

Regulations

for the SG Ready Label for Electric Space-
Heating and Hot Water Heat Pumps and
Compatible System Components



Version 3.0

Valid from 01.05.2025

BWP Marketing & Service GmbH

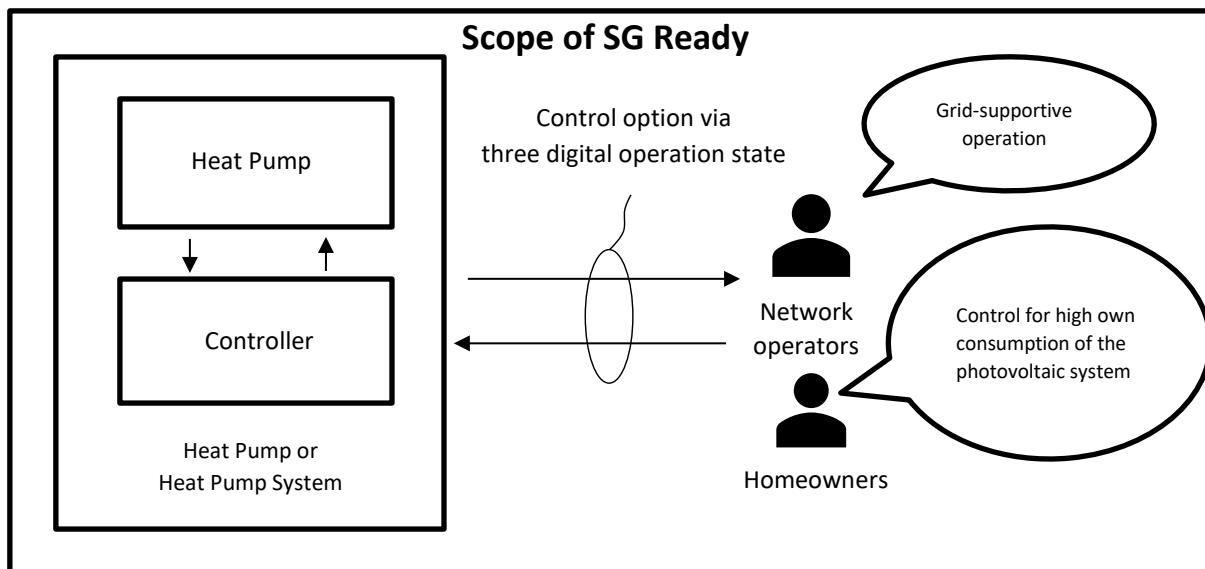
Hauptstraße 3 | 10827 Berlin | Germany | www.waermepumpe.de

Phone: +49 30 208 799 711 | E-mail: sgready@bwp-service.de

I. General Information on SG Ready for Smart Grid-Compatible Heat Pumps and System Components

The energy sector is increasingly shaped by fluctuating renewable energy input. Heat pumps can act as demand-flexible consumers by actively storing excess electricity as thermal energy when it cannot be fed into the local grid. This stored energy can be used to meet heating demands or to reduce consumption peaks by temporarily shutting down the heat pump. Load management with heat pumps is a proven and energy-efficient method that creates synergies between the electricity and heating sectors, reduces dependency on energy imports, and contributes to climate protection.

The SG Ready label helps identify heat pumps that feature a defined interface for grid-friendly load management. This interface can be used by grid operators to control the device or by homeowners to maximize self-consumption in combination with a photovoltaic system.



I.1 Scope of the Label for Heat Pumps

- These regulations apply to series-produced, electrically operated, hydronic heating heat pumps, with or without domestic water heating, sourced from exhaust air, outdoor air, brine, or water.
- These regulations apply to series-produced, electrically operated domestic hot water heat pumps.
- If a unit consists of multiple components, the regulations apply to those developed and offered as a complete package.

I.2 Scope of the Label for Interface-Compatible System Components

- These regulations also apply to series-produced, electrically operated system components. System components are defined as devices that can transmit digital signals according to the technical interface specifications to a heat pump to control its energy consumption or other target variables.
- System components also include control units that are not part of the heat pump's built-in control system.
- Examples of interface-compatible system components under these regulations include inverters, energy managers, FNN control boxes, automation technology systems

I.3 The SG Ready Label

The SG Ready Label applies to the heat pump model or model range, including the control technology used for its operation as well as interface-compatible system components. To successfully apply for the label, heat pumps and compatible system components must meet the requirements of the Technical Interface Specifications Version 1.1. New applications for devices supporting Technical Interface Specifications 1.0 can be submitted until December 31, 2025.

I.4 Model and Model Range Definitions

Models are described by the following product properties depending on the device type.

1.4.1 Space-Heating Heat Pumps

Property	Value Range
P_{designh} according to EN 14825 under average climate conditions and medium-temperature application (55°C), or low-temperature application (35°C) if not applicable *	(0,∞) kW
Maximum power consumption of the refrigeration circuit (F.L.I.) *	(0,∞) kW
Maximum power consumption of the internal ¹ auxiliary heater (F.L.I.) *	[0,∞) kW
Maximum power consumption of the external ² auxiliary heater (F.L.I.) *	[0,∞) kW
Connection voltage *	{230, 400} V
Cooling mode *	{ja, nein}
Control software version	N/A
Heat source and heat sink *	{Exhaust Air-Water, Outdoor Air-Water, Brine-Water, Water-Water, Brine-Brine, Water-Brine}

* This information will be published in the SG Ready database.

Heat pumps that are used for both space heating and domestic water heating are classified as heating heat pumps.

¹ A supplementary heater that is factory-integrated into the heat pump is referred to as internal.

² A supplementary heater that is distributed by the manufacturer together with the heat pump but is only installed when the system is set up is referred to as external.

