

The **Breezair**[™]
TBA Series

The intelligent
evaporative air cooler



Breezair[™]
Advanced natural cooling

Let nature do the work

The beauty of **evaporative cooling** is its **simplicity**. It is a process which has been utilised for hundreds of years. The Arabs hung wet blankets in the entrances of their tents and the Greeks placed terracotta pots filled with water in their doorways.

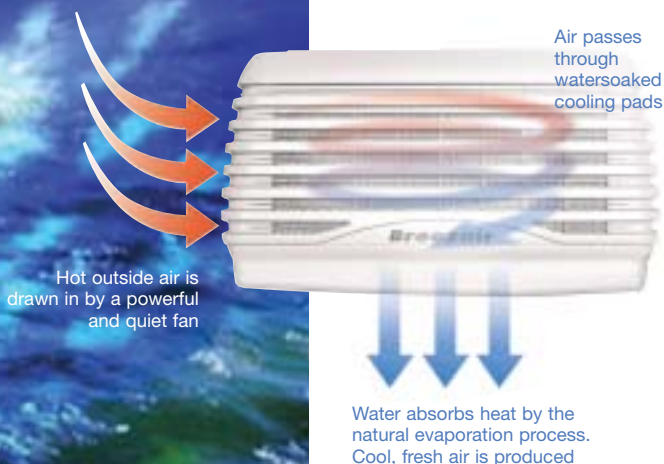


This process occurs naturally whenever water and hot air come into contact. Natural

evaporation takes place which absorbs the heat and cools the hot air by several degrees.

How does an evaporative cooler operate?

Each Breezair cooler contains large cooling pads and during the operating cycle these pads are kept constantly wet. Hot ambient air is drawn into the Breezair cooler by a quiet, powerful fan. The air passes through the water soaked pads and the water absorbs some of the heat by the natural evaporation process, resulting in a cool, refreshing breeze. This combination of a reduced temperature and constant air flow produces a more comfortable working environment, thus improving morale, absenteeism, production and ultimately productivity.



The Breezair™ TBA Series

The Breezair TBA series revolutionises the concept of fixed direct drive evaporative coolers. Both functionally and aesthetically the TBA 550 cooler sets new standards in advanced design, incorporating the clever use of modern injection moulding technology.

Intelligently designed with installers and end users in mind; its ease of installation and the flexibility of its control system configuration; make it more user friendly than any competitive cooler in the market today.

Seeley International is a world leader in Axial polymer fan technology and their latest state-of-the-art fan offers impressive airflow and performance characteristics.

Innovative use of materials and state of the art components provides comfort cooling at economical prices into a variety of applications.

Innovative state of the art technology

What makes Breezair shine above all others as an innovative world-class evaporative air conditioning system is the investment made in developing next generation features. For over 30 years Breezair has been synonymous with leading-edge technology, innovative design and superior cooling.

Led by the state of the art Breezair TBA Series fan design, the Breezair TBA Series technology also boasts a host of other world-class features.

Plastic Super-powerful fan

- Registered design with leading-edge technology
- Manufactured in 100% glass reinforced polypropylene
- Aerodynamically designed blades ensure smooth airflow



Tornado Pump

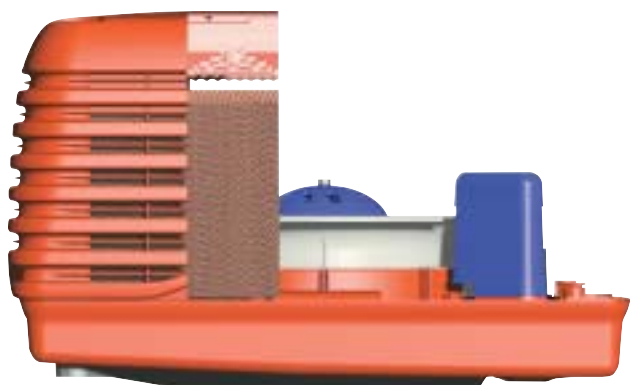
- Exceptional reliability in extreme conditions
- Australian designed & manufactured



AQUAflow™ non-clogging water distribution

- Unique water flow distributor (patented worldwide by Breezair)
- Fully balanced and continuous water distribution to all the Chillcel™ cooling pads
- Maintains perfect pad saturation - maximising cooling efficiency





Cabinet

- Non fading
- Non discolouring
- UV resistant
- Non rusting

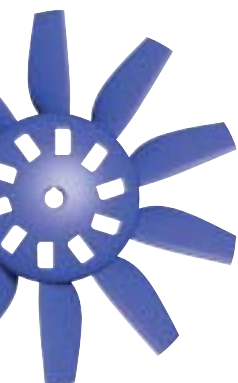
Automatic duct closure (AutoWeatherseal)

- Activates when the cooler is not in operation
- Prevents dust and dirt from accumulating in winter
- Stops the “chimney effect”- prevents hot air from escaping or cold air ingress from outside



Totally Enclosed fan motor

- Specially designed for optimum efficiency in a moisture laden space
- Tropicalised with an additional insulation process ensuring a longer service life



Control Power Module

- Advanced electronic controls ensure that the TBA operates at optimum efficiency at all times
- Microprocessor constantly analyses water quality, water consumption and power output
- Smart, reliable & durable



Clean and Dry function

- Automatic water draining when cooler not in use
- Prevents algae growth
- Maintains clean machine



Long Life Chillcel™ cooling pads

- Breezair unique Chillcel™ pads provide maximum cooling
- Honeycomb design optimises the cooling effect
- Durable design outlasts competitive products



The intelligent choice

Evaporative cooling is usually the only viable option when cooling large areas. A Breezair system consumes up to **80% less energy** than a conventional air conditioning system. Doors and windows can be left open with absolutely no loss in cooling efficiency, the air is **100% fresh**, with no risk of recirculation fumes,



germs or odours and most importantly as the ambient temperature rises, the more cooling you get inside –

the fundamental benefit of the evaporative process.

