

Black Diamond Series

The New Standard in Personalised Comfort and Style



Introducing the Black Diamond Series

The Black Diamond Series sets the new standard in personalised comfort and style. Available in three striking colours, the range is packed with advanced features including Plasma Quad Plus Filtration ideal for allergy sufferers, and the 3D i-See Sensor for customised heating or cooling. And of course, starting at just 19dBa, it's unrivalled for quietness!



Reflect Your Design Personality

The Black Diamond Series is available in Red Diamond, White Diamond or Black Diamond, with a striking gloss finish. Now you can make a real interior design style statement with your heat pump colour choice.

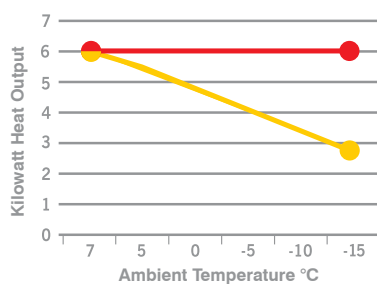


HyperCore® as Standard* – New Zealand's Best Low Temperature Performance

The Black Diamond Series 2.5–5kW capacities come standard with HyperCore Technology. While ordinary heat pumps produce less heat below 7°C, only Mitsubishi Electric HyperCore Technology guarantees to continue to deliver its fully rated capacity right down to -15°C – so you stay warm when you need it most.

As this graph shows, even though both heat pumps are rated to provide 6kW of heat, their performance differs greatly as the temperature drops. While the standard heat pump produces less heat, the LN50 6kW HyperCore High Wall model continues to deliver the full 6kW heating you paid for.

AMBIENT TEMPERATURE vs HEAT DELIVERY



● MSZ-LN50 HyperCore® 6kW Heating High Wall Heat Pump
 ● STANDARD Inverter 6kW Heating High Wall Heat Pump



HYPERCORE

* The Black Diamond Series LN60 does not feature HyperCore Technology.

3D i-See Sensor

The 3D i-See Sensor detects the presence and position of people in the room using thermal heat recognition, adjusting the temperature and airflow pattern for optimal comfort. This helps the Black Diamond Series do more than simply save energy, it also enables a new level of truly personalised comfort to be achieved.

Thermal Scan Technology

The 3D i-See Sensor continually takes a thermal scan of the room, dividing it into 752 three-dimensional zones and measuring the temperature in each zone to detect exactly where people are in a room.

Independently Controlled Dual Split Vane Airflow

Intuitively Adjusts the Airflow Direction to Where It's Needed

The 3D i-See Sensor works in conjunction with the Dual Split Vanes to provide heating or cooling to where it is needed most. As a result, it can save energy by not heating or cooling areas that don't require it. Whether you prefer direct, indirect or evenly distributed airflow, the 3D i-See Sensor and Dual Split Vanes provide the ultimate in customisable airflow.

You'll Never Feel Cold

The 3D i-See Sensor can recognise movement of an individual in a room and subsequently direct the airflow with the Dual Split Vanes; so they continue feeling warm no matter where they have moved to in the room.



You always feel warm and comfortable as the direct heat follows you as you move around the room.

Comfort for All With Multiple Airflow Directions

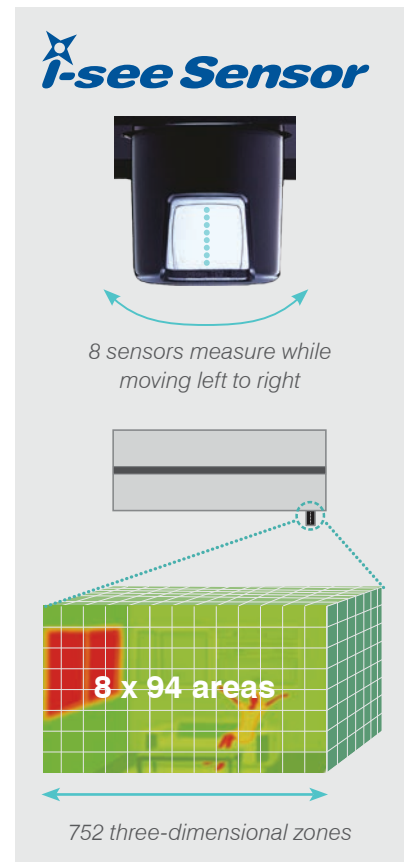
The 3D i-See Sensor can identify multiple people present in the room and adjust the Dual Split Vanes to direct heating or cooling evenly throughout; so everybody feels comfortable in the room.

