

# Breezer By SEELEY INTERNATIONAL Supercool

# **SUBMITTAL DATA SHEET - TBSI580**

| lob Name:   | Location:   |  |  |  |  |  |
|---|---|--|--|--|--|--|
| Contractor:   | Project Manager:  |  |  |  |  |  |
| Superintendent:   | Subcontractor:  |  |  |  |  |  |
| Purchaser:  | Order No:   |  |  |  |  |  |
|   |   |  |  |  |  |  |
| Engineer:   | Project Manager:  |  |  |  |  |  |
| Submitted To: For:  | Approval: Construction:   |  |  |  |  |  |
| Submitted By:   | Submitted By:   |  |  |  |  |  |
|   | Mechanical Schedule ID/Tag Number:  |  |  |  |  |  |
| Cooling Performance   | Standard Features   |  |  |  |  |  |
| Outdoor Design Temp: °F DB °F WB                                | Fresh, outside air for better indoor air quality (IAQ).   |  |  |  |  |  |
| Elevation Above Sea Level: FT                                   | No chemical refrigerants or ozone depleting chemicals.  |  |  |  |  |  |
| Supply Air Ext. Static Pressure: IWG Total                      | Low maintenance, simple winterization.  |  |  |  |  |  |
| Supply Air @ Full Speed: CFM                                    | Water Management System controls mineral build up.  |  |  |  |  |  |
| Supply Air Temperature: °F DB                                   | Quiet and vibration free operation.   |  |  |  |  |  |
| Supply Air Added Humidity: °F WB                                |   |  |  |  |  |  |
|   | Easy to connect power/control wiring.  Digital smart box control module for reliable and  |  |  |  |  |  |
| W   | economical operation.   |  |  |  |  |  |
| Water Specifications  Water Supply Line Pressure: 35 - 115 PSIG | Wall mounted MaglQtouch® Controller with 65ft control cable.  Superstealth™ Fan with "Invertair" inverter variable speed motor. |  |  |  |  |  |
| Inlet Connection: ½" BSP to 3/8" or                             |   |  |  |  |  |  |
| ½" BSP to ¼"  | Black Opal™ Mini-Cell^ Chillcel® Pad technology, 5 year delamination guarantee.   |  |  |  |  |  |
| Drain Connection: 1 ½" BSP to ¾" OD Reducer                     | "Aquaflow" non-clogging water distribution system.  |  |  |  |  |  |
| Water Tank Capacity: 6 gal @ normal max. op. level              | "Permatuf®" corrosion-proof cabinet and drain pan.  |  |  |  |  |  |
|   | 25 year corrosion-free cabinet guarantee.   |  |  |  |  |  |
|   | 10 year structural components guarantee.  |  |  |  |  |  |
|   | Auto Weatherseal barometric dampers close when unit is off.   |  |  |  |  |  |

^ patent pending

Corrosion resistant Tornado™ pump for reliable and

Made in Australia from local and imported parts.

**T** ETL Listed to Standard for Electric Fans (UL-507).

Corrosion resistant trouble-free operation.

✓ 3 year limited warranty.





## **TECHNICAL SPECIFICATIONS - TBS1580**

#### **GENERAL SPECIFICATIONS:**

## **CABINET and WATER RESERVOIR**

The cabinet and water reservoir components are injection moulded structural foam polypropylene (Permatuf®). The cabinet and reservoir are UV stabilised and corrosion free. The major components clip together without additional fasteners.

#### FAN

The Superstealth fan is a multi blade assembly constructed of glass reinforced polypropylene. The blades are aerofoil shaped. The fan is mounted directly to the motor shaft by means of a set screw.

#### **FAN MOTOR**

The fan motor is a single phase inverter motor, with die-cast fully enclosed aluminium frame. The motor and fan assembly are supported on an injection moulded glass reinforced ABS venturi ring via a glass reinforced polypropylene motor mount. The fan motor is fitted with a polarised plug for quick removal and replacement.

#### AutoWinterseal™

The AutoWinterseal™ consists of two semi-circular, polypropylene blades, hinged and counterbalanced, to open automatically when the fan is activated, and to close when the fan is switched off. Latching is by magnets to steel striker plates.

## **MAIN CONNECTION DUCT**

The main connection duct must incorporate a raw edge or safe edge to avoid fouling of the AutoWinterseal<sup>TM</sup>.

