TÜVNORD

Certificate

of Conformity

This certifies that below described product(s) of the company:

Hoymiles Power Electronics Inc.
No. 18 Kangjing Road, Hangzhou, Zhejiang Province,
P.R. China

comply to the essential requirements of the following standards

Manufacturer and factory(-ies):	See Annex 1
Trademark:	See Annex 1
Description of product(s) (details see Annex 2):	**Micro Storage System**
Certification program:	P31-VA-01 Rev. 03 / 02.25 Certification scheme type: type 1a acc. to ISO/IEC 17067:2013
Certification fundamental(s):	IEC 62109-1:2010, IEC 62109-2:2011, IEC 62477-1:2012+AMD1:2016

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 TÜV NORD CERT GmbH. The holder of this document may use it in connection with the related report(s).

Registration no.:	44 799 26 406749 - 210
Report no.:	492014498.001
File no.:	PVP09137/25E-005

Essen, 2026-06-05
Certification Body - Energy Storage Systems

TÜV NORD CERT GmbH
Am TÜV 1, 45307 Essen, Germany
tuev-nord-cert.de | prodcert@tuev-nord.de

Please also pay attention to the information stated overleaf.

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Scan the QR code or visit
https://cis.tuv-nord.com.cn
to verify the validity of the
certificate

Annex 1

to certificate registration no. 44 799 26 406749 - 210

Manufacturer:	**Hoymiles Power Electronics Inc.** No. 18 Kangjing Road, Hangzhou, Zhejiang Province, P.R. China
Trademark:	Hoymiles
Factory 1:	**Hoymiles Power Electronics Inc.** No.149 Kangzhong Road, Hangzhou 310015, Zhejiang Province, P.R. China
Factory 2:	**Zhejiang Hengming Electronics Co., Ltd.** No.149 Kangzhong Road, Hangzhou 310015, Zhejiang Province, P.R. China

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Annex 2

to certificate registration no. 44 799 26 406749 - 210

Description of product(s):

Model or Type designation	HB-4020-X	HB-4020-X-1	HB-4020-X-2	HB-4020-X-3
PV terminal				
Max. PV Voltage [Vd.c.]	60			
Max. PV Input Current [Ad.c.]	4*32			
Max. PV Input Power [W]	4*1000			
MPPT Voltage Range [Vd.c.]	16-60			
Isc [Ad.c.]	4*40			
Battery Data				
Battery type	Rechargeable Li-ion Industrial Battery			
Rated Voltage [Vd.c.]	12.8			
Max. Charge/ Discharge Current [Ad.c.]	180			
Rated Energy [Wh]	4020	8040	12060	16080
Battery Number HB-4020-S	0	1	2	3
On-grid terminal				
Rated Voltage [Va.c.]	230/180-270; L/N/PE			
Rated Frequency [Hz]	50			
Max. Input Current [Aa.c.]	10.87			
Max. Input Power [W]	2500			
Max. Input apparent Power [VA]	2500			
Max. Output Current [Aa.c.]	3.48			
Max. Output Power [W]	800			
Max. Output apparent Power [VA]	800			
Power Factor cosφ [λ]	>0.99, 0.8 leading-0.8 lagging			
Off-Grid Port terminal				
Rated Voltage [Va.c.]	230; L/N/PE			
Rated Output Frequency [Hz]	50			
Max. Input/Output Current [Aa.c.]	10.87			
Max. Input/Output apparent Power [VA]	2500			
Power Factor cosφ [λ]	>0.99, 0.8 leading-0.8 lagging			
System				
Type of inverter	Isolated			
Protective Class	Class I			
Ingress protection	IP66			
Operating Temperature Range [°C]	-20~55 (>40 derating)			

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Annex 2

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Altitude [m]	4000
Overvoltage-Category	DC (PV, BAT) II, AC (Main) III
Software Version	V01.00.00

