

FCDR

CHILLED WATER CRAC UNITS WITH UNDERFLOOR FANS

MAX EFFICIENCY

		Inlet air conditions: 24°C / 50% r.h. - Tw = 7/12°C							
		FCDR 0450	FCDR 0550	FCDR 0650	FCDR 0750	FCDR 1500	FCDR 1800	FCDR 2000	FCDR 2100
Cooling capacity	kW	48.2	57.1	80.0	100.8	121.3	145.0	148.3	196.1
SHR		0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Airflow	m³/h	7000	7800	12000	13500	18000	20000	23000	26000
Fans' power input	kW	0.5	0.6	0.8	1.0	1.2	1.5	1.5	2.0
Fans' current absorption	A	0.7	0.9	1.2	1.6	1.9	2.4	2.4	3.2
EER		96.4	95.2	100.0	100.8	101.1	96.7	98.9	98.1
		Inlet air conditions: 30°C / 35% r.h. - Tw = 10/15°C							
Cooling capacity	kW	43.2	50.2	68.2	90.9	106.7	122.0	132.7	169.6
SHR		0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Airflow	m³/h	6800	7400	11000	13000	17000	18000	21600	24000
Fans' power input	kW	0.4	0.5	0.7	0.9	1.1	1.2	1.3	1.7
Fans' current absorption	A	0.7	0.8	1.1	1.5	1.7	2.0	2.2	2.7
EER		100.5	100.4	97.4	101.0	97.0	101.7	102.1	99.8
		MAX CAPACITY							
		Inlet air conditions: 30°C / 35% r.h. - Tw = 10/15°C							
Cooling capacity	kW	80.9	90.9	146.3	168.8	215.5	244.7	283.8	333.6
SHR		1.0	0.9	1.0	0.9	1.0	0.9	1.0	0.9
EER		32.4	36.3	28.1	32.5	27.6	31.0	27.0	31.8
		Inlet air conditions: 35°C / 30% r.h. - Tw = 20/26°C							
Cooling capacity	kW	55.7	61.6	100.5	115.7	149.4	168.6	192.9	226.0
SHR		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
EER		22.3	24.6	19.3	22.2	19.2	21.3	18.4	21.5
		Inlet air conditions: 34°C / 30% r.h. - Tw = 20/30°C							
Cooling capacity	kW	46.2	52.0	82.5	97.2	122.6	141.1	157.9	185.8
SHR		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
EER		18.5	20.8	15.9	18.7	15.7	17.9	15.0	17.7
Airflow	m³/h	14000	14000	26500	26300	39400	39000	51900	51400
Fans' power input	kW	2.5	2.5	5.2	5.2	7.8	7.9	10.5	10.5
Fans' current absorption	A	4.0	4.1	8.3	8.3	12.6	12.6	16.8	16.9
Dimensions (LxHxD)	mm	1280x1998x950		1760x1998x950		2500x1998x950		3160x1998x950	
Min dimensions with base module (LxHxD)	mm	1280x2548x950		1760x2548x950		2500x2548x950		3160x2548x950	

Available also for 60 Hz power supply



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ITALIAN
COOLING
SOLUTIONS



CHILLED WATER CRAC UNITS WITH UNDERFLOOR FANS

FCDR



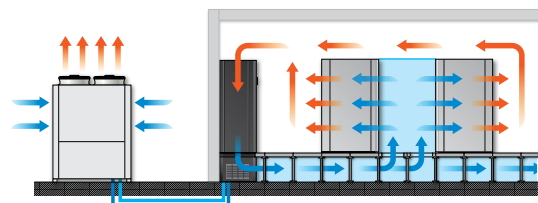
81 - 334 kW



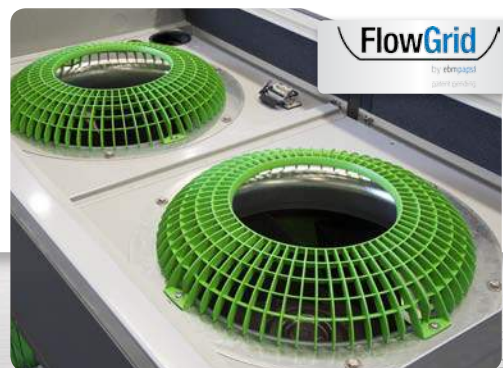
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CHILLED WATER CRAC UNITS WITH UNDERFLOOR FANS

IDEAL FOR FREE-COOLING SYSTEMS



FLOWGRID BY EBM-PAPST: EFFICIENCY AND LOW-NOISE LEVELS



FCDR'S FANS TAKE OFF WITH "E-WING"



HIGH SPECIFIC CAPACITY

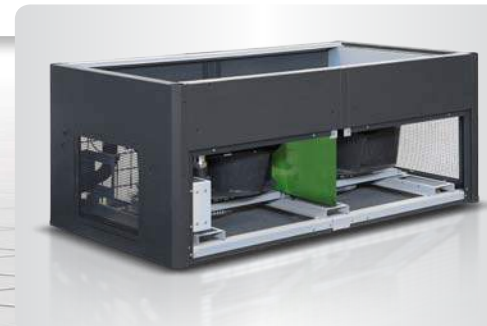


FCDRs are the brand new range of chilled-water air conditioners for high density computer rooms. With a specific aerodynamic analysis each component is designed to reduce the air pressure drops, thus to minimize the energy consumption by the fans, the only power input in the unit.

PAINSTAKING AERODYNAMICS



LOWEST PUE VALUES WITH THE "FREE-FAN" SOLUTION



The air flows through wider sections, as the base module containing the EC fans is separated from the rest of the unit, the "E-Wing" profile separates the airflows out of each fan and the EC motors provide a high-efficient modulation of the airflow.

The very low thermal approaches between chilled water and air increases the possibility of using indirect Free-Cooling, with further reductions to the system PUE and management costs.

- » Backward-curved blade fans with EC motors and plastic impeller EBM-PAPST Radical series
- » Double Δ -shaped coil with large exchange surface
- » Fan speed modulation according to the cooling demand (constant ΔT)
- » Fans are selected to maximize efficiency at low pressure conditions
- » Fan speed modulation according to the air-flow demand (constant Δp)
- » Double circuit version available
- » Quick electrical connections
- » Adjustable legs

