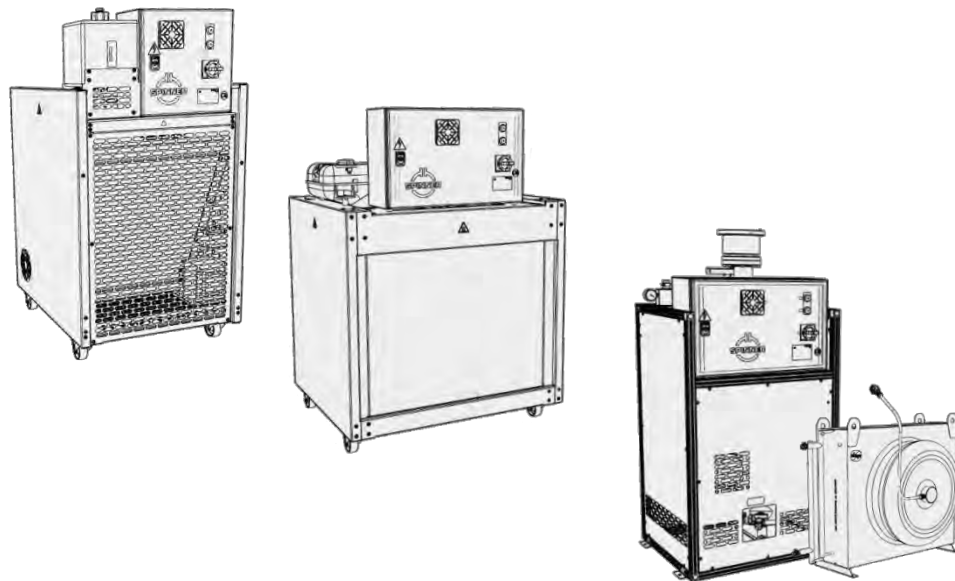




SPINNER | Service Notice | 10062115

Visual inspection and functional test

Product Numbers BN 546404xxxxx, 546434xxxxx, 546435xxxx, 546437xxxx,
546430xxxxx, 546439xxxxx
25 kW to 55 kW SmartLoads



SPINNER SmartLoad

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SPINNER SmartLoad

1 General information

Background

This Service Notice describes how to inspect visually and test the functionality of a SmartLoads. The checks in this document are to be performed on diverse cycles (annex I). SmartLoads with internal and external heatexchanger need to be distinguished (int-Hex vs ext-Hex).

The filled out checklist only needs to be sent back to us annually, when the functional test (chapter 3) is completed.

Actions

Visual inspection, functional test, report results in checklist

Affected Parts

25 kW to 55 kW SmartLoads:

BN 546404xxxxx, 546434xxxxx, 546435xxxx, 546437xxxxx, 546430xxxxx, 546439xxxxx

Qualification of personnel

Qualified technical personnel only

1.1 Overview

This document contains a checklist (chapter 2) and an overview of the hardware (chapter 6). Also software updates (chapter 4) as well as how to set the idle speed (chapter 5) are explained.

In the annex you find the maintenance cycles list, maintenance references and for the functional test of reject loads (chapter 3).

Please follow the tasks in the check list in ascending order, mark or comment your results and e-mail the finished document back to us: after-sales-service@spinner-group.com.



Always find latest updates including training videos and this document on our SmartLoad Service page:







<https://www.spinner-group.com/en/products/smart-load-service>

Questions? Contact: after-sales-service@spinner-group.com



1.2 Safety signs and symbols

Safety signs are used on warning labels, stickers, in the product documentation and on the packaging of the product.

					
Warning! General hazard	Warning! Danger of electric shock	Warning! Hot surface	PE terminal	Earth	Warning! High weight

SPINNER SmartLoad

Warning! Non-ionised electromagnetic radiation	No access for persons with pacemakers	Use safety shoes	Use safety helmet	Use safety gloves	Observe product documentation

Signal words for hazard seriousness

Signal words are used on warning labels, stickers, in the product documentation, on specific danger spots and on the packaging of the product. They indicate the hazard seriousness in safety messages.

- DANGER** Indicates a hazardous situation conveying great risk which, if not avoided, will result in death or serious injury.
- WARNING** Indicates a hazardous situation conveying moderate risk which, if not avoided, could result in death or serious injury.
- CAUTION** Indicates a hazardous situation conveying minor risk which, if not avoided, may result in minor or moderate injury.
- NOTICE** Indicates the possibility of faulty operation that can damage the product.
It is essential to make sure that the signal words described here are always used only in connection with the related product documentation and the related product. The use of signal words in connection with unrelated products or documentation can result in misinterpretation and thus contribute to personal injury or material damage.



Before you start, ensure to read and understand the section safety messages and in particular chapter 1 "Safety" of the respective product manual. Only electrically skilled persons should work on SPINNER dummy loads in accordance with the national safety and accident prevention regulations. Failure to observe could result in death or serious injury.



WARNING - Electric shock hazard
Electric shock can cause severe burns and fatal injuries.
Before you start ensure to disconnect your entire system from the power supply.
Utilize appropriate devices and methods to prevent accidental energizing.



WARNING - High leakage current
Connect at least 10 mm² PE conductor permanently to separate PE terminal before connecting mains connector.



WARNING - Radio Frequency Hazard
Radio Frequency Power can cause burns, eye injuries and electrical shock.
Utilize appropriate devices and methods to prevent accidental energizing.



Wear eye protection

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2 Check list

Please use the check list below to conduct the tests and give us feedback about the results. Please send a copy of this list with the subject "SmartLoad Inspection_Station Name_BN_Serial" to SPINNER After Sales Service:

after-sales-service@spinner-group.com

Registration

Station call sign*	Transmitter type (e.g., THU 9-40)	SmartLoad P/N*	SmartLoad* Ser.Nr.	Load type** (Reject load / station load)	Date of commissioning**	Note
		BN				

* This information is mandatory even if you have registered online on our SmartLoad service website. We need it to match your feedback form to the online data.

How to contact you**

Name	Affiliation	Street / Nr.	City	State	ZIP	Contact e-mail / phone)

Shipping address**

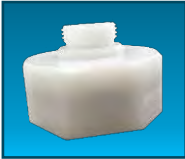
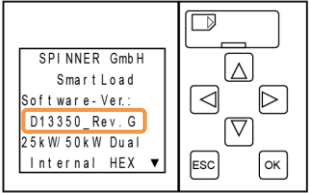

Name	c/o	Street / Nr.	City	State	ZIP	Local contact (e-mail / phone)

** This information is optional if you have already registered on our SmartLoad service website.

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Item	Symptom	Possible Cause	Solution	Check / Notes
<p>2.1 Tank cap</p>  <p><i>New tank cap with - thread on top and - black valve on the bottom</i></p>	<p>No pressure relief in reservoir; no drain hose attachable</p>	<p>Old tank cap</p>	<p>Replace with new tank cap</p> <p><i>Refer to: Service notice “Replacing the coolant reservoir cap” on the SmartLoad service page</i></p>	<p>Tank cap current? Is there a thread on top to which a drain hose can be attached?</p> <p><input type="checkbox"/> passed <input type="checkbox"/> failed (note)</p>
<p>2.2 Software of control unit</p>  <p><i>Find version in display with up / down arrows</i></p>	<p>Version shown in display different than ones listed for your type/BN here:</p> <p>https://www.spinner-group.com/de/downloads/smartloads-software</p>		<p>Update software</p> <p><i>Refer to: - Video “Software update” - Video “Software download” - This document: Chapter 4</i></p> <p><i>Contact After Sales Service in case of problems</i></p>	<p>Software current? <input type="checkbox"/> yes <input type="checkbox"/> no</p> <p><i>If Software was not up to date: Software updated successfully?</i> <input type="checkbox"/> yes <input type="checkbox"/> no (note)</p> <p>Devices current software version (after update attempt): _____</p>
<p>2.3 System clock</p>	<p>Check PLC display to show system time and correct if necessary</p> <p><i>Refer to respective product manuals: - Int-Hex: Chapter 9.1 - Ext-Hex: Chapter 10.1</i></p>			<p>Time set correctly? <input type="checkbox"/> yes <input type="checkbox"/> no</p>

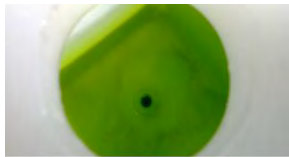


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Item	Symptom	Solution	Check / Notes
2.4 Robustness against surges	Parameters should be set as shown in chapter 6	Set parameters accordingly <i>Refer to:</i> <i>Video "Power surge robustness"</i>	FI parameters set for robustness? <input type="checkbox"/> yes <input type="checkbox"/> no (note)
2.5 Idle Speed <i>Int-Hex only</i>	VFD FU1 shows "00.0" when pumpbutton is not pressed	→ Before functional test (chapter 3): leave it at "0.0" → After functional test: Set to "10.0" <i>Refer to:</i> - <i>Video "Set idle speed"</i> - <i>This document: chapter 5</i>	Idle Speed of int-Hex load set after functional test? <input type="checkbox"/> yes <input type="checkbox"/> no (note)
2.6 Coolant level <i>Int-Hex only</i>  <i>Good level:</i> <i>Between "MIN" and "MAX"</i>	Level above "MAX" marking	Air in cooling system <i>Refer to product manual chapter 9.2</i>	Level not too high? <input type="checkbox"/> passed <input type="checkbox"/> failed (note)
		Expansion due to high temperature of cooling liquid <i>Refer to product manual chapter 6.2</i>	
	Level below "MIN" marking	Evaporation <i>Refer to product manual chapter 6.2 / 9.2</i>	Level not too low? <input type="checkbox"/> passed <input type="checkbox"/> failed (note)
		Leakage <i>Refer to:</i> - <i>Product manual chapter 6.2/9.2</i> - <i>This document: chapter 2.9-2.11</i>	

