

CARRIER® DUCTLESS & VRF SYSTEMS

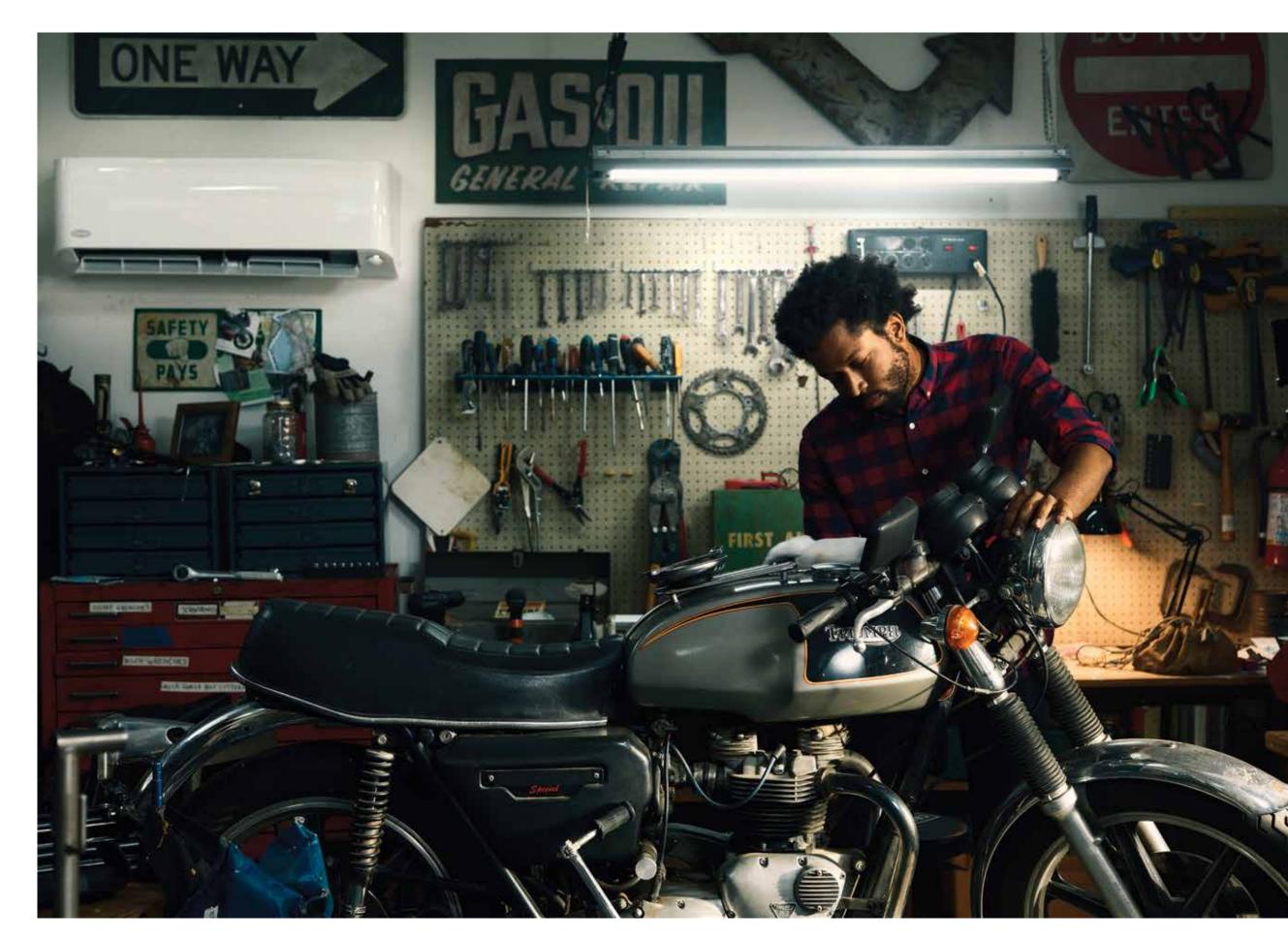
What's Next in Comfort



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Whether the need is for one room or many, this is what comfort looks like.

Preferred in homes throughout Europe and Asia for decades, ductless heating and cooling systems are now being widely adopted in the United States. That's because they can heat and cool any space with precise control and flexibility.

Whether it's through a Ductless unit to heat or cool one room or a VRF system that helps ensure desired comfort for multiple rooms or zones, Carrier offers solutions to make any space a more comfortable place.



Carrier Ductless & VRF systems are a smart way to heat and cool any space.







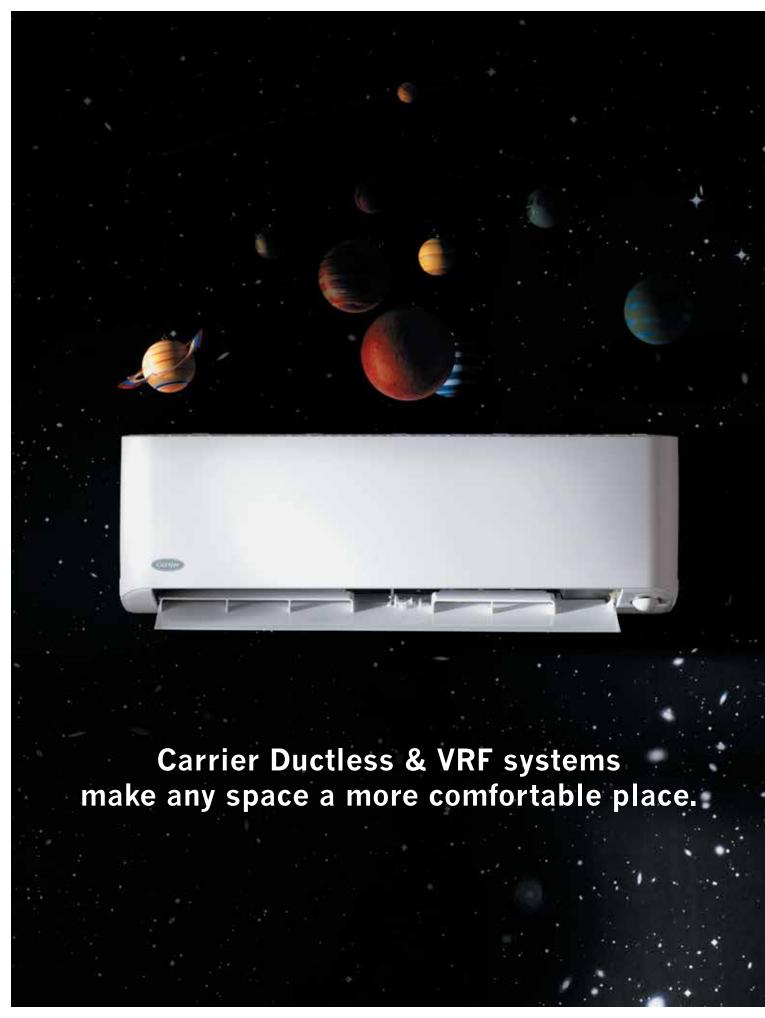
It's that simple.



Almost everyone has a room that always seems drafty, a sunroom that gets too hot to be enjoyable, a master bedroom that's just not cool enough at night or a basement that never gets quite warm enough to be comfortable.

A Ductless or VRF system can fix these problem areas with less expense and hassle than a traditional ducted system. Whether it's through a Single Zone Ductless system for one room or a Multi-zone VRF option to provide comfort to multiple areas, Carrier can help make any space more livable.





5 Reasons Why Ductless Systems Are So Efficient



Inverter Technology

The compressors in most ducted systems only have two modes: on or off. Compressor start-up consumes a lot of energy, and it can be noisy, too. But the inverter technology inside every Carrier® Ductless system lets the compressor continually adjust its speed to keep the room temperature where it should be. Less energy use, less noise, more precise comfort.



SEER (Seasonal Energy Efficiency Ratio) is an efficiency rating, much like the MPG on a car. There is simply nothing more efficient than our newest 42 SEER Ductless system.*



Room-By-Room Comfort

With a Ductless system, you no longer need to overcool the whole house just to make an upstairs room more comfortable or turn up the heat to warm a basement playroom in the winter. Just room-by-room comfort and month-to-month energy savings.



Leading Heat Pump Technology

Carrier Ductless systems deliver comfort during extreme outdoor temperatures, with heating down to -22 degrees and cooling up to 122 degrees Fahrenheit.



Flexibility

With multiple Ductless or VRF solutions to choose from, a Carrier expert can help ensure a system is properly sized to ensure maximum comfort and efficiency.



Ductless & VRF Systems Make More of Your Home More Comfortable

Even the most challenging areas to control can be turned into comfortable, usable spaces with the addition of a Ductless system.



Fresher, Cleaner Air

The washable filters inside Carrier® Ductless systems remove airborne particles and keep them from recirculating in your home's air, and they are easy to maintain. Plus, our top-of-the-line systems allow you to precisely control humidity levels so rooms never feel too damp or too dry.



Smart Controls

Carrier Ductless systems have standard Wi-Fi® connectivity that lets you adjust settings from your smartphone and integrated sensors that can direct airflow toward the people in the room.



Easy Install

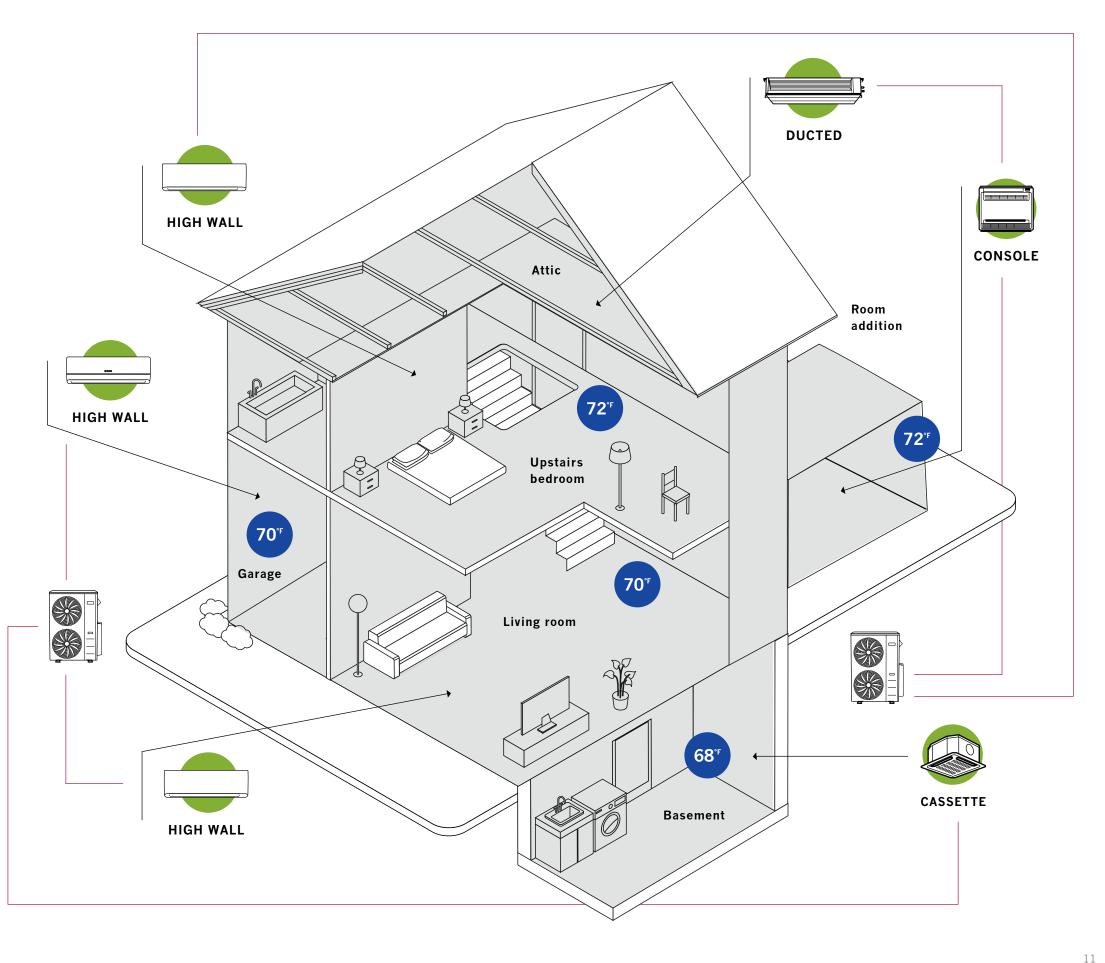
A Ductless system consists of an outdoor unit and an indoor unit connected by refrigerant pipe and electric cable, which enter the house through a 3" hole in the wall. That's it. Installation is quick and minimally disruptive to your space.



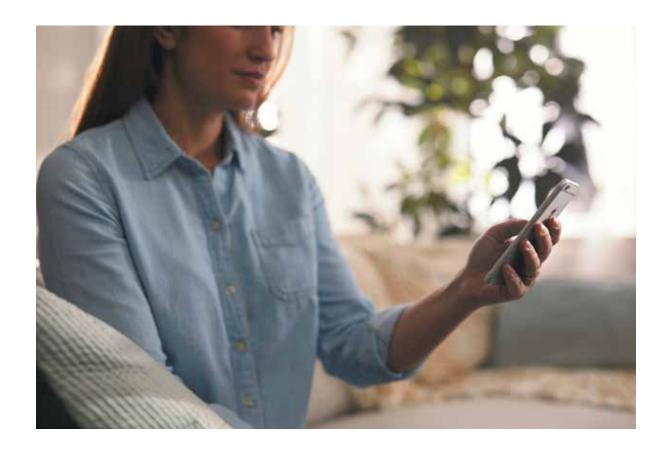
Multiple Zones

A Carrier Ductless Multi-zone or VRF condensing unit can power multiple indoor units simultaneously, helping to achieve the desired comfort level for each and every room.

More than one troubled spot? Carrier VRF systems offer solutions to heat and cool multiple areas throughout your home.



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The Brand That Has Never Stopped Innovating

Built on Willis Carrier's invention of modern air conditioning in 1902, Carrier is a world leader in heating, air-conditioning and refrigeration solutions. We constantly build upon our history of proven innovation with new products and services that improve global comfort and efficiency.

But our innovation doesn't stop there. From the hiring of the first woman air-conditioning engineer to the creation of the first air-conditioning systems for skyscrapers, homes, factories and ships,

Carrier continues to look for ways to advance comfort.

As a trusted partner for precise temperature and humidity control for highly regarded places such as the Sistine Chapel in Vatican City and George Washington's estate in Virginia, we know a thing or two about innovation. And it's this same innovation that we put to work in your home.



The Reviews Are in for Carrier® Ductless Systems.

At the time Ductless products started getting popular, we were forced to use an inferior brand which caused installation issues in the field and plenty of warranty calls for our service department.

When Carrier came out with its Ductless line, we were thrilled! As a factory authorized dealer for Carrier we already knew the quality and reliability would be there, and we were not disappointed.

Shannon Nielsen
VICE PRESIDENT OF OPERATIONS OF
AIRPLUS OF CALIFORNIA, INC.

Hawaii has a very competitive mini-split/ Ductless market. With many different options available, Carrier DLS provides a good product with competitive pricing. Backed by a big name in the industry, given time and good advertising, Carrier DLS/mini-splits will be a bigger player in this market.

Richard Chong
DUCTLESS DEALER AND INNOVATIVE
AC OWNER

Fayette Furnace Company has been installing ductless split units for at least the last decade. We started installing these units in homes and businesses that had areas that needed additional cooling. As time progressed and efficiencies improved, the systems became more and more desirable for use throughout the entire home or building for BOTH heating and cooling. Now we are doing very limited ducted attic jobs and increasing ductless split installations, with some applications using the ductless splits as the primary heating and cooling year round. These systems are ideal for any application.

Michael T. Salanick OWNER/PRESIDENT OF FAYETTE FURNACE COMPANY

DUCTLESS & VRF SYSTEMS PRODUCT LINEUP

Single Zone – Residential



9-24K Btu/h

Up to 42 SEER Up to 15 HSPF

Heat Pump



Outdoor Unit 38MPRA



High Wall 40MPHA 9/12K



High Wall 40MPHA 18/24K

Performance^{*} SERIES

9-36K Btu/h

Up to 25 SEER Up to 12 HSPF

Heat Pump



Outdoor Unit 38MA*R



High Wall 40MAQ



Cassette 40MBCQ



Ducted 40MBFQ



Floor Console 40MBFQ Size 12K



Vertical Fan Coil FMA4X



Cased/Uncased Horizontal Fan Coil FMC/FMU



Fan Coil FV4C

Comfort SERIES

9-24K Btu/h

Up to 19.8 SEER Up to 10.6 HSPF

Heat Pump Cooling Only

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Outdoor Unit 38MHRB





Multi-Zone – Residential

Performance^{*} SERIES

18-48K Btu/h

Up to 23.8 SEER Up to 11.5 HSPF

Heat Pump



Outdoor Unit 38MGR 18K



Outdoor Unit 38MGR 24/30K



Outdoor Unit



38MGR 36/48K



High Wall 40MAQ

High Wall

40MHH



Ducted

40MBDQ

Cassette



40MBFQ Size 12

40MBCQ



Console 40MBFQ Size 18/24

Multi-Zone

INFINITY SERIES

36-60K Btu/h

Up to 18.6 SEER Up to 10 HSPF

Heat Pump 2-Pipe System



Outdoor Unit 38VMH



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Underceiling



Vertical Air Handling Unit (AHU)



Compact Cassette





Medium Static Ducted

High Wall

Floor Console

TOSHIBA

Carrier

72/144K Btu/h

Up to 27.4 IEER Up to 31.3 SCHE

Heat Recovery 3-Pipe System



Outdoor Unit MMYF



4-way Cassette



4-way Compact Cassette



High Wall

Underceiling



Floor Console – Exposed



Outside Air

Floor Console – Recessed Vertical Air Handling Unit (AHU)



High Static Ducted

Slim Ducted (Low Profile)



(Medium Static)





Up to 21.5 SEER Up to 11.5 HSPF

Heat Pump 2-Pipe System

TOSHIBA

Carrier

18-42K Btu/h

Up to 21 SEER Up to 12 HSPF

Heat Pump



Outdoor Units RAV*AT



High Wall RAV KRT



Ducted RAV BT



RAV UT



Console RAV CT

Performance Series

36/48/58K Btu/h

Up to 18.0 SEER Up to 11.5 HSPF

Heat Pump



Outdoor Unit 38MBR 36K



Outdoor Unit 38MBR 48K/58K



Cassette 40MBCQ



Ducted 40MBDQ 36/48K



Console



Ducted 40MBDQ 58K

Performance SERIES

18-54K Btu/h

Up to 14 SEER Up to 8.2 HSPF

Heat Pump Cooling Only



Outdoor Units 24AHA4 25HHA4







Ducted Indoor Units



VRoom Selection Software

With VRoom Selection Software, engineers can easily design, lay out and prepare VRF and DLS systems for quotes. Features include:

- Auto updates
- Sleek drag-and-drop interface
- Table edit options for quick editing of multiple units
- Quick global edits for wired controllers





Single Zone



FEATURES OUTDOOR

- 100% cooling capacity at -22°F (-30°C) without additional kit
- Available in 208/230V
- · Built-in basepan heater
- Auto-restart function
- Refrigerant leakage detection
- Quiet outdoor operation, as low as 55 dB(A)
- Aluminum golden hydrophilic pre-coated fins
- Piping length 98 ft (30m)
- Cooling operating range –22°~122°F (–30°~50°C)
- Heating operating range –22°~86°F (–25°~30°C)

COMPATIBLE WITH:

• 40MPHA High Wall (p 22)

Infinity® Heat Pump With Basepan Heater

Heat Pump With Basepan Heater

Inverter Compressor

Up to 42 SEER

Up to 15 HSPF

Sizes: 09/12/18/24

All Systems are ENERGY STAR® certified

KEY FEATURES

Extra-Low Temperature Heating

Heat output up to 75% of rated capacity down to -22°F (-30°C), so when it's cold outside, it will be warm inside, making this a primary heat source and eliminating the need for a backup heat source.

