

# AP Classic and AP Plus Series

Super Energy Efficient High Wall Heat Pumps



## EcoCore Series – AP Classic and AP Plus



The EcoCore Series AP
Classic (with optional Wi-Fi)
and AP Plus (with built-in
Wi-Fi) High Wall Heat Pumps
set a new standard in super
energy efficient heating.
Next-generation EcoCore
Technology is designed to
use less power than ever
before. And starting at just
18dBA\*, it's NZ's quietest –
ideal for living rooms and
bedrooms!











## New Zealand's Quietest Heat Pump!

Starting at an incredibly quiet 18dBA on its lowest fan speed, the EcoCore Series AP25 indoor unit is New Zealand's quietest high wall heat pump ever. It is ideal where quietness matters most, in bedrooms even on the coldest of winter nights.

Furthermore, the addition of Night Mode means the outdoor operating noise level drops by a further 3dBA – for the perfect night's sleep.

## The Secret to Quietness

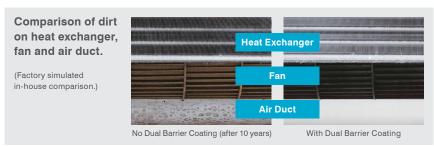
By making the heat exchanger 32% thinner<sup>†</sup> and designing the fan coil to be 22% larger<sup>†</sup> in comparison to previous models, pressure loss across the heat exchanger is minimised and air can now be moved across a larger fan surface. Add to this a new aerodynamically designed fan coil, and a new level of quietness has been achieved!

### **Dual Barrier Coating Maximises Efficient Performance**

The patented and world's first Dual Barrier Coating from Mitsubishi Electric prevents dust and dirt from accumulating on the inner surface of the indoor unit; keeping your heat pump clean year-round.

Keeping key internal components like the heat exchanger, fan and internal duct clean is important for both home comfort and efficiency. Not only does dust and dirt build-up typically create unpleasant odours, it also forces a heat pump to work harder, which can result in significantly impaired energy efficiency.

Dual Barrier Coating prevents dust and oil build-up on the interior of the heat pump for the ultimate in peace of mind, ease and comfort.



<sup>\*</sup> The EcoCore Series AP25 indoor sound level on lowest fan setting in Heating Mode.

<sup>†</sup> Compared to MSZ-GL Series.



## **Energy Efficient EcoCore Inverter Technology**



Superior energy efficiency is achieved by incorporating a large, high density heat exchanger, an advanced high efficiency fan motor and a next-generation inverter compressor that uses more efficient R32 refrigerant.

## More Environmentally Friendly R32 Refrigerant



With a global warming potential that is 30% lower compared to older refrigerants such as R410A, next-generation R32 refrigerant has a much lower environmental impact. Furthermore, zero ozone depleting R32 is easier to reuse and recycle.

### Blue Fin Coating – Built to Withstand the Elements



The heat exchanger of the outdoor unit has been treated with Blue Fin Anti-Corrosion Treatment, slowing the corrosion process caused by salt and sulphur in the air especially in coastal and high sulphur areas.

#### **Horizontal Airflow**



The EcoCore AP Series eliminates uncomfortable draughts with Horizontal Airflow in Cooling Mode, by first spreading airflow evenly across the ceiling.

## Wide and Long Airflow<sup>\*</sup>



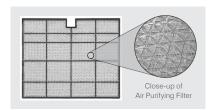
The Wide Airflow Mode enables the airflow direction to be adjusted from left to right and is ideal for open plan environments – ensuring every corner of the room is comfortable. The Long Airflow Mode extends airflow distance.

\* AP60/71/80 models only.

## **Washable Air Purifying Filter**



The EcoCore AP Series is equipped with an Air Purifying Filter. This washable filter traps particles such as dust, pollen and other airborne contaminants, generating stable antibacterial and deodorising effects. The size of the



three-dimensional surface has been increased from previous models, enlarging the filter capture area. These features give the Air Purifying Filter better dust collection performance than conventional filters.

## Optional Plasma Quad Connect for Cleaner, Healthier Air



Designed to integrate with your existing EcoCore AP Series Heat Pump, this high-performance two-stage advanced air filtration module, cleans and minimises dust and other allergens for better indoor air quality, all year round.

