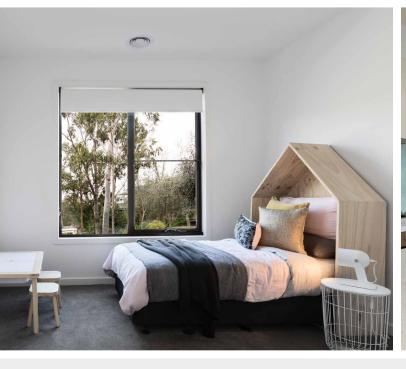


Central Heating and Ventilation

Highly Efficient Ducted Heating, Cooling and Ventilation









Quiet, Unobtrusive Year-Round Comfort for Your Whole Home

Experience Year-Round Comfort With a Whole Home Ducted Heat Pump System

A Mitsubishi Electric Ducted Heat Pump System is designed to provide whole home central heating or cooling at a constant temperature throughout the house. Ideal for installing in new builds or retrofitted into existing homes, it is a costeffective and energy efficient solution for year-round comfort. Mitsubishi Electric Ducted Systems are whisper quiet, and with only its grilles visible, it is the perfect unobtrusive solution for whole home heating or cooling at the same time.



Hidden From View

Installed in the ceiling with only subtle grilles visible, a ducted system lets your interior design style take centre stage. Not only does a ducted system provide a whole home heating or cooling solution, it offers a sleek installation for the design-conscious.



Grille Options to Compliment Your Interior Design

Mitsubishi Electric Ducted Heat Pump Systems allow for a wide range of grille options to best suit your installation needs. From ceiling and wall installations, to underfloor grille options, talk to your installer about what's right for you.



Easy to Use 7-Day Wall Controller to Maximise Energy Efficiency

This attractive full dot liquid crystal display incorporates a large backlit screen and simple menus for easy operation. You can set up to eight temperature and airflow patterns per day for seven days, maximising energy efficient operation – saving you both time and money.



Optional Wi-Fi Control – Never Return to a Cold Home Again

Pre-heat or cool the whole home no matter where you are. On the way home, running late, coming home early, or even when you're in a different country, with optional Wi-Fi Control you'll always arrive home to total comfort.



Optional Zone Control

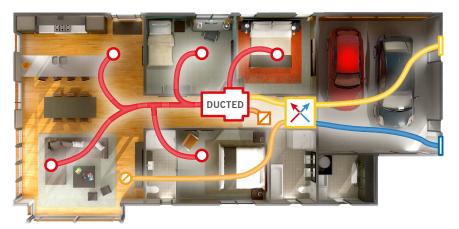
Program and control up to 4 or up to 8 individual zones, providing heating or cooling only to the rooms that require it.







Combine a Ducted System with Fresh Air Heat Recovery Ventilation



Return air



Supplies fresh heated air



X Lossnay Ventilation Unit

The Lossnay Balanced Pressure Ventilation System recovers heat from the stale, damp air it extracts from your home - and then uses that energy to pre-warm or pre-cool the incoming filtered fresh air. This means that when Lossnay is combined with your ducted system, your home can be brought to the desired temperature faster because the heating system is not required to work as hard to do so.

By having a well ventilated home the air is also much drier, further speeding up the efficient heating process. In addition, because fresh air is brought in from the outside and not from the attic, air quality is maximised.

When these two systems are combined to work together, it will ultimately create a drier, healthier environment for you and your family.

	Heat Pump	Ventilation	Ducted Heat Pump + Ventilation
Heating/Cooling	✓	-	✓
Fresh Outside Air	-	✓	✓
Filtered Air (dust etc. removed)	✓	✓	✓
Energy Efficient	✓	✓	✓
Heat/Energy Recovery (Heat Exchange)	-	√	✓

Maximise comfort by combining our ducted system with Lossnay Balanced Pressure Ventilation. Mitsubishi Electric Lossnay Ventilation can be integrated with a PEAD Ducted Heat Pump System offering a complete home heating, cooling and ventilation solution.

How the Lossnay Core Works



Return Air

The stale air extracted from your home is Return Air (RA). Return Air can contain high levels of CO₂, odours and other pollutants. This Return Air stream also contains heat energy that Lossnay can recover, which is not the case with positive pressure ventilation systems.