Stepless Frequency Adjustment

Precise control maintains stable and constant room temperature while reducing sound level and saving energy.

High Wall







SPECIFICATIONS:

		38MPRA 0	utdoor Unit					
		Heat	Pump					
		Sys	tem					
Size 9 12 18 24								
Outdoor Model		38MPRAQ09AA3	38MPRAQ12AA3	38MPRAQ18AA3	38MPRAQ24AA3			
		Elec	trical					
Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60			
MCA	Α	13	15	18	20			
MOCP – Fuse Rating	Α	15	20	30	30			
		Operatin	ng Range					
Cooling Outdoor DB Min-Max	°F (°C)	-22~122 (-30~50)	-22~122 (-30~50)	-22~122 (-30~50)	-22~122 (-30~50)			
Heating Outdoor DB Min-Max	°F (°C)	-22~86 (-30~30)	-22~86 (-30~30)	-22~86 (-30~30)	-22~86 (-30~30)			
		Pip	ing					
Total Piping Length	ft (m)	98 (30)	98 (30)	98 (30)	98 (30)			
Piping Lift*	ft (m)	49 (15)	49 (15)	65 (20)	65 (20)			
Pipe Connection Size – Liquid	in (mm)	1/4 (6.35)	1/4 (6.35)	3/8" (9.52)	3/8" (9.52)			
Pipe Connection Size – Suction	in (mm)	3/8 (9.52)	1/2 (12.7)	5/8" (15.9)	5/8" (15.9)			
		Refriç	gerant					
Туре		R410A	R410A	R410A	R410A			
Charge	lb (kg)	3.5 (1.58)	3.5 (1.58)	5.7 (2.6)	6.5 (2.95)			
		Comp	ressor					
Туре		Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter			
		Out	door					
Unit Width	in (mm)	33.27 (845)	33.27 (845)	37.24 (946)	37.24 (946)			
Unit Height	in (mm)	27.64 (702)	27.64 (702)	31.89 (810)	31.89 (810)			
Unit Depth	in (mm)	14.29 (363)	14.29 (363)	16.14 (410)	16.14 (410)			
Net Weight	lb (kg)	107.59 (48.8)	108.47 (49.2)	135.4 (61.4)	145.1 (65.8)			
Airflow	cfm	1,380	1,380	2,236	2,236			
Sound Pressure	dB(A)	55.5	56.0	61.5	62.0			

^{*}Condensing unit above or below indoor unit

COMPATIBILITY:

Indoor l	Init	Outdoor Unit					
llidoor (JIIIL	38MPRAQ09AA3	38MPRAQ12AA3	38MPRAQ18AA3	38MPRAQ24AA3		
	40MPHAQ09XA3	•					
High	40MPHAQ12XA3		•				
Wall	40MPHAQ18XA3			•			
	40MPHAQ24XA3				•		

	High Wall								
Indoor Model		40MPHAQ09XA3	40MPHAQ12XA3	40MPHAQ18XA3	40MPHAQ24XA3				
ENERGY STAR®		YES	YES	YES	YES				
Cooling System Tons		0.75	1.0	1.5	1.8				
Cooling Rated Capacity	Btu/h	9,000	12,000	18,000	22,000				
Cooling Cap. Range Min-Max	Btu/h	5,000~17,000	5,800~19,000	6,888~30,511	7,445~32,644				
SEER		42.0	32.0	28.2	23.5				
EER		15.0	13.5	14.5	13.65				
Heating Rated Capacity (47°F)	Btu/h	10,000	12,000	18,000	24,000				
Heating Rated Capacity (17°F)	Btu/h	7,200	6,800	12,300	15,450				
Heating Max Capacity (17°F)	Btu/h	15,690	17,070	22,000	22,000				
Heating Max Capacity (5°F)	Btu/h	13,000	13,800	18,000	24,000				
Heating Max Capacity (-13°F)	Btu/h	8,917	9,782	16,572	19,799				
Heating Cap. Range Min-Max	Btu/h	3,100-19,100	3,500-21,000	10,835~29,414	12,050~32,270				
HSPF		15.0	14.0	14.0	12.0				
COP (47°F)	W/W	4.00	4.24	4.12	3.89				
COP (17°F)	W/W	2.78	2.64	3.20	3.00				
COP (5°F)	W/W	2.00	2.00	2.00	2.00				



Infinity® High Wall Indoor Unit

Sizes: 09/12/18/24

KEY FEATURES

Occupancy Sensor

CONTROLS

indoor unit

people or follow people.

Relative Humidity Sensor

increments in a range of 35%~85%

Detects activity in the room and adjusts the

Wireless Remote Controller included with

Wired Remote Controller KSACN0401AAA

(7-Day Programmable) (Optional)

horizontal angle of airflow to blow away from

FEATURES

- Available in 208/230V
- Modes: Cool, Heat, Dry, Fan, Auto
- · Turbo Mode
- Fully modulating fan speeds
- Sleep Mode
- Up-down/right-left louver control (fixed or swing)
- Relative Humidity Sensor
- Occupancy Sensor (only sizes 09/12)
- Wi-Fi® Smartphone Control Built-in
- ECO Mode
- · Carbon Filter
- Follow Me (senses temperature at handheld remote)
- Heating Setback (46°F Heating Mode)
- Quiet indoor operation, as low as 29 dB(A)
- Aluminum golden hydrophilic pre-coated fins

COMPATIBLE WITH:

38MPRA Outdoor Unit Single Zone (p 20)

(p 52)

• 38MGR Outdoor Unit Multi-zone

Increasing comfort customizing the relative humidity in 5%

Optional Wired Controller (7-Day Programmable) KSACN0401AAA

Wireless Remote Controller

ACCESSORIES

24V Interface for third-party thermostat compatibility KSAIC0301230 (optional)

SPECIFICATIONS:

		40MPHA Hi	gh Wall						
		Heat Pu	ımp						
		Syste	m						
Size		9	12	18	24				
Indoor Model		40MPHAQ09XA3	40MPHAQ12XA3	40MPHAQ18XA3	40MPHAQ24XA3				
	Electrical								
Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60				
Power Supply				unit powered outdoor unit					
MCA	Α	0.3	0.3	0.5	0.5				
		Contro	ols						
Wireless Remote Controller (°F/°C Convertible)		Standard	Standard	Standard	Standard				
Wired Remote Controller (°F/°C Convertible)		Optional	Optional	Optional	Optional				
		Operating	Range						
Cooling Indoor DB Min-Max	°F (°C)	62~90 (17~32)	62~90 (17~32)	62~90 (17~32)	62~90 (17~32)				
Heating Indoor DB Min-Max	°F (°C)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)				
		Pipin	g						
Pipe Connection Size – Liquid	in (mm)	1/4 (6.35)	1/4 (6.35)	3/8" (9.52)	3/8" (9.52)				
Pipe Connection Size – Suction	in (mm)	3/8 (9.52)	1/2 (12.7)	5/8" (15.9)	5/8" (15.9)				
		Indoo	or						
Unit Width	in (mm)	35.2 (895)	35.2 (895)	49.57 (1,259)	49.57 (1,259)				
Unit Height	in (mm)	11.7 (298)	11.7 (298)	14.25 (362)	14.25 (362)				
Unit Depth	in (mm)	9.8 (248)	9.8 (248)	11.10 (282)	11.10 (282)				
Net Weight	lb (kg)	37.48 (17)	37.48 (17)	43.4 (19.7)	43.4 (19.7)				
Number of Fan Speeds		4	4	4	4				
Airflow (lowest to highest)	cfm	144/245/295/345	168/252/306/357	261/389/528/926	359/470/583/926				
Sound Pressure (lowest to highest)	dB(A)	29/35.5/41.5/45.6	29/35.5/41.5/46.8	35.1/40.8/46.1/55.9	36.1/43.3/46.4/56.5				
Air Throw Data	ft (m)	21.98 (6.7)	22.97 (7)	28.80 (8.7)	31.66 (9.65)				
Moisture Removal	Pint/h (L/h)	2.11 (1.0)	2.53 (1.2)	3.8 (1.8)	5.0 (2.39)				
Field Drain Pipe Size O.D.	in (mm)	1 (25.4)	1 (25.4)	1 (25.4)	1 (25.4)				

Performance may vary based on the compatible outdoor units. See respective pages for performance data.

COMPATIBILITY:

Indoor Unit	40MPHAQ09XA3	40MPHAQ12XA3	40MPHAQ18XA3	40MPHAQ24XA3
Outdoor Unit Single Zone*	38MPRAQ09AA3 38MPRAQ12AA3		38MPRAQ18AA3	38MPRAQ24AA3
Outdoor Unit Multi-zone*	38MGRC 38MGRC 38MGRC 38MGRC 38MGRC	024C3 030D3 036D3		

Indoor units sizes 18-24 not compatible with multi-zone 38MGR due to size of the indoor unit coil.

INFINITY SERIES 40MPHA HIGH WALL 23



FEATURES OUTDOOR

- 100% heating capacity at 5°F (-15°C) Sizes 9-24 (208/230V)
- Available in 115V and 208/230V
- Built-in basepan heater
- Auto-restart function
- Condenser high-temperature protection
- · Refrigerant leakage detection
- Quiet outdoor operation, as low as 52.5 dB(A)
- Aluminum golden hydrophilic pre-coated fins
- Piping length 82~164 ft (25~50 m)
- Cooling operating range -13°~122°F (-25°~50°C)
- · Heating operating range -22°~86°F (-30°~30°C) -Sizes 9-24 (208/230V) -13°~86°F (-25°~30°C) - Size 12 (115V) and 30, 36 (208/230V)

COMPATIBLE WITH:

40MAO High Wall

	TOWN O LIIBII Maii	(P 20)
•	40MBCQ Cassette	(p 30)
•	40MBDQ Ducted	(p 32)
•	40MBFQ Console	(p 34)

(n 28)

- FMA4X Fan Coil
- FMC-FMU Fan Coil
- FV4C Fan Coil

Performance[™] **Heat Pump with** Basepan Heater

Heat Pump With Basepan Heater

Inverter Compressor

Up to 25 SEER

Up to 12 HSPF

Sizes: 09/12/18/24/30/36

KEY FEATURES

Extra-Low Temperature Heating

Heat output up to 69% of rated capacity down to -22°F (-30°C), so when it's cold outside, it will be warm inside, making this a primary heat source and eliminating the need for a backup heat source.

Rapid Cooling and Heating

After startup, the compressor quickly gets up to maximum speed, cooling or heating the room in minutes.







Console Size 18-58



FMA4X





Ducted







Floor Console

Size 12



Fan Coil FV4C

Performance[®]

SPECIFICATIONS:

				38MA*R Outdoor Un	it			
				Heat Pump				
				System				
Size		12	9	12	18	24	30	36
Outdoor Model		38MAQB12R1	38MAQB09R3	38MAQB12R3	38MAQB18R3	38MAQB24R3	38MAQB30R3	38MAQB36R3
				Electrical				
Voltage, Phase, Cycle	V/Ph/Hz	115-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
MCA	Α	15	9	9	18	20	20	25
MOCP – Fuse Rating	Α	20	15	15	25	30	30	35
				Operating Range				
Cooling Outdoor DB Min-Max	°F (°C)	-13~122 (-25~50)	-13~122 (-25~50)	-13~122 (-25~50)	-13~122 (-25~50)	-13~122 (-25~50)	-13~122 (-25~50)	-13~122 (-25~50)
Heating Outdoor DB Min–Max	°F (°C)	-13~86 (-25~30)	-22~86 (-30~30)	-22~86 (-30~30)	-22~86 (-30~30)	-22~86 (-30~30)	-13~86 (-25~30)	-13~86 (-25~30)
				Piping				
Total Piping Length	ft (m)	82 (25)	82 (25)	82 (25)	98 (30)	164 (50)	164 (50)	164 (50)
Piping Lift*	ft (m)	32 (10)	32 (10)	32 (10)	65 (20)	65 (20)	82 (25)	82 (25)
Pipe Connection Size – Liquid	in (mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
Pipe Connection Size – Suction	in (mm)	1/2 (12.7)	3/8 (9.52)	1/2 (12.7)	1/2 (12.7)	5/8 (16)	5/8 (16)	5/8 (16)
				Refrigerant				
Туре		R410A	R410A	R410A	R410A	R410A	R410A	R410A
Charge	lb (kg)	2.76 (1.25)	3.31 (1.5)	3.31 (1.5)	4.30 (1.95)	5.73 (2.60)	6.06 (2.75)	7.50 (3.40)
				Compressor				
Туре		Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter
				Outdoor				
Unit Width	in (mm)	32.09 (815)	32.09 (815)	32.09 (815)	33.66 (855)	37.24 (946)	37.24 (946)	37.24 (946)
Unit Height	in (mm)	21.81 (554)	21.81 (554)	21.81 (554)	27.63 (702)	31.89 (810)	31.89 (810)	31.89 (810)
Unit Depth	in (mm)	13.11 (333)	13.11 (333)	13.11 (333)	14.17 (360)	16.14 (410)	16.14 (410)	16.14 (410)
Net Weight	lb (kg)	82.9 (37.6)	91.5 (41.5)	91.5 (41.5)	118.2 (53.6)	145.5 (66)	139.8 (63.4)	147.3 (66.8)
Airflow	cfm	1,200	1,200	1,200	1,390	2,130	2,130	2,130
Sound Pressure	dB(A)	52.5	55.5	56.0	57.5	60.5	60.5	60.5

^{*}Condensing unit above or below indoor unit.

COMPATIBILITY:

Indoor Unit					Outdoor Unit			
ilidoor offit		38MAQB12R1	38MAQB09R3	38MAQB12R3	38MAQB18R3	38MAQB24R3	38MAQB30R3	38MAQB36R3
	40MAQB12B1	•						
	40MAQB09B3		•					
	40MAQB12B3			•				
High Wall	40MAQB18B3				•			
	40MAQB24B3					•		
	40MAQB30B3						•	
	40MAQB36B3							•
	40MBCQ093		•					
	40MBCQ123			•				
Cassette	40MBCQ183				•			
Casselle	40MBCQ243					•		
	40MBCQ363							
	40MBCQ483							
	40MBDQ093		•					
	40MBDQ123			•				
	40MBDQ183				•			
Ducted	40MBDQ243					•		
	40MBDQ363							
	40MBDQ483							
	40MBDQ583							
	40MBFQ123			•				
	40MBFQ183				•			
Console	40MBFQ243					•		
Console	40MBFQ363							
	40MBFQ483							
	40MBFQ583							
	FMA4X1800AL			•	•			
Vertical	FMA4X2400AL					•		
Fan Coil	FMA4X3000AL						•	
	FMA4X3600AL							•
	FM(C,U)4Z1800AL			•	•			
Horizontal	FM(C,U)4Z2400AL					•		
Fan Coil	FM(C,U)4Z3000AL						•	
	FM(C,U)4Z3600AL							•
FV4C Fan Coil	FV4CNF002L			•	•	•		
FV46 Fall GOII	FV4CN(B,F)003L						•	•

PERFORMANCE SERIES 38MA*R OUTDOOR UNITS

PERFORMANCE:

				40MAQ High Wall				
Indoor Model		40MAQB12B1	40MAQB09B3	40MAQB12B3	40MAQB18B3	40MAQB24B3	40MAQB30B3	40MAQB36B3
ENERGY STAR®		YES	YES	YES	YES	YES	NO	NO
Cooling System Tons		1.0	0.75	1.0	1.4	2.0	2.5	3.0
Cooling Rated Capacity	Btu/h	12,000	9,000	12,000	17,000	24,000	30,000	36,000
Cooling Cap. Range Min–Max	Btu/h	4,000~13,000	3,500~13,000	4,000~13,800	4,500~18,800	5,500~24,500	8,000~30,500	8,000~36,200
SEER		22.0	25.0	22.5	20.0	20.5	19.8	16.0
EER		13	14.5	13	12.5	13	11.5	8.6
Heating Rated Capacity (47°F)	Btu/h	12,000	10,900	12,000	18,000	24,000	30,000	36,000
Heating Rated Capacity (17°F)	Btu/h	7,600	6,900	7,800	10,800	15,400	18,500	21,000
Heating Maximum Capacity (17°F)	Btu/h	7,600	10,900	12,000	18,000	24,000	18,500	21,000
Heating Maximum Capacity (5°F)	Btu/h	6,490	10,900	12,000	18,000	24,000	16,380	16,380
Heating Maximum Capacity (-13°F)	Btu/h	3,800	9,020	9,020	16,520	16,520	14,320	14,320
Heating Cap. Range Min–Max	Btu/h	5,000~13,500	4,500~14,500	5,000~15,500	5,500~24,000	6,000~32,000	9,000~34,000	9,000~37,000
HSPF		10.2	11.2	12.0	10.3	11.5	9.4	8.5
COP (47°F)	W/W	3.40	3.80	3.56	3.14	3.10	2.60	2.56
COP (17°F)	W/W	2.60	2.74	2.64	2.64	2.64	2.16	2.12
COP (5°F)	W/W	2.03	2.12	2.12	1.75	1.88	2.20	1.50

PERFORMANCE:

		40M	IBCQ Cassette		
Indoor Model		40MBCQ093	40MBCQ123	40MBCQ183	40MBCQ243
ENERGY STAR®		YES	YES	YES	NO
Cooling System Tons		0.75	1.0	1.3	2.0
Cooling Rated Capacity	Btu/h	9,000	12,000	16,000	24,000
Cooling Cap. Range Min–Max	Btu/h	3,500~11,000	4,000~13,000	4,500~18,000	8,500~26,500
SEER		20.0	19.5	20.0	20.0
EER		13.0	12.5	12.5	11.0
Heating Rated Capacity (47°F)	Btu/h	10,000	12,000	18,000	24,000
Heating Rated Capacity (17°F)	Btu/h	6,700	8,700	12,000	16,200
Heating Maximum Capacity (17°F)	Btu/h	9,000	12,000	18,000	24,000
Heating Maximum Capacity (5°F)	Btu/h	9,000	12,000	18,000	24,000
Heating Maximum Capacity (-13°F)	Btu/h	7,320	7,540	12,590	18,500
Heating Cap. Range Min-Max	Btu/h	4,500~11,500	5,000~13,500	5,500~19,000	13,200–32,000
HSPF		10.8	10.6	10.5	11.5
COP (47°F)	W/W	3.30	3.67	3.43	3.46
COP (17°F)	W/W	2.37	2.40	2.55	2.73
COP (5°F)	W/W	1.83	1.84	2.07	1.88

PERFORMANCE:

