



SolaX Power Network Technology (Zhejiang) Co., Ltd.
No.288,Shizhu Road, Tonglu Economic Development Zone,
Tonglu City, Zhejiang Province, 310000 P. R. CHINA
Tel. +86 571 56260011
www.solaxpower.com - info@solaxpower.com

Dichiarazione di conformità alle prescrizioni della Norma CEI 0-21
Declaration of conformity to the requirements of the standard CEI 0-21

TIPOLOGIA DEL SISTEMA DI ACCUMULO CUI SI RIFERISCE LA DICHIARAZIONE:
TYPE OF STORAGE SYSTEM TO WHICH THIS DECLARATION REFERS:

DISPOSITIVO DI INTERFACCIA <i>INTERFACE DEVICE</i>	PROTEZIONE DI INTERFACCIA <i>INTERFACE PROTECTION</i>	DISPOSITIVO DI CONVERSIONE STATICA <i>STATIC CONVERSION DEVICE</i>	DISPOSITIVO DI GENERAZIONE ROTANTE <i>ROTARY GENERATING DEVICE</i>
Sì/Yes	Sì/Yes	Sì/Yes	No

COSTRUTTORE: <i>MANUFACTURER</i>	MODELLO DI INVERTER: <i>INVERTER MODEL</i>	VERSIONE FIRMWARE: <i>FIRMWARE VERSION:</i>	NUMERO DI FASI (monofase/trifase) <i>NUMBER OF PHASE</i>	POTENZA NOMINALE: <i>RATED POWER [W]</i>
SolaX Power Network Technology (Zhejiang) Co., Ltd. No.288,Shizhu Road, Tonglu Economic Development Zone, Tonglu City, Zhejiang Province, 310000 P. R. CHINA	X1-Boost-2.5K-G4	Master : 1.00 Manage:1.00	monofase <i>one-phase</i>	2500
	X1-Boost-3K-G4			3000
	X1-Boost-3.3K-G4			3300
	X1-Boost-3.6K-G4			3600
	X1-Boost-4.2K-G4			4200
	X1-Boost-5K-G4			5000
	X1-Boost-6K-G4			6000

NOTA: Il dispositivo è in grado di limitare la Idc allo 0,5% della corrente nominale.
REMARK: The device is capable to limit Idc to 0,5% of the rated current



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Esaminati i Fascicoli Prove n°U23-0190, emessi dal laboratorio BUREAU VEITAS con accreditamento CNAS N. L3038.

Ai sensi dell'articolo 76 del DPR 28 Dicembre 2000, n° 445, il sottoscritto Li Xinfu, in qualità di legale rappresentante di Solax Power Co. Ltd, 288 Shizhu Rd. Tonglu, Zhejiang Province, China, dichiara che il prodotto indicato è conforme alle prescrizioni CEI-0-21: 2022

*Taken into account test report No. U23-0190 issued by test lab BUREAU VEITAS with CNAS accreditation (No. L3038).
According with the article 76 of Italian DPR 28 December 2000, n° 445, the undersigned Li Xinfu, as legal representative of SolaX Power Network Technology (Zhejiang) Co., Ltd., 288 Shizhu Rd. Tonglu, Zhejiang Province, China, herewith declare that the product complies with the requirements of CEI-0-21: 2022*

DATA 14/03/2023
DATE 14/03/2024

FIRMA LEGALE RAPPRESENTANTE
SIGNATURE LEGAL REPRESENTATIVE
Li Xinfu

A handwritten signature in black ink, appearing to be 'Li Xinfu' in Chinese characters.

浙江艾罗网络能源技术股份有限公司
SOLAX POWER NETWORK TECHNOLOGY (ZHEJIANG) CO., LTD.

The Ministry of Foreign Affairs of the People's Republic of China requests all civil and military authorities of foreign countries to allow the bearer of this passport to pass freely and afford assistance in case of need.