Exhaust Air

As the stale Return Air is removed, the Lossnay Core 'recovers' the useful heat energy from it. The air is then exhausted (EA) outside along with the unwanted pollutants.



Outdoor Air

Outdoor Air (OA) is introduced to provide fresh air. It is first filtered, then passed through the Lossnay Core. This allows it to be pre-heated in winter (or precooled in summer) using the energy recovered from the Return Air.



Supply Air

Supply Air (SA) then enters your house as fresh pre-heated or pre-cooled air.



The Lossnay Difference

The Mitsubishi Electric
Lossnay System is a patented heat recovery ventilation solution that uses fresh air (not attic air) to ventilate your home. The system works by extracting stale air from inside your house and replacing it with allergen-reduced fresh air from outside.

Furthermore, Lossnay also recovers heat energy from the outgoing stale air to prewarm (or pre-cool) the fresh air being drawn into your home.

Improved Air Quality

By drawing in fresh outdoor air, as opposed to attic air, indoor air quality is improved as high levels of ${\rm CO_2}$, odours and other pollutants are removed from your home.



Assists with Moisture and Condensation Control

Effectively reduces moisture in your home by directly removing stale air that causes condensation.



Fresh Air Without Open Windows

Lossnay allows you to have a well-ventilated home without the need to open windows. This improves the safety of your home, family and means outdoor noise is minimised.



Creates a Healthier Home

Filtered fresh air improves air quality for allergy and asthma sufferers.



Retains Heat

Lossnay's unique Heat Recovery Technology recovers up to 85% of the heat energy in outgoing air which is then used to pre-warm or cool the incoming fresh air.



Energy Efficient

Boasting an A+ efficiency rating, incoming fresh air is pre-warmed so your heating system isn't required to work as hard to reach a desired temperature. This is highly energy efficient, and can help reduce heating bills.



Whisper Quiet Operation

From an ultra quiet 14dB*, the Vertical Lossnay is the ideal solution for residential homes and apartments where quiet comfort is key.



*VL-220C2GV on lowest fan speed. Measured at 1.5m.

Easy Control At Your Finger Tips

An intuitive controller with an easy-to-read LCD display is included as standard*. Fan speed, night set back and 24-hour and weekly timers can easily be customised and programmed with multiple stop and start patterns per day.



*VL220/250/350/500

Easy To Clean

The standard filters can be removed for regular cleaning to keep the unit in optimal working condition.



Fresh Air Heat Recovery Ventilation for all Types of Applications

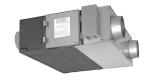
Ventilating your home is vital as it maintains air quality and reduces moisture. creating a healthier and more comfortable environment. There is a Lossnay solution to suit most New Zealand homes, from whole home ducted to single room applications.

Lossnay is specifically designed for more airtight homes built to the current New Zealand Building Code; delivering the optimum amount of fresh air without creating draughts and minimising indoor temperature fluctuations.

Whole Home Ventilation

In-Ceiling Solutions

These ducted whole home balanced pressure Lossnay Heat Recovery Ventilation Systems are designed for installation in homes that have available roof or attic space to accommodate the heat exchanger and corresponding ducting.



Vertical Solutions

The slimline, Vertical Lossnay Series features a small, upright footprint that can be placed in the garage or a utility cupboard and is not limited to an in-roof installation.



Single Room Ventilation

In-Ceiling Single Room Solutions

This cost effective ventilation system is specifically designed to provide fresh filtered air to a single room with the additional benefit of energy efficient heat recovery at the same time. The ducted design means the system can be installed in the roof or attic space, so it is unobtrusive and hidden away.



Wall Mounted Single Room Solutions

This easy to install back-to-back wall mounted system is designed to provide cost effective energy recovery ventilation to one specific area in the home. The ductless design means the system is ideal for homes and buildings where there is no roof space to install a heat exchanger.







Zone Controller



Zone Control will enable your Mitsubishi Electric Ducted Central Heat Pump System to program and control either up to 4 or up to 8 individual zones, providing heating or cooling only to the rooms that require it. Built-in sensor functions monitor room temperature, brightness and occupancy to maximise energy efficient use of the whole system throughout the home or just those rooms where it is needed.*



Features

Temperature Sensor

With an inbuilt thermostat (PAR-ZC01ME-E wall controller), the Zone Controller allows the actual usable space temperature to be measured, offering a more realistic and timely temperature measurement where it is needed most.

