

## SUBMITTAL DATA SHEET - CTA500

Job Name:

Contractor:

Superintendent:

Purchaser:

Engineer:

Submitted To: For:

Submitted By:

Location:

Project Manager:

Subcontractor:

Order No:

Project Manager:

Approval: Construction:

Submitted By:

Mechanical Schedule ID/Tag Number:

### Cooling Performance

Outdoor Design Temp: °F DB °F WB

Elevation Above Sea Level: FT

Supply Air Ext. Static Pressure: IWG Total

Supply Air @ Full Speed: CFM

Supply Air Temperature: °F DB

Supply Air Added Humidity: °F WB

### Water Specifications

Water Supply Line Pressure: 35 - 115 PSIG

Inlet Connection: 1/2" BSP to 3/8" or  
1/2" BSP to 1/4"

Drain Connection: 1 1/2" BSP to 3/4" OD Reducer

Water Tank Capacity: 6 gal @ normal max. op. level

### Optional Features

Installation / Adaptor Kit\* for Purge Pump\*\*

\* Purge Pump not supplied

\*\* Suitable aftermarket 115V Purge Pumps  
Dial Power Clean (1540 or 1541)  
MasterCool CM120 or MCP44

### Standard Features

- Fresh, outside air for better indoor air quality (IAQ).
- No chemical refrigerants or ozone depleting chemicals.
- Low maintenance, simple winterization.
- Bleed-off Tray controls mineral build up.
- Quiet and vibration free operation.
- Easy to connect power/control wiring.
- Completely enclosed fan motor excludes moisture ingress.
- Black Opal™ Mini-Cell^ Chillcel® Pad technology, 3 year delamination guarantee.
- "Aquaflow" non-clogging water distribution system.
- "Permatuf®" corrosion-proof cabinet and drain pan.
- 10 year corrosion-free cabinet guarantee.
- 10 year structural components guarantee.
- Corrosion resistant Tornado™ pump for reliable and trouble-free operation.
- Made in Australia from local and imported parts.
- ETL Listed to Standard for Electric Fans (UL-507).
- 2 year limited warranty.

^ patent pending

## TECHNICAL SPECIFICATIONS - CTA500

---

### 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 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

Single phase, permanent split capacitor (P.S.C.) motor with die-cast fully enclosed aluminium frame. The capacitor is also located on top of the motor. The motor and fan assembly are supported on an injection moulded glass reinforced ABS venturi ring via a glass reinforced polypropylene motor mount.

#### ELECTRICAL ENCLOSURE

Fully enclosed DIN rail allows easy connection of pre-existing or new wiring. 3 separate DIN rail mounted fuses for motor and pump protection are supplied and can be easily replaced.

#### WATER CONNECTION

Water supply connection is terminated with a ½” BSP to ¾” or ½” BSP to ¼” 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™ Mini-Cell^ Chillcel® fabricated, honeycomb, high efficiency type.

#### SPECIAL FEATURES

CTA500 coolers are available in “Beige” and are ETL listed to product standard UL507.

<sup>\*</sup>patent pending

### AIR FLOW PERFORMANCE SUMMARY

| Model  | Industry Standard CFM | Motor (HP) | Speed | Air Flow (CFM) versus Inch Water Gauge (IWG) |      |      |      |      |      |      |
|--------|-----------------------|------------|-------|--|------|------|------|------|------|------|
|        |                       |            |       | 0  | 0.1  | 0.2  | 0.3  | 0.4  | 0.5  | 0.6  |
| CTA500 | 8500                  | 1 ¼        | High  | 7070   | 6780 | 6460 | 6120 | 5740 | 5340 | 4890 |
|        |                       |            | Low   | 5170   | 4530 | 3690 | 2710 | 1800 | 1230 | -    |