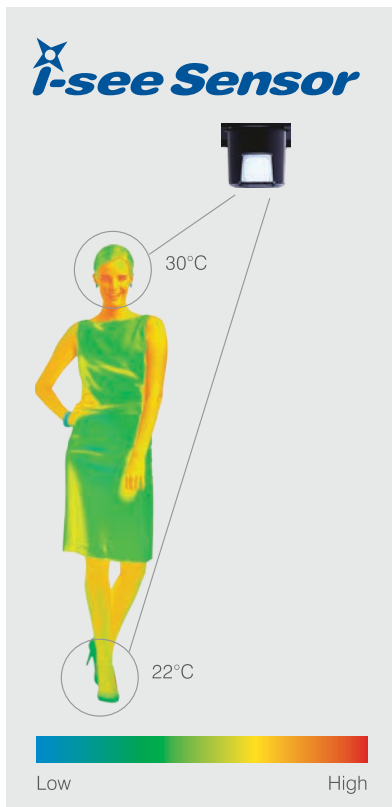


Only one person feels direct heat.



Both people feel direct heat and are both comfortable.

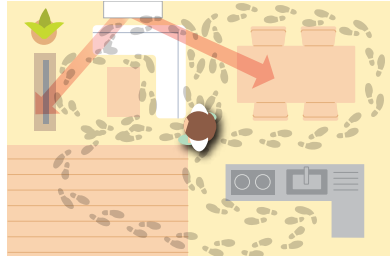




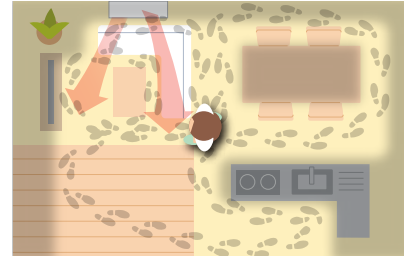
3D i-See Sensor Features

Even Airflow – Airflow Only Where You Need It

With Even Airflow Mode, the 3D i-See Sensor memorises people's movements and furniture positions, efficiently distributing airflow only to where it is needed.



Normal Swing Mode



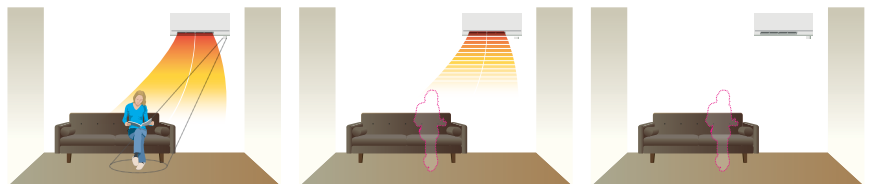
Even Airflow Mode

No Occupancy Modes – for Energy Savings

The 3D i-See Sensor detects whether or not there are people in the room, and automatically switches to one of the No Occupancy Modes, as set by the user.

In No Occupancy Energy Saving Mode, when no one is in the room, the unit automatically reduces power consumption by approximately 10% after 10 minutes, and 20% after 60 minutes.

In No Occupancy Auto-Off Mode, when no one is in the room, the unit turns off automatically.



The 3D i-See Sensor continuously scans the room for occupants.

In Energy Saving Mode – power is reduced when you leave the room.

In Auto-Off Mode – unit switches off when you leave the room

Superior Energy Efficiency

Black Diamond Series heat pumps are some of the most energy efficient heat pumps available in New Zealand. The LN25 model even boasts the maximum 6 star energy rating in heating – which means superior energy efficient performance all winter long. This high energy efficiency is achieved by incorporating a large, high-density heat exchanger, an advanced high-efficiency fan motor and a next generation compressor using the latest in super efficient R32 refrigerant.



Wi-Fi Control Built In!

So you'll never return to a cold home again.

With Mitsubishi Electric Wi-Fi Heat Pump Control you can pre-heat or cool a room no matter where you are. On the way home, running late, coming home early, or even when you're in a different country, with Wi-Fi control you'll always arrive home to total comfort regardless of what New Zealand's unpredictable weather is doing outside!

Quiet Operation

Mitsubishi Electric Heat Pumps are designed to be very, very quiet. Constant development to reduce sound levels has resulted in our Black Diamond Series High Wall indoor units starting at an amazingly quiet 19dBA*. Unrivalled for quietness, they are ideal where it matters most – in living rooms and bedrooms.



* MSZ-LN25/35 indoor sound level on lowest fan speed.

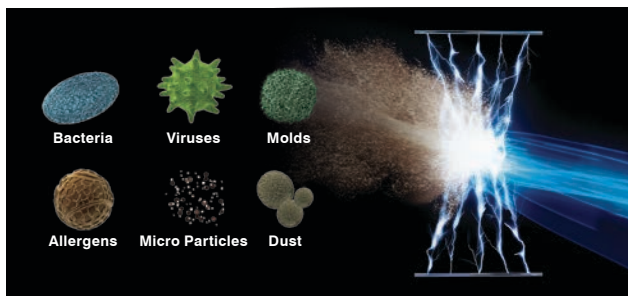
Advanced Plasma Quad Plus Filtration

The new advanced Plasma Quad Plus Filtration System, featuring high-performance two stage plasma technology, filters the air to clean away smells, dust, moulds and other common household allergens.