护照号码/Passport No.
ED5062714

李新富

1367754103

[illegible]

ED50627148CHN6602129M2806066MA00NAMCLILLA930



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Certificate of compliance

with the requirements of the standard CEI 0-21

Certification
Organization

Bureau Veritas Consumer Products Services Germany GmbH
Accreditation to DAkkS, D-ZE-12024-01-00, ref. to DIN EN ISO/IEC 17065

Standard / Guide

CEI 0-21: 2022-03 / V1: 2022-11
Reference technical rules for the connection of active and passive users to the LV electrical Utilities,
Annex A: Features and tests for the System Protection Interface (SPI), Annex B: Testing of
generators connected to the grid via static converters

Type Of System Declared:

Interface Device	Protection Interface	Static Electronic Inverter	Rotating Generation Machine
X	X	X	

Manufacturer SolaX Power Network Technology (Zhe jiang) Co., Ltd.
No.288,Shizhu Road, Tonglu Economic Development Zone, Tonglu City, Zhejiang Province,
310000,
P. R. CHINA

Primary Energy Used	Solar			
Equipment Type	Photovoltaic Inverter			
Generator Model	X1-BOOST-2.5K-G4	X1-BOOST-3K-G4	X1-BOOST-3.3K-G4	X1-BOOST-3.6K-G4
Rated Power [W]	2500	3000	3300	3680
Generator Model	X1-BOOST-4.2K-G4	X1-BOOST-5K-G4	X1-BOOST-6K-G4	--
Rated Power [W]	4200	5000	6000	--

Firmware Version Master:1.00, Manager:1.00

Phase Number Monofase / Frequenza 50Hz / Tensione 230V

Note:

The device is capable of limiting the Idc to 0,5 % of the rated current.

The device uses a DC-sensitive protection function

The device is for systems up to 11,08kW

The device is suitable for installation in systems with an output of more than 11,08 kW.

The inverters of SolaX Power Network Technology (Zhe jiang) 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 ϕ wanted.

REFERENCES OF THE LABORATORIES THAT PERFORMED THE TESTS:

Bureau Veritas Consumer Products Services Germany GmbH
Accreditation to DAkkS, D-PL-12024-03-03, ref. to DIN EN ISO/IEC 17025

After verifying the ISO 9001 of the Manufacturer with No. 15/22Q0689R00, issued by Hangzhou WT Assesment Co., Ltd. and verifying the test reports according to CEI 0-21 with No. SXP-ESH-P23020041, issued by the laboratory Bureau Veritas Consumer Products Services Germany GmbH and verifying the EMC test report with No. ENB2207270194E00101R, issued laboratory EMTEK (Ningbo) Co., Ltd. accredited by CNAS (No. L6666), the listed product(s) are conform with the requirements according to CEI 0-21:2022:03, V1:2022-11, Annex A and Annex B.

Certificate number: U23-0190

Certification Program:

NSOP-0032-DEU-ZE-V01

Date of issue: 2023-03-14

Certification Body

Alf Assenkamp



A partial representation of the certificate requires the written approval of Bureau Veritas Consumer Products Services Germany GmbH

BUREAU VERITAS
Consumer Products Services Germany GmbH

Oehleckerring 40, 22419 Hamburg, Germany
Tel: +49 40 74041-0

cps-hamburg@de.bureauveritas.com
www.bureauveritas.de/cps



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Annex to the Certificate of Compliance to the Requirements of CEI 0-21 n. U23-0190

Annex

Extract from the test report according to CEI 0-21 standard

n. SXP-ESH-P23020041

CEI 0-21: 2022-03 / V1: 2022-11

Reference Technical Rule for the Connection of Active and Passive Users to the LV Networks of Electricity Distribution Companies, Annex A: Features and tests for the System Protection Interface (SPI)

Manufacturer of the System Protection Interface (SPI)	SolaX Power Network Technology (Zhe jiang) Co., Ltd.
Assigned to generation unit type	X1-BOOST-2.5K-G4, X1-BOOST-3K-G4, X1-BOOST-3.3K-G4, X1-BOOST-3.6K-G4, X1-BOOST-4.2K-G4, X1-BOOST-5K-G4, X1-BOOST-6K-G4
Type	Integrated

