

Sensor Unit Climate Unit

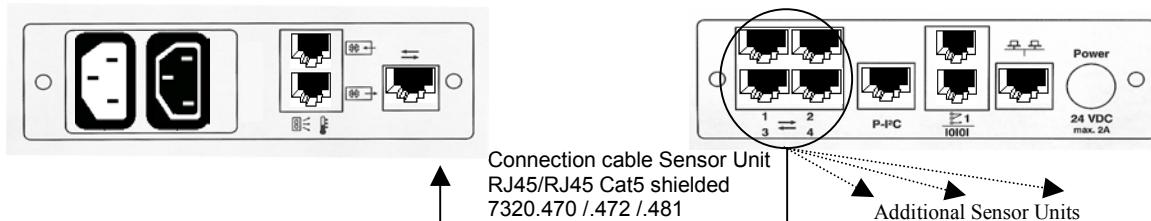
DK 7320.230

Note:

For reasons of clarity of the presentation, these operating instructions do not contain all information details and also cannot cover every possible case of installation, operation or repair. Technical specifications are subject to change without notice. In case of doubt, the German text prevails.

Sensor Unit:
Climate Unit 7320.230

Processing Unit:
PU 7320.100



Description:

The sensor units can be connected to the Processing Unit 7320.100 (max. 4 units). One Climate Sensor Unit controls a fan. A fan type 110/230V AC and the appropriate Rittal accessories can be connected. The sensors, are assigned a code by which they are automatically identified and set by the CMC TC system. The sensors can be used if the following components are available:

- Processing Unit (7320.100) with mains adapter (e.g., 7320.425), national-standard connecting cable, programming cable.
- Connecting cable (e.g., 7320.470, 7320.472 or 7320.481)
- Fan power supply 7200.210-214 / fan connecting cable 7200. 215, optional suppression capacitor 7200.490 to suit fan motor
- optional temperature sensor (7320.500)

Conditions for use / safety instructions:

The sensor unit must only be used together with the Rittal CMC TC system.

- The operating instructions / safety instructions of the Processing Unit (7320.100) apply, where the sensor unit is described in detail. The conditions for use, safety instructions and warranty terms are also described there and must be observed.
- Connection cables 7320.470, 7320.472 or 7320.481 are required. Specified Cat5 cables can be used for special applications. These are described in detail in the operating instructions of the Processing Unit (7320.100). Please contact our central office.
- Use only the sensor connection cables delivered with the sensors / actors for connection to the sensor unit.
- It is absolutely necessary that these cables are installed separately from mains power cables.
- The use of the sensor units is exclusively limited to the specified ambient conditions.
- It is forbidden to open the sensor enclosures. They do not contain parts requiring maintenance.

Caution: The IEC supplies the device with very high voltage. Opening the system is dangerous!

- Before making the connection, check to be sure that the sensor can be used with the PU, sensor or fan.
- It is forbidden to render safety equipment ineffective.

Caution: A protective conductor is required for connection of the fan power supply and the fan. It is absolutely forbidden not to use a protective conductor!

- Direct contact of the sensor unit with water (e.g., dew), oil sludge or any aggressive substances is forbidden.
- Use in locations with flammable gas or vapor is forbidden. Protection from water, dust, etc. must be ensured by installation in a cabinet or rack.

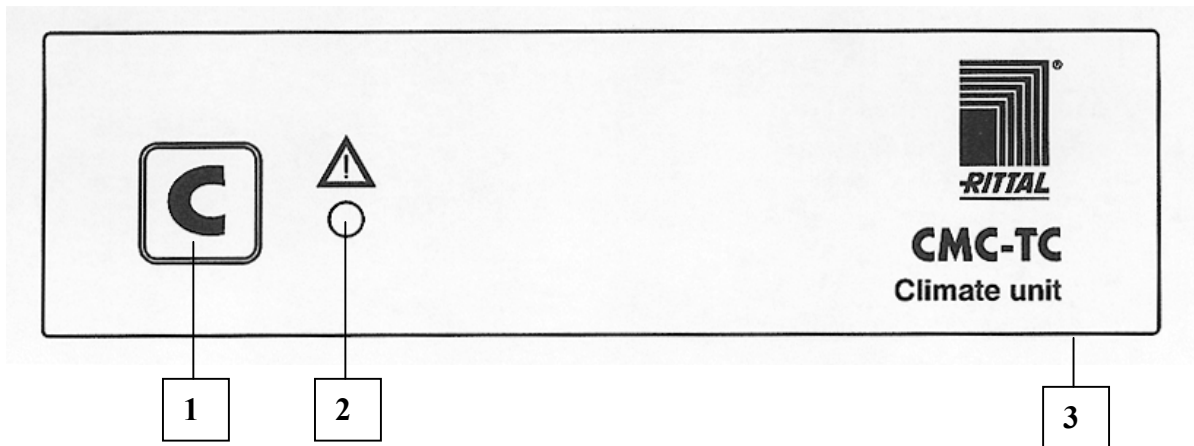
Caution: Always pull the mains cable, otherwise the fan output when connected is live with very high voltage.

Danger !

