

TECHNICAL SPECIFICATIONS - RPSI

GENERAL SPECIFICATIONS:

RPSI Series Evaporative coolers are designed to supply evaporatively cooled or ventilation air and are produced in 2 different capacities to suit a variety of installation requirements.

CABINET

The cabinet is constructed from marine grade aluminium, incorporating channel section corner pillars, mounted on a heavy gauge base frame for structural stability. Many components are powder coated for extra corrosion protection. Cabinet fasteners are stainless steel, aluminium or zinc plated for extra corrosion protection. The cooler is available in three (3) different discharge orientations – Down (D), Side (S) and Top (T). Side and Top configuration are supplied with a flexible duct connector.

All coolers are available in “Basalt” grey.

FAN & MOTOR

The fan is a forward curved centrifugal blower and moulded from plastic. The fan scroll is moulded from plastic for corrosion protection. The motor is electronically commutated permanent magnet, incorporating sealed ball bearings. The motor rotor is external to the stator and is injection moulded from glass reinforced fire resistant polymer. For safety, the motor is fitted with auto re-set overload protection.

WATER RESERVOIR

The water reservoir is a single piece rotational moulded tank made from polyethylene, providing a thick walled, robust and corrosion free component.

COOLING PADS

The cooler is fitted with either Chillcel® (C) fabricated, honeycomb, high efficiency filter pads or Aspen (A) shredded wood wool fibre pads (RPSI2800 only). Pads are located in moulded plastic UV stabilised louvres to enhance the appearance of the unit, protect the pads and minimize water splash.

ELECTRICAL

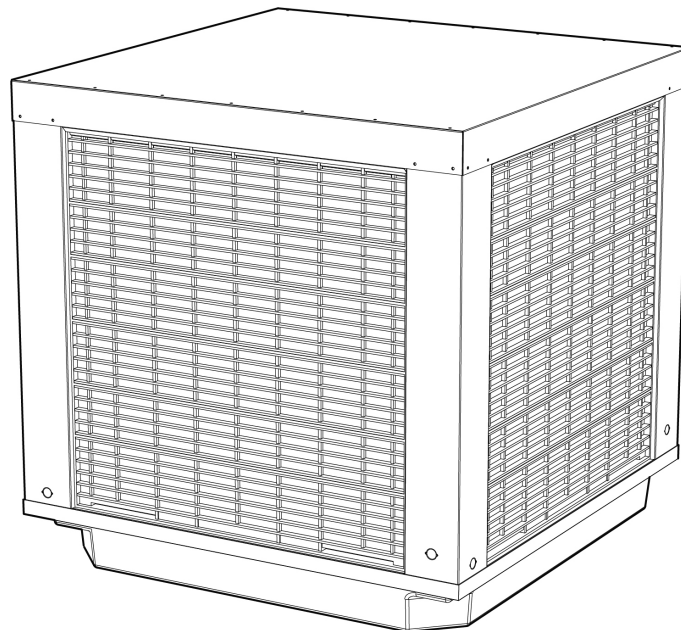
The electrical control box is pre-wired within the cooler and incorporates an isolating switch. A 4m long power supply cord is supplied as standard on all models. Provision is included in the control box for plug-in connection of drain valve and solenoid kits.

CONTROL

All RPSI model coolers are compatible with the full range of Seeley MagIQtouch and MagIQcool wall controls. Connection of the wall control to the cooler is via a 20m low voltage cable. Wi-Fi, RF, BMS and Switch Plate control options are also available.

WATER

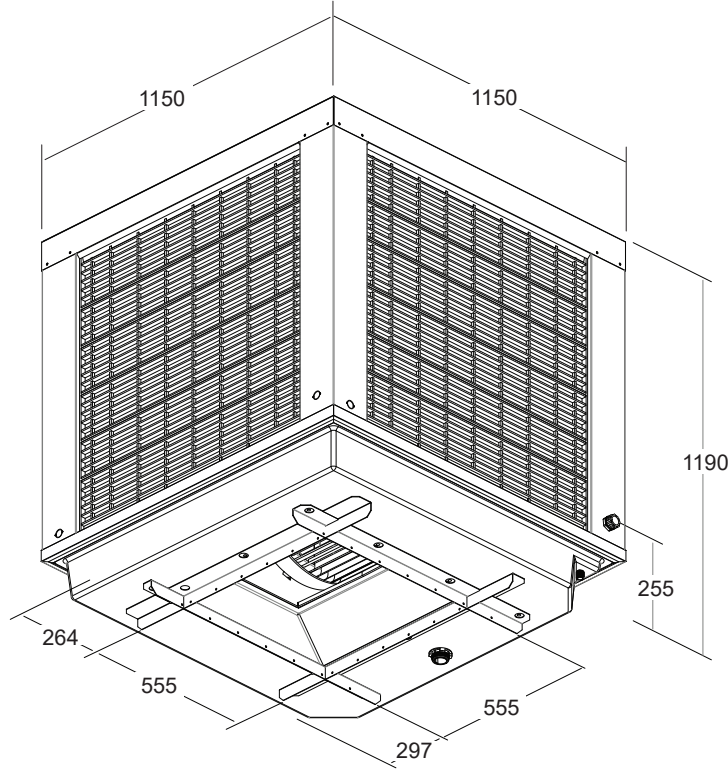
Water supply connection is 1/2” BSP. A float valve is used to control water level in the cooler. The cooler is fitted with a bleed system to control water salinity in the unit and an overflow is provided to allow the unit to be connected to drainage. Optional Water Manager kits are available for improved salinity management.



