

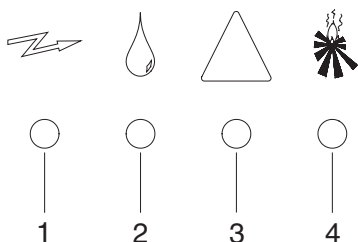


**Capacity of water-cooled condenser**

Connection  
Max. water flow  
Max. capacity\*  
Pressure drop

**CDP 165**  
Ø15 mm  
800 l/h  
5,5 kW  
16 kPa

\*Running conditions: LP 10°C, HP 40°C, water temperature 28°C



**CDP 165  
DEHUMIDIFIER**

**Function**

The CDP 165 works in accordance with the condensation principle. A fan draws the humid air into the dehumidifier and through an evaporator coil. When passing through the evaporator the air is cooled down to below its dew point temperature, and its content of water vapour is condensed into water, which falls into the drip tray and then is led from the drip tray to a drain. The cold, dry air is then passed over the condenser coil where it is re-heated, before leaving the unit at a temperature, which is approx. 5°C higher than at the inlet.

**Applications:**

- Indoor swimming pools
- Therapy pools
- Wellness centres
- Hotel pools

**FEATURES**

- The CDP 165 is built into a cabinet made of powder-coated hot-galvanized double-skinned panels with 50 mm insulation
- Evaporator and condenser coils are epoxy-coated for higher corrosion resistance
- All external and internal parts of the cabinet are powder-coated
- The condensate outlet is located on the air inlet side of the CDP 165. The outlet stub can be connected to a 3/4" water hose.
- Ø500mm air inlet through a filter placed in a removable frame
- Ø500mm dry air outlet positioned either horizontally, or vertically through the top of the unit
- The access for inspection can be moved to the opposite side
- Fresh air inlet possible through Ø160mm fresh air duct
- The CDP 165 can be supplied with an optional water-cooled condenser. The Ø15mm coupling pipes of the water-cooled condenser are made of copper
- The CDP 165 can be placed on the floor utilising the shockabsorbing floor mount kit (optional extra)
- A water heating coil can be mounted in the air outlet duct for further heating of the dry air (optional extra)

**Electronic control**

The CDP 165 is fully automatic with electronic control. An easy to read display panel shows the current status of operation.

1. Power on
2. Dehumidification – the compressor is on
3. Cooling circuit failure – the dehumidifier is switched off
4. Water heating coil is activated

Push buttons allow switching on and off control of dehumidification, re-heating coil and continuous ventilation.

If a controlled and constant relative humidity is required, room or duct hygrometers can be connected to the CDP 165. If the CDP 165 is used with a water-heating coil, the control is prepared for connection of a room thermostat.

**Defrosting**

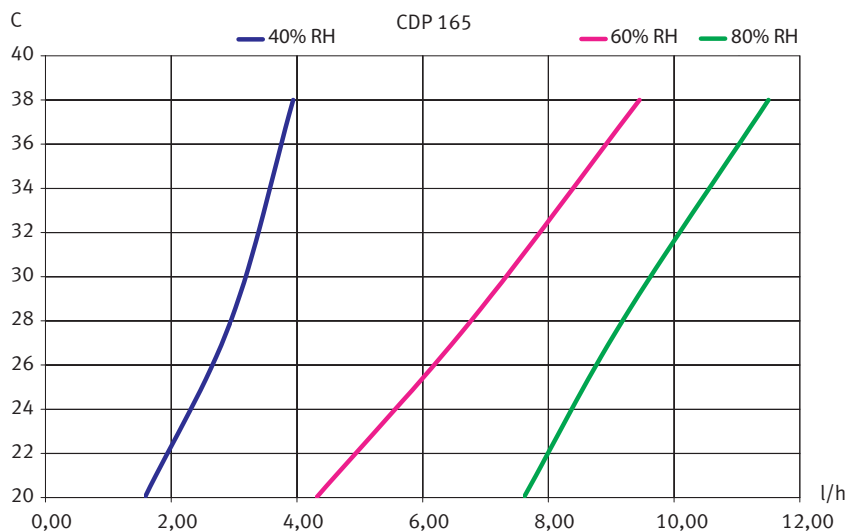
If the CDP 165 is used in the temperature range between 15 and 20°C, passive, demand-controlled defrosting can be achieved by fitting a defrosting sensor on the evaporator coil.