- The sensor unit must be installed properly as described in the separate installation instructions.
- The accuracy of analog inputs can suffer in an environment with electromagnetic disturbance
- The EMC can be improved with additional measures. Please contact our central office.
- In environments with increased electromagnetic noise (e.g., industrial estates) the EMC can be improved by additional measures. Please consult our central office.
- The ambient conditions / safety instructions in the instruction manual must be observed.
- Damage due to non-compliance with these instructions / ambient conditions and the instructions for the Processing Unit 7320.100 is not covered by our warranty. Rittal is not responsible for any consequential damage.
- Injury to persons or damage to property which is due to improper handling or non-compliance with safety instructions is outside Rittal's responsibility. Any such case is not covered by warranty.

Description of Climate Sensor Unit 7320.230

Front



The **Climate Sensor Unit** actuates and controls fans:
A temperature sensor is required for temperature control.



1 Control key

The C key can be used to check and edit the configuration of the sensors and actors of this unit after setting up or changing the installation. The C key must be pressed at least for 3 seconds.



2 Alarm LED

Green:	No fault detected
Orange:	Warning
Blinking red/yellow/green:	'Configuration change' of the sensor unit
Red:	Alarm

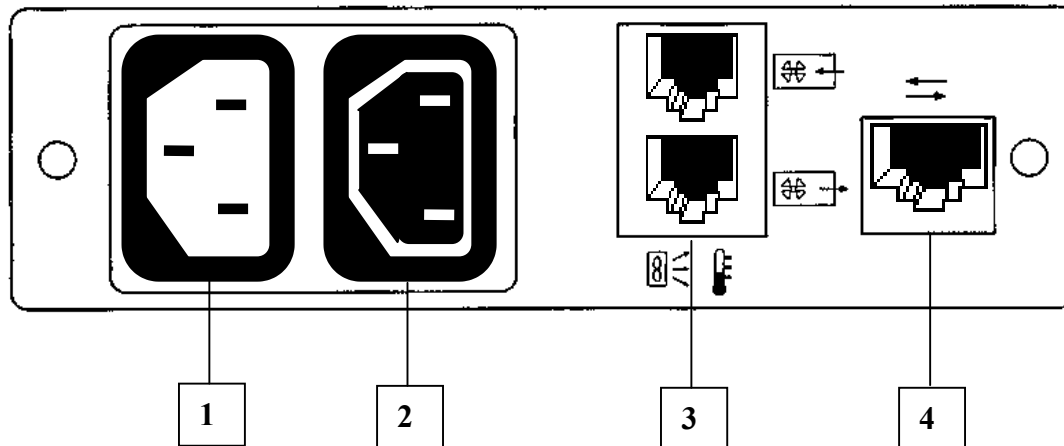
3 Mounting bracket

The sensor unit can be integrated in the 1 HU erection unit 7320.440 using the bottom mount or it can be mounted to the system chassis in the rack. For the latter option, the single erection unit 7320.450 can be used.



Description of the Climate Sensor Unit

7320.230 Rear



1 IEC non-heating appliance plug input for climate supply fan

This input feeds voltage to the fan system. Different national cable types can be used.
7200.210/.211/.213/.214 Connecting cable design D;F;B;GB/CH/USA;CDN



2 IEC non-heating appliance plug output for connection of fan

This output connects the fan directly. Fans with IEC plug can directly be connected with non-heating appliance extension cable 7200.215.

If no connection for a non-heating appliance plug is provided on the fan, it must be fitted by a trained electrician. AC fan systems without interference suppression should be provided with an suppression capacitor 7200.490.

Caution: Always pull the mains cable, otherwise the fan output when connected is live with very high voltage. Danger !



3 Sensor inputs

Basically, all 2x RJ12 sockets are the same and can be used for any sensor type specified.

The sensor unit is equipped with an automatic electronic ID circuit which the system uses to set up the exactly this sensor type.

Press the C key at the front of the unit to start the initialisation procedure

1. Function with temperature sensor – temperature control -

If a Temperature Sensor 7320.500 is used this is automatically referenced for temperature control. The control functions as 2-point control with hysteresis.

The following sensors can additionally be connected to the second socket:

7320.500	Temperature sensor
7320.530	Access sensor
7320.550	Air flow sensor
7320.560	Smoke detector
7320.570	Motion detector
7320.580	Digital input
7320.600	230V AC voltage monitor

2. Function without temperature control

If no temperature control is connected, the fan runs constantly.

The following sensors can additionally be connected to the second socket:

7320.530	Access sensor
7320.550	Air flow sensor
7320.560	Smoke detector
7320.571	Motion detector
7320.580	Digital input
7320.600	230V AC voltage monitor



4 Input for Processing Unit RJ45

This input connects the sensor unit to the PU. The sensor units define the function of the PU. The sensor units are connected to the PU with cables (e.g., 7320.470, 7320.472 or 7320.481). The connecting cable transmits information and power to the sensor unit.



Umschalten auf Perfektion **RITTAL**

Technical data:

1 fan controller
2 universal ports for the sensors in the annex
Automatic identification of sensors
Supply voltage 24 V DC with supply connection from the Processing Unit
Input Fan: 100-250 V AC 50/60Hz max. 3A
Temperature range: +5°C to +45°C
Shock 1g
Enclosure: IP 40

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