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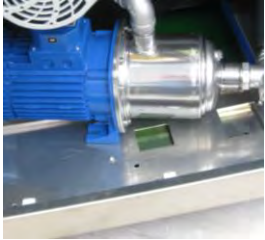

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Item	Symptom	Possible Cause	Solution	Check / Notes
2.7 Coolant appearance Int-Hex only  <i>Good (green, free of dirt)</i>  <i>Bad (dark, particles)</i>	Coolant not green or yellow, cloudy coolant	Abrased particles in cooling system, glycol break down	Contact After Sales Service	Clear and right color? <input type="checkbox"/> passed <input type="checkbox"/> failed (note)
	Visible particles in coolant	Coarse abrasion		<input type="checkbox"/> passed <input type="checkbox"/> failed (note)
2.8 Coolant pressure Ext-Hex only  <i>Good pressure: Between 0,75 and 1.1 bar</i>	Pressure above 1.1 bar	Air in cooling system	Vent if air is present. Drain if overfilled. <i>Refer to product manual chapter 10.2</i>	Pressure within 1.1 and 0.75 bar? <input type="checkbox"/> passed <input type="checkbox"/> failed (note) Pressure: _____ Bar
		Expansion due to high temperature of cooling liquid	Normal behavior. Recheck when coolant < 40°C <i>Refer to product manual chapter 10</i>	
	Pressure below 0.75 bar	Evaporation	Normal over a longer time. → Refill <i>Refer to product manual chapter 7.3</i>	
		Leakage	Localize, rectify, refill, vent <i>Refer to: - Product manual: chapter 7.3 - This document: chapter 2.9-2.11</i>	

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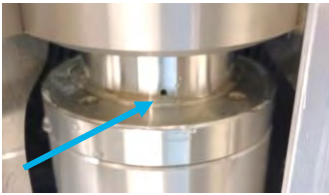


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Item	Symptom	Possible Cause	Solution	Check / Notes
2.9 Leakage - spill 	Coolant spill on floor	Triggered pressure relief valve (ext-Hex)	Vent cooling system, reduce coolant pressure <i>Refer to product manual chapter 7.3 / 10.2</i>	No puddles? <input type="checkbox"/> passed <input type="checkbox"/> failed (note)
		Loose hose clamps	Tighten with a torque of 5 Nm	
		Leaking fitting	Tighten	
		Leaking pump	<i>See chapter 2.10</i>	
		Resistor defect	<i>See chapter 2.11</i>	
2.10 Leakage - pump  <i>Int-Hex: Drip tray</i>  <i>Ext-Hex: collecting vessel</i>	Small amount of coolant in: - Drip tray or - collecting vessel	Shaft seal of pump leaks	A few drops per day are normal behavior of the shaft ring seal. Monitor in regular service interval <i>Refer to product manuals:</i> - <i>Int-Hex:</i> - - <i>Ext-Hex:</i> Chapter 10.1	Not more than a few drops in drip tray or collecting vessel? <input type="checkbox"/> passed <input type="checkbox"/> failed (note)

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Item	Symptom	Possible Cause	Solution	Check / Notes
<p>2.11 Leakage - resistor</p>  <p><i>White stains on aluminium parts</i></p>  <p><i>Brownish residues near vent hole</i></p>	<p>Moisture or residues of dried coolant visible on the vent hole of the resistor element or any other parts</p>	<p>Resistor element defect</p>	<p>Contact After Sales Service</p>	<p>No stains or residues?</p> <p>Resistor 1 <input type="checkbox"/> passed <input type="checkbox"/> failed (note)</p> <p>Resistor 2* <input type="checkbox"/> passed <input type="checkbox"/> failed (note)</p> <p><i>*Applicable for dual loads only</i></p>
<p>2.12 Float/ Snap disc switch</p>   <p><i>Float switch Snap disc</i></p>	<ul style="list-style-type: none"> - No float switch at lowest point of load element - No Snap disc switch on highest tuning screw 	<p>Contact After Sales Service</p> <p><i>Refer to Video: "Integration of float and snap disc switch"</i></p>	<p>Float switch integrated? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Snap disc switch integrated? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	

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Item	Symptom	Possible Cause	Solution	Check / Notes
2.13 Pump  <i>Frequency inverter "FU1" in normal operation</i>	Check VFD FU1: Press pump button and check if display shows "50"	VFD defect	Contact After Sales Service	Pump runs if Pump button is pressed? <input type="checkbox"/> passed <input type="checkbox"/> failed (note)
		PLC defect		
		wiring defect		
	VFD FU1 shows "50" if pump button is pressed but pump doesn't run (no noise from pump)	Pump defect		
Irregular / fluttering pump noise	Approx. every 30 seconds: air in cooling system	wiring between VFD FU1 and pump defect	Vent cooling system <i>Refer to product manuals: - Int-Hex: Chapter 9.2 - Ext-Hex: Chapter 10.2</i>	Pump sound is normal? <input type="checkbox"/> passed <input type="checkbox"/> failed (note)
		Continuous: Pump bearings defect, pump fan scratches at housing	Contact After Sales Service	
2.14 Performance cooling system	Cooldown time to high / overheat	Clogging, defect resistor element	Perform "Functional Test" (chapter 3) Contact After Sales Service if cooldown time is too high	Result of functional test (Chapter 3): Cooldown time < 6sec? <input type="checkbox"/> passed <input type="checkbox"/> failed (note) Measured cooldowntime(s) RES 1: _____sec RES 2: _____sec

For 2.5 to 2.11 also refer to the videos "Functional Test for Reject Loads" and "Functional Test for Station / Test Loads".

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SPINNER SmartLoad

3 Functional / performance test

This procedure makes sure the SmartLoad works normal by testing it with ~1kW of RF power. That means: The resistor element should be cooled down from 80°C to 55°C in under 6 seconds.

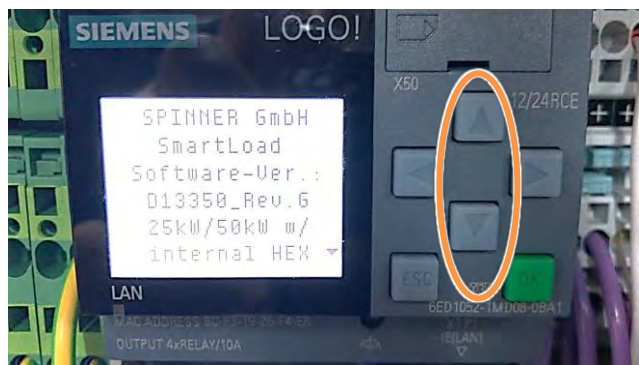
Testing reject and station / test loads requires different setups (see 3.2 / 3.3)

Also refer to the videos “Functional Test for Reject Loads” and “Functional Test for Station / Test Loads” on the SmartLoad Service page.

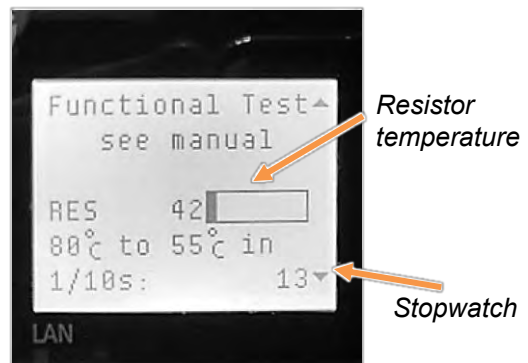
3.1 Testparameters

Please read the following instructions carefully before starting.

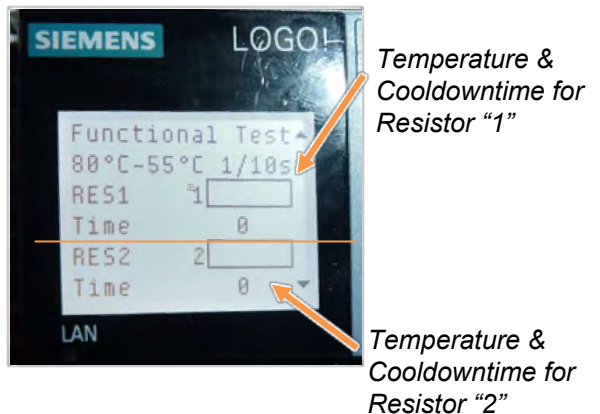
- Use the up and down keys at the Programmable Logic Controller (PLC) to navigate to the page with the "Functional Test".



- The stopwatch on the display starts, when the resistor temperature reaches more than 80°C and stops once it falls below 55°C. The stopped time is the cooldown time that we are looking for in this procedure. Here: Resistor Temperatur "RES" at 42°C
- The time on the display is measured in 1/10 seconds. Here: "13" = 1.3 seconds.



- Dual loads have got two temperature indicators. Their numeration is matched to the labels next to the RF Inputs. Make sure to observe the right one.



SPINNER SmartLoad

3.2 Testprocedure for REJECT loads

To add about 1 kW of RF power some amplifiers have to get switched off - depending on your transmitter type. Repeat the procedure for each reject load element. The site may stay on air.

3.2.1 Preparation

- Make sure idle speed is at “0.0” (chapter 5)
- Go to “Appendix III: Switching tables for functional test of reject loads” and get all tables for your model. There is one for each reject load which are always one less than the number of cabinets.
For example “THU9evo (48)”: 4 cabinets → 3 tables/reject loads.
- Make yourself familiar with the amps that need to be switched off, as this has to be done rather quickly (e.g. mark them). Otherwise the test result may not be conclusive .
- Make sure the resistor temperature is below 40°C before starting. If it is higher, press the pump button to cool down below 40°C.

