



# LISTING REPORT/INSPECTION PROCEDURE

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 1 of 57  
Issued: 2022-03-29  
Revised: N/A

**620 Old Peachtree Road NW, Suite 100, Suwanee, GA 30024 USA (770) 570-1800**

Test Report Number: GZES210802614561

A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of:

- Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources –UL 1741 (Third Edition, Dated September 28, 2021)
- Power conversion equipment – CSA C22.2 No. 107.1 issued on June 2016
- UL 1741 Supplement SB - Grid Support Utility Interactive Inverters and Converters Based upon IEEE 1547-2018 and IEEE 1547.1-2020 (Third Edition, Dated September 28, 2021)

### Reference standard

- IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces – IEEE Std 1547:2018 (Revision of IEEE Std 1547:2003), approved 15 February 2018; IEEE Std 1547a™-2020 Approved 9 March 2020. (Refer to IEEE Std 1547.1:2020, approved 5 March 2020.)
- Hawaiian Electric Companies, IEEE 1547.1-2020 Source Requirements Document Version 2.0 (“SRD V2.0”), effective on July 1<sup>st</sup>, 2020

<b>Issuing Laboratory</b> .....	SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch
Address .....	198 Kezhu Road, Science City, Economic & Technology Development Area, Guangzhou, Guangdong, China
<b>Applicant (Certificate Holder)</b> .....	Shenzhen Megarevo Technology Co., Ltd.
Address .....	4th Floor, Block 2, INVT Guangming Technology Building Shutianpu Community, Matian Neighborhood, Guangming New District, Shenzhen Guangdong, China
Contact Details .....	shenglong Guo Phone: +86 13430841868      Fax: - Email: guoshenglong@megarevo.com.cn
<b>Manufacturer</b> .....	Shenzhen Megarevo Technology Co., Ltd.
Address .....	4th Floor, Block 2, INVT Guangming Technology Building Shutianpu Community, Matian Neighborhood, Guangming New District, Shenzhen Guangdong, China
Contact Details .....	shenglong Guo Phone: +86 13430841868      Fax: - Email: guoshenglong@megarevo.com.cn

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company’s findings at the time of its intervention only and within the limits of Client’s instructions, if any. The Company’s sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.




## LISTING REPORT/INSPECTION PROCEDURE

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 2 of 57  
Issued: 2022-03-29  
Revised: N/A

<b>Factory</b> .....	Shenzhen INVT Electric Co., Ltd. Bao'an Branch Factory	
<b>Address</b> .....	F1-F4, No.3 Building, Emerson Industrial Park, Fengtang Road, Tangwei Community, Fuhai, Bao'an District, Shenzhen,Guangdong, China	
<b>Contact Details</b> .....	liang Ma	
	Phone: +86 13714627137	Fax: -
	Email: maliang@megarevo.com.cn	

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

<b>Product Type</b> ..... :	Hybrid Solar Inverter
Trade Mark..... :	
Product description..... :	The products covered by this report are a permanently connected energy storage converter for use in electric power systems. It can invert the power from energy storage batteries to grid or off grid port; It can also invert the power from grid to energy storage device. Unit is intended to be installed in indoor/outdoor location and not to be installed in hazardous location. The installation should accordance with the National Electrical Code, NFPA 70.
<b>Model Number(s)</b> ..... :	<b>R5KLNA, R6KLNA, R7K6LNA, R8KLNA, R10KLNA</b>
Model Differences..... :	All models have identical mechanical and electrical construction except some parameter configuration of the software architecture and quantity of non-critical components in order to control the max output power and some alternate components (refer to critical component list for details).
<b>Electrical Ratings</b> ..... :	<p><b>R5KLNA</b> PV side: 120-500V(500Vmax), 12A*4, 15A; Batteries side: 40-60V, 120Amax AC grid side: 120Vac/240Vac Split phase, 60Hz, 20.8A(22.9Amax), -0.8~+0.8 EPS<sup>(*)</sup> side: 120Vac/240Vac, Split phase, 60Hz, 5KVA, 20.8A</p> <p><b>R6KLNA</b> PV side: 120-500V(500Vmax), 12A*4, 15A; Batteries side: 40-60V, 135Amax AC grid side: 120Vac/240Vac Split phase, 60Hz, 25A(27.5Amax), -0.8~+0.8 EPS<sup>(*)</sup> side: 120Vac/240Vac, Split phase, 60Hz, 6KVA, 25A</p> <p><b>R7K6LNA</b> PV side: 120-500V(500Vmax), 12A*4, 15A; Batteries side: 40-60V, 190Amax AC grid side: 120Vac/240Vac Split phase, 60Hz, 31.7A(35Amax), -0.8~+0.8 EPS<sup>(*)</sup> side: 120Vac/240Vac, Split phase, 60Hz, 7.6KVA, 31.7A</p>

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



LISTING REPORT/INSPECTION PROCEDURE

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD
PROJECT NUMBER: GZ-CERT220300532

Page 4 of 57
Issued: 2022-03-29
Revised: N/A

Table with technical specifications for R8KLNA and R10KLNA, including PV side, Batteries side, AC grid side, and EPS side details. Includes a note for (\*) EPS and other ratings/accessories.

Table with testing laboratory information: Dongguan BALUN Testing Technology Co., Ltd. Address, Date of receipt, Date(s) of performance, and Conditions of Acceptability.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms\_and\_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms\_e-document.htm.



# LISTING REPORT/INSPECTION PROCEDURE

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 5 of 57  
Issued: 2022-03-29  
Revised: N/A

## CO-LISTING PAGE

### CO-LISTING APPLICANT I

Applicant's Name: N/A \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Primary Contact: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

### Product Correlation:

Basic Models	Co-Listed Models	Note any differences between Basic and Co-Listed models

### CO-LISTING APPLICANT II

Applicant's Name: N/A \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Primary Contact: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

### Product Correlation:

Basic Models	Co-Listed Models	Note any differences between Basic and Co-Listed models

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

**GENERAL INFORMATION****Components**

Components used in the covered products must be those outlined in the latest edition of the Listing Report.

**Listing Marking**

This report along with a valid certificate authorizes the certificate holder to use the Listing Marking of SGS North America only on products covered by this report and in accordance with the Product Certification Program Policy Handbook.

**Production Line Tests**

Manufacturing and Production Tests shall be performed as required by this Report.

**Responsibility of the Manufacturer and Factory**

- 1) It is the manufacturer and factory's responsibility to restrict the use of markings which reference SGS to those products which are found by the manufacturers own inspection to comply with the product description in this report. This includes reference to SGS directly and/or indirectly.
- 2) During hours in which the factory is in operation, the SGS inspector shall be given unlimited access to any portion of the premises where the product and/or parts are being produced, assembled, inspected and labeled; and to the test area designated for routine tests. The SGS inspector shall be permitted to inspect and subject the products to prescribed tests prior to shipment any product bearing or intended to bear marking referencing SGS.
- 3) The factory shall provide all required testing equipment and facilities including trained personnel for conducting all routine tests that are to be performed at the factory. These shall be available when needed so that the inspection work can proceed without delays.

**Follow up Inspections**

As part of the SGS Follow-Up inspection, it is required that an inspector periodically visit the factory location(s) and select for examination and/or testing, the most recent production sample of the product covered in the Listing Report.

**SGS Inspector**

- 1) A product which is found by the SGS inspector to have features which make it unacceptable to bear marking referencing SGS shall be corrected if the listing marking is to be used. The inspector shall carefully check additional production for such features until conditions are considered normal.
- 2) A product which does not comply with the provisions of the listing report shall have all reference to SGS removed. If the rejection of the product is questioned by the factory representative, it may be put on hold in separate area of location pending appeal. The factory shall satisfy the inspector that all marks referencing SGS are removed from the rejected material or finished product. Factory shall destroy product and or turn over to inspector for destruction.
- 3) All discrepancies between the product and the listing report shall be immediately stated to the attention of the factory representative. This shall be noted in the follow-up inspection report as a discrepancy.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

**GENERAL CONSTRUCTIONAL REQUIREMENTS TO BE VERIFIED**

Construction Details - This section specifies construction and component details in addition to the critical components table which are to be verified during factory follow-up inspections.

1. Mechanical Assembly – A wiring device shall be prevented from any turning that can apply tension to conductor connections, result in damage to the conductor, or otherwise adversely affect the assembly. Friction alone between the mating parts of the assembly shall not be acceptable to prevent turning.
2. Corrosion – All bare metal parts are protected against corrosion by coating, painting, plating or other means specifically identified in the specific construction details unless these metal parts inherently possess such properties to resist corrosion.
3. Accessibility of Live Parts – All uninsulated live parts in primary circuitry are housed within a metallic enclosure constructed without openings unless otherwise described in the construction details.
4. Grounding – All dead-metal parts external or within the enclosure that are exposed to contact during normal or any servicing operation are connected to the equipment grounding terminal.
5. Conductor Protection - Conductors that pass over edges or through openings in metal shall be secured from contacting the edges or be protected from cutting and abrasion. For sheet metal less than 1.1 mm thick, protection shall be provided by one of the following methods:
  - (a) rolling the edge of the metal not less than 120 degrees;
  - (b) a bushing or grommet of a material other than rubber at least 1.2 mm thick; or
  - (c) glass sleeving at least 0.25 mm thick.
6. Internal Wiring – UL/cUL listed, all wires in primary circuitry shall be type UL1015, minimum AWG 10, rated 600 V, 105 °C for AC side and UL1015 minimum AWG 12, rated 600V, 105°C for PV side unless otherwise described in this report.
7. Wire Connectors – UL/cUL listed, insulated closed-end type, PV:550V, 110°C, AC: 550V, 110°C, suitable for the wire size and number.
8. Insulating Materials - UL/cUL listed, rated 1500 V, V-0, suitable for the wire size and number.
9. Heat Shrinkable Tubing – UL recognized, rated 600 V, 125 °C, VW-1. Covered on wire connectors.
10. Marking and Labeling Systems – Pressure-sensitive labels and nameplates of the permanent type (Type P) that are secured by adhesive shall be in accordance with CSA C22.2 No. 0.15 or UL 969, suitable for damp locations and rated min. 60 °C when applied on Canopy.
11. Installation, Operating and Safety Instructions - Instructions for installation and use of this product are provided by the manufacturer as required by the standards.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

**ROUTINE TESTS FOR MANUFACTURING AND PRODUCTION**

The manufacturer shall perform the following Manufacturing and Production Tests.

**Test records**

Test records shall be retained for a period of at least six months, and shall include test quantity, test dates, catalog or model numbers, test results, and disposition of any non-complying products.

**Required Tests**

- Dielectric Voltage Withstand Test
- Utility Voltage and Frequency Variation Test
- Grounding Continuity Test

**Dielectric Voltage Withstand Test**

**Method**

Each unit shall withstand without breakdown, as a routine production-line test, the application of a potential from Table 67.1A for AC rated circuits and from Table 67.1B for DC rated circuits:

- a) From input and output wiring, including connected components, to accessible dead metal parts that are able to become energized, and
- b) From input and output wiring to accessible low-voltage, limited-energy metal parts, including terminals.

Other than as noted in 67.3, the potential for the production-line test shall be in accordance with Condition A or Condition B of Table 67.1A or Table 67.1B at a frequency within the range of 40 – 70 Hertz.

**Table 67.1A  
Production-line test conditions AC rated circuits**

Circuit rating, Vac	Condition A		Condition B		Condition C		Condition D	
	Potential, volts ac	Time, seconds	Potential, volts ac	Time, seconds	Potential, volts dc	Time, seconds	Potential, volts dc	Time, seconds
250 or less	1000	60	1200	1	1400	60	1700	1
More than 250	1000+2 V <sup>a</sup>	60	1200+ 2.4 V <sup>a</sup>	1	1400+ 2.8 V <sup>a</sup>	60	1700+3.4 V <sup>a</sup>	1

<sup>a</sup> Maximum marked voltage.

Note: The multipliers in the table are chosen with the following background:

2.4 – A 20% adder on the multiplier 2 to account for reduced test time.

2.8 – A  $\sqrt{2}$ , truncated after the first decimal (=1.4) multiplier on "2" from condition A to account for the peak value of an AC rms voltage to calculate the DC test potential of AC circuits.

3.4 – A combination of the two above: 2\*1.2\*1.4, rounded to the next decimal.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.





## LISTING REPORT/INSPECTION PROCEDURE

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 9 of 57  
Issued: 2022-03-29  
Revised: N/A

**Table 67.1B**  
**Production-line test conditions for DC rated circuits**

only permissible for use by

Circuit rating, Vdc	Condition A		Condition B		Condition C		Condition D	
	Potential, volts ac	Time, seconds	Potential, volts ac	Time, seconds	Potential, volts dc	Time, seconds	Potential, volts dc	Time, seconds
250 or less	1000	60	1200	1	1400	60	1700	1
More than 250	1000+1.4 V <sup>a</sup>	60	1200+ 1.7 V <sup>a</sup>	1	1400+ 2 V <sup>a</sup>	60	1700+2.4 V <sup>a</sup>	1

<sup>a</sup> Maximum marked voltage.

