



CPC
klimatix



Who are we?

We were born with the purpose of bringing innovative solutions to the HVAC market that go beyond the conventional.

Our heritage includes the tradition and expertise of the Mecalor Group, founded in 1960.

The technical experience accumulated over decades gives us solidity in the development of competitive, high-quality products.

Individualized service, from the quotation to after-sales service, is another consolidated differential of the new brand.

The pursuit of international excellence is a determining factor in the motivation of the team, which is eager to exceed your expectations. Be amazed by our dedication.

Welcome to Klimatix, where your project is a priority.

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Programe una visita a nuestra planta.
contato@klimatix.com

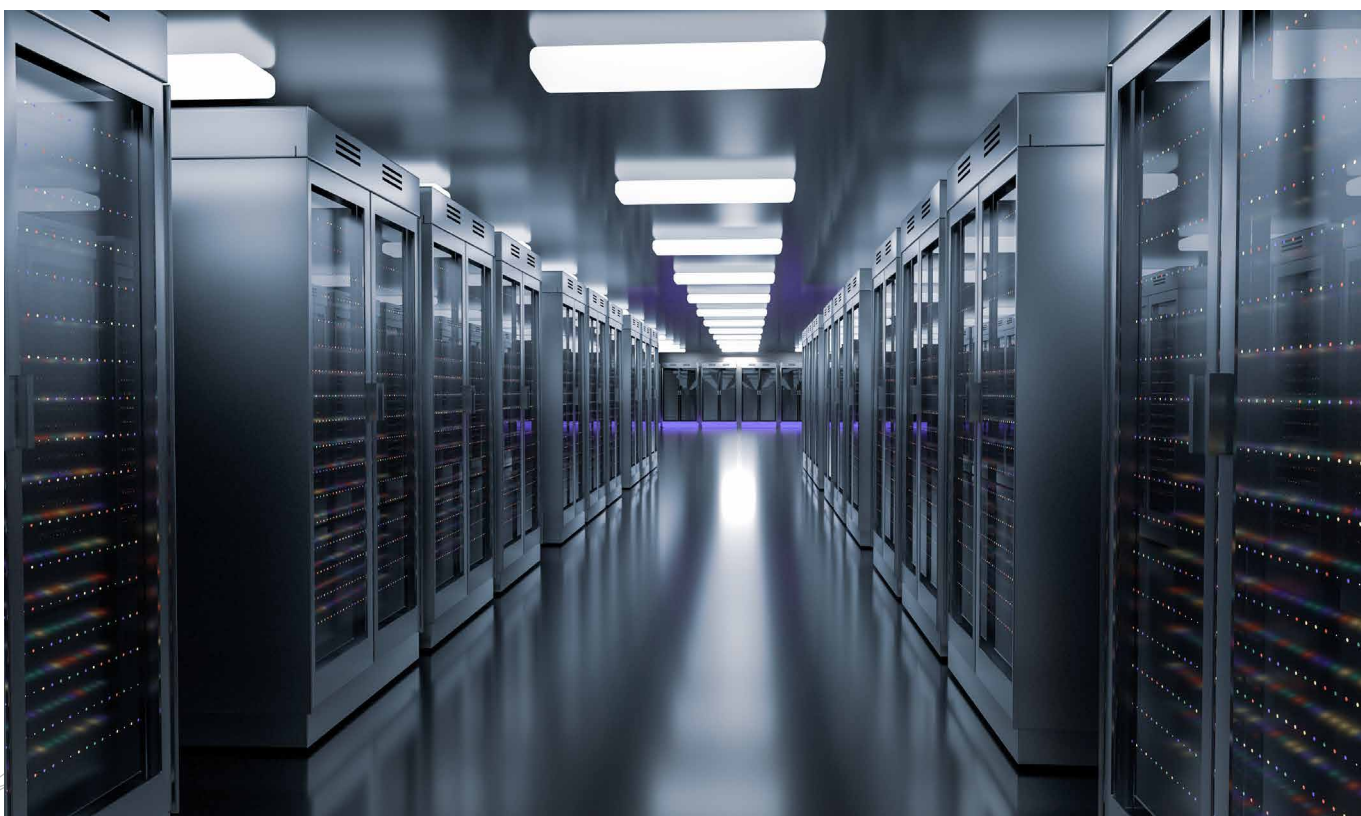
CPC | Klimatix

Precision Air Conditioner

Chiller Water Air Handler

CPC

Capacity 18 kW to 100 kW





Application

Data center rooms, UPS rooms,
or telephone centers

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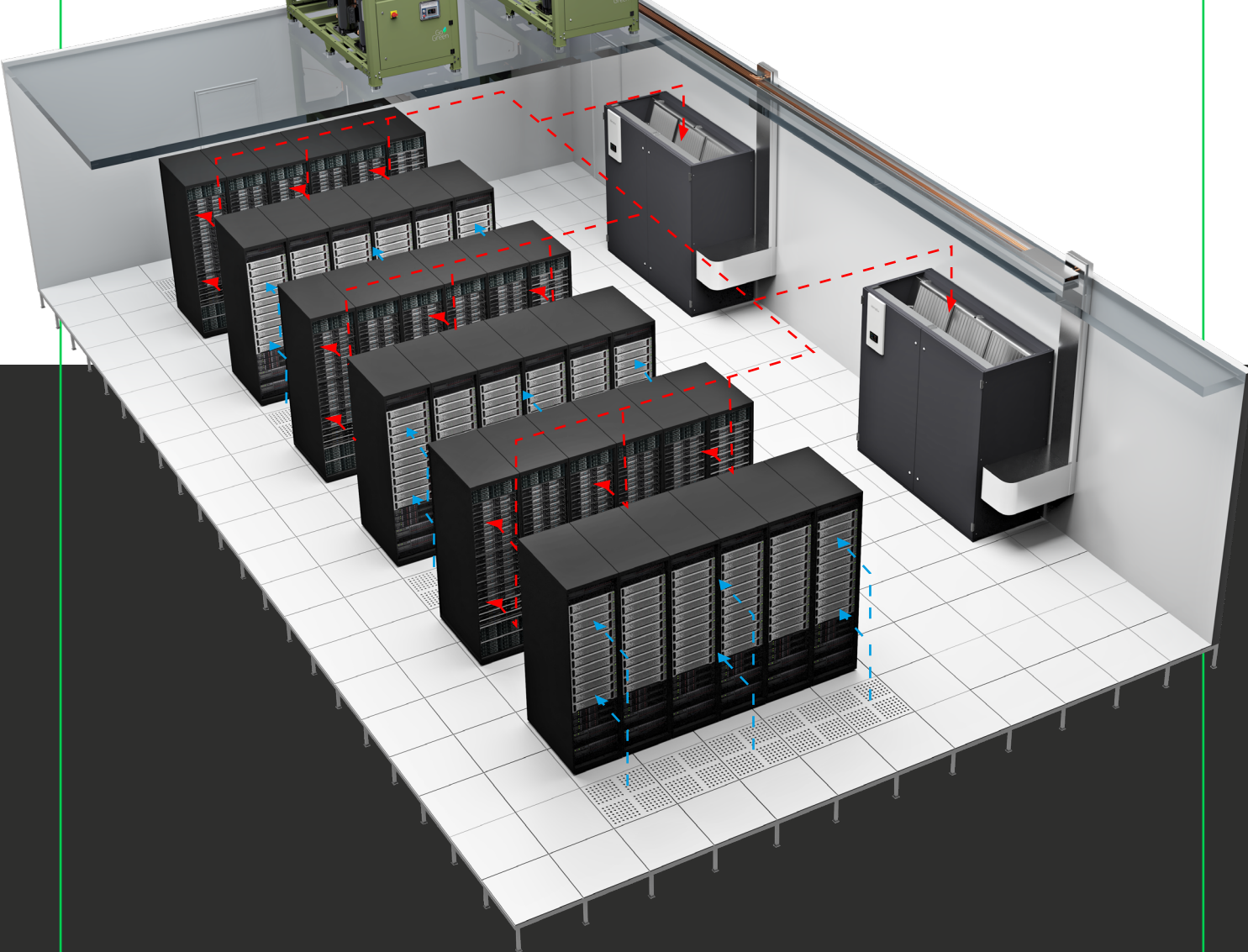
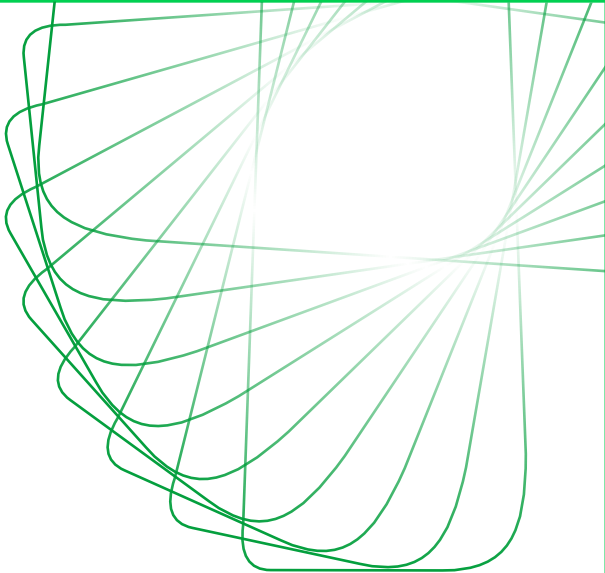


