

Commissioning record for EcoCooler

Unit and property

<i>Order number</i>	<i>Identification label</i>
<i>Object/Project name</i>	<i>Unit type – size</i>
<i>Installation address</i>	<i>Customer name</i>
<i>Customer reference</i>	<i>Customer phone number</i>

Commissioning rules

Commissioning must be performed by competent personnel using the following checklists and attached documentation. The validity of the product warranty is conditional on the system having been correctly commissioned.

The commissioning record applies for units that are delivered with Siemens Climatix integrated control equipment.

Inspection

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

	Check the following:	OK	Note
1.	Visually inspect the unit for damage after transport and assembly.		
2.	Ensure that the unit is correctly set up, that there is sufficient space for the backing and for servicing, and that any supplementary material is removed from the unit.		
3.	If there is a heating coil – ensure it is connected correctly. If there is a fluid – ensure the flow is adjusted.		
4.	The drain connection (evaporation water drain) is connected to the drain via a separate water trap and the drainage pipe slopes correctly to the drain.		
5.	All quick connectors between the unit parts are connected/interconnected.		
6.	Separate delivering/additional components (e.g. supply air sensors, detectors, timers) are mounted and connected to the correct terminals. See separate control diagram.		
7.	For pressure control: that the hoses are connected in duct.		

Commissioning ventilation

The air handling unit's functions must be checked as follows:

		OK	Note
1.	Check that incoming supply voltages, zero and earth are connected (separate feeds to the cooling unit). Check that there is a power supply.		
2.	Check that no error messages are displayed, address any errors.		
3.	Start the unit by navigating to the menu line SERVICE SWITCH, press the dial and select Auto.		
4.	Check that the supply and extract air flows are present and that min. air flow is reached according to data execution (Technical data).		
5.	Test all control functions according to the unit's functional description (operating chart) in a separate control diagram.		
6.	Set the unit's operation in an internal timer-controlled duct.		
7.	Adjust the values of the control equipment if required. The original values/parameters can be found in a separate record (configuration).		
8.	Save commissioning settings to DUC and memory card. Tip! Transfer/save the settings from the memory card to the computer/folder as well for future use if required.		

Setpoints and settings

<i>Main setpoint</i>	<i>Notes</i>
<i>Timer controlled programmes operating times</i>	<i>Notes</i>
<i>Other</i>	<i>Notes</i>

Cooling unit (compressor part), inspection

The cooling unit must be inspected by a certified refrigeration technician at least once a year; the recommended activities listed below should be carried out (EU requirement for sizes 150-980, recommendation for size 100).

The cooling unit needs to be running during the inspection. By default, cooling is selected automatically depending on the outdoor air temperature. If the cooling unit needs to be run manually, this is done by setting the value for the output signal (see row 3 in the table below).
Outdoor temp. over (>)16 °C= Cooling.

Corrective action	Component/function	OK	Circuit		Note/Value			
			1 100-980	2 600-980				
In- spec- tion	Leak test in refrigerant system performed		-	-				
Reading off display	Noise and vibrations considered normal		-	-				
	Output signal cooling		-	-	%			
	Overheating (should be approx. 7-12°C) *		°C	°C				
	Opening degree, expansion valve **		%	%				
	Output signal, frequency inverter (for compressor)		-	-	%			
	Evaporating temperature		°C	°C				
	Condensation temperature		°C	°C				
	Outdoor air temperature		-	-	°C			
	Supply air temperature		-	-	°C			
	Return air temperature		-	-	°C			
	Exhaust air temperature (with EnergyWatch)		-	-	°C			
Air flow (m ³ /s)		-	-	TF	m ³ /s	FF	m ³ /s	
Docu- menta- tion	Control cabinet documentation available and complete		-	-				
	Official reporting carried out (if necessary)		-	-				

* The overheating status is read off in order to determine the function of the cooling circuit. The reversible heat pump must be in operation for at least 10 minutes before the display is read. If the overheating value is approx. 7-12°C, this means that the amount of refrigerant and the expansion valve control are OK.

** If the opening degree is 100%, IV Produkt [Control Support](#) should be contacted.

Other notes and comments

Acknowledgement

Date commissioned	Commissioned by name
Commissioned by company/region	Printed name/Signature

Other notes and comments