Model:**CAHV-P500YA-HPB**

MITSUBISHI ELECTRIC
Changes for the Better

Job Name:	Location:
Drawing Reference:	Schedule No.
System No.:	Date:

Ecodan (Hot Water Heat Pump Unit)

GENERAL FEATURES

The Ecodan CAHV packaged hot water heat pump is designed to provide hot water up to 60°-70°C year round, making it an ideal replacement for a boiler system or, better still, an uncompromising method of heating sanitary hot water for commercial applications. This unit utilizes the unique flash injection technology as applied in the City Multi Hyperheat air conditioning product range.

Built in Heat Exchange Hot Water Heat Pump CAHV-500YA-HPB: Comes complete with an internal 316 stainless steel brazed plate heat exchanger. This allows for easy installation of connecting water pipes to where the hot water is required.

Ecodan Heat Pump ensures an exceptionally high level of reliability by utilizing “Backup Function*”. If either of the compressors malfunctions, the other compressor keeps operating to avoid a complete stop of the system. “Rotation Function” is also available. When two or more units are in the system, the unit runs alternatively to ensure an optimum product life cycle for both of it’s component units.

- Inlet or outlet water temperature control
- Temperature set point control by 0-10 V, 4-20 mA, 0-5 V or 2-10 V
- Pump interlock
- Error input or error output
- Can be connected and controlled by AG200 centralized controller

TECHNICAL SPECIFICATIONS

CAHV-P500YA-HPB

Power Supply: ..... 3-phase 4-wire 380-400-415 V 50/60 Hz

CAPACITY

kW	45
kcal/h	38,700
BTU/h	153,540
Power input | kW	25.6
Current input | A	43.17 - 41.01 - 39.53
COP (kW / kW)	1.76
Maximum current input | A	57.77 - 54.88 - 52.90
Water pressure drop	12.9kPa (1.87psi)

TEMPERATURE RANGE

Outlet water temperature	25~70°C, 77~158°F
Outdoor temperature | D.B	-20~40°C, -4~104°F
Circulating water volume range	7.5 m^3/h-15.0m^3/h

SOUND PRESSURE LEVEL (MEASURED IN ANECHOIC ROOM)

dB (A) 63

WATER PIPE DIAMETER AND TYPE

Inlet | mm (in.)	38.1 (Rc 1 1/2") screw pipe
Outlet | mm (in.)	38.1 (Rc 1 1/2") screw pipe
External finish	Acrylic painted steel sheet <Munsell 5Y 8/1 or similar>

EXTERNAL DIMENSIONS (HxWxD)

mm	1710 (1650 not including legs) x 1978 x 759
in	67.3 (65.0 not including legs) x 77.9 x 29.9
Net weight | kg (lb)	526 (1160)
Accessories	Y-strainer Rc 1 1/2

DESIGN PRESSURE

R407C | MPa	3.85
Water | MPa	1.0

HEAT EXCHANGER

Water side	Copper brazed stainless steel sheet
Air-side	Plate fins and copper tubes

COMPRESSOR

Type	Inverter scroll hermetic compressor
Manufacturer	MITSUBISHI ELECTRIC CORPORATION
Starting method	Inverter
Motor output | kW	7.5 x 2
Case heater | kW	0.045 X 2
Lubricant	MEL 32

FAN

Air flow rate | m^3/min	185 × 2
Air flow rate | L/s	3,083 × 2
Air flow rate | cfm	6,532 × 2
External static pressure	0 Pa (0 mm H2O)
Type and quantity	Propeller fan x 2
Motor output | kW	0.46 × 2
HIC (Heat inter-changer) circuit	Copper pipe

PROTECTION DEVICES

High pressure	High-pressure sensor and switch set at 3.85 MPa (643 psi)
Inverter circuit	Overheat and overcurrent protection
Compressor	Overheat protection
Fan motor	Thermal switch
Defrosting method	Auto-defrost mode (Reversed refrigerant circle)

REFRIGERANT

Type and factory charge | kg	R407C, 5.5 kg x 2
Flow and temperature control	LEV and HIC circuit

Measurements/Dimensions (H×W×D)

67.3 (without legs 65.0) × 77.9 × 29.9