

Panasonic



SINGLE ZONE

Wall-mounted heat pumps,
cassettes and slim ducts

UP TO
23
SEER2

UP TO
10,3
HSPF2

HEATING
UP TO
-20°C

10 YR
WARRANTY

EXTERIOS **E**

ECONAVI

INVERTER



Exclusive distributor in Quebec

DESCAIR

descair.ca

What is a heat pump?

A heat pump is an electrical device that extracts heat from one place and transfers it to another. It allows you to heat in winter and to cool in summer. Heat pumps transfer heat by circulating a substance called a refrigerant through a cycle of evaporation and condensation. A compressor pumps the refrigerant between two heat exchanger coils. In one coil, the refrigerant is evaporated at low pressure and absorbs heat from its surroundings. The refrigerant is then compressed en route to the other coil, where it condenses at high pressure. At this point, it releases the heat it absorbed earlier in the cycle.

The heat pump cycle is fully reversible, and it can provide year-round climate control for your home – heating in winter and cooling and dehumidifying in summer. Since the ground and air outside always contain some heat, a heat pump can supply heat to a house even on cold winter days. In fact, air at -18°C contains about 85% of the heat it contained at 21°C.

What is a SEER?

The seasonal energy efficiency ratio (SEER) measures the cooling efficiency of the heat pump over the entire cooling season. The SEER is based on a climate with an average summer temperature of 28°C. A higher SEER rating means greater energy efficiency for cooling.

What is a HSPF?

The heating seasonal performance factor (HSPF) is a measure of the total heat output in BTU of a heat pump over the entire heating season divided by the total energy in watt hours it uses during that time. Weather data characteristic of long-term climatic conditions are used to represent the heating season in calculating the HSPF. The higher the HSPF rating or a unit, the more energy efficient it is.

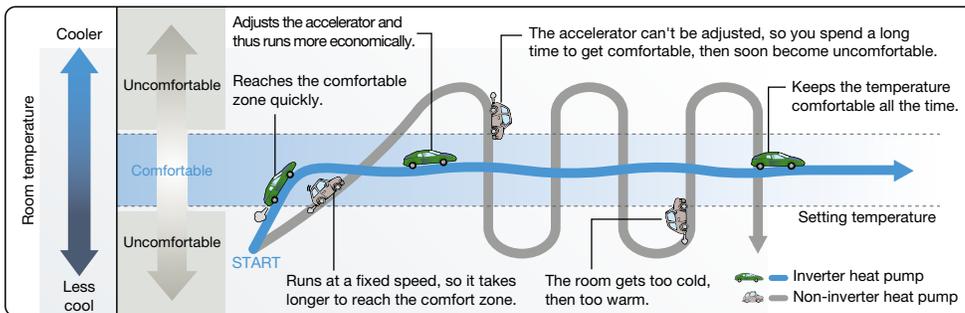
Source: Natural Resources Canada's Office of Energy Efficiency (2004)

INVERTER Technology

High efficiency operation

Panasonic Inverter technology provides optimum power control and extremely efficient operation by modulating the compressor capacity. The result is efficient and flexible operation using less electricity. With accumulated production of 200 million compressors, extremely high quality and reliability are proven.

Advantages of Inverter technology Comparing inverter and non-inverter air conditioners to cars



*Image of output power fluctuation

Reduces electricity consumption

Panasonic Inverter heat pumps are designed to give you exceptional energy savings while ensuring you stay comfortable at all times.

Constant comfort

Precise temperature control with a wide power output range enables an inverter heat pump to meet different room occupancy levels, providing constant comfort.

Quick cooling and heating

Higher cooling/heating power during the start-up period allows cooling/heating the room faster.

Whisper quiet operation

The indoor operating noise has been reduced to 5 dB as the inverter constantly varies its output power to enable more precise temperature control.