Two Stage Plasma Filter

The Plasma Quad Plus Filter works like an electrical curtain, using an electrical discharge to catch and neutralise even microscopically small particles in the air. In fact, it can even capture PM2.5 particles (which are up to 30 times smaller than the width of a human hair!).



Independently Tested

Independent test results confirm up to 99.7% effectiveness, for the ultimate in peace of mind. With the Plasma Quad Plus Filtration System, a healthier and cleaner living environment can be enjoyed by all.

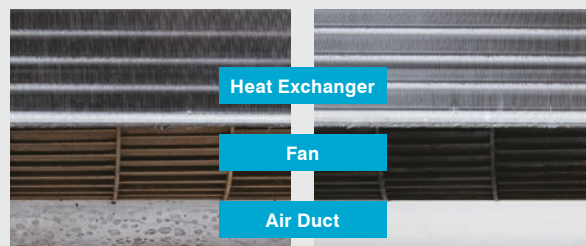
Dual Barrier Coating

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.



Blended fluorine particles prevent hydrophilic dirt penetration and hydrophilic particles prevent hydrophobic dirt from getting into the heat pump. As a result, the patented Dual Barrier Coating on the inner surface continues to keep key internal heat pump components clean.

Comparison of dirt on heat exchanger, fan and air duct
(Factory simulated in-house comparison)



No Dual Barrier Coating
(Image after 10 years)

Dual Barrier Coating used

Maximise Energy Efficient Performance

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.

Black Diamond Series High Wall Features



Whisper Quiet Operation



3D i-See Sensor



Dual Split Vane Technology



Good Design Award
Winner 2016



R32 Next Generation Energy
Efficient Compressor



Dual Barrier Coating



Advanced Plasma Quad
Plus Filtration System



7-Day Programmable
Controller



i-Save Mode



Econo Cool







10°C Heating Mode



Night Mode

Specifications

QUICK GLANCE	TYPE	High Efficiency High Wall Heat Pumps			
	SERIES	Black Diamond Series			
	MODEL	MSZ-LN25VGHZ	MSZ-LN35VGHZ	MSZ-LN50VGHZ	MSZ-LN60VG
	INDOOR UNIT	MSZ-LN25VG/B/R	MSZ-LN35VG/B/R	MSZ-LN50VG/B/R	MSZ-LN60VG/B/R
	OUTDOOR UNIT	MUZ-LN25VGHZ	MUZ-LN35VGHZ	MUZ-LN50VGHZ	MUZ-LN60VG
	COOL	2.5kW 5.10 EER 19 dBA*	3.5kW 4.07 EER 19 dBA*	5.0kW 3.62 EER 27 dBA*	6.1kW 3.53 EER 29 dBA*
	HEAT	3.2kW 5.42 COP 19 dBA*	4.0kW 4.88 COP 19 dBA*	6.0kW 4.00 COP 25 dBA*	6.8kW 3.78 COP 29 dBA*
ENERGY RATING	 5.5 6.0	 3.5 5.0	 3.0 3.5	 2.5 3.0	

COOL	Capacity	Rated	[kW]	2.5	3.5	5.0	6.1
		Min-Max	[kW]	0.8 - 3.5	1.0 - 4.0	1.4 - 5.8	1.4 - 6.9
	Input	Rated	[kW]	0.49	0.86	1.38	1.73
		EER		5.10	4.07	3.62	3.53
	AEER		5.07	4.05	3.61	3.52	
	Star Rating		5.5	3.5	3.0	2.5	
	Indoor Sound Level	(Quiet)	[dBA]	19	19	27	29
		(Low-SHi ¹)	[dBA]	23-29-36-42	24-29-36-43	31-35-39-46	37-41-45-49
	Running Current (In+Out)		[A]	2.5	4.1	6.3	7.8
	Air Volume In (SHi ²)		[L/s]	198	213	231	261

HEAT	Capacity	Rated	[kW]	3.2	4.0	6.0	6.8
		Min-Max	[kW]	1.0 - 6.3	1.0 - 7.0	1.8 - 9.0	1.8 - 9.8
		@-15°C	[kW]	3.2	4.0	6.0	-
	Input	Rated	[kW]	0.59	0.82	1.50	1.80
		COP		5.42	4.88	4.00	3.78
	ACOP		5.39	4.86	3.99	3.77	
	Star Rating		6.0	5.0	3.5	3.0	
	Indoor Sound Level	(Quiet)	[dBA]	19	19	25	29
		(Low-SHi ¹)	[dBA]	24-29-36-45	24-29-36-45	29-34-39-47	37-41-45-49
	Running Current (In+Out)		[A]	3.0	4.0	6.9	7.9
Air Volume In (SHi ²)		[L/s]	240	228	261	261	

