



The only evaporative cooler  
in the UK with published  
BSRIA performance results

ENERGY SAVING

# Cooling Technology

11,000 m<sup>3</sup>/hr air flow  
as tested by BSRIA\*

High performance  
Techo 1.3kw motor

Approved by  
Carbon Trust 



**CLEAN AIR**  
group



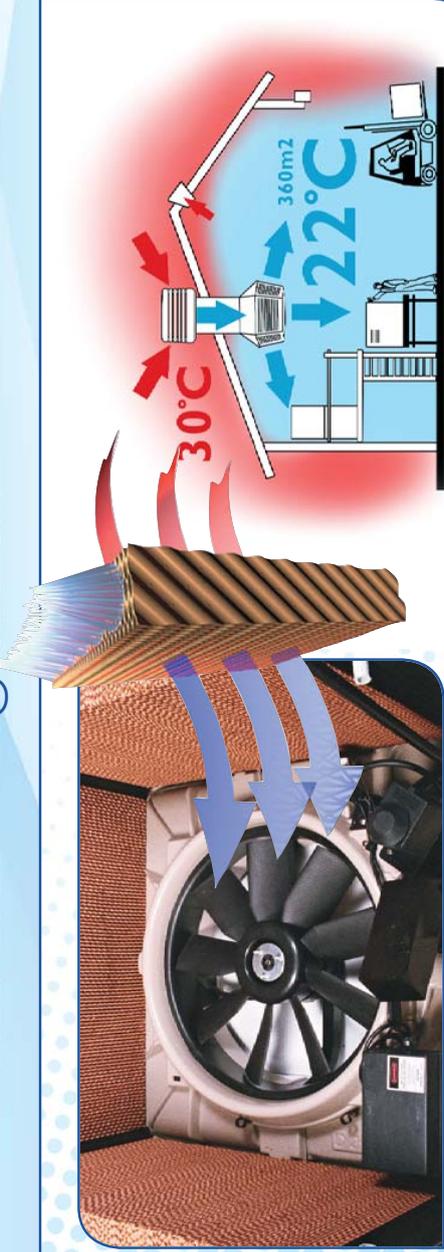
**COOL BREEZE**  
**QAD230**

\* BSRIA test report 53152/1, August 2009

Simple Technology at its most effective

### Why Evaporative cooling?

- can lower internal temp of 360m<sup>2</sup> by up to 16°C
- very low capital, install and running cost
- environmentally friendly, no CFCs
- filters out airborne contaminants
- constant flow of naturally cooled 100% fresh air
- can be used with doors and windows open
- approx. 80% less power consumption than air con
- easy installation and spot cooling capability
- quiet operation



### Cool Breeze QAD230: factors determining performance

#### FAN MOTOR



Manufactured by Techo Australia. The motor features quality Japanese bearings with ultra high temperature grease with a protected bearing life in excess of 30,000 hours. The overall motor

#### FAN DUTY



The QAD230 features a unique powerflow fan with "golf ball" dimpled blades which increases fan efficiency and air flow. At typical velocities of 1.7m/sec, the pressure drop

#### CELLULOSE PADS



The QAD230 utilises a long-life, self supporting cellulose pad, impregnated with anti-rot salts, rigidifying saturates and wetting agents, with unique alternating, transverse flutes at different angles. The design creates highly turbulent mixing between cooling water and air, enhancing evaporative

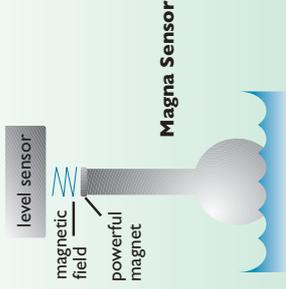
#### SYSTEM CONTROL



The new control system gives industry-leading system management. Features of the new controller include:

- operator friendly
- fault diagnosis
- optional remote

#### WATER MANAGEMENT



Electronic regulation of water level by measurement of 'magnetic hall effect' gives a consistent water level accurate to within 1mm. No adjustment required, no rubber washers to wear or probes to corrode. The computer controlled water management system with patented Magna Sensor drain valve is vastly

#### BUILD



The QAD230 housing, internal mouldings and sump are made from advanced BSF

### Key Features

- > direct axial flow fan system
- > pre-start wash of pads
- > after use auto rinse cycle
- > end of cycle drain
- > adjustable water change
- > gravity drain valve
- > exhaust mode
- > 11 litre sump
- > durable polymer construction
- > powerflow fan
- > magna-sensor auto water level
- > water management system

### How evap cooling works

Air is blown over water held in saturated cellulose pads. As it evaporates it absorbs heat which is carried away and so the surrounding temperature falls. The temperature of air is reduced proportionally to the amount of evaporation that takes place, with a maximum theoretical dry bulb reduction equivalent to the difference between prevailing wet and dry bulb temperatures.

### Clean Air Group

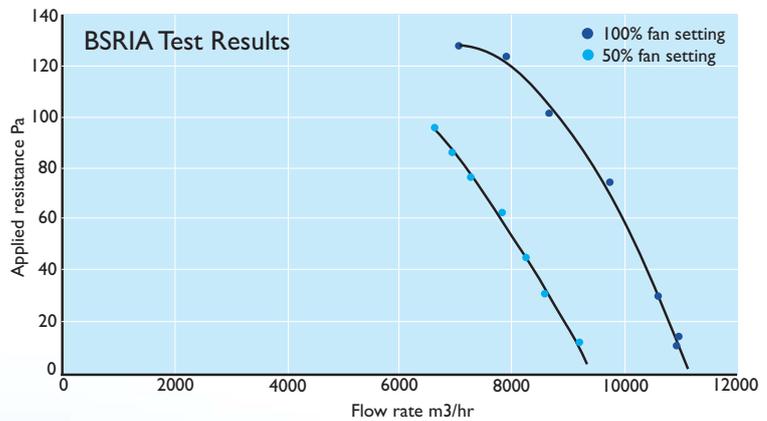
Clean Air Group are sole UK distributors of Cool Breeze, manufactured by AirGroup one of Australia's largest manufacturers of evaporative cooling units. For over twenty years the Clean Air Group has built a reputation for delivering on their promises. We will help ensure that the investment you make is both cost effective and fit for purpose. We undertake all aspects of each project, including calculations of cooling and heating loads, production of CAD drawings, full project management and pre-install surveys.

### Specifications

### QAD230

Motor	Voltage		220-240
	Thermal Overload		AUTO
	Watts	Watts High/Low	1270/680
	Insulation		F Class
Motor	Motor	Amp Draw High/Low	5.6/2.9
	Capacitor-uf	RPM High/Low	1400/850
			30
Fan	Fan	Powerflow Fixed Pitch	YES
Pump	Pump	Performance	26lpm
	Thermal Overload	UL certified	YES
	Insulation	Amps/Watts	C Class
	Power at 1mtr head		.37/66
	RPM at 1mtr head		2550
Water	Inlet Connection		1/2" BSP
	Drain		19mm/40mm
	Tank Capacity	Litres	10-12 ltrs
	Water Level		Magna Sensor
Performance	Design Air Flow	m3/hour	11000
	Calculated with all pads installed		
	Performance Capacity	Kw (Cooling)	15
Dimensions	Size	Depth/Width	1090x1090
		Height	850
	Weight	Dropper Size	550x550
		Shipping kg	56.5
	Operating kg	69	
Filter Media	Celdek		
	No. of Pads		4
	Size	Height/Width/Depth	830/650/100mm
Noise	dBA	Measured at 1m High	65dBA
		Measured at 1m Low	53dBA

### QAD230 Applied resistance vs flow rate



**our promise**  
the right solution  
installed on time  
without disruption  
and within budget



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