ECONAVI

ECONAVI with intelligent eco sensors

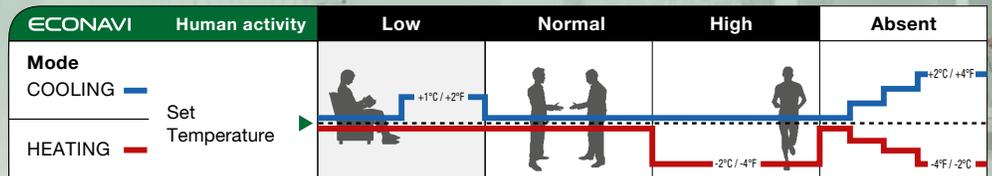
Panasonic has employed ECONAVI™ (Human Detection Technology) on its air conditioner in 2007 and perfected the feature since its launch. This smart technology monitors and senses when there are people in the room and determine how much activity is occurring, then automatically adjusts the temperature setting accordingly for optimum operation.

The area search mode uses sensors that can detect activity in the room and direct cooling to the occupied area. The low activity detection mode monitors the room, decreasing cooling or heating when there is less movement, while the absence detection feature switches to a slightly less powerful cooling mode when there is no one in the room at all.

How does ECONAVI human activity work?

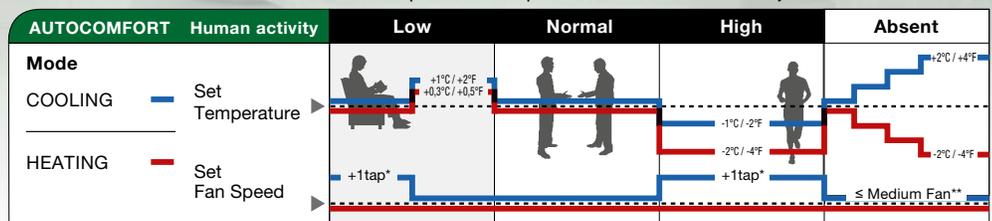
ECONAVI Mode

The unit controls room temperature to save energy.



AUTOCOMFORT Mode

The unit controls room temperature to keep human comfortable consistently.



* During low activity, fan speed 1 tap up for first 15 minutes or until set temperature is reached.

** During human absence, maximum fan speed for cooling mode is medium fan.

Features

ECO NAVI

The unit controls room temperature to save energy.

AUTO COMFORT

The unit controls room temperature to keep human comfortable consistently.

Microprocessor controlled operation

Microprocessor control ensures that the temperature and humidity levels in the room are always comfortable.

Wireless remote control

Panasonic's infrared remote control with an easy to read LCD display gives the user the capability to adjust and set: temperature, sweep (louver control), fan speeds, timer and more, for complete automatic operation.

DRY

By coupling compressor and fan operation, intermittent operation can be precisely controlled according to room temperature, so that air is sufficiently dehumidified.

5 fan speeds and automatic fan operation

Convenient microprocessor control automatically adjusts fan speed to High, Medium or Low, according to room temperature to maintain a comfortable airflow throughout the room.

Self-diagnosing function

Unit is equipped with self-diagnosing function with remote control. This makes it easier to diagnose malfunctions, thus reducing service labor.

Louver control

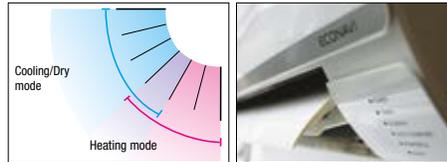
Louver can be manually set to the desired angle by remote control.

Cooling only mode

Can be changed at installation for cooling only.

Air sweep control

The air sweep function moves the louver up and down in the air outlet, directing air in a "sweeping" motion around the room and providing comfort in every corner.



2 air guides to improve the air flow direction

Cooling mode



Cool air doesn't reach you directly; hands and feet won't be cold.

Heating mode



Warm feet and no direct breeze on your face; more comfort.

Automatic heating and cooling changeover

After setting the temperature and functions you desire, just relax. If the room temperature is higher than the set temperature, cooling operation begins. If the room temperature is lower than the set temperature, heating operation begins. During normal thermostat cycle operation, cooling and heating operations automatically change in accordance with set temperature, time and room temperature. (Single zone heat pump unit only)

24-hour clock with ON/OFF program timer

The remote control allows you to set a wide variety of timer-based operations. Such functions include automatic ON/OFF with a timer setting, save time ON/OFF every day, ON timer, OFF timer and Combination timer.

