

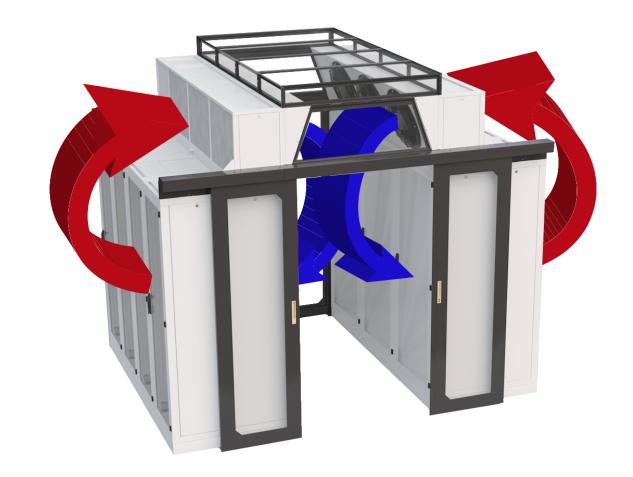
# **Cooling above racks**

Placed directly on top of the IT racks, this unique cooling system offers datacenter owners **maximum area usage**. CoolTop units **don't occupy any floor space** so the Data center can use this free area for IT equipment, resulting in **higher profitability**.

The system is suitable either for **contained hot or cold aisle**. Separating hot and cold zones prevents the mixture of air, increasing cooling efficiency. It also enables fan-speed control, based on pressure difference, which extends server lifetime while reducing power consumption.

Hot air sucked from an upper part of the server room is cooled and transferred to the cold zone directly in front of the racks. **This system doesn't require a raised floor.** Airflow doesn't have to overcome obstacles or long distance. Units working in one group can react to local IT requirements. The unique design principle, quality of components and special control algorithm help maintain extremely low power consumption. The cooling units can be connected to any chilled water system **(especially with free-cooling)**.

Particular emphasis was placed on both safety and protection against water leakage. The unit was designed to be installed either on top of the IT rack or suspended from the ceiling above. A 2400 mm length corresponds to either 3 x 800 mm or 4 x 600 mm wide racks.





## Technical Information

#### CoolTop3

- Width 2400 mm, depth 400 (600) mm, height 600 mm
- Airflow max. 11 000  $\text{m}^3/\text{h}$
- Cooling capacity 48,0 kW (air temperature 35°C, water temperature 10/15°C, SHR=100%)
- Power supply 230V/50Hz
- Power consumption 1 100 W (3 axial EC fans)
- 3-way valve as a standard, 2-way valve as optional
- Communication protocol ModBus, SNMP, etc. or digital I/O signals

### CoolTop2

- Width 2400 mm, depth 400 (600) mm, height 600 mm
- Airflow max. 7 700 m<sup>3</sup>/h
- Cooling capacity 38,2 kW (air temperature 35°C, water temperature 10/15°C, SHR=100%)
- Power supply 230V/50Hz
- Power consumption 710 W (3 axial EC fans)
- 3-way valve as a standard, 2-way valve as optional

Communication protocol ModBus, SNMP, etc., or digital I/O signals

#### Benefits

Unique market solution

Doesn't occupy server room floor space

Best purchase price for 1 kW of cold in the market

• Fully compatible with Conteg racks, with a length of 2400 mm for 3 x 800 mm or 4 x 600 mm racks

Remarkably high energy efficiency ratio. EER = 42.4 at 35°C (air) and 10/15 °C (water)

Modern control and communication

• Suitable for either contained cold or hot-aisle systems, according to the project.

Maximum safety against water leakage

Optional droplet separator (in case of water temperatures below dew point)

• Stainless steel condensate pan below heat exchanger, equipped with water level sensor

• Secondary (metal) water safety receiver built into the casing

• Safety (metal) filter in front of the cooler

Optional condensing sensor