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| GLV120-07 | Hoymiles | HMS |  |
| 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) | | | |

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|------------------|---------------|--|-----------------|------------------------------|
| The undersigned, | Manufacturer: | Hoymiles Power Electronics Inc. No.18 Kangjing Road, Hangzhou, Zhejiang | Represented by: | Henry Dai |
| | Address: | Province | Country: | China |
| | | | email: | <u>tihu.dai@hovmiles.com</u> |
| | | | Telephone: | +86 13655161560 |

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.

file.



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| Done at: | No.18 Kangjing Road, Hangzhou, Zhejiang Province, P.R. China | Homologated by Synergrid on: | 20/03/2027 |
| On: | 2023-2-22 | Stamp Synergrid & signature: | SYNERGRID a.s.b.l.-v.z.w. |
| (stamp manufacturer & signature) | Henry Dai | | Galerie Ravensteingalerij 4/2 |
| | | | BE-1000 Bruxelles/Brussel |
| | | | T.V.A./B.T.W. BE0402.958.051 |

* Transition period until 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

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)

GLV120-07 Hoymiles HMS

checklist ed 2.1.2 (12/2019)

| 1 | 2 | 3 | 4 | 5 | 6 | | 7 | | 8 | 9 | 10 | 11 | | | | | | 12 | | | | 13 | | 14 | 15 | | | | |
|----------------|----------|-----|-------------|-----------|---|----------------------------|---|---|---------|---|----|----------------------------|--|---|--|---|--------------------------------------|--|---|---|---|---|---------------------|-------------------------|-----------------------------|-------------|--------------|--|-------|
| | | | | | ONLY for units (suitable for) energy storage: Name and reference of the power control system | | POWER | | | | | ADDITIONAL CHARACTERISTICS | | | | | | LIMITATIONS | | | | APPLICATION | | Synergrid approval date | | | | | |
| | | | | | power control system type EnFluRi | other power control system | P_{acr} rated (active) power (W) | S_{max} maximum apparent power (VA) | | | | 1-phase or 3-phase | D 3 integrated automatic separation system | () TRIG type B model* = suitable for use in installation > 1MW | D 4.1 additional operating frequency range (51.5 Hz - 52.5 Hz) | D 6.2 power response to underfrequency | D 7.2 active power reduction (PV) | 0 compliant power control system provided (e.g. EnFluRi) | D 7.1 only homologated for "small power" generating installations | D 4.3 only homologated for connection to HV-network | D 9.1 only homologated for use in module < 800W | () only homologated as a backup power system according to §2.1.1 | Backup power system | Energy storage | CHP (combined heat & power) | Wind energy | Solar energy | | Other |
| GLV120-07-0001 | Hoymiles | HMS | HMS-2000-4T | V01.00.08 | | | 2000 | 2000 | 1-phase | X | X | X | | | | | | | | X | | | | | | | | | |
| GLV120-07-0002 | Hoymiles | HMS | HMS-1800-4T | V01.00.08 | | | 1800 | 1800 | 1-phase | X | X | X | | | | | | | | X | | | | | | | | | |
| GLV120-07-0003 | Hoymiles | HMS | HMS-1600-4T | V01.00.08 | | | 1600 | 1600 | 1-phase | X | X | X | | | | | | | | X | | | | | | | | | |



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: GLV = unique reference of the manufacturer xxx = serial number of manufacturer xxx's record xxx yy = unique unit reference for the manufacturer xxx zzz = Note: GLV is the internal Synergrid abbreviation for the function of Conformity, based on the Dutch word "Gelijkwaardigheidswaaktoren". |
| 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 series. 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 type EnFluRi. 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 another type than EnFluRi. 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_{acr} - 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 nameplates. (for photovoltaic inverters: see also definition in 3.0.2.5 of IEC 62891:2011) |
| 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. |

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| 11 | Additional characteristics | In these columns optional additional characteristics of the units are indicated, following the information in checklist annex B 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 RIG). A unit ≥ 1 MW is only "type B ready" if it complies with all 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 and required for a definitive homologation with his homologation application (conception 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 SI 01 for homologation of material, which is applicable. (1) |

(1) - SI/01 Technical specification procedure for application for homologation and renewal of homologation of materials

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