1.4.2 Domestic Hot Water Heat Pumps

Property	Value Range
Declared load profile *	{3XS, XXS, XS, S, M, L, XL, XXL, 3XL, 4XL}
Maximum power consumption of the refrigeration circuit (F.L.I.) *	(0,∞) kW
Maximum power consumption of the internal ³ auxiliary heater (F.L.I.) *	[0,∞) kW
Maximum power consumption of the external ⁴ auxiliary heater (F.L.I.) *	[0,∞) kW
Connection voltage *	{230, 400} V
Control software version	N/A
Heat source *	{ Exhaust Air, Outdoor Air, Indoor Air, Brine, Water }

* This information is published in the SG Ready database.

1.4.3 Interface-Compatible System Components

Property	Value Range
Software version	N/A
Hardware specification	N/A

1.4.4 Model Range Definition

Models within a model range must have identical characteristics for the following properties:

Property	Value Range
Software version	N/A
Control technology	N/A
Heat sources and heat sinks	See sections 1.4.1 and 1.4.2

1.4.5 Identical Design of Heating Heat Pumps

Models with identical values for the following properties are considered models with an identical design:

- $P_{designh}$ according to EN 14825,
- maximum power consumption of the refrigeration circuit,
- cooling mode,
- connection voltage,
- heat source and heat sink.

Differences in other properties do not affect the identical design classification. Models that do not fit this definition are considered separate models.

1.4.6 Identical Design of Hot Water Heat Pumps

Models with identical values for the following properties are considered models with an identical design:

- declared load profile,
- maximum power consumption of the refrigeration circuit,
- connection voltage,
- heat source.

Differences in other properties do not affect the identical design classification. Models that do not fit this definition are considered separate models.

³ A supplementary heater that is factory-integrated into the heat pump is referred to as internal.

⁴ A supplementary heater that is distributed by the manufacturer together with the heat pump but is only installed when the system is set up is referred to as external.

1.5 Application Requirements

Applicants can be manufacturers or distributors. If a heat pump is sold by multiple distributors or under different brand names, a separate label must be applied for each distributor or brand.

However, technical compliance verification is only required once, provided a certificate of design equivalence is submitted.

1.6 Application Procedure

Application documents are available on the BWP website.

Applications must be submitted electronically to the Label Commission, including all necessary documents.

The Commission reviews the submission for compliance with regulations.

A single application can be submitted for heat pump models or system components within a model range.

1.7 Label Commission

The Label Commission is responsible for reviewing applications and granting the label. This commission is responsible for granting the label from the moment the documents are submitted, and the criteria are met.

Alternatively, the BWP office may process applications in cooperation with its chair.

The commission's contact details are published on the BWP website.

1.8 Validity and Monitoring

Granted labels are valid from the date of their initial issuance until the end of the calendar year. The validity of the label is not subject to any prior restrictions, as long as the technical requirements are met, and the label holder complies with the regulations and fee schedule.

Changes to labeled model ranges must be reported to the Label Commission without delay, which will then decide on the continued validity of the label. The commission may conduct random checks on end-customer installations to verify the existence and accuracy of manufacturer documentation and the conformity of the installed device with the standard (main components).

1.9 Extension of a Labeled Model Range

The label holder can extend an already labeled model range to include additional models. For this, an application is required to confirm the affiliation with the model range. All documents that would also be required for an initial application must be submitted.

An extension of the model range does not extend the validity period of the label. After the transition phase, all models in the model range must meet the requirements of Technical Interface 1.1 for a model range extension.

1.10 Renewal and Cancellation of Labels

The label is automatically extended by one year at the end of the calendar year, provided that the requirements are still met.

The label holder can terminate their label at the end of the current calendar year. The termination must be submitted to the label commission at least one month before the end of the calendar year.

The renewal does not affect the interface version to be implemented.

1.11 Validity of a Label

The label and the associated usage rights for the SG Ready label expire in the following cases:

- a) Upon discontinuation of sales of the labeled devices,
- b) In the event of unauthorized modifications to the control technology,
- c) In case of false information in the application documents,
- d) In case of violations of the regulations,

- e) If outstanding invoice amounts are not paid within three months,
- f) In case of misuse of the label.

The label commission will inform the label holder about plans to revoke the label. The affected label holder has the right to submit a statement to the commission within 30 days. Additionally, in cases of unlawful use of the label, the label commission may reject future applications from the same manufacturer without review.

1.12 Amendment of the Regulations

Changes to the current regulations can be decided by the Label Commission. Amendments to the provisions regarding control technology during the validity period of the label do not affect its validity. However, in the case of a renewal application, the heat pump must meet the current requirements at that time unless exemptions are provided.

1.13 Rights of the Label Holder

The label holder is entitled to:

- a) Mark the labeled model range with the label,
- b) Equip the labeled model range with the label,
- c) Use the label and logo for marketing purposes.

1.14 Fee Schedule

The application and issuance of the label are subject to fees. The label commission establishes a fee schedule, which is published on the BWP website.

1.15 Dissemination of Information

The latest information is provided on the BWP website. It includes:

- a) The contact details of the Label Commission,
- b) A list of certified products,
- c) The current versions of all documents related to the label, as well as the fee schedule and application forms.

1.16 Transition Phase

The transition phase for existing SG Ready labels under the regulations of version 2.0 is limited until 31.12.25. From 01.01.26, existing SG Ready labels will be adjusted to comply with the labeling regulations regarding model and model range definitions in version 3.0. The implementation of the technical interface remains unaffected by this.

1.17 Information to be Provided at the Time of Application

In addition to the product specifications listed under 1.4, the implementation of the technical interface must be described.