

Case study

McDonalds
Pimpama, Queensland



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Seeley International consistently wins awards each year for new product design, innovation and the environment





Next generation, indirect evaporative air conditioning CW-P15

Climate Wizard is the global leader in delivering hyper-efficient cooling technology that covers an exceptionally large range of flexible configurations in a wide range of industry applications.

The latest Climate Wizard model provides new installation advantages, to optimise rooftop footprint and provide more install options.

HYPER-EFFICIENT BENEFITS

- Extend the life of existing refrigerated systems
- Improve the cooling performance of refrigerated equipment
- Cooling performance increases when air temperature rises
- Vastly reduce cooling costs (retrofit or new install)
- Improve the IAQ (Indoor Air Quality) with 100% fresh outside air
- No moisture added (dry air cooling)*
- Flexible design and engineering configurations

NEW FEATURES

- UV-Proof Polymer shell and structure for withstanding extreme weather conditions
- Integrated air filtration system with options for disposable or washable pleated panel filters
- Easy-lift crane lifting points
- Curb-mount or frame-mount installation options
- Can be installed side-by-side on either side, all maintainable components can be accessed front or back
- Horizontal discharge for exhaust air

This hyper-efficient technology comes fully supported by an experienced team of Climate Wizard design consultants and engineers to help you design your specific application.

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



McDonald's Store Pimpama, Queensland

McDonald's Pimpama benefits from energy-efficient solution that also delivers fresh air to the store

The McDonald's franchisee at Pimpama was looking for an energy-efficient solution for their store operating 24/7. The design brief stated that the ambient temperatures at Pimpama could reach 33.5°C dry bulb/ 26°C wet bulb, with roof temperatures exceeding 45°C dry bulb, as the client required consistent cooling for a pleasant indoor environment.

The Climate Wizard technology offered a superior energy efficiency ratio over standard refrigerated cooling systems. It also allowed for conditioned fresh air to be delivered directly to staff work stations and to public areas.

Two Climate Wizard model CW-P15 air conditioners were installed; one servicing the kitchen work stations while the other servicing the burger bar and front of house area. Comfortable temperatures were maintained with fresh air supplied directly to the required areas.

Climate Wizard works in conjunction with the refrigerated cooling systems, reducing the heat load from fresh air while not adding any moisture to the conditioned air. This meant reduced operational costs to the McDonald's franchisee coupled with the ability to maintain comfortable environment inside the store for its customers and its staff.

With such a positive feedback, more McDonald's franchisees will be considering upgrading their cooling systems to include Climate Wizard.

PROJECT BENEFITS INCLUDE:

- Dramatic reduction in energy consumption
- Fast payback on installation
- Retrofit or new installation
- Engineered to humid climates
- Low maintenance cost and long life equipment

CW-P15 TECHNICAL SPECIFICATIONS

- Exceptional NATA (ISO 17025) certified cooling performance
- High efficiency inverter drive fan motors
- Proven water management system
- Thermostatic automatic or manual operation
- Sound reduction options available
- Economy mode or return air path
- Easy installation
- Australian designed and manufactured
- Full safety approvals
- Analogue and Modbus BMS interface as standard
- Touch screen MagIQtouch Controller, wall controller or switch plate



MAGIQTOUCH CONTROLLER



WALL CONTROLLER



CW-P15

McDonalds Pimpama Case Study

Nominal cooling capacity*	25 kW
Rated airflow	1,150 L/s (4,140 m ³ /h) at 100 Pa
Max. external static pressure	200 Pa
Max. inlet air temperature	55 °C
Power requirement	2.0 kW
Electrical supply	1-phase, 200-240 V, 50 Hz
Water supply	20 L/min delivered at 100 kPa min, 800 kPa max
Supply air configuration	Side discharge
Supply fans	1x sickle-bladed, airfoil profiled impeller with directly coupled inverter motor
Exhaust fans	1x sickle-bladed, airfoil profiled impeller with directly coupled inverter motor
Water circulation pump	1 x 240V electric pump
Water management	Low voltage catalytic chlorinator and salinity probe
Drain valve	1 x 240V electric pump
Heat exchanger core	3 x Climate Wizard patented counter-flow heat exchanger cores
Air filtration	6 x G4 disposable pleated panel filters, sized 394 x 495 x 44mm or 6 x G4 washable filters with metal frames, sized 394 x 495 x 44mm
Water reservoir	One piece, moulded polymer, 47 L
Dimensions	1960mm (W) x 1430mm (L) x 1285mm (H)
Shipping weight	239 kg
Operating weight	335 kg

Note: specifications subject to change. *Tested in accordance with ASHRAE 143 conditions of 38.0 °C db / 21.0 °C wb. Stand alone cooling capacity may be lower, depending on application.



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We provide full technical support to ensure optimal design for each application.

