

VENTILATION SOLUTION

150 Energy Recovery Ventilator

158 Energy Recovery Ventilator with DX Coil



ERV

Energy Recovery Ventilator

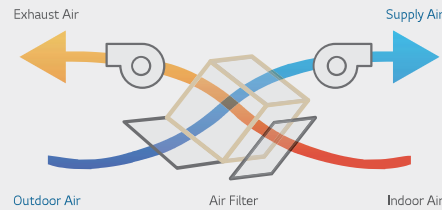


ERV

Energy Recovery Ventilator

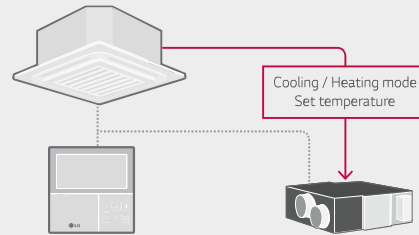
High Efficiency Heat Exchanger

Efficiency and comfort is ensured through the high-efficiency energy recovery central core which recovers energy from the indoor air and transfers it to the fresh incoming air without mixing airstream.



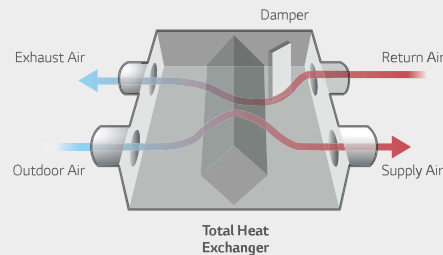
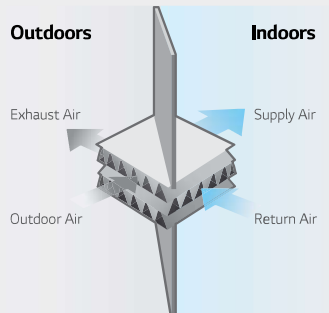
Interlocking with Air Conditioning System

- LG ERV can be interlocked with air conditioners and controlled individually.
- This function can be operated when the system is connected with a remote control.



Compulsory Exhausting System

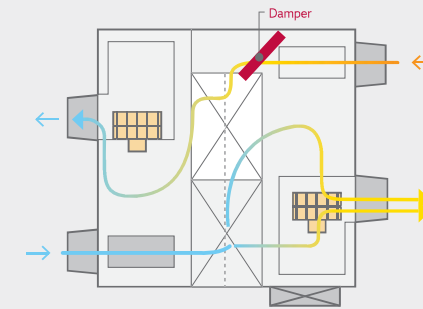
The exhausting system using high static and sirocco fan removes contaminants effectively from indoor air. Supply and exhaust air flows are completely separated in the total heat exchanger, LG ERV can filter out the impurities before supplying outdoor air and make indoor air fresh and healthy.



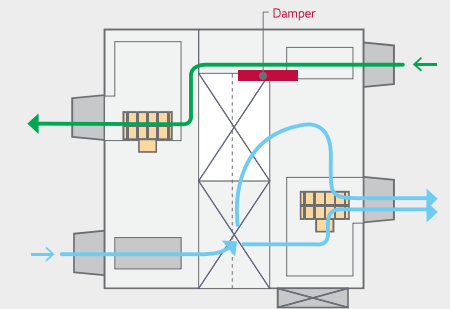
Bypass Ventilation

LG ERV automatically switches the ventilation mode (Enthalpy Heat Exchange Mode / Bypass Mode) according to the indoor / outdoor temperature.

Enthalpy Heat Exchange Mode (Summer / Winter)



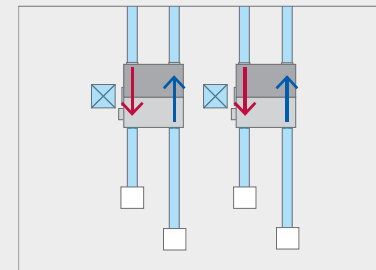
Bypass Mode (Seasonal Change)



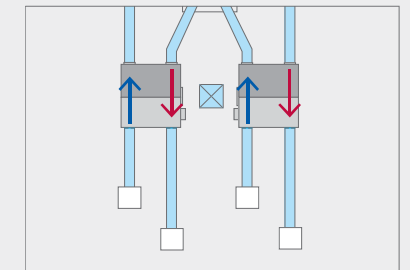
Flexibility of Installation

It's possible to install upside down when you need only one inspection hole.

