

Technical Report No.: 70.409.21.065.11-00

Date: 2021-07-06

Client: Huawei Technologies Co., Ltd.
Address: Administration Building Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, 518129 Shenzhen, PEOPLE'S REPUBLIC OF CHINA

Manufacturing place: Huawei Machine Co., Ltd.
No. 2 City Avenue, Songshan Lake Sci. & Tech. Industry Park, 523808 Dongguan, Guangdong, PEOPLE'S REPUBLIC OF CHINA

Test subject: Product: SOLAR INVERTER
Type: SUN2000-40KTL-M3, SUN2000-36KTL-M3, SUN2000-30KTL-M3, SUN2000-29.9KTL-M3, SUN2000-20KTL-M3, SUN2000-40KTL-NAM3, SUN2000-36KTL-NAM3, SUN2000-33KTL-NAM3, SUN2000-30KTL-NAM3, SUN2000-25KTL-NAM3

Test specification: Draft standard IEC 63027 ED1, 82/1636/CDV
DC arc detection and interruption in photovoltaic power systems

Purpose of examination: • (Visual / Partial -) inspection according to the test specification

Test result: The test result show that the presented product is in compliance with the specific requirements.

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1. Description of the test subject

1.1 Function

These devices are transformer-less grid-connected PV inverters which converts direct current optimized by photovoltaic DC conditioner to alternating current, and they are intended to be connected in parallel with the public LV distribution grid directly. In addition, the inverter is integrated with DC arc fault detection and interruption function.

They are intended for professional incorporation into PV system, and they are assessed on a component test basis.

The AFCI function module integrated into the inverter are the same for this series products, including hardware and control logic in programmable electronic components. Also refer to declaration from Huawei in below.



Manufacturer Declaration

For the following

Equipment Product/Series :Huawei SUN2000

The relevant models can be added under scoped of the certification having the same hardware topology and firmware of the tested model.

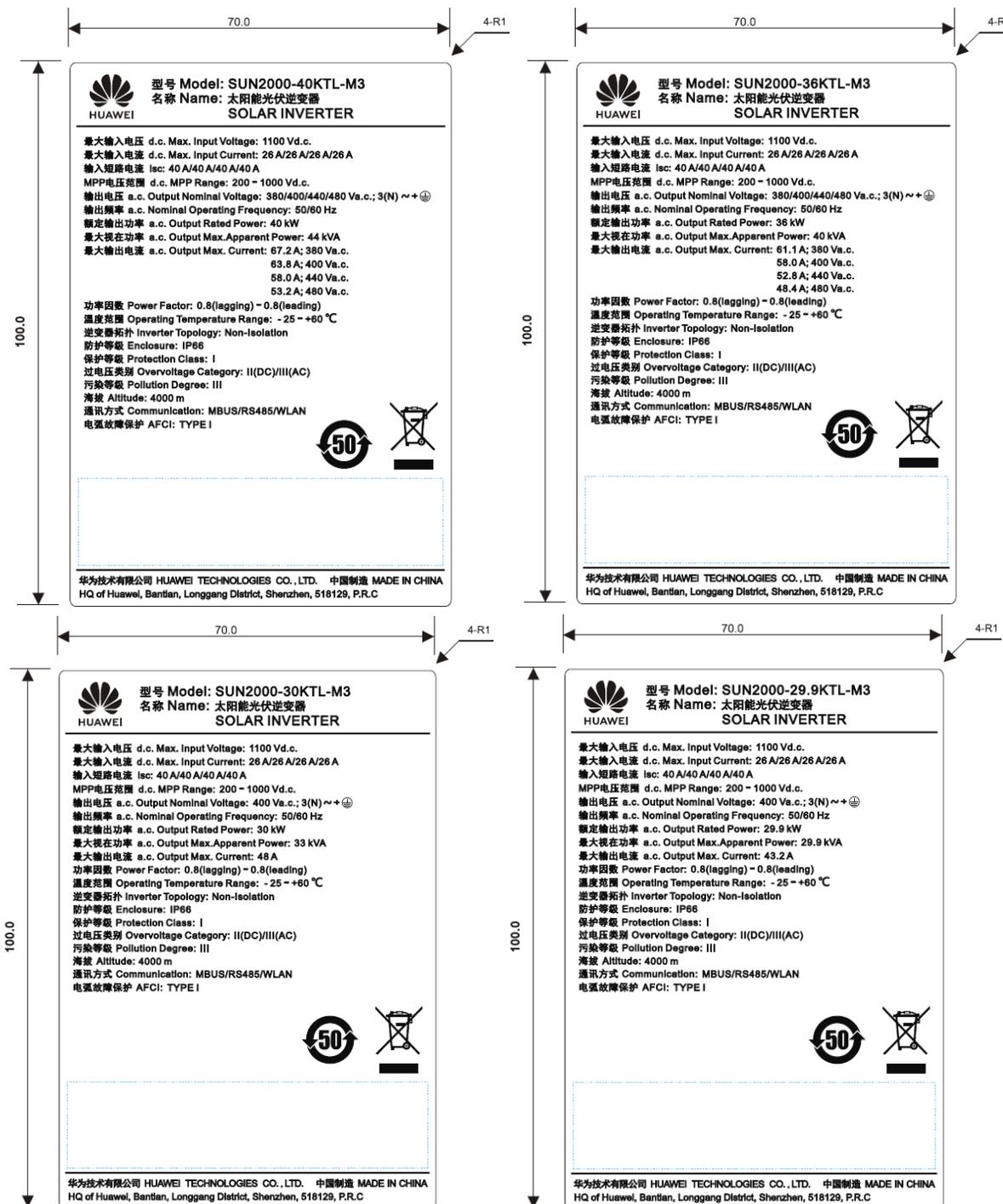
Model	Maximum input current of MPPT(A)	MPPT Number
SUN2000-40KTL-M3	26A	4
SUN2000-36KTL-M3	26A	4
SUN2000-30KTL-M3	26A	4
SUN2000-29.9KTL-M3	26A	4
SUN2000-20KTL-M3	26A	4
SUN2000-25KTL-NAM3	26A	4
SUN2000-30KTL-NAM3	26A	4
SUN2000-33KTL-NAM3	26A	4
SUN2000-36KTL-NAM3	26A	4
SUN2000-40KTL-NAM3	26A	4

