

Certificate of Conformity

Registered No.:
COC PVP12041/23E-02

File reference
PVP12041/23E-02

Test report No.
TRPVP12041/23E/02

Date of issue
2024-06-07

On the basis of the tests undertaken, the samples of the below product(s) have been found to comply with the essential requirements of the referenced specifications at the time the tests were carried out:

Applicant: Guangdong Felicity New Energy Co., Ltd.
(KongGangBaiYun)No.2, Donghua Huaye Road, Renhe Town, Baiyun Area, Guangzhou, Guangdong, P.R. CHINA

Manufacturer: Guangdong Felicity New Energy Co., Ltd.
(KongGangBaiYun)No.2, Donghua Huaye Road, Renhe Town, Baiyun Area, Guangzhou, Guangdong, P.R. CHINA

Factory: Guangdong Felicity New Energy Co., Ltd.
(KongGangBaiYun)No.2, Donghua Huaye Road, Renhe Town, Baiyun Area, Guangzhou, Guangdong, P.R. CHINA

Product: Hybrid Inverter

Type designation: T-REX-50KHP3G01, T-REX-40KHP3G01, T-REX-30KHP3G01,
T-REX-29K9HP3G01, T-REX-25KHP3G01

Three-phase, Software version: Master: V201, Slave: V101

Type of equipment: Interface device
 Interface protection
 Static conversion device
 Rotary generation device

Remark: The device is for plants greater than 11.08kW.

Certification program: BOS-P-01 Rev. 00

Certification fundamental(s): CEI 0-21:2019-04, CEI 0-21;V1:2020-12
CEI 0-21:2022, CEI 0-21;V1:2022-11, CEI 0-21;V2:2024-01

“Reference technical rules for the connection of active and passive users to the LV electrical Utilities”

See test report for detailed information.



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产品
PRODUCT
CNAS C183-P

TÜV NORD (HANGZHOU) CO., LTD.
Member of TÜV NORD Group
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P.R. China

Certification body:

TÜV NORD (HANGZHOU) CO., LTD.

Room B409, Building 1, No. 9, Jiujuan Road, Shangcheng District,
Hangzhou City, Zhejiang Province, 310019, P.R. China

Accredited by CNAS according to ISO/IEC 17065:2012, certificate no.
CNAS C183-P.

Testing laboratory:

Dongguan BALUN Testing Technology Co., Ltd.

Room 104/204/205, Building 1, No. 6, Industrial South Road, Songshan
Lake District, Dongguan, Guangdong, China

Accredited by CNAS according to ISO/IEC 17025:2017, certificate no.
CNAS L14701

Conclusion:

After verifying following documents, it is concluded that the product is in
compliance with the requirements of CEI 0-21:2019-04, CEI 0-
21;V1:2020-12, CEI 0-21:2022, CEI 0-21;V1:2022-11, CEI 0-
21;V2:2024-01.

ISO 9001 certificate:

Certificate no. 2070024Q10027R0M, issued by Guangdong
Zhongzhijian Certification Co., Ltd.

Test report of CEI 0-21:2019-04, CEI 0-21;V1:2020-12, CEI 0-
21:2022, CEI 0-21;V1:2022-11, CEI 0-21;V2:2024-01:

Report no. BL-DG2451237-201, issued by Dongguan BALUN Testing
Technology Co., Ltd., accredited by CNAS according to ISO/IEC
17025:2017, certificate no. CNAS L14701

This document is based on the evaluation of the samples of the above mentioned product(s). It does not
imply an assessment of the mass-production of the product(s), and it does not permit the use of a TÜV
NORD mark. The holder of this document may use it in connection with the related test report(s).



