

TECHNICAL SPECIFICATIONS - RPM

GENERAL SPECIFICATIONS:

RPM direct evaporative coolers are designed to supply large volumes of 100% fresh, cool, outside air offering a cost-effective solution for ventilating and cooling large spaces.

RPM is available in 3 different capacities with the option of Down (D), Side (S), or Top (T) discharge directions 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. The internal cooler frame is constructed from powder coated galvanised steel for corrosion protection. Cabinet fasteners are stainless steel or aluminium for extra corrosion protection. Outer panels are painted "Basalt" grey.

FAN

The fan is a galvanised steel forward curved centrifugal blower mounted inside a polyethylene scroll. The blower shaft is mounted in pillow blocks with, self aligning, sealed, single row ball bearings.

MOTOR

The fan motor is a 2-speed, IP55 rated, squirrel cage induction type, mounted externally to the fan, and connected via belts and taper lock pulleys. Thermal overload relays provide over current protection for both high and low speeds.

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 Chillcel® fabricated, honeycomb, high efficiency filter pads. Pads are located in moulded plastic UV stabilised louvers 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 an external isolation switch is provided. Provision is included in the control box for plug-in connection of optional drain valve and solenoid kits.

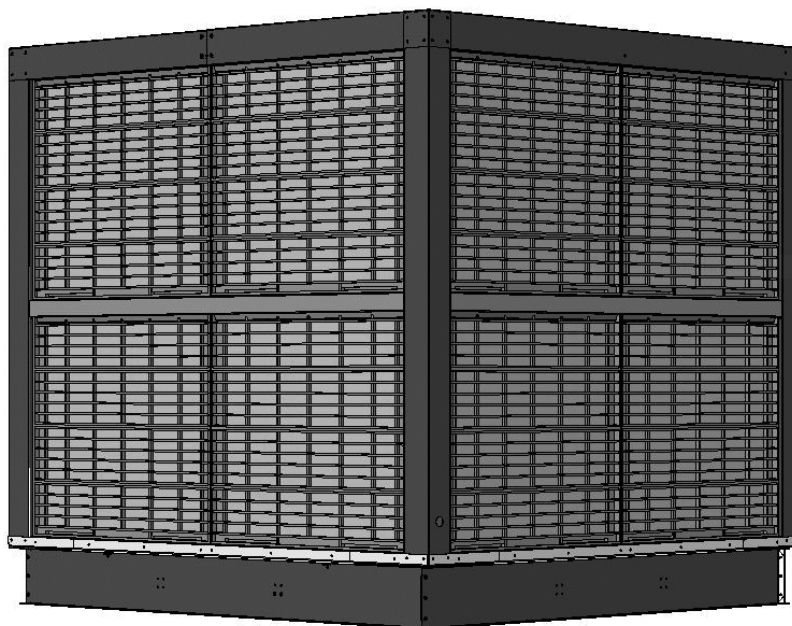
CONTROLS

The cooler is supplied with wall switch controls, providing fan ON/OFF, HIGH/LOW fan speed and pump ON/OFF controls allowing the cooler to be used in Ventilation or Cooling modes.

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 continuous 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 and automatic drainage.