Occupancy Sensor

The Zone Controller (via the PAR-ZC01ME-E wall controller) constantly monitors the usable area to detect vacancy. Once detected, one of four user defined energy-save control options can be implemented to reduce energy consumption: turn the unit on/off, lower the fan speed, temperature offset, or turn user designated zones on/off.

Brightness Sensor

Working in conjunction with the Occupancy Sensor, the Brightness Sensor can be set to maximise energy savings when it detects user defined "Light" or "Dark" conditions (lux values).

Backlit LCD Touch Screen

Featuring a liquid-crystal display (LCD), back lit for operation in dark conditions. For ease of use, the user defined coloured LED indicator (at the bottom of the controller) lights up to indicate the current operation mode i.e. red for Heating, blue for Cooling, green for Night Setback.

Intuitive Airflow Control

Where traditional ducted systems require manual adjustment of the indoor fan speed, the PAC-ZC40/80, equipped with the exclusive Mitsubishi Electric Intuitive Airflow Control, intuitively detects which zones you have open/closed and adjusts the fan speed accordingly. When zones are not in use the fan speed is lowered automatically, leading to increased overall energy savings.

Optional Wi-Fi Control

Advanced temperature monitoring and management. Now you can control, monitor and schedule which zones your ducted heat pump is controlling in real time from anywhere via your smart phone, tablet or online account.



ZONE 1













^{*} Allows connection of up to 2x optional thermistors (PAC-SE41TS-E).

Specifications

Ducted PEAD Series

Specifications: Ceiling-Concealed (PEAD)

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REFRIGERANT						R	32				
Indoor Unit			PEAD-N	Л71JAA	PEAD-N	1100JAA	PEAD-N	1125JAA	PEAD-M140JAA		
Function			Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	
Capacity (minma	pacity (minmax.) (kW)		7.1 (2.8-8.1)	8.0 (2.6-10.2)	10.0 (4.9-11.4)	11.2 (4.5-14.0)	12.5 (5.5-14.0)	14.0 (5.0-16.0)	14.0 (6.2-15.3)	16.0 (5.7-18.0)	
Power Input		(kW)	1.98	2.00	2.67	2.80	3.66	3.52	4.37	4.18	
Rated EER/COP			3.58	4.00	3.74	4.00	3.41	3.97	3.20	3.82	
Rated AEER/ACO	P		3.53	3.93	3.60	3.86	3.32	3.86	3.13	3.73	
Power Supply Out	door Unit					230V, Single	-phase, 50Hz				
A inflam.		(m³/h)	1051-12	60-1501	1440-1738-2041		1771-2131-2520		1918-2340-2761		
Airflow (L/s)		(L/s)	292-350-417		400-483-567		492-592-700		533-650-767		
External Static Pre	nal Static Pressure (Pa) 35/50/70/100/125										
Sound Pressure Level (dBA)		30-33-38		33-38-42		36-40-44		40-44-49			
Dimensions W x D x H (mm)			1,100 x 7	'32 x 250		1,400 x 7	732 x 250		1,600 x 732 x 250		
Weight	Weight (kg)		30		39		4	10	44		
Outdoor Unit			SUZ-M71VAD		PUZ-ZM100VKA		PUZ-ZN	I125VKA	PUZ-ZM140VKA		
	Height	(mm)	88	30	13	138	13	138	1338		
Dimensions	nensions Width (mm)		840		1050		10	50	1050		
	Depth	(mm)	330 330 330		330						
Weight (kg)		(kg)	55		1	111 111		111			
Operation Range	Cooling	[°C]	-15	/ 52	-5 / 52		-5 ,	52	-5 / 52		
Outdoor	Heating	[°C]	-15	/ 24	-20	/ 21	-20	/ 21	-20 / 21		

