



PMA Series

Packaged Make-Up Air Units



 **AIR CHANGE**
DOAS & DEHUMIDIFICATION



PMA Series of energy efficient make-up air dehumidifiers.

Efficient building design together with a reduction in heat loads has changed the sensible to latent load ratio in many building HVAC applications. Air Change developed its popular PCU series of air management systems to achieve precise temperature and humidity control for critical applications. However, there are many projects that require supply of dehumidified make-up air without the sophistication and cost of a fully integrated PCU solution.

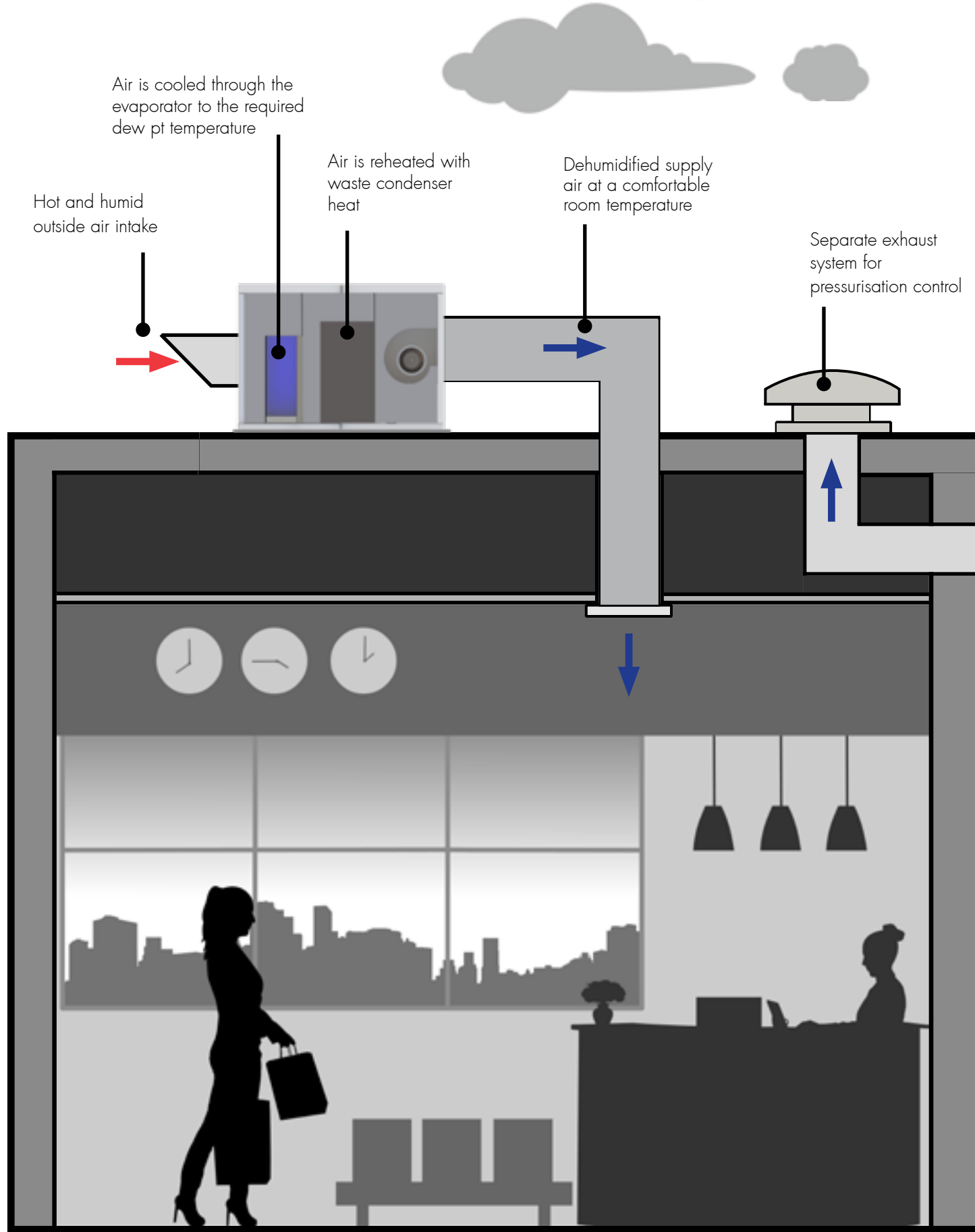
For these smaller less demanding applications, Air Change has developed its PMA series, a packaged system that delivers 100% outside air at a dehumidified and comfortable room neutral temperature.

