



**Indirect evaporative air conditioning
100% outside air**



About Climate Wizard

Climate Wizard's unique indirect evaporative heat exchange core provides hyper-efficient cooling of outside air.

Generate **100% fresh, cool, outside air**, at temperatures that rival refrigerated systems, with up to **80% lower energy costs***.



Reduced running costs by up to 80%*

Reduce the energy use and improve the cooling performance of existing refrigerated systems

No high electrical demand charges even in hot weather

Savings on the installation costs



Temperatures are similar to those produced by refrigerated systems

Improved IAQ (indoor air quality) with 100% outside air

No moisture added to the air**

Total cooling performance increases when air temperature rises



Flexible design and engineering configurations

Ideal for use as a DOAS (dedicated outdoor air system), data centres cooling or for comfort cooling applications

Covers an exceptionally large range of flexible configurations in a wide range of industries

Supported by a team of experienced design consultants and engineers



Wiser use of water (R-718)

No synthetic refrigerants or chemicals to harm the environment



Simple, reliable solution to improve COP / EER (coefficient of performance / energy efficiency ratio)

Meets various regulatory requirements

NATA (National Association of Testing Authorities) accredited



Australian designed and made

Designed for easy maintenance

Easy access to spare parts

Regional offices to support export sales

After sales support

*Compared to refrigerated systems performing the same duty

** Climate Wizard Supercool (indirect/direct option) adds a small amount of moisture to the supply air

Standard product range

Climate Wizard

Indirect evaporative air conditioning

Dramatically reduces energy consumption and cooling costs compared to equivalent refrigerated systems



CW-H10

UP TO
20kW

- COP of up to 15
- Up to 20 kW of cooling capacity in outside air pre-cooling applications
- Up to 800 L/s (2,880 m³/h) supply air

CW-H15

UP TO
27kW

- COP of up to 15
- Up to 27 kW of cooling capacity in outside air pre-cooling applications
- Up to 1,100 L/s (3,960 m³/h) supply air



CW-80

UP TO
146kW

- COP of up to 15
- Up to 146 kW of cooling capacity in outside air pre-cooling applications
- Up to 6,400 L/s (23,000 m³/h) supply air

CW-80 Twin

UP TO
246kW

- COP of up to 13
- Up to 264 kW of cooling capacity in outside air pre-cooling applications
- Up to 11,800 L/s (42,480 m³/h) supply air

Climate Wizard Supercool

Indirect evaporative cooling with direct evaporative stage

Designed to maintain precise temperature and humidity levels – at very low operating costs



CW-H15S Plus

UP TO
32kW

- COP of up to 26
- Up to 47 kW of cooling capacity in outside air pre-cooling applications
- Up to 1,700 L/s (6,120 m³/h) supply air

CW-H15S



UP TO
47kW

- COP of up to 18
- Up to 32 kW of cooling capacity in outside air pre-cooling applications
- Up to 1,100 L/s (3,960 m³/h) supply air

Discover how CW-H15S is the ideal solution for winery barrel halls at climatewizard.com/angels-share



CW-80S

UP TO
182kW

- COP of up to 18
- Up to 182 kW of cooling capacity in outside air pre-cooling applications
- Up to 6,400 L/s (23,040 m³/h) supply air

Note: Nominal cooling capacity is based on design conditions of 36.1 °C db / 17.8 °C wb. Stand alone cooling capacity may be lower, depending on application.

Climate Wizard's unique design and performance features

Indirect heat exchange core

- Patented Climate Wizard counter-flow heat exchanger
- Uses indirect evaporative cooling to keep added moisture separate from the supply air stream
- Designed for long service life and consistent performance
- Provides maximum efficiency



Supply air fan and electric motor

- Backward curved, direct drive, plug fan
- Variable speed ECM (electronically commutated motor) for maximum energy efficiency
- Ultra-quiet, vibration free



Supply air pressure damper

- Regulates air pressure in the discharge plenum
- Used to control exhaust flow in the wet channels
- Provides simple, positive capacity control



*Applicable to CW-H10 and CW-H15 models only.