CPC Chilled water
air handler

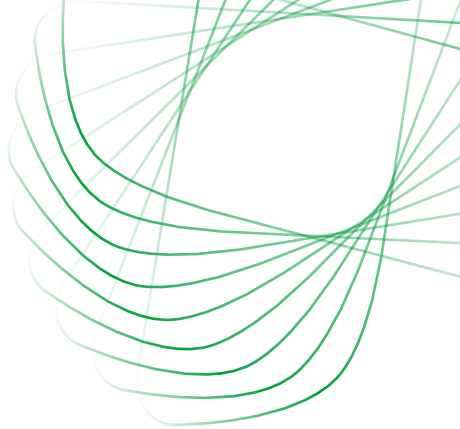
Benefits

- Reliable operation 24/7
- Easy maintenance access
- Very high energy efficiency
- Precise temperature and humidity control
- Colored HMI touchscreen with user-friendly interface
- Ideal technology for great thermal load variations
- Low noise and automatic fan speed adjustment
- Automatic cold water flow adjustment
- Wide range of optional configurations
- High availability rates (uptime)
- High performance EC fans
- Robust build

System
designed
for high
efficiency



- Return
- Insufflation



Nomenclature – CPC

CP C - D - 35 - URF - 380 *

Precision Air Conditioner

C: Indirect Expansion (Fancoil)

D: Downflow

F: Displacement

U: Upflow

Rated Capacity:
18, 26, 35, 50, 70 or 100 kw

1st Digit { O: no humidifier
U: humidifier (vapor generator)

2nd Digit { O: no reheating
R: reheating (electrical resistance)

3rd Digit { F: Two-way valve

Configurations:

/M: Air filter M5

/D: Dual electric power supply

/S: SNMP Communication

/I: Flooded floor sensor

/P: Metal base for raised floor

/R: Damper

/O: Plenum discharge tank

/F: Metal base for raised floor
with fan

/N: Bacnet Communication

/Y: Three-way valve

*: Special operating frequency: 50Hz

Standard CPC voltage

3-phase, 220 V, 60 Hz

3-phase, 380 V, 60 Hz

3-phase, 440 V, 60 Hz



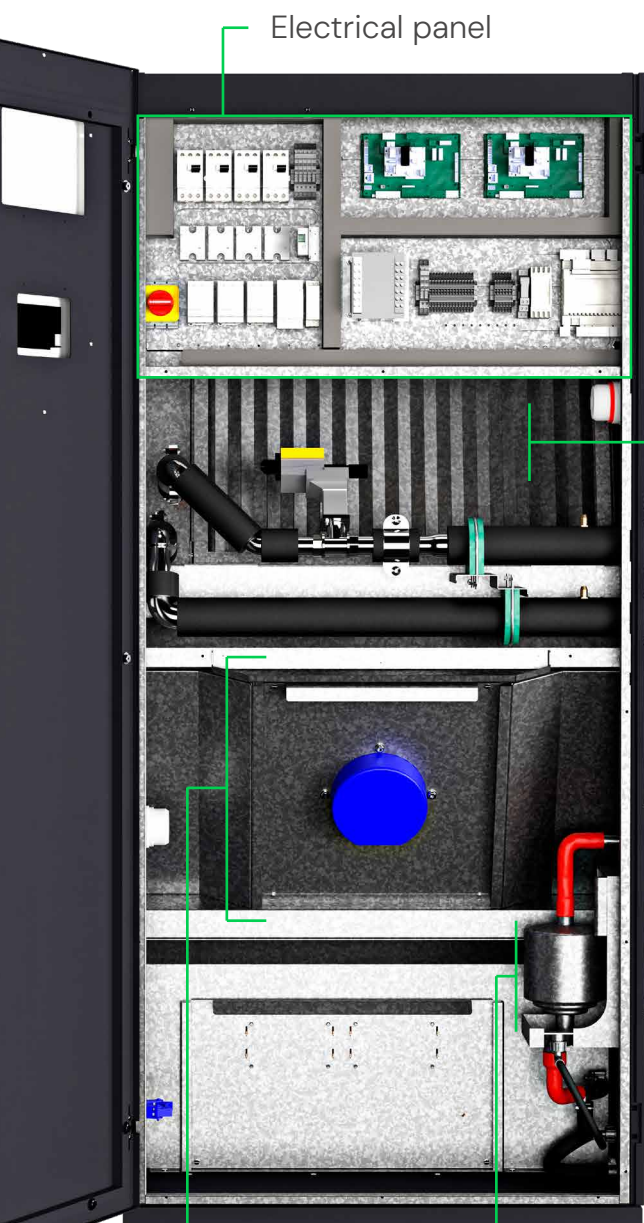
Technical Description

The air conditioners of the CPC line are devices that use chilled water to remove energy and are intended for use in mission-critical environments with a high sensible heat factor to control temperature, relative humidity, and air quality.

Designed for continuous, reliable and long-lasting operation with precise temperature and humidity control, low energy consumption and low noise level.

Optimized airflow by applying CFD tools for maximum efficiency, energy savings, and fans with EC-technology engines.

They have several configurations available to adapt the equipment to the needs of each application.



Electrical panel

HMI Human Machine Interface

Heat Exchanger
Copper tubes
and aluminum fins

Chilled water
outlet
connection

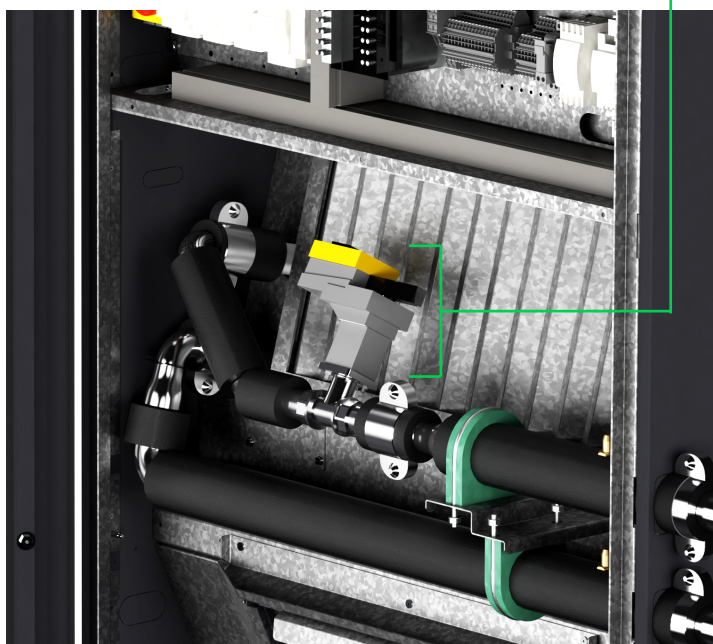
Chilled water
inlet
connection

EC Radial Fan

Vapor
generator



2-way proportional
valve



• Control Technology

Six models with nominal capacities of 18, 26, 35, 50, 70, and 100 kW and Downflow, Displacement, and Upflow air insufflation directions.

Network communication with up to 254 devices grouped into air conditioning zones with a maximum of 10 units.

Communication using Modbus TCP/IP and Modbus RTU protocols that allows remote access to operating conditions, activation, parameterization, and operating log verification.

Optionally the SNMP or Bacnet protocols can be integrated.

Control and monitoring of the operating conditions performed by PLC and visualization of the operating status, logs, and parameterization by accessing the colored HMI touchscreen positioned on the front cover.

Front access for maintenance of all equipment components.

Electrical panel incorporated into the cabinet with IP-40 protection grade.

• Ventilation

Radial fans with high efficiency EC type electric engine and proportional air flow control according to operating condition.

• Refrigeration

Setting the temperature control reference in the return, insufflation according to equipment configuration.

Operating temperature setting between 18°C and 35°C and relative humidity between 40% and 60% and temperature control.

Cooling and Dehumidification of the air carried out by water circulation from a chilled water system (chiller or unit and chilled water) passing through a finned heat exchanger made of copper pipes and aluminum fins.

The system has automatic water flow control by means of a two-way proportional valve.

• Others

Cabinet manufactured in galvanized carbon steel and electrostatic painting in color RAL 9005.

Side and rear covers are thermally insulated with elastomeric blanket and protected by metal plates.

Electrical components for sectioning, protection and activation of devices and engines assembled according to NBR 5410 in an assembly plate manufactured in galvanized carbon steel.

Class G4 filtering according to NBR16101 and differential pressure switch for dirty filter indication and automatic flow rate adjustment to compensate the pressure drop generated by the saturation of the filter.

Optional Configurations

REHEATING

Electric with one or two resistance zones made of AISI304 stainless steel, proportional control and safety thermostat.