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

## TECHNICAL SPECIFICATIONS - CTA500

| Specification               |                                    | CTA500                       |
|-----------------------------|------------------------------------|------------------------------|
| Airflow                     | US Industry Standard (CFM)         | 8500                         |
|                             | Actual @ 0.3 IWG (CFM)             | 6120                         |
| Cooling Capacity*           | BTU/hr                             | 44,020                       |
| Evaporative Efficiency      | Percentage (%)                     | 85.0                         |
| Power Consumption (total)   | Power Max (W)                      | 1330                         |
|                             | Current - Rated (A)                | 14                           |
|                             | Energy Efficiency Ratio (EER)      | 9.7                          |
| Power Supply                | Voltage / Phases / Hz              | 115/1/60                     |
| Controller                  | Type                               | Not Supplied                 |
| Fan                         | Type                               | Axial                        |
|                             | Diameter - External (inch)         | 21.1                         |
| Motor                       | Type                               | PSC - 2 Speed                |
|                             | Speed Max (rpm)                    | 1650 / 1250                  |
|                             | Output Max (HP)                    | 1 ¼                          |
|                             | Output Max (W)                     | 950                          |
|                             | Current Max (A)                    | 13 / 6.5                     |
|                             | Capacitor (uF/V)                   | 60/250                       |
|                             | Overload                           | Auto Reset & One Shot Fuse   |
| Pump                        | Type                               | Centrifugal                  |
|                             | Motor                              | Synchronous                  |
|                             | Power - rated (A)                  | 0.7                          |
|                             | Flow Rate (gal/min)                | 5.5                          |
|                             | Voltage / Phases / Hz              | 115/1/60                     |
|                             | Overload                           | Thermal One Shot Fuse        |
| Cooling Pad Chillcel        | Size (inch)                        | 33 ½ x 20 ¾ H x 3 ½ (4 pads) |
|                             | Pad Area (feet²)                   | 19.2                         |
| Water                       | Tank Capacity (gal)                | 6.1                          |
|                             | Inlet (inch)                       | ½" male BSP                  |
|                             | Drain (inch)                       | 1½" male BSP                 |
|                             | Configurable to local requirements |                              |
| Shipping                    | Dimensions (inch) including pallet | 45 ¼ x 45 ¼ x 35 ½ H         |
|                             | Volume (feet³)                     | 42.4                         |
|                             | Mass - Shipping (lb)               | 148                          |
|                             | Operating (lb)                     | 198                          |
| Connecting Duct (raw edged) | Length & Width (inch)              | 21 ⅝ x 21 ⅝                  |
|                             |                                    | or<br>19 ¾ X 19 ¾ Adaptor    |

\* 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.

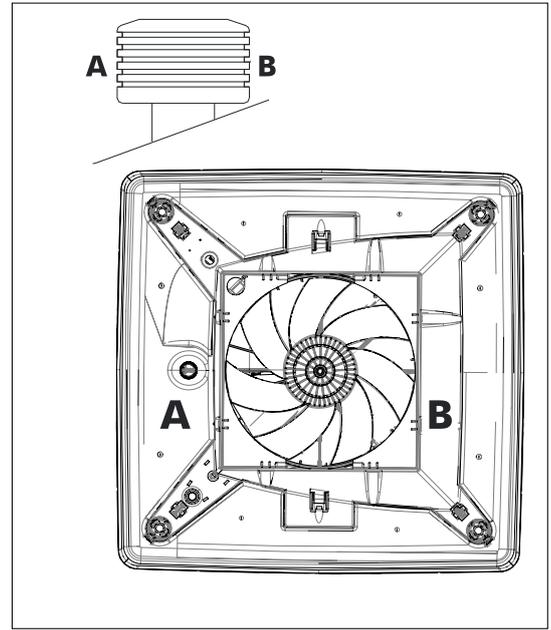
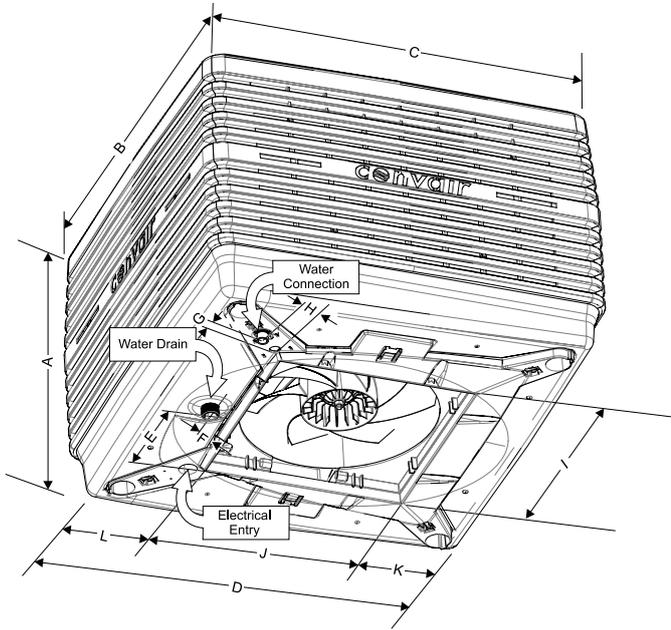
| Model  | Speed | Radiated Sound Power Level (dB(A) re 1pW) Octave Band Centre Frequency |       |       |      |      |      |      | Total Sound Power dB(A) re 1pW |
|--------|-------|--|-------|-------|------|------|------|------|--------------------------------|
|        |       | 125Hz  | 250Hz | 500Hz | 1kHz | 2kHz | 4kHz | 8kHz |                                |
| CTA500 | High  | 57   | 58    | 64    | 70   | 68   | 61   | 53   | 73                             |



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

**TECHNICAL SPECIFICATIONS - CTA500**



| Model  | A  | B      | C      | D      | E      | F     | G     | H     | I      | J      | K     | L  |
|--------|----|--------|--------|--------|--------|-------|-------|-------|--------|--------|-------|----|
| CTA500 | 33 | 45 1/4 | 45 1/4 | 42 1/2 | 10 3/4 | 3 3/4 | 3 1/4 | 3 1/4 | 21 7/8 | 21 7/8 | 9 3/4 | 11 |

Dimensions are in inches

**FAN CURVE (CFM)**