Tornado® water pump

- Australian designed and manufactured
- Exceptional reliability under all conditions
- Includes 'clever impact start' feature that will overcome any tendency for the pump to become locked up with residue during prolonged off periods
- The strong synchronous motor has constant speed, independent of voltage fluctuations, and runs very cool for long life



Water reservoir

- One piece moulded polymer construction
- Durable and corrosion free
- Provides excellent sound deadening properties
- Sloped to prevent standing water when drained



Water management system

- Custom designed water management system minimises water consumption and maximises cleanliness
- Continuously monitors and controls the water salinity level in the reservoir
- Controls water cleanliness using a factory installed electro-chlorinator
- Manages water distribution for minimum water consumption and maximum cooling efficiency
- Drains the water system during prolonged idle periods
- Alarms if low water levels are detected



Automatic drain valve

- Part of the water management system
- Controlled to manage water quality and maximise system efficiency
- Drains the reservoir during prolonged idle periods



Climate Wizard Supercool

With Climate Wizard Supercool, the moisture content can be fine-tuned to specifications, required for different applications, from data centres to wineries.



Chillcel high efficiency evaporative pad

- High efficiency, direct-evaporative cooling pad
- Produces an ultra-low leaving air temperature with minimal additional moisture
- Designed to maximise the space cooling capacity of Climate Wizard Supercool
- Increases supply airflow

Drip tray

- Part of the independent water collection system for the direct evaporative section
- Corrosion free and self-draining



Water distributor

- The water distributor delivers a calibrated volume of water to efficiently Supercool the unit's leaving air
- A dedicated pump and water distributor are used to independently water the direct evaporative media to maximise versatility
- The system uses tried and true technology, developed over many years by Seeley International
- Designed to prevent clogging and evenly water the direct evaporative media



CW-H15

Cabinetry

- Powder coated, marine grade aluminium
- Weather proof and corrosion resistant
- Mechanical fasteners are stainless steel or aluminium

Filter system

- Intake air is filtered through replaceable pleated filters
- The assembly includes:
 - a safety screen to protect the fan
 - a cover to minimise intrusion of rain



Wall controller

- Wall controller and a 20 m plugged control cable, factory supplied
- Can be configured for thermostatically controlled VAV (variable air volume) cooling or constant volume cooling
- Configured to respond to BMS (building management system) start-stop inputs applied at the unit controller
- Can be replaced by direct BMS inputs applied directly to the unit mounted control board



Electronic control module

- Advanced electronics programmed for maximum efficiency
- Controls unit operation to minimise water consumption and maximise efficiency
- Can be configured to accept external BMS system inputs to control system operation (while retaining control of water management and system efficiency)
- Smart, reliable, durable



Technical specifications

	Climate Wizard		
	CW-H10	CW-H15	CW-80
Nominal cooling capacity*	20 kW	27 kW	146 kW, pre-cooling outside air
Rated airflow	800 L/s (2,880 m³/h) at 0 - 215 Pa	1,100 L/s (3,960 m³/h) at 0 - 190 Pa	6,400 L/s (23,000 m³/h) supply, 5,240 L/s (18,860 m³/h) exhaust at 100 Pa external static pressure
Max. external static pressure	215 Pa	190 Pa	250 Pa
Max. inlet air temperature	55 °C	55 °C	55 °C
Power requirement	1.4 kW	1.8 kW	Input power - 10.0 kW at rated airflow
Electrical supply	3-phase, 380-480 V, 50/60 Hz	3-phase, 380-480 V, 50/60 Hz	3-phase, 380-480 V, 50/60 Hz
Water supply	20 L/min delivered at 100 kPa min, 800 kPa max	20 L/min delivered at 100 kPa min, 800 kPa max	80 L/min delivered at 100 kPa min, 800 kPa max (External in-line filtration recommended)
Supply air configuration	Side discharge	Side discharge	Side discharge
Supply fans	Backward curved centrifugal fan with direct coupled EC motor	Backward curved centrifugal fan with direct coupled EC motor	2 x Backward curved centrifugal fan with direct coupled EC motor
Exhaust fans	Not required	Not required	4 x Backward curved centrifugal fan with direct coupled EC motor
Pump	Water circulation pump	Water circulation pump	Water circulation pump
Low voltage catalytic chlorinator	2 chlorinators; salinity probe	2 chlorinators; salinity probe	2 chlorinators; salinity probe
Drain valve	Low voltage, vertical, electric drive	Low voltage, vertical, electric drive	Low voltage, vertical, electric drive
Counter-flow Heat exchange core	2 x Climate Wizard patented counter-flow heat exchange cores	3 x Climate Wizard patented counter-flow heat exchange cores	16 x Climate Wizard patented counter-flow heat exchange cores
Air filtration	G4 pleated washable filters with metal frames	G4 pleated washable filters with metal frames	16 x G4 pleated washable filters with metal frames size 625 mm x 625 mm x 45 mm
Water reservoir	One piece, moulded polymer, 45 L	One piece, moulded polymer, 65 L	One piece, moulded polymer, 300 L
Dimensions	1985 mm (L) x 1230 mm (W) x 1170 mm (H)	1985 mm (L) x 1825 mm (W) x 1170 mm (H)	3,800 mm (L) x 2,570 mm (W) x 3,600 mm (H)
Shipping weight	180 kg	220 kg	2,160 kg
Operating weight	225 kg	265 kg	2,620 kg
Controller options	Wall controller, BMS interface	Wall controller, BMS interface	BMS interface, BACnet (optional)