Characteristics of the interface protection system

Temperature Ambient		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [V]	Requested [V] $\pm 1\%$	Detected [ms]	Requested [ms]	Detected	Requested	Detected [ms]	Requested [ms]
Voltage Threshold	Min	195,2	195,5	1510	1500 ± 20	N/A	$1,03 \leq r \leq 1,05$	N/A	$40 \leq tr \leq 100$
	Max	264,7	264,5	198	200 ± 20	N/A	$0,95 \geq r \geq 0,97$	N/A	$40 \leq tr \leq 100$

Temperature -10 °C		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [V]	Requested [V] $\pm 1\%$	Detected [ms]	Requested [ms]	Detected	Requested	Detected [ms]	Requested [ms]
Voltage Threshold	Min	195,2	195,5	1500	1500 ± 20	N/A	$1,03 \leq r \leq 1,05$	N/A	$40 \leq tr \leq 100$
	Max	264,7	264,5	198	200 ± 20	N/A	$0,95 \geq r \geq 0,97$	N/A	$40 \leq tr \leq 100$

Temperature +55 °C		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [V]	Requested [V] $\pm 1\%$	Detected [ms]	Requested [ms]	Detected	Requested	Detected [ms]	Requested [ms]
Voltage Threshold	Min	195,3	195,5	1510	1500 ± 20	N/A	$1,03 \leq r \leq 1,05$	N/A	$40 \leq tr \leq 100$
	Max	264,7	264,5	198	200 ± 20	N/A	$0,95 \geq r \geq 0,97$	N/A	$40 \leq tr \leq 100$

Note:

$\leq 1\%$ for the voltage thresholds

$\leq 3\% \pm 20$ ms for the times of intervention

variation of the error during the repetition of the tests

$\leq 2\%$ for the tensions

$\leq 1\% \pm 20$ ms for the times of intervention



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n. SXP-ESH-P23020041

Frequency 49,8Hz ... 50,2Hz

Temperature Ambient		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [Hz]	Requested [Hz] $\pm$ 20 mHz	Detected [ms]	Requested [ms]	Detected	Requested	Detected [ms]	Requested [ms]
Frequency Threshold	Min	49,82	49,8	83	100 $\pm$ 20 ms	N/A	$1,001 \leq r \leq 1,003$	N/A	$40 \leq tr \leq 100$
	Max	50,20	50,2	89	100 $\pm$ 20 ms	N/A	$0,997 \geq r \geq 0,999$	N/A	$40 \leq tr \leq 100$
Temperature -10 °C		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [Hz]	Requested [Hz] $\pm$ 20 mHz	Detected [ms]	Requested [ms]	Detected	Requested	Detected [ms]	Requested [ms]
Frequency Threshold	Min	49,82	49,8	97	100 $\pm$ 20 ms	N/A	$1,001 \leq r \leq 1,003$	N/A	$40 \leq tr \leq 100$
	Max	50,20	50,2	90	100 $\pm$ 20 ms	N/A	$0,997 \geq r \geq 0,999$	N/A	$40 \leq tr \leq 100$
Temperature +55 °C		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [Hz]	Requested [Hz] $\pm$ 20 mHz	Detected [ms]	Requested [ms]	Detected	Requested	Detected [ms]	Requested [ms]
Frequency Threshold	Min	49,80	49,8	99	100 $\pm$ 20 ms	N/A	$1,001 \leq r \leq 1,003$	N/A	$40 \leq tr \leq 100$
	Max	50,20	50,2	99	100 $\pm$ 20 ms	N/A	$0,997 \geq r \geq 0,999$	N/A	$40 \leq tr \leq 100$



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Annex to the Certificate of Compliance to the Requirements of CEI 0-21 n. U23-0190