		40MBE	OQ Ducted		
Indoor Model		40MBDQ093	40MBDQ123	40MBDQ183	40MBDQ243
ENERGY STAR®		YES	YES	YES	YES
Cooling System Tons		0.75	1.0	1.4	2.0
Cooling Rated Capacity	Btu/h	9,000	12,000	16,500	24,000
Cooling Cap. Range Min-Max	Btu/h	3,500~12,000	4,000~12,900	4,500~18,000	5,500~24,500
SEER		23.0	20.5	19.6	20.5
EER		13.5	12.5	12.5	12.5
Heating Rated Capacity (47°F)	Btu/h	10,000	12,000	19,000	24,000
Heating Rated Capacity (17°F)	Btu/h	7,200	8,500	13,400	17,200
Heating Maximum Capacity (17°F)	Btu/h	10,000	13,000	20,200	25,400
Heating Maximum Capacity (5°F)	Btu/h	10,000	12,000	19,000	24,000
Heating Maximum Capacity (-13°F)	Btu/h	8,350	8,560	12,510	16,520
Heating Cap. Range Min-Max	Btu/h	4,000~15,000	4,500~15,700	5,500~19,000	6,000~26,000
HSPF	•	12.0	11.0	11.0	12.5
COP (47°F)	W/W	3.60	3.30	2.93	3.82
COP (17°F)	W/W	2.92	2.36	2.71	2.56
COP (5°F)	W/W	1.91	1.79	1.75	1.83

PERFORMANCE:

		40MBFQ Console		
Indoor Model		40MBFQ123	40MBFQ183	40MBFQ243
ENERGY STAR®		YES	YES	NO
Cooling System Tons		1.0	1.4	2.0
Cooling Rated Capacity	Btu/h	12,000	17,000	24,000
Cooling Cap. Range Min-Max	Btu/h	4,000~13,000	6,830~19,800	8,000~28,150
SEER		19.4	19.9	20.0
EER		12.5	12.5	11.5
Heating Rated Capacity (47°F)	Btu/h	12,000	18,000	24,000
Heating Rated Capacity (17°F)	Btu/h	9,600	13,400	17,200
Heating Maximum Capacity (17°F)	Btu/h	12,000	21,500	26,600
Heating Maximum Capacity (5°F)	Btu/h	12,000	21,300	26,560
Heating Maximum Capacity (-13°F)	Btu/h	8,150	15,670	18,540
Heating Cap. Range Min-Max	Btu/h	5,000~13,500	12,900~29,000	20,500~36,750
HSPF		10.5	10.6	11.5
COP (47°F)	W/W	3.17	3.48	3.52
COP (17°F)	W/W	2.49	2.38	2.82
COP (5°F)	W/W	1.76	1.77	1.81

26 PERFORMANCE SERIES 27



Performance[™] High Wall Indoor Unit

FEATURES

- Available in 115V and 208/230V
- Modes: Cool, Heat, Dry, Fan, Auto
- Turbo Mode
- Four fan speeds
- Sleep Mode
- Up-down louver control (fixed or swing)
- Follow Me (senses temperature at handheld remote)
- Heating Setback (46°F Heating Mode)
- Quiet indoor operation, as low as 27 dB(A)
- Aluminum golden hydrophilic pre-coated fins

COMPATIBLE WITH:

• 38MA*R Outdoor Unit Single Zone (p 24)

 38MGR Outdoor Unit Multi-zone (p 52)

ACCESSORIES

Wi-Fi® Smartphone control kit KSAIF0301AAA

24V Interface for third-party thermostat compatibility KSAIC0301230**

**Compatible with indoor units starting with Serial Number 4216V10001.

KEY FEATURES

Sizes: 09/12/18/24/30/36

Follow Me

Temperature sensor built in the remote controller will sense its surrounding temperature. The unit will adjust the room temperature more accurately to give you comfort.

CONTROLS

Wireless Remote Controller included with indoor unit



Wired Remote Controller KSACN0101AAA (Timer Function) (Optional)

Wired Remote Controller KSACN0401AAA (7-Day Programmable) (Optional)*

*7-Day Programmable compatible with indoor units starting with Serial Number 0216V10001.



Standard Wired Controller (Timer Function) KSACN0101AAA



Optional Wired Controller (7-Day Programmable) KSACN0401AAA



Wireless Remote Controller



SPECIFICATIONS:

				40MAQ High Wall							
	Heat Pump										
				System							
Size 12 9 12 18 24 30 3							36				
Indoor Model		40MAQB12B1	40MAQB09B3	40MAQB12B3	40MAQB18B3	40MAQB24B3	40MAQB30B3	40MAQB36B3			
				Electrical							
Voltage, Phase, Cycle	V/Ph/Hz	115-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60			
Power Supply				Indoor u	nit powered from out	door unit					
MCA	Α	0.4	0.2	0.2	0.27	0.4	0.4	0.4			
				Controls							
Wireless Remote Controlle (°F/°C Convertible)	er	Standard	Standard	Standard	Standard	Standard	Standard	Standard			
Wired Remote Controller (°F/°C Convertible)		Optional	Optional	Optional	Optional	Optional	Optional	Optional			
				Operating Range							
Cooling Outdoor DB Min–Max	°F (°C)	63~86 (17~30)	63~86 (17~30)	63~86 (17~30)	63~86 (17~30)	63~86 (17~30)	63~86 (17~30)	63~86 (17~30)			
Heating Outdoor DB Min–Max	°F (°C)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)			
				Piping							
Pipe Connection Size – Liquid	in (mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)			
Pipe Connection Size – Suction	in (mm)	1/2 (12.7)	3/8 (9.52)	1/2 (12.7)	1/2 (12.7)	5/8 (16)	5/8 (16)	5/8 (16)			
				Indoor							
Unit Width	in (mm)	32.87 (835)	32.87 (835)	32.87 (835)	38.98 (990)	46.69 (1,186)	46.69 (1,186)	46.69 (1,186)			
Unit Height	in (mm)	11.02 (280)	11.02 (280)	11.02 (280)	12.40 (315)	13.39 (343)	13.39 (343)	13.39 (343)			
Unit Depth	in (mm)	7.80 (198)	7.80 (198)	7.80 (198)	8.58 (218)	10.16 (258)	10.16 (258)	10.16 (258)			
Net Weight	lb (kg)	19.18 (8.7)	19.18 (8.7)	19.18 (8.7)	26.46 (12.0)	40.12 (18.2)	40.12 (18.2)	40.12 (18.2)			
Number of Fan Speeds		4	4	4	4	4	4	4			
Airflow (lowest to highest)	cfm	210/300/360/380	210/290/360/380	210/300/360/380	310/450/650/680	520/620/780/870	520/620/780/870	520/620/780/870			
Sound Pressure (lowest to highest)	dB(A)	27/34/42	27/34/42	27/34/42	33/40/46	39/45/50	39/45/50	39/45/50			
Air Throw Data	ft (m)	23 (7)	23 (7)	23 (7)	30 (9)	36 (11)	36 (11)	36 (11)			
Moisture Removal	Pint/h (L/h)	2.8 (1.3)	1.1 (0.5)	2.3 (1.1)	3.8 (1.8)	5.4 (2.6)	8.1 (3.9)	11.7 (5.6)			
Field Drain Pipe Size O.D.	in (mm)	0.625 (16)	0.625 (16)	0.625 (16)	0.625 (16)	0.625 (16)	0.625 (16)	0.625 (16)			

Performance may vary based on the compatible outdoor units. See respective pages for performance data.

COMPATIBILITY:

Indoor Unit	40MAQB12B1	40MAQB09B3	40MAQB12B3	40MAQB18B3	40MAQB24B3	40MAQB30B3	40MAQB36B3
Outdoor Unit Single Zone	38MAQB12R1	38MAQB09R3	38MAQB12R3	38MAQB18R3	38MAQB24R3	38MAQB30R3	38MAQB36R3
		38MGR0	38MGRQ18B3				
			38MGRQ24C3				
Outdoor Unit Multi-zone			38MGRQ3	0D3			
Widiti-20116			38MGRQ3				
			38MGRQ4	8E3			

Backward compatible with 38MAQ Single Zone and 38MGQ Multi-zone Systems

PERFORMANCE SERIES 40MAO HIGH WALL 29



FEATURES

- · Modes: Cool, Heat, Dry, Fan, Auto
- Auto-restart function
- Louver control (fixed or swing)
- Three fan speeds
- · Outside air intake
- Built-in condensate lift pump
- Follow Me (senses temperature at handheld remote)
- Heating Setback (46°F Heating Mode)
- Quiet indoor operation, as low as 34 dB(A)
- Aluminum golden hydrophilic pre-coated fins
- Grille/ceiling panel 2" x 2" sizes 9 to 18 40MBCQ01XXX3
- Grille/ceiling panel 3" x 3" size 24 P/N 40MBCQ02XXX3

COMPATIBLE WITH:

- 38MA*R Outdoor Unit Single Zone (p 24)
- 38MGR Outdoor Unit Multi-zone (p 52)



Performance[™] Cassette Indoor Unit

Sizes: 09/12/18/24

KEY FEATURES

Built-in Condensate Lift Pump

The cassette is supplied with a condensate lift pump that is capable of lifting the water 29.5in (750mm) above the top of the unit.

Integrated Electrical Components

Easy maintenance with the circuit box right inside the unit. The integrated design provides a more compact size for easier installation.

CONTROLS

Wireless Remote Controller included with indoor unit



Optional Wired Remote Controller KSACN0101AAA (Timer Function)

Optional Wired Remote Controller KSACN0501AAA (7-Day Programmable)



Optional Wired Controller (Timer Function) KSACN0101AAA



Optional Wired Controller (7-Day Programmable) KSACN0501AAA



Wireless Remote Controller

ACCESSORIES

Wi-Fi® Smartphone control kit KSAIF0401AAA

24V Interface for compatibility with conventional thermostat KSAIC0301230

Grille is required; sold separately.

SPECIFICATIONS:

40MBCQ Cassette									
		Heat F							
System									
Size		9	12	18	24				
Indoor Model		40MBCQ093	40MBCQ123	40MBCQ183	40MBCQ243				
		Electi	rical	,	,				
Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60				
Power Supply			Indoor unit powere	d from outdoor unit					
MCA	Α	0.2	0.2	0.2	0.3				
		Cont	rols						
Wireless Remote Controller (°F/°C C	convertible)	Standard	Standard	Standard	Standard				
Wired Remote Controller (°F/°C Con	vertible)	Optional	Optional	Optional	Optional				
		Operating	g Range						
Cooling Indoor DB Min–Max	°F (°C)	63~90 (17~32)	63~90 (17~32)	63~90 (17~32)	62~90 (17~32)				
Heating Indoor DB Min–Max	°F (°C)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)				
		Pipi	ng						
Pipe Connection Size – Liquid	in (mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	3/8 (9.52)				
Pipe Connection Size – Suction	in (mm)	3/8 (9.52)	1/2 (12.7)	1/2 (12.7)	5/8 (16)				
		Indo	or						
Body Unit Width	in (mm)	22.44 (570)	22.44 (570)	22.44 (570)	33.07 (840)				
Body Unit Height	in (mm)	10.24 (260)	10.24 (260)	10.24 (260)	8.07 (205)				
Body Unit Depth	in (mm)	22.44 (570)	22.44 (570)	22.44 (570)	33.07 (840)				
Body Net Weight	lb (kg)	35.27 (16)	35.27 (16)	39.68 (18)	46.3 (21)				
Panel Unit Width	in (mm)	25.47 (647)	25.47 (647)	25.47 (647)	37.4 (950)				
Panel Unit Height	in (mm)	1.97 (50)	1.97 (50)	1.97 (50)	2.17 (55)				
Panel Unit Depth	in (mm)	25.47 (647)	25.47 (647)	25.47 (647)	37.4 (950)				
Panel Net Weight	lb (kg)	5.51 (2.5)	5.51 (2.5)	5.51 (2.5)	11.02 (5)				
Number of Fan Speeds		3	3	3	3				
Airflow (lowest to highest)	cfm	260/320/380	280/340/400	290/350/420	625/761/878				
Sound Pressure (lowest to highest)	dB(A)	34/39/44	36/39/42	46/48/50	47/50/52				
Air Throw Data	ft (m)	23 (7)	23 (7)	30 (9)	30 (9)				
Moisture Removal	Pint/h (L/h)	1.58 (0.75)	2.88 (1.366)	4.26 (2.02)	5.22 (2.47)				
Field Drain Pipe Size O.D.	in (mm)	1 (25.4)	1 (25.4)	1 (25.4)	1 (25.4)				

 $Performance\ may\ vary\ based\ on\ the\ compatible\ outdoor\ units.\ See\ respective\ pages\ for\ performance\ data.$

COMPATIBILITY:

Indoor Unit	40MBCQ093	40MBCQ093 40MBCQ123		40MBCQ243			
Outdoor Unit Single Zone	38MAQB09R3	38MAQB12R3	38MAQB18R3	38MAQB24R3			
-	38MGR	Q18B3					
		38MGRQ24C3					
Outdoor Unit Multi-zone		38MGR0	Q30D3				
		38MGRQ36D3					
		38MGRQ48E3					

Backward compatible with 38MAQ Single Zone and 38MGQ Multi-zone Systems

30 PERFORMANCE SERIES 31



Performance[™] Ducted Indoor Unit

FEATURES

- · Modes: Cool, Heat, Dry, Fan, Auto
- · Vertical or horizontal installation
- Up to 0.64 in WG
- Rear or bottom return
- · Outside air intake
- Follow Me (senses temperature at handheld remote)
- Heating Setback (46°F Heating Mode)
- Quiet indoor operation, as low as 30 dB(A)
- Aluminum golden hydrophilic pre-coated fins
- External condensate lift pump shipped with the unit (sizes 09–18)
- Built-in condensate lift pump (size 24)

COMPATIBLE WITH:

38MA*R Outdoor Unit Single Zone (p 24)

38MGR Outdoor Unit
Multi-zone (p 52)

Performance Series

KEY FEATURES

Sizes: 09/12/18/24

Vertical or Horizontal Installation

Designed for maximum installation flexibility. The secondary drain built-in allows the unit to be mounted vertically allowing either a floor or ceiling-concealed installation depending on existing conditions.

Flexible Air Intake

Air inlet can be installed either at the back or the bottom of the unit due to the small plate size on the flange, allowing for flexible installation to meet the needs of each job.

CONTROLS

Wireless Remote Controller included with indoor unit



Optional Wired Remote Controller (Timer Function)

Wired Remote Controller KSACN0501AAA (7-Day Programmable) included with indoor unit



Optional Wired Controller (Timer Function) KSACN0101AAA



Optional Wired Controller (7-Day Programmable) KSACN0501AAA



Remote Controller

ACCESSORIES

Wi-Fi® Smartphone control kit KSAIF0401AAA

24V Interface for compatibility with conventional thermostat KSAIC0301230

SPECIFICATIONS:

		40MBDQ D	Jucted				
		Heat Pu					
		Syste	•				
Size 9 12 18 24							
Indoor Model		40MBDQ093	40MBDQ123	40MBDQ183	40MBDQ243		
		Electric	cal				
Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60		
Power Supply			Indoor unit powered	from outdoor unit			
MCA	Α	1.11	1.11	1.2	1.2		
		Contro	ols				
Wireless Remote Controller (°F/°C Co	onvertible)	Standard	Standard	Standard	Standard		
Wired Remote Controller (°F/°C Conv	ertible)	Standard	Standard	Standard	Standard		
		Operating	Range				
Cooling Indoor DB Min-Max	°F (°C)	63~90 (17~32)	63~90 (17~32)	63~90 (17~32)	63~90 (17~32)		
Heating Indoor DB Min-Max	°F (°C)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)		
		Pipin	g				
Pipe Connection Size – Liquid	in (mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	3/8 (9.52)		
Pipe Connection Size – Suction	in (mm)	3/8 (9.52)	1/2 (12.7)	1/2 (12.7)	5/8 (16)		
		Indoo	r				
Unit Width	in (mm)	27.56 (700)	27.56 (700)	34.65 (880)	43.31 (1100)		
Unit Height	in (mm)	7.87 (200)	7.87 (200)	8.27 (210)	9.8 (249)		
Unit Depth	in (mm)	19.92 (506)	19.92 (506)	26.54 (674)	30.47 (774)		
Net Weight	lb (kg)	43.56 (19.8)	43.56 (19.8)	54 (24.5)	86.86 (39.4)		
Number of Fan Speeds		3	3	3	3		
Airflow (lowest to highest)	cfm	147/211/264	176/282/353	300/400/480	440/700/780		
Sound Pressure (lowest to highest)	dB(A)	30/34/38	35/37/39	35/37/39	35.5/40/44		
Max Static Pressure	in WG	0.20	0.20	0.40	0.64		
Field Drain Pipe Size O.D.	in (mm)	1 (25.4)	1 (25.4)	1 (25.4)	1 (25.4)		

Performance may vary based on the compatible outdoor units. See respective pages for performance data.

COMPATIBILITY:

Indoor Unit	40MBDQ093	40MBDQ123	40MBDQ183	40MBDQ243				
Outdoor Unit Single Zone	38MAQB09R3	38MAQB12R3	38MAQB18R3	38MAQB24R3				
	38MGR0	Q18B3						
		38MGRQ24C3						
Outdoor Unit Multi-zone		38MGRQ30D3						
		38MGRQ36D3						
		38MGRQ48E3						

For Sizes 36 and 48, refer to the Light Commercial Section Backward compatible with 38MAQ Single Zone and 38MGQ Multi-zone Systems

40MBDO DUCTED 33



FEATURES

Size 12

- · Modes: Cool, Heat, Dry, Fan, Auto
- Auto-restart function
- Louver control (fixed or swing)
- Three fan speeds
- Air discharge from top and bottom (size 12)
- Follow Me (senses temperature at handheld remote)
- Heating Setback (46°F Heating Mode)
- Quiet indoor operation, as low as 37 dB(A)
- Aluminum golden hydrophilic pre-coated fins

COMPATIBLE WITH:

• 38MA*R Outdoor Unit Single Zone

(p 24)

• 38MGR Outdoor Unit Multi-zone

(p 52)

Performance SERIES

Performance[™] Floor Console Indoor Unit

Sizes: 12/18/24

KEY FEATURES

2-Way Optional Air Outlet

Both up and down air-outlet or up air-outlet only. (Size 12 only.)

Outside Air Intake

Outside air is brought into the room via a connection pipe, which keeps the indoor air fresher and cleaner. (Sizes 18 to 24 only.)

CONTROLS

Wireless Remote Controller included with indoor unit



Optional Wired Remote Controller KSACN0101AAA (Timer Function)

Optional Wired Remote Controller KSACN0401AAA (7-Day Programmable) Size 12

Optional Wired Remote Controller KSACN0501AAA (7-Day Programmable) Sizes 18 and 24



Optional Wired Controller (Timer Function) KSACN0101AAA



Optional Wired Controller (7-Day Programmable) KSACN0401AAA or KSACN0501AAA



Wireless Remote Controller

ACCESSORIES

Wi-Fi® Smartphone control kit KSAIF0401AAA (sizes 18–24)

24V Interface for compatibility with conventional thermostat KSAIC0301230

SPECIFICATIONS:

		40MBFQ Console						
Heat Pump								
		System						
Size 12 18 24								
Indoor Model		40MBFQ123	40MBFQ183	40MBFQ243				
		Electrical						
Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-1-60	208/230-1-60				
Power Supply		Ind	door unit powered from outdoo	runit				
MCA	Α	0.29	1.0	1.0				
		Controls						
Wireless Remote Controller (°F/°C Co	onvertible)		Standard					
Wired Remote Controller (°F/°C Conv	ertible)		Optional					
		Operating Range						
Cooling Indoor DB Min–Max	°F (°C)	63~90 (17~32)	62~90 (17~32)	62~90 (17~32)				
Heating Indoor DB Min–Max	°F (°C)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)				
		Piping						
Pipe Connection Size – Liquid	in (mm)	1/4 (6.35)	1/4 (6.35)	3/8 (9.52)				
Pipe Connection Size – Suction	in (mm)	1/2 (12.7)	1/2 (12.7)	5/8 (16)				
		Indoor						
Unit Width	in (mm)	27.56 (700)	42.05 (1,068)	42.05 (1,068)				
Unit Height	in (mm)	23.62 (600)	26.57 (675)	26.57 (675)				
Unit Depth	in (mm)	8.27 (210)	9.25 (235)	9.25 (235)				
Net Weight	lb (kg)	32.41 (14.7)	55.12 (25)	58.42 (26.5)				
Number of Fan Speeds		3	3	3				
Airflow (lowest to highest)	cfm	220/250/280	420/485/550	600/710/760				
Sound Pressure (lowest to highest)	dB(A)	34/41/45	39/44/47	46/50/52				
Air Throw Data	ft (m)	23 (7)	26 (8)	26 (8)				
Field Drain Pipe Size O.D.	in (mm)	1 (25.4)	1 (25.4)	1 (25.4)				

Performance may vary based on the compatible outdoor units. See respective pages for performance data.