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Description of product(s):

Inverter					
Model or Type designation	T-REX- 25KHP3G0 1	T-REX- 29K9HP3G 01	T-REX- 30KHP3G0 1	T-REX- 40KHP3G0 1	T-REX- 50KHP3G0 1
PV Input Parameters					
V _{max} PV [Vd.c.]	1000				
MPPT Voltage Range [Vd.c.]	200-850				
I _{sc} PV [Ad.c.]	55+55	55+55+55		55+55+55+55	
Max. Input Current [Ad.c.]	36+36	36+36+36		36+36+36+36	
Battery parameters:					
Battery voltage range [Vd.c.]	160-800				
Max. charging Current [Ad.c.]	50+50				
Max. Discharging Current [Ad.c.]	50+50				
Battery Type	LFP(LiFePO4)				
AC Parameters					
Rated Output Voltage [Va.c.]	230/400, 3W+N+PE				
Rated Output Frequency [Hz]	50/60				
Rated Output Power [kW]	25	29.9	30	40	50
Max. Output Power [kW]	27.5	29.9	33	44	55
Max. Apparent Output Power [VA]	27.5	29.9	33	44	55
Rated Output Current [Aa.c.]	36.3	43.4	43.5	58	72.5
Max. Output Current [Aa.c.]	39.9	43.4	47.9	63.8	79.7
Power Factor cosφ [λ]	0.8 leading to 0.8 lagging				
System					
Inverter Topology	Non-isolated				
Protective Class	Class I				
Ingress Protection	IP65				
Weight [kg]	85.6				
Operation Temperature Range [°C]	-25~+60 (derating at +50)				



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Remark: The inverters listed above may be installed with the following batteries:

Battery	
Model or Type designation	LUX-Y-48100HMG01
Manufacture	FelicityESS
Battery Type	LiFePO4
Energy [kWh]	5.12
Capacity [Ah]	100
Rated Voltage [Vdc]	51.2 (for single battery pack)
Max Charge Current [Adc]	100
Max Discharge Current [Adc]	100
Standard Charge Current [Adc]	50
Standard Discharge Current [Adc]	50
Operating Temperature [°C]	-20 to 55
Operation Humidity	0 ~ 95 % (No condensation)
Nominal Operation Altitude [m]	<2000
IP Rating	IP21
Net Weight [kg]	41.3

The inverters listed above may be installed with the following batteries:					
Battery					
Model of Battery	LUX-Y-48100HMG01				
BMS model	FHU48100				
Firmware version of BMS	V203				
Inverter with 4 Battery					
Model of Inverter	T-REX-25KHP3G 01	T-REX-29K9HP3 G01	T-REX-30KHP3G 01	T-REX-40KHP3G 01	T-REX-50KHP3G 01
Nominal Discharge Power P _{SN} [kW]	10	10	10	10	10
Nominal Charge Power P _{CN} [kW]	10	10	10	10	10
Maximum Discharge Power P _{SMAX} [kW]	20	20	20	20	20
Maximum Charge Power P _{CMAX} [kW]	20	20	20	20	20
Inverter with 8 Batteries					
Model of Inverter	T-REX-25KHP3G 01	T-REX-29K9HP3 G01	T-REX-30KHP3G 01	T-REX-40KHP3G 01	T-REX-50KHP3G 01
Nominal Discharge Power P _{SN} [kW]	20	20	20	20	20
Nominal Charge Power P _{CN} [kW]	20	20	20	20	20
Maximum Discharge Power P _{SMAX} [kW]	25	29.9	30	40	40
Maximum Charge Power P _{CMAX} [kW]	25	29.9	30	40	40
Inverter with 12 Batteries					



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Model of Inverter	T-REX- 25KHP3G 01	T-REX- 29K9HP3 G01	T-REX- 30KHP3G 01	T-REX- 40KHP3G 01	T-REX- 50KHP3G 01
Nominal Discharge Power P_{SN} [kW]	25	29.9	30	30	30
Nominal Charge Power P_{CN} [kW]	25	29.9	30	30	30
Maximum Discharge Power P_{SMAX} [kW]	25	29.9	30	40	50
Maximum Charge Power P_{CMAX} [kW]	25	29.9	30	40	50

Note: The batteries are not integrated into the inverter and must be installed according to the local regulations.



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