

## The Breezair Icon EXH Series: the world's quietest evaporative cooler

Breezair's Icon series boasts the most advanced features available in evaporative coolers. It's led the market in its class for many years – and still remains the most efficient and quietest available.

### Permatuf™ corrosion-proof cabinet

The Breezair cabinet will not corrode or rust. The UV stabilised structural polymer material is the same type used to make acid baths, battery cases and some space satellite components. Plus, it's designed to blend with any property.

### Centrifugal fan

Centrifugal fans are the first choice of air conditioning engineers worldwide. The Breezair forward curved, centrifugal fans are made from injection-molded polypropylene. They are double-width, inherently statically and dynamically balanced, with aerofoil blades to provide high pressure performance and very low noise levels.

### Chillcel™ high efficiency pads

With strong, long-lasting Chillcel pads that last for up to seven years, maintenance is easy. Chillcel pads are made from organic paper materials, cleverly manufactured into honeycomb panels that have excellent structural and cooling strength. They are easy to clean and replace when necessary. Seeley International has been using Chillcel pads in our products for many years, so they have a proven track record.



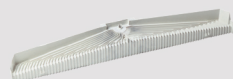
### HushPower® direct drive (ECM) motor

Exclusive to Breezair, this motor is super efficient and electronically controlled for optimum efficiency. Corrosion resistant, it's the quietest motor available and has unsurpassed reliability, reduced energy use and runs at variable speeds.



### Non-clogging water distribution system

Breezair's non-clogging water distribution is one of the things that make it unique. The water distributor maximises cooling efficiency by supplying a continuous and balanced flow of water across the cooling pads. This is different to any other brand of evaporative coolers, which are subject to water flow variations for a number of reasons. Breezair's balanced flow ensures highest evaporation efficiency and maximum cooling.



### Thermostat control

Operate up to 41 coolers from a single wall control using up to 10 smart hubs (optional). Each cooler comes with 1651 mm wiring loom and it can be extended up to a maximum length of 3302 mm (optional).



### Tornado® water pump

The perfect pump for the job! The Tornado pump is built to last. Designed, manufactured and tested by Seeley International, the Tornado pump epitomises reliability. It features very safe material choices, an encapsulated motor with overload cut-out, stainless steel shafts and bearings fully protected from water.

Plus, it has a clever impact-start feature that will overcome any tendency for the pump to become locked up with residue during prolonged off periods. The strong synchronous motor has constant speed, independent of voltage fluctuations, and runs very cool.



### Industrial wall control (optional accessory)



The IWC can handle up to 10 smart hubs and control up to 41 Breezair coolers. The IWC identifies any faulty cooler in a group and provides comprehensive fault diagnostics enabling any cooler in a multi cooler installation to be quickly identified and repaired. The IWC10 may also be set up to control Breezair cooler from EXTERNAL devices, such as PLCs and Building Management Systems (BMS).

### AUTOWeatherseal

The AUTOWeatherseal closes the cooler air discharge outlet automatically, thus significantly reducing natural air currents from circulating in and out of the building. The result – a more comfortable and controlled environment.



### WATERManager™ system

The Breezair WATERManager ensures optimum machine life with minimum maintenance by constantly checking water quality. As the water in the cooler evaporates, it leaves behind impurities and salts, which then become deposited on the cooling pads and cause the cooling power to fall. The WATERManager system senses water quality with a probe that sends a signal back to the electronic control module, which then ejects some dirty water and allows fresh water to enter.



### Clean and dry function

The cooler drains automatically when it's not in use, preventing algae growth and maintaining a clean cooler.



### Digital Smartbox™ / control power module

A state-of-the-art digital electronic control means optimum performance. The Smartbox digital control module monitors and controls all of the cooler's features to provide ultimate comfort conditions, temperature sensing and water quality supervision – completely, safely and reliably. The module also incorporates diagnostic features and memory to aid troubleshooting and minimise downtime. Several user choice parameters are available to allow you to set up your preferred environment.