#### **ELECTRICAL CONTROL**

The electrical control box is pre-wired within the cooler. A 6'7" long power supply cord is supplied as standard on all models. Provision is included for plug-in connection of drain valve and solenoid kits. A 10 amp anti-surge fuse is fitted to the underside of the enclosure.

## THERMOSTAT CONTROL

TBSI model coolers feature the MagIQtouch® Controller, for full automatic control. Connection of the Controller to the control box is via the 65' low voltage cable supplied. Hard wired and RF options available.

#### **WATER CONNECTION**

Water supply connection is via a flexible connector which is terminated with a 1/2" BSP to 3/8" or 1/2" BSP to 1/4" compression adapter piece. An isolating valve must be fitted adjacent to the cooler for service. A drain-down facility is required in areas subject to freezing.

The pump is a centrifugal type with encapsulated windings and is an ETL Recognised Component to product standard UL778.

The patented water distribution system is an integral part of the lid, and can be readily viewed from the top by removing the pad frame assembly.

#### **COOLING PADS**

Cooling filter pads are Black Opal<sup>TM</sup> Mini-Cell<sup>^</sup> Chillcel<sup>®</sup> fabricated, honeycomb, high efficiency type.

## **SPECIAL FEATURES**

Supercool TBSI series coolers are available in "Slate Grey" and are ETL listed to product standard UL507.

^patent pending

#### AIR FLOW PERFORMANCE SUMMARY

| Model   | Industry<br>Standard<br>CFM | ord Motor (HP) | Air Flow (CFM) versus Inch Water Gauge (IWG) |      |      |      |      |      |      |
|---------|-----------------------------|----------------|--|------|------|------|------|------|------|
|         |                             |                | 0  | 0.1  | 0.2  | 0.3  | 0.4  | 0.5  | 0.6  |
| TBSI580 | 10000                       | 1 1/4          | 7200   | 6990 | 6780 | 6480 | 6120 | 5740 | 5360 |

It is a policy of Seeley International to introduce continual product improvement. Accordingly specifications are subject to change without notice.

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# **TECHNICAL SPECIFICATIONS - TBS1580**

| Specification               | TBS1580   |                       |  |  |  |
|-----------------------------|---|-----------------------|--|--|--|
| Airflow                     | Industry Standard (CFM)                         | 10,000<br>6480        |  |  |  |
| Airiow                      | Actual @ 0.3 IWG (CFM)                          |                       |  |  |  |
| Cooling Capacity*           | BTU/hr  | 62,780                |  |  |  |
| Evaporative Efficiency      | Percentage (%)                                  | 91.5                  |  |  |  |
| Dawas Canaumatian           | Power Max (W)                                   | 1500                  |  |  |  |
| Power Consumption           | Current - Rated (A)                             | 7.0                   |  |  |  |
| (total)                     | Energy Efficiency Ratio (EER)                   | 12.3                  |  |  |  |
| Power Supply                | Voltage / Phases / Hz                           | 200-240/1/60          |  |  |  |
| Controller                  | Туре  | Digital               |  |  |  |
| F                           | Туре  | Axial                 |  |  |  |
| Fan                         | Diameter - External (inch)                      | 21.1                  |  |  |  |
|                             | Туре  | Inverter              |  |  |  |
|                             | Speed Max (rpm)                                 | 1700 VAR              |  |  |  |
|                             | Output Max (HP)                                 | 1 1/4                 |  |  |  |
| Motor                       | Output Max (W)                                  | 950                   |  |  |  |
|                             | Current Max (A)                                 | 6.3                   |  |  |  |
|                             | Overload  | One Shot Fuse         |  |  |  |
|                             | Enclosure Rating                                | IP24                  |  |  |  |
|                             | Туре  | Centrifugal           |  |  |  |
|                             | Motor   | Synchronous           |  |  |  |
|                             | Power - rated (A)                               | 0.5                   |  |  |  |
| Pump                        | Flow Rate (gal/min)                             | 5.5                   |  |  |  |
|                             | Voltage / Phases / Hz                           | 200-240/1/60          |  |  |  |
|                             | Overload  | Thermal One Shot Fuse |  |  |  |
|                             | Enclosure Rating                                | IPX4                  |  |  |  |
|                             | Size (inch)                                     | 33 ½ x 20 ¾ x 4 ¾     |  |  |  |
| Cooling Pad Chillcel        | Olze (men)                                      | (4 pads)              |  |  |  |
|                             | Pad Area (ft <sup>2</sup> )                     | 19.2                  |  |  |  |
|                             | Tank Capacity (gal)                             | 6.1                   |  |  |  |
| Water                       | Inlet (inch)                                    | ½" male BSP           |  |  |  |
|                             | Drain (inch) Configurable to local requirements | 1½" male BSP          |  |  |  |
|                             | Dimensions (inch)                               | 45 ¼ x 45 ¼ x 35 ½H   |  |  |  |
| Shipping                    | Volume (ft³)                                    | 42.4                  |  |  |  |
| Fr8                         | Mass - Shipping (lb)                            | 157                   |  |  |  |
|                             | Operating (Ib)                                  | 207                   |  |  |  |
| Connecting Duct (raw edged) | Length & Width (inch)                           | 21 % x 21 %           |  |  |  |

