

Super Stealth

COMMERCIAL & INDUSTRIAL

TBSi 580

# THE WORLD'S COOLEST, QUIETEST AND MOST ENERGY EFFICIENT EVAPORATIVE COOLER



Introducing the advanced **MAGI@TOUCH** Next generation smart controller

Breez

SEELEY S

# THE BREEZAIR TBSI SERIES: INVERTER AXIAL HIGH PERFORMANCE EVAPORATIVE COOLER

## COOL WORKING ENVIRONMENTS WITH EASE

Breezair TBSI boasts the most advanced features available in evaporative air conditioners. It's led the market in its class for many vears – and still remains the most efficient and quietest available. Breezair features a range of benefits exclusive to Seelev International – while delivering 100% fresh, cool, outside air at much lower costs than refrigerated cooling methods.

#### HIGHLY DURABLE AND NON-CORROSIVE **CABINET AND WATER RESERVOIR**

High performance Permatuf® polymer construction will not corrode or rust.

#### **EXCEPTIONAL WATER DISTRIBUTION INCREASES COOLING EFFECT**

This Australian designed, world patented, free flow, water distributor ensures constant, even pad saturation increasing the cooling effect and outperforming competitor products.

#### **AUTO WEATHERSEAL**

The AUTO Weatherseal closes the cooler air discharge outlet automatically, thus significantly reducing natural air currents from circulating in and out of the building. The result - a more comfortable and controlled environment.

#### DIGITAL SMARTBOX™

The Smartbox<sup>™</sup> digital control module monitors and controls all of the cooler's features to provide ultimate comfort conditions, temperature sensing and water quality supervision - completely safely and reliably.



- Exceptional reliability in extreme conditions
- Dual directional it can't block!

# MAG I Q TOUCH (Additional Cost) TOUCH SCREEN TECHNOLOGY

Smart, sophisticated and incredibly intuitive, your MaglQtouch® controller makes operating your Breezair, a breeze. Control the temperature, fan speed and many more features on a user friendly touch screen.



**MAGIQTOUCH®** wired controller

Touch screen, wall mounted controller wired to your home or building



**MAGIQTOUCH®** wireless controller (Radio Frequency) Optional

Use the latest in Radio Frequency (RF) channel hopping technology with no need for wiring





## **BREEZAIR GUARANTEE**

For complete peace of mind, Breezair backs every one of its air conditioning systems with an industry leading comprehensive guarantee program. Refer to your owner's manual for all service and guarantee terms and conditions.

#### **INVERTAIR™ INVERTER MOTOR**

- Ensures long term performance and incredible reliability of your system
- Variable speed motor offers maximum control over comfort level and uses far less energy than a standard fan and motor
- Motor has been tested by a Nationally Recognized Testing Laboratory. ETL Listed to Standard for Electric Fans (UL-507)

#### SUPERSTEALTH® FAN

SuperStealth® axial fan is specifically designed to be more energy efficient and quiet

#### **FLEXIBLE COOLING**

If you need to cool small areas within a large space, then spot cooling is an effective option. It offers an envelope of cool, high velocity air that can be directed to a specific area, irrespective of the surrounding conditions.

#### BREAKTHROUGH BLACK OPAL<sup>™</sup> MINI-CELL CHILLCEL<sup>®</sup> PAD TECHNOLOGY

- The only evaporative cooling medium of its kind. Fully manufactured in Australia. It's an **absolute out-performer!**
- Exclusive small cell design provides cutting-edge cooling capacity.
- Maintains our global leading Mini-Cell Chillcel<sup>®</sup> pad technology, which increases surface area of the pads by 25%, dramatically multiplying cooling capacity and efficiency - BEYOND BELIEF!
- BLACK OPAL<sup>™</sup> MINI-CELL CHILLCEL<sup>®</sup> pads deliver transformational aesthetics to your home enabling the unit to blend seamlessly into its surroundings.

#### WATERMANAGER™ SAVES WATER

- Uses the minimum amount of water to achieve high efficiency cooling
- Water quality monitoring to maximise water savings



#### AUTO WATER DRAINING KEEPS YOUR SYSTEM CLEAN

- Empties the reservoir automatically when system is not in use, leaving it clean and dry
- . Ensures the system is operating at maximum efficiency, while using the minimum amount of water
- Helps to avoid the seasonal maintenance\* as required by some other similar products

\*Seasonal maintenance does not replace regular maintenance of the unit as required for peak performance.

## OPTIONAL EXTRAS MAGIQTOUCH® AIR SENSORS

# SEELEY

#### Internal Air Sensor

A remote temperature and humidity sensing module.

Enables the MaglQtouch<sup>®</sup> Controller to be mounted in a convenient location (e.g. control room or living area), while still sensing air from the conditioned office area.

#### External Air Sensor

Intuitively optimizes water and energy usage based on outside ambient conditions and displays current outside temperature.

Sensing module automatically drains the water tank when temperature nears freezing.