**TECHNICAL DATA**

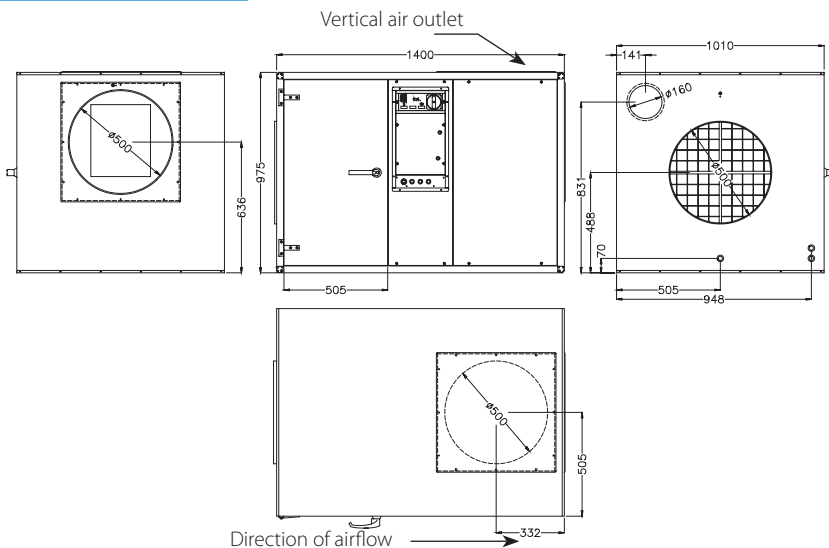
**Model**

Operating range – humidity	<b>CDP 165</b> 40 – 100 %RH
Operating range – temperature	20 – 38 °C
Air volume	3600 m <sup>3</sup> /h
Max external pressure	240 Pa
Max. fresh air supply	540 m <sup>3</sup> /h
Power supply	3x230/50 / 3x400/50 V/Hz
Max. ampere consumption	20,2 / 11,5 A
Max. power consumption	4,3 kW
Refrigerant	R407C
Quantity of refrigerant	6,800 kg
Compressor	Reciprocating
Sound level (at 1 metre)	63 dB(A)
Weight	190 kg
Filter	EU 3
Colour	RAL 9016
Protection class	IPX4

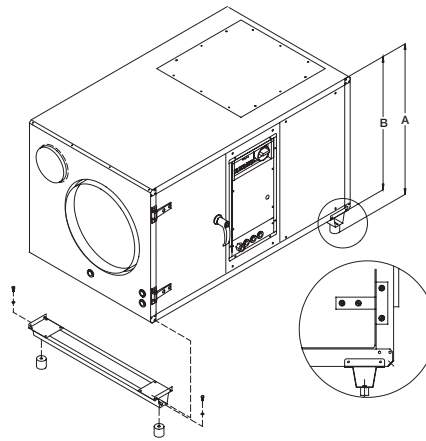
**CAPACITY CURVES**



**DIMENSIONS**



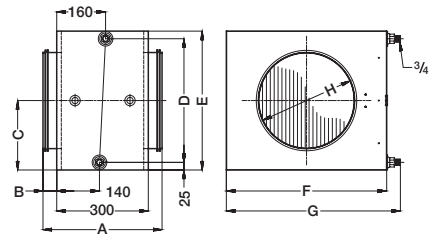
Shockabsorbing floor mount kit



**CDP 165** A 1067±2 B 975

The floor mount kit is fastened by a M5 sheet metal screw

Water heating coil



**Ø500** A 410 B 55 C 352 D 655 E 705 F 775 G 820 H 500 kg 34

Capacity of water heating coils

CDP 165		2RR	2RR	2RR
Connection		3/4"	3/4"	3/4"
Duct connection	mm	Ø500	Ø500	Ø500
Water temperature	°C	82/71	80/60	70/35
Air volume	m <sup>3</sup> /h	3600	3600	3600
Air outlet temperature	°C	52,29	47,86	35,09
Capacity	kW	30,87	25,47	9,87
Water flow	l/h	2376	1080	216
Pressure drop, water	kPa	13,17	3,24	0,22
Pressure drop, air	Pa	25,92	25,74	25,21

The technical specifications of the water heating coils are based on a room temperature of 27°C

**ACCESSORIES**

- Shockabsorbing floor mount kit
- Water heating coil
- Room hygrostat
- Duct hygrostat
- Room thermostat
- Defrost sensor
- Ext. failure monitoring kit (see separate data sheets)

**Also available in this series:**

- CDP 35
- CDP 45
- CDP 65
- CDP 75
- CDP 125
- CDP 35T
- CDP 45T
- CDP 65T
- (see separate data sheets)

All dimensions are in mm.

**ACCESSORIES CDP 75 - 125 - 165**

Illustration	Accessory	CDP-type	Dantherm No.
	Room hygromat	CDP 75 CDP 125 CDP 165	516301 516301 516301
	Room thermostat	CDP 75 CDP 125 CDP 165	513321 513321 513321
	Duct hygromat	CDP 75 CDP 125 CDP 165	516310 516310 516310
	Wall mounting kit	CDP 75 CDP 125	175381 175382
	Shockabsorbing floor mount kit	CDP 75 CDP 125 CDP 165	175367 175368 175369
	Water heating coil	CDP 75 CDP 125 CDP 165	570027 570027 570029
	Defrost sensor	CDP 75 CDP 125 CDP 165	175401 175401 175401
	External failure monitoring kit	CDP 75 CDP 125 CDP 165	019401 019401 019401