

Commissioning record

For Envistar Series, EcoCooler and ThermoCooler HP

AHU (air handling unit) and property

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

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 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 has been properly commissioned.

The commissioning record applies to units delivered with Siemens Climatix (code MX) integrated control equipment.

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 <https://orderdocs.ivprodukt.com/> - log in with your 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 [IV Produkt Cloud](#)

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

Activate your AHU at cloud.ivprodukt.com (select Sign Up).



Control setup and installation

Check:	OK	Note
1. the AHU visually 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 relevant that any transport protection is removed from: <ul style="list-style-type: none"> – fans with steel spring suspension – the compressor assembly Top ThermoCooler HP size 06-10 – the thermal wheel and in front of the circuit board on the EcoCooler/ThermoCooler HP with sectioned configuration, Easy Access. Refer to the separate Assembly Instructions and stickers on the AHU. 		
4. that any packaging material is removed from the AHU.		
5. the position of the thermal wheel vertically to ensure that no abnormal movement or skewing has occurred during transport and installation. Refer to the separate Assembly Instructions .		
6. where relevant that: <ul style="list-style-type: none"> – electrical air heater is connected correctly – the pipe connection is correctly executed and the water coil is adjusted correctly. Refer to the separate Assembly Instructions . 		
7. that ducts have been connected. Check air directions (supply air, outdoor air, and extract air). Refer to the separate Assembly Instructions .		
8. where relevant that fire dampers are in the correct position.		
9. where relevant that drain connections/water traps (condensation drain) are connected to the drain and that there is no backfall on the drain pipe. Water traps without a ball should be filled with water. Note! ThermoCooler HP has two water traps. Refer to the separate Assembly Instructions.		
10. that incoming control cables are connected. Refer to the separate Control Diagram.		
11. where relevant that all quick connectors between the parts of the AHU are connected/interconnected. Refer to the separate Assembly Instructions		
12. that separately delivered/additional components (such as sensors, detectors, timers, frost protection sensors) are fitted and connected to the correct terminals. Refer to the separate Assembly Instructions and Control Diagram..		
13. when adjusting the pressure that the hoses are connected in the duct, and in the correct duct (supply air/extract air). Refer to the separate Assembly Instructions.		
14. IMPORTANT! That the incoming supply voltage, zero and earth are connected.		

Control via Climatix hand-held terminal

		OK	Note
1.	Make sure that 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 is achieved. Refer to the values in the 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 hand-held terminal. Tip! Transfer and save the settings from the memory card to a computer for future use.		

Setpoints and settings

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

Measure		Function	Value /Note	
Set value in the Climatix hand-held terminal	Unit > Temperature settings	Temperature control	Control type	
			Setpoint temp.	
			°C	
		Supply air compensation (only when changing the control type summer/winter control)	Supply air comp.	
			°C	
	AHU > Settings air flow	Dead zone temperature (only if cooling is installed)	Dead zone temp.	
			°C	
		Min. and max. supply air setpoint (only with extract air/room cascade control)	Setpoint min. temp	
			°C	
			Setpoint max. temp	
			°C	
	AHU > Weekly schedule	Control - pressure/flow	Control type	
			Setpoint.SF Step 1	Setpoint.RF Step 1
			Setpoint.SF Step 2	Setpoint.RF Step 2
			Setpoint.SF Step 3	Setpoint.RF Step 3
	AHU > Weekly schedule	Weekly schedule	Monday	
			Tuesday	
			Wednesday	
			Thursday	
			Friday	
			Saturday	
			Sunday	

Inspect compressor part

The AHU must be running during the inspection and have been 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 cooling unit/reversible heat pump must be energised for at least 8 hours prior to commissioning.
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ThermoCooler HP

The reversible heat pump is reversible and should be run in either cooling mode or heating mode during inspection. By default, cooling mode/heating mode is selected automatically depending on the outdoor air temperature.

With sectioned configuration, Easy Access, the reversible heat pump must be run in cooling mode for at least 5 minutes prior to first commissioning.

- Outdoor temp below 16°C = heating mode
- Outdoor temp above 16°C = cooling mode

If the reversible heat pump needs to be run manually, this is done by setting the value of Cooling output/Heating output signal under:

AHU >Cooling >Cooling output signal/Heating output signal

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

EcoCooler

By default, cooling mode is selected automatically depending on the outdoor air temperature.

Outdoor temp above 16 °C = cooling mode

If the cooling unit needs to be run manually, this is done by setting the value for Cooling output signal under: **Unit > Cooling > Cooling output signal**

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

Inspect compressor part

Product code	Number of circuits ^a
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Measure	Component/Function	OK	Note/Value			
Set value in the Climatix hand-held terminal	Operating information	Outdoor air temperature		°C		
		Return air temp.		°C		
		Exhaust air temperature		°C		
		Supply air temperature		°C		
		Air flow		TF	m ³ /s	EF m ³ /s
	AHU > Cooling ^b			Circuit 1	Krets 2	Circuit 3
		Superheat ^c		K	K	K
		Expansion valve opening degree ^d		%	%	%
		Evaporating temperature		°C	°C	°C
		Hot gas temperature		°C	°C	°C
		Condensing temperature		°C	°C	°C
		Output signal ^e		%		
		Frequency inverter output signal		%		
Control	Documentation available ^f					
	Reporting, leak detection and reporting to the authorities ^g					
	Noise and vibrations considered normal					

^{a)} With more circuits - note the value of each circuit in the table.

^{b)} Only for ThermoCooler HP or EcoCooler.

^{c)} 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.

^{d)} If the opening of the expansion valve is 100%, contact IV Produkt [Control Support](#).

^{e)} ThermoCooler HP - Cooling/Heating, EcoCooler - Cooling

^{f)} For documentation, see orderdocs.ivprodukt.com. Log in with your order number. 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.

^{g)} For further information, please refer to national requirements for handling of refrigerant

Acknowledgement

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

Other notes and comments

Feel free to contact us



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Order portal
