

# **Commissioning record**

For EcoHeater

### AHU (air handling unit) and property

Order number	AHU designation
Customer name	Model and size
Customer reference	The customer's phone number
Object/Project name	
Installation address	

#### **Commissioning instructions**

Commissioning of the AHU (air handling unit) must be carried out by competent personnel using the checklists in this document and the attached documentation.

The AHU (air handling unit) must not be put into operation until all the items in the check list below have been checked off.

The product warranty is only valid if the AHU (air handling unit) has been properly commissioned.

#### **Attached documentation**

For Assembly Instructions, Technical Data, Control Diagram, Configuration Record and documentation for the Climatix hand-held terminal, refer to the documentation unique to the order at <u>docs.ivprodukt.com</u> - log in with the order number.

Note! The Assembly instructions, Control Diagram and Configuration Record are also physically included with the AHU. There is usually a quick guide for the Climatix hand-held terminal on one of the AHU doors.

#### **IV Produkt Cloud**

If IV Produkt Cloud Service+ is not already enabled for the AHU upon commissioning, this is a service we recommend. It gives you full access to control and monitor the AHU remotely. Read more at <u>www.ivprodukt.com/cloud</u>.

When you sign up to IV Product Cloud for a new AHU, Service+ is included free of charge for one month. After that, it switches to the free service, IV Product Cloud Free, for continued connectivity with limited functionality. Contact IV Produkt to extend Service+.

Activate your AHU at <u>cloud.ivprodukt.com</u> (select Sign Up).



Check the following:			Note
1.	Visually inspect the AHU for damage after transport and assembly. Refer to the separate assembly instructions.		
2.	That the AHU is set up correctly and that there is enough free space for carrying out service. Refer to the separate assembly instructions.		
3.	Where applicable, transport fuses have been removed from fans with steel spring suspension. Refer to the separate Assembly Instructions and stickers on the AHU.		
4.	That any packaging material is removed from the AHU.		
5.	That the fluid flow is adjusted and that flexible hoses are fitted. Refer to the separate Assembly instructions .		
6.	That ducts and sleeves are connected. Refer to the separate Assembly instructions .		
7.	That the drain connections/water traps (evaporation water drainage) are connected to the drain and the drainage pipe slopes correctly to the drains. Refer to the separate assembly instructions.		
8.	That incoming control cables are connected. Refer to the separate Control Diagram.		
9.	Ensure all quick connectors between the AHU parts are connected/interconnected. Refer to the separate assembly instructions.		
10.	That separately delivered/additional components (e.g., sensors, detectors, timers) are fitted and connected to the correct terminals. Refer to separate Control Diagram.		
11.	When mounting in the suction chamber, check that the hose for the reference point pressure sensor channel (GP4) is connected outside the suction chamber.		
12.	That the incoming supply voltage, zero and earth are connected.		



## **Control via Climatix hand-held terminal**

Check the following:			Note
1.	Make sure no error messages are displayed. Fix any errors. Refer to the separate documentation for the Climatix hand-held terminal.		
2.	Start the AHU by selecting the Auto mode. Refer to the separate documentation for the Climatix hand-held terminal.		
3.	Check that the minimum airflow/water flow is being reached. Refer to the values in the separate Technical Data and documentation for the Climatix hand-held terminal.		
4.	Test all control functions according to the AHU's functional description. Refer to the separate Control Diagram and documentation for Climatix hand-held terminal.		
5.	If the AHU is equipped with a fire function, check that the fire function is tested according to the AHU functional description. Refer to the separate Control Diagram and documentation for Climatix hand-held terminal.		
6.	Schedule the AHU's operating times. Refer to the separate documentation for the Climatix hand-held terminal.		
7.	If necessary, adjust the value. For original values/parameters, refer to the separate Configuration Record and documentation for the Climatix hand-held terminal.		
8.	Save commissioning settings to the Climatix controller and SD card. Refer to the separate documentation for the Climatix handheld terminal. Tip! Transfer and save the settings from the memory card to a computer for future use.		
9	For AHU's with refrigerant detectors; Ensure that the AHU is in Auto mode when commissioning is complete.		



## Setpoints and settings

For a complete list of functions and values/parameters, refer to the separate Configuration Record.

Meas	ure	Function	
		Control/Regulation	Control type
	> air flow		Setpoint.RF Step 1
ninal	AHU > Settings air flow		Setpoint.RF Step 2
eld tern			Setpoint.RF Step 3
Set value in the Climatix hand-held terminal		Weekly schedule	
natix h			
the Clir	eduler		
lue in t	AHU > Time scheduler		
Set va	AHU > 1		



#### Inspect compressor part

The AHU must be running during the inspection and be in operation for at least 20 minutes before the values are stable.

!	NB! Risk of compressor damage. The oil in the speed-controlled compressor must be warm before commissioning. The heat pump must be powered up for at least 8 hours before commissioning.
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Temperature control is controlled either by the accumulation tank temperature, internal radiator curve or external control signal (0-10V), overarching control system During inspection, the heat pump must be run according to the control diagram's functional description.

If the AHU needs to be run manually, this is done by setting the value for: **AHU > Heat pump >** *Current heating need* 

For instructions, refer to the separate documentation for the Climatix hand-held terminal.

#### Inspect compressor part



#### **Product code**

Measure		Component/Function	ОК	Note/Value			
Set value in the Climatix hand-held terminal	Operating information	Outdoor air temperature					°C
		Return air temp.					°C
		Exhaust air temperature					°C
		Air flow		EF			m³/s
-held	Oper	Water temp.: Return VP (In) - Outbound VP (Out)		In:	°C	Out:	°C
hand		Water flow				L	l/s
natix	AHU > Heat Pump	Superheating <sup>a</sup>					К
e Clir		Expansion valve opening degree <sup>b</sup>					%
in th		Evaporating temperature					°C
value		Hot gas temperature					°C
Set		Condensing temperature					°C
		Current heat requirement					%
		Frequency inverter output signal					%
		Documentation available <sup>c</sup>					
Control		Reporting, leak detection and reporting to the authorities <sup><i>d</i></sup>					
		Noise and vibrations considered normal					
		Control of air flow through compressor part according to instructions in Operation and maintenance for the AHU					

a) The superheat status is read in order to determine the function of the cooling circuit. If the superheat value is approx. 7-12 K, this means that the amount of refrigerant and the expansion valve control are OK.

b) If the opening of the expansion valve is 100%, contact IV Product <u>Control Support</u>.

<sup>c)</sup> For documentation, refer to <u>docs.ivprodukt.com</u> - log in with the order number. The Assembly instructions, Control Diagram and Configuration Record are also physically included with the AHU. Usually there is a quick guide for the Climatix hand-held terminal on one of the AHU's doors.

d) For further information, please refer to national requirements for handling of refrigerant



## Acknowledgement

Date commissioned	Signature (operator)
Commissioned by company/region	Name in block letters

## Other notes and comments

## Feel free to contact us



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#### Support:

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