Normal installation of 2 units



Reverse installation of 1 unit (Left unit)



Inspection chamber

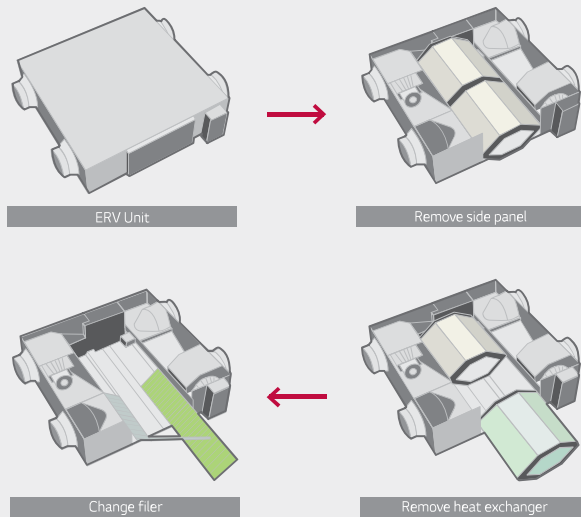


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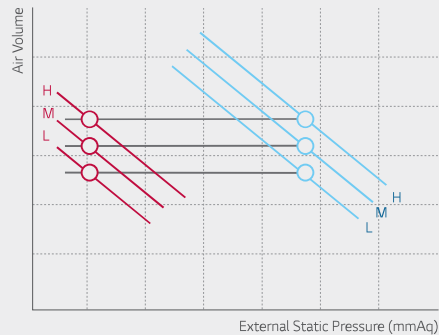
Easy Cleaning and Filter Change

It is easy and convenient to change and clean the filter.



External Static Pressure Control

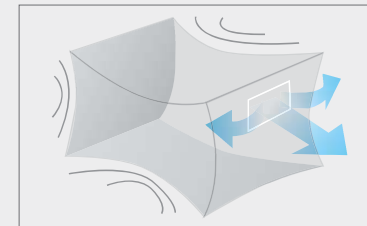
The high static pressure fan can control the air volume depending on the length of the duct. It is also easy to control the pressure level by using the remote controller for a more flexible duct installation and easier testing.



Fast Ventilation Mode

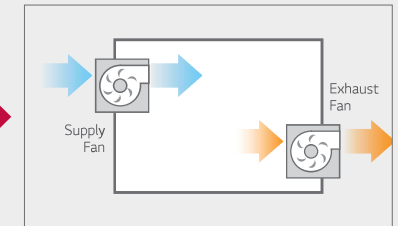
Fast ventilation mode prevents the spread of contaminants under negative indoor air pressure, and makes indoor air fresh and comfortable quickly.

Only Exhausting



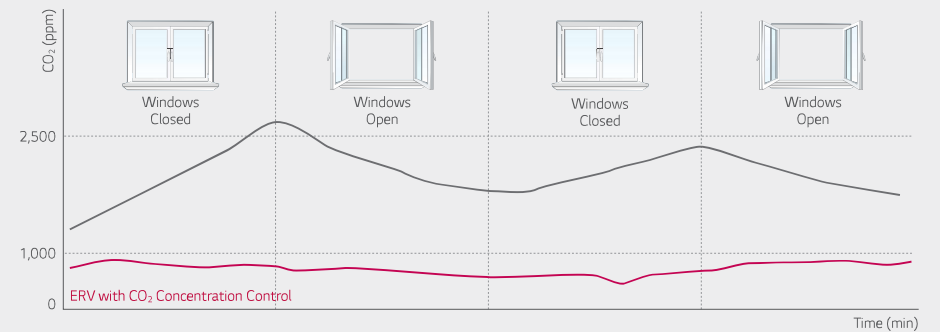
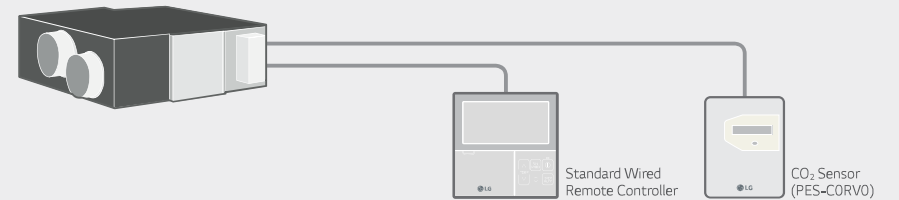
Exhausting operation causes negative indoor air pressure, and cannot fully ventilate.