3.2.2 Executing the test

- Begin with the first reject load you would like to test e.g. “1-2”. Switch off the amplifiers as indicated in the respective switching table to feed the test power. Immediately go to the PLC and monitor the resistor temperature as explained in chapter 3.1
 - Temperature is cooled down below 55°C in under 6 sec:
Test passed, switch back on all amps
 - Temperature rises above 80°C after pump starts:
switch all amplifiers immediately **on** (within 20 seconds)
→ Test failed, device is defect. Contact after sales service.
- Loads with **internal** heat exchanger only: **Set idle speed back to “10.0”** (chapter 5)
- Note result in chapter 2.14 and send finished check list to After Sales Service

3.3 Testprocedure for STATION / TEST loads

For this test the site needs to go off air. The load will be also tested with 1kW of RF power which is to be set directly at the transmitter.

3.3.1 Preparation

- Make sure idle speed is at “0.0” (chapter 5)
- Set transmitter control to local, note current output power and switch off the RF output. Decrease the RF output power in the setting to 0 and reroute the RF output from the antenna to the smartload (electronic switch)
- Set output power of transmitter to 1kW and make sure the transmitter is switched off again.
- Make sure resistor temperature is below 40°C before starting. If it is higher, press pump button to cool down below 40°C

3.3.2 Executing the test

- Switch the transmitter on and immediately go to the PLC and monitor the resistor temperature as explained in 3.1
 - Temperature is cooled down below 55°C in under 6 sec: Test passed, reverse preparations and go back on air with previous nominal power
 - Temperature rises above 80°C after the pump starts,
switch **off** the transmitter immediately (within 20 seconds)
 - → Test failed, device is defect. Contact after sales service.
- Loads with **internal** heat exchanger only: **Set idle speed back to “10.0” (chapter 5)**
- Note result in chapter 2.14 and send finished check list to After Sales Service

SPINNER SmartLoad

4 Software update

Updating the software of your SmartLoad requires you to download the right software version, put it on a suitable SD Card and insert it into the control unit. Your site will go off air for a few minutes.

Also refer to the to videos “Software update” and “Software download” on the SmartLoad service page

Suitable SD card

- Micro SDHC 8 GB to 32 GB (SD Ver. 2.0), Micro SDXC does NOT work
- Industrial-grade quality
- FAT32 format (quick format)

Identify key characteristics of the load

- Internal or external Heat Exchanger (int-Hex or ext-Hex)
- Single or dual load (one or two inputs)

Download newest software

Find SW for your BN here:

<https://www.spinner-group.com/de/downloads/smart-loads-software>



Copy Software on SD card

- Copy LOGO_U_P.bin on card
- Do not change file name (PLC ignores files with other names)

Update Procedure

Caution: PLC needs to reboot after update. Interlock will open!

- Gently open drawer with SD card from the PLC
- Remove SD card (if present)
- Insert new SD card and close drawer. If it feels stuck, lightly squeeze top and bottom together and carefully try to close it.
- Switch off load and wait until PLC display gets dark. Interlock opens.
- Wait a few seconds and switch device back on. PLC automatically loads the software, installs and starts it.
- After start-up interlock will close again. If this accelerated procedure won't work, contact after sales service.
- Leave SD card in PLC (logs are recorded on SD card)
- Verify on the PLC display that it shows the new version and note in chapter 2.2

SPINNER SmartLoad

5 Power surge robustness

Some parameters of the frequency inverters FU1 and FU2 need to be tweaked to enhance the power surge robustness. Before you start, make sure the idle speed is at “0.0” (also see chapter 6).

Open the cover of “FU1”. You will have to either



Push the jog wheel



Turn the jog wheel

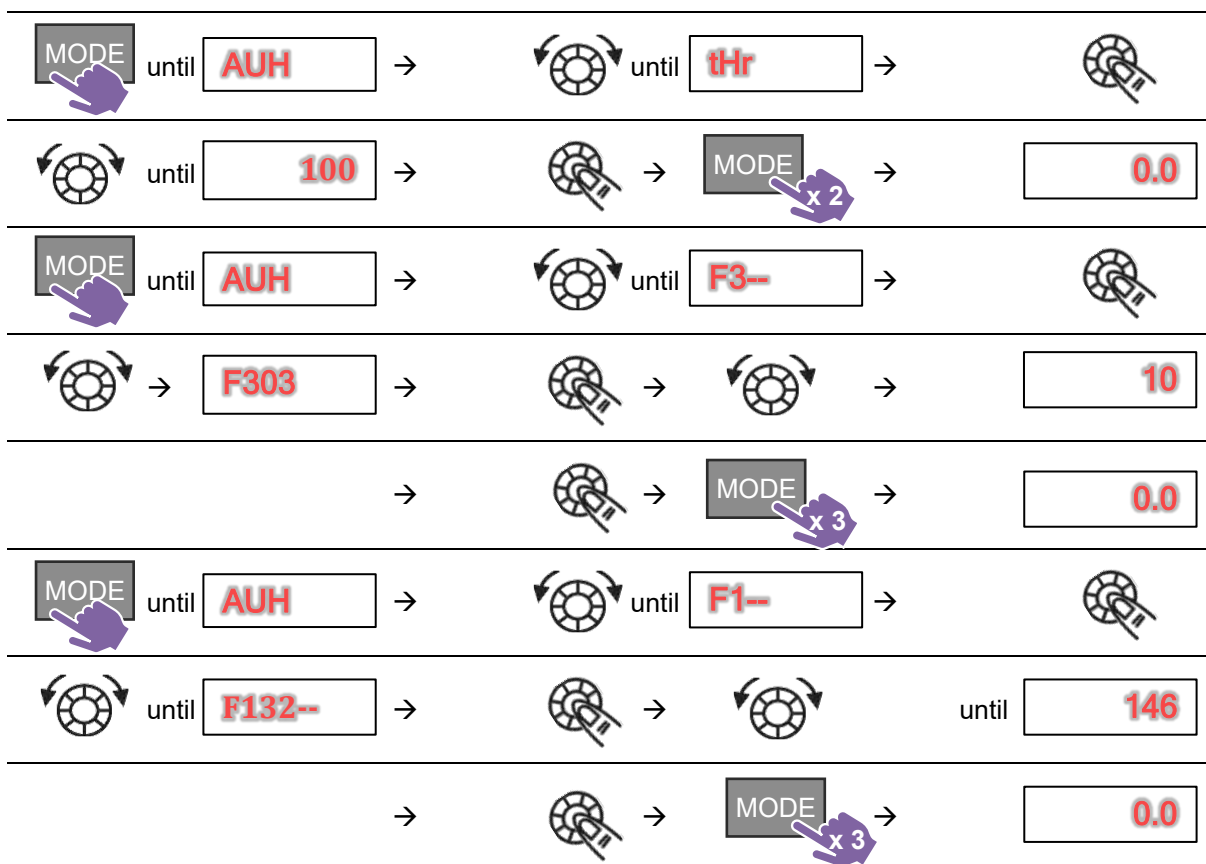


Push the “MODE” button or



Check the value in the display

Perform the following procedure:



After you are done with FU1, repeat the same steps with FU2. Close the covers of the frequency inverters once you are done.

You will also find an explaining video on the SmartLoad Service page: “3 Power surge robustness”.

SPINNER SmartLoad



6 Idle Speed – Internal heatexchanger only

SmartLoads with internal heatexchanger benefit from the pump being on idle speed. However it needs to be at “0.0” during the functional test in chapter 3 of this document.

You will also find an explaining video on the SmartLoad Service page: “6 Indoor Loads only: Set idle speed”.

6.1 Idle speed set before functional test

In case idle speed is already set, the display of the frequency inverter “FU1” shows the value “10.0”. You need to set it to “0.0” before performing the functional test

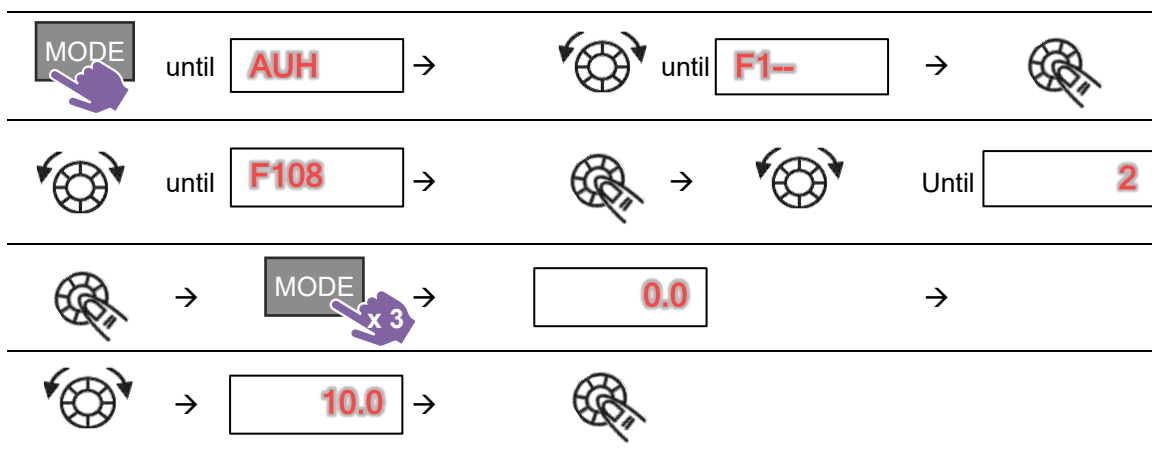
 Turn the jog wheel till “0,0” is shown in the display and  push the jog wheel once.

