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Certificate of compliance

Applicant: **Hoymiles Power Electronics Inc.**
No. 18 Kangjing Road HangZhou, ZhejiangProvince
P.R.China

Product: **Hybrid inverter**

Model: **HIT-5L-G3,
HIT-6L-G3,
HIT-8L-G3,
HIT-10L-G3,
HIT-12L-G3,
HIT-15L-G3,
HIT-17L-G3,
HIT-20L-G3**

The device is designed to work as a generation unit of the type: A and B

Inverter for three-phase parallel connection to the public grid. The network monitoring and disconnection device is an integral part of the above-mentioned model.

Applied rules and standards:

EN 50549-1:2019/A1:2023

Requirements for parallel connection of installations with distribution networks - Part 1: Connection to an LV distribution network - Production of installations up to and including Type B

- 4.4 Normal operating range
- 4.5 Immunity to disturbances
- 4.6 Active response to frequency deviation
- 4.7 Power response to voltage variations and voltage changes
- 4.8 EMC and power quality
- 4.9 Interface protection
- 4.10 Connection and starting to generate electrical power
- 4.11 Ceasing and reduction of active power on set point
- 4.13 Requirements regarding single fault tolerance of interface protection system and interface switch

EN 50549-10:2022

Requirements for generating plants to be connected in parallel with distribution networks - Part 10: Tests for conformity assessment of generating units

Commission Regulation (EU) 2016/631 of 14 April 2016

Establishing a network code on requirements for grid connection of generators (NC RFG).
Type approval for generation units to use in Type A and B plants.

At the time of issue of this certificate, the safety concept of an aforementioned representative product corresponds to the valid safety specifications for the specified use in accordance with regulations.

Report number: **BMH-ESH-P25030452**

Certification Program: **NSOP-0032-DEU-ZE-V10**

Certificate number: **U25-0375**

Date of issue: **2025-04-17**

Certification body

Accreditation



Domenik Koll
Head of Energy Systems Germany



Accredited certification body by Deutsche Akkreditierungsstelle GmbH (DAkKS) according to ISO/IEC 17065. The accreditation is valid only for the scope listed in the annex of the accreditation certificate D-ZE-12024-01-00. The Deutsche Akkreditierungsstelle GmbH (DAkKS) is signatory of the multilateral arrangements of EA, ILAC and IAF for mutual recognition.

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Type Approval and declaration of compliance with the requirements of EN 50549-1 and Commission Regulation (EU) 2016/631 of 14 April 2016				
Manufacturer	Hoymiles Power Electronics Inc. No. 18 Kangjing Road HangZhou, ZhejiangProvince P.R.China			
Product type	Hybrid inverter			
Static converter model	HIT-5L-G3	HIT-6L-G3	HIT-8L-G3	HIT-10L-G3
Input DC (photovoltaic)				
MPP voltage range [V]	150-900	150-900	150-900	150-900
Max. input voltage [V]	1000	1000	1000	1000
Max. input current per MPPT [A]	20	20	20	20
Input DC (battery)				
DC voltage range [V]	40-60	40-60	40-60	40-60
Max. DC voltage [V]	60	60	60	60
Max. DC current per DC input [A]	120	150	190	210
Output AC				
Rated AC voltage [V]	3L/N/PE,230,50Hz	3L/N/PE,230,50Hz	3L/N/PE,230,50Hz	3L/N/PE,230,50Hz
Rated output current [A]	7,6	9,1	12,2	15,2
Max. output current [A]	8,3	10,0	13,3	16,7
Nom. converter output (P _{NINV}) [W]	5000	6000	8000	10000
Rated apparent power [VA]	5500	6600	8800	11000
In on-grid battery mode AC				
P _{sn} (nom. discharge power) [W]	5000	6000	8000	10000
P _{cn} (nom. charging power) [W]	5000	6000	8000	10000
P _{smax} (max. discharge power) [W]	5500	6600	8800	11000
P _{cmax} (max. charging power) [W]	5500	6600	8800	11000
Type	Bidirectional	Bidirectional	Bidirectional	Bidirectional
In off-grid battery mode				
P _{sn} (nom. discharge power) [W]	5000	6000	8000	10000
P _{smax} (max. discharge power) [W]	5000	6000	8000	10000
Static converter model				
Static converter model	HIT-12L-G3	HIT-15L-G3	HIT-17L-G3	HIT-20L-G3
Input DC (photovoltaic)				
MPP voltage range [V]	150-900	150-900	150-900	150-900
Max. input voltage [V]	1000	1000	1000	1000
Max. input current per MPPT [A]	20	20	20	20
Input DC (battery)				
DC voltage range [V]	40-60	40-60	40-60	40-60
Max. DC voltage [V]	60	60	60	60
Max. DC current per DC input [A]	250	300	350	350
Output AC				



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Annex certificate of conformity No. U25-0375

Extract from test report BMH-ESH-P25030452 issued by a testing laboratory accredited by "Deutsche Akkreditierungsstelle GmbH (DAkkS)" according to ISO/IEC 17025. The accreditation is only valid for the scope listed in the annex of the accreditation certificate "D-PL-12024-03-04".

Rated AC voltage [V]	3L/N/PE,230,50Hz	3L/N/PE,230,50Hz	3L/N/PE,230,50Hz	3L/N/PE,230,50Hz
Rated output current [A]	18,2	22,8	25,8	30,4
Max. output current [A]	20,0	25,0	28,3	33,3
Nom. converter output (P_{NINV}) [W]	12000	15000	17000	20000
Rated apparent power [VA]	13200	16500	18700	22000
In on-grid battery mode AC				
P_{sn} (nom. discharge power) [W]	12000	15000	17000	20000
P_{cn} (nom. charging power) [W]	12000	15000	17000	20000
P_{smax} (max. discharge power) [W]	13200	16500	18700	22000
P_{cmax} (max. charging power) [W]	13200	16500	18700	22000
Type	Bidirectional	Bidirectional	Bidirectional	Bidirectional
In off-grid battery mode				
P_{sn} (nom. discharge power) [W]	12000	15000	17000	20000
P_{smax} (max. discharge power) [W]	12000	15000	17000	20000

Interface protection system and interface switch (Network and system protection "NS-protection")	
Type of protection	Integrated NS-protection
Assigned to generation unit type	HIT-5L-G3, HIT-6L-G3, HIT-8L-G3, HIT-10L-G3, HIT-12L-G3, HIT-15L-G3, HIT-17L-G3, HIT-20L-G3
Integrated interface switch	Type of switching equipment 1: Relay (Model HF161F) Type of switching equipment 2: Relay (Model HF161F) Note: The output is switched off by the inverter bridge and two relay in series in each line and neutral.
Firmware version	Main DSP:V1.00.00; Slave DSP:V1.00.00
Note	
<p>The settings of the interface protection are password protected adjustable.</p> <p>In case the above stated generators are used with an external protection device, the protection settings of the inverters are to be adjusted according to the manufacturer's declaration.</p> <p>The above stated generators are tested according to the requirements in the EN 50549-1:2019 Commission Regulation (EU) 2016/631 of 14 April 2016. Any modification that affects the stated tests must be named by the manufacturer/supplier of the product to ensure that the product meets all requirements.</p>	