## COOLER CONNECTIVITY

Operate multiple coolers from a single MaglQtouch® controller, using optional link module and wiring loom – no special controllers required!

For all connectivity options, please refer to the installation manual.



## **TBSi** Technical Information

Specification		TBSi 580				
Airflow	Industry standard (cfm)	10,000				
Cooling capacity*	0.3 IWG (BTU/hr)	62,700				
Power consumption (total)	Watts max	1500				
	Current max (amp)	7.0				
Power supply	Voltage / Phases / Hz	200-240 / 1 / 60				
Controller	Туре	Digital				
Fan	Туре	Axial				
	Diameter (mm)	534				
Motor	Туре	Inverter				
	Speed max (rpm)	1700				
	Rating (Watts)	950				
	Current (amp)	5.5				
	Voltage / Phases / Hz	200-240 V / 1 / 60				
	Overload	Two 'one shot' fuses				
Pump	Туре	Centrifugal				
	Motor	Synchronous				
	Rating Watts (input)	30				
	Flow rate (gal/min)	4.4 @ 3.9 ft head				
	Voltage / Phases / Hz	200-240 / 1 / 60				
	Overload	Thermal One Shot				
	Enclosure rating	IP X4				
Cooling pad Chillcel	Size (inches)	33½" x 20¾" x 4¾" x 4" pads				
	Pad area (ft2)	19.3				
Water	Tank capacity (gal)	6				
	Inlet (inches)	1⁄2" male BSP				
	Drain (mm/inches) Configurable to local requirements	40mm / 1½" male BSP				
Shipping	Dimensions including pallet (inches)	45¼" x 45¼" x 35½" (H)				
	Volume (ft3)	42				
	Mass (lbs)	150				
	Operating (lbs)	201				
Connecting duct (raw edged)	Length x width (inches)	215%" x 215%"				

#### **Typical installation**

Drain outlet	1 $\%^*$ BSP to $\%^*$ OD Reducer piece designed for push-on use with a flexible hose ( $\%^*$ ID) or solid PVC pipe ( $\%^*$ ID)
Water inlet	$\mathscr{V}_2^*$ BSP to $\mathscr{H}^*$ Nom or $\mathscr{V}_2^*$ BSP to $\mathscr{H}^*$ compression adapter pieces
Electrical	1/2" Flexible conduit
Install kit	The kit consists of MaglQtouch wall control, 65' wiring loom, auto drain valve and plumbing fittings (supplied as standard inside cooler).

### **Cooler Discharge Air Temperature Chart**

		Ambient Relative Humidity %								
		10	20	30	40	50	60	70	80	90
ш.	50	37	38	40	42	43	45	46	47	49
e	60	43	46	47	50	52	53	55	57	58
eratu	70	50	53	55	58	60	62	64	66	68
dwa	80	56	60	63	66	68	71	73	76	78
E a	90	62	66	70	74	77	80	83	85	88
LY BI	100	68	73	78	82	85	89	92	95	N/A
ut D	110	74	80	85	90	94	N/A	N/A	N/A	N/A
mbie	120	80	87	93	98	103	N/A	N/A	N/A	N/A
A	130	86	94	101	106	N/A	N/A	N/A	N/A	N/A

This chart represents approximate air temperatures based on 87% saturation efficiency at sea level from tests carried out to Australian Standard 2913. TBSi has been tested by the Nationally Recognized Testing Laboratory. ETL List to Standard for Electric Fans (UL-507).

# **TBSi 580**



CABINET DETAILS											
Model#	Α	В	C	D	E	F	G	Н	1	1	K
TBSi 580	45 ¼	45 ¼	33	42 1/2	21 7⁄8	9 ¾	21 7⁄8	10 3⁄4	3 3⁄4	3 ¼	3 ¼
Note: All dimensions are in inches.											



AIRFLOW (CFM)

	Industry STD	Motor	Certified Air Delivery (CFM) (static pressure inches water)							
Model#	Rating CFM	I H.P	0.0	0.2	0.4	0.6	0.8	1.0		
TBSi 580	10,000	1 1⁄4	7200	6780	6120	5360	4560	3370		

#### **Sizing Instructions**

Use the Certified Air Delivery performance tables and the following procedure to properly size a Seeley International evaporative cooling unit for your application.

The performance or Cooling Capacity of an evaporative cooler is a function of both the air flow (CFM) and air discharge temperature.

Static pressure, or duct system resistance, also impacts on air delivery and should be considered to correctly size the cooling unit.

#### 1. Determine design Conditions

Outside Dry-Bulb (DB) Outside Wet-Bulb (WB) Inside Dry-Bulb (TI)

2. Determine the design Sensible Heat Load (Btu/h)

3. Determine the Cooler Leaving Air Temperature (LAT) LAT = DB - [(DB-WB) EFF] where EFF = 0.87 for Chillcel media 4. Determine the CFM required <u>CFM=0.925 x Sensible Heat Load</u> (TI –LAT)

5. Determine the cooler(s) required by referring to the air flow charts above.



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Information in this brochure was correct at the time of preparation. E & OE