If you only need to cool small areas within a large space then evaporative cooling provides you with the only effective option - **spot cooling**. An envelope of cool, high velocity air can be directed to a specific area irrespective of the surrounding conditions.

- **More energy efficient**
- **Cleaner, healthier air**
- **Easier and cheaper to install**
- **Improves productivity**
- **Friendlier to the environment**
- **Easier to maintain**



Technical specifications

Specifications	TBA 550	
Airflow	High Speed at 80pa L/sec (m ³ /h)	3010 (10840)
Cooling Capacity*	kW	14.7
Power Consumption (total)	Watts	1360
Fan	Diameter mm	541
Motor	Type	PSC
	Speed rpm	1360/var
	Rating Watts	950
	Current amps	5.6
	Capacitor uF	30
	Voltage(±10%)Phases/Hz	230/1/50
	Overload	Auto reset
Pump	Enclosure	IP 35
	Type	Centrifugal Encapsulated Synchronous 2 pole
	Rating (input) Watts	40
	Flow Rate L/Min	19 @ 1.2m head
	Overload	Auto reset
Cooling Pad Chillcel™	Enclosure rating	IP x 4
	Size mm	525 x 850 x 90 (4pcs)
	Pad Area m ²	1.8
	Velocity m/sec	1.7
Water	Capacity litres	23
	Drain mm	40 (Configurable to local regulations)
Shipping	Dimensions (inc pallet) mm	1150 x 1150 x 902 (H)
	Volume m ³	1.2
	Mass Kg	66
	Operating Kg	89
Connecting Duct (raw edged)	Length x Width mm	550 x 550

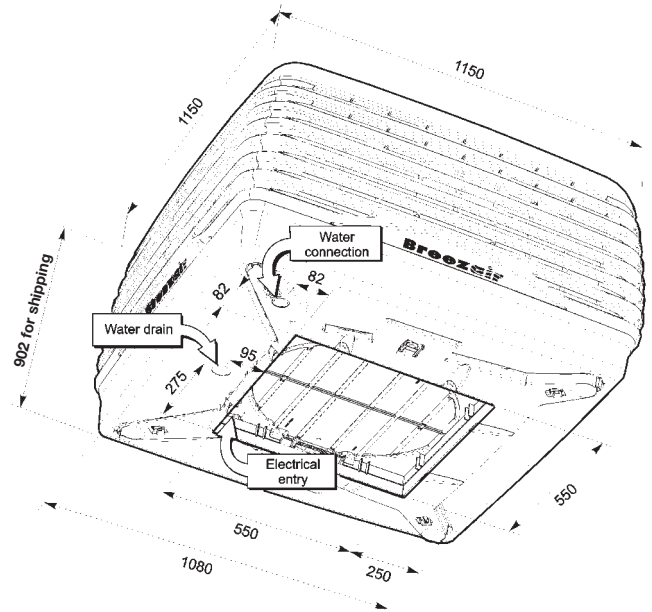
*Cooling capacity calculated to Australian standard AS 2913 - 2000, ambient of 38°C dry bulb & 21°C wet bulb, with room exit temperature of 27.4°C

Cooler Discharge Air Temperature Chart

Ambient Dry Bulb Temperature	Ambient Relative Humidity %								
	10	20	30	40	50	60	70	80	90
°C									
10	3.3	4.0	4.8	5.6	6.4	7.2	8.0	8.6	9.4
15	6.6	7.8	8.8	9.8	10.8	11.7	12.6	13.4	14.3
20	10.1	11.4	12.8	13.9	15.2	16.2	17.2	18.2	19.2
25	13.4	15.0	16.6	18.0	19.4	20.6	21.8	22.9	24.0
30	16.6	18.6	20.4	22.0	23.6	25.0	26.4	27.7	28.9
35	19.8	22.2	24.2	26.2	28.0	29.6	31.0	32.4	33.7
40	23.0	25.6	28.1	30.4	32.3	33.9	na	na	na
45	25.9	29.2	32.0	34.4	na	na	na	na	na
50	29.0	32.7	35.8	na	na	na	na	na	na

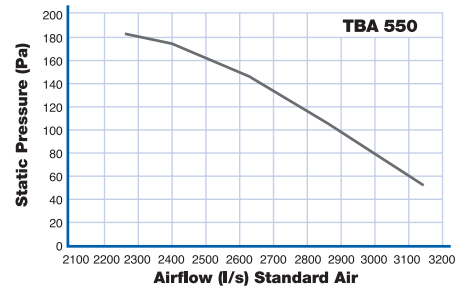
This chart represents approximate air temperatures based on 80% saturation efficiency at sea level. From tests carried out to Australian Standard 2913

Cabinet Details



Note: All dimensions are in mm

Fan Curves



Our Company has a policy of continuous product development and therefore reserves the right to make changes to these specifications without notice



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