

Unit Certificate

Zhejiang Hyxi Technology Co., Ltd.

Room 216, Block A, Building 1, No. 57 Jiang'er Road,
Changhe Street, Binjiang District, Hangzhou, Zhejiang,
China.

Type of equipment	All-in-one Micro ESS & AC-Coupled Micro ESS (Type 2)	
Product Name	HYX-MS3000AC-800, HYX-MS3000AC-800-BP-1, HYX-MS3000AC-800-BP-2, HYX-MS3000AC-800-BP-3, HYX-MS3000AC-800-BP-4, HYX-MS3000AC-800-BP-5, HYX-MS3000-800, HYX-MS3000-800-BP-1, HYX-MS3000-800-BP-2, HYX-MS3000-800-BP-3, HYX-MS3000-800-BP-4, HYX-MS3000-800-BP-5, HYX-MS3000AC, HYX-MS3000AC-BP-1, HYX-MS3000AC-BP-2, HYX-MS3000AC-BP-3, HYX-MS3000AC-BP-4, HYX-MS3000AC-BP-5, HYX-MS3000, HYX-MS3000-BP-1, HYX-MS3000-BP-2, HYX-MS3000-BP-3, HYX-MS3000-BP-4, HYX-MS3000-BP-5	
Technical data	rated active power:	$P_{rE} = 0.8-3.0 \text{ kW}$
	maximum active power:	$P_{E\max} = 0.8-3.0 \text{ kW}$
	max. apparent power:	$S_{E\max} = 0.8-3.0 \text{ kVA}$
	rated voltage:	$U_r = 230 \text{ V}$
	Rated current (AC):	$I_r = 3.48-13.05 \text{ A}$
	Initial short-circuit AC current:	$I_{k''} = 3.48-13.05 \text{ A}$
Certification scheme	P30VA01 Rev. 11/10.25	TÜV NORD Certification Process for Grid Integration Certification
Network connection rule	VDE-AR-N 4105 2018-11	Generators connected to the low-voltage distribution network customer installations to the medium voltage network operation with low- voltage distribution networks
Test requirement	DIN VDE V 0124-100 2020-06	Grid integration of generator plants - Low-voltage Test requirements for generator units to be connected to and operated in parallel with low-voltage distribution networks

The power generating units comply with the requirements of the network connection rule specified above, with a restriction. For further details and technical specifications, please refer to Annex 1, which consists of 4 pages.

Certificate Registration No. 4479823053474
Evaluation Report No. 35419765

valid from 2026-03-16
Type 1a Certificate

Essen, 2026-03-16
Rev. 1.0



Certification body of TÜV NORD CERT GmbH

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Am TÜV 1, 45307 Essen
Germany
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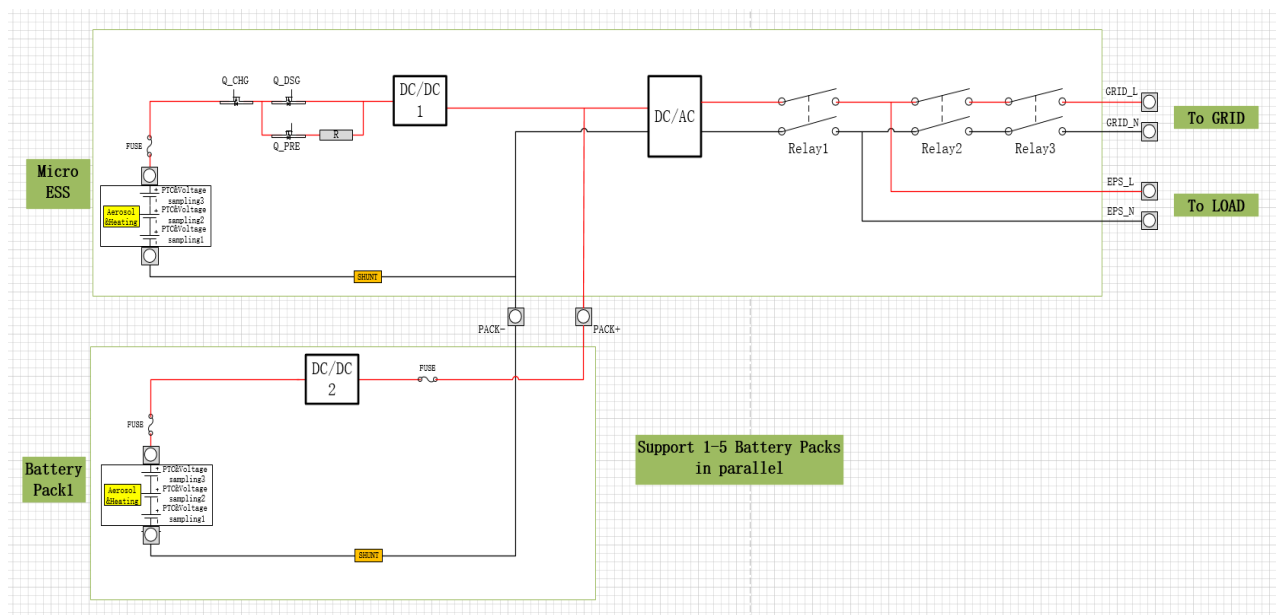
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to the Unit Certificate with the Registration No. 4479823053474

Zhejiang Hyxi Technology Co., Ltd.