As with all Air Change products, the energy efficiency of PMA units is of paramount concern, particularly as they are designed to deliver dehumidified make-up air over prolonged periods of time. The PMA series is designed for small make up air applications and seeks to balance operating and running costs.

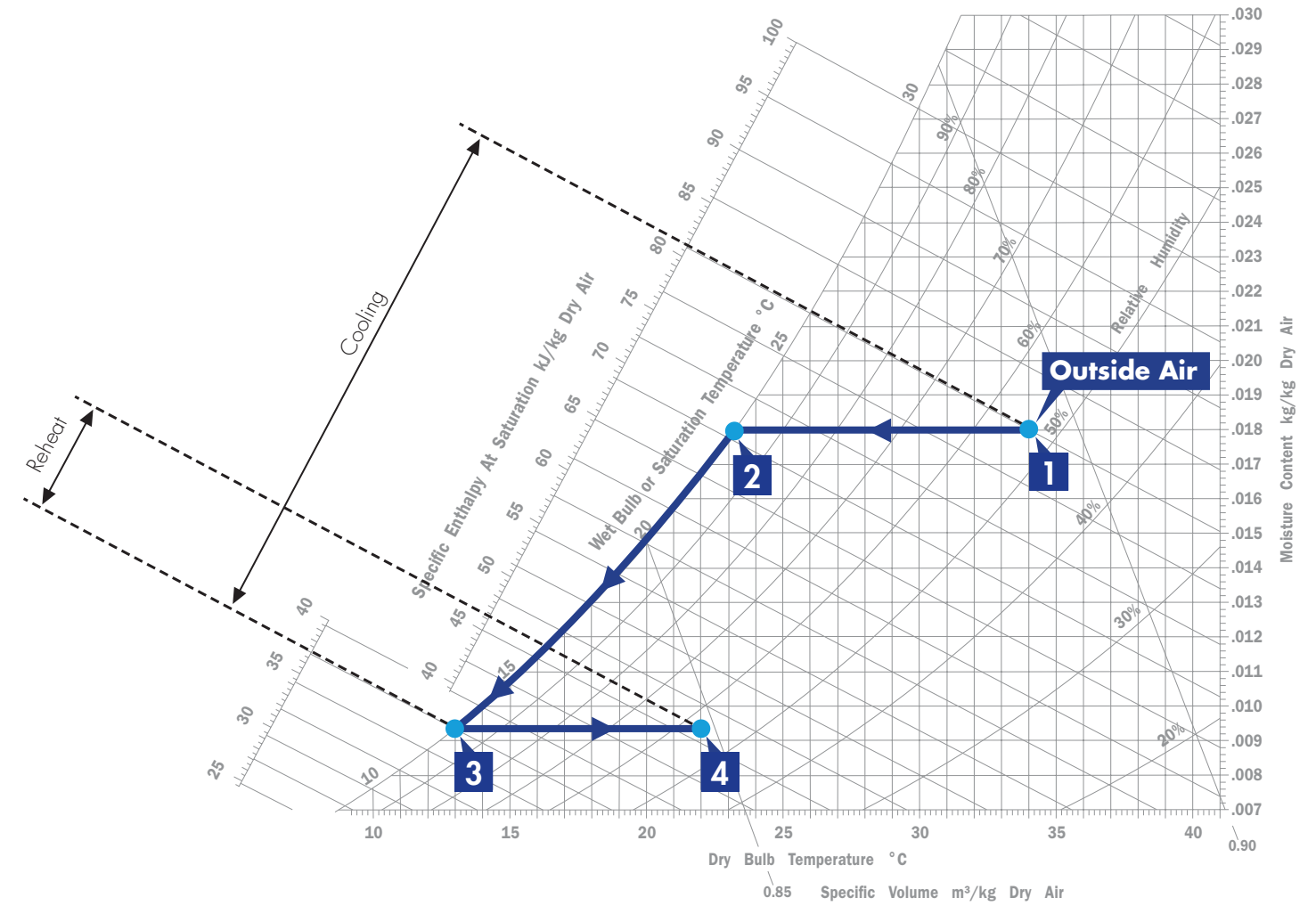
With this in mind, the PMA series reheats the air to the specified supply temperature using waste condenser heat but does not precool the air in the same manner as the Air Change ACDHUM.



