Declaration of conformity

to the requirements of the Standard CEI 0-21

CERTIFICATION ORGANIZATION: **Bureau Veritas Consumer Products Services Germany GmbH**
Accreditation DAkkS, D-ZE-12024-01-00, Rif. DIN EN ISO/IEC 17065
Data validity: 15-October-2020

STANDARD / GUIDE:
CEI 0-21: 2012-06
CEI 0-21; V1: 2012-12 Edition December 2012
CEI 0-21; V2: 2013-12 Edition December 2013
CEI 0-21: 2014-09
CEI 0-21; V1: 2014-12 Edition December 2014
CEI 0-21: 2016-07
CEI 0-21; V1: 2017-07 Edition July 2017
Technical reference rule for the connection of active and passive users to the LV electricity distribution networks of companies

TYPE OF SYSTEM DECLEARED:

INTERFACE DEVICE	PROTECTION INTERFACE	STATIC ELECTRONIC INVERTER	ROTATING GENERATION MACHINE
X	X	X	

MANUFACTURER:
Huawei Technologies Co., Ltd.
Administration Building, Headquarters of Huawei Technologies Co., Ltd.
Bantian, Longgang District, Shenzhen, 518129
P.R.C

PRODUCT TYPE:	SOLAR INVERTER					
MODEL:	SUN2000-3KTL-M0	SUN2000-4KTL-M0	SUN2000-5KTL-M0	SUN2000-6KTL-M0	SUN2000-8KTL-M0	SUN2000-10KTL-M0
NOMINAL POWER:	3,0kW	4,0kW	5,0kW	6,0kW	8,0kW	10,0kW

FIRMWARE VERSION: **V100R001**

PHASE NUMBER: **three-phase**

NOTE:
The device is able to limit the Idc to 0.5% of the nominal current.
The device is for plants of each power.
The inverters of Huawei Technologies Co., Ltd. have a maximum apparent power limit. In the case where a system should be able to reach in every working condition a determined power factor, it is necessary to set the maximum active power in such a way, that you can reach at any time the cos-phi wanted.

LABORATORY THAT HAS DONE THE TESTING:
Bureau Veritas Consumer Products Services Germany GmbH
Accreditation DAkkS, D-PL-12024-03-03, Rif. DIN EN ISO/IEC 17025
Valid Laboratory Accreditation Data: 11-JUNE-2019

After reviewing the ISO 9001 Manufacturer's No. FM669363, issued by BSI, ISO 9001 Manufacturer's No. 064-17-Q-1267-R1-M, issued by Beijing Standard Certification Centre, reviewing the test-reports with No. 18TH0255-CEI 0-21_0, issued by the laboratory Bureau Veritas Consumer Products Services Germany GmbH and reviewing the manufacturer's CE declaration of conformity with the relevant test report, No. DM181110030 issued by the laboratory STC with recognized accreditation by DAkkS (No. D-PL12121-01-00). The indicated product is declared to comply with the provisions of CEI 0-21: 2012-06, CEI 0-21; V1: 2012-12, CEI 0-21; V2: 2013-12, CEI 0-21: 2014-09, CEI 0-21; V1: 2014-12, CEI 0-21: 2016-07, CEI 0-21; V1: 2017-07.

Certificate number: **U18-0646**

Data of issue: **2018-11-30**

Certification body

Holger Schaffer
Certification body Bureau Veritas Consumer Products Services Germany GmbH
Accreditation to DIN EN ISO/IEC 17065

Table Interface Protection System (SPI)

Extract of the test report **No. 18TH0255-CEI 0-21_0**

Interface Protection System (SPI)

Manufacturer:	Huawei Technologies Co., Ltd. Administration Building, Headquarters of Huawei Technologies Co., Ltd. Bantian, Longgang District, Shenzhen, 518129 P.R.C					
Model:	SUN2000-3KTL-M0	SUN2000-4KTL-M0	SUN2000-5KTL-M0	SUN2000-6KTL-M0	SUN2000-8KTL-M0	SUN2000-10KTL-M0
Nominal Power:	3,0kW	4,0kW	5,0kW	6,0kW	8,0kW	10,0kW
Firmware version:	V100R001					
Number of phases (single-phase/three-phase):	three-phase					

Temperature -25 °C		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [V]	Requested [V] ± 1%	Detected [ms]	Requested [ms]	Detected	Requested	Detected [ms]	Requested [ms]
Voltage Threshold	Min	195,7	195,5	412	400 ± 20 ms	N/A	between 1,03 and 1,05	N/A	between 40 and 100
	Max	265,2	264,5	210	200 ± 20 ms	N/A	between 0,95 and 0,97	N/A	between 40 and 100