Note: specifications subject to change. *Based on design conditions of 36.1 °C db / 17.8 °C wb. Stand alone cooling capacity may be lower, depending on application.

Climate Wizard Supercool

CW-80 Twin	CW-H15S	CW-H15S winery configuration	CW-80S
264 kW, pre-cooling outside air	47 kW	32 kW	182 kW, pre-cooling outside air
11,800 L/s (42,480 m³/h) supply, 9,650 L/s (34,740 m³/h) exhaust at 100 Pa external static pressure	1,700 L/s (6,120 m³/h) at 0 - 120 Pa	1,100 L/s (3,960 m³/h) at 0 - 140 Pa	6,400 L/s (23,040 m³/h) supply, 5,240 L/s (18,864 m³/h) exhaust at 40 Pa external static pressure
250 Pa	80 Pa	140 Pa	200 Pa
55 °C	55 °C	55 °C	55 °C
Input power - 20.0 kW at rated airflow	1.8 kW	1.8 kW	Input power - 10.0 kW at rated airflow
3-phase, 380-480 V, 50/60 Hz	3-phase, 380-480 V, 50/60 Hz	3-phase, 380-480 V, 50/60 Hz	3-phase, 380-480 V, 50/60 Hz
120 L/min delivered at 100 kPa min, 800 kPa max (External in-line filtration recommended)	20 L/min delivered at 100 kPa min, 800 kPa max	20 L/min delivered at 100 kPa min, 800 kPa max	80 L/min delivered at 100 kPa min, 800 kPa max (External in-line filtration recommended)
Top discharge	Side discharge	Side discharge	Side discharge
4 x Backward curved centrifugal fan with direct coupled EC motor	Backward curved centrifugal fan with direct coupled EC motor	Backward curved centrifugal fan with direct coupled EC motor	2 x Backward curved centrifugal fan with direct coupled EC motor
8 x Backward curved centrifugal fan with direct coupled EC motor	Backward curved centrifugal fan with direct coupled EC motor	Backward curved centrifugal fan with direct coupled EC motor	4 x Backward curved centrifugal fan with direct coupled EC motor
Water circulation pump	Water circulation pump	Water circulation pump	Water circulation pump
2 chlorinators; salinity probe	2 chlorinators; salinity probe	2 chlorinators; salinity probe	2 chlorinators; salinity probe
Low voltage, vertical, electric drive	Low voltage, vertical, electric drive	Low voltage, vertical, electric drive	Low voltage, vertical, electric drive
32 x Climate Wizard patented counter-flow heat exchange cores	3 x Climate Wizard patented counter-flow heat exchange cores	3 x Climate Wizard patented counter-flow heat exchange cores	16 x Climate Wizard patented counter-flow heat exchange cores
32 x G4 pleated washable filters with metal frames size 625 mm x 625 mm x 45 mm	G4 pleated washable filters with metal frames	G4 pleated washable filters with metal frames	16 x G4 pleated washable filters with metal frames size 625 mm x 625 mm x 45 mm
One piece, moulded polymer, 300 L	One piece, moulded polymer, 65 L	One piece, moulded polymer, 65 L	One piece, moulded polymer, 300 L
6,600 mm (L) x 2,570 mm (W) x 3,600 mm (H)	1985 mm (L) x 1825 mm (W) x 1170 mm (H)	1985 mm (L) x 1825 mm (W) x 1170 mm (H)	3,800 mm (L) x 2,570 mm (W) x 3,600 mm (H)
4,320 kg	230 kg	230 kg	2,185 kg
5,149 kg	280 kg	280 kg	2,665 kg
BMS interface, BACnet (optional)	Wall controller, BMS interface	Wall controller, BMS interface	BMS interface, BACnet (optional)