How it works



How it works



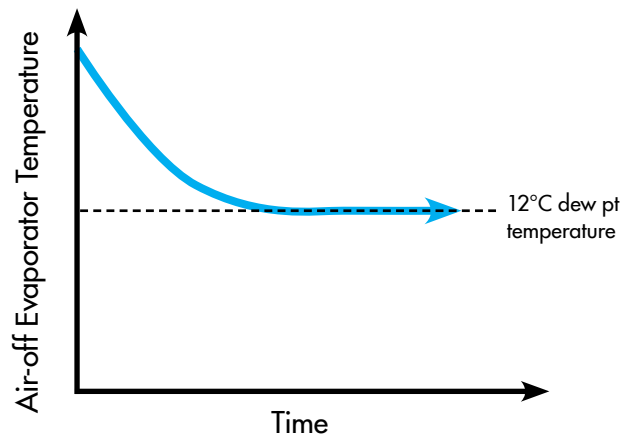
- 1** Humid outside air enters the unit.
- 2** The make-up air is cooled through the evaporator coil to the dew point line.
- 3** The make-up air is further cooled along the dew point line to the required moisture content.
- 4** The make-up air is reheated from dew point up to 22°C.

Features

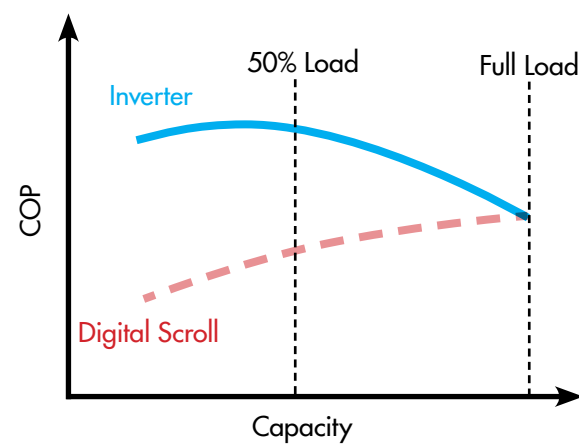


BLDC Inverter Compressors

To best perform their required function, a dehumidifier must maintain a constant air-off coil dew point temperature which requires a stable evaporator pressure with any air-on coil condition. The variable capacity control of inverter compressors allow units to precisely meet the required dew point temperature without compressor on/off cycling and hence maintain constant and accurate dehumidification. Inverter compressors also offer much higher energy efficiency than fixed speed compressors using hot gas bypass to achieve stable evaporator pressure and better control and efficiency than digital scroll compressors.



Smooth and steady control of evaporator air temperature achieved by inverter compressors.

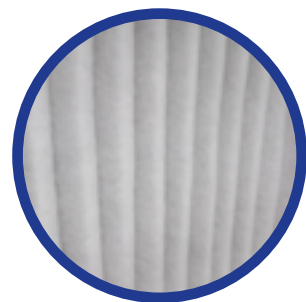


Indicative COP vs. capacity profiles of inverter and digital scroll compressors.



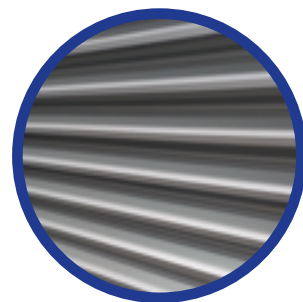
Integrated Control System

The integrated PMA control system monitors ambient outside air conditions and modulates unit capacity according to the required supply air condition.