COMPATIBILITY:

Indoor Unit	40MBFQ123	40MBFQ183	40MBFQ243			
Outdoor Unit Single Zone	38MAQB12R3	38MAQB12R3 38MAQB18R3				
	38MGRQ18B3					
	38MGR	38MGRQ24C3				
Outdoor Unit Multi-zone		38MGRQ30D3				
		38MGRQ36D3				
		38MGRQ48E3				

Backward compatible with 38MAQ Single Zone and 38MGQ Multi-zone Systems

PERFORMANCE SERIES 40MBF0 CONSOLE 35

COMFORT SERIES



FEATURES OUTDOOR

- · Cost competitive
- Available in 115V and 208/230V
- Built-in basepan heater on heat pump units
- Auto-restart function
- Refrigerant leakage detection
- Quiet outdoor operation, as low as 52 dB(A)
- Aluminum golden hydrophilic pre-coated fins
- Piping length 82~164 ft (25~50m)
- Cooling operating range 0°~122°F (-17°~50°C)
- Heating operating range 0°~86°F (-17°~30°C)

COMPATIBLE WITH:

• 40MHHC High Wall Cooling Only

(p 40)

• 40MHHQ High Wall Heat Pump

(p 42)

Comfort[™] **Heat Pump**

Cooling Only – 38MHRBC Heat Pump – 38MHRBQ With Basepan Heater

Inverter Compressor

Up to 19.8 SEER

Up to 10.6 HSPF

Sizes: 09/12/18/24

KEY FEATURES

Economical Solution

An economical choice that can provide comfort when you need it.

Rapid Cooling and Heating

After startup, the compressor quickly gets up to maximum speed, cooling or heating the room in minutes.



High Wall



SPECIFICATIONS:

			38MHRBQ Outdoor	Ullit		
			Heat Pump			
			System			
Size		12	9	12	18	24
Outdoor Model		38MHRBQ12AA1	38MHRBQ09AA3	38MHRBQ12AA3	38MHRBQ18AA3	38MHRBQ24AA3
			Electrical			
Voltage, Phase, Cycle	V/Ph/Hz	115-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
MCA	Α	13	8	10	15	18
MOCP – Fuse Rating	Α	20	15	15	20	25
			Operating Rang	е		
Cooling Outdoor DB Min–Max	°F (°C)	0~122 (-17~50)	0~122 (-17~50)	0~122 (-17~50)	0~122 (-17~50)	0~122 (-17~50)
Heating Outdoor DB Min–Max	°F (°C)	0~86 (-17~30)	0~86 (-17~30)	0~86 (-17~30)	0~86 (-17~30)	0~86 (-17~30)
	•	<u>'</u>	Piping			
Total Piping Length	ft (m)	82 (25)	82 (25)	82 (25)	98 (30)	164 (50)
Piping Lift*	ft (m)	33 (10)	33 (10)	33 (10)	66 (20)	66 (20)
Pipe Connection Size – Liquid	in (mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	3/8 (9.52)
Pipe Connection Size – Suction	in (mm)	1/2 (12.7)	3/8 (9.52)	1/2 (12.7)	1/2 (12.7)	5/8 (16)
	'		Refrigerant			
Туре		R410A	R410A	R410A	R410A	R410A
Charge	lb (kg)	2.12 (0.96)	1.76 (0.80)	2.12 (0.96)	2.82 (1.28)	3.97 (1.80)
			Compressor			
Туре		Rotary Inverter				
			Outdoor			
Unit Width	in (mm)	30.31 (770)	30.31 (770)	30.31 (770)	31.50 (800)	33.27 (845)
Unit Height	in (mm)	21.85 (555)	21.85 (555)	21.85 (555)	21.81 (554)	27.64 (702)
Unit Depth	in (mm)	11.81 (300)	11.81 (300)	11.81 (300)	13.11 (333)	14.29 (363)
Net Weight	lb (kg)	69 (31.3)	63 (28.6)	65.5 (29.7)	79.6 (36.1)	114.2 (51.8)
Airflow	cfm	1,170	1,170	1,170	1,170	1,765
Sound Pressure	dB(A)	54.5	57.2	57.4	57.0	60.2

^{*}Condensing unit above or below indoor units.

COMPATIBILITY:

Indeed link			Outdoor Unit						
Indoor Unit		38MHRBQ12AA1				38MHRBQ24AA3			
	40MHHQ121	•							
	40MHHQ093		•						
High Wall	40MHHQ123			•					
	40MHHQ183				•				
	40MHHQ243					•			

Manufacturer reserves the right to discontinue, or change at any time, specification or designs without notice or incurring obligations.

PERFORMANCE:

40MHHQ High Wall										
Heat Pump										
Indoor Unit		40MHHQ121	40MHHQ093	40MHHQ123	40MHHQ183	40MHHQ243				
ENERGY STAR®		NO	NO	NO	NO	NO				
Cooling System Tons		1.0	0.8	1.0	1.5	2.0				
Cooling Rated Capacity	Btu/h	12,000	9,000	12,000	18,000	24,000				
Cooling Cap. Range Min–Max	Btu/h	3,700~13,000	3,400~10,500	3,700~13,000	5,500~19,000	8,987~26,585				
SEER		19.8	18.5	19.8	19.0	17.3				
EER		10	11.2	11.2	11.2	9.7				
Heating Rated Capacity (47°F)	Btu/h	12,000	9,800	12,000	18,000	24,800				
Heating Rated Capacity (17°F)	Btu/h	8,000	7,500	9,230	11,600	18,000				
Heating Maximum Capacity (17°F)	Btu/h	8,200	7,850	9,500	11,800	18,300				
Heating Maximum Capacity (5°F)	Btu/h	9,000	6,070	8,880	10,150	16,760				
Heating Cap. Range Min–Max	Btu/h	3,500~13,500	2,800~11,500	3,500~13,500	6,200~19,000	8,371~25,350				
HSPF		10.6	10.0	9.6	10.6	9.6				
COP (47°F)	W/W	2.93	3.27	3.22	3.26	3.13				
COP (17°F)	W/W	2.58	2.58	2.64	2.64	2.49				
COP (5°F)	W/W	1.60	1.60	1.60	1.50	1.40				

PERFORMANCE:

	40MHHC High Wall										
	Cooling Only										
Indoor Unit		40MHHC121	40MHHC123	40MHHC183	40MHHC243						
ENERGY STAR®		NO	NO	NO	NO						
Cooling System Tons		1.0	1.0	1.4	1.8						
Cooling Rated Capacity	Btu/h	12,000	11,500	17,000	22,000						
Cooling Cap. Range Min–Max	Btu/h	4,800~13,200	4,800~13,000	5,800~18,600	4,900~24,100						
SEER		17.3	19.0	19.0	18.5						
EER		10.7	11.2	10.3	11.1						

SPECIFICATIONS:

38MHRBC Outdoor Unit											
Cooling Only											
System											
Size 12 12 18 24											
Outdoor Model		38MHRBC12AA1	38MHRBC12AA3	38MHRBC18AA3	38MHRBC24AA3						
		Elec	ctrical								
Voltage, Phase, Cycle	V/Ph/Hz	115-1-60	208/230-1-60	208/230-1-60	208/230-1-60						
MCA	Α	13	11	15	18						
MOCP – Fuse Rating	Α	20	15	20	25						
		Operati	ng Range								
Cooling Outdoor DB Min-Max	°F (°C)	0~122 (-17~50)	0~122 (-17~50)	0~122 (-17~50)	0~122 (-17~50)						
		Pi	ping								
Total Piping Length	ft (m)	82 (25)	82 (25)	98 (30)	164 (50)						
Piping Lift*	ft (m)	33 (10)	33 (10)	66 (20)	66 (20)						
Pipe Connection Size – Liquid	in (mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	3/8 (9.52)						
Pipe Connection Size – Suction	in (mm)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	5/8 (16)						
		Refri	igerant								
Туре		R410A	R410A	R410A	R410A						
Charge	lb (kg)	1.30 (0.59)	1.17 (0.53)	1.98 (0.90)	2.56 (1.16)						
		Comp	pressor								
Туре		Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter						
		Ou	tdoor								
Unit Width	in (mm)	30.31 (770)	30.31 (770)	30.31 (770)	33.27 (845)						
Unit Height	in (mm)	21.85 (555)	21.85 (555)	21.85 (555)	27.64 (702)						
Unit Depth	in (mm)	11.81 (300)	11.81 (300)	11.81 (300)	14.29 (363)						
Net Weight	lb (kg)	57.8 (26.2)	53.8 (24.4)	65.9 (29.9)	88.6 (40.2)						
Airflow	cfm	1,170	1,230	1,195	1,825						
Sound Pressure	dB(A)	52.0	53.6	55.3	58.0						

^{*}Condensing unit above or below indoor units.

COMPATIBILITY:

Indoor Unit		Outdoor Unit						
		38MHRBC12AA1	38MHRBC12AA3	38MHRBC18AA3	38MHRBC24AA3			
	40MHHC121	•						
112 - 1- 147 - 11	40MHHC123		•					
High Wall	40MHHC183			•				
	40MHHC243				•			

COMFORT SERIES 40MHH HIGH WALL



Comfort[™] High Wall Indoor Unit

FEATURES

- Available in 115V and 208/230V
- Modes: Cool, Heat, Dry, Fan, Auto
- Turbo Mode
- Up-down louver control (fixed or swing)
- Filter removal from the top
- Improved serviceability
- Four fan speeds
- Sleep Mode
- Follow Me (senses temperature at handheld remote)
- Heating Setback (46°F Heating Mode)
- Quiet indoor operation, as low as 27 dB(A)
- Aluminum golden hydrophilic pre-coated fins

COMPATIBLE WITH:

• 38MHRB Outdoor Unit Single Zone

(p 36)

 38MGR Outdoor Unit Multi-zone

(p 52)

Comfort S E R I E S Cooling Only – 40MHHC Heat Pump – 40MHHQ

Sizes: 09/12/18/24

KEY FEATURES

Improved Serviceability

Full access to the terminal connections and fan after lifting the front cover of the high wall for easy installation and service.

Convenient Filter Removal

The filter is conveniently located on the inlet, allowing direct removal from the top of the unit without opening the panel.

CONTROLS

Wireless Remote Controller included with indoor unit



Optional Wired Remote Controller (7-Day Programmable)



Optional Wired Controller (7-Day Programmable) KSACN0401AAA

Wireless Remote Controller

ACCESSORIES

KSAIC0301230

Wi-Fi® Smartphone control kit KSAIF0101AAA (sizes 09/12/24)
Wi-Fi® Smartphone control kit KSAIF0201AAA (size 18)
24V Interface for compatibility with conventional thermostat

SPECIFICATIONS:

40MHH High Wall												
	Cooling Only											
System												
Size		12	12	18	24							
Indoor Model		40MHHC121	40MHHC123	40MHHC183	40MHHC243							
			Electrical									
Voltage, Phase, Cycle	V/Ph/Hz	115-1-60	208/230-1-60	208/230-1-60	208/230-1-60							
Power Supply			Indoor unit powered	I from outdoor unit								
MCA	Α	0.3	0.25	0.4	0.45							
			Controls									
Wireless Remote Cont (°F/°C Convertible)	roller	Standard	Standard	Standard	Standard							
Wired Remote Control (°F/°C Convertible)	ler	Optional	Optional	Optional	Optional							
		Oį	perating Range									
Cooling Indoor DB Min–Max	°F (°C)	63~90 (17~32)	63~90 (17~32)	63~90 (17~32)	63~90 (17~32)							
			Piping									
Pipe Connection Size – Liquid	in (mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	3/8 (9.52)							
Pipe Connection Size – Suction	in (mm)	1/2 (12.7)	1/2 (12.7)	1/2 (12.7)	5/8 (16)							
			Indoor									
Unit Width	in (mm)	32.00 (813)	32.00 (813)	38.36 (974)	43.83 (1,113)							
Unit Height	in (mm)	11.81 (300)	11.81 (300)	12.8 (325)	13.41 (341)							
Unit Depth	in (mm)	7.75 (197)	7.75 (197)	8.87 (225)	9.22 (234)							
Net Weight	lb (kg)	17.64 (8)	17.64 (8)	23.15 (10.5)	30.86 (14)							
Number of Fan Speeds	S	4	4	4	4							
Airflow (lowest to highest)	cfm	190/239/301/328	188/238/305	344/422/506/550	420/514/609/640							
Sound Pressure (lowest to highest)	dB(A)	29/36/41/42	28/35/40/42	34/39/43/45	39/44/49/49							
Air Throw Data	ft (m)	22 (6.7)	22 (6.7)	24 (7.3)	39.4 (12)							
Moisture Removal	Pint/h (L/h)	3.17 (1.50)	3.09 (1.46)	4.61 (2.18)	6.38 (3.02)							
Field Drain Pipe Size O.D.	in (mm)	0.625 (16)	0.625 (16)	0.625 (16)	0.625 (16)							

 $Performance\ may\ vary\ based\ on\ the\ compatible\ outdoor\ units.\ See\ respective\ pages\ for\ performance\ data.$

COMFORT SERIES 40MHH HIGH WALL 41

COMFORT SERIES 40MHH HIGH WALL

40MHH HIGH WALL

SPECIFICATIONS:

40MHH High Wall												
Heat Pump												
System												
Size		12	12	18	24							
Indoor Model		40MHHQ121	40MHHQ093	40MHHQ123	40MHHQ183	40MHHQ243						
Electrical Electrical												
Voltage, Phase, Cycle	V/Ph/Hz	115-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60						
Power Supply			Indoor u	nit powered from outdo	oor unit							
MCA	Α	0.3	0.25	0.25	0.28	0.45						
			Controls									
Wireless Remote C (°F/°C Convertible)	ontroller	Standard	Standard	Standard	Standard	Standard						
Wired Remote Cont (°F/°C Convertible)	troller	Optional	Optional	Optional	Optional	Optional						
			Operating Rar	nge								
Cooling Indoor DB Min–Max	°F (°C)	63~90 (17~32)	63~90 (17~32)	63~90 (17~32)	63~90 (17~32)	63~90 (17~32)						
Heating Indoor DB Min–Max	°F (°C)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)						
			Piping									
Pipe Connection Size – Liquid	in (mm)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	1/4 (6.35)	3/8 (9.52)						
Pipe Connection Size – Suction	in (mm)	1/2 (12.7)	3/8 (9.52)	1/2 (12.7)	1/2 (12.7)	5/8 (16)						
			Indoor									
Unit Width	in (mm)	32.00 (813)	28.53 (725)	32.00 (813)	38.36 (974)	43.83 (1,113)						
Unit Height	in (mm)	11.81 (300)	11.81 (300)	11.81 (300)	12.8 (325)	13.41 (341)						
Unit Depth	in (mm)	7.75 (197)	7.75 (197)	7.75 (197)	8.87 (225)	9.22 (234)						
Net Weight	lb (kg)	22.49 (10.2)	21.16 (9.6)	22.49 (10.2)	31.97 (14.5)	40.12 (18.2)						
Number of Fan Spe	eds	4	4	4	4	4						
Airflow (lowest to highest)	cfm	200/265/306/329	165/229/271/324	212/282/324/353	353/412/529/559	353/483/589/647						
Sound Pressure (lowest to highest)	dB(A)	29/38/42/42	31/36/40/42	34/39/41/43	34/39/44/46	38/42/48/49						
Air Throw Data	ft (m)	22 (6.7)	20.3 (6.2)	22.6 (6.9)	25 (7.6)	37.7 (11.5)						
Moisture Removal	Pint/h (L/h)	3.49 (1.65)	2.05 (0.97)	3.38 (1.6)	4.63 (2.19)	5.73 (2.71)						
Field Drain Pipe Size O.D.	in (mm)	0.625 (16)	0.625 (16)	0.625 (16)	0.625 (16)	0.625 (16)						

Performance may vary based on the compatible outdoor units. See respective pages for performance data.

