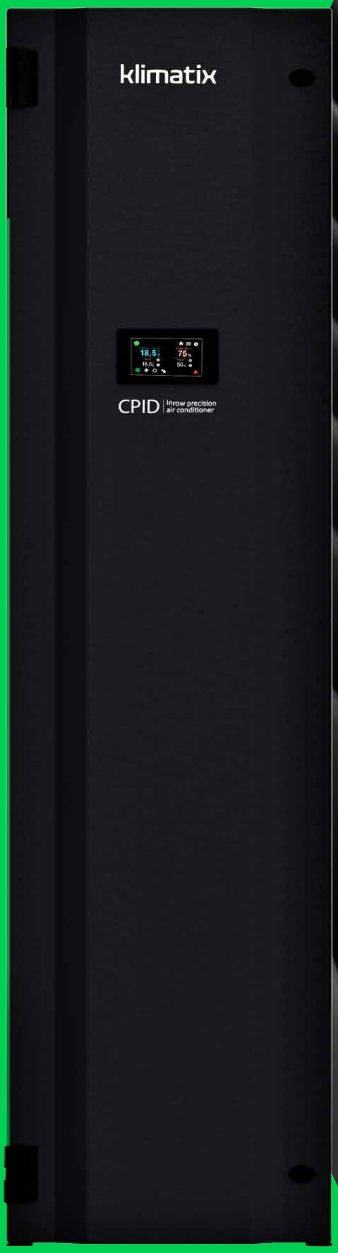


CPID
klimatix

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.