## Technical specifications

		EXH 130	EXH 170	EXH 210
Airflow @ 80Pa	(m³/h)	4790	7520	9140
Cooling capacity*	(kW)	6.5	10.6	12.3
Power consumption (total)	Watts max / min	790 / 70	1200 / 70	1890 / 70
	Current max (amp)	3.6	5.8	9.0
Power supply	Voltage / Phases / Hz	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50
Controller	Type	Digital	Digital	Digital
Fan	Type	Centrifugal	Centrifugal	Centrifugal
	Dia x width (mm)	380 x 380	460 x 380	460 x 380
Motor	Type	Direct drive inverter	Direct drive inverter	Direct drive inverter
	Speed max (rpm)	640 VAR	510 VAR	680 VAR
	Output Watts max	500	750	1500
	Overload & Fuse	Auto reset	Auto reset	Auto reset
	Enclosure	IP2X	IP2X	IP2X
Pump	Type	Centrifugal	Centrifugal	Centrifugal
	Motor	Synchronous	Synchronous	Synchronous
	Rating Watts (input)	25	25	25
	Flow rate (L/min)	21	21	21
	Voltage / Phases / Hz	230 / 1 / 50	230 / 1 / 50	230 / 1 / 50
	Overload	Auto reset	Auto reset	Auto reset
Cooling pad Chilicel	Enclosure rating	IPX4	IPX4	IPX4
	Size (mm)	800 x 436 (H) x 90 (4 pads)	800 x 635 (H) x 90 (4 pads)	800 x 635 (H) x 90 (2 pads) 800 x 635 (H) x 100 (2 pads)
Water	Pad area (m²)	1.40	2.05	2.05
	Tank capacity (L)	11	11	11
Shipping	Inlet (mm / inches)	12.7 / ½ male BSP	12.7 / ½ male BSP	12.7 / ½ male BSP
	Drain (mm / inches)	40 / 1½ male BSP	40 / 1½ male BSP	40 / 1½ male BSP
Connecting duct (raw edged)	Dimensions including pallet (mm)	1160 x 1160 x 775 (H)	1160 x 1160 x 975 (H)	1160 x 1160 x 975 (H)
	Volume (m³)	1.04	1.31	1.31
	Mass (kg)	71	77	78
	Operating (kg)	78	84	85
Cabinet	Length x width (mm)	550 x 550	550 x 550	550 x 550
	Colour	Beige, Grey and Limited Red (Terracotta)	Beige and Grey	Beige, Grey and Limited Red (Terracotta)

\*Cooling capacity measured to Australian Standard AS2913-2000, ambient of 38°C dry bulb & 21°C wet bulb, with room exit temperature of 27.4°C.

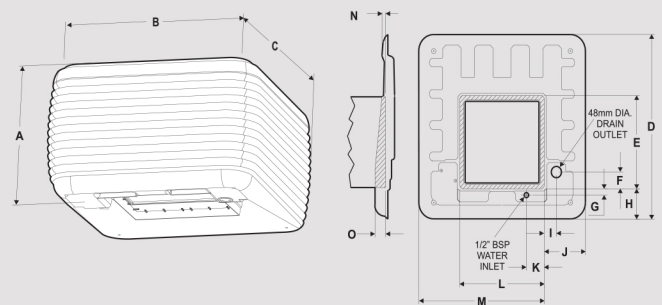


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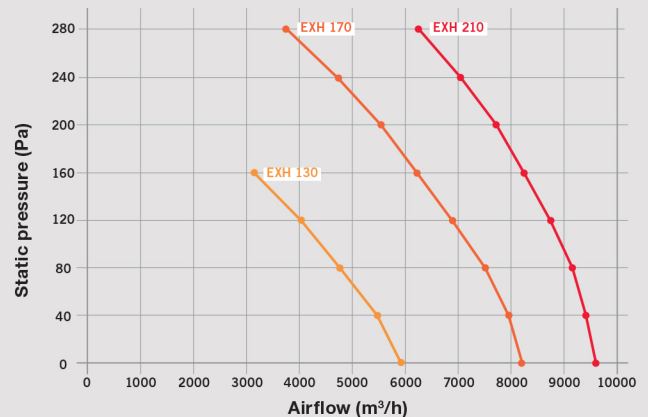
## CABINET DETAILS



Model#	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
EXH 130	660	1160	1160	1108	555	109	38	182	81	274	118	555	834	38	84
EXH 170 EXH 210	860	1160	1160	1108	555	109	38	182	81	274	118	555	834	38	84

Note: All dimensions are in mm.

## FAN CURVES



Model#	Industry STD Rating m³/h @ 80Pa	Certified Air Delivery (m³/h) (static pressure Pa)							
		0	40	80	120	160	200	240	280
EXH 130	4790	5940	5470	4790	4030	3200	-	-	-
EXH 170	7520	8280	7990	7520	6910	6230	5540	4790	3740
EXH 210	9140	9580	9400	9140	8780	8320	7740	7060	6300

## Cooler Discharge Air Temperature Chart

		Ambient Relative Humidity %								
		10	20	30	40	50	60	70	80	90
Ambient Dry Bulb Temperature °C	10	2.8	3.7	4.6	5.4	6.2	7.0	7.8	8.6	9.3
	15	6.3	7.4	8.5	9.5	10.5	11.5	12.4	13.3	14.2
	20	9.6	11.0	12.3	13.6	14.8	15.9	17.0	18.1	19.1
	25	12.8	14.5	16.1	17.6	19.0	20.4	21.6	22.8	23.9
	30	15.9	18.0	19.9	21.7	23.3	24.8	26.2	27.6	28.8
	35	19.0	21.5	23.7	25.7	27.6	29.3	30.9	32.3	33.7
	40	22.1	24.9	27.5	29.8	31.9	33.8	35.5	37.1	38.6
	45	25.0	28.4	31.3	33.9	36.2	38.3	40.2	41.9	43.5
50	28.0	31.9	35.2	38.1	40.6	42.8	44.9	46.7	48.4	

This chart represents approximate air temperatures based on cooling performance at sea level. From tests carried out to Australian Standard 2913.