

# Liquid Cooling Package



Accessories for LCP Page 433 Chillers for IT cooling Page 441 Network/server enclosures TS-IT Page 92

## Benefits:

- Maximum energy efficiency thanks to EC fan technology and IT-based control
- Minimal pressure loss at the air end, which in turn minimises the power consumption of the fans
- Control of the server inlet temperature
- With redundant temperature sensor integrated at the air end as standard
- Optimum adaptability thanks to dynamic, continuous control of the cold water volume flow
- By using high water inlet temperatures, the proportion of indirect free cooling is increased, which in turn reduces operating costs

- Targeted cooling output thanks to modular fan units
- Fan modules configurable as n+1 redundancy
- Standard 3-phase connection for electrical redundancy
- The separation of cooling and rack prevents water from entering the server enclosure
- Up to 55 kW cooling output on a footprint of just 0.36 m<sup>2</sup>
- Minimal area load due to low weight

## Functions:

The LCP draws in the air at the sides at the rear of the server enclosures, cools it using high-performance compact impellers, and blows the cooled air back into the front part of the server enclosure at the sides

## Monitoring:

- Monitoring of all system-relevant parameters such as server air intake temperature, server waste air temperature, water inlet/return temperature, water flow, cooling output, fan speed, leakage
- Direct connection of the unit via SNMP over Ethernet

## Temperature control:

- Linear fan control
- Two-way control valve

## Colour:

- RAL 7035

## Protection category IP to IEC 60 529:

- IP 20

## Cooling medium:

- Water

## Optional:

- Fully integrated fire detection and extinguisher system
- Automatic server enclosure door opening
- Various sensors
- Racks 2200 mm high

## Technical details:

Available on the Internet

Photo shows a configuration example with equipment not included in the scope of supply

## LCP Rack CW

Model No.	Packs of	3311.130	3311.230	3311.260	Page
<b>Total cooling output/Number of fan modules required kW</b>		<b>10 / 1 20 / 2 30 / 3</b>	<b>10 / 1 20 / 2 30 / 3</b>	<b>40 / 4 45 / 5 55 / 6</b>	
Number of fan modules in supplied state		1	1	4	
Width mm		300	300	300	
Height mm		2000	2000	2000	
Depth mm		1000	1200	1200	
Installation in bayed enclosure suite		Flush	Flush	Flush	
Rated operating voltage V, ~, Hz		230, 1~, 50/60 400, 3~, 50/60	230, 1~, 50/60 400, 3~, 50/60	230, 1~, 50/60 400, 3~, 50/60	
Type of electrical connection		Connector	Connector	Connector	
Air throughput at max. cooling output m <sup>3</sup> /h		4800	4800	8000	
Fans may be exchanged with the system operational		■	■	■	
EC fan		■	■	■	
Water inlet temperature °C		15	15	15	
Permissible operating pressure (p. max.) bar		6	6	6	
Duty cycle %		100	100	100	
Water connection		1½" external thread	1½" external thread	1½" external thread	
Weight as delivered kg		214.0	214.0	235.0	
<b>Accessories</b>					
Fan module	1 pc(s).	3311.011	3311.011	3311.011	434
Touchscreen display, colour	1 pc(s).	3311.030	3311.030	3311.030	433
Connection hose, bottom and top	2 pc(s).	3311.040	3311.040	3311.040	433
Add-on cover	1 pc(s).	3301.221	3301.421	3301.421	433