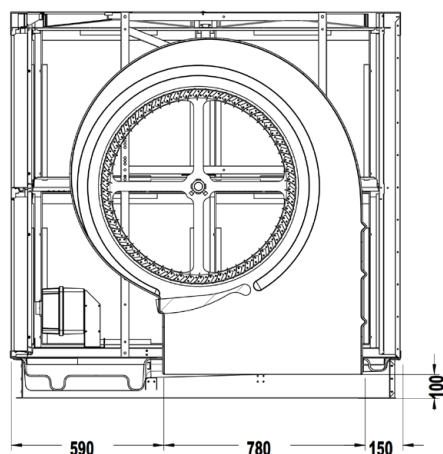
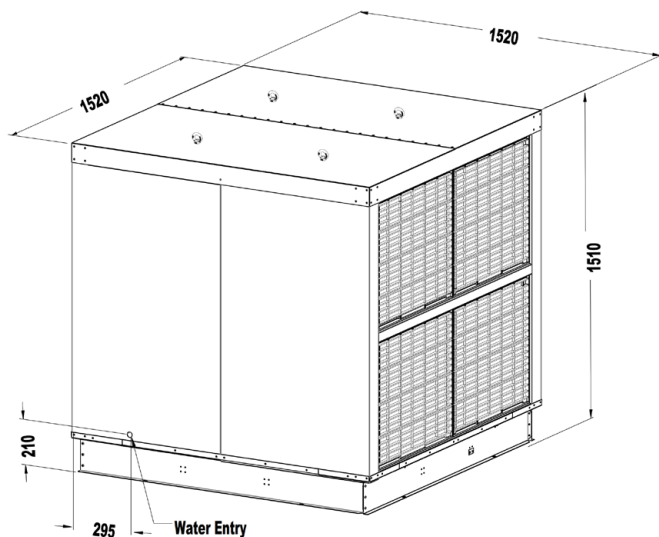
Optional Water Manager kits are available for improved salinity management.



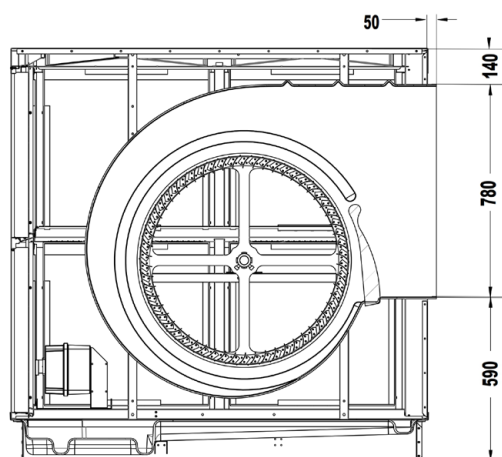
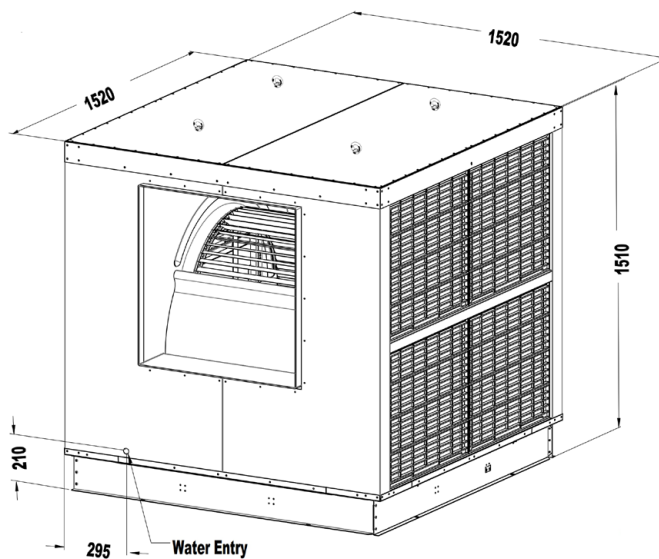


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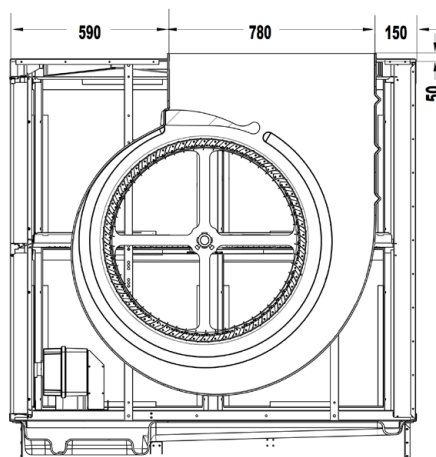
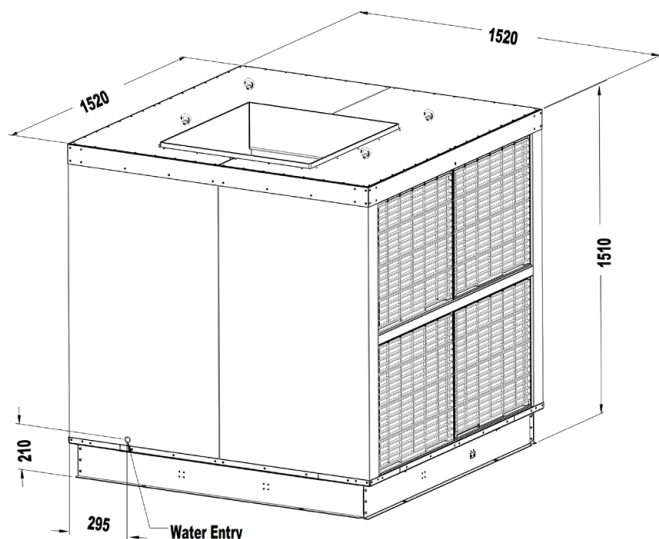
DOWN DISCHARGE