VL Whole Home Range

Specifications: Fresh Air Home Ventilation

Specifications: Fre	sh Ai	r Home	Venti	lation													
Туре		In-Ce	eiling Concealed Ducted Vertical Wall Mounted Ducted														
Model			VL-220	CZGV-E		١	/L-250CZ	PVU-L/R-I	E	١	/L-350CZ	PVU-L/R-I	E	VL-500CZPVU-L/R-E			
Ventilation Modes		F	leat Reco	very Mod	le	H	leat Reco	very Mod	е	H	leat Reco	very Mod	le	H	leat Reco	very Mod	ie
Heat Exchange System		Heat Re	ecovery V	entilating	System	Heat Recovery Ventilating System			Heat Recovery Ventilating System			System	Heat Recovery Ventilating System				
Heat Exchange Material		Water-		Paper Se	ensible	Synthetic Resin Sensible Heat Exchanger			Synthetic Resin Sensible Heat Exchanger			Synthetic Resin Sensible Heat Exchanger					
Surrounding Air Condition		Betwee		l 40°C, 80 ss	%RH or		not exce	ure and h ed the de ture 12°C	w point		not exce	ure and h ed the de ture 12°C		int should no		ndoor temperature and humidity hould not exceed the dew point temperature 12°C	
Return (Suction) Air Condi	tion	ı	Up to 40°	C, 95%RH	1		Jp to 40°	C, 95%RH	1		Up to 40°	C, 95%RH	1		Up to 40°	C, 95%Rl	+
Supply Fan Operation Unc Outdoor Temperature	ler Low	6 min Of	24 mi FF5°C o	mittent op n ON, r less: Co r stopped	ntinuous		opera or less: Co	: Intermit ation. ontinuous opped			-3°C to -15°C: Intermittent operation. 15°C or less: Continuous supply air stopped		-3°C to -15°C: Intermittent operation. -15°C or less: Continuous supply air stopped				
Electrical Power Supply			220-240	V / 50Hz			220-240	V / 50Hz			220-240V / 50Hz			220-240V / 50Hz			
Fan Speed		Fan Speed 4	Fan Speed 3	Fan Speed 2	Fan Speed 1	Fan Speed 4	Fan Speed 3	Fan Speed 2	Fan Speed 1	Fan Speed 4	Fan Speed 3	Fan Speed 2	Fan Speed 1	Fan Speed 4	Fan Speed 3	Fan Speed 2	Fan Speed 1
Input Power	(W)	80	35	18.5	8.5	106	44	23	11	155	71	37	19	275	104	49	21
Air Volume - Heat Recovery Mode	(m³/h)	230	165	120	65	250	175	125	75	320	224	160	96	500	350	250	150
necovery wode	(L/s)	64	46	33	18	69	49	35	21	89	62	44	27	139	97	69	42
External Static Pressure	(Pa)	164	84	44	13	150	74	38	14	150	74	38	14	200	98	50	18
Temperature Exchange Efficiency (%)		82	84	85	86	85	87	88	90	85	87	88	90	85	87	89	92
Noise (dBA) (Measured at 1.5m under the centre of the unit in an anechoic chamber)		31	25	19	14	31	22	16	15>	35	26	19	15>	37	29	22	15>
Duct Size	(mm)	150			122			145				183					
Interlock Cable Included (CN2L)		No			Yes			Yes				Yes					
Dimensions W x D x H	(mm)		850 x 7	20 x 320		595 x 356 x 565			658 x 432 x 623				725 x 556 x 632				
Weight	(kg)		3	1		26				32					3	19	