klimatix

Schedule a visit to our plant.
contato@klimatix.com

Precision Air Conditioner

Direct self expansion with remote condenser

CPID

Capacity 18 kW,
26kW and 40 kW

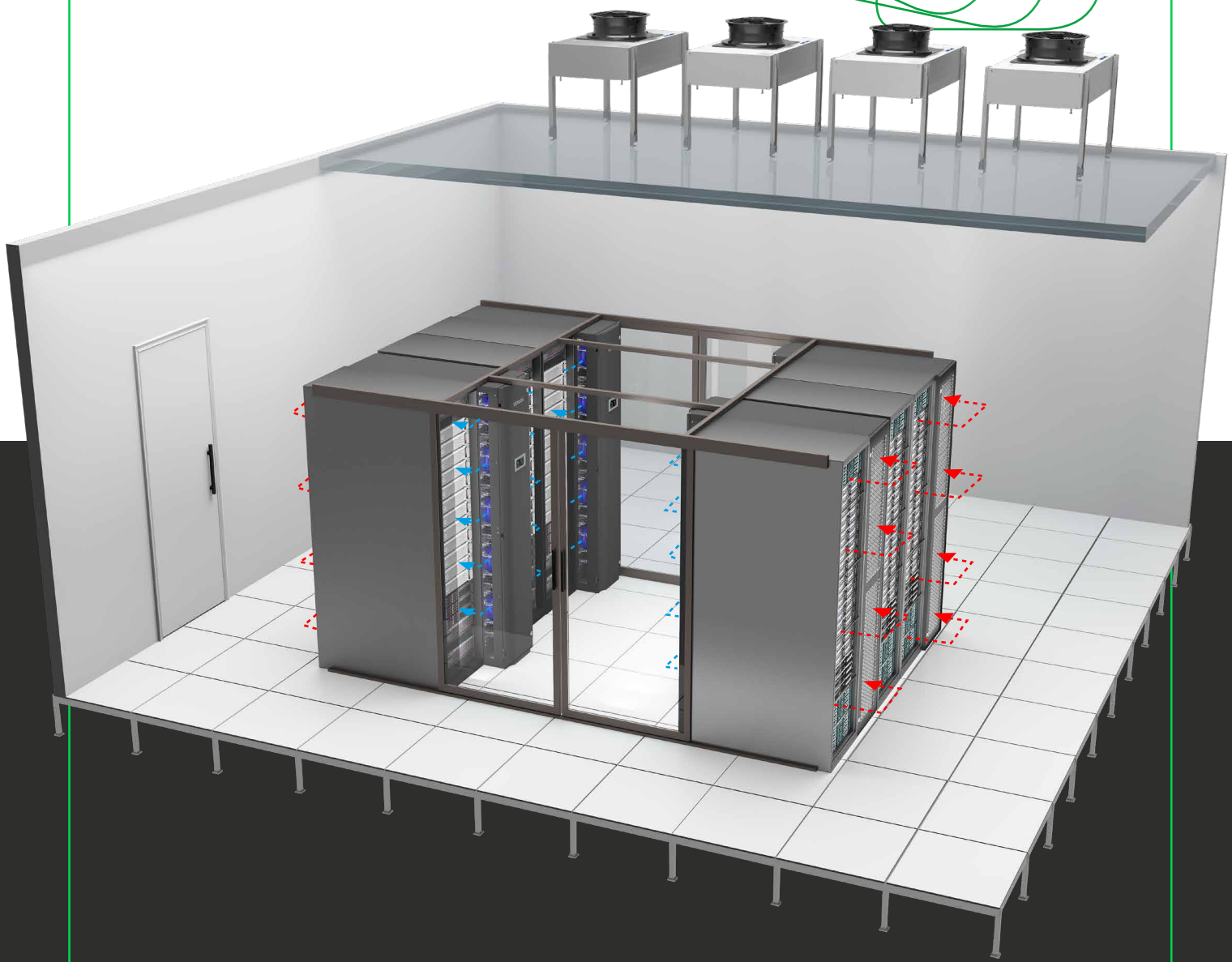
Application

Air conditioning for critical mission data centers, UPS rooms and communication centers.

Benefits

- Reliable operation 24/7
- Very high energy efficiency
- Equipment for installation between racks
- Precise temperature and humidity control
- Independent insufflation temperature control
- Length options for 1,000mm and 1,200mm racks
- Inverter compressor with capacity control from 30% to 100%
- Ideal technology for great thermal load variations
- Low noise and automatic fan speed adjustment
- Colored HMI touchscreen with user-friendly interface
- Wide range of optional configurations
- High performance EC fans
- Robust build

System designed for high efficiency



Nomenclature – CPID

CP I – D – LP – 18 – URI – 380 *

Precision Air Conditioner

I: In row

D: Direct Expansion

1st Digit
- L: Lateral flow
- F: Front flow

2nd Digit
- P: Standard structure
- E: Extended structure

Nominal Capacity: 18, 26, 40 kw

1st Digit
- 0: no humidifier
- U: humidifier (vapor generator)

2nd Digit
- 0: no reheating
- R: reheating (electrical resistance)

3rd Digit
- I: Inverter Compressor

Configurations:

/M: Air filter M5
/S: SNMP Communication
/N: BACNET Communication
/I: Flooded floor sensor
/C: Customized

