Certificate of compliance

Applicant:	**Autarco Group B.V.** Torenallee 20, 5617 BC, Eindhoven **Netherlands**
Product:	**Photovoltaic (PV) and battery inverter**
Model:	**S2.LH5000-MII** **S2.LH6000-MII** **S2.LH8000-MII** **S2.LH10000-MII**

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 50549-1:2019-02, NBN EN 50549-1:2019-02
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

C10/11:2021-03
Specific technical prescription regarding power-generating plant operating in parallel to the distribution network

DIN VDE V 0124-100:2020 (5.5.2.1 Functional safety of network and system protection)
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

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 Type B plants.

At the time of issue of this certificate, the representative product listed above corresponds to the stated rules and standards.

Report number:	**CKNN-ESH-P23121387**	**Certification program:**	**NSOP-0032-DEU-ZE-V01**
Certificate number:	**U23-1212**	**Date of issue:**	**2024-01-09**

Certification body

Domenik Koll
Head of Energy Systems

DAkkS Deutsche Akkreditierungsstelle D-ZE-12024-01-00

Certification body of Bureau Veritas Consumer Products Services Germany GmbH accredited according to DIN EN ISO/IEC 17065

Testing laboratory accredited according to DIN EN ISO/IEC 17025

Annex to the EN 50549-1 / C10/11 certificate of compliance No. U23-1212

Appendix

Extract from test report according to EN 50549-1 / C10/11 **Nr. CKNN-ESH-P23121387**

Type Approval and declaration of compliance with the requirements of EN 50549-1, Commission Regulation (EU) 2016/631 of 14 April 2016 and C10/11 for Belgium				
Manufacturer / applicant	**Autarco Group B.V.** Torenallee 20, 5617 BC, Eindhoven **Netherlands**			
Micro-generator Type	Photovoltaic and battery inverter			
	S2.LH5000-MII	**S2.LH6000-MII**	**S2.LH8000-MII**	**S2.LH10000-MII**
MPP DC voltage range [V]	200-850			
Max. input DC voltage [V]	1000			
Max. input DC current [A]	16/16/16		16/16/16/16	
Output AC voltage [V]	3L/N/PE, 230/400, 50/60 Hz			
Max AC current [A]	7,2	8,7	11,5	14,4
Active Power [W]	5000	6000	8000	10000
Max. apparent power [VA]	5000	6000	8000	10000
Battery DC voltage range [V]	120-600			
Battery charge / discharge current [A]	25		50	
Firmware version	A1			
Description of the structure of the power generation unit: The power generation unit is equipped with a PV/DC and line-side EMC filter. The power generation unit has no galvanic isolation between DC input and AC output. Output switch-off is performed with single-fault tolerance based on the inverter bridge and two series-connected relays in (each) line and neutral. This enables a safe disconnection of the power generation unit from the network in case of error.				
Note: The settings of the interface protection are password protected adjustable. 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. 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 and C10/11 for Belgium. 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.				