

Commercial Heating

Product Information

CAHV-P500YA-HPB

Ecodan Air Source Heat Pump Boiler

Making a
World of
Difference



CAHV Monobloc Heat Pump Boiler System



Certificate Number: MCS HP0002
Product Reference: CAHV-P500YA-HPB



The Ecodan CAHV air source heat pump monobloc system can operate singularly, or form part of a multiple unit system. The CAHV also comes equipped with a wide range of controller features as standard.

A multiple unit system has the ability to cascade available units on and off to meet the load from a building. As an example of this modulation, a 16 unit system allows 0.5kW increments of capacity, from 18kW all the way up to 688kW. This level of modulation is unprecedented within the heating industry and with cascade and rotation built in as standard, the Ecodan CAHV system is perfectly suited to a wide range of commercial applications.

- Multiple unit cascade control of up to 688kW capacity
- Split refrigerant circuits within each CAHV provide 50% back up
- Ability to rotate units based on accumulated run hours
- Provides from 25°C up to 70°C water flow temperatures without boost heaters
- Low maintenance, hermetically-sealed monobloc design
- Low on-site refrigerant volume
- HIC (Zubadan) technology delivers 43kW at -3°C with minimal drop off down to -20°C



Air Conditioning | Commercial Heating
Domestic Heating | Photovoltaics



ecodan[®]
Renewable Heating Technology

MODEL		CAHV-P500YA-HPB	
Heating*1 (A7/W35)	Capacity (kW)	45	
	Power Input (kW)	10.9	
	Running Current [MAX] (A)	17.6 [52.9]	
	COP	4.13	
Heating*2 (A-3/W35)	Capacity (kW)	43	
	Power Input (kW)	15.2	
	Running Current [MAX] (A)	24.58 [52.9]	
	COP	2.80	
Water Pressure Drop*1 *2 (kPa)		18	
Temperature Range	Outlet Water Temperature	25-70°C	
	Outdoor Temperature D.B	-20-40°C	
Circulating Water Volume Range		7.5m³/h - 15.0m³/h	
Sound Pressure Level (measured in anechoic room)*1 at 1m (dBA)*3		59	
Sound Pressure Level (measured in anechoic room)*1 at 10m (dBA)*3		51	
Diameter of Water Pipe Connection mm(in)	Inlet	38.1 (Rc 1 1/2") screw	
	Outlet	38.1 (Rc 1 1/2") screw	
External Finish		Acrylic painted steel plate - MUNSELL 5Y 6/1 or similar	
Dimensions (mm)	Width	1978	
	Depth	759	
	Height	1710 (1650 without legs)	
Weight (kg)		526	
Electrical Supply		380-415v, 50Hz	
Phase		3	
Compressor		Inverter scroll hermetic compressor	
Refrigerant	Type x original charge	R407c x (5.5kg) x 2	
	Control	LEV and HIC circuit	

*1 Under normal heating conditions at outdoor temp: 7°CDB / 6°CWB, outlet water temp 35°C, inlet water temp 30°C as tested to BS EN14511.

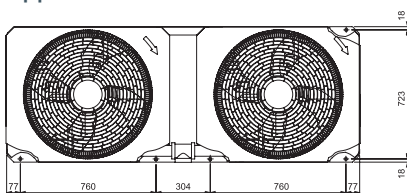
*2 Under normal heating conditions at outdoor temp: 3°CDB / -4°CWB, outlet water temp 35°C, inlet water temp 30°C.

*3 Sound power level 70.7dBA tested to BS EN12102.

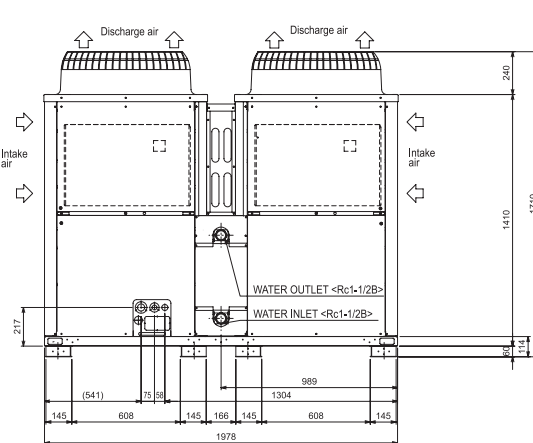
- Please don't use the steel material for the water piping material.
- Please always make water circulate or pull out the circulation water completely when not using it.
- Please do not use groundwater or well water.
- Install the unit in an environment where the wet bulb temperature will not exceed 32°C.
- The water circuit must be a closed circuit.

Schematics

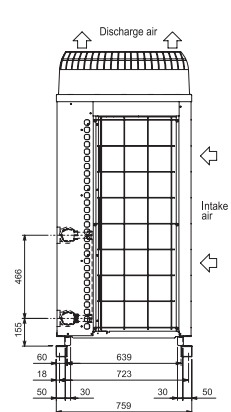
Upper View



Front View



Side View



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