

GLV231-03	Sigenergy	Sigen Energy Controller, Sigen Storage Controller, Sigen Hybrid Inverter, Sigen PV Inverter
C10/26 - DECLARATION OF CONFORMITY for power-generating units GLV ed2.1.2 (12/2019)		
for the application of annex D "Technical basic requirements regarding the power-generation units" of the Synergrid prescription C10/11 ed2.1 (01/09/2019)		

The undersigned,	Manufacturer:	SHANGHAI SIGEN NEW ENERGY TECHNOLOGY CO.,LTD.	Represented by:	Yang Zhong
	Address:	No.175 Weizhan Rd.Lin-gang 201304 Shanghai	Country:	China
		PEOPLE'S REPUBLIC OF CHINA	email:	yang.zhong@sigenergy.com
			Telephone:	+31 0649383218

Hereby declares that each production unit completed in the list in tab 'list of power-generating units' of this homologation application complies with the following conditions:

1. The power-generating unit complies with the relevant requirements set out in annex D "Technical basic requirements regarding the power-generation units" of the Synergrid prescription C10/11 ed2.1 (01/09/2019).

2. In order to substantiate this, a separate technical file has been submitted at least for each separate product series of the 'C10/26 list of power-generating units' of this homologation application. Each technical file shall be drawn up on the basis of a checklist Annex D, duly and correctly completed by the manufacturer, accompanied by all the required proof of conformity.

2.1 For technical requirements for which the required proof of conformity (column J in checklist annex D) is a declaration of honour by the manufacturer, the manufacturer declares by signing and dating this declaration of conformity the correctness of the information (conform / not conform / not applicable) provided by him or her in columns K, L and M of this checklist.

2.2. For technical requirements for which the required proof of conformity (column J in checklist Annex D) is a test report or a certificate, the necessary test reports and/or certificates are available * in the technical file:

- Certificates have been issued by an EN 45011 (or ISO 17065:2012) certification body accredited for these materials.

- Test reports have been established by an ISO 17025:2005 or ISO 17065:2012 laboratory accredited for these tests.

2.3 A list of the document references or the certificates of conformity referred to in the checklist Annex D is also available in the technical file.

Done at:	Shanghai, China	Homologated by Synergrid on:	27/09/2024
On:	5/08/2023	Stamp Synergrid & signature:	Digitally signed, see last page
(stamp manufacturer & signature)			

*** Transition period till 01/05/2020** (see exceptions in chapter 3 of C10/11 ed 2.1 (01/09/2019)):

If at the time of submission of this homologation application it is not yet possible to submit all the necessary certificates and/or test reports (exception 3), or that the units do not yet have all the required characteristics (exceptions 1 and 2), a **temporary homologation** may be granted. All necessary certificates and/or test reports must be in the possession of Synergrid at the latest on 30/04/2020 in order to obtain a final homologation. If this is not the case, the temporary C10/26 homologation will be withdrawn.

POWER-GENERATING UNITS TO BE HOMOLOGATED FOR LIST C10/26 ACCORDING TO THE REQUIREMENTS OF ANNEX D OF THE TECHNICAL PRESCRIPTION C10/11 ed2.1 (01/09/2019)

2. C10/26 list with power-generating units in accordance with annex D of C10/11 ed2.1 (01/09/2019)

GLV231-03	Sigenergy	Sign Energy Controller, Sign Storage Controller, Sign Hybrid Inverter, Sign PV Inverter
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checklist ed 2.1.2 (12/2019)