A unit employing circuitry that is able to be damaged by an ac potential is able to be tested using a dc potential in accordance with Condition C or Condition D of Table 67.1A or Table 67.1B.

Testing of a unit in a heated or unheated condition meets the intent of the requirement for manufacturing and production tests.

The test is to be performed on a complete, fully assembled unit. It is not intended that the unit be unwired, modified, or disassembled for the test.

A unit employing a solid-state component that is not relied upon to reduce a risk of electric shock and that is susceptible to damage by the dielectric potential, is able to be tested before the component is electrically connected or after the component is electrically disconnected. The circuitry is able to be rearranged for the purpose of the test to minimize the potential of solid-state-component damage while retaining representative dielectric stress of the circuit.

Where the output rating of the test equipment transformer is less than 500 VA, the equipment is to include a voltmeter in the output circuit to directly indicate the test potential

Where the output rating of the test equipment transformer is 500 VA or more, the test potential is to be indicated:

- a) By a voltmeter in the primary circuit or in a tertiary-winding circuit,
- b) By a selector switch marked to indicate the test potential, or
- c) In the case of equipment having a single test-potential output, by a marking in a readily visible location to indicate the test potential. When marking is used without an indicating voltmeter, the equipment shall include a positive means, such as an indicator lamp, to indicate that the manually reset switch has been reset following a dielectric breakdown.

Test equipment, other than that described in 67.7 – 67.9, is usable when found to accomplish the intended factory control.

During the test, the unit switches are to be in the on position, both sides of the input and output circuits of the unit are to be connected together and to one terminal of the test equipment, and the second test-equipment terminal is to be connected to the accessible dead metal.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



**LISTING REPORT/INSPECTION PROCEDURE**

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
 PROJECT NUMBER: GZ-CERT220300532

Page 10 of 57  
 Issued: 2022-03-29  
 Revised: N/A

The results are acceptable if there is no dielectric breakdown.

<u>Test Locations:</u>	<u>Test Voltage</u>	<u>Test Time</u>
L and metal enclosure	2516 Vdc for Dielectric Voltage withstand test	1 s
DC+/- and metal enclosure	2900 Vdc for Dielectric Voltage withstand test	1 s
Live part and communication port	2900 Vdc for Dielectric Voltage withstand test	1 s

**Utility Voltage and Frequency Variation Test**

Method

As a routine production line test, each inverter shall be subjected to the Utility Voltage and Frequency Variation Test as per SB6 of UL Standard 1741 - 3<sup>st</sup> Edition refer to IEEE 1547.1-2020, Section 7 (Production Tests).

Production tests shall include the following as applicable:

- Response to abnormal voltage (see 7.2)
- Response to abnormal frequency (see 7.3)

As a routine production line test, each utility-interactive inverter initially exporting power within its normal operating range shall cease to export power to the simulated utility source after the output voltage and frequency of the simulated utility source are adjusted to each condition specified below within the time as noted in the Table 13 and Table 18 (extracted from IEEE 1547-2018). The inverter is to be tested to at each default condition once to verify compliance.

**Table 13 —DER response (shall trip) to abnormal voltages for DER of abnormal operating performance Category III (see Figure H.9)**

Shall trip function	Shall trip—Category III			
	Default settings <sup>a</sup>		Ranges of allowable settings <sup>b</sup>	
	Voltage (p.u. of nominal voltage)	Clearing time (s)	Voltage (p.u. of nominal voltage)	Clearing time (s)
OV2	1.20	0.16	fixed at 1.20	fixed at 0.16
OV1	1.10	13.0	1.10–1.20	1.0–13.0
UV1	0.88	21.0	0.0–0.88	21.0–50.0
UV2	0.50	2.0	0.0–0.50	2.0–21.0

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

**Table 18—DER response (shall trip) to abnormal frequencies for DER of abnormal operating performance Category I, Category II, and Category III (see Figure H.10)**

Shall trip function	Default settings <sup>a</sup>		Ranges of allowable settings <sup>b</sup>	
	Frequency <sup>c</sup> (Hz)	Clearing time (s)	Frequency (Hz)	Clearing time (s)
OF2	62.0	0.16	61.8–66.0	0.16–1 000.0
OF1	61.2	300.0	61.0–66.0	180.0–1 000.0
UF1	58.5	300.0 <sup>c</sup>	50.0–59.0	180.0–1 000
UF2	56.5	0.16	50.0–57.0	0.16–1 000

Each inverter with field adjustable trip points shall have the trip factory set points confirmed in accordance with the manufacturer's installation instructions.

The inverter is not required to be tested at full output power and Signal injection methods shall be permitted to be used for production testing.

**WARNING:** The factory test(s) specified may present a hazard of injury to personnel and/or property and should only be performed by persons knowledgeable of such hazards and under conditions designed to minimise the possibility of injury.

**Grounding Continuity Test**

**Method**

The impedance at 60 hertz between the point of connection of the equipment-grounding means and any other metal part that is required to be grounded shall not be more than 0.1 ohm, the voltage when a current of 25 amperes derived from a 60-hertz source with a no-load voltage not exceeding 6 volts is passed between the grounding connection and the metal part in question.

A visual or audible device (ohmmeter, buzzer, etc.) may be used to indicate grounding continuity.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

### PHOTOGRAPHS

Photo 1: Front view of enclosure:



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 13 of 57  
Issued: 2022-03-29  
Revised: N/A

Photo 2: Rear view of enclosure:



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 14 of 57  
Issued: 2022-03-29  
Revised: N/A

Photo 3: Connection interface:



Photo 4: Right side view of enclosure:

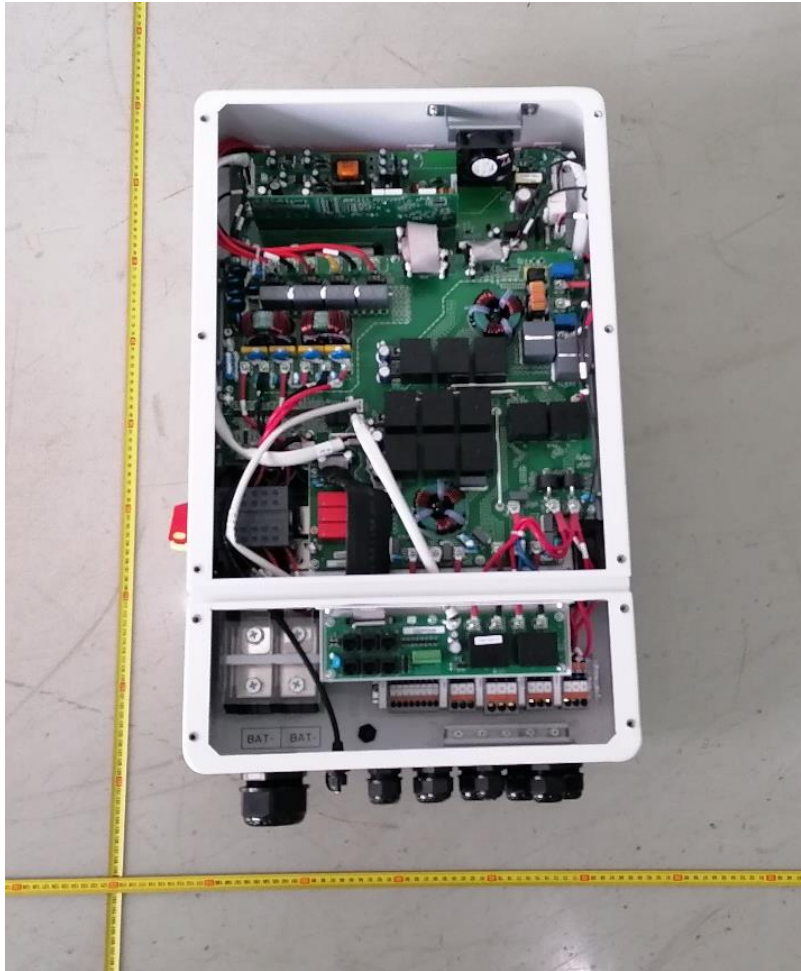


This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 15 of 57  
Issued: 2022-03-29  
Revised: N/A

Photo 5: Internal view of unit:



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 16 of 57  
Issued: 2022-03-29  
Revised: N/A

Photo 6: Front view of PE2029\_EM1 Board

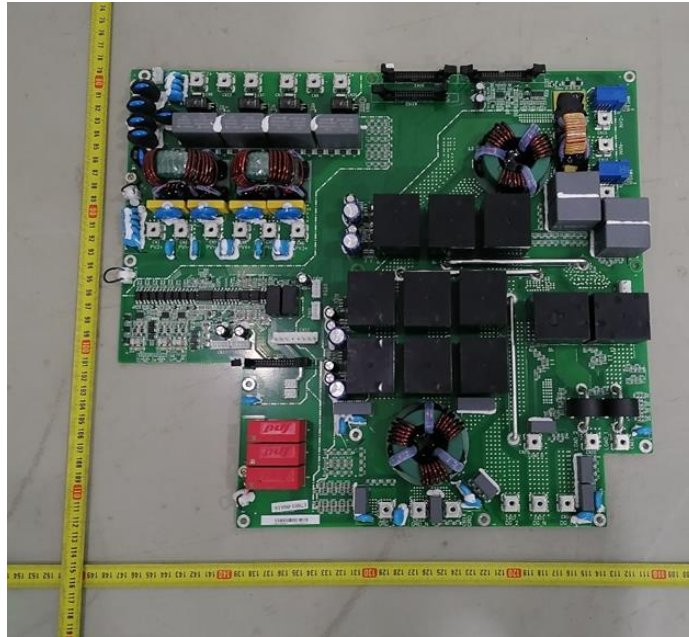
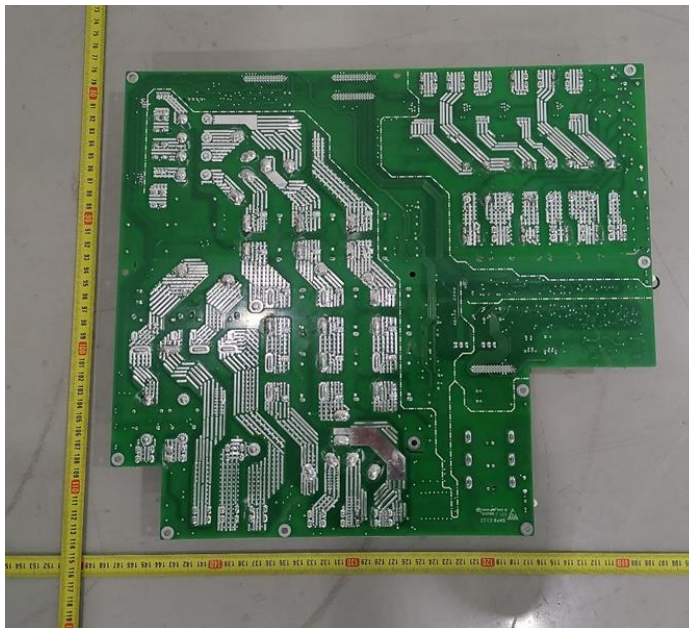


Photo 7: Back view of PE2029\_EM1 Board:



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
 PROJECT NUMBER: GZ-CERT220300532

Page 17 of 57  
 Issued: 2022-03-29  
 Revised: N/A

Photo 8: Front view of PE2029\_DR1 Board:

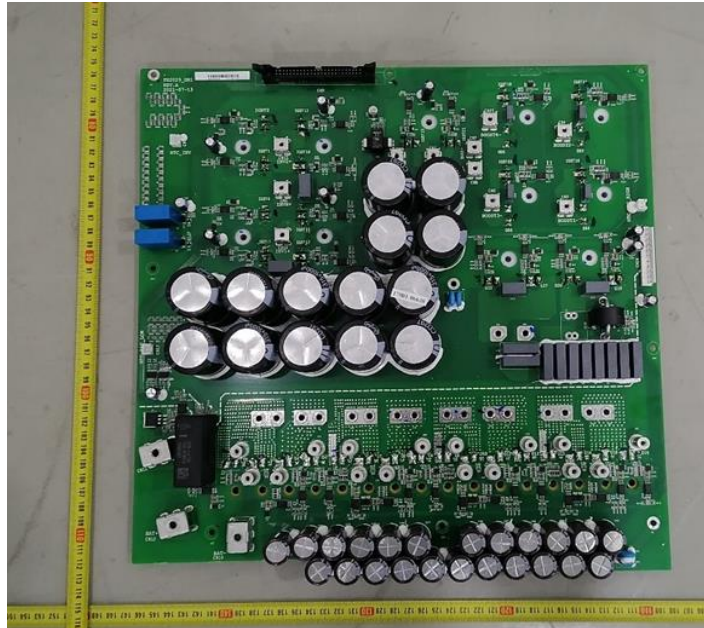
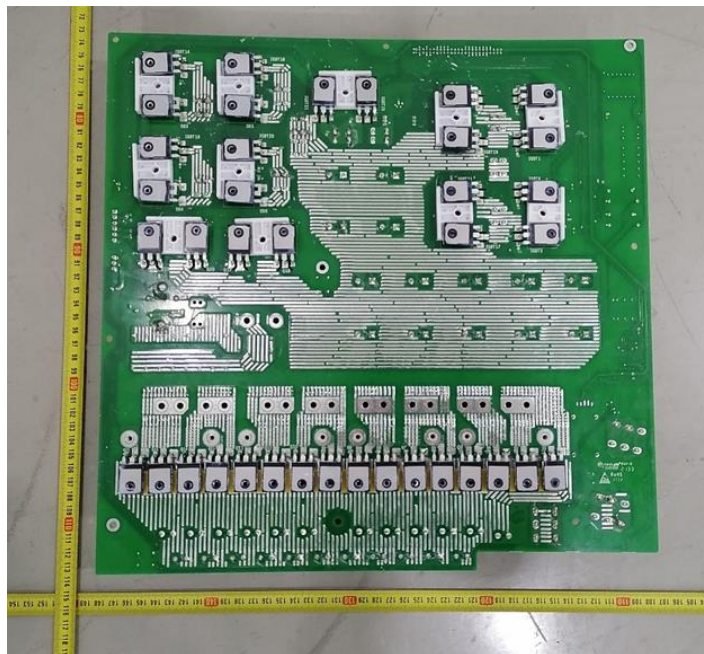


Photo 9: Back view of PE2029\_DR1 Board:



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

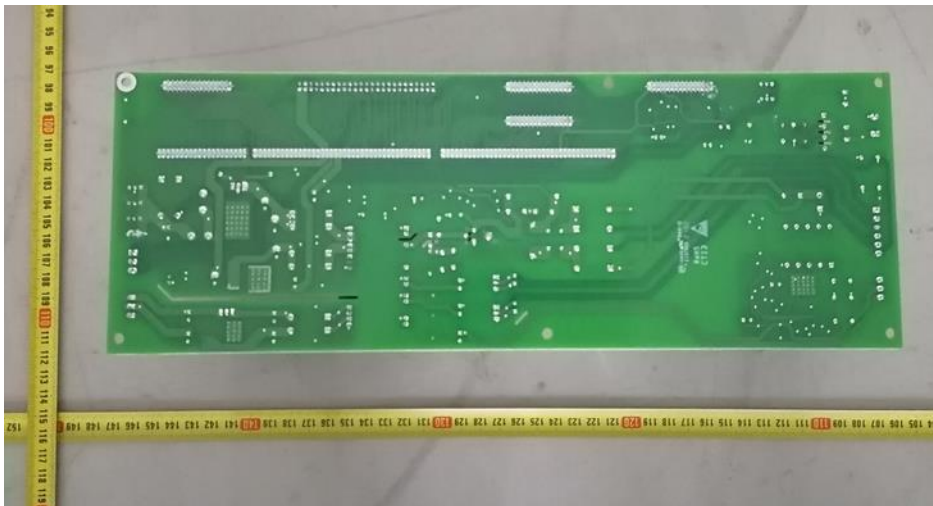
SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 18 of 57  
Issued: 2022-03-29  
Revised: N/A

Photo 10: Front view of PE2029\_PW1 Board:



Photo 11: Back view of PE2029\_PW1 Board:



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

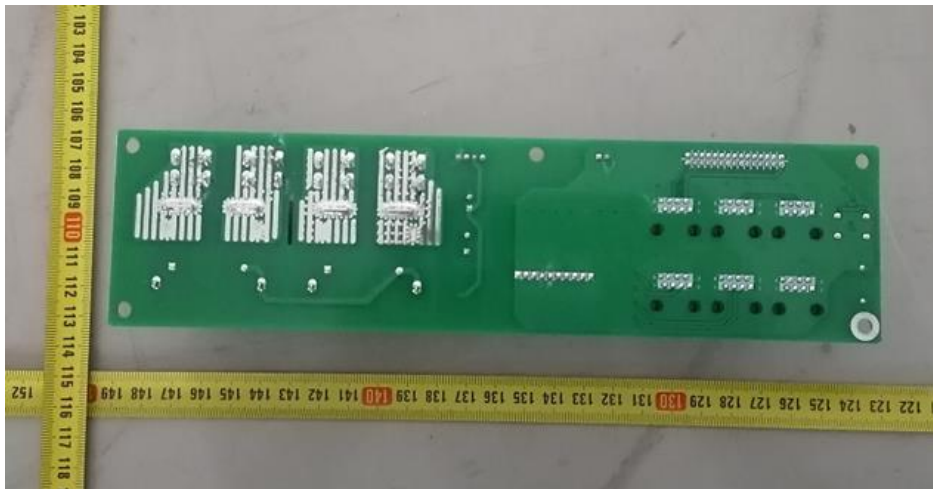
SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 19 of 57  
Issued: 2022-03-29  
Revised: N/A

Photo 12: Front view of PE2029\_TF1 Board:



Photo 13: Back view of PE2029\_TF1 Board:



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Photo 14: Front view of PE1821\_MN1 board:

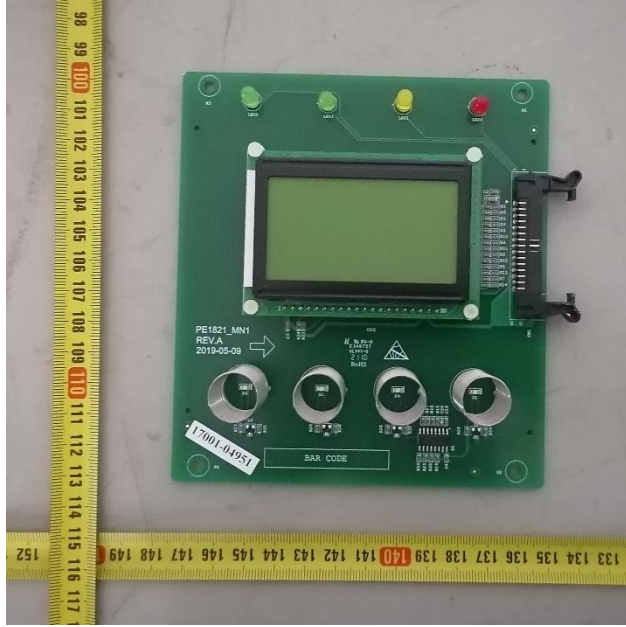
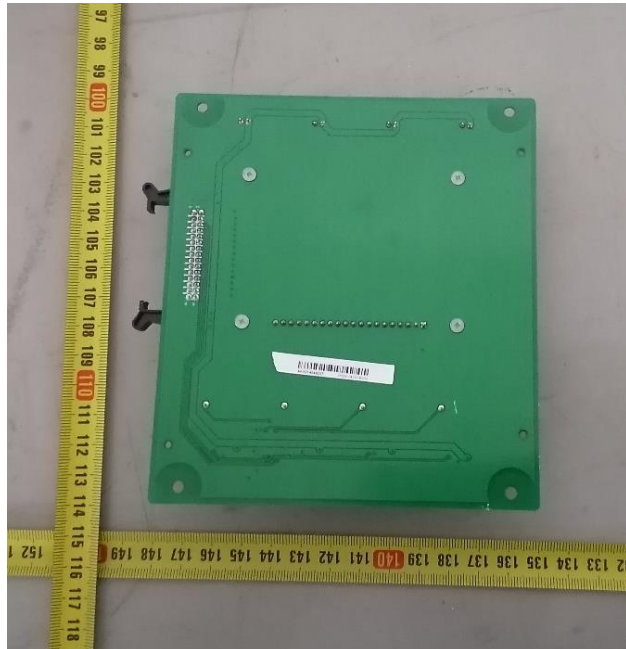


Photo 15: Back view of PE1821\_MN1 board:



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 21 of 57  
Issued: 2022-03-29  
Revised: N/A

Photo 16: Photo for Critical Components:

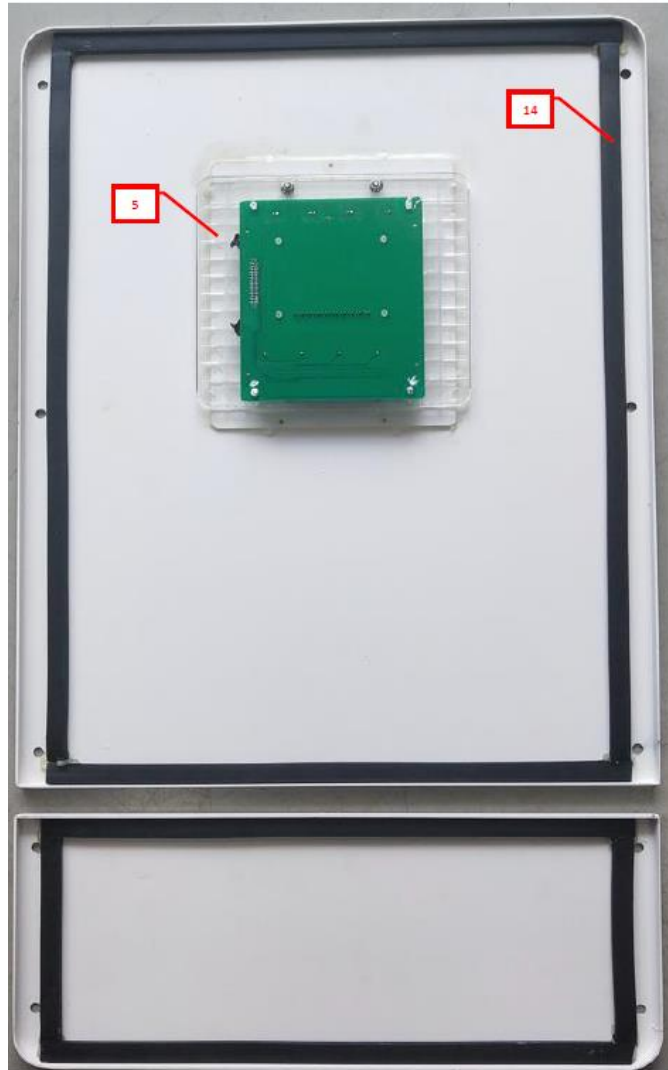


This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 22 of 57  
Issued: 2022-03-29  
Revised: N/A

Photo 17: Photo for Critical Components:



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Photo 18: Photo for Critical Components:

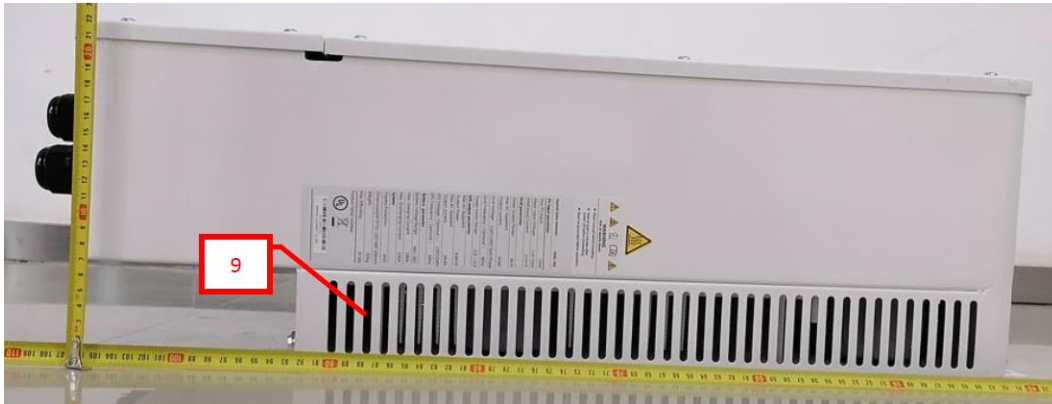
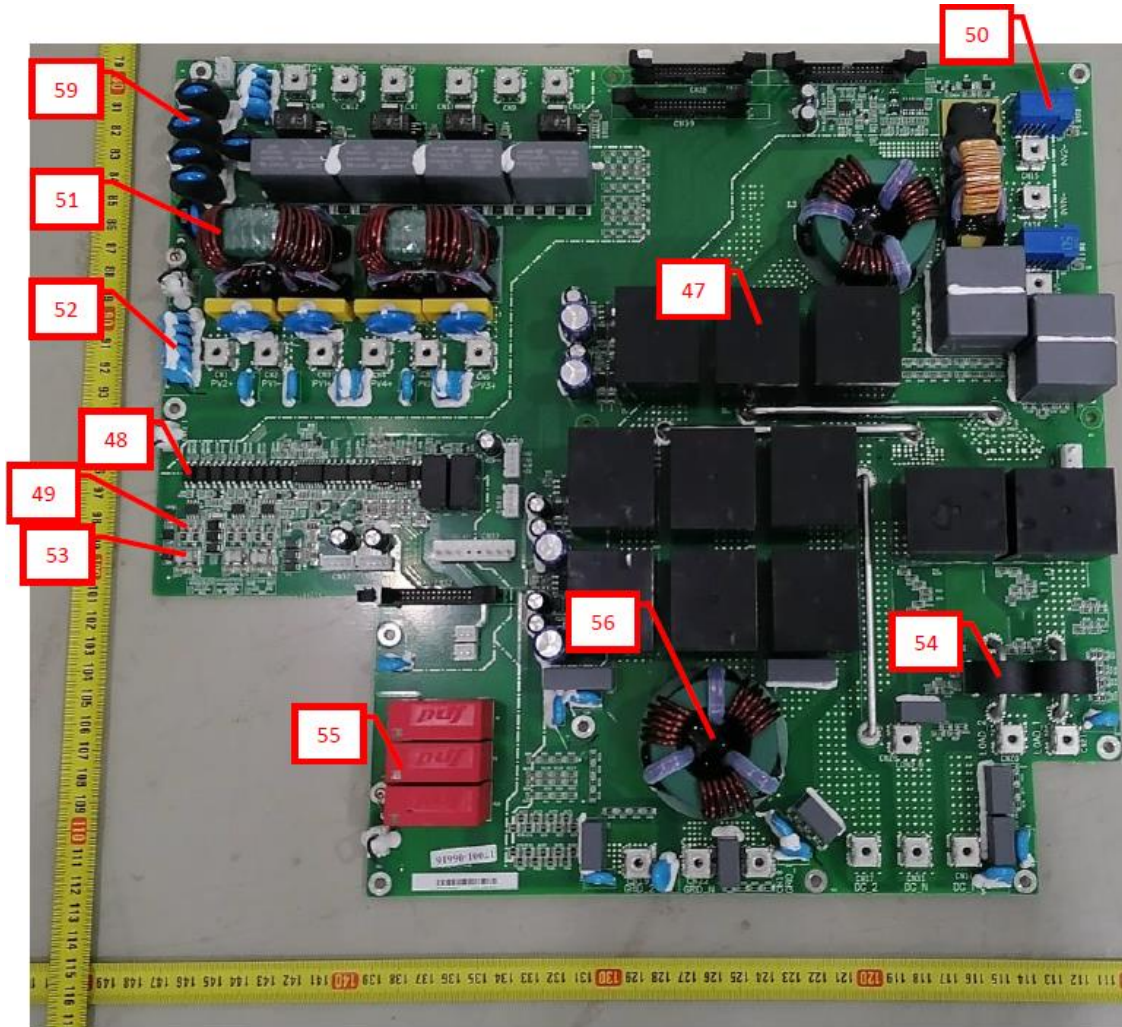


Photo 19: Photo for Critical Components:



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

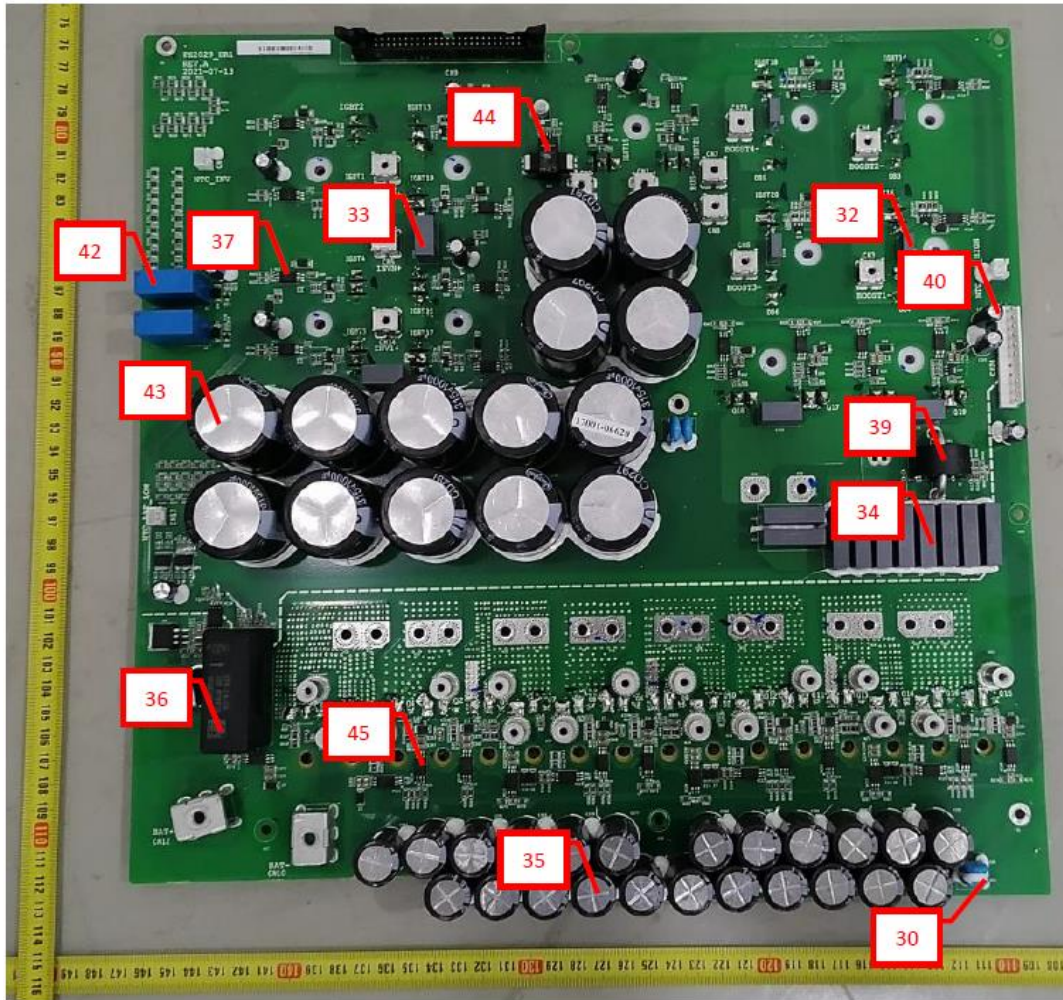
Photo 20: Photo for Critical Components:



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

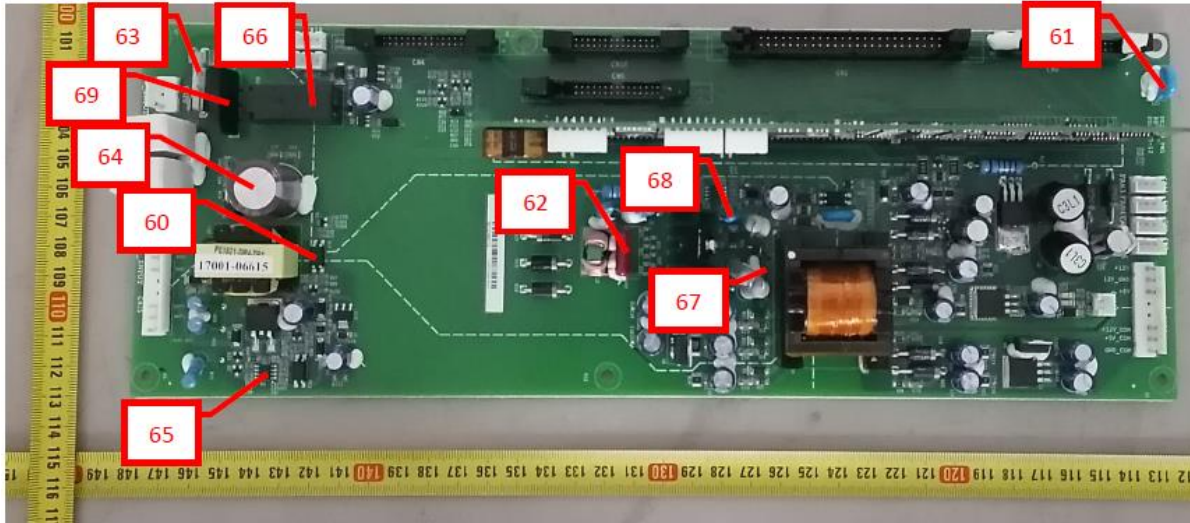


Photo 21: Photo for Critical Components:



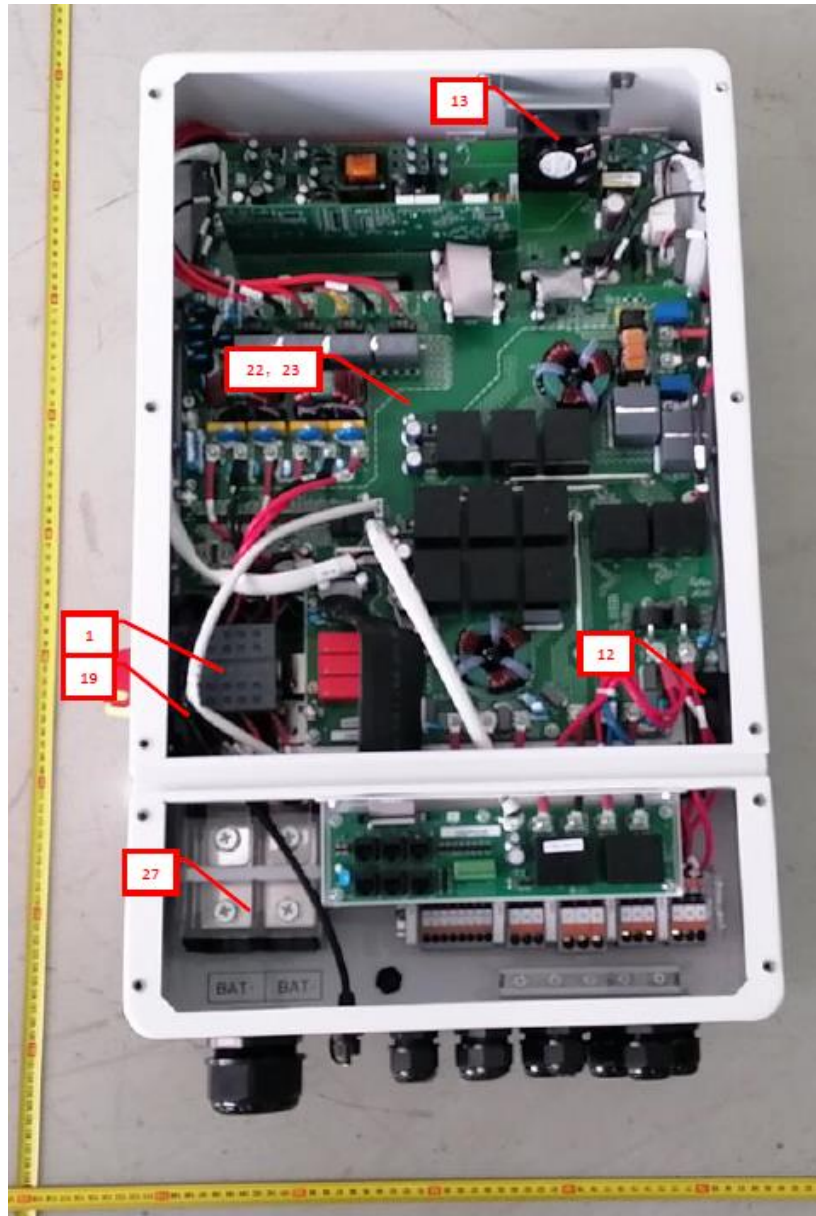
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Photo 22: Photo for Critical Components:



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Photo 23: Photo for Critical Components:

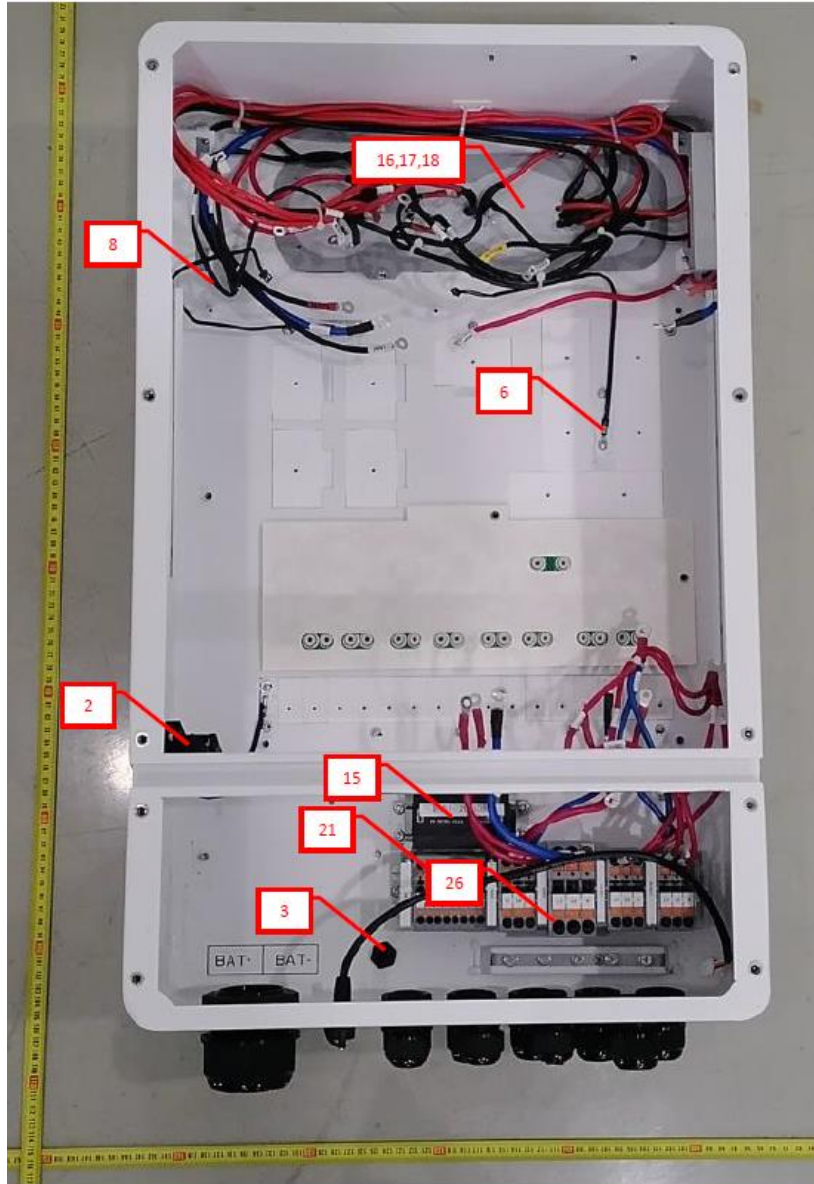


This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 28 of 57  
Issued: 2022-03-29  
Revised: N/A

Photo 24: Photo for Critical Components:



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 29 of 57  
Issued: 2022-03-29  
Revised: N/A

Photo 25: Photo for Critical Components:



Photo 26: Photo for Critical Components:



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

**CRITICAL COMPONENTS**

The following components are considered “critical” in terms of this certification and must be verified during factory inspections. No substitutions or alternate components are allowed unless specifically as stated in this report. The following components are applicable to all models except specifically described.

Photo No.	Item No.	Component name	Manufacturer/ trademark	Type/ model	Technical data	Standard	Mark(s) of conformity
23	1	DC switch	Santon International BV	XBUE3610-6-D	600Vdc/25A dc/6P -40~85°C	ANSI/UL 508	UR
24	2	Rotary switch	APB	MP2-20R+MCBH-00+MCB-20	24Vdc/ -40~85°C	UL508	UR
24	3	Waterproofing Ventilated Assembly Parts	Shenzhen KSV Electronics Co, LTD.	PFVM12P3A-B30S	M12*1.5/-40~125°C /217.4ml/min at Δp=1.25 mbar/>3000mmH2O/IP65/IP67	ANSI/UL 94	cURus
16	4	Screen surface film	MACDERMID AUTOTYPE LTD	INVT 8.819.0739	144.5*164*3mm	ANSI/UL 94	cURus
17	5	Display PC panel	CHI MEI CORPORATION	INVT 8.078.0109	PC-110(+), 185*160*20mm	ANSI/UL 94	cURus
24	6	NTC Temp sensor	SHENZHEN SHI KEMIN SENSOR CO LTD	CWF4 15KJ4150 L=250MM	φ4.0*24/L=250MM/30°C--+120°C	CSA LTR No. I-003	cURus
--	7	CT	Yuanxing International Inc	CTSA050B	100A/100mA	IEEE C57.13	cURus

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Photo No.	Item No.	Component name	Manufacturer/ trademark	Type/ model	Technical data	Standard	Mark(s) of conformity
				CTSA016	90A/90mA	CAN/CSA-C61869-1, CAN/CSA-C61869-2	cURus
24	8	Secure the external fan cable	ShenZhen Kswell Electronics Co.,LT	M20-10-G-0	M20*1.5/-40~100°C	UL1741; CSA No.107.1	Tested with appliance
18	9	External waterproof fan	NMB	06025VA12N CL01	12V/0.2A/44dB/-40~70°C /60*60mm	CSA-C22.2 No. 113	UR
--	10	conformal coating	ELANTAS ZHUHAI CO LTD	BZ1806	V-0	UL94; UL746E	UR
--	11	heat-shrinkable tube	ShenZhen Woer Heat—Shrinkable Material Co.,Ltd	RSFR(CB)	300V,125°C	UL 224; CSA-C22.2 No. 198.1 (2006)	cURus
23	12	Circulating fan at low voltage side of battery	NMB	06025SA12N AL01,L=510(N MB)	12V/0.2A/44dB/-40~70°C /60*60mm	CSA-C22.2 No. 113	cUR
23	13	Circulating fan	NMB	06025SA12N AL01	12V/0.2A/44dB/-40~70°C /60*60mm	CSA-C22.2 No. 113	cUR
17	14	Sealant	RAMPF Polymer Solutions GmbH & Co KG	HT-820	V-0, HF-1	ANSI/UL 94	UR

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Photo No.	Item No.	Component name	Manufacturer/ trademark	Type/ model	Technical data	Standard	Mark(s) of conformity
24	15	Arc detection module	Fonrich (shanghai) New Energy Technology Co., Ltd	FR-DCMG-AS4A	81*42*43mm/±15 A/-40~70°C	UL1699 B	--
24	16	Insulating sheet in an inductive metal box	DUPONT SPECIALTY PRODUCTS USA, LLC	410	Φ16	ANSI/UL 94	UR
24	17	Insulation tape in an inductive metal box	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PF-301	180°C	CAN/UL 510A	UR
24	18	Potting glue in inductive metal box	SHENZHEN ANPIN SILICONE MATERIAL CO LTD	905	V-0, 150°C	ANSI/UL 94, UL746A, UL746B	cURus
23	19	Fuse (Battery +)	Littelfuse	MEGA70V_S F51	70VDC,300A/-40~125°C	UL1741; CSA No.107.1	Tested with appliance
			BUSSMANN	EVH-300	70VDC,300A/-40~125°C	UL1741; CSA No.107.1	Tested with appliance
19	20	Battery cable fastener	Shanghai Kinglok Electrical Material Co., Ltd	FDNCG-M50L-41-BK	M50*1.5/-40~85°C	UL1741; CSA No.107.1	--
			ShenZhen Kswell Electronics Co.,LTD	M50-38-B-1	M50*1.5/-40~100°C	UL1741; CSA No.107.1	--

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Photo No.	Item No.	Component name	Manufacturer/ trademark	Type/ model	Technical data	Standard	Mark(s) of conformity
24	21	PV terminal	PHOENIX CONTACT GMBH & CO. KG	3211757 PT4	600v/30A/4mm <sup>2</sup> /-60~130°C	CSA-C22.2 No. 158	cUR
23	22	PCB coating	SHENZHEN RONGDA PHOTODESENSITIVE SCIENCE AND TECHNOLOGY CO LTD	H-9100/H-9100B	V-0	IEC 60695-11-10	UR
23	23	PCB material	GANZHOU BANGDE CIRCUIT TECHNOLOGY CO LTD	BD-D	V-0, 130°C	ANSI/UL 94; ANSI/UL 796 ;CAN/CSA-C22.2 No. 0.17	cURus
19	24	M25 thread ring	ShenZhen Kswell Electronics Co.,LT	K105-0077	M25*1.5/-40~105°C	UL1741; CSA No.107.1	Tested with appliance
19	25	M20 thread ring	Jiaxing City Shengyang Electric Co., Ltd	MA20-H2-06	M20*1.5/-40~100°C	UL1741; CSA No.107.1	Tested with appliance
24	26	GRID terminal	PHOENIX CONTACT GMBH & CO. KG	3212120 PT10	600V/55A/10mm <sup>2</sup> /-60~130°C	CSA-C22.2 No. 158	cUR
23	27	BAT terminal	Shenzhen Connection Electronics Co., Ltd	DRTB150-BR-2PIN	600V/300A/150mm <sup>2</sup> /-60~120°C	CSA-C22.2 No. 158	cUR

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Photo No.	Item No.	Component name	Manufacturer/ trademark	Type/ model	Technical data	Standard	Mark(s) of conformity
25	28	Microprocessor (U4)	TI	TMS320F280049CPZS	100Mhz/256KB/-40~125°C	UL1741; CSA No.107.1	Tested with appliance
25	29	Microprocessor (U12)	ST	STM32F103VCT6	75Mhz/512KB/-40~125°C	UL1741; CSA No.107.1	Tested with appliance
21	30	Safety Y capacitance (C322-C323,C393-C394)	SHAANXI HUAXING ELECTRONIC DEVELOPMENT CO LTD	CT7-2F4-400VAC-472M	400VAC/4700PF ±20%/ -25~+125°C	CAN/CSA-E60384-1 (2014)	cUR
21	32	Capacitor (C238-C241)	XIAMEN FARATRONIC CO LTD	C232J223K3S C450	630Vdc/22000uF ±10%/-55~105°C	UL1741; CSA No.107.1	Tested with appliance
21	33	Capacitor (C373-C376)	XIAMEN FARATRONIC CO LTD	C823A333J60 C000	1000vdc/33000uF ±5%/-40~105°C	UL1741; CSA No.107.1	Tested with appliance
21	34	Capacitor (U1-U4,U7-U8,U10-U13)	XIAMEN FARATRONIC CO LTD	C823A473J90 C000	1000vdc/47000uF ±5%/-40~105°C	UL1741; CSA No.107.1	Tested with appliance
21	35	Battery low-voltage side capacitor(C377-C382,C386-C391,C410-C416,C418-C421)	HUNAN AIHUA GROUP CO., LTD	ERJ1JM122M300TR	63V 1200 μF/-40~105°C	UL1741; CSA No.107.1	Tested with appliance

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Photo No.	Item No.	Component name	Manufacturer/ trademark	Type/ model	Technical data	Standard	Mark(s) of conformity
21	36	Current Sensor (Battery low-voltage side)	Sinomags	STB-200LA_ZNH	200A// -40~105°C	UL1741; CSA No.107.1	Tested with appliance
21	37	Isolated Gate Driver (The low-voltage side of the battery) (PC19-PC34)	TI	ucc23513b	-40~150°C	UL1577	cURus
--	38	Isolation Amplifier	TI	AMC1301DWVR	-40~125°C	UL1577	cURus
21	39	Current Sensor (Battery high voltage side)	YUANXING ELECTRONICS CO., LTD	TA21R11-5A/2.5mA	5A/2.5Ma/-40°C ~+85°C	UL1741; CSA No.107.1	Tested with appliance
21	40	Capacitor (C365-C368,C370,C372,C422-C423)	Nantong Jianghai Capacitor Co.,Ltd	ECR1ELH471 ML080020E	470uf/-40~105°C	UL1741; CSA No.107.1	Tested with appliance
	41	Power tube layering	--	80880233	--	UL 5VA	--
21	42	Relay (K1,K2)	TYCO ELECTRONICS (SHENZHEN) CO LTD	SDT-SH-112DM	12VDC/10A/-30~70°C	ANSI/UL 508; CAN/CSA C22.2. No. 14-10	cURus