Automatic restart function after power failure

This feature allows the system to automatically resume operation at its reset program, after power is restored from a power failure when the remote control is in the room.

Hot start heating system

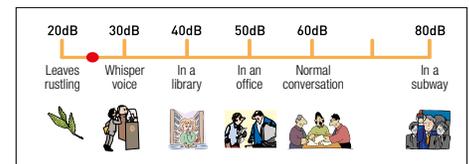
Right from the start, air is warm and comfortable. The hot start heating system prevents any cold blasts at the beginning while the heat pump is warming up.

Electric refrigerant control valve

The circulation volume of the refrigerant is controlled by a pulse type electric control valve. In order to attain optimum efficiency, when the power is switched ON, the opening degree of the electric control valve is controlled between 90 and 480 steps.

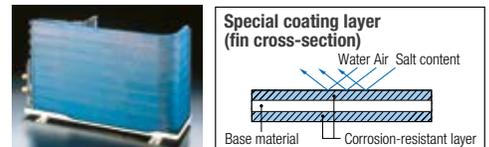
Quiet mode

Low fan speed for extra quiet operation.



Blue Fin Condenser

Condensers can take a beating from exposure to salty air, rain and other corrosive factors. Panasonic has extended the life of its condensers with an original anti-rust coating.



R-410A

The unit runs with refrigerant type R-410A.

Anti-microbial filter

The anti-microbial filter by 3M is treated to inhibit the growth of mold and mildew, and helps create clean air.

Wi-Fi and BACnet

The unit is compatible with Wi-Fi and BACnet. Additional parts required (optional).

Wall-mounted heat pumps – Single zone

Panasonic

EXTERIOS E

E9RKUA / E12RKUA

E18RKUA / E24RKUA



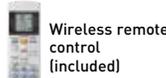
ME5RKUA / ME7QKUA
Only in multi-zone



Unit intérieure
CS-E9RKUAW / CS-E12RKUAW



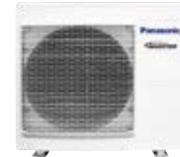
Indoor unit
CS-E18RKUAW / CS-E24RKUAW



Wireless remote control (included)



Wired remote control (CZ-RD516C-1) (optional)



Wireless remote control (included)



Wired remote control (CZ-RD516C-1) (optional)