1	2	3	4	5	6	7	8	9	10	11					12			13				14	15			
SYNERGRID reference number (GLVxxx-yy-zzzz)	BRAND NAME	Name of the product SERIES	REFERENCE of the model / type of the unit	FIRMWARE VERSION	ONLY for units (suitable for) energy storage: Name and reference of the power control system		POWER		1-phase or 3-phase	ADDITIONAL CHARACTERISTICS					LIMITATIONS			APPLICATION				Synergrid approval date				
					power control system type EnFluRi	other power control system	P _{scr} rated (active) power (W)	S _{max} maximum apparent power (VA)		D.3	(-)	D.4.1 additional operating frequency range (51.5 Hz - 52.5 Hz) *RfG type B ready* = suitable for use in installation ≥ 1MW	D.6.2 power response to underfrequency	D.7.2 active power reduction (PU)	() compliant power control system provided (e.g. EnFluRi)	D.7.1 only homologated for "small power- generating installations"	D.9.1 only homologated for use in module < 800W	(-) only homologated as a backup power system according to §2.1.1	Solar energy	Wind energy	CHP (combined heat & power)	Energy storage	Backup power system	Other	Temporary homologation (expires on 01/05/2020)	Final homologation
GLV231-03-0001	Sigenergy	Signen PV Inverter	Signen PV Max 5.0 TPLV	V100R001C25	Signen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH		5.000	5.500	3-phase	X		X	X	X	X			X							27/09/2024	
GLV231-03-0002	Sigenergy	Signen PV Inverter	Signen PV Max 6.0 TPLV	V100R001C25	Signen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH		6.000	6.600	3-phase	X		X	X	X	X			X							27/09/2024	
GLV231-03-0003	Sigenergy	Signen PV Inverter	Signen PV Max 8.0 TPLV	V100R001C25	Signen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH		8.000	8.800	3-phase	X		X	X	X	X			X							27/09/2024	
GLV231-03-0004	Sigenergy	Signen PV Inverter	Signen PV Max 10.0 TPLV BE	V100R001C25	Signen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH		10.000	10.000	3-phase	X		X	X	X	X			X							27/09/2024	
GLV231-03-0005	Sigenergy	Signen PV Inverter	Signen PV Max 12.0 TPLV	V100R001C25	Signen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH		12.000	13.200	3-phase	X		X	X	X	X			X							27/09/2024	
GLV231-03-0006	Sigenergy	Signen Hybrid Inverter	Signen Hybrid 5.0 TPLV	V100R001C25	Signen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH, Signen Gateway HomeMax TP, or Home TP		5.000	5.500	3-phase	X		X	X	X	X			X			X	X			27/09/2024	
GLV231-03-0007	Sigenergy	Signen Hybrid Inverter	Signen Hybrid 6.0 TPLV	V100R001C25	Signen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH, Signen Gateway HomeMax TP, or Home TP		6.000	6.600	3-phase	X		X	X	X	X			X			X	X			27/09/2024	
GLV231-03-0008	Sigenergy	Signen Hybrid Inverter	Signen Hybrid 8.0 TPLV	V100R001C25	Signen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH, Signen Gateway HomeMax TP, or Home TP		8.000	8.800	3-phase	X		X	X	X	X			X			X	X			27/09/2024	

GLV231-03-0009	Sigenergy	Sigen Hybrid Inverter	Sigen Hybrid 10.0 TPLV BE	V100R001C25	Sigen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH, Sigen Gateway HomeMax TP, or Home TP		10.000	10.000	3-phase	X		X	X	X	X					X		X	X			27/09/2024
GLV231-03-0010	Sigenergy	Sigen Hybrid Inverter	Sigen Hybrid 12.0 TPLV	V100R001C25	Sigen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH, Sigen Gateway HomeMax TP, or Home TP		12.000	13.200	3-phase	X		X	X	X	X					X		X	X			27/09/2024
GLV231-03-0011	Sigenergy	Sigen Energy Controller	SigenStor EC 5.0 TPLV	V100R001C25	Sigen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH, Sigen Gateway HomeMax TP, or Home TP		5.000	5.500	3-phase	X		X	X	X	X					X		X	X			27/09/2024
GLV231-03-0012	Sigenergy	Sigen Energy Controller	SigenStor EC 6.0 TPLV	V100R001C25	Sigen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH, Sigen Gateway HomeMax TP, or Home TP		6.000	6.600	3-phase	X		X	X	X	X					X		X	X			27/09/2024
GLV231-03-0013	Sigenergy	Sigen Energy Controller	SigenStor EC 8.0 TPLV	V100R001C25	Sigen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH, Sigen Gateway HomeMax TP, or Home TP		8.000	8.800	3-phase	X		X	X	X	X					X		X	X			27/09/2024
GLV231-03-0014	Sigenergy	Sigen Energy Controller	SigenStor EC 10.0 TPLV BE	V100R001C25	Sigen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH, Sigen Gateway HomeMax TP, or Home TP		10.000	10.000	3-phase	X		X	X	X	X					X		X	X			27/09/2024
GLV231-03-0015	Sigenergy	Sigen Energy Controller	SigenStor EC 12.0 TPLV	V100R001C25	Sigen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH, Sigen Gateway HomeMax TP, or Home TP		12.000	13.200	3-phase	X		X	X	X	X					X		X	X			27/09/2024
GLV231-03-0016	Sigenergy	Sigen Storage Controller	SigenStor AC 5.0 TPLV	V100R001C25	Sigen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH, Sigen Gateway HomeMax TP, or Home TP		5.000	5.500	3-phase	X		X	X	X	X							X	X			27/09/2024
GLV231-03-0017	Sigenergy	Sigen Storage Controller	SigenStor AC 6.0 TPLV	V100R001C25	Sigen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH, Sigen Gateway HomeMax TP, or Home TP		6.000	6.600	3-phase	X		X	X	X	X							X	X			27/09/2024

GLV231-03-0018	Sigenergy	Sigen Storage Controller	SigenStor AC 8.0 TPLV	V100R001C25	Sigen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH, Sigen Gateway HomeMax TP, or Home TP	8.000	8.800	3-phase	X		X	X	X	X								X	X		27/09/2024
GLV231-03-0019	Sigenergy	Sigen Storage Controller	SigenStor AC 10.0 TPLV BE	V100R001C25	Sigen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH, Sigen Gateway HomeMax TP, or Home TP	10.000	10.000	3-phase	X		X	X	X	X								X	X		27/09/2024
GLV231-03-0020	Sigenergy	Sigen Storage Controller	SigenStor AC 12.0 TPLV	V100R001C25	Sigen Sensor TP-DH, TP-CT120-DH, TP-CT300-DH, TP-CT600-DH, Sigen Gateway HomeMax TP, or Home TP	12.000	13.200	3-phase	X		X	X	X	X								X	X		27/09/2024

