

COMPACT COOLING UNITS FOR DATA CENTERS

with evaporative cooling
and outdoor air pre-cooling



FACTS, PLEASE!

- For capacity ranges from 10 to 50 kW
- Compact design with small unit footprints
- Year round temperature of $22\text{ °C} \pm 1\text{ K}$ (for a maximum ambient wet-bulb temperature of 24 °C)
- 100 % air recirculation mode
- No DX unit required
- Climate-neutral cooling technology
- Simplified maintenance by use of water as refrigerant

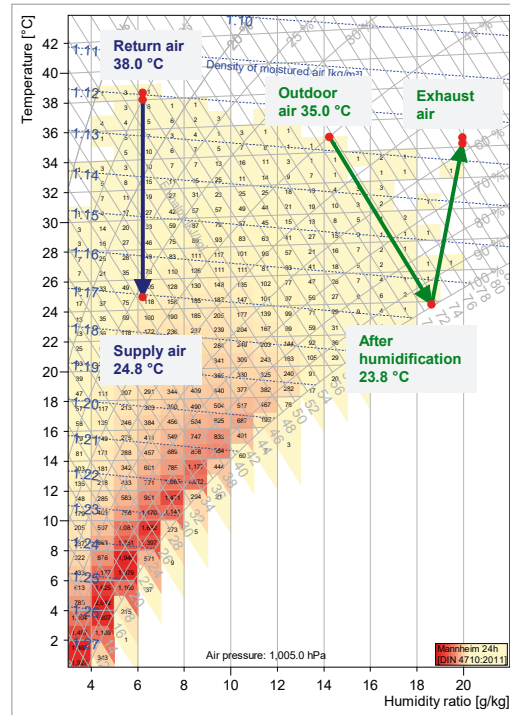
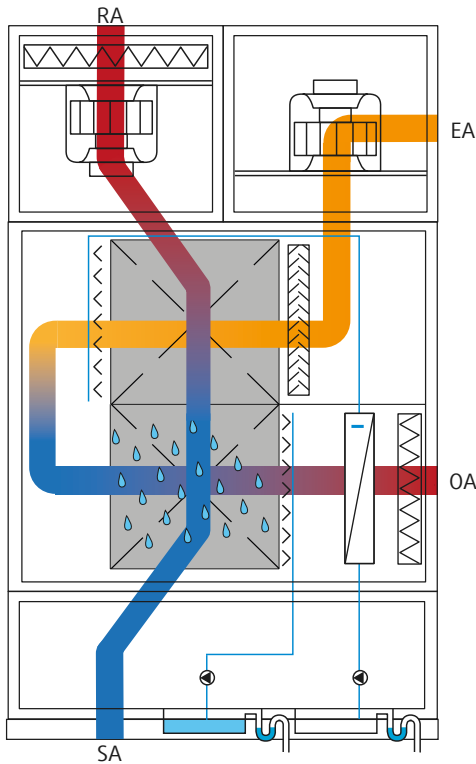
Unit pictured

- 1620 x 730 x 2790 mm (L x W x H)
- Max. power consumption: 2.3 kW
- Max. cooling duty: 13 kW



EVAPORATIVE COOLING

The process air is cooled by indirect adiabatic evaporative cooling. Heat exchange takes place with adiabatic humidification, even with low outdoor temperatures. This enables a reduction of the heat removing outdoor air / exhaust air volume flow, which in turn lowers the power consumption of the fan motor unit for outdoor air / exhaust air.



EVAPORATIVE COOLING WITH OUTDOOR AIR PRE-COOLER

The outdoor air pre-cooler is switched on to cover peak loads. It reduces the temperature of the incoming outdoor air and thereby increases the cooling potential of the evaporative cooling. The heated circulation water is sprayed through a second nozzle system into the heat exchanger, which contributes to the evaporative cooling.