Fast Ventilation Mode



CO₂ Concentration Control

Using CO₂ sensor, LG ERV controls exhaust air flow automatically to keep indoor air fresh under settled CO₂ concentration.



ERV

Energy Recovery Ventilator

LZ-H025GBA4 / LZ-H035GBA4 / LZ-H050GBA4



Model			LZ-H025GBA4	LZ-H035GBA4	LZ-H050GBA4	
Nominal Capacity		CMH (CFM)	250 (147)	350 (206)	500 (294)	
Power Supply		Ø / V / Hz	1, 220-240, 50-60			
ERV Mode	Step	-	SUPER-HIGH / HIGH / LOW			
	Current	SH / H / L	Amps	0,70 / 0,60 / 0,42	1,10 / 0,95 / 0,60	1,92 / 1,58 / 0,79
	Power Input	SH / H / L	W	90 / 75 / 52	150 / 135 / 80	240 / 230 / 90
	Air Flow	SH / H / L	CMH (CFM)	250 / 250 / 150 (147 / 147 / 88)	350 / 350 / 210 (206 / 206 / 123)	500 / 500 / 320 (294 / 294 / 124)
	External Static Pressure	SH / H / L	Pa (inWTR)	100 / 70 / 50 (0,40 / 0,28 / 0,20)	150 / 130 / 100 (0,60 / 0,52 / 0,40)	150 / 100 / 50 (0,60 / 0,40 / 0,20)
	Temperature Exchange Efficiency	SH / H / L	%	80 / 80 / 83	75 / 75 / 77	78 / 78 / 79
	Enthalpy Exchange Efficiency	Heating (SH / H / L)	%	70 / 70 / 72	68 / 68 / 70	72 / 72 / 74
		Cooling (SH / H / L)	%	66 / 66 / 68	63 / 63 / 65	67 / 67 / 69
	Noise Level (Sound Level, 1.5m)	SH / H / L	dB (A)	27 / 25 / 23	28 / 26 / 25	34 / 32 / 25
	Bypass Mode	Step	-	SUPER-HIGH / HIGH / LOW		
Current		SH / H / L	Amps	0,70 / 0,60 / 0,42	1,10 / 0,95 / 0,60	1,92 / 1,58 / 0,79
Power Input		SH / H / L	W	90 / 75 / 52	150 / 135 / 80	240 / 230 / 90
Air Flow		SH / H / L	CMH (CFM)	250 / 250 / 150 (147 / 147 / 88)	350 / 350 / 210 (206 / 206 / 123)	500 / 500 / 320 (294 / 294 / 124)
External Static Pressure		SH / H / L	Pa (inWTR)	100 / 70 / 50 (0,40 / 0,28 / 0,20)	150 / 130 / 100 (0,60 / 0,52 / 0,40)	150 / 100 / 50 (0,60 / 0,40 / 0,20)
Noise Level (Sound Level, 1.5m)		SH / H / L	dB (A)	27 / 25 / 23	28 / 26 / 25	34 / 32 / 25
Heat Exchanger	Type	-	Air to air cross flow heat exchange			
Net Weight		kg	44	44	45	
Dimension	W x H x D	mm	988 x 273 x 1,014	988 x 273 x 1,014	988 x 273 x 1,014	
	Qty	EA	4			
Duct work*	Size (Ø)	mm	Ø200			
	Qty	EA	1			
Supply Air Fan	Type	-	Direct-Drive (Sirocco Fan)			
	Qty	EA	1			
Exhaust Air Fan	Type	-	Direct-Drive (Sirocco Fan)			
	Qty	EA	2		2	
Filters	Type	-	Cleanable Fibrous fleeces			
	Size (W x H x D)	mm	855 x 10 x 166		855 x 6 x 230	
Dry Contact			PDRYCB000			

Note: 1. ERV mode: Total Heat Recovery Ventilation mode

2. * Refer to dimensional drawings.

3. Noise level:

- The operating conditions are assumed to be standard

- Sound measured at 1.5m below the center the body.

- Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of particular room in which the equipment is installed.

- The sound level at the air discharge port is about 8 dB(A) higher than the unit's operating sound.




4. Temperature and Enthalpy Exchange Efficiency at cooling

Indoor Temperature: 26.5°C DB, 64.5% RH, Outdoor Temperature: 34.5°C DB, 30.4% RH

5. Temperature and Enthalpy Exchange Efficiency at heating

Indoor Temperature: 20.5°C DB, 59.5% RH, Outdoor Temperature: 5°C DB, 65% RH

6. Temperature Exchange efficiency is tested at heating condition.

Premium	Standard II	CO ₂ Sensor
 PREMTA000 PREMTA000A PREMTA000B	 PREMTB001	 PES-CORVO

ERV

Energy Recovery Ventilator

LZ-H080GBA4 / LZ-H100GBA4
LZ-H150GBA4 / LZ-H200GBA4



LZ-H080GBA4 / LZ-H100GBA4



LZ-H150GBA4 / LZ-H200GBA4

Model			LZ-H080GBA4	LZ-H100GBA4	LZ-H150GBA4	LZ-H200GBA4	
Nominal Capacity		CMH (CFM)	800 (471)	1,000 (589)	1,500 (883)	2,000 (1,177)	
Power Supply		Ø / V / Hz	1, 220-240, 50-60				
ERV Mode	Step	-	SUPER-HIGH / HIGH / LOW				
	Current	SH / H / L	Amps	2,77 / 2,16 / 1,44	3,41 / 2,90 / 1,76	5,60 / 5,40 / 2,90	6,80 / 5,90 / 3,60
	Power Input	SH / H / L	W	370 / 280 / 170	480 / 385 / 210	740 / 540 / 340	960 / 770 / 420
	Air Flow	SH / H / L	CMH (CFM)	800 / 800 / 660 (471 / 471 / 388)	1,000 / 1,000 / 800 (589 / 589 / 471)	1,500 / 1,500 / 1,200 (883 / 883 / 706)	2,000 / 2,000 / 1,600 (1,177 / 1,177 / 942)
	External Static Pressure	SH / H / L	Pa (inWTR)	200 / 110 / 60 (0,80 / 0,44 / 0,24)	160 / 90 / 50 (0,64 / 0,36 / 0,20)	200 / 110 / 60 (0,80 / 0,44 / 0,24)	160 / 90 / 50 (0,64 / 0,36 / 0,20)
	Temperature Exchange Efficiency	SH / H / L	%	79 / 79 / 82	77 / 77 / 78	79 / 79 / 82	77 / 77 / 78
	Enthalpy Exchange Efficiency	Heating (SH / H / L)	%	71 / 71 / 72	70 / 70 / 72	71 / 71 / 72	70 / 70 / 72
		Cooling (SH / H / L)	%	64 / 64 / 66	62 / 62 / 64	64 / 64 / 66	62 / 62 / 64
	Noise Level (Sound Level, 1.5m)	SH / H / L	dB (A)	37 / 35 / 31	38 / 36 / 32	39 / 37 / 33	40 / 38 / 34
	Bypass Mode	Step	-	SUPER-HIGH / HIGH / LOW			
Current		SH / H / L	Amps	2,77 / 2,16 / 1,44	3,41 / 2,90 / 1,76	5,60 / 5,40 / 2,90	6,80 / 5,90 / 3,60
Power Input		SH / H / L	W	370 / 280 / 170	480 / 385 / 210	740 / 540 / 340	960 / 770 / 420
Air Flow		SH / H / L	CMH (CFM)	800 / 800 / 660 (471 / 471 / 388)	1,000 / 1,000 / 800 (589 / 589 / 471)	1,500 / 1,500 / 1,200 (883 / 883 / 706)	2,000 / 2,000 / 1,600 (1,177 / 1,177 / 942)
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Noise Level (Sound Level, 1.5m)		SH / H / L	dB (A)	37 / 35 / 31	38 / 36 / 32	39 / 37 / 33	40 / 38 / 34
Heat Exchanger	Type	-	Air to air cross flow heat exchange				
Net Weight		kg	60		140		
Dimension	W x H x D	mm	1,062 x 365 x 1,140		1,313 x 738 x 1,140		
	Qty	EA	4		4 + 2		
Duct work*	Size (Ø)	mm	Ø250		Ø250 + Ø350		
	Qty	EA	1		2		
Supply Air Fan	Type	-	Direct-Drive (Sirocco Fan)				
	Qty	EA	1				
Exhaust Air Fan	Type	-	Direct-Drive (Sirocco Fan)				
	Qty	EA	2			4	
Filters	Type	-	Cleanable fibrous fleeces				
	Size (W x H x D)	mm	1,056 x 6 x 212,5				
Dry Contact			PDRYCB000				

Note: 1. ERV mode: Total Heat Recovery Ventilation mode

2. * Refer to dimensional drawings.