EXPLANATIONS FOR THE COMPLETION OF THE TABLE

Column	Title	Remarks
1	SYNERGRID reference number (GLVxxx-yy-zzzz)	In the case of a positive homologation, each C10/26-homologated power-generating unit is given a unique Synergrid reference number: xxx = unique reference or the manufacturer yy = serial number of manufacturer xxx's record xxx zzzz = unique unit reference for the manufacturer xxx <i>Note : "GLV" is the internal Synergrid-abbreviation for Declaration of Conformity, based on the Dutch word "Gelijkvormigheidsverklaring".</i>
2	Brand name	Brand name under which the unit is marketed on the Belgian market,
3	Name of the product series	Name of the product range. Note: For each separate product range (or each group of units with common characteristics) a separate checklist according to Appendix D is required (sheet 3) together with the corresponding conformity proof documents.
4	Reference of the model / type of the unit	Unique product name or reference. Units of the same product range must be unequivocally distinguished from each other through this name or reference.
5	Firmware version	Reference of the firmware version of the unit.
6	power control system type EnFluRi	This case is only applicable for units (suitable for) energy storage, provided with a power control system of <u>type EnFluRi</u> : Name and reference of the power control system of type EnFluRi, compliant to the requirements in C10/11 ed2.1 (01/09/2019) §4.1.7 and §7.11.2.1
7	other power control system	This case is only applicable for units (suitable for) energy storage, provided with a power control system of <u>another type than EnFluRi</u> : Name and reference of the power control system, compliant to the requirements in C10/11 ed2.1 (01/09/2019) §7.11.2.2
8	P _{ac,r} rated (active) power (W)	Active (electrical) power in W at the terminals of the unit, as stated on the technical sheet / data sheet / brochure and nameplate. (For photovoltaic inverters: see also definition in §3.2.5 of IEC 62894 2016-11)
9	S _{max} - maximum apparent power (VA)	Maximum apparent (electrical) power at the terminals of the unit, as stated on the certificate / the test report / the technical sheet / data sheet / brochure.
10	1-phase or 3-phase	Indicate whether the unit is single- or three-phase. This characteristic refers to the unit itself, not to the nature of the connection to the distribution network to which the unit can be connected.
11	Additional characteristics	In these columns optional additional characteristics of the units are indicated, following the information in checklist annex D and the corresponding technical file. Put an "X" at each relevant additional characteristic. Note: Only units < 1 MW that are "type B ready" may be applied in an installation ≥ 1 MW (installation "type B" according to the European Network Code RfG). A unit < 1 MW is only "type B ready" if it complies with <u>all</u> optional properties ticked in column I of the checklist Annex D.
12	Limitations	These columns specify limitations of the units to their application in certain types of installations, in accordance with the information in the checklist in annex D and the corresponding technical file. Put an "X" to each relevant limitation.
13	Application	Indicate the applications for which the unit is suitable. Include an "X" with each application for which the unit can be used.
14	Synergrid approval date Temporary homologation (expires on 01/05/2020)	Date on which the submitted homologation file was approved by Synergrid for a limited period of time. - A temporary homologation is granted if the applicant invokes exceptions in chapter 3 of C10/11 ed2.1 (01/09/2019) and has not yet submitted all the test reports required for a definitive homologation with his homologation application (exception 3), or if the units do not yet have all the required properties (exceptions 1 and 2). - The expiry date for a temporary homologation is 01/05/2020 - see conditions in chapter 3 of C10/11 ed.2.1 (01/09/2019).

15	Synergrid approval date Final homologation	Date on which the submitted homologation file was definitely approved by Synergrid. - A final approval will be granted as soon as Synergrid has a fully compliant homologation dossier. - A final homologation only remains valid under the following conditions: - No changes that have an influence on the initial approval are made to (the production of) the units. - There is no new edition of prescription C10/11. - The validity date of the test reports in the technical file submitted for approval has not been exceeded. See also the general Synergrid procedure S1/01 for homologation of material, which is applicable. (1)
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[\(1\) - S1/01 Technical specification: procedure for application for homologation and renewal of homologation of materials](#)

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Yang Zhong

Signataire 1

Serial number: yang.zhong@sigenergy.com

IP: 90.152.xxx.xxx

2024-10-08 09:39:40 UTC

Yang Zhong

Van Steenberghe Liesbeth Annelore

Signataire 2

Serial number: 4F:5B:D5:DD:42[...]B:30:F9:01:6A

IP: 109.133.xxx.xxx

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