After the functional test: Set Idle speed back to “10.0” in the same way.

6.2 No idle speed set before functional test

After performing the functional test, an idle speed should be set for SmartLoads with internal heat exchanger.

Open the cover of the frequency inverter “FU1” and perform the following steps (symbols explained in chapter 5):



Close the cover once you are done.

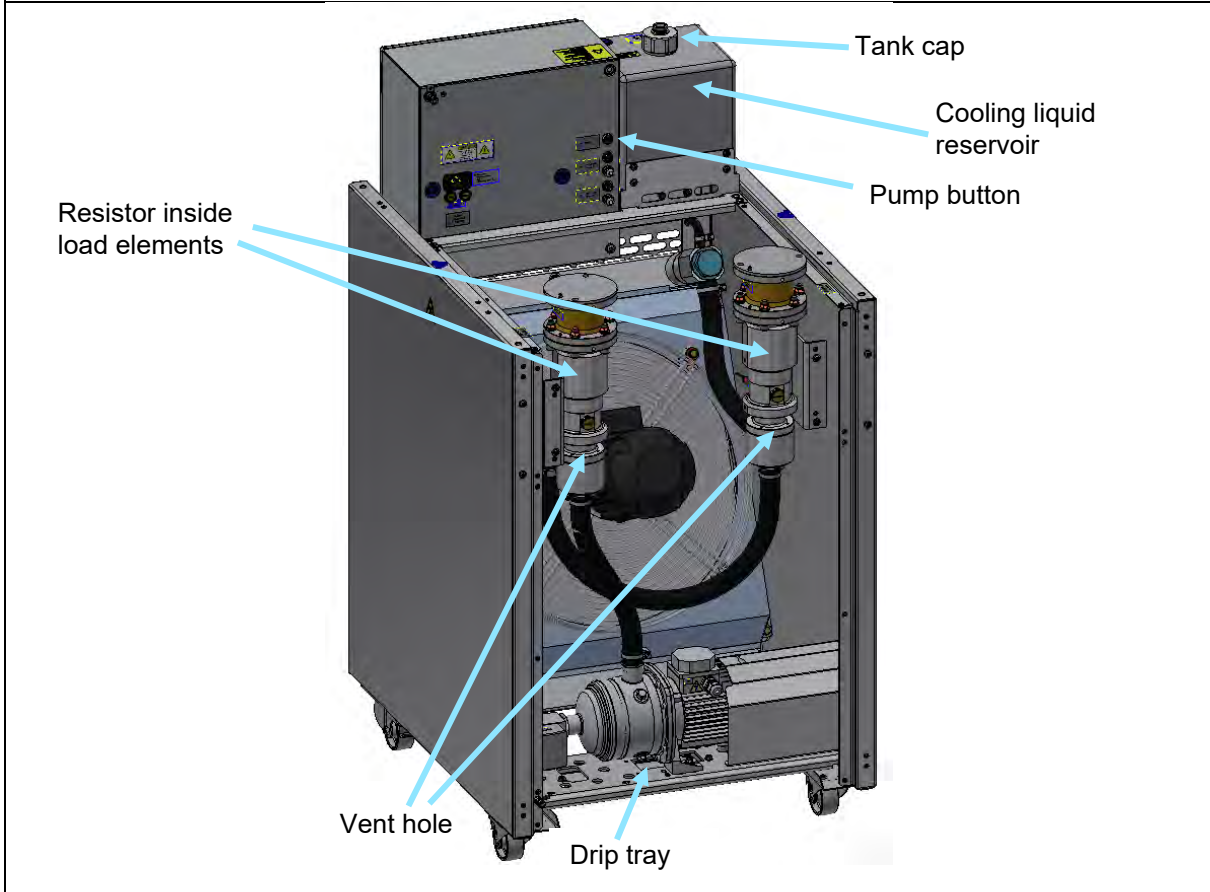
SPINNER SmartLoad

7 Overview of SmartLoad hardware

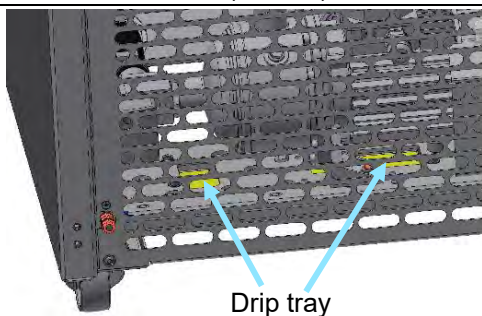
7.1 SmartLoad with *internal* heat exchanger (int-Hex)

Location of key elements

Example: SmartLoad with two RF Inputs and internal heat exchanger (int-Hex)
 BN 546434 Dual Load 25 kW

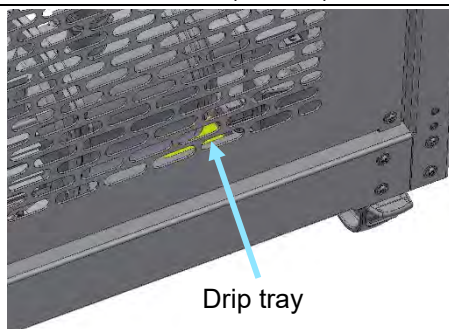


25 kW SmartLoad (int-Hex)



Rearview

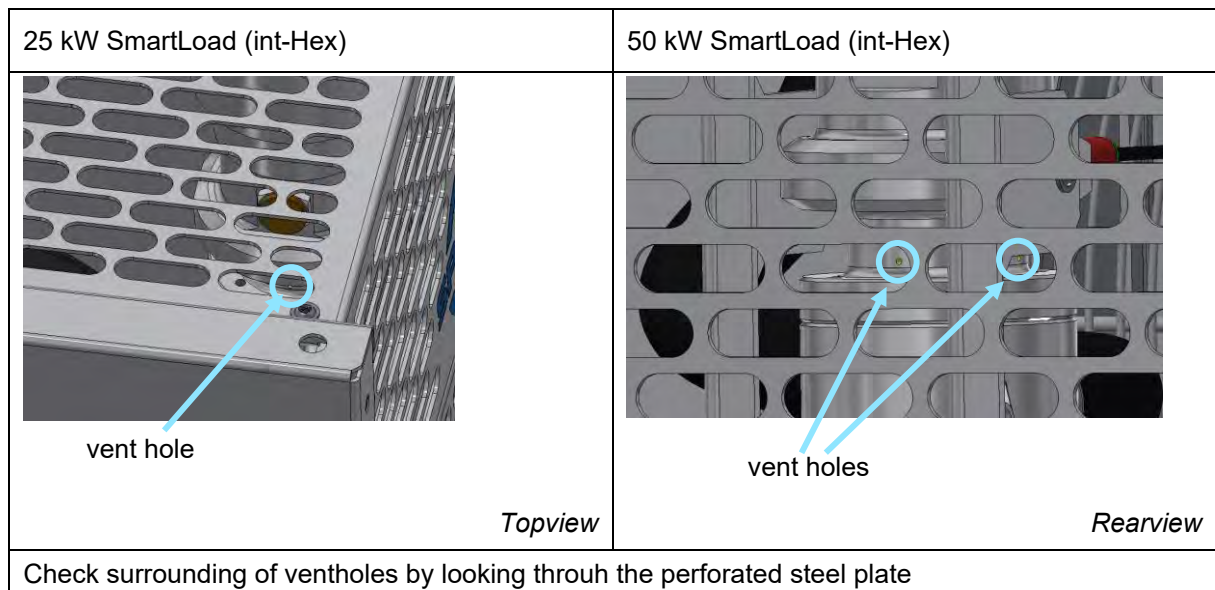
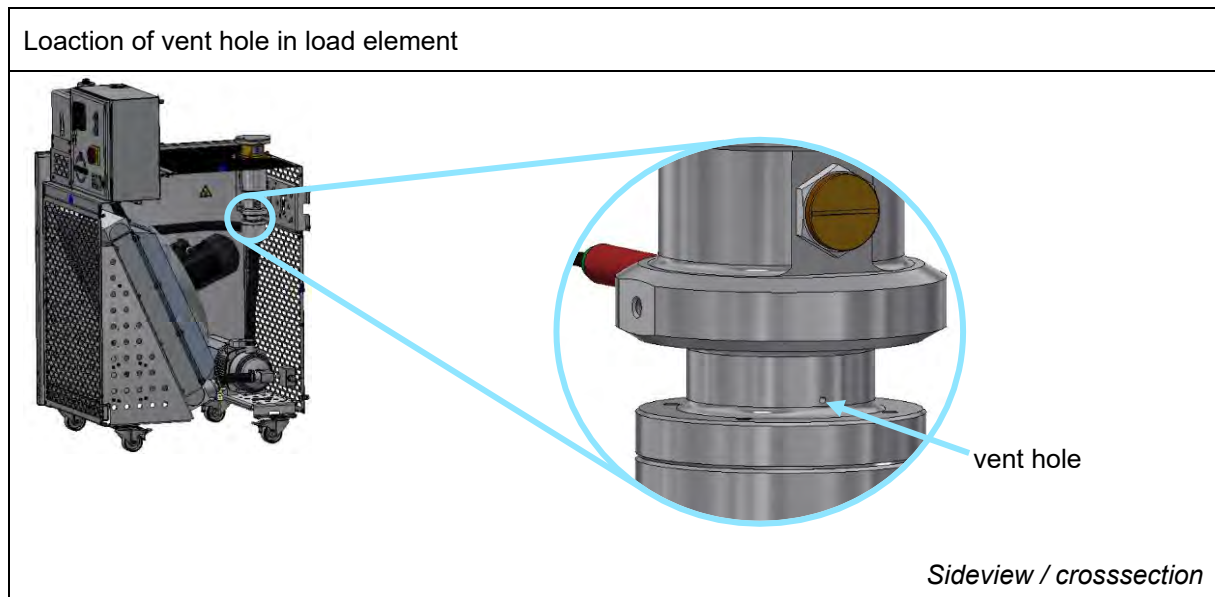
50 kW SmartLoad (int-Hex)