COMPATIBILITY:

Cooling Only										
Indoor Unit	40MHHC121	40MHHC123	40MHHC183	40MHHC243						
Outdoor Unit Single Zone	38MHRBC12AA1	38MHRBC12AA3	38MHRBC18AA3	38MHRBC24AA3						
Outdoor Unit Multi-zone										

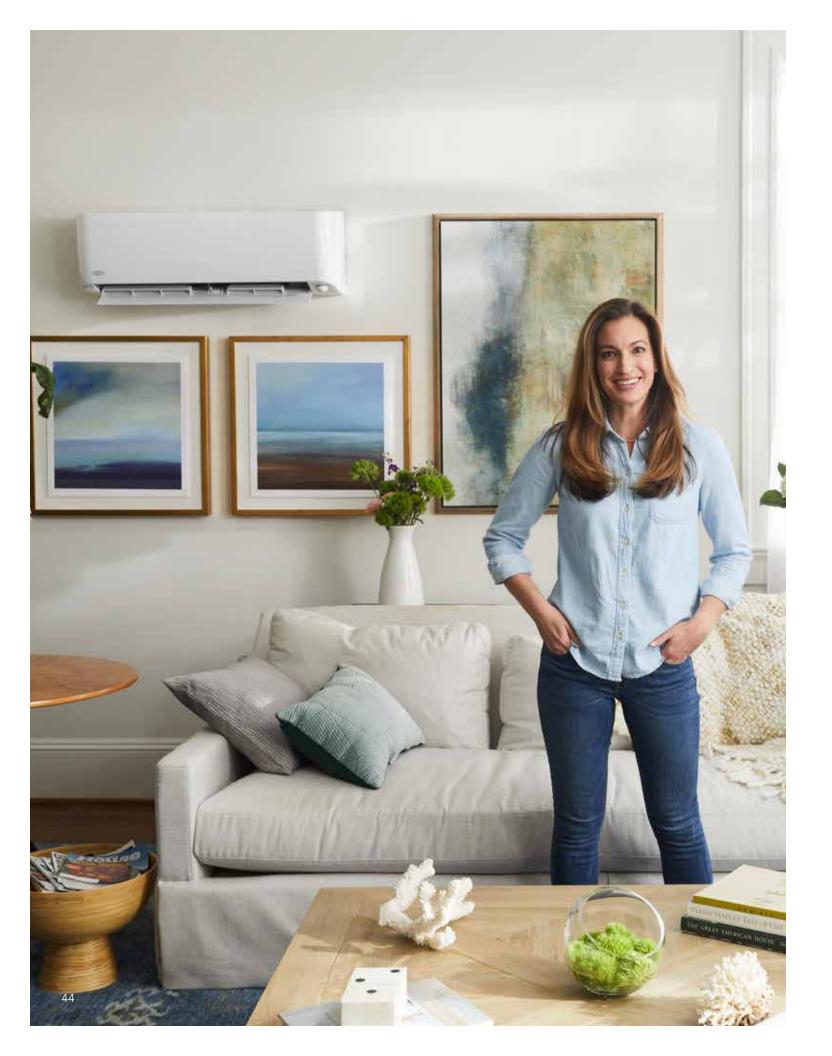
Backward compatible with 38MHRC Single Zone

COMPATIBILITY:

Heat Pump											
Indoor Unit	40MHHQ121	40MHHQ093	40MHHQ123	40MHHQ183	40MHHQ243						
Outdoor Unit Single Zone	38MHRBQ12AA1	38MHRBQ09AA3	38MHRBQ12AA3	38MHRBQ18AA3	38MHRBQ24AA3						
		38MGR									
Outdoor Unit Multi-zone			38MGR	Q30D3							
			38MGR	Q36D3							
			38MGR	Q48E3							

Backward compatible with 38MHRQ Single Zone

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Multi-zone

INFINITY SERIES 38VMH OUTDOOR UNIT

38VMH OUTDOOR UNIT



36, 48 and 60K

FEATURES

- Up to 18.6 SEER cooling efficiency
- Up to 10.0 HSPF heating efficiency
- Available in 3-, 4- and 5-ton capacity range
- 208/230-1-60Hz power supply
- · Ability to connect up to nine multiplestyle indoor units on a 5-ton system
- Heat pump system
- High-performance outdoor unit with Inverter-driven scroll compressor
- Cooling operating range 5°~118°F
- Heating operating range –13°~64°F
- Connected capacity up to 130%
- Quiet outdoor operation, as low as 58.7 dB(A)

COMPATIBLE WITH:

The 38VMH heat pump system can be matched with the following indoor units and controls:

40VMA, 40VMC, 40VMF, 40VMH, 40VML, 40VMM, 40VMR, 40VMU, 40VMV, 40VMW & 40VM9 (controller)



Infinity® Series VRF Heat Pump

CARRIER® VRF

Heat Pump System

36,000 to 60,000 Btu/h

3 to 5 tons

KEY FEATURES:

The Carrier 38VMH VRF heat pump system is a combination of an outdoor unit with multiple-style indoor units connected by refrigerant piping and wiring. The outdoor units have stacked dual-condenser fan with side-blow arrangement.



4-way Compact

Cassette 40VMC



4-way Cassette 40VMF



Low Static Duct 40VML



Medium Static Duct 40VMM



Floor Console 40VMR



Underceiling **40VMU**





High Wall 40VMW

SPECIFICATIONS:

		38MVH Out					
Outdoor Unit Model N	lama	Syst	em	38VMA036HDS3-1	38VMA048HDS3-1	38VMA060HDS3-	
Nominal Tons	dille		Ton	3	4	5	
NOTHINAL TORIS		D. of an		3	4	3	
0		Perforn Nominal	kBtu/h	36,000	48,000	60,000	
Cooling Capacity (*1) (with non-ducted indo	or units/ducted)	Rated	kBtu/h	36,000	,	60,000	
,	or units/ductou)	Nominal	kBtu/h	40,000	48,000 52,500	66,000	
Heating Capacity (*1) (with non-ducted indo	or units/ducted)	Rated	kBtu/h	40,000	52,500	66,000	
(With Horr ductor muc				40,000	52,500	66,000	
	Dower Cupply (*2)	Performance	Non-Ducted		208/230V, 1-Phase, 60	U	
With Non-ducted Indoor Units	Power Supply (*2)		IAM	3.1	4.6	6.1	
ilidoor offits	Cooling	Power Consumption	kW Btu/W	18.0	18.0	18.6	
Electrical		SEER (Seasonal Energy Efficiency Ratio)		3.1			
Characteristics (Nominal) (*1)	Heating	Power Consumption	kW	9.2	4.3 9.2	5.8	
(Nominal) (1)		HSPF (Heating Seasonal Performace Factor)	Btu/W	9.2	9.2	9.6	
	D 0 1 (#0)	Performance	ce Ducted	1	000/0001/ 1 Phase 00	11-	
With Ducted Indoor Units	Power Supply (*2)			0.0	208/230V, 1-Phase, 60		
	Cooling	Power Consumption	kW	2.9	4.7	6.1	
Electrical		SEER (Seasonal Energy Efficiency Ratio)	Btu/W	17.8	17.8	18.6	
Characteristics (Nominal) (*1)	Heating	Power Consumption	kW	3.0	4.2	5.7	
(NOITIIIIai) (*1)		HSPF (Heating Seasonal Performace Factor)	Btu/W	9.6	9.6	10.0	
		Dimen		<u> </u>	50.4/4		
Height			in	52-1/4			
Width			in	35-1/2			
Depth			in	15-3/4			
Total Weight	Unit		lb		220		
		Compr	essor				
Type/Quantity			Т	Inve	erter-Driven Hermetic Ro	otary/1	
Motor Output			kW		13		
		Fan I					
Motor Output			W		90+90		
Air Volume			cfm		4,100		
Refrigerant (*3) (charg	jed refrigerant amount)	lb		8.6		
Electrical	Unit	MCA (*4)	Α	36	38	40	
Specifications	Onit	Recommended Fuse Size	Α	40	40	45	
		Pipi	ng				
Refrigerant	Connecting Port	Gas Side (main pipe) (brazing)	in		5/8	3/4	
Piping	Diameter	Liquid Side (main pipe) (brazing)	in		3/8		
		Operation Temp	erature Range				
Cooling			°F DB		5~118		
Heating			°F WB		-13~64		
		Indo	oor				
Maximum Number of	Connected Indoor Unit	S		5	7	9	
Maximum Capacity of	Combined Indoor Unit	S			50 to 130%		
Cound Dropouro Loval	Cooling/Heating (*5)		dB(A)	58.7	60.1	60.7	

Specifications subject to change

(*1) Rated conditions.

Cooling: Indoor air temperature 80 °F dry bulb/67 °F wet bulb, outdoor air temperature 95 °F dry bulb. Heating: Indoor air temperature 70 °F dry bulb, outdoor air temperature 47 °F dry bulb/43 °F wet bulb.

- (*2) The source voltage must not fluctuate more than $\pm -10\%$.
- (*3) The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.
- (*4) Select wire size based on larger value of MCA.
- MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).
- (*5) These values, measured in anechoic chamber, at a point 1m in front of the unit at a height of 1.4m. During actual operation, these values are normally somewhat higher as a result of ambient conditions.

INFINITY SERIES 38VMH OUTDOOR UNIT 47



Toshiba Carrier VRF Heat Recovery

FEATURES

- Available in 6-ton single module which can be twinned up to 12-ton capacity
- Ability to connect up to 25 indoor units
- 3-pipe heat recovery system
- High-performance outdoor units with all Inverter-driven twin rotary compressor
- DC inverter condenser fan motor
- 208/230-1-60Hz voltage
- Cooling ambient operating temperature is 14°~122°F
- Heating ambient operating temperature is -13°~60°F
- Connected capacity up to 150%

COMPATIBLE WITH:

The MMYF-SP heat recovery unit is matched with multiple VRF fan coils.

TOSHIBA CARRIER VRF

Heat Recovery System 72,000 or 144,000 Btu/h 6 or 12 tons

The Toshiba Carrier VRF system is a combination of an outdoor unit with multiple-style indoor units connected by refrigerant piping and wiring. The VRF heat recovery outdoor unit is a single module with twinning capability up to 12 tons to achieve greater capacity.



SPECIFICATIONS:

		MMYF Outdoor Unit System			
Outdoor Unit Set Model N	ame	MMY-	MY-		
Outdoor Unit Model Name	<u> </u>	MMY-MAP		MAP0726FT2P-UL	0726FT2P-UL
Outdoor offit Model Name	.	WWY-MAP			0726FT2P-UL
Nominal Tons			Ton	6	12
		Performance		1	
Cooling Capacity (*1)	21-71-1-8	Nominal	kBtu/h	72	144
(with non-ducted indoor u	nits/ducted)	Rated	kBtu/h	69	138
Heating Capacity (*1)	:t(-ltd)	Nominal	kBtu/h	81	162
(with non-ducted indoor u	nits/ducted)	Rated	kBtu/h	77	154
		Performance Non-Ducted		000/0001/	Di coll
With Non-ducted	Power Supply (*2)			· ·	-Phase, 60Hz
Indoor Units	Cooling	Power Consumption (*6)	kW	4.43	9.65
Electrical		IEER (Integrated Energy Efficiency Ratio)	Btu/W	27.4	26.4
Characteristics (Nominal) (*1)	Heating	Power Consumption (*6)	kW	5.98	11.69
(Notilital) (1)	-	SCHE (Simultaneous Cooling & Heating Efficiency)	Btu/W	30.6	31.3
	Danier Complex (#0)	Performance Ducted		200/2201/ 1	Dhoo COU
With Ducted Indoor Units	Power Supply (*2)		1-14/		-Phase, 60Hz
indoor onits	Cooling	Power Consumption (*6)	kW Btu/W	4.88	9.81
Electrical		IEER (Integrated Energy Efficiency Ratio)	kW	6.10	11.56
Characteristics (Nominal) (*1)	Heating	Power Consumption (*6)	Btu/W	27.8	28.0
(Nonlina) (1)		SCHE (Simultaneous Cooling & Heating Efficiency)	DIU/W	21.0	20.0
Height		Dimensions	in	72.9	72.9
Width			in	39.0	39.0 x 2
Depth			in	30.7	30.7
Total Weight	Unit		lb	600	600 + 600
Total Weight	Ollit	Compressor	ID .	000	000 + 000
Type		Compressor		Hermetic Twin R	otary Compressor
турс		Fan Unit		Tiermette TWIII Ti	otary compressor
Air Volume		raii oiiit	cfm	5,900	5,900 x 2
Maximum External Static	Pressure		in WG	0.24	0.24
Refrigerant (*3) (charged r)	lb	24.3	24.3 x 2
Electrical	onigorani amouni	MCA (*4)	Α	47	47 + 47
Specifications	Unit	Recommended Fuse Size	Α	50	50 + 50
		Piping	•		
		Gas Side (main pipe) (brazing)	in	7/8	1-1/8
Refrigerant	Connecting Port	Liquid Side (main pipe) (flare)	in	1/2	5/8
Piping	Diameter	Discharge (main pipe) (flare)	in	3/4	7/8
		Balance Pipe (flare)	in	3/8	3/8
		Operation Temperature Rang			
Cooling			°F DB	14-	~122
Heating			°F WB	-13	3~60
		Indoor			
Maximum Number of Coni	nected Indoor Unit	S		12	25
Maximum Capacity of Con	mbined Indoor Unit	S		50 to	150%
Sound Pressure Level Coo	ling/Hosting (*5)		dB(A)	57/60	60/63

- ('2) The source voltage must not fluctuate more than $\pm 10\%$.
- ('3) The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.
- ('4) Select wire size based on the larger value of MCA.

MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).

('5) In case the diversity exceeds 135%, the type of indoor unit is limited and the maximum number of indoor unit is reduced. ('6) Only for outdoor unit.

TOSHIBA CARRIER SERIES MMYF HEAT RECOVERY OUTDOOR UNIT 49



FEATURES

- Available in 3-, 4- and 5-ton capacity range
- Ability to connect up to nine multiplestyle indoor units on a 5-ton system
- Heat pump system
- High-performance outdoor unit with Inverter-driven twin rotary compressor
- 208/230-1-60Hz power supply
- Cooling operating range 23°~122°F
- Heating operating range –13°~60°F
- Connected capacity up to 135%
- Up to 21.5 SEER cooling efficiency
- · Up to 11.5 HSPF heating efficiency
- Quiet outdoor operation

COMPATIBLE WITH:

The MCY7 heat pump is matched with multiple VRF fan coils.

Toshiba Carrier VRF Heat Pump

TOSHIBA CARRIER VRF

Heat Pump System 36,000 to 60,000 Btu/h

3 to 5 tons

The Toshiba Carrier VRF System is a combination of an outdoor unit with multiple-style indoor units connected by refrigerant piping and wiring. The outdoor units have stacked dual-condenser fan with side-blow arrangement.

COMPATIBLE INDOOR UNITS:

The MCY7 heat pump is matched with multiple VRF fan coils.



SPECIFICATIONS:

		MCY7 Outd				
0.14	·	Syste	em	MAP0367HS-UL	MAP0487HS-UL	MAP0607HS-U
Outdoor Unit Model N	lame	MCY-				
Nominal Tons			Ton	3	4	5
		Perform	ance	1		1
Cooling Capacity (*1) (with non-ducted indo	or units/ducted)	Nominal	kBtu/h	36	48	60
Heating Capacity (*1) (with non-ducted indo	or units/ducted)	Nominal	kBtu/h	40	54	66
		Performance I	Non-Ducted			
	Power Supply (*2)			208/230V, 1-Phase, 60	Hz
With Non-ducted	Cooling	Power Consumption	kW	2.29	3.71	5.26
Indoor Units	Cooling	EER (Energy Efficiency Ratio)	Btu/W	15.7	12.95	11.4
Electrical		Power Consumption	kW	2.79	3.95	5.16
Characteristics	Heating	COP (Coefficient of Performance)	Btu/W	4.2	4.01	3.75
(Nominal) (*1)	SEER (Seasonal En	ergy Efficiency Ratio)		22.7	21	20.5
	-	sonal Performance Ratio)		11.5	11.5	11.5
	11211 (1111 3 1111	Performanc	e Ducted			_
	Power Supply (*2	,			208/230V, 1-Phase, 60	Hz
With Ducted		Power Consumption	kW	2.76	4.87	5.76
Indoor Units	Cooling	EER (Energy Efficiency Ratio)	Btu/W	13.05	9.85	10.42
		Power Consumption	kW	3.45	5.27	5.34
Electrical	Heating		Btu/W	3.4	3	3.62
Characteristics (Nominal) (*1)	CEED (Correction	COP (Coefficient of Performance)	Dlu/ VV	17.7	16.6	17.6
(Nonmar) (1)		SEER (Seasonal Energy Efficiency Ratio) HSPF (Heating Seasonal Performance Ratio)				
	HSPF (Heating Sea:	·		10.5	9.5	11
		Dimens		1 01		
Height			in	61	61	61
Width			in	39.8	39.8	39.8
Depth			in	14.6	14.6	14.6
Total Weight	Unit		lb	311	311	311
		Compre	essor			
Туре				Her	metic Twin Rotary Comp	pressor
Motor Output			kW	3.75	3.75	3.75
		Fan U	nit			
Air Volume			cfm	4,520	4,690	4,850
Refrigerant R410A (*3)) (charged refrigerant	amount)	lb	14.8	14.8	14.8
Electrical		MCA (*4)	Α	36.3	36.3	36.3
Specifications	Unit	Recommended Fuse Size	Α	40	40	40
		Pipir	ıq			'
Refrigerant	Connecting Port	Gas Side (main pipe) (brazing)	in	5/8	5/8	3/4
Piping	Diameter	Liquid Side (main pipe) (brazing)	in	3/8	3/8	3/8
		Operation Tempe				
Cooling		Sportage 10mpc	°F DB		23~122	
Heating			°F WB		-13~60	
		Indo			.0 00	
Maximum Number of	Connected Indoor Unit		UI .	6	8	9
	Combined Indoor Unit			80 to 135%		135%
			JD/A\			
Sound Pressure Level	Cooling/Heating (*5)		dB(A)	52/56	54/57	55/58

(*1) Rated conditions

Cooling: Indoor 80° F Dry Bulb/67° F Wet Bulb, Outdoor 95° F Dry Bulb. Heating: Indoor 70° F Dry Bulb, Outdoor 47° F Dry Bulb/43° F Wet Bulb.

(°2) The source voltage must not fluctuate more than $\pm 10\%$.

(*4) Select wire size based on the larger value of MCA.

MCA: Minimum Circuit Amps (Minimum Circuit Amps required for power supply design).

^{(&#}x27;3) The amount does not consider extra piping length. Refrigerant must be added on site in accordance with the actual piping length.

PERFORMANCE SERIES 38MGR OUTDOOR UNIT

38MGR OUTDOOR UNIT



FEATURES

- 100% heating capacity at 5°F (-15°C)
 Sizes 24-36 (208/230V)
- Connect 2~5, multiple-style indoor units
- · Basepan heater factory installed
- Quiet outdoor operation, as low 62 dB(A)
- Aluminum golden hydrophilic pre-coated fins
- Total piping length 131~328 ft (40~100 m)
- Vertical lift/drop piping length 49~65 ft (15~20 m)
- Cooling operating range –13°~122°F (–25°~50°C)
- Heating operating range –22°~86°F (–30°~30°C)

COMPATIBLE WITH:

•	40MPHA High Wall	(p 22)
•	40MAQ High Wall	(p 28)
•	40MHHQ High Wall	(p 42)
•	40MBCQ Cassette	(p 30)
•	40MBDQ Ducted	(p 32)
•	40MBFO Floor Console	(n 34)



Performance™ Multi-zone Heat Pump With Basepan Heater

Heat Pump With Basepan Heater

Inverter Compressor

Up to 23.8 SEER

Up to 11.5 HSPF

Sizes: 18/24/30/36/48

KEY FEATURES

Space-saving Installation

Up to five indoor units can be connected to a single outdoor unit, reducing the number of outdoor units. All indoor units can be individually controlled and do not need to be installed at the same time.

Multiple-style Indoor Units

Flexibility on the options of indoor unit styles to fit any application or need.



COMBINATIONS:

To access the Combination Charts, please see instructions on page 53.

