OPTIMA-HD

OPTIMA-HD is one type of precision air conditioners with high density cooling capacity by using chilled water, applicable to large and medium-sized data center and electronic equipment room. It has a wide range cooling capacity, high operating reliability and stability, the density of cooling capacity is up to 75kW/m² which can save a lot of space in equipment room. Equipped with EC fan, OPTIMA-HD has a high operating efficiency, precise control of temperature +/- 1°C, relative humidity +/-5% which can assure the reliable and stable environment of the data room.

There are three air flow schemes, up flow, down flow and front flow under rise floor can be provide to different needs of equipment room. Easily maintain from the front of the product.

OPTIMA-HD use chilled water as cooling resource for mechanical cooling or free cooling. The system has the characteristics of simple structure, reliable and save the operating expense .

OPTIMA-HD has two types: single circuit and dual circuits. Each circuit of dual circuits can be redundancy each other or work simultaneously or rotation between mechanical cooling and chilled water of free cooling.



Model		40B1	60B1	80B2	100B2	120B3	140B3	160B4	180B4	50D1	60D1	80D2	100D2	120D3	140D3
Circuit	CW: single circuit									CWD: double circuit					
Supply air scheme	O:Up flow; U:Down flow									U:Down flow					
Power source	380V-3Ph-50Hz									380V-3Ph-50Hz					
Cooling capacity(1)	kW	42.1	60.7	83.6	101.6	123.3	145.2	160.5	180.9	50.4	61.1	81.0	100.7	120.5	143.2
Water flow(1)	m³/h	7.2	9.6	14.2	17.3	19.5	24.7	26.3	28.4	7.7	9.6	12.7	14.8	17.9	22.0
Water pressure drop(1)	kPa	95	97	86	94	93.6	91.2	98.6	83.9	101.1	123.1	83.1	83.2	184.6	156.6
Supply fan															
Туре	EC Centrifugal Fan								EC Centrifugal Fan						
Qty. of fan	n.	1	1	2	2	3	3	3	3	1	1	2	2	3	3
Air volume	m³/h	11700	12600	22600	23600	31800	32600	37200	37200	11600	12300	23600	22800	31200	33600
Electric heater capacity	kW	9	9	13.5	13.5	18	18	18	18	9	9	13.5	13.5	13.5	13.5
Humidification capacity	Kg/h	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Width*Depth*Height(O/U)(2)	mm	900*900*	00*1960/1730 1750*900*1960/1730			2490*900*1960/1730 2905*900*1960/1			1960/1730	1250*900*1900		1750*900*1900		2560*900*1900	
Weight	Kg	375	405	525	560	670	750	840	910	380	405	465	490	580	640

⁽¹⁾ Return air dry bulb temperature 24 $^{\circ}$ C,RH50%,inlet/outlet chilled water temperature 7 $^{\circ}$ C/12 $^{\circ}$ C;

⁽²⁾ Excluding the height of return air plenum of up flow unit and supply air plenum of down flow unit.