

TECHNICAL SPECIFICATIONS - RPL

GENERAL SPECIFICATIONS:

RPL 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.

RPL 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. Outer panels are painted "Basalt" grey.

FAN

The fan is a galvanised steel forward curved centrifugal blower mounted inside a polyethylene scroll. The stainless steel 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 connection of an optional drain valve and inlet water solenoid kit.

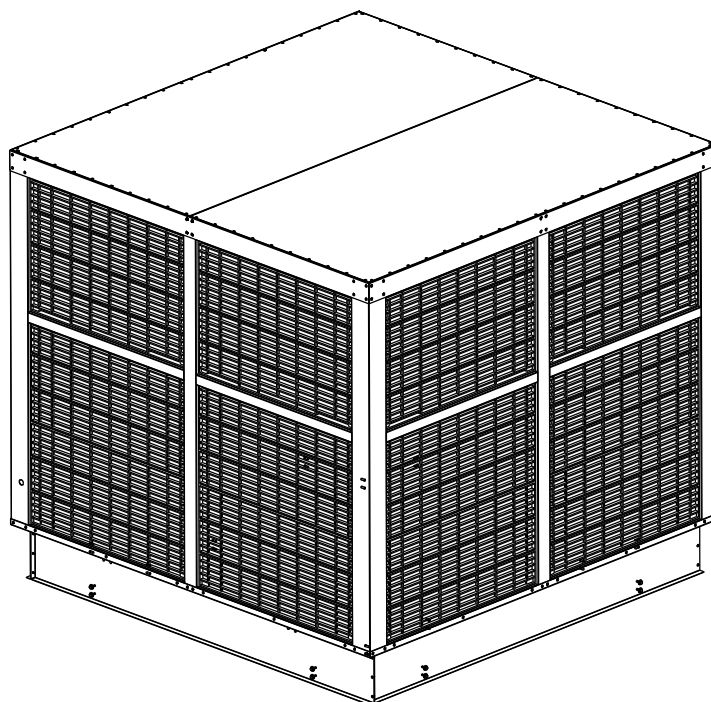
CONTROLS

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

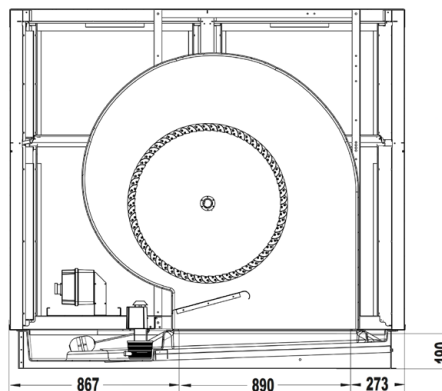
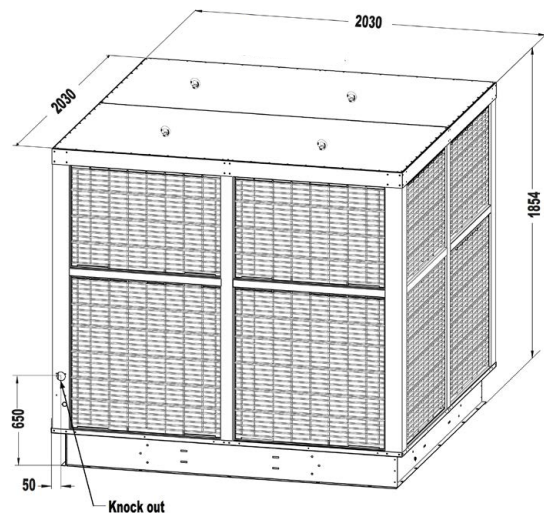
Water supply connection is 1/2" BSP. A float valve is used to control water level in the cooler. The cooler is fitted with a continuous bleed system to control water salinity in the unit and an overflow is provided to allow the unit to be connected to drainage. Optional Water Manager kits are available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

Optional Water Manager kits are available for improved salinity management.

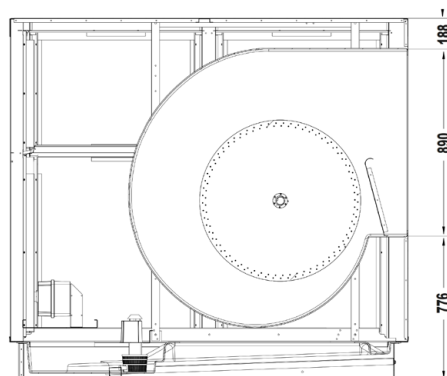
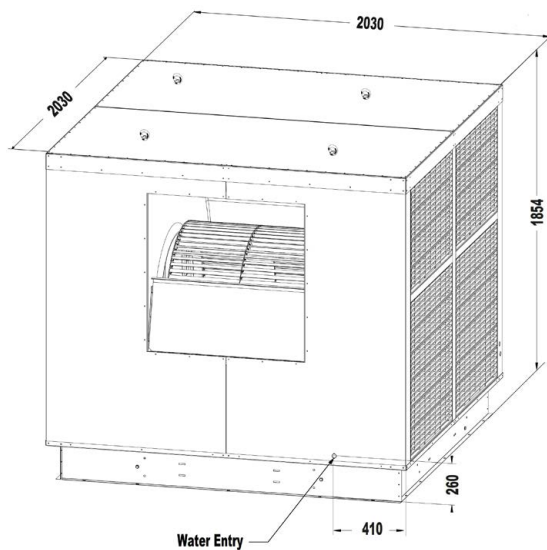