Controller	Standard	Premium LN 7-Day Programmable Controller & Wi-Fi Control			
	Optional Wired 7-Day Timer	PAR-31MAA			
Power Supply	(Powered From Outdoor Unit)	230 V / Single Phase / 50 Hz			
Indoor	Dimensions (WxDxH)	[mm]	890 x 233 x 307		
	Weight	[kg]	15.5		
Outdoor	Dimensions (WxDxH)	[mm]	800 x 285 x 550	800 x 285 x 550	840 x 330 x 880
	Weight	[kg]	35	36	55
	Sound Level - SPL/Power (Cooling-Heating)	[dBA]	46 - 49	49 - 50	51 - 55
Piping	Diameter (Liquid/Gas)	[mm]	6.35 / 9.52	6.35 / 9.52	6.35 / 9.52
	Max. Length/Height [†]	[m]	20 / 12	20 / 12	30 / 15
	Chargeless Piping Length	[m]	7	7	7
Operation Range Outdoor	Cooling	[°C]	-10 / +46	-10 / +46	-10 / +46
	Heating	[°C]	-25 / +24	-25 / +24	-25 / +24
Colour		Black Diamond / Red Diamond / White Diamond			

EER = Energy Efficiency Ratio
 COP = Coefficient of Performance
 AEER = Annual Energy Efficiency Ratio
 ACOP = Annual Coefficient of Performance

Sound Level:
¹(SHi = Super High).
²(Low-SHi) Low / Medium / High / Super High.
 *Sound Levels rated at lowest fan speed.

[†] 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.
 Rating Conditions (AS/NZS 3823)

Black Diamond Series



White Diamond

- MSZ-LN25VGV HyperCore**
Heating Capacity: 3.2 kW | Cooling Capacity: 2.5 kW
- MSZ-LN35VGV HyperCore**
Heating Capacity: 4.0 kW | Cooling Capacity: 3.5 kW
- MSZ-LN50VGV HyperCore**
Heating Capacity: 6.0 kW | Cooling Capacity: 5.0 kW
- MSZ-LN60VGV**
Heating Capacity: 6.8 kW | Cooling Capacity: 6.1 kW



Black Diamond

- MSZ-LN25VGB HyperCore**
Heating Capacity: 3.2 kW | Cooling Capacity: 2.5 kW
- MSZ-LN35VGB HyperCore**
Heating Capacity: 4.0 kW | Cooling Capacity: 3.5 kW
- MSZ-LN50VGB HyperCore**
Heating Capacity: 6.0 kW | Cooling Capacity: 5.0 kW
- MSZ-LN60VGB**
Heating Capacity: 6.8 kW | Cooling Capacity: 6.1 kW



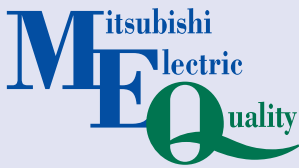
Red Diamond

- MSZ-LN25VGR HyperCore**
Heating Capacity: 3.2 kW | Cooling Capacity: 2.5 kW
- MSZ-LN35VGR HyperCore**
Heating Capacity: 4.0 kW | Cooling Capacity: 3.5 kW
- MSZ-LN50VGR HyperCore**
Heating Capacity: 6.0 kW | Cooling Capacity: 5.0 kW
- MSZ-LN60VGR**
Heating Capacity: 6.8 kW | Cooling Capacity: 6.1 kW



Peace of mind is assured
with your choice of Mitsubishi
Electric Heat Pumps.

We support our product
with a unique and comprehensive 5
year parts
and labour warranty.



Quality you can rely on

- All units line tested
- Performance tested
- 800 hour heat stress test
- 2000 hour endurance test

Your Guarantee Of Excellence

This emblem is your assurance of the very best in technology and quality as it represents Mitsubishi Electric's continuing efforts in making our heat pumps the industry standard. Every Mitsubishi Electric Heat Pump is a product of painstaking research, relentless testing, and a resolute determination to improve upon vital performance characteristics. As a result, our heat pumps have become more durable, less costly to operate, quieter, easier to install and maintain, and better able to distribute air evenly throughout any type of interior. This kind of commitment to quality enables our products to create remarkably pleasant environments that will ultimately make your life more comfortable.



Black Diamond Technologies

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Mitsubishi Electric products in NZ

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For more information on Mitsubishi Electric Heat Pumps, please visit www.mitsubishi-electric.co.nz
or call our Customer Service Team on **0800 784 382**