SPECIFICATIONS:

		381	MGR Outdoor Unit			
			Heat Pump			
			System			
Size		18	24	30	36	48
Outdoor Model		38MGRQ18B3	38MGRQ24C3	38MGRQ30D3	38MGRQ36D3	38MGRQ48E3
Max Number of Zones		2	3	4	4	5 5
Max Number of Zones			ormance Non-Ducted	4	4	3
ENERGY STAR®		YES	YES	YES	YES	YES
Cooling System Tons		1.5	2.0	2.5	3.0	4.0
Cooling Rated Capacity	Btu/h	18,000	24,000	30,000	36,000	48,000
Cooling Cap. Range Min-Max	Btu/h	5,810~21,940	7,880~33,510	8,090~41,470	8,560~45,020	8,560~53,160
SEER	Dia/II	22.5	23	23.8	21.5	22.4
EER		12.5	12.5	12.5	13.5	12.5
Heating Rated Capacity (47°F)	Btu/h	19,000	24,000	28,000	36,000	48,000
Heating Maximum Capacity (5°F)	Btu/h	14,400	24,450	29,230	36,660	37,290
Heating Maximum Capacity (-13°F)	Btu/h	9,540	20,250	24,520	30,780	30,970
Heating Cap. Range Min–Max	Btu/h	5,760~24,480	6,010~36,180	6,350~41,950	7,210~50,350	7,210~55,820
HSPF	Dtu/II	10.3	10.3	10.0	10.5	10.2
COP (47°F)	W/W	3.6	3.9	3.8	3.8	3.6
COP (47 F)	W/W	2.2	2.1	2.0	1.8	2.0
COP (5 F)	VV/VV	1	bination Ducted and Non-		1.0	2.0
ENERGY STAR®		NO	YES	NO	NO	NO
Cooling System Tons		1.5	2.0	2.5	3.0	4.0
Cooling Rated Capacity	Btu/h	18,000	24,000	30,000	36,000	48,500
Cooling Cap. Range Min–Max	Btu/h	5,795~20,708	7,765~31,955	8,060~39,990	8,510~42,635	8,510~52,580
SEER	Dtu/II	20.50	22.00	22.40	20.25	21.45
EER		12.15	11.75	11.25	12.40	11.30
	Btu/h					
Heating Rated Capacity (47°F)		18,700	24,000	29,000	36,400	49,000
Heating Maximum Capacity (5°F)	Btu/h	14,565	24,150	28,615	36,065	37,045
Heating Maximum Capacity (-13°F)	Btu/h	9,295	18,990	23,390	29,260	29,445
Heating Cap. Range Min–Max HSPF	Btu/h	5,650~24,365	5,980~36,190	6,275~42,305	7,045~47,800	7,045~54,935
	14/04/	10.15	10.15	10.00	10.75	10.85
COP (47°F)	W/W	3.7	3.9	3.7	3.7	3.5
COP (5°F)	W/W	2.1	2.0	2.0	1.8	1.9
ENERGY STAR®		NO Per	formance Ducted YES	NO	NO	NO
Cooling System Tons		1.5	2.0	2.5	3.0	4.1
Cooling System rons Cooling Rated Capacity	Btu/h	18,000	-		36,000	49,000
			24,000	30,000		-
Cooling Cap. Range Min–Max	Btu/h	5,780~19,476	7,650~30,400	8,030~38,510	8,460~40,250	8,460~52,000
SEER EER		18.5	21.0	21.0	19.0	20.5
	D4/b	11.8	11.0	10.0	11.3	10.1
Heating Rated Capacity (47°F)	Btu/h	18,500	24,000	30,000	37,000	50,000
Heating Maximum Capacity (5°F)	Btu/h	14,730	23,850	28,000	35,470	36,800
Heating Maximum Capacity (-13°F)	Btu/h	9,050	17,730	22,260	27,740	27,920
Heating Cap. Range Min–Max	Btu/h	5,539~24,249	5,950~36,200	6,200~42,660	6,880~45,250	6,880~54,050
HSPF		10.0	10.0	10.0	11.0	11.5
COP (47°F)	W/W	3.8	3.8	3.6	3.6	3.4
COP (5°F)	W/W	2.1	2.0	2.0	1.7	1.8
0 " 0 " DD#" #	05 (00)		perating Range	10,100 (05, 50)	10,100 (05, 50)	10 100 (05 50)
Cooling Outdoor DB Min–Max	°F (°C)	-13~122 (-25~50)	-13~122 (-25~50)	-13~122 (-25~50)	-13~122 (-25~50)	-13~122 (-25~50)
Heating Outdoor DB Min–Max	°F (°C)	-22~86 (-30~30)	-22~86 (-30~30)	-22~86 (-30~30)	-22~86 (-30~30)	-22~86 (-30~30)
Total Distant 2	# ()	404 (40)	Piping	000 (05)	000 (405)	000 (455)
Total Piping Length	ft (m)	131 (40)	197 (60)	263 (80)	328 (100)	328 (100)
	ft (m)	82 (25)	98 (30)	115 (35)	115 (35)	115 (35)
Piping to furthest FCU		49 (15)	49 (15)	49 (15)	65 (20)	65 (20)
Drop (OD above ID)	ft (m)					
· ·	ft (m) ft (m)	49 (15)	49 (15)	49 (15)	65 (20)	65 (20)
Drop (OD above ID)		49 (15) 1/4*2	1/4*3	1/4*4	1/4*4	1/4*5
Drop (OD above ID) Lift (OD below ID)	ft (m)	49 (15)				. ,

PERFORMANCE SERIES 38MGR OUTDOOR UNIT

SPECIFICATIONS:

38MGR Outdoor Unit											
Heat Pump											
System											
Size		18	24	30	36	48					
Outdoor Model		38MGRQ18B3	38MGRQ24C3	38MGRQ30D3	38MGRQ36D3	38MGRQ48E3					
		Re	efrigerant								
Туре		R410A	R410A	R410A	R410A	R410A					
Charge	lb (kg)	4.41 (2.0)	6.17(2.8)	6.61 (3.0)	10.13 (4.6)	10.13 (4.6)					
		E	lectrical								
Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60					
Power Supply			Indoo	r unit powered from outdo	or unit						
MCA	A	18	25	30	35	35					
MOCP – Fuse Rating	A	25	35	45	50	50					
		Co	mpressor								
Туре		Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter					
			Outdoor								
Unit Width	in (mm)	37.31 (948)	41.22 (1,047)	41.22 (1,047)	41.15 (1,045)	41.15 (1,045)					
Unit Height	in (mm)	27.64 (702)	31.88 (810)	31.88 (810)	52.48 (1,333)	52.48 (1,333)					
Unit Depth	in (mm)	14.82 (376)	17.91 (455)	17.91 (455)	17.63 (448)	17.63 (448)					
Net Weight	lb (kg)	105.8 (48)	149.9 (68)	156.5 (71)	221.6 (100.5)	223.8 (101.5)					
Airflow	cfm	1,390	2,130	2,130	4,500	4,500					
Sound Pressure	dB(A)	62	63	62	64	64					

COMPATIBILITY:

Indoor Unit		Outdoor Unit					
		38MGRQ18B3	38MGRQ24C3	38MGRQ30D3	38MGRQ36D3	38MGRQ48E3	
	40MPHAQ09XA3	•	•	•	•	•	
High Wall	40MPHAQ12XA3	•	•	•	•	•	
	40MPHAQ18XA3						
	40MPHAQ24XA3						
	40MAQB09B3	•	•	•	•	•	
High Wall	40MAQB12B3	•	•	•	•	•	
nigii wali	40MAQB18B3		•	•	•	•	
	40MAQB24B3			•	•	•	
	40MHHQ093	•	•	•	•	•	
High Wall	40MHHQ123	•	•	•	•	•	
	40MHHQ183		•	•	•	•	
	40MHHQ243			•	•	•	
	40MBCQ093	•	•	•	•	•	
0 "	40MBCQ123	•	•	•	•	•	
Cassette	40MBCQ183		•	•	•	•	
	40MBCQ243			•	•	•	
	40MBDQ093	•	•	•	•	•	
Ducted	40MBDQ123	•	•	•	•	•	
Ducteu	40MBDQ183		•	•	•	•	
	40MBDQ243			•	•	•	
	40MBFQ123	•	•	•	•	•	
Console	40MBFQ183		•	•	•	•	
	40MBFQ243			•	•	•	

Indoor units 40MPHA sizes 18–24 not compatible with multi-zone 38MGR due to size of the indoor unit coil.

COMBINATION CHART:

		38MGR Outdoor Unit		
		Heat Pump		
Outdoor Unit Model	2-Zone	3-Zone	4-Zone	5-Zone
	9+9			
38MGRQ18B3	9+12			
	12+12			
	9+9	9+9+9		
	9+12	9+9+12		
38MGRQ24C3	9+18	9+9+18		
	12+12	9+12+12		
	12+18	12+12+12		
	18+18	0.00	0.0.0	
	9+9	9+9+9	9+9+9+9	
	9+12 9+18	9+9+12 9+9+18	9+9+9+12	
	9+18	9+9+18	9+9+9+18 9+9+12+12	
	12+12	9+9+24	9+9+12+18	
BMGRQ30D3	12+18	9+12+18	9+12+12+12	
	12+16	9+18+18	12+12+12+12	
	18+18	12+12+12	12.12.12.12	
	10110	12+12+18		
		12+18+18		
		12+12+24		
	9+18	9+9+9	9+9+9+9	
	9+24	9+9+12	9+9+9+12	
	12+12	9+9+18	9+9+9+18	
	12+18	9+9+24	9+9+9+24	
	12+24	9+12+12	9+9+12+12	
	18+18	9+12+18	9+9+12+18	
	18+24	9+12+24	9+9+12+24	
	24+24	9+18+18	9+9+18+18	
8MGRQ36D3		9+18+24	9+9+18+24	
omangood o		9+24+24	9+12+12+12	
		12+12+12	9+12+12+18	
		12+12+18	9+12+12+24	
		12+12+24	9+12+18+18	
		12+18+18	9+18+18+18	
		12+18+24	12+12+12+12	
		12+24+24	12+12+12+18	
		18+18+18	12+12+12+24	
	9+18	18+18+24 9+9+9	12+12+18+18 9+9+9+9	9+9+9+9+9
	9+24	9+9+12	9+9+9+12	9+9+9+9+12
	12+12	9+9+18	9+9+9+18	9+9+9+9+18
	12+18	9+9+24	9+9+9+24	9+9+9+9+24
	12+24	9+12+12	9+9+12+12	9+9+9+12+12
	18+18	9+12+18	9+9+12+18	9+9+9+12+18
	18+24	9+12+24	9+9+12+24	9+9+9+18+18
	24+24	9+18+18	9+9+18+18	9+9+12+12+12
014000405		9+18+24	9+9+18+24	9+9+12+12+18
BMGRQ48E3		9+24+24	9+12+12+12	9+12+12+12+12
		12+12+12	9+12+12+18	9+12+12+12+18
		12+12+18	9+12+12+24	12+12+12+12+12
		12+12+24	9+12+18+18	
		12+18+18	9+18+18+18	
		12+18+24	12+12+12+12	
		12+24+24	12+12+12+18	
		18+18+18	12+12+12+24	
		18+18+24	12+12+18+18	



Light Commercial



36K



48K and 58K

Performance[™] Commercial Heat Pump

FEATURES OUTDOOR

- Inverter Compressor
- · Built-in basepan heater
- Condenser high-temperature protection
- Refrigerant leakage detection
- Quiet outdoor operation, as low as 62.5 dB(A)
- Aluminum golden hydrophilic pre-coated fins
- Piping length 213 ft (65 m)
- Cooling operating range –13°~122°F (–25°~50°C)
- Heating operating range –22°~86°F (–30°~30°C)

COMPATIBLE WITH:

40MBCQ Cassette (p 62)
 40MBDQ Ducted (p 64)
 40MBFQ Console (p 66)



Heat Pump With Basepan Heater

Inverter Compressor

Up to 18.0 SEER

Up to 11.5 HSPF

Sizes: 36/48/58

KEY FEATURES

Longer Piping Lengths

Piping flexibility up to a total piping length of 213 ft (65m)

Low Ambient Cooling

With built-in low ambient kit or special designed PCB, outdoor fan speeds can be changed automatically based on the temperature. The unit can run cooling operation even in low ambient temperatures.





Cassette

Ducted



Console

SPECIFICATIONS:

		38MBR Outdo	or Unit	
		Heat Pun	ıp	
		System		
Size		36	48	58
Outdoor Model		38MBRQ36A3	38MBRQ48A3	38MBRQ58A3
		Electrica	1	
Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-1-60	208/230-1-60
MCA	Α	30	35	35
MOCP – Fuse Rating	Α	50	50	50
		Operating Ra	ange	
Cooling Outdoor DB Min–Max	°F (°C)	-13~122 (-25~50)	-13~122 (-25~50)	-13~122 (-25~50)
Heating Outdoor DB Min-Max	°F (°C)	-22~86 (-30~30)	-22~86 (-30~30)	-22~86 (-30~30)
		Piping		
Total Piping Length	ft (m)	213 (65)	213 (65)	213 (65)
Piping Lift*	ft (m)	98 (30)	98 (30)	98 (30)
Pipe Connection Size – Liquid	in (mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
Pipe Connection Size – Suction	in (mm)	5/8 (16)	5/8 (16)	3/4 (19)
		Refrigera	nt	
Туре		R410A	R410A	R410A
Charge	lb (kg)	6.72 (3.05)	9.26 (4.2)	10.19 (4.62)
		Compress	or	
Туре		Rotary Inverter	Rotary Inverter	Rotary Inverter
		Outdoor		
Unit Width	in (mm)	37.24 (946)	37.48 (952)	37.48 (952)
Unit Height	in (mm)	31.89 (810)	52.48 (1,333)	52.48 (1,333)
Unit Depth	in (mm)	16.14 (410)	16.34 (415)	16.34 (415)
Net Weight	lb (kg)	136.47 (61.9)	217.4 (98.6)	225.09 (102.1)
Airflow	cfm	2,130	4,500	4,415
Sound Pressure	dB(A)	63.0	62.5	64.0

^{*}Condensing unit above or below indoor unit.

COMPATIBILITY:

Indoor Unit		Outdoor Unit				
		38MBRQ36A3	38MBRQ48A3	38MBRQ58A3		
Cassetta	40MBCQ363	•				
Cassette	40MBCQ483		•			
	40MBDQ363	•				
Ducted	40MBDQ483		•			
	40MBDQ583			•		
	40MBFQ363	•				
Console	40MBFQ483		•			
	40MBFQ583			•		

PERFORMANCE SERIES

38MBR OUTDOOR UNIT

PERFORMANCE:

40MBCQ Cassette					
Indoor Model		40MBCQ363	40MBCQ483		
ENERGY STAR®		NO	NO		
Cooling System Tons		3.0	4.0		
Cooling Rated Capacity	Btu/h	36,000	48,000		
Cooling Cap. Range Min–Max	Btu/h	8,500~38,000	9,000~50,000		
SEER		17.5	16.8		
EER		9	9.5		
Heating Rated Capacity (47°F)	Btu/h	38,000	50,000		
Heating Rated Capacity (17°F)	Btu/h	25,200	35,000		
Heating Capacity (5°F)	Btu/h	25,300	34,000		
Heating Cap. Range Min-Max	Btu/h	9,500~50,000	10,000~55,000		
HSPF		10.5	11.0		
COP (47°F)	W/W	3	3.6		
COP (17°F)	W/W	2.46	2.62		
COP (5°F)	W/W	2.09	1.84		

PERFORMANCE:

40MBDQ Ducted					
Indoor Model		40MBDQ363	40MBDQ483	40MBDQ583	
ENERGY STAR®		NO	NO	NO	
Cooling System Tons		3.0	4.0	4.8	
Cooling Rated Capacity	Btu/h	36,000	48,000	57,000	
Cooling Cap. Range Min-Max	Btu/h	8,500~38,000	9,000~50,000	18,000~58,000	
SEER		16.5	17.4	18	
EER		9	9.2	10	
Heating Rated Capacity (47°F)	Btu/h	40,000	49,500	62,000	
Heating Rated Capacity (17°F)	Btu/h	27,600	33,400	37,600	
Heating Capacity (5°F)	Btu/h	25,300	34,000	35,000	
Heating Cap. Range Min-Max	Btu/h	9,500~50,000	10,000~55,000	12,000~63,000	
HSPF		11.5	10.3	9.0	
COP (47°F)	W/W	3	3.6	3.6	
COP (17°F)	W/W	2.46	2.62	2.62	
COP (5°F)	W/W	1.89	1.84	1.91	

PERFORMANCE:

		40MBFQ Console		
Indoor Model		40MBFQ363	40MBFQ483	40MBFQ583
ENERGY STAR®		NO	NO	NO
Cooling System Tons		3.0	4.0	4.5
Cooling Rated Capacity	Btu/h	36,000	48,000	54,000
Cooling Cap. Range Min-Max	Btu/h	8,500~38,000	9,000~50,000	18,000~58,000
SEER		16	17.8	18
EER		8	9.3	9.8
Heating Rated Capacity (47°F)	Btu/h	38,000	50,000	60,000
Heating Rated Capacity (17°F)	Btu/h	25,400	35,000	39,000
Heating Capacity (5°F)	Btu/h	25,300	34,000	35,000
Heating Cap. Range Min-Max	Btu/h	9,500~50,000	10,000~55,000	12,000~63,000
HSPF		10.0	11.0	10.5
COP (47°F)	W/W	3	3.6	3.6
COP (17°F)	W/W	2.46	2.62	2.62
COP (5°F)	W/W	2.29	1.84	1.91

60 PERFORMANCE SERIES 61



FEATURES OUTDOOR

- · Modes: Cool, Heat, Dry, Fan, Auto
- Auto-restart function
- Louver control (fixed or swing)
- Three fan speeds
- · Outside air intake
- Built-in condensate lift pump
- Follow Me (senses temperature at handheld remote)
- Heating Setback (46°F Heating Mode)
- Quiet indoor operation, as low as 49 dB(A)
- Aluminum golden hydrophilic pre-coated fins
- Grille/ceiling panel 3" x 3" P/N 40MBCQ02XXX3

COMPATIBLE WITH:

 38MBR Outdoor Unit Single Zone

(p 58)



Performance[™] Cassette Indoor Unit

Sizes: 36/48

KEY FEATURES

Built-in Condensate Lift Pump

The cassette is supplied with a condensate lift pump that is capable of lifting the water 29.5in (750mm) above the top of the unit.

360° Airflow Panel

With the 360° Airflow panel, air is distributed to every corner of the room.

CONTROLS

Wireless Remote Controller included with indoor unit



Optional Wired Remote Controller KSACN0101AAA (Timer Function)

Optional Wired Remote Controller KSACN0501AAA (7-Day Programmable)

ACCESSORIES

Wi-Fi® Smartphone control kit KSAIF0401AAA

24V Interface for third-party thermostat compatibility KSAIC0301230

Grille is required; sold separately.



Optional Wired Controller (7-Day Programmable) KSACN0501AAA



Wireless Remote Controller

SPECIFICATIONS:

	40MBCQ Cas	sette						
	Heat Pun	ір						
System								
Size		36	48					
Indoor Model		40MBCQ363	40MBCQ483					
	<u>Electrical</u>							
Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-1-60					
Power Supply		Indoor unit powere	ed from outdoor unit					
MCA	A	0.8	1.6					
	Controls	S _.						
Wireless Remote Controller (°F/°C Convertible)		Standard	Standard					
Wired Remote Controller (°F/°C Convertible)		Optional	Optional					
	Operating R	ange						
Cooling Indoor DB Min–Max	°F (°C)	63~90 (17~32)	63~90 (17~32)					
Heating Indoor DB Min–Max	°F (°C)	32~86 (0~30)	32~86 (0~30)					
	Piping							
Pipe Connection Size – Liquid	in (mm)	3/8 (9.52)	3/8 (9.52)					
Pipe Connection Size – Suction	in (mm)	5/8 (16)	5/8 (16)					
	Indoor							
Body Unit Width	in (mm)	33.07 (840)	33.07 (840)					
Body Unit Height	in (mm)	9.65 (245)	11.3 (287)					
Body Unit Depth	in (mm)	33.07 (840)	33.07 (840)					
Body Net Weight	lb (kg)	58.2 (26.4)	63.27 (28.7)					
Panel Unit Width	in (mm)	37.4 (950)	37.4 (950)					
Panel Unit Height	in (mm)	2.17 (55)	2.17 (55)					
Panel Unit Depth	in (mm)	37.4 (950)	37.4 (950)					
Panel Net Weight	lb (kg)	11.02 (5)	11.02 (5)					
Number of Fan Speeds		3	3					
Airflow (lowest to highest)	cfm	809/958/1,095	853/1,030/1,177					
Sound Pressure (lowest to highest)	dB(A)	49/52/55	49/52/55					
Air Throw Data	ft (m)	30 (9)	30 (9)					
Moisture Removal	Pint/h (L/h)	8.53 (4.04)	13.5 (6.39)					
Field Drain Pipe Size O.D.	in (mm)	1 (25.4)	1 (25.4)					

Performance may vary based on the compatible outdoor units. See respective pages for performance data.