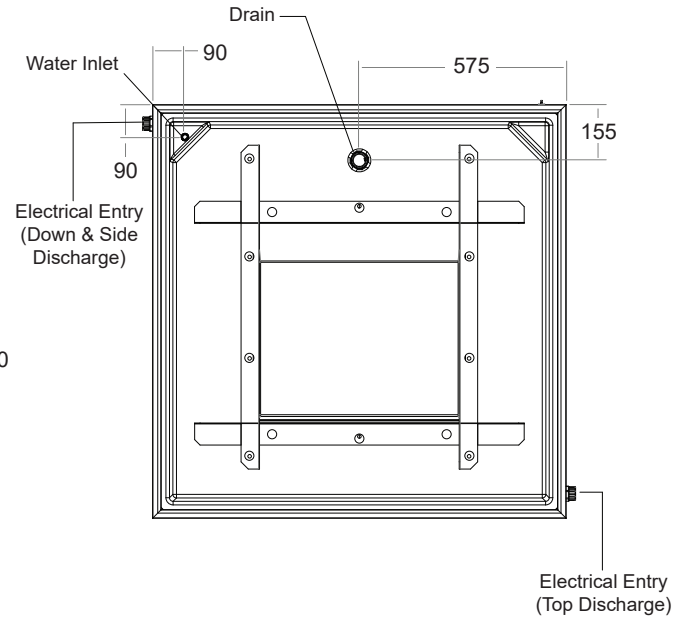


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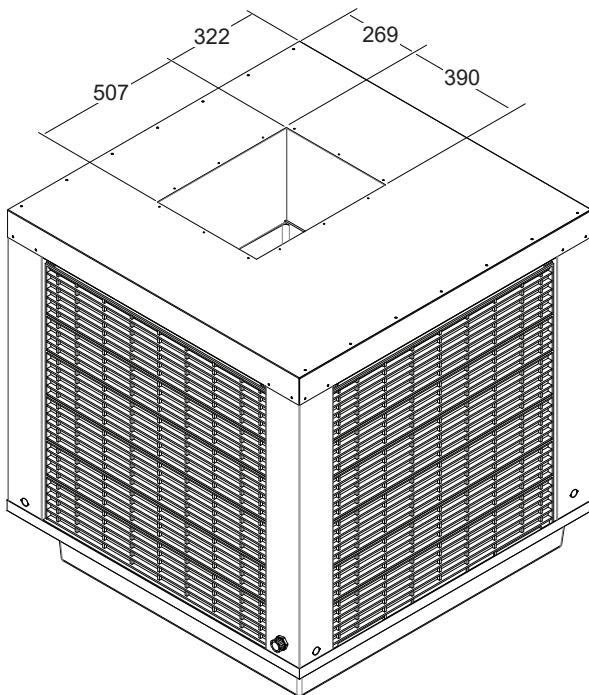
DOWN DISCHARGE