Outdoor unit
CU-E9RKUA / CU-E12RKUA



Outdoor unit
CU-E18RKUA / CU-E24RKUA



Model N°	E9RKUA		E12RKUA		E18RKUA		E24RKUA		
	Indoor unit CS-E9RKUAW	Outdoor unit CU-E9RKUA	Indoor unit CS-E12RKUAW	Outdoor unit CU-E12RKUA	Indoor unit CS-E18RKUAW	Outdoor unit CU-E18RKUA	Indoor unit CS-E24RKUAW	Outdoor unit CU-E24RKUA	
Performance and electrical ratings									
Capacity	Cooling	BTU/hr. 9,000 (4,100 ~ 10,200)		11,500 (4,100 ~ 13,300)		17,200 (5,800 ~ 19,800)		24,000 (5,800 ~ 27,200)	
	Heating	BTU/hr. 12,000 (4,100 ~ 14,100)		13,800 (4,100 ~ 16,300)		21,600 (5,800 ~ 22,000)		28,800 (5,800 ~ 29,200)	
Moisture removal	High	Pt./hr. 1.3		1.7		3.0		7.6	
	Dry air flow	High CFM 425		450		670		670	
SEER / SEER2	23.0 / 23.0		22.5 / 22.5		19.5 / 19.5		19.0 / 19.0		
	13.0 / 13.0		12.5 / 12.5		13.2 / 13.2		10.2 / 10.2		
HSPF / HSPF2 (Region IV)		11.0 / 10.3		11.0 / 9.0		10.0 / 9.0		10.0 / 9.0	
COP		W/W 3.14 (6.00 ~ 2.76)		3.24 (6.00 ~ 2.79)		3.62 (4.47 ~ 3.57)		3.38 (4.47 ~ 3.22)	
Temperature	Cooling	°C -17.8°C ~ -46.0°C °F 0.0°F ~ 114.8°F		-17.8°C ~ -46.0°C 0.0°F ~ 114.8°F		-17.8°C ~ -46.0°C 0.0°F ~ 114.8°F		-17.8°C ~ -46.0°C 0.0°F ~ 114.8°F	
	Heating	°C -20.0°C ~ -24.0°C °F -4.0°F ~ -75.2°F		-20.0°C ~ -24.0°C -4.0°F ~ -75.2°F		-20.0°C ~ -24.0°C -4.0°F ~ -75.0°F		-20.0°C ~ -24.0°C -4.0°F ~ -75.0°F	
Power supply		V, Phase, Hz 230/208 V, 1 Ph, 60 Hz		230/208 V, 1 Ph, 60 Hz		230/208 V, 1 Ph, 60 Hz		230/208 V, 1 Ph, 60 Hz	
Running amps	Cooling	A 3.2 / 3.6		4.2 / 4.7		6.3 / 7.0		10.8 / 11.9	
	Heating	A 5.1 / 5.7		5.6 / 6.3		8.3 / 9.3		11.4 / 12.6	
Power input	Cooling	W 690 (250 ~ 850)		920 (250 ~ 1,150)		1,300 (430 ~ 1,600)		2,350 (430 ~ 2,720)	
	Heating	W 1,120 (200 ~ 1,500)		1,250 (200 ~ 1,710)		1,750 (380 ~ 1,800)		2,500 (380 ~ 2,660)	
MCA/MOP		A 15 / 15		15 / 15		15 / 20		20 / 25	
Features									
Controls		Microprocessor		Microprocessor		Microprocessor		Microprocessor	
Low ambient temperature		Equipped		Equipped		Equipped		Equipped	
Wireless remote control		Included		Included		Included		Included	
Wired remote control (optional)		CZ-RD516C-1		CZ-RD516C-1		CZ-RD516C-1		CZ-RD516C-1	
Fan speed		5 speeds + Auto		5 speeds + Auto		5 speeds + Auto		5 speeds + Auto	
Timer		24 hour program		24 hour program		24 hour program		24 hour program	
Air deflection	Horizontal	Manual		Manual		Automatic		Automatic	
	Vertical	Automatic		Automatic		Automatic		Automatic	
Filter		Washable anti-microbial filter		Washable anti-microbial filter		Washable anti-microbial filter		Washable anti-microbial filter	
Refrigerant		R-410A		R-410A		R-410A		R-410A	
Refrigerant control		Electric expansion valve		Electric expansion valve		Electric expansion valve		Electric expansion valve	
Indoor noise level	(Hi/Mid/Lo)	dB(A) 40 / 25 / 20		43 / 28 / 20		47 / 39 / 36		48 / 40 / 37	
Outdoor noise level	(Hi)	dB(A) 47		48		49		51	
Refrigerant piping	Type	Flare		Flare		Flare		Flare	
	Discharge/Suction	in. 1/4" and 3/8"		1/4" and 1/2"		1/4" and 1/2"		1/4" and 5/8"	
Refrigerant pipe length (Min./Max.)		ft. Min. 9.8 / Max. 65.6		Min. 9.8 / Max. 65.6		Min. 9.8 / Max. 100.0		Min. 9.8 / Max. 100.0	
Elevation difference	Outdoor above	ft. 49.2		49.2		49.2		49.2	
	Outdoor below	ft. 49.2		49.2		49.2		49.2	
Precharged		in. 24.6		24.6		32.8		32.8	
Additional charge for each ft.		oz/ft. 0.2		0.2		0.3		0.3	
Dimensions and weight									
Height	in.	11-7/16	21-9/32	11-7/16	21-9/32	11-7/16	31-5/16	11-7/16	31-5/16
Width	in.	34-9/32	30-23/32	34-9/32	30-23/32	42-5/32	34-15/32	42-5/32	34-15/32
Depth	in.	8-7/16	11-13/32	8-7/16	11-13/32	9-15/32	12-5/8	9-15/32	12-5/8
Net weight	lb.	20	82	20	82	26	132	26	132