Rearview

Check drip tray by looking through the perforated steel plate (rearside)

SPINNER SmartLoad

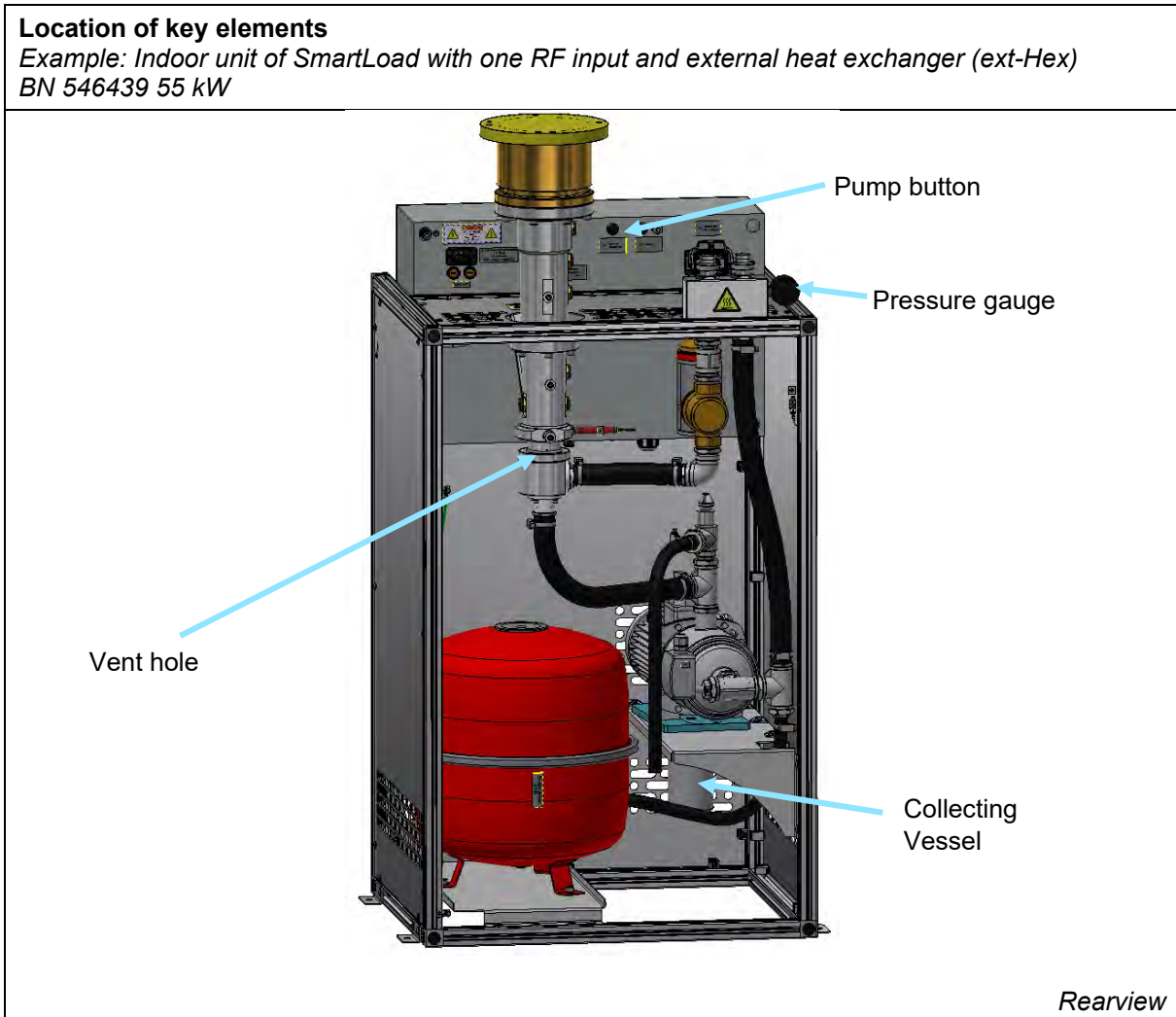


SPINNER SmartLoad

7.2 SmartLoad with external heat exchanger (ext-Hex)

Location of key elements

Example: Indoor unit of SmartLoad with one RF input and external heat exchanger (ext-Hex)
BN 546439 55 kW



Rearview

25/50 kW SmartLoad (ext-Hex)	
<p>Vent hole</p>	
Topview	Frontview
Inspect surrounding of vent hole by looking into the device	Check collecting vessel through opening for filling / drain nozzle

SPINNER SmartLoad

Appendix I: Maintenance cycles

Just like your transmitter also SmartLoads need regular attention. Repeat the checks as explained in the previous chapters and in the manual according to this schedule, which is also part of the Rohde & Schwarz maintenance list.

Weekly:

- Color / pureness of coolant
- Coolant level / pressure
- Leakages
- Residues around vent hole of load elements
- Run up pump for a few seconds

Monthly:

- Check heat exchanger for unobstructed airflow (damage, dirt..)

Quaterly:

- Check if software is still up to date

Annual:

- Perform functional test (station & reject loads) as in Chapter 3 and 6 and send results to Spinner
- Check airfilters of electrical cabinet to be clean
- Check glycol concentration to be between 35% and 50% (Manual)

Every 4 years:

- Exchange coolant (see video “coolant change” on service page. Use Antifrogen-N only)

Appendix II: Maintenance references in product manual

Below are references for some maintenance procedures. Descriptions are to be found in the manual corresponding to your SmartLoad. (<https://products.spinner-group.com>; find the “downloads” tap belonging to your products “BNxxxxx” Number)

- PLC clock time setting: Ch. 9.1 (int-Hex); Ch. 10.1 (ext-Hex)
- Heat Exchanger: We recommend checking every 6 weeks to ensure unobstructed air circulation. Remove dust or dirt from the heat exchanger with compressed air or a soft brush. Ch. 8, 9 (int-Hex) Ch. 9, 10 (ext-Hex)
- Front panel fan filter cleaning: Ch. 9.5 (int-Hex), Ch. 10.3 (ext-Hex)
- Deaeration of the cooling circuit: Ch. 9.2 (int-Hex), Ch. 10.2 (ext-Hex)

SmartLoad with internal heat exchanger (int-Hex)

- Checking glycol concentration and pH-value (Ch. 9.3)
- Correcting the coolant level (Ch. 9.4)

SmartLoad with external heat exchanger (ext-Hex)

- Filling of the coolant circuit (Ch. 7.3)
- Check the coolant pressure (nominal range 0.75 to 1.1 bar)

Appendix III: Tables for functional tests of reject loads

The following tables show which amplifiers need to be shut off during the functional test of reject loads in order to get approx. 1kW test power from the transmitter.

Each reject load needs to be tested separately thus having its own belonging switching scheme. In the list below, you can find the required lists by looking up your transmitter.

This tables refers to Rohde & Schwarz THU9ecto transmitters (ATSC (8VSB)). For other transmitters contact our after sales service team.

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Table 1: THU9evo (16)				Table 2: THU9evo (20)				Table 3: THU9evo (24)									
Pout C1-2: 16,88 kW reject load C1-2: 0,90 kW				Pout C1-2: 20,01 kW reject load C1-2: 1,21 kW				Pout C1-2: 25,81 kW reject load C1-2: 1,03 kW									
5,00 kW		12,79 kW		5,70 kW		15,53 kW		8,26 kW		18,59 kW							
cabinet 1		cabinet 2		cabinet 1		cabinet 2		cabinet 1		cabinet 2							
A1	off	0,00 kW	A1	on	1,60 kW	A1	off	0,00 kW	A1	on	1,56 kW	A1	off	0,00 kW	A1	on	1,55 kW
A2	on	1,60 kW	A2	on	1,60 kW	A2	on	1,56 kW	A2	on	1,56 kW	A2	on	1,55 kW	A2	on	1,55 kW
A3	on	1,60 kW	A3	on	1,60 kW	A3	off	0,00 kW	A3	on	1,56 kW	A3	on	1,55 kW	A3	on	1,55 kW
A4	off	0,00 kW	A4	on	1,60 kW	A4	on	1,56 kW	A4	on	1,56 kW	A4	off	0,00 kW	A4	on	1,55 kW
A5	on	1,60 kW	A5	on	1,60 kW	A5	on	1,56 kW	A5	on	1,56 kW	A5	on	1,55 kW	A5	on	1,55 kW
A6	on	1,60 kW	A6	on	1,60 kW	A6	off	0,00 kW	A6	on	1,56 kW	A6	on	1,55 kW	A6	on	1,55 kW
A7	on	1,60 kW	A7	on	1,60 kW	A7	on	1,56 kW	A7	on	1,56 kW	A7	off	0,00 kW	A7	on	1,55 kW
A8	off	0,00 kW	A8	on	1,60 kW	A8	off	0,00 kW	A8	on	1,56 kW	A8	on	1,55 kW	A8	on	1,55 kW
						A9	on	1,56 kW	A9	on	1,56 kW	A9	on	1,55 kW	A9	on	1,55 kW
						A10	on	1,56 kW	A10	on	1,56 kW	A10	off	0,00 kW	A10	on	1,55 kW
												A11	on	1,55 kW	A11	on	1,55 kW
												A12	on	1,55 kW	A12	on	1,55 kW