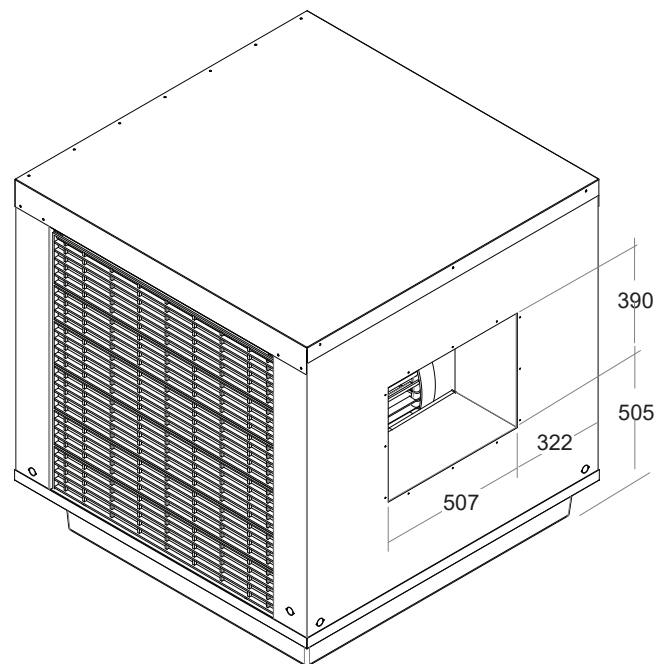
BOTTOM



TOP DISCHARGE



SIDE DISCHARGE



Dimensions are in mm

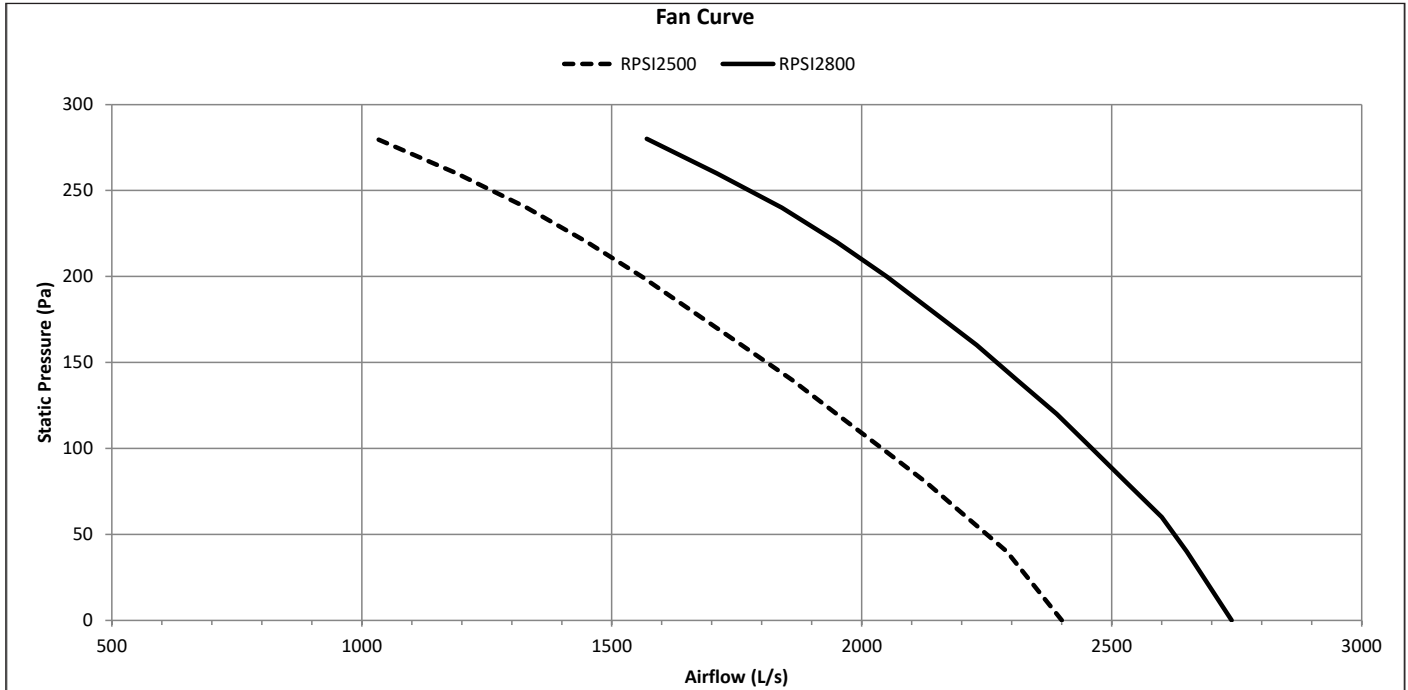
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MODEL		RPSI2500 DOWN / TOP	RPSI2500 SIDE	RPSI2800 DOWN / TOP	RPSI2800 SIDE	
PERFORMANCE	Cooling Capacity* @ 80Pa	9.0 kW (Chillcel®)	8.3 kW (Chillcel®)	10.8 kW (Chillcel®) 9.1 kW (Aspen)	9.7 kW (Chillcel®) 9.7 kW (Aspen)	
SERVICES	Electrical	Voltage	240 V / 1~ / 50Hz	240 V / 1~ / 50Hz	240 V / 1~ / 50Hz	240 V / 1~ / 50Hz
		Rated Current	6 A	6 A	9 A	9 A
		Input Power	1.3 kW	1.3 kW	1.9 kW	1.9 kW
	Water	Supply	20 L/m 100kPa - 800kPa	20 L/m 100kPa - 800kPa	20 L/m 100kPa - 800kPa	20 L/m 100kPa - 800kPa
		Max Temperature	40 °C	40 °C	40 °C	40 °C
		Inlet	1/2" Male BSP	1/2" Male BSP	1/2" Male BSP	1/2" Male BSP
		Drain	1-1/2" Male BSP	1-1/2" Male BSP	1-1/2" Male BSP	1-1/2" Male BSP
		Drain Flow Rate	15 L/min	15 L/min	15 L/min	15 L/min
	Duct Connections		550 x 550mm Down 390 x 507 Top	390 x 507 Side	550 x 550mm Down 390 x 507 Top	390 x 507 Side
AIR SYSTEMS	Fan	Fan	Centrifugal	Centrifugal	Centrifugal	Centrifugal
		Size	460mm	460mm	460mm	460mm
	Motor	Type	Variable Speed, ECM	Variable Speed, ECM	Variable Speed, ECM	Variable Speed, ECM
		Power	750 W	750 W	1500 W	1500 W
		Max Speed	510 rpm	510 rpm	680 rpm	680 rpm
		Overload	Auto Reset	Auto Reset	Auto Reset	Auto Reset
		IP Rating	IPX2	IPX2	IPX2	IPX2
COOLING PADS	Material & Size	4x Chillcel® 800 x 890 x 90mm	3x Chillcel® 800 x 890 x 90mm	4x Chillcel® Pads 800 x 890 x 90mm or 4x Aspen Pads 800 x 890 x 70mm	3x Chillcel® Pads 800 x 890 x 90mm or 3x Aspen Pads 800 x 890 x 70mm	
WATER SYSTEMS	Reservoir Capacity		48 L	48 L	48 L	48 L
	Pump	Type	Centrifugal	Centrifugal	Centrifugal	Centrifugal