4-way cassette and slim duct heat pumps – Single and multi-zone

Panasonic

E12RB4UW / E18RB4UW



Indoor unit
CS-E12RB4UW / CS-E18RB4UW



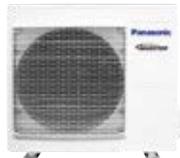
E9SD3UA / E12SD3UA / E18SD3UA



Indoor unit
CS-E9SD3UAW / CS-E12SD3UAW / CS-E18SD3UAW



Outdoor unit
CU-E12RB4U



Outdoor unit
CU-E18RB4U

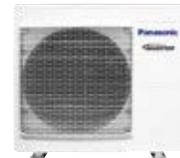


Wireless remote control
(included)

Wired remote control
(CZ-RD52CU)
(optional)



Outdoor unit
CU-E9SD3UA / CU-E12SD3UA



Outdoor unit
CU-E18SD3UA



Model N°	4-WAY CASSETTE				SLIM DUCT						
	E12RB4UW		E18RB4UW		E9SD3UA		E12SD3UA		E18SD3UA		
Unit Model	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	
	CS-E12RB4UW	CU-E12RB4U	CS-E18RB4UW	CU-E18RB4U	CS-E9SD3UAW	CU-E9SD3UA	CS-E12SD3UAW	CU-E12SD3UA	CS-E18SD3UAW	CU-E18SD3UA	
Grille assembly	CZ-BT20U		CZ-BT20U		-		-		-		
Performance and electrical ratings											
Capacity	Cooling	BTU/hr. 11,900 (4,100 ~ 13,100)		17,500 (4,400 ~ 18,700)		9,000 (4,100 ~ 10,200)		11,500 (4,100 ~ 13,300)		17,200 (5,800 ~ 19,400)	
	Heating	BTU/hr. 13,600 (4,100 ~ 16,300)		20,400 (4,400 ~ 21,000)		12,000 (4,100 ~ 14,100)		13,800 (4,100 ~ 16,300)		20,800 (5,800 ~ 24,200)	
Moisture removal	Haut	Pt./hr. 4.0		6.1		1.3		1.7		4.6	
Dry air flow	Haut	CFM 370		450		475		475		540	
SEER / SEER2		18.0 / 18.0		17.5 / 17.5		20.5 / 20.5		20.0 / 20.0		16.5 / 16.5	
EER / EER2		10.30 / 10.30		10.25 / 10.25		13.00 / 13.00		12.50 / 12.50		10.85 / 10.85	
HSPF / HSPF2 (Region 4)		9.0 / 8.7		8.5 / 7.9		10.0 / 9.9		10.0 / 9.5		8.5 / 7.9	
COP		W/W 2.93 (5.22 ~ 2.79)		2.55 (4.78 ~ 2.46)		3.12 (6.00 ~ 2.76)		3.24 (6.00 ~ 2.79)		3.32 (4.47 ~ 3.26)	
	Temperature	Cooling	°C -17.8°C ~ 46°C °F 0°F ~ 114.8°F		-17.8°C ~ 46°C 0°F ~ 114.8°F						
	Heating	°C -15°C ~ 24°C °F 5.0° ~ 75.2°F		-15°C ~ 24°C 5.0° ~ 75.2°F		-20°C ~ 24°C -4°F ~ 75.2°F		-20°C ~ 24°C -4°F ~ 75.2°F		-20°C ~ 24°C -4°F ~ 75.2°F	
Power supply	V, Phase, Hz	208/230 V, 1 Ph, 60 Hz		208/230 V, 1 Ph, 60 Hz		208/230 V, 1 Ph, 60 Hz		208/230 V, 1 Ph, 60 Hz		208/230 V, 1 Ph, 60 Hz	
Running amps	Cooling	A 5.2 / 6.0		7.7 / 9.1		3.2 / 3.6		4.2 / 4.7		7.6 / 8.5	
	Heating	A 6.1 / 6.9		10.7 / 12.5		5.1 / 5.7		5.6 / 6.3		8.7 / 9.8	
Power input	Cooling	W 1,150 (250 ~ 1,320)		1,700 (250 ~ 1,850)		690 (250 ~ 850)		920 (250 ~ 1,150)		1,580 (430 ~ 1,820)	
	Heating	W 1,360 (230 ~ 1,710)		2,340 (270 ~ 2,500)		1,120 (200 ~ 1,500)		1,250 (200 ~ 1,710)		1,830 (380 ~ 2,180)	
Auxiliary heater connector		-		-		Yes		Yes		Yes	
MCA/MOP	A	15 / 15		20 / 25		15 / 15		15 / 15		20 / 25	
Features											
Controls		Microprocessor		Microprocessor		Microprocessor		Microprocessor		Microprocessor	
Low ambient temperature		Equipped		Equipped		Equipped		Equipped		Equipped	
Wireless remote control		Included		Included		Included		Included		Included	