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Table 4: THU9evo (30) - reject load 1-2						Table 5: THU9evo (30) - reject load 1-3								
Pout C1-3: 29,64 kW reject load C1-3: 0,00 kW						Pout C1-3: 37,57 kW reject load C1-3: 0,84 kW								
Pout C1-2: 19,75 kW reject load C1-2: 1,19 kW			5,62 kW			15,33 kW			9,88 kW			Pout C1-2: 30,65 kW reject load C1-2: 0,00 kW		
5,62 kW		15,33 kW		9,88 kW		15,33 kW		15,33 kW		7,76 kW				
cabinet 1		cabinet 2		cabinet 3		cabinet 1		cabinet 2		cabinet 3				
A1	off	0,00 kW	A1	on	1,54 kW	A1	off	0,00 kW	A1	on	1,54 kW	A1	on	1,54 kW
A2	on	1,54 kW	A2	on	1,54 kW	A2	on	1,54 kW	A2	on	1,54 kW	A2	on	1,54 kW
A3	off	0,00 kW	A3	on	1,54 kW	A3	on	1,54 kW	A3	on	1,54 kW	A3	on	1,54 kW
A4	on	1,54 kW	A4	on	1,54 kW	A4	on	1,54 kW	A4	on	1,54 kW	A4	on	1,54 kW
A5	on	1,54 kW	A5	on	1,54 kW	A5	on	1,54 kW	A5	on	1,54 kW	A5	on	1,54 kW
A6	off	0,00 kW	A6	on	1,54 kW	A6	off	0,00 kW	A6	on	1,54 kW	A6	on	1,54 kW
A7	on	1,54 kW	A7	on	1,54 kW	A7	on	1,54 kW	A7	on	1,54 kW	A7	on	1,54 kW
A8	off	0,00 kW	A8	on	1,54 kW	A8	on	1,54 kW	A8	on	1,54 kW	A8	on	1,54 kW
A9	on	1,54 kW	A9	on	1,54 kW	A9	on	1,54 kW	A9	on	1,54 kW	A9	on	1,54 kW
A10	on	1,54 kW	A10	on	1,54 kW	A10	on	1,54 kW	A10	on	1,54 kW	A10	on	1,54 kW

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Table 6: THU9evo (36) - reject load 1-2						Table 7: THU9evo (36) - reject load 1-3								
Pout C1-3: 38,74 kW reject load C1-3: 0,00 kW						Pout C1-3: 44,09 kW reject load C1-3: 1,37 kW								
Pout C1-2: 25,81 kW reject load C1-2: 1,03 kW			8,26 kW			18,59 kW			12,91 kW			Pout C1-2: 37,17 kW reject load C1-2: 0,00 kW		
8,26 kW		18,59 kW		12,91 kW		18,59 kW		18,59 kW		8,26 kW				
cabinet 1		cabinet 2		cabinet 3		cabinet 1		cabinet 2		cabinet 3				
A1	off	0,00 kW	A1	on	1,55 kW	A1	off	0,00 kW	A1	on	1,55 kW	A1	on	1,55 kW
A2	on	1,55 kW	A2	on	1,55 kW	A2	on	1,55 kW	A2	on	1,55 kW	A2	on	1,55 kW
A3	on	1,55 kW	A3	on	1,55 kW	A3	on	1,55 kW	A3	on	1,55 kW	A3	on	1,55 kW
A4	off	0,00 kW	A4	on	1,55 kW	A4	on	1,55 kW	A4	on	1,55 kW	A4	off	0,00 kW
A5	on	1,55 kW	A5	on	1,55 kW	A5	on	1,55 kW	A5	on	1,55 kW	A5	on	1,55 kW
A6	on	1,55 kW	A6	on	1,55 kW	A6	on	1,55 kW	A6	on	1,55 kW	A6	on	1,55 kW
A7	off	0,00 kW	A7	on	1,55 kW	A7	off	0,00 kW	A7	on	1,55 kW	A7	on	1,55 kW
A8	on	1,55 kW	A8	on	1,55 kW	A8	on	1,55 kW	A8	on	1,55 kW	A8	on	1,55 kW
A9	on	1,55 kW	A9	on	1,55 kW	A9	on	1,55 kW	A9	on	1,55 kW	A9	on	1,55 kW
A10	off	0,00 kW	A10	on	1,55 kW	A10	on	1,55 kW	A10	on	1,55 kW	A10	off	0,00 kW
A11	on	1,55 kW	A11	on	1,55 kW	A11	on	1,55 kW	A11	on	1,55 kW	A11	on	1,55 kW
A12	on	1,55 kW	A12	on	1,55 kW	A12	on	1,55 kW	A12	on	1,55 kW	A12	on	1,55 kW

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Table 8: THU9evo (40) - reject load 1-2

Pout C1-4: 39,49 kW											
reject load C1-4: 0,00 kW											
Pout C1-2: 19,75 kW						Pout C3-4: 19,75 kW					
reject load C1-2: 1,19 kW						reject load C3-4: 0,00 kW					
5,62 kW			15,33 kW			9,88 kW			9,88 kW		
cabinet 1			cabinet 2			cabinet 3			cabinet 4		
A1	off	0,00 kW	A1	on	1,54 kW	A1	off	0,00 kW	A1	off	0,00 kW
A2	on	1,54 kW	A2	on	1,54 kW	A2	on	1,54 kW	A2	on	1,54 kW
A3	off	0,00 kW	A3	on	1,54 kW	A3	on	1,54 kW	A3	on	1,54 kW
A4	on	1,54 kW	A4	on	1,54 kW	A4	on	1,54 kW	A4	on	1,54 kW
A5	on	1,54 kW	A5	on	1,54 kW	A5	on	1,54 kW	A5	on	1,54 kW
A6	off	0,00 kW	A6	on	1,54 kW	A6	off	0,00 kW	A6	off	0,00 kW
A7	on	1,54 kW	A7	on	1,54 kW	A7	on	1,54 kW	A7	on	1,54 kW
A8	off	0,00 kW	A8	on	1,54 kW	A8	on	1,54 kW	A8	on	1,54 kW
A9	on	1,54 kW	A9	on	1,54 kW	A9	on	1,54 kW	A9	on	1,54 kW
A10	on	1,54 kW	A10	on	1,54 kW	A10	on	1,54 kW	A10	on	1,54 kW

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Table 9: THU9evo (40) - reject load 3-4

Pout C1-4: 39,49 kW											
reject load C1-4: 0,00 kW											
Pout C1-2: 19,75 kW						Pout C3-4: 19,75 kW					
reject load C1-2: 0,00 kW						reject load C3-4: 1,19 kW					
9,88 kW			9,88 kW			5,62 kW			15,33 kW		
cabinet 1			cabinet 2			cabinet 3			cabinet 4		
A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	on	1,54 kW
A2	on	1,54 kW	A2	on	1,54 kW	A2	on	1,54 kW	A2	on	1,54 kW
A3	on	1,54 kW	A3	on	1,54 kW	A3	off	0,00 kW	A3	on	1,54 kW
A4	on	1,54 kW	A4	on	1,54 kW	A4	on	1,54 kW	A4	on	1,54 kW
A5	on	1,54 kW	A5	on	1,54 kW	A5	on	1,54 kW	A5	on	1,54 kW
A6	off	0,00 kW	A6	off	0,00 kW	A6	off	0,00 kW	A6	on	1,54 kW
A7	on	1,54 kW	A7	on	1,54 kW	A7	on	1,54 kW	A7	on	1,54 kW
A8	on	1,54 kW	A8	on	1,54 kW	A8	off	0,00 kW	A8	on	1,54 kW
A9	on	1,54 kW	A9	on	1,54 kW	A9	on	1,54 kW	A9	on	1,54 kW
A10	on	1,54 kW	A10	on	1,54 kW	A10	on	1,54 kW	A10	on	1,54 kW

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Table 10: THU9evo (40) - reject load 1-4

Pout C1-4: 44,86 kW											
reject load C1-4: 1,28 kW											
Pout C1-2: 15,51 kW						Pout C3-4: 30,65 kW					
reject load C1-2: 0,00 kW						reject load C3-4: 0,00 kW					
7,76 kW			7,76 kW			15,33 kW			15,33 kW		
cabinet 1			cabinet 2			cabinet 3			cabinet 4		
A1	off	0,00 kW	A1	off	0,00 kW	A1	on	1,54 kW	A1	on	1,54 kW
A2	on	1,54 kW	A2	on	1,54 kW	A2	on	1,54 kW	A2	on	1,54 kW
A3	off	0,00 kW	A3	off	0,00 kW	A3	on	1,54 kW	A3	on	1,54 kW
A4	on	1,54 kW	A4	on	1,54 kW	A4	on	1,54 kW	A4	on	1,54 kW
A5	on	1,54 kW	A5	on	1,54 kW	A5	on	1,54 kW	A5	on	1,54 kW
A6	off	0,00 kW	A6	off	0,00 kW	A6	on	1,54 kW	A6	on	1,54 kW
A7	on	1,54 kW	A7	on	1,54 kW	A7	on	1,54 kW	A7	on	1,54 kW
A8	on	1,54 kW	A8	on	1,54 kW	A8	on	1,54 kW	A8	on	1,54 kW
A9	on	1,54 kW	A9	on	1,54 kW	A9	on	1,54 kW	A9	on	1,54 kW
A10	on	1,54 kW	A10	on	1,54 kW	A10	on	1,54 kW	A10	on	1,54 kW

