

# CERTIFICATE

of conformity with the following European Directives

Low Voltage Directive 2014/35/EU

This certifies that below described products of the applicant:

### Zhejiang Inventronics New Energy Technology Co., Ltd.

West section.2nd floor, South Building, building 1, No.88, Huancheng South Road, Tonglu Economic Development Zone, Tonglu County, Hangzhou City, Zhejiang Province, 311500, P.R.China

comply to the essential requirements of the above mentioned European Directive and the following standards, taking into account the German national deviations:

Product(s):

Hybrid Inverter

Model type(s):

HHB-05K000EULV, HHB-4K6000EULV, HHB-3K6000EULV

This certificate of conformity is based on the evaluation of samples of the product. It does not imply an assessment of the production and it does not permit the use of a mark of conformity or of a safety mark of the TÜV NORD CERT GmbH. The holder of this certificate may use this Certificate together with his EC-Declaration of Conformity.

Certification program:

P31-VA-01 Rev. 02 / 04.20

Certification fundamental(s):

EN 62109-1:2010, EN 62109-2:2011

Registered no .:

44 799 24 406749 - 146

Report no .:

492013117.001

File no .:

PVP05053/23B-01

TÜV NORD CERT GmbH Certification Body **Energy Storage System** 

Essen, 2024-04-25

TÜV NORD CERT GmbH

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Please also pay attention to the information stated overleaf.





## ANNEX

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### to Certificate registration no. 44 799 24 406749 - 146

#### Description of product(s):

Model or Type designation	HHB-05K000EULV	HHB-4K6000EULV	HHB-3K6000EULV
	PV input paramet	ers:	
V <sub>MAX</sub> PV [Vd.c.]	500		
MPP Voltage Range [Vd.c.]	90-430		
Max. PV Input Current [Ad.c.]	16/16		
Short-circuit current [Ad.c.]	23/23		
	Grid input parame	ters:	
Rated Voltage [Va.c.]	230		
Rated Frequency [Hz]	50/60		
Rated Power [kW]	10.0		
Max. Apparent Power [kVA]	10.0		
Max. Current [Aa.c.]	45.6		
Power Factor cosφ [λ]	0.8 leading ~0.8 lagging		
	Grid output parame	eters:	
Rated Voltage [Va.c.]	230		
Rated Frequency [Hz]	50/60		
Rated Power [kW]	5.0	4.6	3.68
Max. Apparent Power [kVA]	5.0	4.6	3.68
Max. Current [Aa.c.]	22.8	20.0	16.8
Power Factor cosφ [λ]	0.8 leading ~0.8 lagging		

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# ANNEX

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	Load parameters:	
Rated Voltage [Va.c.]	230	
Rated Frequency [Hz]	50/60	
Rated Power [kW]	5.0	
Max. Apparent Power [kVA]	5.0	
Max. Current [Aa.c.]	22.8	
Power Factor cosφ [λ]	0.8 leading ~0.8 lagging	
	Battery parameter:	
Battery voltage range [Vd.c.]	40~60	
Max. charging current [Ad.c.]	100	
Max. discharging current [Ad.c.]	100	
	Others:	
Protective class	Class I	
Inverter topology	Non-isolated	
Operation temperature range	-25~60°C (>+45°C, Derating)	
Ingress protection	IP65	
Overvoltage-category	DC II, AC III	
Hardware	A02	
Software	V00A03	

#### Remark:

For detailed product information, please refer to CDF (Constructional Data Form) in Annex 3 of test report.

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