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Photo No.	Item No.	Component name	Manufacturer/ trademark	Type/ model	Technical data	Standard	Mark(s) of conformity
21	43	BUS Capacitor	Nantong Jianghai Capacitor Co.,Ltd	GGSW211033 --CD297	315V/1000Uf/-25~105°C	UL1741; CSA No.107.1	Tested with appliance
21	44	Balanced Current Transducer	LEM	HLSR 32-P	32A/-40~105°C	ANSI/UL 508; CSA-C22.2 No. 14	cURus
21	45	Isolated Gate Driver	TI	UCC23513D WYR	-40°C to +130°C	UL1577	cURus
--	46	Ceramic gasket	BORNSUN	78460051_A	60*38mm	UL1741; CSA No.107.1	Tested with appliance
20	47	Relay(RLY1 -RLY11)	Xiamen Hongfa Electroacoustic Co., LTD	HF176F	320VAC/90A/-40°C ~ +85°C	ANSI/UL 508; CAN/CSA C22.2 No. 14-13	cURus
20	48	Communication Optocoupler (PC1-PC9)	SHARP	PC123X5YIP0 F	50mA/-30°C ~ +100°C	ANSI/UL 1577	cURus
20	49	EMI Ferrite Chip Beads (L11-L16)	GUANGDONG ZHAOQING YINGDA INDUCTOR CO., LTD	CBG201209U 152T	2*1.2*0.9/152Ω/-40°C ~ +125°C	UL1741; CSA No.107.1	Tested with appliance
20	50	INV Current Transducer(SN5-6)	LEM SWITZERLAND S A	CKSR 50-NP	50A/-40~105°C	ANSI/UL 508; CSA-C22.2 No. 14	cURus

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

20	51	PV inductance (L1,L2)	KINGBOARD LAMINATES HOLDINGS LTD	Adhesive: E-500	--	--	cUR
			KINGBOARD LAMINATES HOLDINGS LTD	BOARD: FR-4,1.5mm	V-0/130°C	CAN/CSA-C22.2 No. 0.17	cUR
			JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	TAPE: CT280	CLASS B, 130°C	CAN/UL 510A	N/A
			CHANGYUAN ELECTRONICS (SHENZHEN) CO LTD	TUPE: CB-TT-S	VW-1/ 200°C	CSA-C22.2 No. 198.1 (2006)	cUR
			WU JIANG TAIHU INSULATING MATERIAL CO LTD	VARNISH: ET-90(a)	CLASS H,180°C	UL 1446	UR
			TAI-I ELECTRIC WIRE & CABLE CO.,LTD	MW30C EIW 2.3mm	CLASS F ,155°C	ANSI/UL 1446	UR
20	52	Safety Y capacitance	MURATA MFG CO LTD	DE1E3KX472 MA4BN01F	400VAC/4700PF/ -25~125°C	CAN/CSA-E60384-1	cUR
20	53	Gas discharge tube, (GDT3-GDT5)	SHENZHEN BENCENT ELECTRONIC CO LTD	B8G600M	10,000A @ 8/20µs, -40~85°C	ANSI/UL 497B	UR

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

20	54	Hall(L5,L6)	YUANXING ELECTRONICS CO., LTD	TA21R11-5A/2.5mA	5A/2.5Ma/-40~85°C	UL1741; CSA No.107.1	Tested with appliance
20	55	SPD(F8-F10)	Xiamen SET Electronics Co., Ltd	TFMOV10M3 85	385VAC,10kA	UL1449 UL94 V-0 CSA C22.2 No. 269.5-17	UR
20	56	Common mode choke (L3-L4)	KINGBOARD LAMINATES HOLDINGS LTD	BOARD: FR-4,1.5mm	V-0/130°C	IEC 60695-11-10	cUR
			JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	TAPE: CT280	CLASS B, 130°C	CAN/UL 510A	UR
			CHANGYUAN ELECTRONICS (SHENZHEN) CO LTD	TUPE: CB-TT-S	VW-1/ 200°C	CSA-C22.2 No. 198.1	cUR
			WU JIANG TAIHU INSULATING MATERIAL CO LTD	VARNISH: ET-90(a)	CLASS H,180°C	UL1446	UR
			TAI-I ELECTRIC WIRE & CABLE CO.,LTD	Wire: MW30C EIW 2.3mm	CLASS F ,155°C	UL1446	UR
--	58	USB digital isolator (U6)	ADI	ADuM4160	12Mbps/5kV/105°C	UL1741; CSA No.107.1	Tested with appliance

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

20	59	Thermal Fuse (F2-F7)	AUPO ELECTRONICS LTD	A8-3A-F	6.2*6.3*2.5mm/150°C	UL 60691	cUR
22	60	Optocoupler (PC1-PC3)	Sharp Corporation	PC123X5YIP0F	50mA/-30°C ~ +100°C	CSA Component Acceptance Service Notice No. 5A	cUR
22	61	Safety Y capacitance (C21,C22)	SHAANXI HUAXING ELECTRONIC DEVELOPMENT CO LTD	CT7-2F4-400VAC-472M	400Vac/4700uf/-25°C ~ +85°C	CAN/CSA-E60384-1	cUR
22	62	Capacitance (C42)	SHENZHEN SURONG CAPACITORS CO., LTD	CBB21-104K-630VDC	630VDC,0.1uf/-25°C ~ +85°C	UL1741; CSA No.107.1	Tested with appliance
22	63	FUSE(F1)	COOPER BUSSMANN LLC	S505H-1-R	250Vac,5*20mm/-40°C ~ +85°C	CSA-C22.2 No. 248.1 (2011)	cUR
22	64	Capacitance (C70)	HUNAN Aihua Group CO.,LTD	EHS2WM680 M300T	450V;68uF, -25°C ~+105°C	UL1741; CSA No.107.1	Tested with appliance
22	65	Power PWM CHIP (U3,U5)	ON	NCP1351BDR 2G	-60~150°C	UL1741; CSA No.107.1	Tested with appliance
22	66	Relay (RLY1)	SONG CHUAN PRECISION CO LTD	507N-2CH-F-C12VDC	8A/240VAC, -25°C ~ +85°C	ANSI/UL 508; CAN/CSA C22.2. No. 14-10	cUR

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

22	67	Capacitance (C20)	Sichuan Zhongxing Electronic Co., Ltd	CL21103K2J40B000	10nF±10%-630VDC, -55°C ~ +105°C	UL1741; CSA No.107.1	Tested with appliance
22	68	Capacitance (C38)	SHAANXI HUAXING ELECTRONIC DEVELOPMENT CO LTD	CT81-2B4-1KV-221K	1000V;220pF, -25°C ~ +85°C	UL1741; CSA No.107.1	Tested with appliance
22	69	Rectifier bridge (DB1)	LESHAN RADIO COMPANY, LTD	GBU8K	1000V;8A;1V, -55°C ~ +150°C	UL94	cUR
26	70	Safety Y capacitance (C104)	SHAANXI HUAXING ELECTRONIC DEVELOPMENT CO LTD	CT7-2F4-400VAC-472M	4700pF±20%-400VAC, -25°C ~ +85°C	CAN/CSA-E60384-1 (2014); CAN/CSA-E60384-14 (2009 or 2014)	cUR
26	71	Relay (K1, K2)	Xiamen Hongfa Electroacoustic Co., LTD	HF176F	320VAC/90A/-40°C ~ +85°C	ANSI/UL 508; CAN/CSA C22.2 No. 14-13	cUR

*Note: For each circuit board, the certification standard information is only applicable to PCB board materials.*

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.





# LISTING REPORT/INSPECTION PROCEDURE

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 41 of 57  
Issued: 2022-03-29  
Revised: N/A

## ANNUAL RE-TESTING OF UNLISTED COMPONENTS

The unlisted components on this page are uncontrolled (not falling under a third party certification program) and require periodic retesting and/or evaluation.

**Note to SGS Follow Up Inspector: The inspection office will notify you in writing when these components must be selected and sent to the Lab indicated below for re-evaluation.**

Ship the samples to:

Ship the samples to SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch  
198 Kezhu Road, Science City, Economic & Technology Development Area, Guangzhou,  
Guangdong, China

The unlisted components covered by this report and are required to be re-tested/evaluated are shown in the following table:







PHOTO #	ITEM #	DESCRIPTION	MFR	TYPE/ MODEL	RATING
N/A	N/A	N/A	N/A	N/A	N/A
VERIFICATION PROCESS					
<b>Test Standard:</b>		N/A			
<b>Frequency of Testing:</b>		N/A		<b>No. of Test Samples:</b>	N/A
Clause No.	TEST	PARAMETERS			
N/A	N/A	N/A			

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

**MARKINGS**


The following markings are required:

**Marking A: Nameplate**


 <b>MEGAREVO</b> Hybrid Solar Inverter Grid Support Interactive Inverter R5KLNA		 <b>MEGAREVO</b> Hybrid Solar Inverter Grid Support Interactive Inverter R6KLNA	
<b>PV Input</b>		<b>PV Input</b>	
Max PV Input	7.5kW	Max PV Input	9kW
Mppt input Voltage	120~500V	Mppt input Voltage	120~500V
MAX.Input Current	12A*4	MAX.Input Current	12A*4
MAX.Short Circuit Current	15A	MAX.Short Circuit Current	15A
<b>AC Output (On Grid)</b>		<b>AC Output (On Grid)</b>	
Rated Output Power	5kVA	Rated Output Power	6kVA
Rated Output current	20.8A	Rated Output current	25A
Grid Voltage	120V/240V Split phase	Grid Voltage	120V/240V Split phase
Grid Frequency ( Optional )	60Hz	Grid Frequency ( Optional )	60Hz
Power Factor Range	-0.8~+0.8	Power Factor Range	-0.8~+0.8
<b>AC Output (EPS)</b>		<b>AC Output (EPS)</b>	
Rated Output Power	5kVA	Rated Output Power	6kVA
Rated Output Current	20.8A	Rated Output Current	25A
EPS Voltage	120V/240V Split phase	EPS Voltage	120V/240V Split phase
EPS Frequency ( Optional )	60Hz	EPS Frequency ( Optional )	60Hz
<b>Battery</b>		<b>Battery</b>	
Battery Voltage Range	40V~60V	Battery Voltage Range	40V~60V
Max. charging Current	120A	Max. charging Current	135A
Max. Discharging Current	120A	Max. Discharging Current	135A
<b>System</b>		<b>System</b>	
Ingress Protection	IP65	Ingress Protection	IP65
Dimensions(W*D*H)	430*710*220mm	Dimensions(W*D*H)	430*710*220mm
Weight	41Kg	Weight	41Kg
Max. Efficiency	97.8%	Max. Efficiency	97.8%
Product Serial number		Product Serial number	
 		 	

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

**Marking A: Nameplate (Continued)**

 <b>MEGAREVO</b> Hybrid Solar Inverter Grid Support Interactive Inverter R7K6LNA	
<b>PV Input</b>	
Max PV Input	12kW
Mppt input Voltage	120~500V
MAX.Input Current	12A*4
MAX.Short Circuit Current	15A
<b>AC Output (On Grid)</b>	
Rated Output Power	7.6kVA
Rated Output current	31.7A
Grid Voltage	120V/240V Split phase
Grid Frequency ( Optional )	60Hz
Power Factor Range	-0.8~+0.8
<b>AC Output (EPS)</b>	
Rated Output Power	7.6kVA
Rated Output Current	31.7A
EPS Voltage	120V/240V Split phase
EPS Frequency ( Optional )	60Hz
<b>Battery</b>	
Battery Voltage Range	40V~60V
Max. charging Current	190A
Max. Discharging Current	190A
<b>System</b>	
Ingress Protection	IP65
Dimensions(W*D*H)	430*710*220mm
Weight	41Kg
Max. Efficiency	97.8%
Product Serial number	




 <b>MEGAREVO</b> Hybrid Solar Inverter Grid Support Interactive Inverter R8KLNA	
<b>PV Input</b>	
Max PV Input	12kW
Mppt input Voltage	120~500V
MAX.Input Current	12A*4
MAX.Short Circuit Current	15A
<b>AC Output (On Grid)</b>	
Rated Output Power	8kVA
Rated Output current	33.3A
Grid Voltage	120V/240V Split phase
Grid Frequency ( Optional )	60Hz
Power Factor Range	-0.8~+0.8
<b>AC Output (EPS)</b>	
Rated Output Power	8kVA
Rated Output Current	33.3A
EPS Voltage	120V/240V Split phase
EPS Frequency ( Optional )	60Hz
<b>Battery</b>	
Battery Voltage Range	40V~60V
Max. charging Current	190A
Max. Discharging Current	190A
<b>System</b>	
Ingress Protection	IP65
Dimensions(W*D*H)	430*710*220mm
Weight	41Kg
Max. Efficiency	97.8%
Product Serial number	



