

iQdata Cooling unit 4 kW

Wall-mounted cooling unit



User benefits

The high-performance cooling unit, which is mounted sideways on the server rack, helps in efficient cooling of IT components.

The operation and maintenance is done from the front side, so that it is possible to place the wall cooling unit, including the server rack, in corners or nooks.

The heat exchanger with hydrophilic coating ensures a low air-sided differential pressure and prevents contamination.

The heat exchanger is designed in such a way that the wall-mounted cooling unit can be operated even at high cold water temperatures.

All water-supplying components are placed in a condensate pan.

The cooling unit can be operated with very low power consumption by using EC-fans. The cooling unit is fitted with a fan modules n+1 redundancy.

The desired rotary speed of the fans is selected manually using the controller.

The desired server supply air temperature can be adjusted using the control valve without auxiliary energy. The display integrated into the door shows the current server supply air temperature.

Functioning

The wall-mounted cooling unit sucks in the warm server exhaust air from the rear cabinet area of the racks and directs the warm air via a high efficiency heat exchanger. There the air is cooled down and blown back from the side into the front area of the server via EC fans.

IT monitoring

In the event of a fan fault, a collective fault message is displayed as a potential-free contact.

The fault is also indicated on the display by an LED. The temperature of the supply air can be read on the display.

Redundancy

The fans were designed in such a way that in the event of a fan fault, the remaining fans alone delivered the air volume flow rate required for cooling. If a fan fails, this is detected by the remaining fans and these then run automatically at 100 % speed.

Installation instructions

The wall-mounted cooling unit is designed for sideways installation on the server racks. The installation is done using screw joints between the rack frame and the wall-mounted cooling unit. This ensures a secure connection and load carrying.

Protection class acc. IEC 60 529

IP54

Dimensions / weight

Width (W):	300.00 mm
Length (L):	1000.00 mm
Height (H):	1500.00 mm
Weight:	85 kg

Technical data

Nominal cooling power, cold water 6 / 20°C:	4 kW
Nominal cold water volume flow at 6 / 20°C:	0.25 m ³ /h
Max. cooling capacity at 6/13°C:	8 kW
Max. cooling water volume flow at 6/13°C:	1.0 m ³ /h
Cooling capacity, cold water 15 / 21°C:	4 kW
Cooling water volume flow at 15/21°C:	0.57 m ³ /h
Differential pressure at 0.57 m³/h	55 KPa
Air performance (free blowing) 1 fan: Air performance (free blowing) 2 fans:	1000 m ³ /h 1850 m ³ /h
Server supply-air temperature:	23°C
EC- fans:	2 units
Operating voltage:	3~ ; 400 V AC; 50 – 60 Hz
Electricity consumption:	340 W (both fans with 100 % rpm)
Recommended mains fuse:	3 x LS C 16A
Recommended wire size:	5 x 2.5 mm ²
Temperature control:	2-way – Control valve without auxiliary energy with thermostat
Coolant:	Water
Permitted operating pressure:	10 bar

Cold water connection

Kamlock coupling 3/4"

Connection to condensate line

Hose connector 1/2"