#### Never Return to a Cold Home Again with Wi-Fi Control



Pre-heat or cool a room no matter where you are. With Wi-Fi Control you'll always arrive home to total comfort. Wi-Fi Control is built-in to the AP Plus Series and available as an optional upgrade with the AP Classic Series.

#### AP Classic | AP Plus



Dimensions (WxDxH): 798 x 219 x 299mm

#### MSZ-AP25VG(K)D

Heating Capacity: 3.2 kW | Cooling Capacity: 2.5 kW

#### MSZ-AP35VG(K)D

Heating Capacity: 3.7 kW | Cooling Capacity: 3.5 kW

#### MSZ-AP42VG(K)D

Heating Capacity: 5.4 kW | Cooling Capacity: 4.2 kW

#### MSZ-AP50VG(K)D

Heating Capacity: 6.0 kW | Cooling Capacity: 5.0 kW



Dimensions (WxDxH): 1100 x 257 x 325mm

#### MSZ-AP60VG(K)D

Heating Capacity: 6.8 kW | Cooling Capacity: 6.0 kW

#### MSZ-AP71VG(K)D

Heating Capacity: 8.0 kW | Cooling Capacity: 7.1 kW

#### MSZ-AP80VG(K)D

Heating Capacity: 9.0 kW | Cooling Capacity: 7.8 kW





## AP Classic and AP Plus Series Specifications

QUICK Glance	TYPE			High Wall System														
	SERIES			AP Classic Series and AP Plus Series														
	MODEL			MSZ-AP25		MSZ-AP35		MSZ-AP42		MSZ-AP50		MSZ-AP60		MSZ-AP71		MSZ-AP80		
		REFRIGERANT									R32							
	INDOOR UNIT OUTDOOR UNIT			MSZ-AP25VG(K)D MUZ-AP25VG		MSZ-AP35VG(K)D MUZ-AP35VG		MSZ-AP42VG(K)D MUZ-AP42VG		MSZ-AP50VG(K)D MUZ-AP50VG		MSZ-AP60VG(K)D MUZ-AP60VG		MSZ-AP71VG(K)D MUZ-AP71VG		MSZ-AP80VG(K)D MUZ-AP80VG		
	וואון אססקוסס			2.5kW		3.5kW		4.2kW		5.0kW		6.0kW		7.1kW		7.8kW		
		COOL		5.00 EER 19 dBA*		4.02 EER 19 dBA*		3.53 EER 26 dBA*		3.79 EER 28 dBA*		3.77 EER 29 dBA*		3.53 EER 30 dBA*		3.31 EER 30 dBA*		
					3.2kW		3.7kW		5.4kW		6.0kW		6.8kW		8.0kW		9.0kW	
	HEAT			4.78 COP 18 dBA*		4.57 COP 19 dBA*		3.78 COP 26 dBA*		3.70 COP 28 dBA*		4.07 COP 29 dBA*		3.83 COP 30 dBA*		3.53 COP 30 dBA*		
	ZERL STAR RATINGS (NZ) Cold Area  Avge Area <sup>‡</sup> Hot Area <sup>‡</sup>		5.5	3.0	5.0	2.5	4.0	2.0	4.0	2.0	4.0	2.0	3.5	2.0	3.5	2.0		
			Area <sup>‡</sup>	5.0	3.0	4.5	3.0	3.5	2.5	4.0	2.5	3.5	2.5	3.0	2.5	3.0	2.5	
			Area‡	5.5	3.5	5.0	3.5	4.0	3.0	4.0	3.5	4.0	3.0	3.5	3.0	3.5	3.0	
COOL		Rated	[kW]	2.5		3.5		4.2		5.0		6.0		7.1		7.8		
	Capacity	Min-Max	[kW]	1.1-3.6		1.1-4.1		0.9-4.8		1.4-6.2		1.4-7.3		2.0-8.7		2.0-9.2		
	Input	Input Rated		0.50		0.87		1.19		1.32		1.59		2.01		2.36		
	EER/AEER			5.00 / 4.97		4.02 / 4.01		3.53 / 3.52		3.79 / 3.78		3.77 / 3.77		3.53 / 3.53		3.31 / 3.30		
	Indoor Quiet Sound		[dBA]	19		19		26		28		29		30		30		
	Level Low-SHi <sup>2</sup>		[dBA]	24-31-38-44		24-31-38-45		29-35-40-46		33-39-44-49		37-41-45-48		37-41-45-49		37-41-45-53		
	Running Current (Rated) [A			2.6		4.1		5.3		5.9		7.1		8.8		10.8		