Room 216, Block A, Building 1, No. 57 Jiang'er Road,
Changhe Street, Binjiang District, Hangzhou, Zhejiang,
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Schematic structure of the AC-Coupled Micro ESS:



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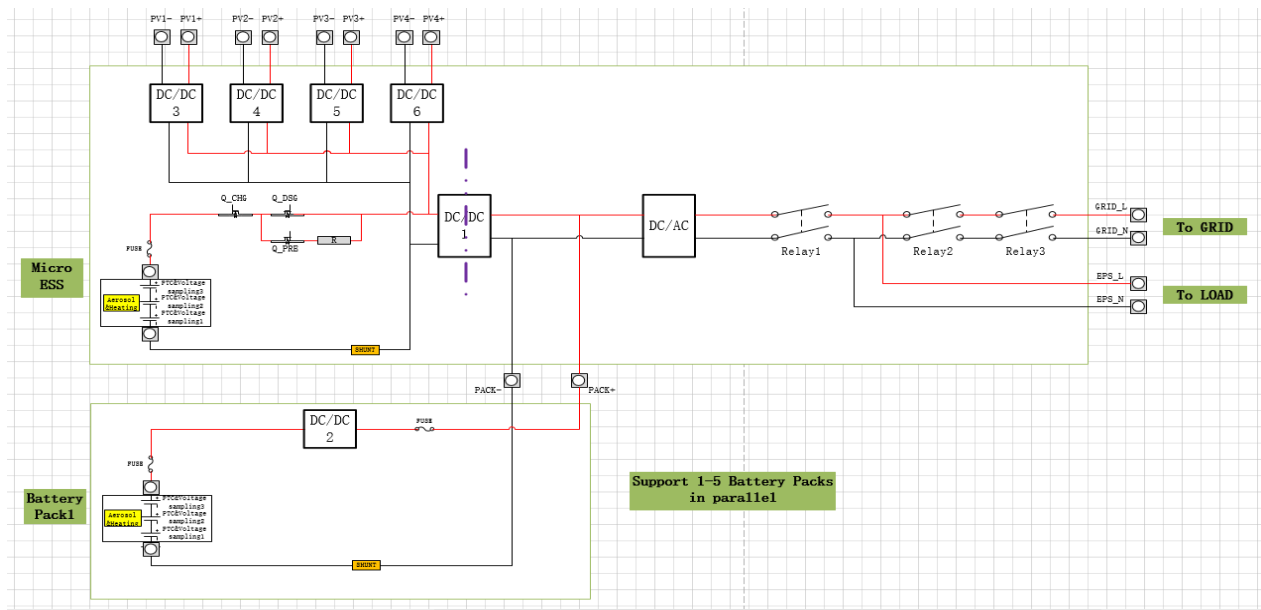
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Schematic structure of the All-in-one Micro ESS:



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Technical data of the power generating units

General				
Type of the power generating units		Type 2 /AC-Coupled Micro ESS		
Designation	HYX-MS3000AC	HYX-MS3000AC-BP-1 HYX-MS3000AC-BP-2 HYX-MS3000AC-BP-3 HYX-MS3000AC-BP-4 HYX-MS3000AC-BP-5	HYX-MS3000AC-800	HYX-MS3000AC-800-BP-1 HYX-MS3000AC-800-BP-2 HYX-MS3000AC-800-BP-3 HYX-MS3000AC-800-BP-4 HYX-MS3000AC-800-BP-5
On-grid variables				
Rated apparent power S_{rE}	1500 VA 1500 VA (max)	3000 VA 3000 VA (max)	800 VA 800 VA (max)	
Rated effective power P_{rE}	1500 VA 1500 VA (max)	3000 VA 3000 VA (max)	800 VA 800 VA (max)	
Max. effective power P_{Emax}	1515.12 W (1.010 P_{Emax})	3025.31 W (1.008 P_{Emax})	805.66 W (1.007 P_{Emax})	
Max. apparent power S_{Emax}	1516.45 VA (1.011 S_{Emax})	3027.95 VA (1.009 S_{Emax})	806.36 VA (1.008 S_{Emax})	
Rated voltage U_r	230, L+N+PE			
Rated current I_r	6.53 A	13.05 A	3.48 A	
Initial short-circuit alternating current I''_k	6.53 A	13.05 A	3.48 A	
Reactive power adjustment range $\cos \varphi$	0.8 leading to 0.8 lagging			
Rated output / Input frequency f_n	50 Hz			
Battery Variables				
Battery Information	9.6Vd.c.,314Ah,3014Wh			
Max. Charge/Discharge Current	157A			