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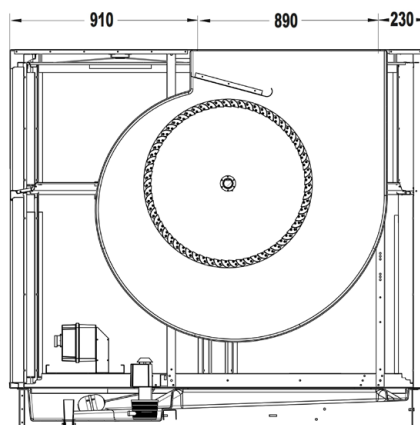
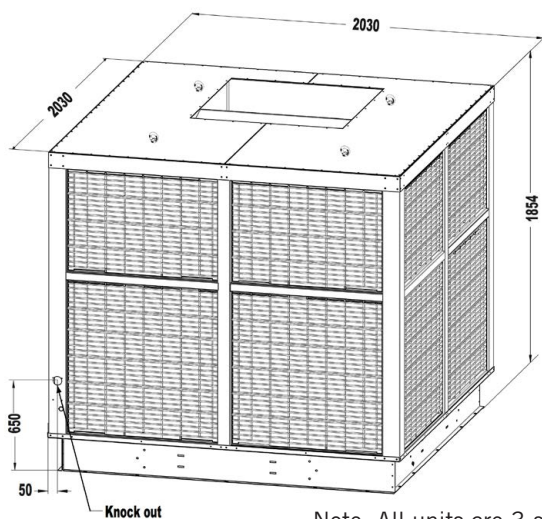
DOWN DISCHARGE



SIDE DISCHARGE



TOP DISCHARGE



Note: All units are 3-sided intakes except RPL14000 Down and Top which are 4-sided intakes.
Dimensions are in mm

