



GENERAL

Climate Wizard air-conditioners operate with a high coefficient of performance and are characterized by the supply of cool fresh air that has had NO additional moisture added to the supply air stream, that is delivered at an extremely low energy cost. The air-conditioner has a supply air fan (dry air), a separate exhaust fan (moist air), an indirect heat exchanger core, integrated water reservoir and pumps, and is complete with all components for installation. Climate Wizard Air Conditioners comply with AS 2913-2000 where applicable and are capable of functioning continuously in ambient temperatures up to 55°C.

CABINET

The cabinet is constructed from a high UV stabilised grade of polymer, and has stainless steel and aluminium structural sub components, incorporating 2 motor/fan assemblies, non-corrodible heat exchange core and other ancillary equipment. There are universal attachment configurations for frame mounted roof top or level surface locations. Fork lift tine channels are provided within the base to facilitate transport, and crane lifting is accommodated via 2 built in shackle points at the top corners. Where appropriate, components are treated to provide corrosion resistance and mechanical fasteners are stainless steel, aluminium or zinc coated steel. An industry standard connection duct is provided for outlet supply air and an exhaust attenuation hood is also included.

FAN ASSEMBLIES

The fans are axial stickle-bladed air foil profiled impellor type. The fans are directly mounted to the electric motor shafts and the compete fan/motor assembly is isolated from the cabinet through rubber dampeners. The electric motors are high efficiency and have inverter drives that are responsive to pulse width modulation to implement speed control that delivers optimum efficiency at lower speed operation.

HEAT EXCHANGE CORE

The heat exchange cores are designed to facilitate heat exchange between the wet air passages and the dry air passages such that high efficiency heat transfer takes place without the addition of any additional moisture. They are designed to provide long life and consistent, long term high efficiency.

RESERVOIR

The reservoir is an integral part of the polymer cabinet to provide integrity of the structure and to ensure durability. The reservoir houses the drain pump, level control, chlorinator and salinity monitoring water management system. The system circulation pump and inlet water supply solenoid are external to the tank and are housed behind removable covers below the intake louver.

ELECTRICAL CABINET AND CONTROLS

Control equipment including supply connection terminals, motor control hardware, interface electronics, contactors, external control wiring and ancillary controls, are factory mounted and wired and contained within an approved enclosure.

The MagIQcool wall controller and MS1 BMS controller, including communication cable to the main control, are factory mounted and contained within a water and moisture resistant enclosure.

Both enclosures are located under a removable stainless steel cover above the supply outlet.

The air conditioner requires 220-240V 15Amp supply. It is recommended that the electrical contractor install an isolation switch adjacent the cooler.

WATER MANAGEMENT SYSTEM

The water supply connection is a $\frac{1}{2}$ " BSP fitting that connects directly to the externally mounted electric water solenoid. Core saturation is achieved through the circulation pump delivering water to a specially designed non-clog water distribution system fitted at the top of each bank of heat exchanger cores providing uniform flow across each core.

The pumps are manufactured from engineering plastics, with stainless steel shafts and fully encapsulated synchronous motors with thermal overload protection.

The air-conditioner is fitted ex-factory with an electronic water management system that controls the maximum salinity level of the reservoir water through monitoring the water conductivity and replenishment as determined by the control system. The air-conditioner is fitted with an electrically operated drain pump that responds to the water management control system.

AIR FILTER

Intake air is filtered through 6 washable pleated filters, protected by the intake louver at the front of the cabinet to minimise intrusion of rain. Also available are paper disposable filters.







WIRING CIRCUIT DIAGRAM

1 Phase, 220-240V / 50Hz supply













Specification		CW-P15				
	Electrical Supply (Aus/Eur) Voltage / Frequency / Current	220-240V 50/60Hz 1~ 11amps				
Services	Input Power	1.96kW				
	Water Supply	1/2" male BSP male connection. Min. 100kPa, Max 800kPa, 20L/min				
Environment	Max. Operating Temp	55°C ambient (shade)				
	Airflow @ High Speed	1100L/s @ 140Pa				
	СоР	12.2				
Porformanco	Evaporation Efficiency	104.4%				
renomiance	Max. External Static Pressure	250Pa				
	Nominal Cooling Capacity* kW (AS2913-2000)	9.7				
	Nominal Cooling Capacity* (ASHRAE 143) kW	23.7				
Fans	Forward curve type. Glass fibre reinforced polymer with 2 fans 397mm dia * 93mm v					
Motors	Diecast aluminium housing. ECM with PWM control and overload protection.	2 Variable Speed motors Input Power 900W (nominal) each				
	Max. Speed	2300 RPM				
Heat Exchanger Core	Indirect Evaporative	3 cores				
	Inlet 12V Solenoid	1/2" BSP male				
	Consumption	56 L/hr				
	Tank capacity	47 L				
	Pump - Circulation	50L/min @ 4.5m. Input power 125W, 230V/50Hz				
Water	Pump - Drain	20L/min @ 1m head. Input power 20W, 230V/50Hz				
	Drain Connection	Rubber coupling and hose clamp compatible with 1 1/2" (40mm) BSP barbed fitting or 40mm DWV pipe				
		Min. Internal dia. 38mm				
	Chlorinator	1 catalytic chlorine generator				
Air Filters	Type G4 Standard Industry Pleated panel, washable type	394 * 495 * 46mm Qty 6 Nominal Size 406 * 508 * 50mm				
	Shipping Dimensions	2050 L * 1500 W * 1420mm H				
Shipping	Operating Dimensions	1960 L * 1440 W * 1285mm H				
	Weight	259kg				
Waight	Operating Weight	335kg				
weight	Dry Weight	239kg				

*Tested in accordance with Australian Standards AS2913-2000 and ASHRAE 143 with conditions of 38.0 C Dry Bulb / 21.0 C Wet Bulb.

Frequency	Radiated Sound Power Level (dB re 1pw) Octave Band Centre Frequency								Total Sound Power
(Hz)	63	125	250	500	1k	2k	4k	8k	(dB re 1pw)
CW-P15	46	54.5	62.3	65.3	70.3	65.4	57.8	50.1	77.8





