

Cool Wall

Compact precision cooling

Flexible infrastructure

Modular architecture that evolves with demand

The Cool Wall is the most compact series in our fan wall portfolio, making it ideal for space-constrained data centres. Modular architecture enables operators to customize the system from capacity to redundancy, also supporting the thermal demands of upcoming 800VDC data centres.



Cooling Capacity
45kW to 90kW



Best Fit Use Cases
800VDC data
centre architecture



Independent modules for partial-load operation

Each module operates independently, adjusting cooling output with real-time load requirements for improved partial-load performance. This independent architecture eases maintenance while also enhancing operational resilience.

Key Components

- **DC Axial Fan:** Modulates fan speed based on real-time airflow demand to maximize efficiency.
- **Plate Type Heat Exchanger:** Transfers heat rapidly between primary and secondary circuits. Improves system reliability and enables independent optimization of each cooling circuit.
- **Inverter Scroll Compressor:** Delivers precise cooling using variable-speed technology.
- **Synergy with Coolant Distribution Unit:** Dual coil design allows the compressor to remain off when the chilled water loop meets cooling demand, improving efficiency and synergizing well with CDU setups.

Features & Functions



Reduced Footprint

Stackable and compact framework maximizes space and increases density.



Robust Build

Durable steel structure engineered for intensive data centre purposes.



Accessible Design

Rear access to hot swappable DC fans allow for easier maintenance.



Reduced Hotspots

Unique uniform horizontal airflow technology reduces hotspots.



Smart Controller

Multiple monitoring functions and BMS connection capabilities.



AC/DC Power Supply Options

Designed with flexible power architecture options to suit AC or DC applications.

Specifications

Model (CWD*-***)	E-045	E-060	E-090	C-045	C-060	C-090
RAT 37°C, SAT 25°C, Water 34°C/43°C						
Total Cooling Capacity (kW)	45.1	60.1	90.1	45.1	60.1	90.1
Sensible Cooling Capacity (kW)	45.1	60.1	90.1	45.1	60.1	90.1
Return Air Relative Humidity (%)	20	20	20	20	20	20
Supply Air Relative Humidity (%)	60	60	60	60	60	60
Supply Air Flow (m³/h)	11800	11800	23600	15200	15200	23600
Altitude (m)	<20	<20	<20	<20	<20	<20
External Static Pressure (Pa)	30	30	30	30	30	30
Unit Rated Power (kW)	9.3	12.5	17.5	10.42	13.4	18.6
Coolant Type	R410A					
Water Flow (l/s)	1.5	2	3	1.5	2	3
Water Pressure Drop (kPa)	68	68	68	68	68	68
Fan Quantity	15	18	30	15	15	22
Compressor Quantity	1	1	1	1	1	1
Water Inlet Pipe	DN32	DN40	DN50	DN32	DN40	DN50
Water Outlet Pipe	DN32	DN40	DN50	DN32	DN40	DN50
Drain Pipe (ID, mm)	25 (R3/4)	25 (R3/4)	25 (R3/4)	25 (R3/4)	25 (R3/4)	25 (R3/4)
Pipe Connection Point	Top	Top	Top	Top	Top	Top
Width (mm)	900	1200	1800	900	1200	1800
Depth (mm)	400	400	400	400	400	400
Height (mm)	3300	3300	3300	2800	2800	2800
Water Pipe Box Height (mm)	600	600	600	600	600	600
Unit Operating Weight (kg)	465	500	760	460	485	740
Power Supply	540VDC or 380-415V 3P+1N 50/60Hz					

- Please contact our representatives for other requirements.
- The manufacturer reserves the rights to make changes to the product specifications. The data and renders shown above may vary.