Temperature Ambient		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [V]	Requested [V] ± 1%	Detected [ms]	Requested [ms]	Detected	Requested	Detected [ms]	Requested [ms]
Voltage Threshold	Min	195,6	195,5	406	400 ± 20 ms	N/A	between 1,03 and 1,05	N/A	between 40 and 100
	Max	265,0	264,5	210	200 ± 20 ms	N/A	between 0,95 and 0,97	N/A	between 40 and 100

Temperature +60 °C		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [V]	Requested [V] ± 1%	Detected [ms]	Requested [ms]	Detected	Requested	Detected [ms]	Requested [ms]
Voltage Threshold	Min	195,7	195,5	412	400 ± 20 ms	N/A	between 1,03 and 1,05	N/A	between 40 and 100
	Max	265,2	264,5	212	200 ± 20 ms	N/A	between 0,95 and 0,97	N/A	between 40 and 100

Note:
≤ 1 % for the voltage thresholds
≤ 3 % ± 20 ms for the times of intervention
variation of the error during the repetition of the tests
≤ 2 % for the tensions
≤ 1 % ± 20 ms for the times of intervention

Table Interface Protection System (SPI)

Extract of the test report **No. 18TH0255-CEI 0-21_0**

Frequency 49,5Hz … 50,5Hz

Temperature -25 °C		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [Hz]	Requested [Hz] ± 20 mHz	Detected [ms]	Requested [ms]	Detected	Requested	Detected [ms]	Requested [ms]
Frequency Threshold	Min	49,50	49,5	106	100 ± 20 ms	N/A	between 1,001 and 1,003	N/A	between 40 and 100
	Max	50,50	50,5	116	100 ± 20 ms	N/A	between 0,997 and 0,999	N/A	between 40 and 100

Temperature Ambient		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [Hz]	Requested [Hz] ± 20 mHz	Detected [ms]	Requested [ms]	Detected [Hz]	Requested [Hz] ± 20 mHz	Detected [ms]	Requested [ms]
Frequency Threshold	Min	49,50	49,5	107	100 ± 20 ms	N/A	between 1,001 and 1,003	N/A	between 40 and 100
	Max	50,50	50,5	115	100 ± 20 ms	N/A	between 0,997 and 0,999	N/A	between 40 and 100

Temperature +60 °C		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [Hz]	Requested [Hz] ± 20 mHz	Detected [ms]	Requested [ms]	Detected [Hz]	Requested [Hz] ± 20 mHz	Detected [ms]	Requested [ms]
Frequency Threshold	Min	49,50	49,5	107	100 ± 20 ms	N/A	between 1,001 and 1,003	N/A	between 40 and 100
	Max	50,50	50,5	116	100 ± 20 ms	N/A	between 0,997 and 0,999	N/A	between 40 and 100

Frequency 47,5Hz … 51,5Hz

Temperature -25 °C		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [Hz]	Requested [Hz] ± 20 mHz	Detected [ms]	Requested [ms]	Detected [Hz]	Requested [Hz] ± 20 mHz	Detected [ms]	Requested [ms]
Frequency Threshold	Min	47,50	47,5	112	100 ± 20 ms	N/A	between 1,001 and 1,003	N/A	between 40 and 100
	Max	51,50	51,5	116	100 ± 20 ms	N/A	between 0,997 and 0,999	N/A	between 40 and 100

Temperature Ambient		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [Hz]	Requested [Hz] ± 20 mHz	Detected [ms]	Requested [ms]	Detected [Hz]	Requested [Hz] ± 20 mHz	Detected [ms]	Requested [ms]
Frequency Threshold	Min	47,50	47,5	110	100 ± 20 ms	N/A	between 1,001 and 1,003	N/A	between 40 and 100
	Max	51,50	51,5	112	100 ± 20 ms	N/A	between 0,997 and 0,999	N/A	between 40 and 100

Temperature +60 °C		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [Hz]	Requested [Hz] ± 20 mHz	Detected [ms]	Requested [ms]	Detected [Hz]	Requested [Hz] ± 20 mHz	Detected [ms]	Requested [ms]
Frequency Threshold	Min	47,50	47,5	111	100 ± 20 ms	N/A	between 1,001 and 1,003	N/A	between 40 and 100
	Max	51,50	51,5	117	100 ± 20 ms	N/A	between 0,997 and 0,999	N/A	between 40 and 100

Nota:
± 20 mHz for the frequency thresholds
≤ 3 % ± 20 ms for the times of intervention
variation of the error during the repetition of the tests
- ≤ 1 % ± 20 ms for the times of intervention