*: Special operating frequency: 50Hz

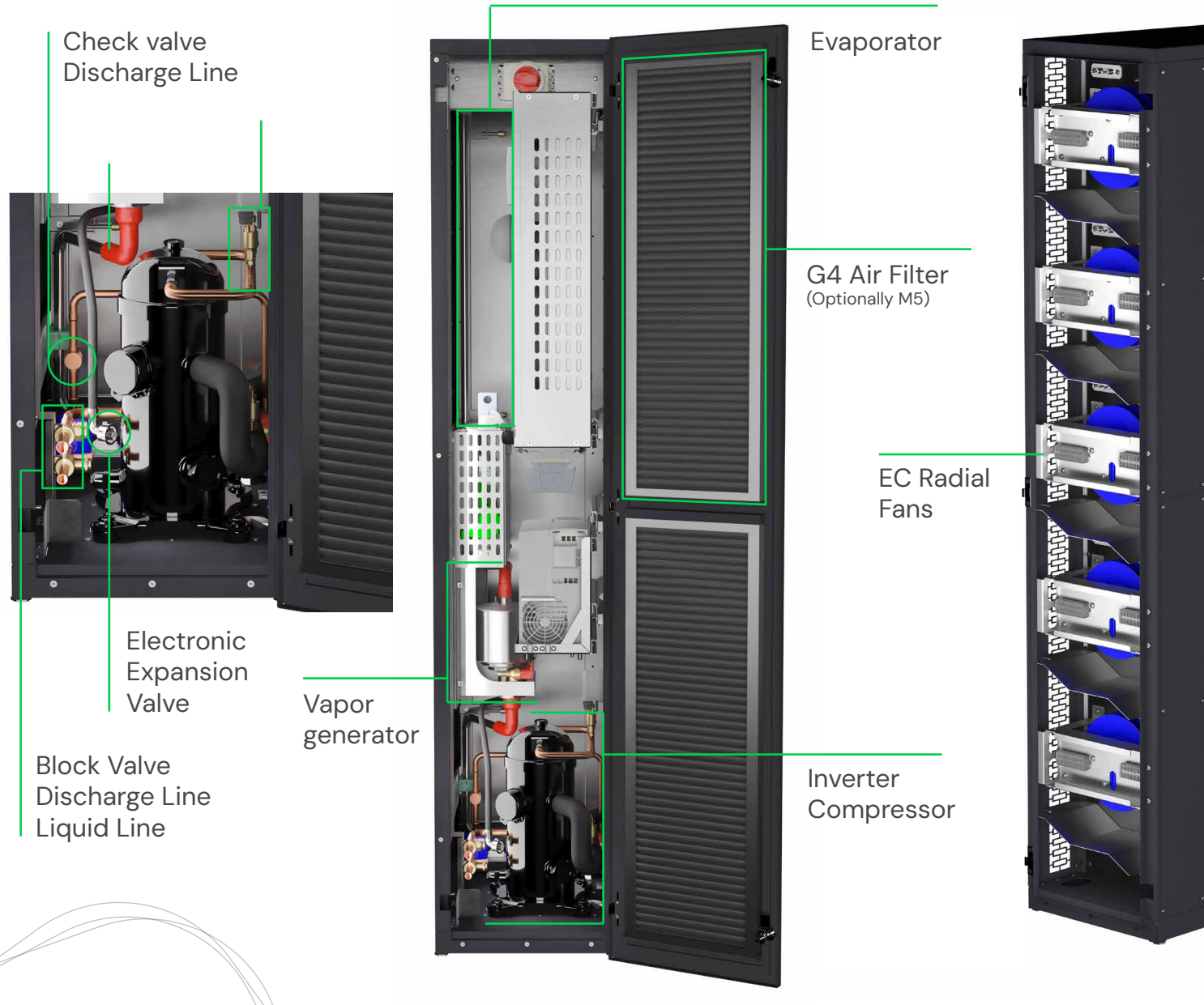
Standard Voltage of the CPID
3-phase, 220 V, 60 Hz
3-phase, 380 V, 60 Hz
3-phase, 440 V, 60 Hz
Special Voltage – E.g.: 400 V, 480 V, etc.

Technical Description

The air conditioners in the CPID line are equipment intended for use in mission-critical environments with a high sensible heat factor and racks with a high load density for controlling the temperature, relative humidity, and air quality of racks, with the airflow directed mainly to the region where they are installed, allowing control by supply temperature directly to the cooling points. They can operate with supply temperatures of between 20°C and 25°C and return temperatures of between 30°C and 35°C.

Designed for continuous operation, reliable and long-lasting operation. With control of precise temperature and humidity control, low power consumption, and low noise level. Optimized airflow by applying CFD tools for maximum efficiency, low power consumption and fans with EC-technology engines.

They can be supplied in lateral airflow configuration with the option of closing on one side (zone air conditioning, focusing on the rack region) or on the front (perimeter air conditioning, focusing on the room temperature).



• Control Technology

Three models with nominal capacities of 18, 26, and 40 kW

Network communication with up to 254 devices grouped into of air conditioning zones with 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.

Air flow configuration in three zones or by average through air temperature differential monitoring.

Operating setting temperature between 20°C and 35°C and relative humidity between 30% and 70%.

