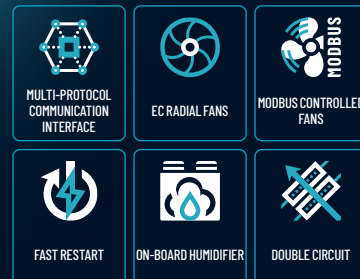


DATA CENTER
INDUSTRIAL

JREF CW

Radial

**CHILLED WATER
PERIMETER MOUNTED UNITS
FOR DATA CENTERS**
15–33 kW


The JREF CW Radial series perimeter mounted units are chilled water units with EC radial fans for small-sized premises such as server rooms and labs or for applications where **accurate control of thermo-hygrometric parameters and round-the-clock operation are required**. In-depth CFD (computational fluid dynamics) analysis has allowed for the meticulous design of every last constructive detail to **minimise air pressure drops and, therefore, fan power consumption**. Air through-flow sections have been expanded to make **installation and maintenance operations faster and easier**.

- Temperature control through heating and post-heating systems using electric heating elements, additional hot water coil, or both (optional)

- Humidity control through dehumidification and humidification (optional)

- Fan speed modulation based on thermal load (constant ΔT)

- Broad choice of accessories, including base modules and plenums for ducting

- Air filter class G3 as standard. Air Filters G4, M5, F7 (optional)

- Double power supply with automatic switch (optional)

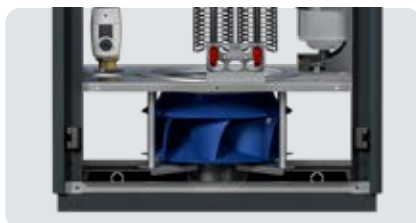
- Constant-flow (airflow control) or constant available overpressure (ΔP control) ventilation modulation (optional)

- Instant reading of water flow rate, water inlet and outlet temperatures, or supplied cooling capacity (optional)



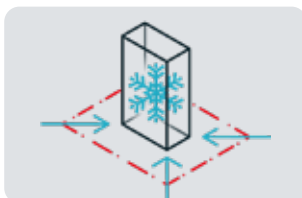
Extended filter section

Air filters, located on the entire surface of the coil, **maximize the filtering section and minimize the unit's air pressure drops**.



Ventilation adjustment

Depending on the air distribution logic in the server room, it is possible to adjust the machine on-board ventilation system to ensure **a constant air flow rate** (airflow control) or **a constant available overpressure** (ΔP control). The latter is particularly useful if a floating floor is used.

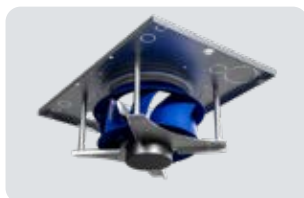


High power density

The reduced footprint and high efficiency **offer higher cooling capacity**. In this way **the space dedicated to the units in the Data Center is minimized, making the most of available spaces**.

Double circuit

Chilled water units are also available with a double circuit. In this version the supply is **via two different hydraulic circuits** that can offer the **utmost operational continuity if one of the two circuits malfunctions**. Each circuit is equipped with a regulating valve



Ventilation EC

EC PLUG fans, standard throughout the range, are adjustable using different logics: flow rate, overpressure, constant ΔP and ΔT . Their accurate adjustment allows an efficient use of power for ventilation and **a consequent reduction of the system's PUE**. Extended range speed adjustment is carried out via Modbus protocol. The "emergency speed" function allows for fan operation **even in the event of microprocessor malfunctions**.



Finned pack coil with hydrophilic coating

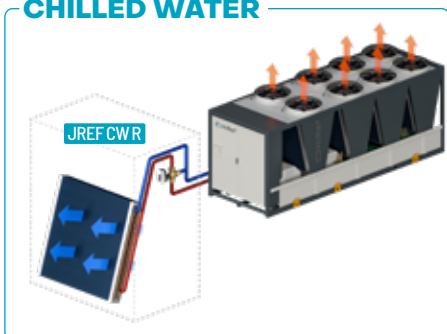
All models in the JREF CW Radial range feature heat exchange coils with hydrophilic coating. This special coating - together with adequate adjustment of air through-flow speeds - **helps condensate collection and outflow during the dehumidification process, preventing any dripping on the inside and outside of the unit**.



Accurate regulation with multiple types of valves

All units in the JREF CW Radial range have as standard regulating valves fitted with 0-10V servo motor, selectable in 2-way execution, with variable or 3-way flow system or with servo motor with spring return. Pressure-independent valves can also be fitted on request. All these types of valves ensure **the utmost adjustment accuracy while maintaining the system's hydronic balance**.

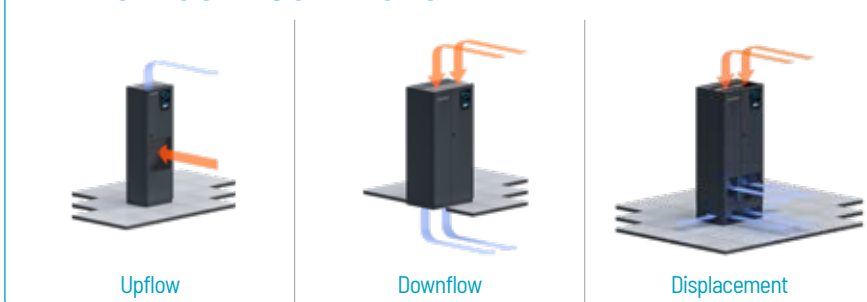
CHILLED WATER



Easier scheduled maintenance

The unit has been painstakingly designed to ensure frontal access to components. This makes **routine maintenance easier in full compliance with safety standards**.

AIRFLOW CONFIGURATIONS



JREF CW R		0150	0170	0210	0250	0270	0320
Air temperature 30°C - 35% / Water temperature In 10°C Out 15°C							
Cooling capacity	kW	17.7	20.2	21.9	27.4	31.4	32.9
EER		23.62	25.33	24.83	22.98	26.72	28.56
SHR		1	1	1	1	1	0.99
Air temperature 35°C - 30% / Water temperature In 15°C Out 20°C							
Cooling capacity	kW	17.8	20.3	22	27.6	31.5	32.9
EER		23.84	25.46	24.86	23.14	26.83	28.59
SHR		1	1	1	1	1	1
Rated air flow	m³/h	4130		6130		6060	5930
Total fan absorbed power	kW	0.8		0.9	1.2		1.1
Power supply	V/ph/Hz	400/3+N/50					
Lp @ nominal rpm; dist.=2m Q=2	db(A)	59	60	61	62	62	62
Dimensions [L xHxD]	mm	600x2000x600			900x2000x600		

Performance data relating to Downflow versions. | Also available with 60 Hz power supply. | Height of model Displacement 2100 mm.