	Air Volume In (SHi <sup>1</sup> )		[L/s]	2	205		223		223		258		315		310		343	
НЕАТ	Capacity	Rated	[kW]	3.2		3.7		5.4		6.0		6.8		8.0		9.0		
		Min-Max	[kW]	1.3-5.0		1.3-5.1		1.3-6.0		1.4-8.0		2.0-8.6		2.2-9.9		2.2-11.0		
	Input Rated		[kW]	0.67		0.81		1.43		1.62		1.67		2.09		2.55		
	COP / ACOP		[4DA]	4.78 / 4.75		4.57 / 4.55 19		3.78 / 3.77		3.70 / 3.70		4.07 / 4.06		3.83 / 3.82		3.53 / 3.53		
	Sound	Quiet Low-SHi <sup>2</sup>	[dBA]	25-31-38-42		25-31-38-45		29-35-40-46		33-38-43-48		37-41-45-48			37-41-45-51		37-41-45-51	
	Level Low-SHI <sup>2</sup> Running Current (Rated)		[A]	3.3		3.8		6.3		7.1		7.4		9.1		11.3		
	Air Volume In (SHi¹)		[L/s]		90	215		233 268			338		320		320			
	Standard			7-Day Programmable Controller														
Controller	Optional	Wired 7-Day T	imer							PAR Controll								
Wi-Fi								Optional		AP Classic S			us Series					
Power Supply	(Powered	From Outdoor						23	0 V / Single	Phase / 50	Hz							
	Maximum Current		[A]	7.0		7.1		9	9.9		14.0		14.0		16.4		16.5	
Indoor Outdoor	Dimensions (WxDxH)		[mm]		798 x 21			9 x 299					1100 x 2	1100 x 257 x 325				
	Weight		[kg]	10							1	6	17					
	Dimensions (WxDxH)		[mm]	800 x 285 x 550 35 35		36		800 x 28 41		35 x 714 41		840 x 33						
	Weight Sound Level - SPL³/Power		[kg]														/ 60, 60	
	(Cooling-Heating)		[dBA]		46-49 / 59-59		50-50 / 64-64		51-52 / 65-65		54-56 / 69-69		55-57 / 69-69		56-55 / 69-69		56-55 / 69-69	
Piping	Diameter (Liquid/Gas)		[mm]		/ 9.52	6.35 / 9.52		6.35 / 9.52			6.35 / 12.7		6.35 / 12.7		6.35 / 12.7		6.35 / 12.7	
	Max. Length/Height† Chargeless Piping Length		[m]		/ 12 I0	20 / 12		20 / 12 10		20 / 12 15		30 / 15 15		30 / 15 15		30 / 15 15		
0	Cooling		[m]				-10 / 46		-10 / 46		-10 / 46		-10 / 46		-10 / 46		-10 / 46	
Operation Range Outdoor	Heating		[°C]	-10 / 46 -15 / 24		-10 / 40		-10 / 40		-10 / 40		-10 / 40		-10 / 40		-10 / 40		
Indoor Unit Colour		9	[ 0]	- 10	,	- 70	,	- 10	,	Wh		- 10		10	,	- 10	,	

EER = Energy Efficiency Ratio
COP = Coefficient of Performance
AEER = Annual Energy Efficiency Ratio
ACOP = Annual Coefficient of Performance
SPL = Sound Pressure Level

1 SHi = Super High

 $^2\ \text{Low-SHi} = \text{Low-Medium-High-Super High}$   $^3\ \text{SPL}$  measured under rated operating frequency

\* Sound Levels rated at lowest fan speed.

Avge/Hot are Australia only.

Rating Conditions (AS / NZS 3823). Cooling: Indoor: 27°C DB, 19°C WB. Outdoor: 35°C DB Heating: Indoor: 20°C DB Outdoor: 7°C DB, 6°C WB.



Black Diamond Technologies Limited



Exclusive New Zealand Partner Since 1981



<sup>†</sup> Maximum length is inclusive of height differential i.e. (20/12) means the pipe can be 12m high and 8m across for a total length of 20m.