COMPATIBILITY:

Indoor Unit	40MBCQ363	40MBCQ483
Outdoor Unit Single Zone	38MBRQ36A3	38MBRQ48A3

62 PERFORMANCE SERIES 63





FEATURES OUTDOOR

- Modes: Cool, Heat, Dry, Fan, Auto
- Vertical (sizes 36 & 48) or horizontal installation
- Up to 0.8 in WG
- Rear or bottom return
- · Outside air intake
- Built-in condensate lift pump
- Follow Me (senses temperature at handheld remote)
- Heating Setback (46°F Heating Mode)
- Quiet indoor operation, as low as 38.5 dB(A)
- Aluminum golden hydrophilic pre-coated fins

COMPATIBLE WITH:

 38MBR Outdoor Unit Single Zone

(p 58)

Performance SERIES

Performance[™] Ducted Indoor Unit

Sizes: 36/48/58

KEY FEATURES

Vertical or Horizontal Installation

Designed for maximum installation flexibility. The secondary drain built-in allows the unit to be mounted vertically allowing either a floor or ceiling-concealed installation depending on existing conditions. (Sizes 36 and 48 only.)

Built-in Condensate Lift Pump

Supplied with a condensate lift pump that is capable of lifting the water 29.5in (750mm) above the top of the unit.

CONTROLS

Wireless Remote Controller included with indoor unit



Wired Remote Controller (7-Day Programmable) included with indoor unit

ACCESSORIES

Wi-Fi® Smartphone control kit KSAIF0401AAA

24V Interface for third-party thermostat compatibility KSAIC0301230



Standard Wired Controller (7-Day Programmable) KSACN0501AAA



Wireless Remote Controller

SPECIFICATIONS:

	4	OMBDQ Ducted				
	4	Heat Pump				
		System				
Size		36	48	58		
Indoor Model		40MBDQ363	40MBDQ483	40MBDQ583		
mass mass.		Electrical	10224.0	1022 400		
Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-1-60	208/230-1-60		
Power Supply	l	Indoor	unit powered from outdo	or unit		
MCA	Α	2.45	3.2	3.65		
		Controls				
Wireless Remote Controller (°F/°C Convertible) Standard Standard Standard						
Wired Remote Controller (°F/°C Convertible)	<u> </u>	Standard	Standard	Standard		
	Operating Range					
Cooling Indoor DB Min–Max	°F (°C)	63~90 (17~32)	63~90 (17~32)	63~90 (17~32)		
Heating Indoor DB Min-Max	°F (°C)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)		
		Piping				
Pipe Connection Size – Liquid	in (mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)		
Pipe Connection Size – Suction	in (mm)	5/8 (16)	5/8 (16)	3/4 (19)		
		Indoor				
Unit Width	in (mm)	53.54 (1,360)	47.24 (1,200)	55.12 (1,400)		
Unit Height	in (mm)	9.8 (249)	11.81 (300)	17.32 (440)		
Unit Depth	in (mm)	30.47 (774)	34.41 (874)	33.78 (858)		
Net Weight	lb (kg)	106.48 (48.3)	119.71 (54.3)	163 (74)		
Number of Fan Speeds		3	3	3		
Airflow (lowest to highest)	cfm	700/910/1,080	720/1,030/1,230	1,260/1,710/2,150		
Sound Pressure (lowest to highest)	dB(A)	38.5/42/45.5	46/49.5/50.5	51/54/57		
Max Static Pressure	in WG	0.64	0.64	0.80		
Field Drain Pipe Size O.D.	in (mm)	1 (25.4)	1 (25.4)	1 (25.4)		

Performance may vary based on the compatible outdoor units. See respective pages for performance data.

COMPATIBILITY:

Indoor Unit	40MBDQ363	40MBDQ483	40MBDQ583
Outdoor Unit Single Zone	38MBRQ36A3	38MBRQ48A3	38MBRQ58A3

Backward compatible with 38MBQ Single Zone Systems



Performance[™] Floor Console Indoor Unit

FEATURES OUTDOOR

- Modes: Cool, Heat, Dry, Fan, Auto
- Auto-restart function
- Capable to be mounted on floor and ceiling
- Louver control (fixed or swing)
- Three fan speeds
- Follow Me (senses temperature at handheld remote)
- Heating Setback (46°F Heating Mode)
- Quiet indoor operation, as low as 43 dB(A)
- Aluminum golden hydrophilic pre-coated fins

COMPATIBLE WITH:

• 38MBR Outdoor Unit Single Zone

(p 58)

Performance SERIES

KEY FEATURES

Sizes: 36/48/58

Outside Air Intake

Outside air is brought into the room via a connection pipe, which keeps the indoor air fresher and cleaner.

Flexible Installation

Can be installed on the floor or ceiling depending on the application need.

CONTROLS

Wireless Remote Controller included with indoor unit



Optional Wired Remote Controller KSACN0101AAA (Timer Function)

Optional Wired Remote Controller KSACN0501AAA (7-Day Programmable)

ACCESSORIES

Wi-Fi® Smartphone control kit KSAIF0401AAA

24V Interface for third-party thermostat compatibility KSAIC0301230



Optional Wired Controller (7-Day Programmable) KSACN0501AAA



Wireless Remote Controller

SPECIFICATIONS:

		40MBFQ Console		
		Heat Pump		<u> </u>
		System		
Size		36	48	58
Indoor Model		40MBFQ363	40MBFQ483	40MBFQ583
		Electrical		
Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-1-60	208/230-1-60
Power Supply	'	Indoo	or unit powered from outdoo	or unit
MCA	Α	1.23	0.85	1.48
		Controls		
Wireless Remote Controller (°F/°C Conver	tible)	Standard	Standard	Standard
Wired Remote Controller (°F/°C Convertib	le)	Optional	Optional	Optional
		Operating Range		
Cooling Indoor DB Min–Max	°F (°C)	63~90 (17~32)	63~90 (17~32)	63~90 (17~32)
Heating Indoor DB Min-Max	°F (°C)	32~86 (0~30)	32~86 (0~30)	32~86 (0~30)
		Piping		
Pipe Connection Size – Liquid	in (mm)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)
Pipe Connection Size – Suction	in (mm)	5/8 (16)	5/8 (16)	3/4 (19)
		Indoor		
Unit Width	in (mm)	50.59 (1,285)	64.96 (1,650)	64.96 (1,650)
Unit Height	in (mm)	9.25 (235)	9.25 (235)	9.25 (235)
Unit Depth	in (mm)	26.57 (675)	26.57 (675)	26.57 (675)
Net Weight	lb (kg)	69 (31.3)	83.78 (38)	110 (50)
Number of Fan Speeds		3	3	3
Airflow (lowest to highest)	cfm	638/917/1,037	1,000/1,120/1,350	796/1,029/1,385
Sound Pressure (lowest to highest)	dB(A)	43/49/54	52/54/57	46/49/55
Air Throw Data	ft (m)	33 (10)	39 (12)	39 (12)
Field Drain Pipe Size O.D.	in (mm)	1 (25.4)	1 (25.4)	1 (25.4)

Performance may vary based on the compatible outdoor units. See respective pages for performance data.

COMPATIBILITY:

Indoor Unit	40MBFQ363	40MBFQ483	40MBFQ583
Outdoor Unit Single Zone	38MBRQ36A3	38MBRQ48A3	38MBRQ58A3

PERFORMANCE SERIES 40MBF0 CONSOLE 67



Performance[™] **Outdoor Unit**

Cooling Only – 24AHA4 Heat Pump – 25HHA4

Fixed-Speed Compressor 14.0 SEER

8.2 HSPF

Sizes: 18/24/30/36/48/60



Ducted Indoor Units





FEATURES

- Available in 208/230V-1, 208/230V-3 and 460V-3
- WeatherArmor[™] cabinet
- All-steel cabinet construction
- Mesh coil guard
- Quiet outdoor operation, as low as 66 dB(A)
- Piping length up to 250 ft
- Cooling operating range -20°~125°F (-28°~52°C) (w/Low-Ambient Kit)
- Heating operating range 17°~75°F (-8°~24°C)

COMPATIBLE WITH:

• Ducted Indoor Units

PERFORMANCE SERIES 24AHA4 OUTDOOR UNIT

24AHA4 OUTDOOR UNIT

SPECIFICATIONS:

			24AHA4 Outd	oor Unit						
			Cooling (Only						
System										
Size		18	24	30	36	36	36			
Outdoor Model		24AHA418A003	24AHA424A003	24AHA430A003	24AHA436A003	24AHA436A005	24AHA436A006			
Electrical										
Outdoor Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-3-60	460-3-60			
MCA (Outdoor)	Α	11.8	14.1	18.3	18.8	12.5	7.6			
MOCP – Fuse Rating (Outdoor)	Α	20	25	30	30	20	15			
			Operating F	Range						
Cooling Outdoor DB Min-Max	°F			55~125 (–20°F w	/Low-Ambient Kit)					
			Piping							
Total Piping Length	ft	200	200	200	200	200	200			
Drop (OD above ID)	ft	200	200	200	200	200	200			
Lift (OD below ID)	ft	65	65	65	65	65	65			
Outdoor Pipe Connection Size – Liquid	in	3/8	3/8	3/8	3/8	3/8	3/8			
Outdoor Pipe Connection Size – Suction	in	5/8	3/4	3/4	7/8	7/8	7/8			
			Refriger	ant						
Туре		R-410A	R-410A	R-410A	R-410A	R-410A	R-410A			
Charge	lb	6.4	6.5	8.6	8.9	8.9	8.9			
			Compres	sor						
Туре		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll			
			Outdoo	or						
Unit Width	in	36.9	36.9	44.5	44.5	44.5	44.5			
Unit Height	in	31.1	31.1	37.1	37.1	37.1	37.1			
Unit Depth	in	14.6	14.6	17.1	17.1	17.1	17.1			
Net Weight	lb	146	148	183	184	184	184			
Airflow	cfm	1,285	1,285	1,900	2,615	2,615	2,615			
		No	ominal Performance	Ducted Fan Coils						
Indoor Model		*	*	*	*	*	*			
ENERGY STAR®		NO NO	NO NO	NO NO	NO NO	NO NO	NO NO			
Cooling System Tons		1.5	2.0	2.5	3.0	3.0	3.0			
Cooling Rated Capacity (Nominal)	Btu/h	18,000	24,000	29,600	35,400	35,400	35,400			
SEER		14	14	14	14	14	14			
EER		12.2	12.2	12.2	12.2	12.2	12.2			

Tested AHRI Combination Ratings
Additional ratings and system combinations can be accessed via the Carrier database at: MyCarrierRatings.com
*For performance data at specific application and/or design conditions with various indoor unit combinations, the equipment performance calculator can be accessed at: http://rpmob.wrightsoft.com/

SPECIFICATIONS:

	24AHA4 Outdoor Unit									
			Cooling O	nly						
System										
Size		48	48	48	60	60	60			
Outdoor Model		24AHA448A003	24AHA448A005	24AHA448A006	24AHA460A003	24AHA460A005	24AHA460A006			
Electrical										
Outdoor Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-3-60	460-3-60	208/230-1-60	208/230-3-60	460-3-60			
MCA (Outdoor)	Α	24.3	18.3	8.4	31.1	21.4	9.7			
MOCP – Fuse Rating (Outdoor)	Α	40	30	15	50	35	15			
			Operating R	Range						
Cooling Outdoor DB Min-Max	°F				/Low-Ambient Kit)					
			Piping							
Total Piping Length	ft	200	200	200	200	200	200			
Drop (OD above ID)	ft	200	200	200	200	200	200			
Lift (OD below ID)	ft	65	65	65	65	65	65			
Outdoor Pipe Connection Size – Liquid	in	3/8	3/8	3/8	3/8	3/8	3/8			
Outdoor Pipe Connection Size – Suction	in	7/8	7/8	7/8	1 1/8	1 1/8	1 1/8			
			Refrigere	ent						
Туре		R-410A	R-410A	R-410A	R-410A	R-410A	R-410A			
Charge	lb	9	9	9	10.6	10.6	10.6			
			Compres	sor						
Туре		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll			
			Outdoo	r						
Unit Width	in	44.5	44.5	44.5	44.5	44.5	44.5			
Unit Height	in	37.1	37.1	37.1	43.1	43.1	43.1			
Unit Depth	in	17.1	17.1	17.1	17.1	17.1	17.1			
Net Weight	lb	213	213	213	245	245	245			
Airflow	cfm	2,615	2,615	2,615	2,785	2,785	2,785			
		No	minal Performance	Ducted Fan Coils						
Indoor Model		*	*	*	*	*	*			
ENERGY STAR®		NO	NO	NO	NO	NO	NO			
Cooling System Tons		3.8	3.8	3.8	4.8	4.8	4.8			
Cooling Rated Capacity (Nominal)	Btu/h	45,000	45,000	45,000	57,000	57,000	57,000			
SEER		14	14	14	14	14	14			
EER		11.7	11.7	11.7	11.7	11.7	11.7			

Tested AHRI Combination Ratings
Additional ratings and system combinations can be accessed via the Carrier database at: www.MyCarrierRatings.com
*For performance data at specific application and/or design conditions with various indoor unit combinations, the equipment performance calculator can be accessed at: http://rpmob.wrightsoft.com/

PERFORMANCE SERIES 25HHA4 OUTDOOR UNIT

25HHA4 OUTDOOR UNIT

SPECIFICATIONS:

			25HHA4 Outd	oor Unit							
			Heat Pu								
	System										
Size		18	24	30	36	36	36				
Outdoor Model		25HHA418A003	25HHA424A003	25HHA430A003	25HHA436A003	25HHA436A005	25HHA436A006				
Electrical Electrical											
Outdoor Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-3-60	460-3-60				
MCA (Outdoor)	Α	11.8	16.5	17.2	19	12.8	7.6				
MOCP – Fuse Rating (Outdoor)	Α	20	25	30	30	20	15				
			Operating I	Range							
Cooling Outdoor DB Min-Max	°F			55~125 (-20°F w	/Low-Ambient Kit)						
Heating Outdoor DB Min - Max	°F	17~75	17~75	17~75	17~75	17~75	17~75				
			Piping	1							
Total Piping Length	ft	200	200	200	200	200	200				
Drop (OD above ID)	ft	200	200	200	200	200	200				
Lift (OD below ID)	ft	65	65	65	65	65	65				
Outdoor Pipe Connection Size – Liquid	in	3/8	3/8	3/8	3/8	3/8	3/8				
Outdoor Pipe Connection Size – Suction	in	5/8	3/4	3/4	7/8	7/8	7/8				
			Refriger	ent							
Туре		R-410A	R-410A	R-410A	R-410A	R-410A	R-410A				
Charge	lb	6.72	7.67	12.1	12.3	12.3	12.3				
			Compres	sor							
Туре		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll				
			Outdoo	or							
Unit Width	in	36.9	36.9	44.5	44.5	44.5	44.5				
Unit Height	in	25.1	31.1	37.1	37.1	37.1	37.1				
Unit Depth	in	14.6	14.6	17.1	17.1	17.1	17.1				
Net Weight	lb	150	161	196	197	197	197				
Airflow	cfm	1,285	1,285	2,615	2,615	2,615	2,615				
		No	ominal Performance	Ducted Fan Coils							
Indoor Model		*	*	*	*	*	*				
ENERGY STAR®		NO	NO	NO	NO	NO	NO				
Cooling System Tons		1.5	2.0	2.4	2.9	2.9	2.9				
Cooling Rated Capacity	Btu/h	18,000	23,400	28,800	34,200	34,200	34,200				
SEER		14	14	14	14	14	14				
EER		11.5	11.5	12.5	12	12	11.5				
Heating Rated Capacity	Btu/h	17,200	22,800	28,200	34,200	34,200	34,200				
HSPF		8.2	8.2	8.5	8.5	8.5	8.2				
COP	W/W	2.48	2.5	2.62	2.6	2.6	2.6				

Tested AHRI Combination Ratings
Additional ratings and system combinations can be accessed via the Carrier database at: www.MyCarrierRatings.com
*For performance data at specific application and/or design conditions with various indoor unit combinations, the equipment performance calculator can be accessed at: http://rpmob.wrightsoft.com/

SPECIFICATIONS:

			25HHA4 Outd	oor Unit							
			Heat Pur	np							
			Systen	1							
Size		48	48	48	60	60	60				
Outdoor Model		25HHA448A003	25HHA448A005	25HHA448A006	25HHA460A003	25HHA460A005	25HHA460A006				
Electrical											
Outdoor Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-3-60	460-3-60	208/230-1-60	208/230-3-60	460-3-60				
MCA (Outdoor)	Α	28.8	18.6	8.6	33.4	22.9	10.6				
MOCP – Fuse Rating (Outdoor)	Α	50	30	15	50	40	15				
	Operating Range										
Cooling Outdoor DB Min-Max	°F			55~125 (-20°F w	/Low-Ambient Kit)						
Heating Outdoor DB Min-Max	°F	17~75	17~75	17~75	17~75	17~75	17~75				
			Piping								
Total Piping Length	ft	200	200	200	200	200	200				
Drop (OD above ID)	ft	200	200	200	200	200	200				
Lift (OD below ID)	ft	65	65	65	65	65	65				
Outdoor Pipe Connection Size – Liquid	in	3/8	3/8	3/8	3/8	3/8	3/8				
Outdoor Pipe Connection Size – Suction	in	7/8	7/8	7/8	1 1/8	1 1/8	1 1/8				
	,		Refrigere	ent							
Туре		R-410A	R-410A	R-410A	R-410A	R-410A	R-410A				
Charge	lb	10.95	10.95	10.95	11.82	11.82	11.82				
	•		Compres	sor							
Туре		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll				
			Outdoo	r							
Unit Width	in	44.5	44.5	44.5	44.5	44.5	44.5				
Unit Height	in	43.1	43.1	43.1	43.1	43.1	43.1				
Unit Depth	in	17.1	17.1	17.1	17.1	17.1	17.1				
Net Weight	lb	246	246	246	258	258	258				
Airflow	cfm	2,785	2,785	2,785	2,785	2,785	2,785				
	,	No	minal Performance	Ducted Fan Coils							
Indoor Model		*	*	*	*	*	*				
ENERGY STAR®		NO	NO	NO	NO	NO	NO				
Cooling System Tons		3.8	3.8	3.8	4.6	4.6	4.6				
Cooling Rated Capacity	Btu/h	45,500	45,500	45,500	55,000	55,000	55,000				
SEER		14	14	14	14	14	14				
EER		11.5	11.5	11.5	11.5	11.5	11.5				
Heating Rated Capacity	Btu/h	46,000	46,000	46,000	55,000	55,000	55,000				
HSPF		8.2	8.2	8.2	8.2	8.2	8.2				
СОР	W/W	2.56	2.56	2.56	2.62	2.62	2.62				

Tested AHRI Combination Ratings
Additional ratings and system combinations can be accessed via the Carrier database at: www.MyCarrierRatings.com
*For performance data at specific application and/or design conditions with various indoor unit combinations, the equipment performance calculator can be accessed at: http://rpmob.wrightsoft.com/

TOSHIBA CARRIER SERIES RAV*AT OUTDOOR UNIT



Toshiba Carrier Light Commercial Heat Pump

FEATURES

- Available in 208/230V
- Quiet outdoor operation, as low as 48 dB(A)
- Piping length 165~245 ft
- Cooling operating range 0°~110°F (-17°~44°C) (w/wind baffles) - Sizes 18 & 24 -13°~110°F (-25°~44°C) (w/wind baffles) - Sizes 36 & 42
- Heating operating range -4°~59°F (-20°~15°C)

Systems can be programmed to operate in cooling-only mode with heating locked out.