Model or Type designation	HB-4020-XM	HB-4020-XM-1	HB-4020-XM-2	HB-4020-XM-3
PV terminal				
Max. PV Voltage [Vd.c.]	60			
Max. PV Input Current [Ad.c.]	4*32			
Max. PV Input Power [W]	4*1000			
MPPT Voltage Range [Vd.c.]	16-60			
Isc [Ad.c.]	4*40			
Battery Data				
Battery type	Rechargeable Li-ion Industrial Battery			
Rated Voltage [Vd.c.]	12.8			
Max. Charge/ Discharge Current [Ad.c.]	180			
Rated Energy [Wh]	4020	8040	12060	16080
Battery Number HB-4020-S	0	1	2	3
On-grid terminal				
Rated Voltage [Va.c.]	230/180-270; L/N/PE			
Rated Frequency [Hz]	50			
Max. Input/Output Current [Aa.c.]	10.87			
Max. Input/Output Power [W]	2500			
Max. Input/Output apparent Power [VA]	2500			
Power Factor cosφ [λ]	>0.99, 0.8 leading-0.8 lagging			
Off-Grid Port terminal				
Rated Voltage [Va.c.]	230; L/N/PE			
Rated Output Frequency [Hz]	50			
Max. Input/Output Current [Aa.c.]	10.87			
Max. Input/Output apparent Power [VA]	2500			
Power Factor cosφ [λ]	>0.99, 0.8 leading-0.8 lagging			
System				
Type of inverter	Isolated			
Protective Class	Class I			
Ingress protection	IP66			
Operating Temperature Range [°C]	-20~55 (>40 derating)			
Altitude [m]	4000			

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Annex 2

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Overvoltage-Category	DC (PV, BAT) II, AC (Main) III
Software Version	V01.00.00

Model or Type designation	HB-4020-AC	HB-4020-AC-1	HB-4020-AC-2	HB-4020-AC-3
Battery Data				
Battery type	Rechargeable Li-ion Industrial Battery			
Rated Voltage [Vd.c.]	12.8			
Max. Charge/ Discharge Current [Ad.c.]	180			
Rated Energy [Wh]	4020	8040	12060	16080
Battery Number HB-4020-S	0	1	2	3
On-grid terminal				
Rated Voltage [Va.c.]	230/180-270; L/N/PE			
Rated Frequency [Hz]	50			
Max. Input Current [Aa.c.]	10.87			
Max. Input Power [W]	2500			
Max. Input apparent Power [VA]	2500			
Max. Output Current [Aa.c.]	3.48			
Max. Output Power [W]	800			
Max. Output apparent Power [VA]	800			
Power Factor cosφ [λ]	>0.99, 0.8 leading-0.8 lagging			
Off-Grid Port terminal				
Rated Voltage [Va.c.]	230; L/N/PE			
Rated Output Frequency [Hz]	50			
Max. Input/Output Current [Aa.c.]	10.87			
Max. Input/Output apparent Power [VA]	2500			
Power Factor cosφ [λ]	>0.99, 0.8 leading-0.8 lagging			
System				
Type of inverter	Isolated			
Protective Class	Class I			
Ingress protection	IP66			
Operating Temperature Range [°C]	-20~55 (>40 derating)			
Altitude [m]	4000			
Overvoltage-Category	DC (PV, BAT) II, AC (Main) III			
Software Version	V01.00.00			

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Annex 2

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Model or Type designation	HB-4020-ACM	HB-4020-ACM-1	HB-4020-ACM-2	HB-4020-ACM-3
Battery Data				
Battery type	Rechargeable Li-ion Industrial Battery			
Rated Voltage [Vd.c.]	12.8			
Max. Charge/ Discharge Current [Ad.c.]	180			
Rated Energy [Wh]	4020	8040	12060	16080
Battery Number HB-4020-S	0	1	2	3
On-grid terminal				
Rated Voltage [Va.c.]	230/180-270; L/N/PE			
Rated Frequency [Hz]	50			
Max. Input/Output Current [Aa.c.]	10.87			
Max. Input/Output Power [W]	2500			
Max. Input/Output apparent Power [VA]	2500			
Power Factor cosφ [λ]	>0.99, 0.8 leading-0.8 lagging			
Off-Grid Port terminal				
Rated Voltage [Va.c.]	230; L/N/PE			
Rated Output Frequency [Hz]	50			
Max. Input/Output Current [Aa.c.]	10.87			
Max. Input/Output apparent Power [VA]	2500			
Power Factor cosφ [λ]	>0.99, 0.8 leading-0.8 lagging			
System				
Type of inverter	Isolated			
Protective Class	Class I			
Ingress protection	IP66			
Operating Temperature Range [°C]	-20~55 (>40 derating)			
Altitude [m]	4000			
Overvoltage-Category	DC (PV, BAT) II, AC (Main) III			
Software Version	V01.00.00			

Remark:
For detailed product information, please refer to CDF (Constructional Data Form) in the associated report.

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