A cooling circuit with a scroll compressor inverts, allowing an adjustment from 30% to 100% of the installed capacity in the equipment.

Cooling circuit with block valves in the refrigerant inlet and outlet lines, liquid display, filter drier, check valve in the compressor discharge and electronic expansion valve.

Direct expansion with remote air condenser and refrigerant R410A.

• Others

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

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.

Filtering class G4 according to NBR16101 and differential pressure switch for indication of dirty filter and automatic adjustment of flow to compensate obstruction

Optional Configurations

REHEATING

Electric with resistances made of AI51304 stainless steel, proportional control and safety thermostat.

HUMIDIFIER

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

FILTER

Class M5 filter according to NBR 16101.

COMUNICAÇÃO

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

WET FLOOR SENSOR

Alarm for the presence of moisture on the floor.

FAN MAINTENANCE

Fan hot-swappable system without the need to stop the evaporator unit.

CPID | Klimatix

Technical data

	Description	Unit	Model		
	Evaporator unit		**CPID- 18**	**CPID- 26**	**CPID - 40**
Operating conditions	Total capacity (1)	kW	17.9	28.0	38.1
	Sensible capacity	kW	17.9	28.0	38.1
	Useful capacity	kW	17.2	27.4	37.0
	EER efficiency (CPA)	-	3.577	4.136	4.091
	EER Efficiency (CPA + CR)	-	3.011	3.418	3.344
	Sensible heat factor	-	1.00	1.00	1.00
	Air supply direction	-	Side / Front		
	Nominal flow rate	m^3/h	4500	6000	7750
	Maximum static pressure available	Pa	70	100	100
	Specific fan power (SFP)	$W/(m^3/s)$	512	407	488
	Cooling circuits		1	1	1
	Filtering class	-	G4		
	Sound pressure (2)	dBA	57	59	65
	Refrigerant load (5)	kg	1.3	2.4	3.0
Dimensional	Width	mm	400	500	600
	Depth	mm	1200	1200	1200
	Height	mm	1975	1975	1975
	Occupied area	m^2	0.48	0.60	0.72
	Weight	kg	370	420	490
	Maintenance		Front / Rear		
	Maintenance access	mm	900		
	Inlet connection diameter	in	1/2	5/8	5/8
	Outlet connection diameter	in	5/8	3/4	7/8
	Remote condenser		**CR-25**	**CR-35**	**CR-60**
Operating conditions	Air supply direction	-	Vertical / Horizontal		Vertical
	Nominal flow rate	m^3/h	7000	9000	16500
	Maximum static pressure available	Pa	10	10	10
	Specific fan power (SFP)	$W/(m^3/s)$	484	570	454
	Sound pressure (2)	dBA	62	67	66
	Refrigerant load (5)	kg	0.9	0.9	1.9
Dimensional	Width	mm	1450	1750	1920
	Depth	mm	910	820	850
	Height	mm	1190	1160	1060
	Weight	kg	60	75	95
	Maintenance	-	Front / Rear / Side		
	Maintenance access	mm	600		
	Inlet connection diameter	in	5/8	3/4	7/8
	Outlet connection diameter	in	1/2	5/8	5/8
Refrigeration installation	Maximum equivalent length (4)	m	30		
	Max. level difference (evaporator below condenser) (4)	m	17		
	Max. level difference (evaporator above condenser) (4)	m	5		
Power	Rated power (1) (3)	kW	5,9	8.2	11.4
	Maximum power (3)	kW	8.1	14.2	20.0
	Reheating resistor	kW	4.5	9.0	9.0
	Humidifier	kW	2.25	2.25	2.25

(1) Return temperature 35°C, relative humidity 30% and atmospheric pressure 101.3kPa; Ambient temperature 35°C; Leq. 20 meters

(2) Sound pressure at 2 meters from the source

(3) Power in operation considering evaporator unit and remote condenser

(4) Consult manufacturer for other measurements

(5) Condensing temperature 45°C and subcooling 5°C

Assistência Técnica

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!

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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