SIDE DISCHARGE



TOP DISCHARGE



Dimensions are in mm

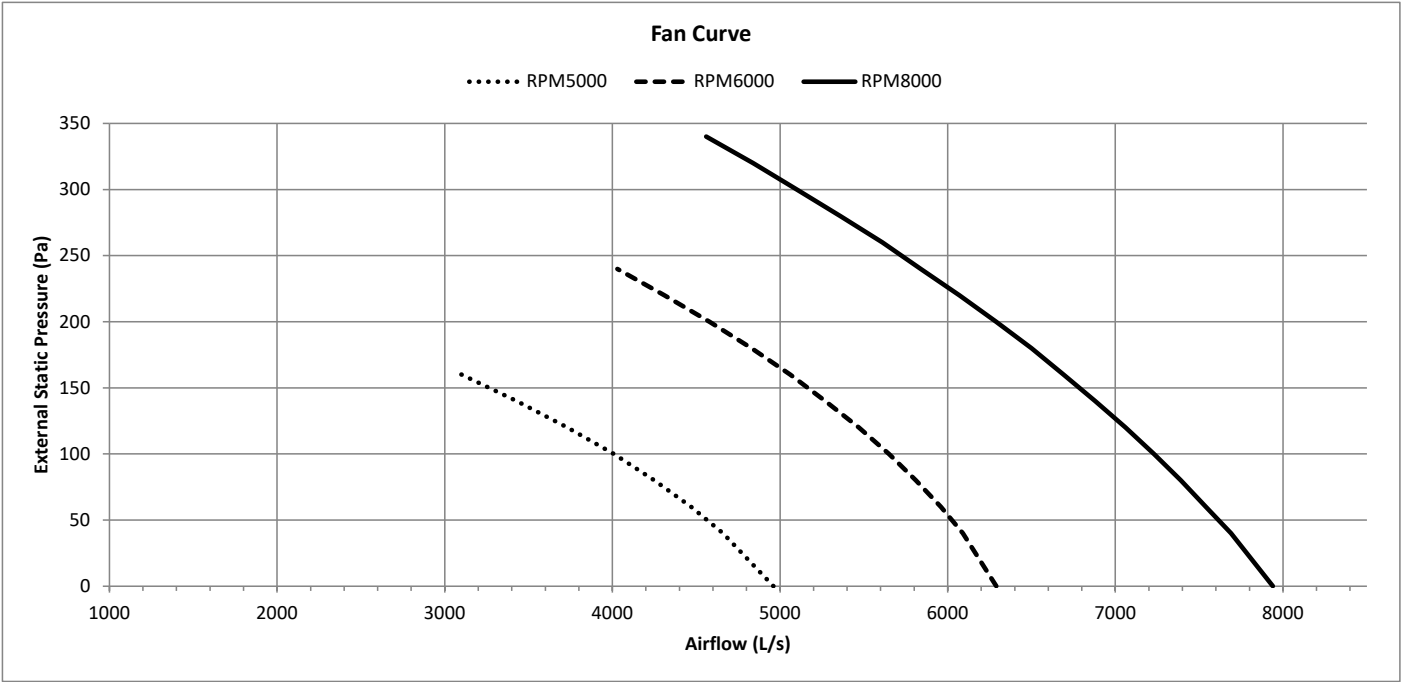
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MODEL			RPM5000	RPM6000	RPM8000
SERVICES	Electrical	Voltage	415 V / 3~ / 50Hz	415 V / 3~ / 50Hz	415 V / 3~ / 50Hz
		Rated Current	6.6 A	6.6 A	11.1 A
		Max Input Power	3.7 kW	3.7 kW	6.5 kW
	Water	Supply	20 L/m 100kPa - 800kPa	20 L/m 100kPa - 800kPa	20 L/m 100kPa - 800kPa
		Max Temperature	40 °C	40 °C	40 °C
		Inlet	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
		Drain Flow Rate	15 L/min	15 L/min	15 L/min
	Duct Connections		780 x 760mm	780 x 760mm	780 x 760mm
AIR SYSTEMS	Fan	Fan	Centrifugal	Centrifugal	Centrifugal
		Size	760mm	760mm	760mm
	Motor	Type	2 Speed Induction	2 Speed Induction	2 Speed Induction
		Power	3.0 kW	3.0 kW	5.5 kW
		Max Speed	1440 rpm	1440 rpm	1440 rpm
		Overload	Motor Thermal Overload Relay	Motor Thermal Overload Relay	Motor Thermal Overload Relay
		IP Rating	IP55	IP55	IP55
COOLING PADS	Material & Size		12x ChillCel® 595 x 580 x 90mm	12x ChillCel® 595 x 580 x 90mm	12x ChillCel® Pads 595 x 580 x 90mm
WATER SYSTEMS	Reservoir Capacity		55 L	55 L	55 L
	Pump	Type	Centrifugal	Centrifugal	Centrifugal
		Power	60 W	60 W	60 W
		Max Flow Rate	18 L/min	18 L/min	18 L/min
		Voltage	230V / 1~ / 50 Hz	230V / 1~ / 50 Hz	230V / 1~ / 50 Hz
		IP Rating	IPX4	IPX4	IPX4
	Optional Water Manager Kit (sold separately)	Inlet 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
		Drain Valve	24 VAC Vertical	24 VAC Vertical	24 VAC Vertical
DIMENSIONS	Shipping		1560mm Long x 1560mm Wide x 1630mm High	1560mm Long x 1560mm Wide x 1630mm High	1560mm Long x 1560mm Wide x 1630mm High
	Operating		1520mm Long x 1520mm Wide x 1510mm High	1520mm Long x 1520mm Wide x 1510mm High	1520mm Long x 1520mm Wide x 1510mm High
WEIGHT	Shipping		295 kg	295 kg	330 kg
	Operating inc. water		330 kg	330 kg	365 kg