LGH Whole Home Range

Specifications: Fresh Air Home Ventilation

Туре	In-Ceiling Concealed Ducted									
Model		LGH-1	5RVX-E	LGH-2	5RVX-E	LGH-3	5RVX-E	LGH-5	ORVX-E	
Ventilation Modes			y Mode, Bypass on Mode		ry Mode, Bypass on Mode		ry Mode, Bypass on Mode	Energy Recovery Mode, Bypass Ventilation Mode		
Heat Exchange System			ery Ventilation tem		very Ventilation		very Ventilation stem	Energy Recovery Ventilation System		
Heat Exchange Material		Specially Treated Paper Plate Heat Exchanger			Paper Plate Heat anger		l Paper Plate Heat anger	Specially Treated Paper Plate Heat Exchanger		
Surrounding Air Condition			and 40°C, 80%RH ess	Between -10°C and 40°C, 80%RH or less			and 40°C, 80%RH less	Between -10°C and 40°C, 80%RH or less		
Return (Suction) Air Condit	tion	Up to 40°	C, 80%RH	Up to 40°	C, 80%RH	Up to 40°	C, 80%RH	Up to 40°	°C, 80%RH	
Supply Fan Operation Under Low Outdoor Temperature		-10°C to -15°C: Intermittent opperation 60 min ON, 10 min OFF15°C or less: Intermittent operation 55min OFF, 5 min ON.		-10°C to -15°C: Intermittent opperation 60 min ON, 10 min OFF15°C or less: Intermittent operation 55min OFF, 5 min ON.		-10°C to -15°C: Intermittent opperation 60 min ON, 10 min OFF15°C or less: Intermittent operation 55min OFF, 5 min ON.		-10°C to -15°C: Intermittent opperation 60 min ON, 10 min OFF15°C or less: Intermittent operation 55min OFF, 5 min ON.		
Electrical Power Supply		220-240V / 50Hz		220-240V / 50Hz		220-240	V / 50Hz	220-240V / 50Hz		
Fan Speed		Fan Speed: High	Fan Speed: Low	Fan Speed: High	Fan Speed: Low	Fan Speed: High	Fan Speed: Low	Fan Speed: High	Fan Speed: Low	
Input Power	(W)	49	7	62	7.5	140	11	165	12	
Air Volume - Heat	(m³/h)	150	38	250	63	350	88	500	125	
Recovery Mode	(L/s)	42	10	69	17	97	24	139	35	
External Static Pressure	(Pa)	95	6	85	5	160	10	120	8	
Temperature Exchange Eff	iciency (%)	80	84	79	86	80	88.5	78	87	
Noise (dBA) (Measured at 1.5m under the centre of the unit in an anechoic chamber)		28	17	27	17	32	17	34	18	
Duct Size (mm)		100		150		1:	50	200		
Interlock Cable Included (CN2L)		Yes		Yes		Y	es	Yes		
Dimensions W x D x H	(mm)	780 x 6	10 x 289	780 x 735 x 289		888 x 8	74 x 331	888 x 1016 x 331		
Weight	(kg)	2	20	2	23	3	30	33		
Note: Other models of the L	CLLBanasa	ua avrailabla (air va	l 6 00 0 00	O ==3/l=)						

Note: Other models of the LGH Range are available (air volume from 38-2,000 m³/h).

Lossnay VL100 Single Room Range

Specifications: Single Room Ventilation

Туре		Wall Mounted	I Single Room	In-Ceiling Single Room				
Model		VL-100	EU5-E	VL-100ZSKRT-E				
Ventilation Modes		Energy Rec	overy Mode	Energy Recovery Mode				
Heat Exchange System		Energy Recovery	Ventilation System	Energy Recovery Ventilation System				
Heat Exchange Material		Specially Treated Pape	r Plate Heat Exchanger	Specially	Specially Treated Paper Plate Heat Exchanger			
Surrounding Air Condition		Between -10°C and	40°C, 80%RH or less	Betwe	en -10°C and	40°C, 80%RH or less		
Return (Suction) Air Condition		Up to 40°	C, 80%RH		Up to 40°	C, 80%RH		
Electrical Power Supply		230V	/ 50Hz		/ 50Hz			
Fan Speed		Fan Speed: High	Fan Speed: Low	Fan Speed: High		Fan Speed: Low		
Input Power	(W)	31	15	3.	2	15		
Air Volume - Heat Recovery Mode	(m³/h)	105	60	78		42		
All volume - Heat Necovery Mode	(L/s)	29.1	16.6	21.7		11.7		
Temperature Exchange Efficiency (%)*		73	80	49 62				
Noise (dBA) (Measured at 1.5m under the anechoic chamber)	centre of the unit in an	37	25	40		25.5		
Duct Size	(mm)	- 100				00		
B: : W B !!	, ,			Unit:	386 x 386 x 204			
Dimensions W x D x H (mm)		620 x 2	Grille:	455 x 455 x 9				
Weight	(kg)	7.5			6			

^{*}In heating mode