<sup>\*</sup> Cooling capacity measured to Australian Standard AS2913-2000, ambient of 100.4°F dry bulb & 69.8°F wet bulb, with room exit temperature of 81.3°F.

| Model     | Speed | Radiated Sound Power Level (dB(A) re 1pW) Octave Band Centre Frequency |       |       |      |      |      |      | Total Sound Power |  |
|-----------|-------|--|-------|-------|------|------|------|------|-------------------|--|
| Model Spe | Speeu | 125Hz  | 250Hz | 500Hz | 1kHz | 2kHz | 4kHz | 8kHz | dB(A) re 1pW      |  |
| TBSI580   | 10    | 58   | 63    | 69    | 71   | 70   | 62   | 52   | 76                |  |



Air flow performance has been measured in accordance with Australian Standard AS2913:2000 "Evaporative Air Conditioning Equipment" by Meridian Laboratories Pty Ltd

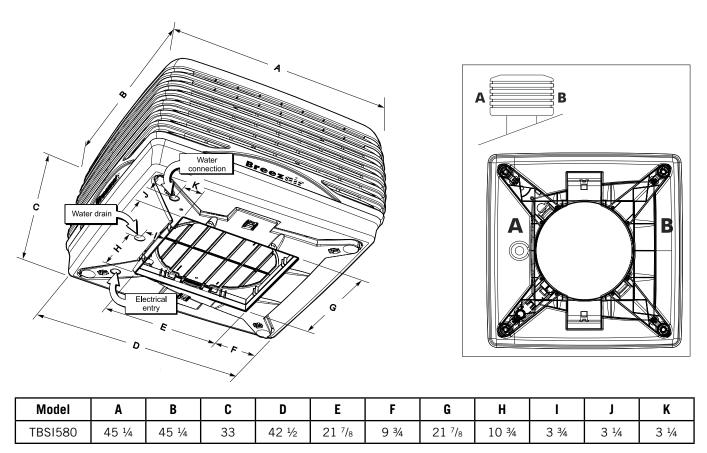
\*Meridian Laboratories is registered by the National Association of Testing Authorities, Australia. The tests reported herein have been performed in accordance with its terms of registration. Registration No.: 3697

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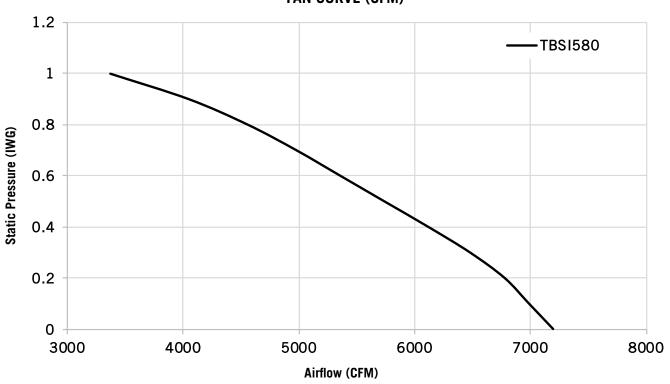


# **TECHNICAL SPECIFICATIONS - TBS1580**



Dimensions are in inches.

# FAN CURVE (CFM)



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