High Speed Sound Power Level (dB re 1 pW)									
Octave Band Centre Frequency									
FREQUENCY (Hz)		125	250	500	1k	2k	4k	8k	Total
RPM5000	Radiated	80	78	74	74	75	71	61	84
	In Duct	72	71	71	71	71	65	54	78
RPM6000	Radiated	78	76	72	71	73	68	58	82
	In Duct	76	74	71	71	74	69	61	81
RPM8000	Radiated	82	79	77	78	80	76	66	87
	In Duct	83	80	79	79	81	77	71	88

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High Speed Performance Summary										
Static Pressure (Pa)		0	40	80	120	160	200	240	280	320
RPM5000	Airflow (L/s)	4960	4660	4250	3730	3100	-	-	-	-
	Input Power (kW)	2.0	1.9	1.7	1.5	1.3	-	-	-	-
RPM6000	Airflow (L/s)	6290	6090	5810	5470	5060	4580	4030	-	-
	Input Power (kW)	3.4	3.3	3.1	3.0	2.7	2.5	2.2	-	-
RPM8000	Airflow (L/s)	7940	7690	7390	7060	6690	6290	5840	5360	4840
	Input Power (kW)	6.2	6.1	5.9	5.7	5.6	5.4	5.2	5.1	4.9



CONTROLS

The cooler is supplied with Wall Switch controls, providing fan ON/OFF, HIGH/LOW fan speed and pump ON/OFF controls.