Annex

Extract from the test report according to CEI 0-21 standard

n. SXP-ESH-P23020041

Frequency 47,5Hz ... 51,5Hz

Temperature Ambient		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [Hz]	Requested [Hz] $\pm$ 20 mHz	Detected [ms]	Requested [ms]	Detected	Requested	Detected [ms]	Requested [ms]
Frequency Threshold	Min	47,46	47,5	94	100 $\pm$ 20 ms	N/A	$1,001 \leq r \leq 1,003$	N/A	$40 \leq tr \leq 100$
	Max	51,50	51,5	91	100 $\pm$ 20 ms	N/A	$0,997 \geq r \geq 0,999$	N/A	$40 \leq tr \leq 100$

Temperature -10 °C		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [Hz]	Requested [Hz] $\pm$ 20 mHz	Detected [ms]	Requested [ms]	Detected	Requested	Detected [ms]	Requested [ms]
Frequency Threshold	Min	47,50	47,5	93	100 $\pm$ 20 ms	N/A	$1,001 \leq r \leq 1,003$	N/A	$40 \leq tr \leq 100$
	Max	51,50	51,5	89	100 $\pm$ 20 ms	N/A	$0,997 \geq r \geq 0,999$	N/A	$40 \leq tr \leq 100$

Temperature +55 °C		Intervention thresholds		Time of intervention		Reset Ratio		Time of relapse	
		Detected [Hz]	Requested [Hz] $\pm$ 20 mHz	Detected [ms]	Requested [ms]	Detected	Requested	Detected [ms]	Requested [ms]
Frequency Threshold	Min	47,50	47,5	91	100 $\pm$ 20 ms	N/A	$1,001 \leq r \leq 1,003$	N/A	$40 \leq tr \leq 100$
	Max	51,50	51,5	89	100 $\pm$ 20 ms	N/A	$0,997 \geq r \geq 0,999$	N/A	$40 \leq tr \leq 100$

Note:

$\pm$ 20 mHz for the frequency thresholds

$\leq 3 \% \pm 20$ ms for the times of intervention

variation of the error during the repetition of the tests

- $\leq 1 \% \pm 20$ ms for the times of intervention



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CEI 0-21: 2022-03 / V1: 2022-11

Reference Technical Rule for the Connection of Active and Passive Users to the LV Networks of Electricity Distribution Companies, Annex B: Testing of generators connected to the grid via static converters

Manufacturer of the static converter	SolaX Power Network Technology (Zhe jiang) Co., Ltd. No.288,Shizhu Road, Tonglu Economic Development Zone, Tonglu City, Zhejiang Province, 310000, P. R. CHINA
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Characteristics of the static converter

Equipment Type	Photovoltaic inverter			
Static converter model	X1-BOOST-2.5K-G4	X1-BOOST-3K-G4	X1-BOOST-3.3K-G4	X1-BOOST-3.6K-G4
Input PV DC				
MPP voltage range [V]	40-560			
Max. input voltage [V]	600			
Output AC				
Rated AC voltage [V]	230 Va.c., 50 Hz			
Rated output current [A]	10,9	13,1	14,4	16,0
Max. output current [A]	12	14,4	15,8	17,6
Nominal converter output (P_{NINV}) [W]	2500	3000	3300	3680
Rated apparent power [VA]	2750	3300	3630	4048

Equipment Type	Photovoltaic inverter			
Static converter model	X1-BOOST-4.2K-G4	X1-BOOST-5K-G4	X1-BOOST-6K-G4	--
Input PV DC				
MPP voltage range [V]	40-560			--
Max. input voltage [V]	600			--
Output AC				
Rated AC voltage [V]	230 Va.c., 50 Hz			--
Rated output current [A]	18,3	21,7	26,1	--
Max. output current [A]	20,1	21,7	27,3	--
Nominal converter output (P_{NINV}) [W]	4200	5000	6000	--
Rated apparent power [VA]	4620	5000	6000	--