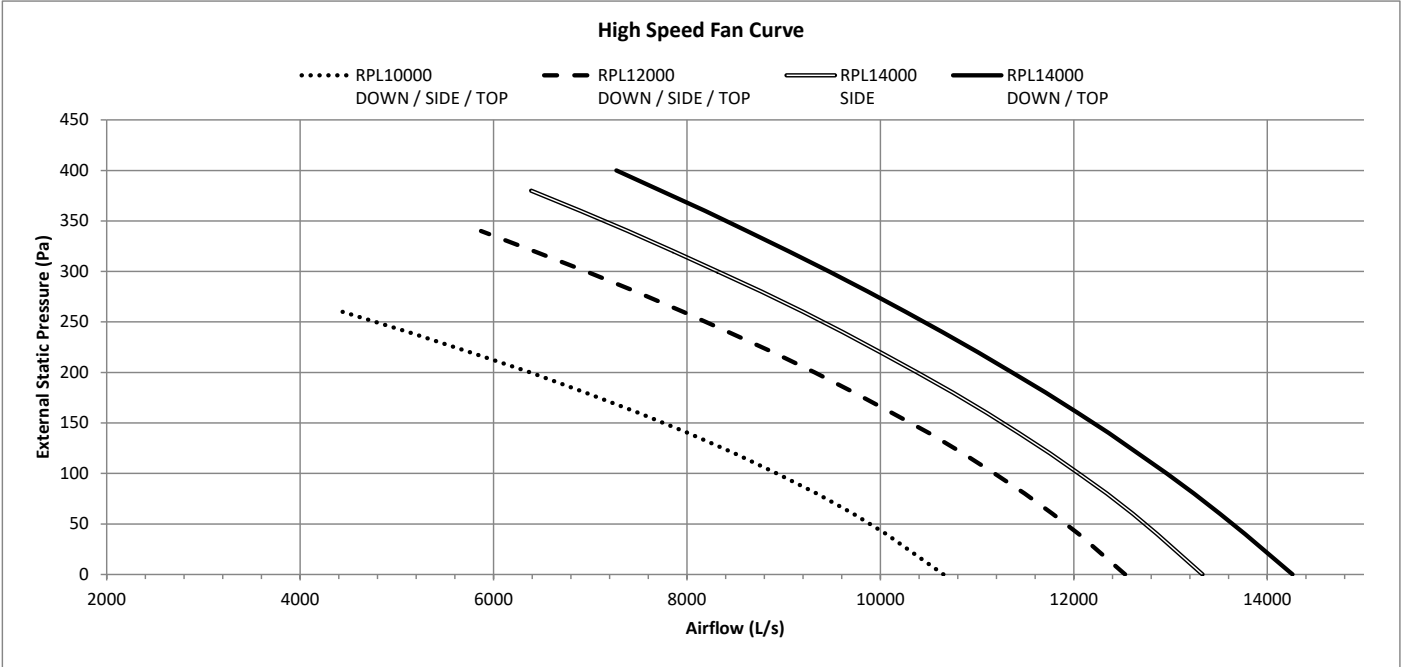
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MODEL			RPL10000	RPL12000	RPL14000	RPL14000
			DOWN / SIDE / TOP	DOWN / SIDE / TOP	SIDE	DOWN / TOP
			3-SIDED INTAKE	3-SIDED INTAKE	3-SIDED INTAKE	4-SIDED INTAKE
SERVICES	Electrical	Voltage	415 V / 3~ / 50Hz	415 V / 3~ / 50Hz	415 V / 3~ / 50Hz	415 V / 3~ / 50Hz
		Rated Current	14.2 A	22.1 A	29.4 A	29.4 A
		Max Input Power	8.7 kW	12.9 kW	17.5 kW	17.5 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		890 x 890mm	890 x 890mm	890 x 890mm	890 x 890mm
AIR SYSTEMS	Fan	Fan	Centrifugal	Centrifugal	Centrifugal	Centrifugal
		Size	820mm	820mm	820mm	820mm
	Motor	Type	2 Speed Induction	2 Speed Induction	2 Speed Induction	2 Speed Induction
		Shaft Power	7.5 kW	11.0 kW	15.0 kW	15.0 kW
		Max Speed	1440 rpm	1440 rpm	1440 rpm	1440 rpm
		Overload	Motor Thermal Overload Relay	Motor Thermal Overload Relay	Motor Thermal Overload Relay	Motor Thermal Overload Relay
		IP Rating	IP55	IP55	IP55	IP55
	Material & Size		Chillcel® 6x 595 x 580 x 90mm 6x 795 x 895 x 90mm	Chillcel® 6x 595 x 580 x 90mm 6x 795 x 895 x 90mm	Chillcel® 6x 595 x 580 x 90mm 6x 795 x 895 x 90mm	Chillcel® 8x 595 x 580 x 90mm 8x 795 x 895 x 90mm
WATER SYSTEMS	Reservoir Capacity		100 L	100 L	100 L	100 L
	Pumps		2 Centrifugal Pumps 18 L/min ea. 230V 50Hz 60W ea.	2 Centrifugal Pumps 18 L/min ea. 230V 50Hz 60W ea.	2 Centrifugal Pumps 18 L/min ea. 230V 50Hz 60W ea.	2 Centrifugal Pumps 18 L/min ea. 230V 50Hz 60W ea.
	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		2100mm Long x 2100mm Wide x 2050mm High	2100mm Long x 2100mm Wide x 2050mm High	2100mm Long x 2100mm Wide x 2050mm High	2100mm Long x 2100mm Wide x 2050mm High
	Operating		2030mm Long x 2030mm Wide x 1854mm High	2030mm Long x 2030mm Wide x 1854mm High	2030mm Long x 2030mm Wide x 1854mm High	2030mm Long x 2030mm Wide x 1854mm High
WEIGHT	Shipping		460 kg	470 kg	500 kg	515 kg
	Operating inc. water		530 kg	540 kg	560 kg	575 kg

High Speed Sound Power Level (dB re 1 pW)									
Octave Band Centre Frequency									
FREQUENCY (Hz)		125	250	500	1k	2k	4k	8k	Total
RPL10000	Radiated	93	90	89	88	86	82	76	97
RPL12000	Radiated	95	92	91	89	87	84	78	99
RPL14000	Radiated	97	94	93	91	89	87	82	101

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High Speed Performance Summary												
Static Pressure (Pa)		0	40	80	120	160	200	240	280	320	360	400
RPL10000 DOWN / SIDE / TOP	Airflow (L/s)	10,650	10,060	9,340	8,490	7,500	6,380	5,120	3,730	-	-	-
	Input Power (kW)	7.5	7.2	6.7	6.0	5.2	4.3	3.2	1.9	-	-	-
RPL12000 DOWN / SIDE / TOP	Airflow (L/s)	12,530	12,050	11,490	10,850	10,120	9,320	8,430	7,470	6,420	-	-
	Input Power (kW)	12.3	11.8	11.3	10.6	9.8	9.0	8.0	7.0	5.8	-	-
RPL14000 SIDE	Airflow (L/s)	13,330	12,860	12,340	11,750	11,100	10,380	9,610	8,770	7,860	6,900	-
	Input Power (kW)	14.7	14.0	13.3	12.5	11.6	10.7	9.8	8.8	7.8	6.7	-
RPL14000 DOWN / TOP	Airflow (L/s)	14,260	13,770	13,240	12,660	12,040	11,360	10,640	9,870	9,050	8,190	7,270
	Input Power (kW)	17.4	16.7	16.0	15.2	14.3	13.3	12.3	11.1	9.9	8.5	7.1



CONTROLS

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