DAMPER

Motorized and installed on the top of the unit avoiding the return of the airflow through the equipment.

FILTER

Class M5 filter according to NBR 16101.

WET FLOOR SENSOR

Alarm for the presence of moisture on the floor.

DUAL ELECTRIC POWER SUPPLY

Electrical panel equipped with ATS switch for dual power supply and automatic switching in the event of a mains power failure.

HUMIDIFIER

Humidifier with immersed electrodes, plastic tank, filling and draining valves and proportional control of superheated vapor generation.

CAIXA PLENUM DE DESCARGA

Used in the Upflow version with double deflection louvers for directing the air flow.

COMMUNICATION

SNMP, BACNET MS/TP, BACNET IP Protocols, others on request.

HIGH BASE

Used in equipment of the downflow type, manufactured in carbon steel and finished with black electrostatic paint in black RAL 9005. With deflector to direct the air flow and adjustable feet that allow leveling and height adjustment in +/- 30mm. Standard heights of 300mm, 400mm, 500mm, and 600mm. Other measures on request.

Technical data

	Description	Unit	Model						
			CPC - 18	CPC - 26	CPC - 35	CPC - 50	CPC - 70	CPC - 100	
Operating conditions	Fancoil								
	Total capacity (1)	kW	17.4	25.8	33.0	50.9	70.8	98.9	
	Sensible capacity	kW	16.6	24.6	31.4	48.8	66.8	92.4	
	Useful capacity	kW	15.5	23.1	29.6	45.4	63.0	87.0	
	EER efficiency	-	15.439	17.075	18.242	15.113	18.418	18.386	
	Sensible heat factor	-	0.95	0.95	0.95	0.96	0.94	0.93	
	Air supply direction	-	Down / Up flow						
	Nominal flow rate	m ³ /h	5000	7000	9500	15000	20000	27500	
	Maximum static pressure available	Pa	200	250	250	250	250	250	
	Specific fan power (SFP) (2)	W/(m ³ /s)	811	777	686	808	692	704	
	Filtering class	-	G4						
	Downflow sound pressure (3)	dB(A)	66	66	62	69	65	66	
	Upflow sound pressure (3)	dB(A)	68	68	64	71	67	68	
	Chilled water flow rate	m ³ /h	3.0	4.4	5.7	8.7	12.2	17.0	
	Chilled water inlet temperature	°C	7.0	7.0	7.0	7.0	7.0	7.0	
	Chilled water outlet temperature	°C	12.0	12.0	12.0	12.0	12.0	12.0	
	Load loss	kPa	47	48	59	46	62	99	
	Dimensional	Width	mm	910	910	1060	1585	2115	2740
		Depth	mm	620	885	885	885	885	885
Height		mm	2000	2000	2000	2000	2000	2000	
Occupied area		m ²	0.56	0.81	0.94	1.40	1.87	2.42	
Weight		kg	390	415	465	560	750	925	
Maintenance			Front						
Maintenance access		mm	900						
Inlet connection diameter		in	1 1/4	1 1/2	1 1/2	1 1/2	2	2 1/2	
Outlet connection diameter		in	1 1/4	1 1/2	1 1/2	1 1/2	2	2 1/2	
Power	Nominal power (1) (4)	kW	1.2	1.6	1.9	3.5	4.0	5.5	
	Maximum power (4)	kW	1.5	2.1	3.5	4.1	6.9	10.3	
	Reheating resistor	kW	4.5	6.0	9.0	12.0	18.0	27.0	
	Humidifier	kW	2.25	2.25	2.25	2.25	6	11.25	

(1) Return temperature 24°C, relative humidity 45% and atmospheric pressure 101.3kPa

(2) Considering a maximum pressure loss of 250Pa in the installation

(3) Sound pressure at 2 meters from the source

(4) Power in operation

Technical Support

Our goal is to simplify your everyday life



We serve
all of
Latin America!

Free lifetime support in the
service channels

Stock and supply of
original parts

Workshop car with high
quality tools

Punctuality in
scheduled visits

90% of calls resolved
over the phone

Own team

Monitoring of the visits
in real time

80% of calls resolved on the
first visit

Qualified technicians with more
than 15 years of experience

Customer satisfaction

We monitor the satisfaction of our customers from sale to the end of the equipment's useful life and take action whenever necessary, through our Active Listening Program.

We only rest when we deliver the best!

CPC | Klimatix

Gilmar Moreira
Technician since 1983
Weverton Santos
Technician since 2012



The information in this catalog is subject to change without prior notice. Version: May 2022.

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