

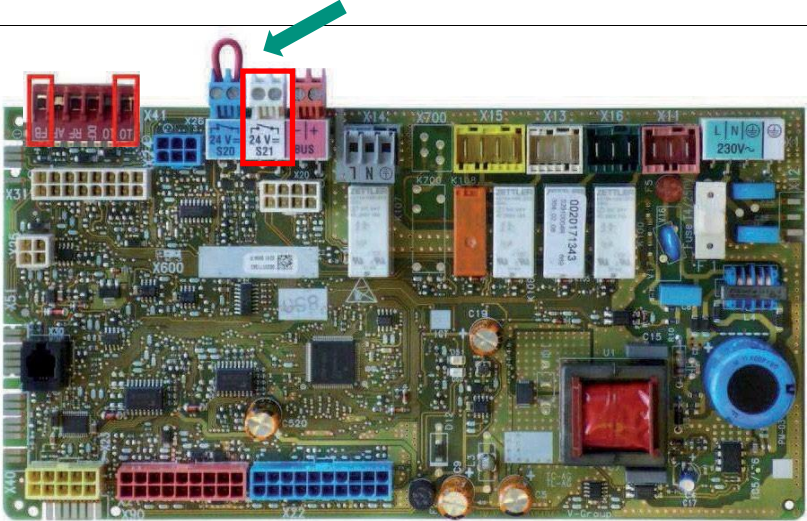
aroTHERM plus

EVU-Lock connection

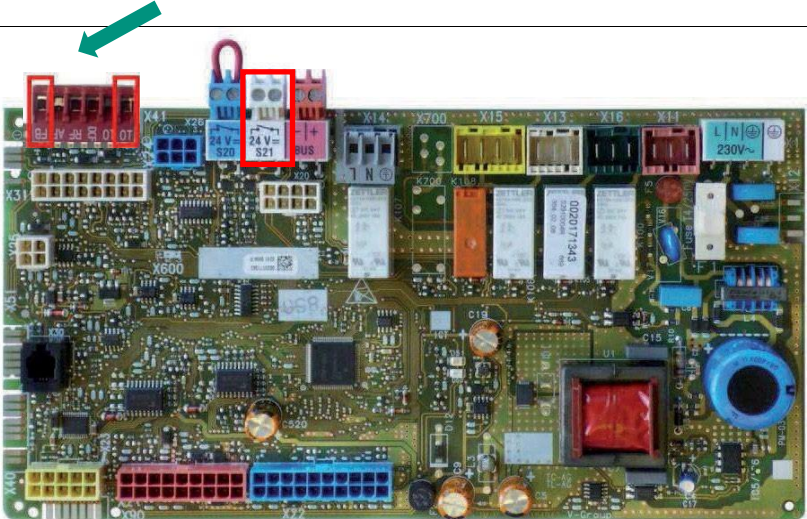
PV-/SG-Ready connection

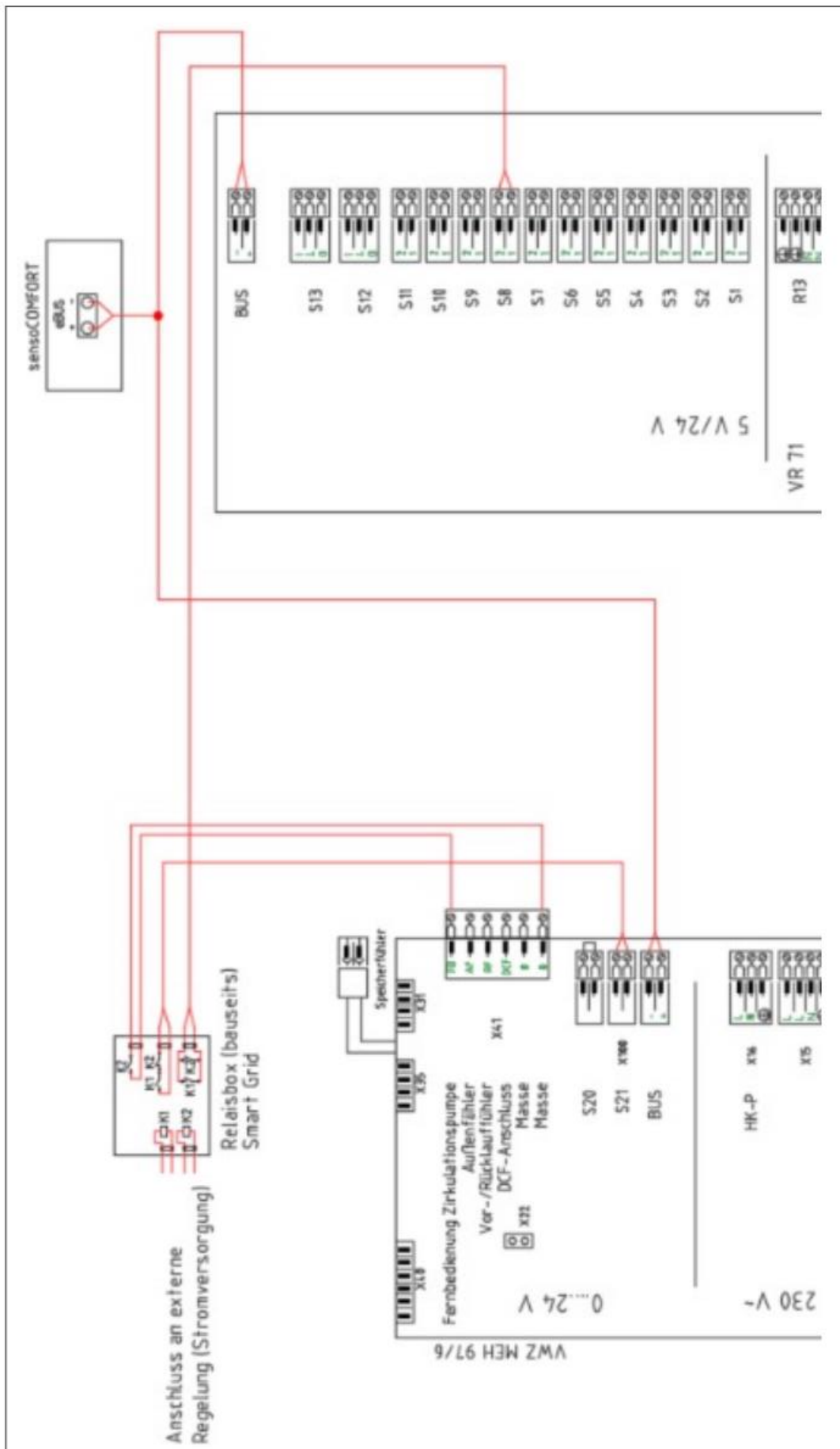


EVU-Lock connection

<p>X106/S21</p> <p>EVU-Lock</p> <p>Must be closed to lock the heat pump.</p>	<p>A potential-free make contact with a switching capacity of 24 V/0.1 A.</p>	
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PV-/ SG-Ready connection

<p>Multi functional input (ME)</p> <p>PV-/ SG-Ready</p>	<p>The contact "FB and O" on plug X41 to be switched by an energy manager of the photovoltaic system.</p>	
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Anschluss Inneneinheit → VR 71

Configuration of Vaillant sensoCOMFORT 720 system controller


The SG Ready function must be activated and configured on the heat pump system controller. Depending on the system controller of the heat pump, the activation and configuration of the SG Ready function can be different.


1. Click the  button to reach the “MENU”





2. Go to “Settings” > “Installer level”
3. Enter the access code to access the installer level. The factory programmed code is “00”
4. Click the  button to confirm
5. Go to “Installation configuration” > “Installation” > “ESCO”
6. Select “HP + BUH off”
7. Click the  button to confirm.



8. Click  to go back to “Installation Configuration”
9. Go to “HP control module configuration” > “MI”. Select “Photovoltaics”

10. Click  the button to confirm



11. Click  to go back to "Installation Configuration"
12. Go to "Installation" > "Buffer cylinder offset" to set the temperature offset for the buffer cylinder when SG Ready is active
13. Click  to go back to the main menu after finishing the above steps

As a guidance, the usual settings for Buffer cylinder offsets are +5 K for DHW as well as heating water buffer cylinder, and +1.5 K for room temperature.

Power limits for a PV connection

<div>Grenzwert PV-Ready</div> <div>1700 W</div>	Einstellungen -> Energiemanagement -> Grenzwert PV-Ready Stellen Sie unter „Grenzwert PV-Ready“ die elektrische Leistung des Gerätes ein, die an den PV-Ready Kontakt angeschlossen wird. soll. Dabei soll ein Offset von 200 – 300 W berücksichtigt werden. Beispiel: El. Leistungsaufnahme Wärmepumpe 1.400 W + Offset 300 W → Einstellwert: 1700 W