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

**Marking A: Nameplate (Continued)**

 <b>MEGAREVO</b> Hybrid Solar Inverter Grid Support Interactive Inverter R10KLNA	
<b>PV Input</b>	
Max PV Input	15kW
Mppt input Voltage	120~500V
MAX.Input Current	12A*4
MAX.Short Circuit Current	15A
<b>AC Output (On Grid)</b>	
Rated Output Power	10kVA
Rated Output current	41.7A
Grid Voltage	120V/240V Split phase
Grid Frequency ( Optional )	60Hz
Power Factor Range	-0.8~+0.8
<b>AC Output (EPS)</b>	
Rated Output Power	10kVA
Rated Output Current	41.7A
EPS Voltage	120V/240V Split phase
EPS Frequency ( Optional )	60Hz
<b>Battery</b>	
Battery Voltage Range	40V~60V
Max. charging Current	210A
Max. Discharging Current	210A
<b>System</b>	
Ingress Protection	IP65
Dimensions(W*D*H)	430*710*220mm
Weight	41Kg
Max. Efficiency	97.8%
Product Serial number	



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Marking B: Cautionary

	<p><b>WARNING</b> -Hot surfaces. -To reduce the risk of burns. -Do not touch.</p> <p><b>AVERTISSEMENT</b> -Surfaces chaudes. -Réduire les risques de brûlures. -Ne touchez pas.</p>
	<p><b>WARNING</b> -Both AC and DC voltage sources are terminated inside this equipment. -Each circuit must be individually dis-connected before servicing. -When the Photovoltaic array is exposed to light, it supplies a DC voltage to this equipment.</p> <p><b>AVERTISSEMENT</b> -Les sources de tension alternative et continue sont raccordées à l'intérieur de cet équipement. -Chaque circuit doit être déconnecté avant de procéder à toute réparation. -Lorsque le réseau photovoltaïque est exposé à la lumière, il fournit une tension continue à cet équipement.</p> <p><b>WARNING</b> -Disconnect all sources of supply before servicing.</p> <p><b>AVERTISSEMENT</b> -Couper toutes les sources d'alimentation avant de faire l'entretien et les réparations.</p> <p><b>WARNING</b> -When a ground fault is indicated. Normally grounded conductors may be ungrounded and energized or normally ungrounded conductors may be grounded.</p> <p><b>AVERTISSEMENT</b> -Lorsqu'un défaut à la terre est signalé, Les conducteurs normalement mis à la terre peuvent ne pas être mis à la terre et être sous tension ou les conducteurs qui, Normalement, ne sont pas mis à la terre peuvent être mis à la terre.</p>
	<p><b>WARNING</b> -Risk of electric shock from energy stored in capacitor. -Do not remove cover until 5 minutes after disconnecting all sources of supply.</p> <p><b>AVERTISSEMENT</b> -Risque d'électrocution en raison de l'électricité emmagasinée. -Attendre 5 minutes après avoir débranché toutes les sources d'alimentation avant d'accéder.</p>
	<p><b>CAUTION</b> -Risk of electric shock, Do not remove upper front cover. -No user serviceable parts inside. -Refer servicing to qualified service personnel.</p> <p><b>ATTENTION</b> -Risque d'électrocution, Ne pas enlever le capot avant supérieur. -Aucune utilisateur pièce réparable à l'intérieur. -Référez le service à personnel de service qualifié.</p>
<p>Transformerless inverter, Non-isolated inverter. Inverseur sans transformateur, onduleur non-isolé. Interactive PCE. Appareillage de conversion de puissance interactif.</p>	
	<p>Risk Of Electric Shock. Risque de choc électrique.</p> <p>Use Copper Conductors Only. Utiliser uniquement des conducteurs en cuivre</p> <p>Use conductor with insulation rated for at least 90 °C. Utilisez un conducteur avec une isolation nominale d'au moins 90 °C.</p> <p>Reference to the instruction manual for the tightening torque to be applied to the wiring terminals. Référence au manuel d'instructions pour le couple de serrage à appliquer aux bornes de câblage.</p>

Note:

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



## LISTING REPORT/INSPECTION PROCEDURE

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 46 of 57  
Issued: 2022-03-29  
Revised: N/A

1. Marking A shall be permanent. SGS NA Listed Mark shall be at least 5 mm high. Other letters shall be at least 2.4 mm high.
2. Marking B shall be permanent, and A cautionary marking shall be prefixed by the word "CAUTION", "WARNING", or "DANGER" in letters not less than 3.2 mm (1/8 inch) high. The remaining letters shall not be less than 1.6 mm (1/16 inch) high.
3. Permanent methods include Molded, Die-stamped, Paint-stenciled, Stamped, etched metal or pressure-sensitive label recognized by NRTL.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

**INSTRUCTIONS**

Both English and French instructions shall be provided. Instruction shall include below information:

1. Proper installation method.
2. Wiring instructions that specify the proper method of connecting the grounding means and maintaining polarity shall be included
3. Other information should not lead to misuse.
4. Electrical Ratings and Descriptions

<b>According to Table 65.1 of UL 1741 (Third Edition, Dated September 28, 2021)</b>		
<b>Model:</b>	<b>R5KLNA</b>	<b>R6KLNA</b>
<b>INPUT RATINGS:</b>		
Maximum input voltage	500 V dc	
Range of input operating voltage	120 V dc to 500 V dc	120 V dc to 500 V dc
Range of input operating voltage with full power	180 V dc to 430 V dc	200 V dc to 430 V dc
Maximum input current (dc)	12 Adc	12 Adc
Number of input	4	
<b>OUTPUT RATINGS:</b>		
Output power factor rating	default >0.99 (-0.8~0.8 adjustable)	
Operating voltage range (ac) (L-L)	0.88Un~1.1Un	
Operating frequency range or single frequency	58.5 Hz to 61.2 Hz	
Number of phases	Single phase/ Split phase	
Nominal output voltage (ac)	120Vac/240Vac	
Normal output frequency	60 Hz	
Maximum continuous output current (ac) per line	22.9 Arms	27.5 Arms
Rated output current (ac) per line	20.8 Arms	25 Arms
Maximum continuous output power (ac)	5.5 kVA	6.6 kVA
Rated continuous output power (ac)	5.0 kW	6.0 kW
Maximum output fault current (ac) and duration	71.5 Arms@1cycle 72.0Arms@3cycle 72.4 Arms@5cycle	
Trip limit and trip time accuracy - Voltage:	±2.4 V	±2.4 V
Utility interconnection voltage and frequency trip limits and trip times	see Note 1 and 2	
Trip limit and trip time accuracy - Frequency:	±0.01 Hz	
Trip limit and trip time accuracy - Time	±1%setting, but not less than 50ms	
Normal operation temperature range	-25°C to 60°C	
Enclosure Rating Type	Type 3R	

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



## LISTING REPORT/INSPECTION PROCEDURE

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 48 of 57  
Issued: 2022-03-29  
Revised: N/A

<b>According to Table 65.1 of UL 1741 (Third Edition, Dated September 28, 2021)</b>		
<b>Model:</b>	<b>R7K6LNA</b>	<b>R8KLNA</b>
<b>INPUT RATINGS:</b>		
Maximum input voltage	500 V dc	
Range of input operating voltage	120 V dc to 500 V dc	120 V dc to 500 V dc
Range of input operating voltage with full power	220 V dc to 430 V dc	250 V dc to 430 V dc
Maximum input current (dc)	12 Adc	12 Adc
Number of input	4	
<b>OUTPUT RATINGS:</b>		
Output power factor rating	default >0.99 (-0.8~0.8 adjustable)	
Operating voltage range (ac) (L-L)	0.88Un~1.1Un	
Operating frequency range or single frequency	58.5 Hz to 61.2 Hz	
Number of phases	Single phase/ Split phase	
Nominal output voltage (ac)	120Vac/240Vac	
Normal output frequency	60 Hz	
Maximum continuous output current (ac) per line	35 Arms	36.7 Arms
Rated output current (ac) per line	31.7 Arms	33.3 Arms
Maximum continuous output power (ac)	8.4 kVA	8.8 kVA
Rated continuous output power (ac)	7.6 kW	8.0 kW
Maximum output fault current (ac) and duration	371.5 Arms@1cycle 72.0Arms@3cycle 72.4 Arms@5cycle	
Trip limit and trip time accuracy - Voltage:	±2.4 V	±2.4 V
Utility interconnection voltage and frequency trip limits and trip times	see Note 1 and 2	
Trip limit and trip time accuracy - Frequency:	±0.01 Hz	
Trip limit and trip time accuracy - Time	±1%setting, but not less than 50ms	
Normal operation temperature range	-25°C to 60°C	
Enclosure Rating Type	Type 3R	

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.





## LISTING REPORT/INSPECTION PROCEDURE

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 49 of 57  
Issued: 2022-03-29  
Revised: N/A

<b>According to Table 65.1 of UL 1741 (Third Edition, Dated September 28, 2021)</b>	
<b>Model:</b>	<b>R10KLNA</b>
<b>INPUT RATINGS:</b>	
Maximum input voltage	500 V dc
Range of input operating voltage	120 V dc to 500 V dc
Range of input operating voltage with full power	280 V dc to 430 V dc
Maximum input current (dc)	12 Adc
Number of input	4
<b>OUTPUT RATINGS:</b>	
Output power factor rating	default >0.99 (-0.8~0.8 adjustable)
Operating voltage range (ac) (L-L)	0.88Un~1.1Un
Operating frequency range or single frequency	58.5 Hz to 61.2 Hz
Number of phases	Single phase/ Split phase
Nominal output voltage (ac)	120Vac/240Vac
Normal output frequency	60 Hz
Maximum continuous output current (ac) per line	41.7 Arms
Rated output current (ac) per line	45.8 Arms
Maximum continuous output power (ac)	11 kVA
Rated continuous output power (ac)	10 kW
Maximum output fault current (ac) and duration	71.5 Arms@1cycle 72.0Arms@3cycle 72.4 Arms@5cycle
Trip limit and trip time accuracy - Voltage:	$\pm 2.4$ V $\pm 2.4$ V
Utility interconnection voltage and frequency trip limits and trip times	see Note 1 and 2
Trip limit and trip time accuracy - Frequency:	$\pm 0.01$ Hz
Trip limit and trip time accuracy - Time	$\pm 1\%$ setting, but not less than 50ms
Normal operation temperature range	-25°C to 60°C
Enclosure Rating Type	Type 3R

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

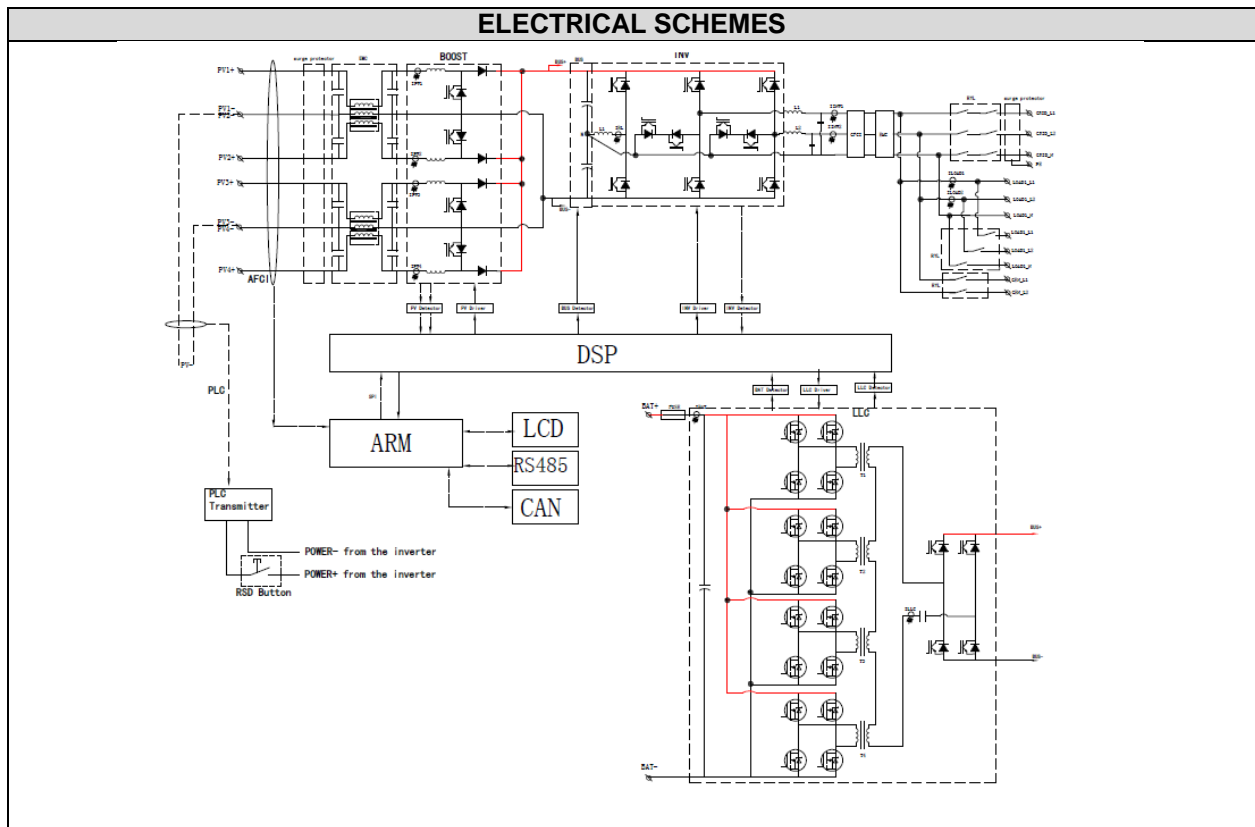
According to Table 28 of IEEE 1547-2018 (representative)			
#	Parameter	EUT Configuration Information	
1	Active power rating at unity power factor (nameplate active power rating)	8.0kW	
2	Active power rating at specified over-excited power factor	7.04 kW	
3	Specified over-excited power factor	0.8	
4	Active power rating at specified under-excited power factor	7.04 kW	
5	Specified under-excited power factor	0	
6	Apparent power maximum rating	8.8 kVA	
7	Normal operating performance category	B	
8	Abnormal operating performance category	III	
9	Reactive power injected maximum rating	5280 VAr	
10	Reactive power absorbed maximum rating	5280 VAr	
11	Active power charge maximum rating	8.0 kW	
12	Apparent power charge maximum rating	8.8 kVA	
13	AC voltage nominal rating	240 V	
14	AC voltage maximum rating	264 V	
15	AC voltage minimum rating	211.2 V	
16	Supported control mode functions	Item 0~26	
17	Reactive susceptance that remains connected to the Area EPS in the cease to energize and trip state	N/A	
18	Manufacturer	--	
19	Model	R8KLNA	
20	Serial number	I01219018513	
21	Version	V1.04.06(DSP), V1.03.06(ARM)	
According to Table 3 of IEEE 1547-2018			
Time Frame	Steady-state measurements		
Parameter	Minimum measurement accuracy	Measurement window	Range
Voltage, RMS	± 1% Vnom	10 cycles	0.5 p.u. to 1.2 p.u.
Frequency	0.01 Hz	60 cycles	50 Hz to 66 Hz
Active Power	± 5% Srated	10 cycles	-1.0 p.u. to 1.0 p.u.
Reactive Power	± 5% Srated	10 cycles	-1.0 p.u. to 1.0 p.u.
Time	1). 1% of measured duration (>= 5 s) 2). 30 ms (< 5 s)	N/A	0~ 1000 s