		Power	25W	25W	25W	25W
		Max Flow Rate	21 L/min	21 L/min	21 L/min	21 L/min
		Voltage	230V / 1~ / 50 Hz	230V / 1~ / 50 Hz	230V / 1~ / 50 Hz	230V / 1~ / 50 Hz
		IP Rating	IPX4	IPX4	IPX4	IPX4
	Optional Water Manager Kit (sold separately)	Inlet Valve	24 VAC Solenoid Valve	24 VAC Solenoid Valve	24 VAC Solenoid Valve	24 VAC Solenoid Valve
		Water Probes	2-pin Conductivity Probe	2-pin Conductivity Probe	2-pin Conductivity Probe	2-pin Conductivity Probe
Drain Valve		24 VAC Vertical	24 VAC Vertical	24 VAC Vertical	24 VAC Vertical	
DIMENSIONS	Shipping		1200mm Long x 1200mm Wide x 1255mm High	1200mm Long x 1200mm Wide x 1255mm High	1200mm Long x 1200mm Wide x 1255mm High	1200mm Long x 1200mm Wide x 1255mm High
	Operating		1150mm Long x 1150mm Wide x 1190mm High	1150mm Long x 1150mm Wide x 1190mm High	1150mm Long x 1150mm Wide x 1190mm High	1150mm Long x 1150mm Wide x 1190mm High
WEIGHT	Shipping		120 kg	110 kg	120 kg	110 kg
	Operating inc. water		140 kg	130 kg	140 kg	130 kg

*Down discharge model tested to Australian Standard AS 2913-2000 with design condition of: 38°C dry-bulb, 21°C wet-bulb and 27.4°C room exit temperature.

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Performance Summary									
Static Pressure (Pa)		0	40	80	120	160	200	240	280
RPSI2500	Airflow (L/s)	2400	2290	2130	1950	1760	1560	1210	1030
RPSI2800	Airflow (L/s)	2740	2650	2530	2390	2230	2050	1840	1570



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

MAGIQTUUCH CONTROLS

RPSI is compatible with a wide range of MagIQtouch control solutions, including Wall Controllers, Building Management System (BMS) Controllers and Sensor Accessories.

Contact your local Sales office for compatible kits and installation literature.