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- Sound measured at 1.5m below the center the body.

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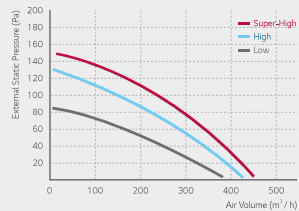
ERV

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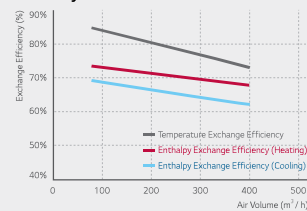
LZ-H025GBA4



Ventilation



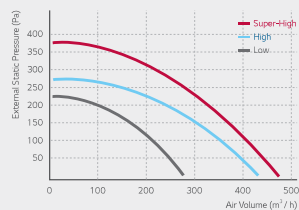
Efficiency



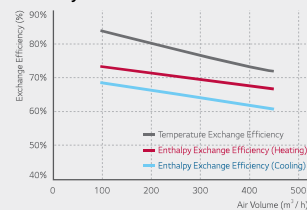
LZ-H035GBA4



Ventilation



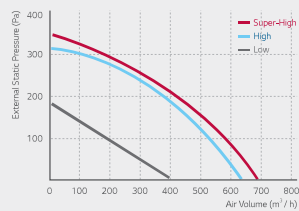
Efficiency



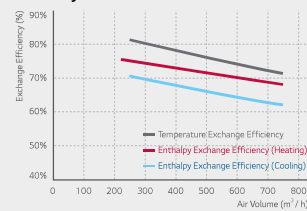
LZ-H050GBA4



Ventilation



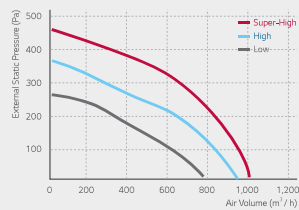
Efficiency



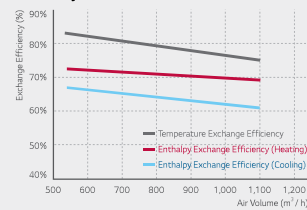
LZ-H080GBA4



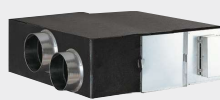
Ventilation



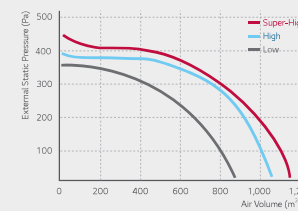
Efficiency



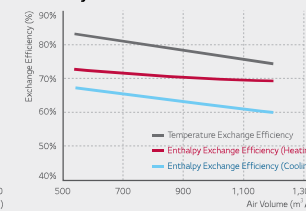
LZ-H100GBA4



Ventilation



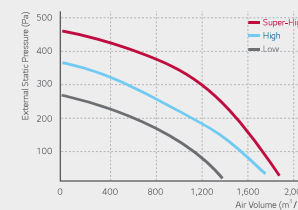
Efficiency



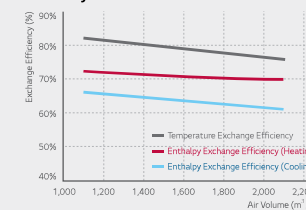
LZ-H150GBA4



Ventilation



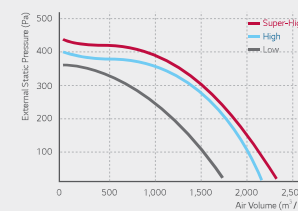