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Table 11: THU9evo (48) - reject load 1-2

Pout C1-4: 49,95 kW											
reject load C1-4: 0,00 kW											
Pout C1-2: 24,98 kW						Pout C3-4: 24,98 kW					
reject load C1-2: 1,00 kW						reject load C3-4: 0,00 kW					
8,00 kW			17,99 kW			12,49 kW			12,49 kW		
cabinet 1			cabinet 2			cabinet 3			cabinet 4		
A1	off	0,00 kW	A1	on	1,50 kW	A1	off	0,00 kW	A1	off	0,00 kW
A2	on	1,50 kW	A2	on	1,50 kW	A2	on	1,50 kW	A2	on	1,50 kW
A3	on	1,50 kW	A3	on	1,50 kW	A3	on	1,50 kW	A3	on	1,50 kW
A4	off	0,00 kW	A4	on	1,50 kW	A4	on	1,50 kW	A4	on	1,50 kW
A5	on	1,50 kW	A5	on	1,50 kW	A5	on	1,50 kW	A5	on	1,50 kW
A6	on	1,50 kW	A6	on	1,50 kW	A6	on	1,50 kW	A6	on	1,50 kW
A7	off	0,00 kW	A7	on	1,50 kW	A7	off	0,00 kW	A7	off	0,00 kW
A8	on	1,50 kW	A8	on	1,50 kW	A8	on	1,50 kW	A8	on	1,50 kW
A9	on	1,50 kW	A9	on	1,50 kW	A9	on	1,50 kW	A9	on	1,50 kW
A10	off	0,00 kW	A10	on	1,50 kW	A10	on	1,50 kW	A10	on	1,50 kW
A11	on	1,50 kW	A11	on	1,50 kW	A11	on	1,50 kW	A11	on	1,50 kW
A12	on	1,50 kW	A12	on	1,50 kW	A12	on	1,50 kW	A12	on	1,50 kW

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Table 12: THU9evo (48) - reject load 3-4

Pout C1-4: 49,95 kW											
reject load C1-4: 0,00 kW											
Pout C1-2: 24,98 kW						Pout C3-4: 24,98 kW					
reject load C1-2: 0,00 kW						reject load C3-4: 1,00 kW					
12,49 kW			12,49 kW			8,00 kW			17,99 kW		
cabinet 1			cabinet 2			cabinet 3			cabinet 4		
A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	on	1,50 kW
A2	on	1,50 kW	A2	on	1,50 kW	A2	on	1,50 kW	A2	on	1,50 kW
A3	on	1,50 kW	A3	on	1,50 kW	A3	on	1,50 kW	A3	on	1,50 kW
A4	on	1,50 kW	A4	on	1,50 kW	A4	off	0,00 kW	A4	on	1,50 kW
A5	on	1,50 kW	A5	on	1,50 kW	A5	on	1,50 kW	A5	on	1,50 kW
A6	on	1,50 kW	A6	on	1,50 kW	A6	on	1,50 kW	A6	on	1,50 kW
A7	off	0,00 kW	A7	off	0,00 kW	A7	off	0,00 kW	A7	on	1,50 kW
A8	on	1,50 kW	A8	on	1,50 kW	A8	on	1,50 kW	A8	on	1,50 kW
A9	on	1,50 kW	A9	on	1,50 kW	A9	on	1,50 kW	A9	on	1,50 kW
A10	on	1,50 kW	A10	on	1,50 kW	A10	off	0,00 kW	A10	on	1,50 kW
A11	on	1,50 kW	A11	on	1,50 kW	A11	on	1,50 kW	A11	on	1,50 kW
A12	on	1,50 kW	A12	on	1,50 kW	A12	on	1,50 kW	A12	on	1,50 kW

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Table 13: THU9evo (48) - reject load 1-4

Pout C1-4: 55,06 kW											
reject load C1-4: 1,12 kW											
Pout C1-2: 20,23 kW						Pout C3-4: 35,98 kW					
reject load C1-2: 0,00 kW						reject load C3-4: 0,00 kW					
10,12 kW			10,12 kW			17,99 kW			17,99 kW		
cabinet 1			cabinet 2			cabinet 3			cabinet 4		
A1	off	0,00 kW	A1	off	0,00 kW	A1	on	1,50 kW	A1	on	1,50 kW
A2	on	1,50 kW	A2	on	1,50 kW	A2	on	1,50 kW	A2	on	1,50 kW
A3	on	1,50 kW	A3	on	1,50 kW	A3	on	1,50 kW	A3	on	1,50 kW
A4	off	0,00 kW	A4	off	0,00 kW	A4	on	1,50 kW	A4	on	1,50 kW
A5	on	1,50 kW	A5	on	1,50 kW	A5	on	1,50 kW	A5	on	1,50 kW
A6	on	1,50 kW	A6	on	1,50 kW	A6	on	1,50 kW	A6	on	1,50 kW
A7	off	0,00 kW	A7	off	0,00 kW	A7	on	1,50 kW	A7	on	1,50 kW
A8	on	1,50 kW	A8	on	1,50 kW	A8	on	1,50 kW	A8	on	1,50 kW
A9	on	1,50 kW	A9	on	1,50 kW	A9	on	1,50 kW	A9	on	1,50 kW
A10	on	1,50 kW	A10	on	1,50 kW	A10	on	1,50 kW	A10	on	1,50 kW
A11	on	1,50 kW	A11	on	1,50 kW	A11	on	1,50 kW	A11	on	1,50 kW
A12	on	1,50 kW	A12	on	1,50 kW	A12	on	1,50 kW	A12	on	1,50 kW

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Table 14: THU9evo (60) - reject load 1-2

Pout C1-6: 57,34 kW reject load C1-6: 0,00 kW																	
Pout C1-3: 28,68 kW reject load C1-3: 0,00 kW						Pout C4-6: 28,68 kW reject load C4-6: 0,00 kW											
Pout C1-2: 19,11 kW reject load C1-2: 1,15 kW			9,56 kW			9,56 kW			9,56 kW			9,56 kW					
5,44 kW			14,83 kW			9,56 kW			9,56 kW			9,56 kW					
cabinet 1			cabinet 2			cabinet 3			cabinet 4			cabinet 5			cabinet 6		
A1	off	0,00 kW	A1	on	1,49 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW
A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW
A3	off	0,00 kW	A3	on	1,49 kW	A3	on	1,49 kW	A3	on	1,49 kW	A3	on	1,49 kW	A3	on	1,49 kW
A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW
A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW
A6	off	0,00 kW	A6	on	1,49 kW	A6	off	0,00 kW	A6	off	0,00 kW	A6	off	0,00 kW	A6	off	0,00 kW
A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW
A8	off	0,00 kW	A8	on	1,49 kW	A8	on	1,49 kW	A8	on	1,49 kW	A8	on	1,49 kW	A8	on	1,49 kW
A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW
A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW

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Table 15: THU9evo (60) - reject load 4-5

Pout C1-6: 57,34 kW reject load C1-6: 0,00 kW																	
Pout C1-3: 28,68 kW reject load C1-3: 0,00 kW						Pout C4-6: 28,68 kW reject load C4-6: 0,00 kW											
Pout C1-2: 19,11 kW reject load C1-2: 0,00 kW			9,56 kW			9,56 kW			5,44 kW			14,83 kW			9,56 kW		
9,56 kW			9,56 kW			9,56 kW			5,44 kW			14,83 kW			9,56 kW		
cabinet 1			cabinet 2			cabinet 3			cabinet 4			cabinet 5			cabinet 6		
A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	on	1,49 kW	A1	off	0,00 kW
A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW
A3	on	1,49 kW	A3	on	1,49 kW	A3	on	1,49 kW	A3	off	0,00 kW	A3	on	1,49 kW	A3	on	1,49 kW
A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW
A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW
A6	off	0,00 kW	A6	off	0,00 kW	A6	off	0,00 kW	A6	off	0,00 kW	A6	on	1,49 kW	A6	off	0,00 kW
A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW
A8	on	1,49 kW	A8	on	1,49 kW	A8	on	1,49 kW	A8	off	0,00 kW	A8	on	1,49 kW	A8	on	1,49 kW
A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW
A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW

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Table 16: THU9evo (60) - reject load 1-3

Pout C1-6: 73,07 kW reject load C1-6: 0,00 kW																	
Pout C1-3: 36,35 kW reject load C1-3: 0,82 kW						Pout C4-6: 36,73 kW reject load C4-6: 0,00 kW											
Pout C1-2: 29,65 kW reject load C1-2: 0,00 kW			14,83 kW			7,51 kW			12,24 kW			12,24 kW			12,24 kW		
14,83 kW			14,83 kW			7,51 kW			12,24 kW			12,24 kW			12,24 kW		
cabinet 1			cabinet 2			cabinet 3			cabinet 4			cabinet 5			cabinet 6		
A1	on	1,49 kW	A1	on	1,49 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW
A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW
A3	on	1,49 kW	A3	on	1,49 kW	A3	off	0,00 kW	A3	on	1,49 kW	A3	on	1,49 kW	A3	on	1,49 kW
A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW
A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW
A6	on	1,49 kW	A6	on	1,49 kW	A6	off	0,00 kW	A6	on	1,49 kW	A6	on	1,49 kW	A6	on	1,49 kW
A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW
A8	on	1,49 kW	A8	on	1,49 kW	A8	on	1,49 kW	A8	on	1,49 kW	A8	on	1,49 kW	A8	on	1,49 kW
A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW
A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW

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Table 17: THU9evo (60) - reject load 4-6

Pout C1-6: 73,07 kW reject load C1-6: 0,00 kW																	
Pout C1-3: 36,73 kW reject load C1-3: 0,00 kW						Pout C4-6: 36,35 kW reject load C4-6: 0,82 kW											
Pout C1-2: 24,48 kW reject load C1-2: 0,00 kW			12,24 kW			12,24 kW			14,83 kW			14,83 kW			7,51 kW		
cabinet 1			cabinet 2			cabinet 3			cabinet 4			cabinet 5			cabinet 6		
A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	on	1,49 kW	A1	on	1,49 kW	A1	off	0,00 kW
A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW
A3	on	1,49 kW	A3	on	1,49 kW	A3	on	1,49 kW	A3	on	1,49 kW	A3	on	1,49 kW	A3	off	0,00 kW
A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW
A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW
A6	on	1,49 kW	A6	on	1,49 kW	A6	on	1,49 kW	A6	on	1,49 kW	A6	on	1,49 kW	A6	off	0,00 kW
A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW
A8	on	1,49 kW	A8	on	1,49 kW	A8	on	1,49 kW	A8	on	1,49 kW	A8	on	1,49 kW	A8	on	1,49 kW
A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW
A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW

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Table 18: THU9evo (60) - reject load 1-6

Pout C1-6: 72,29 kW reject load C1-6: 0,86 kW																	
Pout C1-3: 28,68 kW reject load C1-3: 0,00 kW						Pout C4-6: 44,50 kW reject load C4-6: 0,00 kW											
Pout C1-2: 19,11 kW reject load C1-2: 0,00 kW			9,56 kW			9,56 kW			14,83 kW			14,83 kW			14,83 kW		
cabinet 1			cabinet 2			cabinet 3			cabinet 4			cabinet 5			cabinet 6		
A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	on	1,49 kW	A1	on	1,49 kW	A1	on	1,49 kW
A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW	A2	on	1,49 kW
A3	on	1,49 kW	A3	on	1,49 kW	A3	on	1,49 kW	A3	on	1,49 kW	A3	on	1,49 kW	A3	on	1,49 kW
A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW	A4	on	1,49 kW
A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW	A5	on	1,49 kW
A6	off	0,00 kW	A6	off	0,00 kW	A6	off	0,00 kW	A6	on	1,49 kW	A6	on	1,49 kW	A6	on	1,49 kW
A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW	A7	on	1,49 kW
A8	on	1,49 kW	A8	on	1,49 kW	A8	on	1,49 kW	A8	on	1,49 kW	A8	on	1,49 kW	A8	on	1,49 kW
A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW	A9	on	1,49 kW
A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW	A10	on	1,49 kW

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Table 19: THU9evo (72) - reject load 1-2

Pout C1-6: 73,96 kW reject load C1-6: 0,00 kW																	
Pout C1-3: 36,99 kW reject load C1-3: 0,00 kW						Pout C4-6: 36,99 kW reject load C4-6: 0,00 kW											
Pout C1-2: 24,65 kW reject load C1-2: 0,99 kW			12,33 kW			12,33 kW			12,33 kW			12,33 kW					
7,89 kW			17,75 kW			12,33 kW			12,33 kW			12,33 kW					
cabinet 1			cabinet 2			cabinet 3			cabinet 4			cabinet 5			cabinet 6		
A1	off	0,00 kW	A1	on	1,48 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW
A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW
A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW
A4	off	0,00 kW	A4	on	1,48 kW	A4	on	1,48 kW	A4	on	1,48 kW	A4	on	1,48 kW	A4	on	1,48 kW
A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW
A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW
A7	off	0,00 kW	A7	on	1,48 kW	A7	off	0,00 kW	A7	off	0,00 kW	A7	off	0,00 kW	A7	off	0,00 kW
A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW
A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW
A10	off	0,00 kW	A10	on	1,48 kW	A10	on	1,48 kW	A10	on	1,48 kW	A10	on	1,48 kW	A10	on	1,48 kW
A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW
A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW

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Table 20: THU9evo (72) - reject load 4-5

Pout C1-6: 73,96 kW reject load C1-6: 0,00 kW																	
Pout C1-3: 36,99 kW reject load C1-3: 0,00 kW						Pout C4-6: 36,99 kW reject load C4-6: 0,00 kW											
Pout C1-2: 24,65 kW reject load C1-2: 0,00 kW			12,33 kW			12,33 kW			7,89 kW			17,75 kW			12,33 kW		
12,33 kW			12,33 kW			12,33 kW			7,89 kW			17,75 kW			12,33 kW		
cabinet 1			cabinet 2			cabinet 3			cabinet 4			cabinet 5			cabinet 6		
A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	on	1,48 kW	A1	off	0,00 kW
A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW
A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW
A4	on	1,48 kW	A4	on	1,48 kW	A4	on	1,48 kW	A4	off	0,00 kW	A4	on	1,48 kW	A4	on	1,48 kW
A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW
A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW
A7	off	0,00 kW	A7	off	0,00 kW	A7	off	0,00 kW	A7	off	0,00 kW	A7	on	1,48 kW	A7	off	0,00 kW
A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW
A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW
A10	on	1,48 kW	A10	on	1,48 kW	A10	on	1,48 kW	A10	off	0,00 kW	A10	on	1,48 kW	A10	on	1,48 kW
A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW
A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW

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Table 21: THU9evo (72) - reject load 1-3

Pout C1-6: 86,81 kW reject load C1-6: 0,02 kW																	
Pout C1-3: 42,10 kW reject load C1-3: 1,31 kW						Pout C4-6: 44,76 kW reject load C4-6: 0,00 kW											
Pout C1-2: 35,50 kW reject load C1-2: 0,00 kW			17,75 kW			7,89 kW			14,92 kW			14,92 kW			14,92 kW		
17,75 kW			17,75 kW			7,89 kW			14,92 kW			14,92 kW			14,92 kW		
cabinet 1			cabinet 2			cabinet 3			cabinet 4			cabinet 5			cabinet 6		
A1	on	1,48 kW	A1	on	1,48 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW
A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW
A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW
A4	on	1,48 kW	A4	on	1,48 kW	A4	off	0,00 kW	A4	on	1,48 kW	A4	on	1,48 kW	A4	on	1,48 kW
A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW
A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW
A7	on	1,48 kW	A7	on	1,48 kW	A7	off	0,00 kW	A7	on	1,48 kW	A7	on	1,48 kW	A7	on	1,48 kW
A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW
A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW
A10	on	1,48 kW	A10	on	1,48 kW	A10	off	0,00 kW	A10	on	1,48 kW	A10	on	1,48 kW	A10	on	1,48 kW
A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW
A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW

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Table 22: THU9evo (72) - reject load 4-6

Pout C1-6: 86,81 kW reject load C1-6: 0,02 kW																	
Pout C1-3: 44,76 kW reject load C1-3: 0,00 kW						Pout C4-6: 42,10 kW reject load C4-6: 1,31 kW											
Pout C1-2: 29,82 kW reject load C1-2: 0,00 kW			14,92 kW			14,92 kW			17,75 kW			17,75 kW			7,89 kW		
cabinet 1			cabinet 2			cabinet 3			cabinet 4			cabinet 5			cabinet 6		
A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	on	1,48 kW	A1	on	1,48 kW	A1	off	0,00 kW
A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW
A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW
A4	on	1,48 kW	A4	on	1,48 kW	A4	on	1,48 kW	A4	on	1,48 kW	A4	on	1,48 kW	A4	off	0,00 kW
A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW
A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW
A7	on	1,48 kW	A7	on	1,48 kW	A7	on	1,48 kW	A7	on	1,48 kW	A7	on	1,48 kW	A7	off	0,00 kW
A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW
A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW
A10	on	1,48 kW	A10	on	1,48 kW	A10	on	1,48 kW	A10	on	1,48 kW	A10	on	1,48 kW	A10	off	0,00 kW
A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW
A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW

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Table 23: THU9evo (72) - reject load 1-6

Pout C1-6: 81,54 kW reject load C1-6: 1,67 kW																	
Pout C1-3: 29,96 kW reject load C1-3: 0,00 kW						Pout C4-6: 53,27 kW reject load C4-6: 0,00 kW											
Pout C1-2: 19,96 kW reject load C1-2: 0,00 kW			9,98 kW			9,98 kW			17,75 kW			17,75 kW			17,75 kW		
cabinet 1			cabinet 2			cabinet 3			cabinet 4			cabinet 5			cabinet 6		
A1	off	0,00 kW	A1	off	0,00 kW	A1	off	0,00 kW	A1	on	1,48 kW	A1	on	1,48 kW	A1	on	1,48 kW
A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW	A2	on	1,48 kW
A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW	A3	on	1,48 kW
A4	off	0,00 kW	A4	off	0,00 kW	A4	off	0,00 kW	A4	on	1,48 kW	A4	on	1,48 kW	A4	on	1,48 kW
A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW	A5	on	1,48 kW
A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW	A6	on	1,48 kW
A7	off	0,00 kW	A7	off	0,00 kW	A7	off	0,00 kW	A7	on	1,48 kW	A7	on	1,48 kW	A7	on	1,48 kW
A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW	A8	on	1,48 kW
A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW	A9	on	1,48 kW
A10	on	1,48 kW	A10	on	1,48 kW	A10	on	1,48 kW	A10	on	1,48 kW	A10	on	1,48 kW	A10	on	1,48 kW
A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW	A11	on	1,48 kW
A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW	A12	on	1,48 kW

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