Wired remote control (optional)		CZ-RD52CU		CZ-RD52CU		CZ-RD52DU		CZ-RD52DU		CZ-RD52DU	
Fan speed		3 speeds + Auto		3 speeds + Auto		5 speeds		5 speeds		5 speeds	
Air deflection	Horizontal	-		-		-		-		-	
	Vertical	Automatic		Automatic		-		-		-	
Filter		Washable		Washable		-		-		-	
Refrigerant		R-410A		R-410A		R-410A		R-410A		R-410A	
Refrigerant control		Electric expansion valve		Electric expansion valve		Electric expansion valve		Electric expansion valve		Electric expansion valve	
Indoor noise level - Cooling (Hi/Mid/Lo)	dB(A)	34 / 28 / 25		44 / 30 / 27		35 / 28 / 25		35 / 28 / 25		41 / 30 / 27	
Outdoor noise level - Cooling (Hi)	dB(A)	51 (Max. 66)		52 (Max. 66)		48		49		49	
Refrigerant piping	Type	Flare		Flare		Flare		Flare		Flare	
	Discharge/Suction	in. 1/4" and 1/2"		1/4" and 1/2"		1/4" and 3/8"		1/4" and 1/2"		1/4" and 1/2"	
Refrigerant pipe length (Min./Max.)	ft.	Min. 9.8 / Max. 65.6		Min. 9.8 / Max. 100		Min. 9.8 / Max. 65.6		Min. 9.8 / Max. 65.6		Min. 9.8 / Max. 100	
Elevation difference	Outdoor above	ft. 49.2		49.2		49.2		49.2		49.2	
	Outdoor below	ft. 49.2		49.2		49.2		49.2		49.2	
Precharged	ft.	24.6		24.6		24.6		24.6		24.6	
Additional charge for each ft.	oz/ft.	0.2		0.3		0.2		0.2		0.3	
Dimensions and weight											
Height	in.	10-1/4	21-1/2	10-1/4	31-1/2	7-7/8	21-11/32	7-7/8	21-11/32	7-7/8	31-5/16
Width	in.	22-3/4	31	22-3/4	34-1/2	29-17/32	30-23/32	29-17/32	30-23/32	29-17/32	34-15/32
Depth	in.	22-3/4	11-1/2	22-3/4	12-3/4	25-7/32	11-13/32	25-7/32	11-13/32	25-7/32	12-5/8
Net weight	lb.	40	82	40	132	42	82	42	82	42	132



Use of the AHRI Certified™ mark indicates a manufacture's participation in the certification program. For verification of certification for individual products, go to www.ahridirectory.org

Quality Management System Certificate	 Certified to ISO 9001: 2008 Cert. No.: MY-AR 1010	Certified to ISO 9001: 2008 Panasonic HA Air-Conditioning (M) Sdn. Bhd. Cert. No.: MY-AR 1010
Environmental Management System Certificate	 Certified to ISO 14001: 2004 Cert. No.: MY-ER 0112	Certified to ISO 14001: 2004 Panasonic HA Air-Conditioning (M) Sdn. Bhd. Cert. No.: MY-ER 0112



Serving the North American air conditioning market since 1983

Exclusive distributor in Quebec



descair.ca

*Panasonic basic warranty (residential): 10 years compressor and 10 years parts. 10 years labor warranty is offered by Descair in Quebec only.

Because its products are subject to continuous improvements, Panasonic reserves the right to modify product design and specifications without notice and without incurring any obligations.

CAUTION Do not add or replace refrigerant other than the specified type. Manufacturer is not responsible for the damage and deterioration in safety due to usage of other refrigerant.