Efficiency



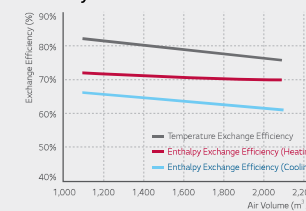
LZ-H200GBA4



Ventilation



Efficiency

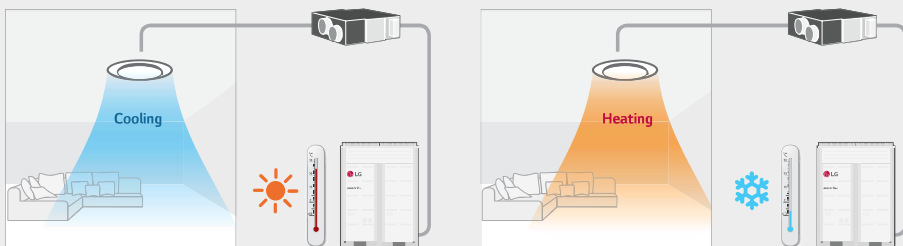


ERV DX

Energy Recovery Ventilator with DX Coil

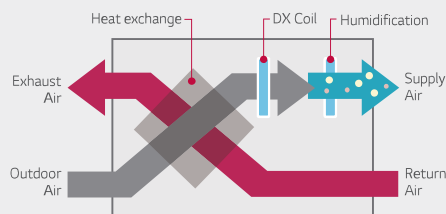
Providing Cool & Warm Fresh Air

During the summer, ERV DX can transform outdoor warm air into cool air for indoors, and it can prevent cold drafts during the winter by supplying warm air.



Total Air Conditioning Solution

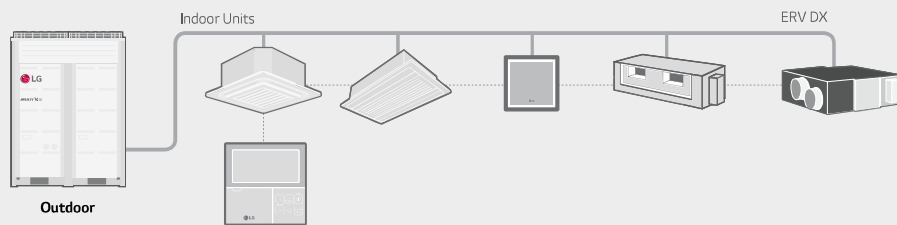
LG ERV DX can be used as a Total Air Conditioning Solution. It can control condition of incoming air with the DX coil and humidifier for making comfortable indoor air. In the summer, LG ERV DX controls the air indoors by cooling and dehumidifying incoming air. In winter, it can provide warm air by heating and humidifying the incoming air.



Interlocking with MULTI V

LG ERV DX can be interlocked with MULTI V.

It can be controlled individually by a wired remote controller connected to MULTI V indoor units.