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Device	Unit	VWL 65/6	VWL 75/6	VWL 105/6	VWL 125/6
Max. power consumption A2 / W55	kW	0.8	1.5	1.6	2.2
Power setting on the PV inverter	kW	1.1	1.8	1.9	2.6

SG Ready operating modes

- Operating mode 1** (1 switching state, with terminal solution: **1:0**):
 This operating mode is downward compatible with the RU blocking frequently switched at fixed times and comprises a maximum of 2 hours of "**hard**" **blocking** time.
- Operating mode 2** (1 switching state, for terminal solutions: **0:0**):
 In this circuit, the heat pump runs in energy-efficient **normal mode** with proportional heat storage filling for the maximum two-hour EVU shutdown.
- Operating mode 3** (1 switching state, with terminal solution **0:1**):
 In this operating mode, the heat pump runs within the controller in boosted operation for space heating and domestic hot water. This is not a definite start-up command, but a switch-on **recommendation according to today's boost**.
- Operating mode 4** (1 switching state, with terminal solution **1:1**):
 This is a **definitive startup command**, insofar as it is possible within the framework of the control settings. For this operating mode, different control models must be adjustable on the controller for different tariff and utilization models:
 - Variant 1: The heat pump (compressor) is actively switched on.
 - Variant 2: The heat pump (compressor and additional electric heaters) is actively switched on, optional: higher temperature in the heat accumulators.

References

Current installation manuals, product brochures and further information for Vaillant heat pump models and additional hardware can be obtained on the official Vaillant website (www.vaillant.de).

<https://www.vaillant.de/fachpartnernet/startseite/elektro/waermepumpen-unterlagen/elektro-kompendium-wp-22-2639115.pdf>

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