity

Applicant: Victron Energy B.V.

Product type: Connection cables

Model/Type reference : VE.Direct to USB interface
ASS030530000
Interface MK2-USB (VE.Bus to USB) ASS030130000
CANUSB interface ASS030532000
VE.Bus to NMEA2000 interface ASS030520100
VE.Direct to NMEA2000 interface ASS030520300
VE.Can to NMEA2000 Micro-C male ASS030520200
BMV-60xS to NMEA2000 interface ASS030520000
BMV-60xS to VE.Can interface ASS030520020
Interface MK2.2b (VE.Bus to RS232) ASS030120200
RS232 to USB converter ASS030200000
VE.Direct to RS232 interface ASS030520500
VE.Direct to VE.Can interface ASS030520400
VE.Direct to Global Remote interface ASS030534000
VE.Bus to VE.Can interface ASS030520105
Inverting remote on-off cable ASS030550100
Non inverting remote on-off cable ASS030550200
VE.Direct non inverting remote on-off cable ASS030550300
Skylia-i remote on-off cable ASS030550400

Ratings : ---

A representative test sample of above stated models passed the tests according to:

Standard:

According manufacturer specification based on IEC 60335-1 2010 (Fifth Edition) incl. Corr. 1:2010 and Corr. 2:2011 + A1:2013
Testing according to the Standard without cable performance tests. Cable performance suitable for connecting Green-Energy Equipment.

Report no: 15PP112-01_0

Certificate no: 15-239-00

Date of issue: 2015-12-21



Raphael Rader

DECLARATION OF CONFORMITY



COMPANY : Victron Energy B.V.

Declares that the following products:

PRODUCT TYPE : DC TO AC SINEWAVE INVERTER

BRAND : Victron Energy

MODELS :

Phoenix Inverter C 12/1200	Phoenix Inverter 24/3000
Phoenix Inverter C 12/1600	Phoenix Inverter 24/5000
Phoenix Inverter C 12/2000	Phoenix Inverter C 48/1200
Phoenix Inverter 12/3000	Phoenix Inverter C 48/1600
Phoenix Inverter 12/5000	Phoenix Inverter 48/3000
Phoenix Inverter C 24/1200	Phoenix Inverter 48/5000
Phoenix Inverter C 24/1600	
Phoenix Inverter C 24/2000	

Are in conformity with the requirements of the following Directives of the European Union:

EMC Directive 2014/30/EU with the following harmonized standards:

EN 61000-6-1:2007
EN 61000-6-2:2005
EN 61000-6-3:2007/A1:2011/C11:2012
EN 55014-1:2017
EN 55014-2:2015
ISO 7637-2:2016

Low Voltage Directive 2014/35/EU with the following harmonized standards:

EN 60335-1:2012/A13: 2017
EN 62109-1:2010

Restriction of the use of certain hazardous substances RoHS (2011/65/EU and 2015/863/EU) with the following harmonized standards:

EN-IEC 63000:2018

Vehicle Radiated Emissions & Immunity Testing

ECE R10-5

CE MARK DATE: September, 2010

Signed: Reinout Vader

Authority: Managing Director

Date: 18 July 2019