Firmware version related to AFCI function: SUN2000MAV100R001C20

1.2 Consideration of the foreseeable use

- Not applicable
- Covered through the applied standard
- Covered by the following comment
- Covered by attached risk analysis

1.3 Technical Data



Doc No.: ITC-TTW0902.02E - Rev. 5

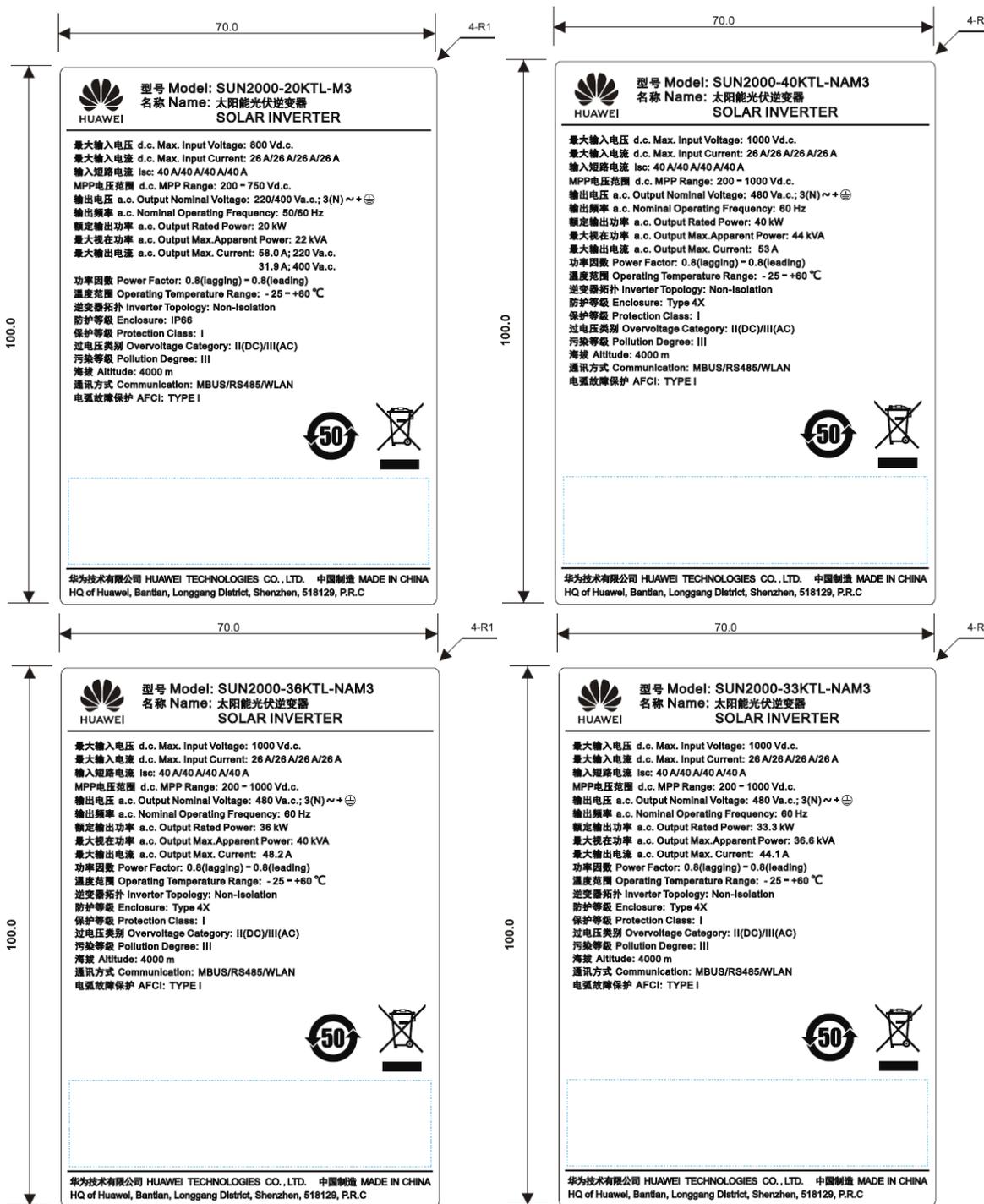
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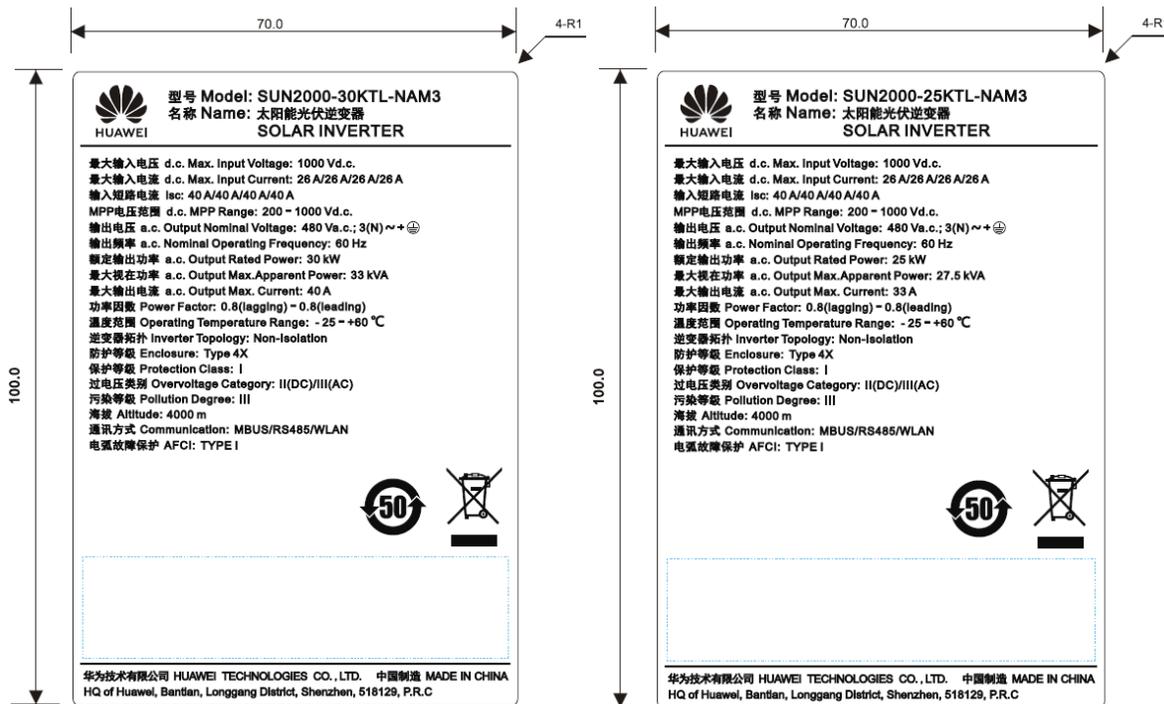
www.tuv-sud.com

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TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
 3-13, No.151 Heng Tong Road, 200070, Shanghai, P.R. China





Note: inverter marking only, a separated marking regarding to arcing characteristic should be provided on inverter as well according to draft standard IEC 63027 ED1, 82/1636/CDV

2. Order

2.1 Date of Purchase Order, Customer's Reference

2021-05-21

2.2 Receipt of Test Sample, Condition, Location

2021-06-01

2.3 Date of Testing

Witness tested by TUV SUD engineer from 2021-06-01 to 2021-07-02

2.4 Location of Testing

Huawei Technologies Co., Ltd.
No.901, Tang Lu Road, Pudong New District, Shanghai, P.R.C.

2.5 Points of Non-Compliance or Exceptions of the Test Procedure

N/A



3.1 Points of Non-Compliance according to the test specification

- N/A

4. Remark

- N/A

5. Documentation

- Not available at this stage

6. Summary

“The test specification(s) is (are) met” for which are evaluated at this stage.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch

Tested by:

Shan Huang 
 printed name, function & signature

Approved by:

Kai Zhao 
 printed name, function & signature