*Note: Maximum reactive power level (injection and absob) is 66%Sn for function Voltage-reactive power mode (Q(U)) and Active power-reactive power mode (P-Q), while 100%Sn for Constant power factor mode (PF) and Constant reactive power mode.*

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Note 1: Utility Interconnection Voltage and Frequency Trip Limits and Trip Times:

According to IEEE 1547-2018				
Shall trip—Category III				
Shall trip function	Default settings		Ranges of allowable settings	
	Voltage (p.u.)	Clearing time (s)	Voltage (p.u.)	Clearing time (s)
OV2	1.20	0.16	fixed at 1.20	fixed at 0.16
OV1	1.10	13.0	1.10 ~ 1.20	1.0 ~ 13.0
UV1	0.88	21.0	0.0 ~ 0.88	2.0 ~ 50.0
UV2	0.50	2.0	0.0~0.50	0.16 ~ 21.0
OF2	62.0	0.16	61.8~66.0	0.16~1000.0
OF1	61.2	300.0	61.0~66.0	180.0~1000.0
UF1	58.5	300.0	50.0~59.0	180.0~1000.0
UF2	56.5	0.16	50.0~57.0	0.16~1000.0



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

**SUMMARY OF TEST RESULTS**

The following tests were performed:

**UL 1741 (Third Edition, Dated September 28, 2021)**

Section	Test Description
26	Spacings
27	Alternate Spacings – Clearances and Creepage Distances
45	Maximum - Voltage Measurements
46	Temperature
47	Dielectric Voltage-Withstand Test
48.2	Output Power Characteristics – Output ratings
48.3	Output Power Characteristics – DC input range
48.4	Harmonic distortion
50.2	Abnormal Tests – Output overload test
50.3	Abnormal Tests – Short Circuit test
50.4	Abnormal Tests – DC input miswiring test
50.5	Abnormal Tests – Ventilation test
50.6	Abnormal Tests – Component Short and open circuit
50.8	Loss of control circuit
51	Grounding Impedance test
60	Capacitor Voltage Determination Test
61	Stability
63	Compression test
64	Rain and Sprinkler Tests

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

**SUMMARY OF TEST RESULTS(Continuing)****CSA C22.2. No.107.1-16 issued on June 2016**

Section	Test Description
6.2	Ratings
6.3	Temperature
6.5	Dielectric strength
6.6	Abnormal operation
6.9	Compression
10.5.1	AC output voltage for stand-alone inverters
10.5.2	Harmonic distortion for stand-alone inverters
10.5.3	DC injection
10.5.4	Frequency
10.5.5	Stand-alone inverter dc output short-circuit current contribution
14.3.2	Output ratings
14.3.3	Harmonic current distortion
14.3.4	Utility voltage and frequency variation test
14.3.5	Anti-islanding test
14.3.6	Loss of control circuit power
14.3.7	Maximum back feed current into the PCE input circuit
14.3.8	Testing of automatic disconnecting mean for non-isolated inverters
14.3.9	AC output short circuit current contribution test

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



## LISTING REPORT/INSPECTION PROCEDURE

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 54 of 57  
Issued: 2022-03-29  
Revised: N/A

### SUMMARY OF TEST RESULTS(Continuing)

<b>UL 1741SB (Third Edition, Dated September 28, 2021) Based upon IEEE 1547-2018 and IEEE 1547.1-2020</b>			
<b>UL1741SB (Ed.3)</b>	<b>IEEE1547: 2018</b>	<b>IEEE Std 1547.1:2020</b>	
SB4.3.5.3	4.4	5.3	Temperature stability
SB4.3.5.4	6.4	5.4	Test for response to voltage disturbances
SB4.3.5.4.2	6.4.1	5.4.2	Test for overvoltage trip
SB4.3.5.4.3		5.4.3	Test for undervoltage trip
SB4.3.5.4.4	6.4.2.1	5.4.4	Low-voltage ride-through tests
	6.4.2.3		
	6.4.2.2	5.4.5	Test for voltage disturbances within continuous operating region
SB4.3.5.4.7	6.4.2.1	5.4.7	High-voltage ride-through tests
	6.4.2.4		
SB4.3.5.5	6.5	5.5	Test for response to frequency disturbances
SB4.3.5.5.1	6.5.1	5.5.1	Test for overfrequency trip
SB4.3.5.5.2		5.5.2	Test for underfrequency trip
SB4.3.5.5.3	6.5.2.1	5.5.3	Test for low-frequency ride-through
	6.5.2.3		
SB4.3.5.5.4	6.5.2.1	5.5.4	Test for high-frequency ride-through
	6.5.2.4		
	6.5.2.5	5.5.5	Test for rate of change of frequency (ROCOF)
SB4.3.5.5.6	6.5.2.6	5.5.6	Test for voltage phase-angle change ride-through
	4.10.2	5.6	Enter service
	4.10.3		
	6.6		
	4.10.4	5.7.4	Synchronization control function test for equipment with no synchronizing disable capability (variation 3)
	4.11	5.8	Interconnection integrity
SB4.3.5.8.1	4.11.1	5.8.1	Protection from electromagnetic interference (EMI) test
SB4.3.5.8.2	4.11.2	5.8.2	Surge withstand performance test
	4.11.3	5.8.3	Paralleling device tests
	7.1	5.9	Limitation of dc injection for inverters
SB4.3.5.10	8.1	5.10	Unintentional islanding
SB4.3.5.10.2	8.1.1	5.10.2	Balanced generation to load unintentional islanding test
	6.2.2	5.11	Open phase
	7.3	5.12	Current distortion
		5.12.2	Current distortion test for DER not capable of operation isolated from external source
	4.6.2	5.13	Limit active power
	5.3	5.14	Voltage regulation
SB4.3.5.14.3	5.3.2	5.14.3	Test for constant power factor (p.f.) mode
SB4.3.5.14.4	5.3.3	5.14.4	Test for voltage-reactive power (volt-var) mode

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



## LISTING REPORT/INSPECTION PROCEDURE

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 55 of 57  
Issued: 2022-03-29  
Revised: N/A

<b>UL 1741SB (Third Edition, Dated September 28, 2021) Based upon IEEE 1547-2018 and IEEE 1547.1-2020</b>			
<b>UL1741SB (Ed.3)</b>	<b>IEEE1547: 2018</b>	<b>IEEE Std 1547.1:2020</b>	
SB4.3.5.14.5		5.14.5	Test for voltage-reactive power (volt-var) mode (VRef test)
SB4.3.5.14.6		5.14.6	Test for voltage - reactive power (volt-var) mode with an imbalanced grid
SB4.3.5.14.7	5.3.4	5.14.7	Test for active power-reactive power mode (watt-var)
SB4.3.5.14.8	5.3.5	5.14.8	Test for constant reactive power (var) mode
SB4.3.5.14.9	5.4.2	5.14.9	Test for voltage-active power (volt-watt) mode
		5.14.10	Test for voltage-active power (volt-watt) mode with an imbalanced grid
SB4.3.5.15		5.15	Frequency support
SB4.3.5.15.2	6.5.2.7	5.15.2	Test for frequency-droop (frequency-power or frequency-watt) capability—above nominal frequency
SB4.3.5.15.3		5.15.3	Test for frequency-droop (frequency-power or frequency-watt) capability—below nominal frequency
SB4.3.5.16	4.7	5.16	Test for prioritization of DER responses
		5.16.2	Test for voltage and frequency regulation priority
SB4.3.5.17	7.4	5.17	Limitation of overvoltage contribution
SB4.3.5.17.2	7.4.2	5.17.2	Load rejection overvoltage (LROV) test
	11.4	5.18	Fault current tests
	11.4.2	5.18.1	Fault current tests for inverters
SB4.3.6	10 <sup>(4)</sup>	5.19	Persistence of DER parameter settings
SB4.3.6.8.2		6	Interoperability tests (IEEE2030.5 Protocol used)
		6.8.2	
		6.4	Nameplate data test
		6.8.2.1	
SB4.3.6.6		6.6	Monitoring information test
		6.8.2.3	
SB4.3.6.7		6.7	Management information test
		6.8.2.4	
<b>UL1741SB (Ed.3)</b>	<b>IEEE1547a: 2020</b>	<b>IEEE Std 1547.1:2020</b>	
	6.4.1	5.4.3	Test for undervoltage trip
<b>UL1741SB (Ed.3)</b>	<b>SRD 2.0</b>	<b>IEEE Std 1547.1:2020</b>	
	PART II.A	5.6	Enter service
	PART II.A	5.5.3	Test for low-frequency ride-through
		5.5.4	Test for high-frequency ride-through
	PART II.C	5.15.2	Test for frequency-droop (frequency-power or frequency-watt) capability - abovenominal frequency
		5.15.3	Test for frequency-droop (frequency-power or frequency-watt) capability - below nominal frequency

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



## LISTING REPORT/INSPECTION PROCEDURE

SHENZHEN MEGAREVO TECHNOLOGY CO., LTD  
PROJECT NUMBER: GZ-CERT220300532

Page 56 of 57  
Issued: 2022-03-29  
Revised: N/A

### REVISION TABLE

The following changes have been made to this Report:

<u>Date</u>	<u>Project #</u>	<u>Revision prepared by</u>	<u>Page</u>	<u>Description of Change</u>
2022-03-29	GZES2108 026145PV	Sunny Lin	None	First issuance.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



**CONCLUSION**

Samples of the products covered by this Report have been found to comply with the applicable requirements of Standard:

- Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources –UL 1741. (Third Edition, Dated September 28, 2021)
- Power conversion equipment – CSA C22.2 No. 107.1 issued on June 2016
- UL 1741 Supplement SB - Grid Support Utility Interactive Inverters and Converters Based upon IEEE 1547-2018 and IEEE 1547.1-2020. (Third Edition, Dated September 28, 2021)

Reference standard

- IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces – IEEE Std 1547:2018 (Revision of IEEE Std 1547:2003), approved 15 February 2018; IEEE Std 1547a™-2020 Approved 9 March 2020. (Refer to IEEE Std 1547.1:2020, approved 5 March 2020.)
- Hawaiian Electric Companies, IEEE 1547.1-2020 Source Requirements Document Version 2.0 (“SRD V2.0”), effective on July 1<sup>st</sup>, 2020

Report Prepared by:



Sunny Lin  
Project Engineer

Report Reviewed and Approved by:



Roger Hu  
Global Reviewer