Filters and Weatherproof Louvres Standard Inclusions

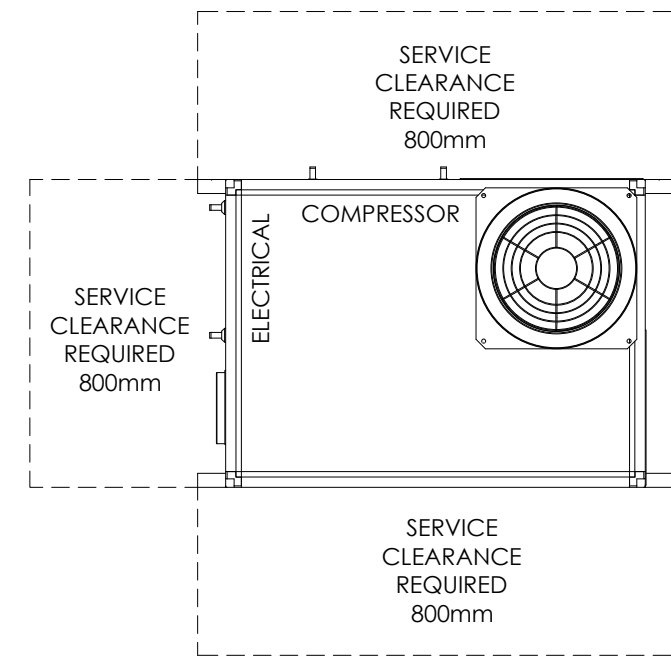
Built to withstand outdoor installations, the unit comes standard with G4 panel filtration, making it a plug and play solution for rooftop installations.



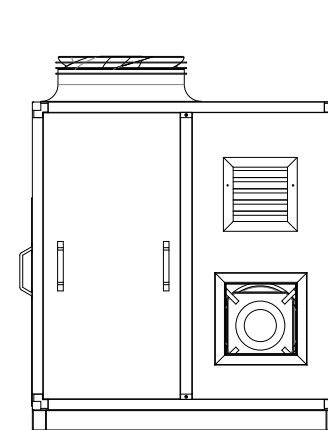
Specifications

Model	PMA200	PMA400	PMA600	PMA900
Supply Airflow (l/s)	200	400	600	900
Nominal Cooling Capacity (kW)	13.6	27.4	41.2	60
Reverse Cycle Operation	Standard	Standard	Standard	Standard
Supply Air Dew Point Temp (°C)	11+	11+	11+	11+
Nominal Supply Air Temp (°C)	11-23	11-23	11-23	11-23
Compressor Type	BLDC Inverter	BLDC Inverter	BLDC Inverter	BLDC Inverter
No. of Compressors	1	1	1	2
Refrigerant Type	R410A or R32	R410A or R32	R410A or R32	R410A or R32
V / Ph / Hz	415 / 3 / 50	415 / 3 / 50	415 / 3 / 50	415 / 3 / 50
Width (mm)	1100	1280	1500	1700
Depth (mm)	1700	1700	1850	2000
Height (mm)	1330	1540	1760	1760

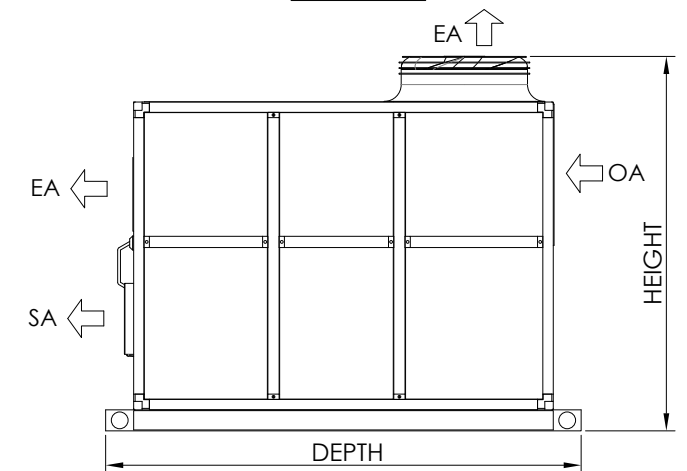
Air Change supports a policy of continuous product improvement. Therefore specification and designs are subject to change without prior notice. Refrigerant is subject to availability.



PLAN VIEW



FRONT VIEW



ELEVATION VIEW

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For more than 20 years, Air Change has provided unique equipment and engineering solutions for local and international clients using our internationally patented heat and energy recovery technology. During that time, we have developed a comprehensive range of energy efficient products to deliver controlled indoor climate conditions satisfying the requirements of all project stakeholders: the developer, the design engineer, and the building's owner and occupants.

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Air Change Pty Ltd products internationally patent protected

Refrigerant Trading Authorisation No: AU23586



Multi Award Winning Technology

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