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DC – Input variables	
Type /IGBT module	NCE75ED65VT
Quantity DC Link Capacitor	8
Clock frequency	20kHz
Type of power control	PWM
Max. Output current (only for IGBT)	75A
Software versions	V1.0
Generation unit Control	
Manufacturer	Zhejiang Hyxi Technology Co., Ltd.
Software version	V1.0
Protection device	
Manufacturer	XIAMEN HONGFA ELECTROACOUSTIC CO LTD
Type	Integrated guard
Switch-off unit (AC)	HF140FF-G
Software versions	V1.0

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General		
Type of the power generating units	Type 2 / All-in-one Micro ESS	
Designation	HYX-MS3000	HYX-MS3000-800
	HYX-MS3000-BP-1	HYX-MS3000-800-BP-1
	HYX-MS3000-BP-2	HYX-MS3000-800-BP-2
	HYX-MS3000-BP-3	HYX-MS3000-800-BP-3
	HYX-MS3000-BP-4	HYX-MS3000-800-BP-4
	HYX-MS3000-BP-5	HYX-MS3000-800-BP-5
On-grid variables		
Rated apparent power S_{rE}	1500 VA 1500 VA (max)	800 VA 800 VA (max)
Rated effective power P_{rE}	1500 VA 1500 VA (max)	800 VA 800 VA (max)
Max. effective power P_{Emax}	1515.12 W (1.010 P_{Emax})	805.66 W (1.007 P_{Emax})
Max. apparent power S_{Emax}	1516.45 VA (1.011 S_{Emax})	806.36 VA (1.008 S_{Emax})
Rated voltage U_r	230, L+N+PE	
Rated current I_r	6.53 A	3.48 A
Initial short-circuit alternating current I''_k	6.53 A	3.48 A
Reactive power adjustment range $\cos \varphi$	0.8 leading to 0.8 lagging	
Rated output / Input frequency f_n	50 Hz	
Battery Variables		
Battery Information	9.6Vd.c.,314Ah,3014Wh	
Max. Charge/Discharge Current	157A	
PV – Input Variables		
Max. DC input voltage	60 V	
Max. input current	18A/18A/18A/18A	
Isc PV	25A/25A/25A/25A	

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DC – Input variables	
Type /IGBT module	NCE75ED65VT
Quantity DC Link Capacitor	8
Clock frequency	20kHz
Type of power control	PWM
Max. Output current (only for IGBT)	75A
Software versions	V1.0
Generation unit Control	
Manufacturer	Zhejiang Hyxi Technology Co., Ltd.
Software version	V1.0
Protection device	
Manufacturer	XIAMEN HONGFA ELECTROACOUSTIC CO LTD
Type	Integrated guard
Switch-off unit (AC)	HF140FF-G
Software versions	V1.0

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Remarks

Additional technical data is given in the evaluation report (appendix A1).

The use of a modified software version is permitted if the changes to the above-mentioned software versions have been checked by TÜV NORD CERT GmbH. The validity of a new software version is confirmed to the manufacturer in writing. This confirmation then forms part of the certificate.

Quality Management System

The manufacturer has proven for the manufacturing facility of the power generating units a certification of its quality management system according to ISO 9001. The manufacturer confirmed in a manufacturer declaration that the certification of the management system will be valid parallel to the period of this unit certificate.

The battery portion of the product was not evaluated, except for clause 5.7.4.2.3 "Active power adjustment at over-frequency and under-frequency" in VDE-AR-N 4105.

Restrictions

Please note that all models does not have a display. As a result, the protection settings of the decoupling protection and the connection conditions cannot be read or set via a display on the component. As a result, a readout function must be implemented on the PGU.

P_{AVE} monitoring function is not integrated in the unit. The function can be implemented according to the specifications of the VDE-AR-N 4105 Chapter 5.5.2 in a stand-alone equipment.

Appendix to the Certificate

- A1. Evaluation report no. 35419765 version 1.0
- A2. Extracts from the test report VDE-AR-N 4105 Annex E.5
TÜV NORD Testing (Suzhou) Co., Ltd. Extract No. BL-DG2620022-205 A1
from Mar.10,2026
- A3. Extracts from the test report VDE-AR-N 4105 Annex E.7
TÜV NORD Testing (Suzhou) Co., Ltd. Extract No. BL-DG2620022-205 A2
from Mar.10,2026

Essen,2026-02-02



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