ERV DX

Energy Recovery Ventilator with DX Coil

LZ-H050GXH0 / LZ-H080GXH0 / LZ-H100GXH0
LZ-H050GXN0 / LZ-H080GXN0 / LZ-H100GXN0



Model		LZ-H050GXH0	LZ-H080GXH0	LZ-H100GXH0	LZ-H050GXN0	LZ-H080GXN0	LZ-H100GXN0		
Fresh Air Conditioning Load	Cooling ¹⁾	kW	4,93	7,46	9,12	4,93	7,46	9,12	
	Heating ²⁾	kW	6,73	9,80	11,72	6,73	9,80	11,72	
Temperature Exchange Efficiency	SH / H / L	%	86 / 86 / 87	80 / 80 / 81	76 / 76 / 78	86 / 86 / 87	80 / 80 / 81	76 / 76 / 78	
	Enthalpy Exchange Efficiency	Cooling (SH / H / L)	%	61 / 61 / 63	50 / 50 / 53	45 / 45 / 50	61 / 61 / 63	50 / 50 / 53	45 / 45 / 50
		Heating (SH / H / L)	%	76 / 76 / 77	67 / 67 / 69	64 / 64 / 66	76 / 76 / 77	67 / 67 / 69	64 / 64 / 66
Air Flow Rate	Heat Exchange Mode (SH / H / L)	CMH	500 / 500 / 440	800 / 800 / 640	1,000 / 1,000 / 820	500 / 500 / 440	800 / 800 / 640	1,000 / 1,000 / 820	
	Bypass Mode (SH / H / L)	CMH	500 / 500 / 440	800 / 800 / 640	1,000 / 1,000 / 820	500 / 500 / 440	800 / 800 / 640	1,000 / 1,000 / 820	
Fan	External Static Pressure (SH / H / L)	Pa	160 / 120 / 100	140 / 90 / 70	110 / 70 / 60	180 / 150 / 110	170 / 120 / 80	150 / 100 / 70	
	System		Natural Evaporating Type						
Humidifier	Amount ³⁾	kg/h	2,70	4,00	5,40				
	Pressure Feed Water	Mpa	0,02 - 0,49						
Sound Pressure	Heat Exchange Mode (SH / H / L)	dB (A)	38 / 36 / 33	39 / 37 / 34	40 / 38 / 35	39 / 37 / 35	41 / 38 / 36	41 / 39 / 36	
	Bypass Mode (SH / H / L)	dB (A)	39 / 37 / 34	40 / 38 / 35	40 / 38 / 35	39 / 37 / 35	41 / 38 / 36	41 / 39 / 36	
Refrigerant		R410A							
Power Supply		Ø / V / Hz							
Power Input (Nominal)	Heat Exchange Mode (SH / H / L)	kW	0,25 / 0,20 / 0,15	0,42 / 0,35 / 0,25	0,48 / 0,42 / 0,27	0,25 / 0,20 / 0,15	0,42 / 0,35 / 0,25	0,48 / 0,42 / 0,27	
	Bypass Mode (SH / H / L)	kW	0,25 / 0,20 / 0,15	0,42 / 0,35 / 0,25	0,48 / 0,42 / 0,27	0,25 / 0,20 / 0,15	0,42 / 0,35 / 0,25	0,48 / 0,42 / 0,27	
Nominal Running Current (RLA)	Heat Exchange Mode (SH / H / L)	A	1,5 / 1,3 / 1,0	2,5 / 2,0 / 1,5	3,6 / 3,2 / 2,3	1,5 / 1,3 / 1,0	2,5 / 2,0 / 1,5	3,6 / 3,2 / 2,3	
	Bypass Mode (SH / H / L)	A	1,5 / 1,3 / 1,0	2,5 / 2,0 / 1,5	3,6 / 3,2 / 2,3	1,5 / 1,3 / 1,0	2,5 / 2,0 / 1,5	3,6 / 3,2 / 2,3	
Dimensions	W x H x D	mm	1,667 x 365 x 1,140			1,667 x 365 x 1,140			
Net Weight		kg	105			98			
	Liquid	mm	Ø6,35			Ø6,35			
	Gas	mm	Ø12,7			Ø12,7			
	Water	mm	Ø6,35			-			
Piping Connection	Drain (Outer Diameter)	mm	Ø25,4			Ø25,4			
	Connection Duct Diameter	mm	Ø250			Ø250			
Remote Controller		Refer to the below Wired Remote Controller table							
Dry Contact	Simple (1 Contact point with Case)		PDRYCB000						
	2 Contact point		PDRYCB400						
	For Thermostat (On-Off / Mode / Fan Speed)		PDRYCB300						
	Modbus Communication		PDRYCB500						

Note: 1) Cooling Capacity Test condition - Indoor temperature: 27°C DB, 19°C WB / Outdoor temperature: 35°C DB
2) Heating Capacity Test condition - Indoor temperature: 20°C DB / Outdoor temperature: 7°C DB, 6°C WB
3) Humidifying capacity is based on the following conditions - Indoor temperature: 20°C DB, 15°C WB / Outdoor temperature: 7°C DB, 6°C WB
* Cooling and heating capacities are based on the following conditions: - Fan is based on High and Super-high. The figures in the parenthesis indicate the heat reclaimed from the heat recovery ventilator.
* The operating sound measured at the point 1.5 m below the center of the unit is converted to that measured at an anechoic chamber built in accordance with the KS B 6879 conditions.
* The actual operating sound varies depending on the surrounding conditions (near running unit's sound, reflected sound and so on) and is normally higher than this value.
* Air flow rate can be changed over to low mode or high mode.
* The specifications, designs and information here are subject to change without notice.
* This product contains Fluorinated Greenhouse Gases, (R410A)

Premium	Standard II	CO ₂ Sensor
PREMTA000 PREMTA000A PREMTA000B	PREMTB001	PREMTB001
		PES-CORVO