COMPATIBLE WITH:

•	RAV*KRT High Wall	(p 78)
•	RAV*UT Cassette	(p 80)
•	RAV*BT Ducted	(p 82)
•	RAV*CT Underceiling	(p 84)

Inverter Compressor Up to 21 SEER

Up to 12 HSPF

Sizes: 18/24/30/36/42





Cassette







SPECIFICATIONS:

RAV*AT Outdoor Unit										
Heat Pump										
System										
Size		18	24	30	36	42				
Outdoor Model		RAV-SP180AT2-UL	RAV-SP240AT2-UL	RAV-SP300AT2-UL	RAV-SP360AT2-UL	RAV-SP420AT2-UL				
Electrical										
Voltage, Phase, Cycle	V/Ph/Hz	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60				
MCA	Α	17	24	24	24	24				
MOCP – Fuse Rating	Α	30	40	40	40	40				
			Operating Range	е						
Cooling Outdoor DB Min–Max	°F (°C)	23~110 (-5~44) [0 (-	–17) with wind baffle]	23~110 (–5	5~44) [−13 (−25) with	wind baffle]				
Heating Outdoor DB Min–Max	°F (°C)	-4~59 (-20~15)	-4~59 (-20~15)	-4~59 (-20~15)	-4~59 (-20~15)	-4~59 (-20~15)				
			Piping							
Total Piping Length	ft (m)	165 (50.2)	165 (50.2)	245 (74.7)	245 (74.7)	245 (74.7)				
Piping Lift*	ft (m)	100 (30.5)	100 (30.5)	100 (30.5)	100 (30.5)	100 (30.5)				
Pipe Connection Size – Liquid	in (mm)	1/4 (6.35)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)				
Pipe Connection Size – Suction	in (mm)	1/2 (12.7)	5/8 (16)	5/8 (16)	5/8 (16)	5/8 (16)				
			Refrigerant							
Туре		R410A	R410A	R410A	R410A	R410A				
Charge	lb (kg)	3.1	4.6	6.8	6.8	6.8				
			Compressor							
Туре		Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter				
			Outdoor							
Unit Width	in (mm)	30.7 (779)	35.4 (899)	35.4 (899)	35.4 (899)	35.4 (899)				
Unit Height	in (mm)	21.7 (551)	35 (889)	52.8 (1,341)	52.8 (1,341)	52.8 (1,341)				
Unit Depth	in (mm)	11.4 (289)	12.6 (289)	12.6 (320)	12.6 (320)	12.6 (320)				
Net Weight	lb (kg)	98 (44.4)	144.5 (65.5)	211.5 (95.9)	211.5 (95.9)	211.5 (95.9)				
Sound Pressure	dB(A)	48/49	49/50	50/51	52/52	52/52				

^{*}Condensing unit above or below indoor unit.

COMPATIBILITY:

Indoor Unit			Outdoor Unit						
Indoor offic		RAV-SP180AT2-UL	RAV-SP240AT2-UL	RAV-SP300AT2-UL	RAV-SP360AT2-UL	RAV-SP420AT2-UL			
High Wall	RAV-SP180KRT-UL	•							
High Wall	RAV-SP240KRT-UL		•						
	RAV-SP180UT-UL	•							
	RAV-SP240UT-UL		•						
Cassette	RAV-SP300UT-UL			•					
	RAV-SP360UT-UL				•				
	RAV-SP420UT-UL								
	RAV-SP181BT-UL	•							
	RAV-SP241BT-UL		•						
Ducted	RAV-SP301BT-UL			•					
	RAV-SP361BT-UL				•				
	RAV-SP421BT-UL					•			
	RAV-SP180CT-UL	•							
	RAV-SP240CT-UL		•						
Underceiling	RAV-SP300CT-UL			•					
	RAV-SP360CT-UL				•				
	RAV-SP420CT-UL					•			

TOSHIBA CARRIER SERIES

RAV*AT OUTDOOR UNIT 75

PERFORMANCE:

RAV*KRT High Wall									
Indoor Model		RAV-SP180KRT-UL	RAV-SP240KRT-UL						
ENERGY STAR®		NO	NO						
High Wall									
Cooling System Tons		1.5	2.1						
Cooling Rated Capacity	Btu/h	18,000	25,000						
Cooling Cap. Range Min–Max	Btu/h	3,560~23,500	4,100~32,600						
SEER		19.5	16.7						
EER		10	9.1						
Heating Rated Capacity (47°F)	Btu/h	19,000	26,400						
Heating Rated Capacity (17°F)	Btu/h	11,600	16,720						
Heating Maximum Capacity (17°F)	Btu/h	16,500	24,500						
Heating Maximum Capacity (5°F)	Btu/h	11,600	16,900						
Heating Cap. Range Min-Max	Btu/h	2,250~23,000	3,480~30,400						
HSPF		11.5	9.8						
COP (47°F)	W/W	3.12	2.70						
COP (17°F)	W/W	2.09	2.02						
COP (5°F)	W/W	1.80	1.76						

PERFORMANCE:

RAV*UT Cassette									
Indoor Model		RAV-SP180UT-UL	RAV-SP240UT-UL	RAV-SP300UT-UL	RAV-SP360UT-UL	RAV-SP420UT-UL			
ENERGY STAR®		NO	NO	YES	YES	NO			
			Cassette						
Cooling System Tons		1.6	2.1	2.7	3.0	3.4			
Cooling Rated Capacity	Btu/h	19,000	25,000	32,000	36,500	40,800			
Cooling Cap. Range Min–Max	Btu/h	3,800~21,600	5,670~28,500	10,470~36,460	11,260~41,500	10,990~46,100			
SEER		20.5	20.7	21.0	21.0	19.0			
EER		10.7	11.0	14.0	13.0	11.5			
Heating Rated Capacity (47°F)	Btu/h	18,800	26,000	33,400	36,000	46,000			
Heating Rated Capacity (17°F)	Btu/h	11,100	15,390	19,280	22,800	24,420			
Heating Maximum Capacity (17°F)	Btu/h	16,400	24,200	27,300	32,000	34,400			
Heating Maximum Capacity (5°F)	Btu/h	11,300	15,800	18,700	22,400	24,600			
Heating Cap. Range Min–Max	Btu/h	3,100~21,200	4,100~29,900	8,500~38,100	8,240~40,300	8,400~51,500			
HSPF		12	10	11	12	11			
COP (47°F)	W/W	3.73	3.36	4.24	4.00	3.51			
COP (17°F)	W/W	2.62	2.43	2.90	2.82	2.84			
COP (5°F)	W/W	2.21	2.12	2.04	2.04	2.43			

PERFORMANCE:

		R	AV*BT Ducted							
Indoor Model		RAV-SP181BT-UL	RAV-SP241BT-UL	RAV-SP301BT-UL	RAV-SP361BT-UL	RAV-SP421BT-UL				
ENERGY STAR®		NO	NO	YES	YES	NO				
	Ducted									
Cooling System Tons		1.5	2.0	2.5	3.0	3.5				
Cooling Rated Capacity	Btu/h	18,000	24,000	30,000	36,000	42,000				
Cooling Cap. Range Min-Max	Btu/h	9,600~19,200	14,000~25,800	18,000~32,500	20,800~39,200	23,700~45,400				
SEER		17.0	18.2	20.0	19.7	18.7				
EER		8.6	9.6	13.0	12.5	10.6				
Heating Rated Capacity (47°F)	Btu/h	20,000	27,000	34,000	40,000	47,500				
Heating Rated Capacity (17°F)	Btu/h	11,000	19,800	20,700	21,500	32,300				
Heating Maximum Capacity (17°F)	Btu/h	12,400	16,740	21,080	24,800	29,450				
Heating Maximum Capacity (5°F)	Btu/h	9,400	12,690	15,980	18,800	22,325				
Heating Cap. Range Min-Max	Btu/h	11,000~22,500	19,800~30,800	20,700~35,000	21,500~41,500	32,300~49,000				
HSPF		10.8	9.6	11.8	11.5	12.0				
COP (47°F)	W/W	2.85	2.89	3.75	3.69	3.25				
COP (17°F)	W/W	2.19	2.24	2.89	2.86	2.51				
COP (5°F)	W/W	1.85	1.87	2.43	2.40	2.11				

PERFORMANCE:

RAV*CT Underceiling								
Indoor Model		RAV-SP180CT-UL	RAV-SP240CT-UL	RAV-SP300CT-UL	RAV-SP360CT-UL	RAV-SP420CT-UL		
ENERGY STAR®		NO	NO	YES	NO	NO		
			Underceiling					
Cooling System Tons		1.4	2.0	2.5	3.0	3.4		
Cooling Rated Capacity	Btu/h	17,000	23,700	30,000	36,000	41,000		
Cooling Cap. Range Min-Max	Btu/h	3,750~19,400	4,700~26,900	11,340~34,200	11,960~41,000	10,980~46,700		
SEER		17.0	19.5	20.6	20.4	18.8		
EER		8.6	9.0	13.0	12.0	9.7		
Heating Rated Capacity (47°F)	Btu/h	19,000	28,900	29,800	38,000	44,800		
Heating Rated Capacity (17°F)	Btu/h	17,405	18,930	21,710	25,280	28,100		
Heating Maximum Capacity (17°F)	Btu/h	17,600	28,000	36,100	36,100	39,200		
Heating Maximum Capacity (5°F)	Btu/h	12,700	19,700	23,500	23,500	26,700		
Heating Cap. Range Min-Max	Btu/h	2,800~21,700	3,600~32,400	9,900~33,700	11,700~42,750	9,100~50,500		
HSPF		10.8	10.3	10.3	11.0	11.0		
COP (47°F)	W/W	2.98	2.89	3.99	3.56	3.27		
COP (17°F)	W/W	2.85	2.46	3.30	2.76	2.74		
COP (5°F)	W/W	2.12	1.77	1.96	1.96	2.35		

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Toshiba Carrier High Wall Indoor Unit

FEATURES

- Available in 208/230V
- Modes: Cool, Heat, Dry, Fan, Auto
- Turbo Mode
- · One-touch memory
- Sleep Mode
- Filter maintenance indicator
- Quiet indoor operation, as low as 38 dB(A)

COMPATIBLE WITH:

 RAV*AT Outdoor Unit Single Zone

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CONTROLS

Sizes: 18/24

Wireless Remote Controller included with indoor unit



Optional Wired Remote Controller

ACCESSORIES

Condensate Pump (230V optional)

Insulated 25' Line Set

Systems can be programmed to operate in cooling-only mode with heating locked out



Optional Wired Controller (7-Day Programmable) RBC-AMS54E-UL





SPECIFICATIONS:

	RAV*KRT H	igh Wall					
	Heat Pu	- ,					
	Syste	-					
Size		18	24				
Indoor Model		RAV-SP180KRT-UL	RAV-SP240KRT-UL				
	Electri	cal					
Voltage		208/230-1-60	208/230-1-60				
Power Supply		Indoor unit powere	d from outdoor unit				
	Contro	ols					
Wireless (°C, °F, Convertible)		Standard –	Convertible				
Wired (°C, °F, Convertible)		Optional –	Convertible				
Operating Range							
Cooling Indoor DB Min–Max	°F (°C)	69~90	(21~32)				
Heating Indoor DB Min–Max	°F (°C)	59~83 (15~28)					
	Pipin	g					
Pipe Connection Size – Liquid	in (mm)	1/4 (6.35)	3/8 (9.52)				
Pipe Connection Size – Suction	in (mm)	1/2 (12.7)	5/8 (16)				
	Indoo	or					
Unit Width	in (mm)	41.3 (1,049)	41.3 (1,049)				
Unit Height	in (mm)	12.6 (320)	12.6 (320)				
Unit Depth	in (mm)	9 (228)	9 (228)				
Net Weight	lb (kg)	31 (14)	31 (14)				
Number of Fan Speeds		3	3				
Airflow (lowest to highest)	cfm	400/430/490	401/460/560				
Sound Pressure (lowest to highest)	dB(A)	38/41/43	38/41/46				

Performance may vary based on the compatible outdoor units. See respective pages for performance data.

COMPATIBILITY:

Indoor Unit	RAV-SP180KRT-UL	RAV-SP240KRT-UL
Outdoor Unit Single Zone	RAV-SP180AT2-UL	RAV-SP240AT2-UL

TOSHIBA CARRIER SERIES

RAV*KRT HIGH WALL 79



Toshiba Carrier Cassette Indoor Unit

FEATURES

- Available in 208/230V
- Modes: Cool, Heat, Dry, Fan, Auto
- One-touch memory
- Sleep Mode
- · Filter maintenance indicator
- Built-in condensate lift pump
- · Outside air intake
- Branch duct capability
- Independent louver control (fixed or swing)
- Power-saving Mode
- Quiet indoor operation, as low as 32 dB(A)

CONTROLS

Sizes: 18/24/30/36/42

Controller not included with indoor unit. Must order:

Optional Wireless Remote Controller
Optional Wired Remote Controller



ACCESSORIES

Condensate Pump (230V optional)

Insulated 25' Line Set

Outside air intake

Air-discharge direction kit

Systems can be programmed to operate in cooling-only mode with heating locked out

COMPATIBLE WITH:

• RAV*AT Outdoor Unit Single Zone

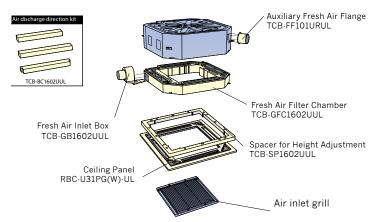
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Optional Wired Controller (7-Day Programmable) RBC-AMS54E-UL



Optional Wireless Controller





SPECIFICATIONS:

RAV*UT Cassette									
	Heat Pump								
			System						
Size		18	24	30	36	42			
Indoor Model		RAV-SP180UT-UL	RAV-SP240UT-UL	RAV-SP300UT-UL	RAV-SP360UT-UL	RAV-SP420UT-UL			
			Electrical						
Voltage		208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60			
Power Supply				nit powered from out	door unit				
			Controls						
Wireless (°C, °F, Convertible	<u>e)</u>		Opti	onal – Dedicated °F o	or °C				
Wired (°C, °F, Convertible)				Optional – Convertible	9				
		I	Operating Range			l			
Cooling Indoor DB Min–Max	°F (°C)	69~90 (21~32)	69~90 (21~32)	69~90 (21~32)	69~90 (21~32)	69~90 (21~32)			
Heating Indoor DB Min–Max	°F (°C)	59~83 (15~28)	59~83 (15~28)	59~83 (15~28)	59~83 (15~28)	59~83 (15~28)			
			Piping						
Pipe Connection Size – Liquid	in (mm)	1/4 (6.35)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)			
Pipe Connection Size – Suction	in (mm)	1/2 (12.7)	5/8 (16)	5/8 (16)	5/8 (16)	5/8 (16)			
			Indoor						
Unit Width	in (mm)	33.1 (840)	33.1 (840)	33.1 (840)	33.1 (840)	33.1 (840)			
Unit Height	in (mm)	10.1 (256)	10.1 (256)	12.6 (320)	12.6 (320)	12.6 (320)			
Unit Depth	in (mm)	33.1 (840	33.1 (840	33.1 (840)	33.1 (840)	33.1 (840)			
Net Weight	lb (kg)	44 (19.9)	44 (19.9)	53 (24)	53 (24)	53 (24)			
Grille Dimensions (W X H X D)	in (mm)		37.4x1.2x37.4 (949x30x949)						
Grille Net Weight	lb (kg)	10 (4.5)							
Number of Fan Speeds		3	3	3	3	3			
Airflow (lowest to highest)	cfm	450/500/600	460/550/700	670/820/1150	700/820/1200	700/820/1200			
Sound Pressure (lowest to highest)	dB(A)	34/35/37	34/35/39	36/40/46	38/41/47	38/41/47			

Performance may vary based on the compatible outdoor units. See respective pages for performance data.

COMPATIBILITY:

Indoor Unit	RAV-SP180UT-UL	RAV-SP240UT-UL	RAV-SP300UT-UL	RAV-SP360UT-UL	RAV-SP420UT-UL
Outdoor Unit Single Zone	RAV-SP180AT2-UL	RAV-SP240AT2-UL	RAV-SP300AT2-UL	RAV-SP360AT2-UL	RAV-SP420AT2-UL

TOSHIBA CARRIER SERIES 81



Toshiba Carrier Ducted Indoor Unit

FEATURES

- Available in 208/230V
- Modes: Cool, Heat, Dry, Fan, Auto
- Up to 0.46 in WG
- Rear or bottom return
- · Outside air intake
- Built-in condensate lift pump
- Quiet indoor operation, as low as 30 dB(A)

COMPATIBLE WITH:

• RAV*AT Outdoor Unit Single Zone

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CONTROLS

Sizes: 18/24/30/36/42

Controller not included with indoor unit. Must order:

Optional Wireless Remote Controller
Optional Wired Remote Controller



ACCESSORIES

Condensate Pump (208–230V optional)

Systems can be programmed to operate in cooling-only mode with heating locked out



Optional Wired Controller (7-Day Programmable) RBC-AMS54E-UL



Controller

TOSHIBA

SPECIFICATIONS:

RAV*BT Ducted Style								
	Heat Pump							
System								
Size		18	24	30	36	42		
Indoor Model		RAV-SP181BT-UL	RAV-SP241BT-UL	RAV-SP301BT-UL	RAV-SP361BT-UL	RAV-SP421BT-UL		
		<u>'</u>	Electrical					
Voltage		208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60		
Power Supply			Indoor u	nit powered from out	door unit			
			Controls					
Wireless (°C, °F, Convertible	9)		Optio	onal – Dedicated °F o	or °C			
Wired (°C, °F, Convertible)			(Optional – Convertible	е			
			Operating Range					
Cooling Indoor DB Min–Max	°F (°C)	69~90 (21~32)	69~90 (21~32)	69~90 (21~32)	69~90 (21~32)	69~90 (21~32)		
Heating Indoor DB Min–Max	°F (°C)	59~83 (15~28)	59~83 (15~28)	59~83 (15~28)	59~83 (15~28)	59~83 (15~28)		
			Piping					
Pipe Connection Size – Liquid	in (mm)	1/4 (6.35)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)		
Pipe Connection Size – Suction	in (mm)	1/2 (12.7)	5/8 (16)	5/8 (16)	5/8 (16)	5/8 (16)		
			Indoor					
Unit Width	in (mm)	12.6 (320)	12.6 (320)	12.6 (320)	12.6 (320)	12.6 (320)		
Unit Height	in (mm)	27.6 (700)	39.4 (1,000)	53.2 (1,350)	53.2 (1,350)	53.2 (1,350)		
Unit Depth	in (mm)	31.5 (800)	31.5 (800)	31.5 (800)	31.5 (800)	31.5 (800)		
Net Weight	lb (kg)	73 (33)	93 (42)	119 (54)	119 (54)	119 (54)		
Number of Fan Speeds		3	3	3	3	3		
Airflow (lowest to highest)	cfm	341/406/459	529/618/706	765/853/953	929/1,041/1,165	929/1,041/1,165		
Sound Pressure (lowest to highest)	dB(A)	30/33/36	32/34/36	33/36/39	34/37/40	34/37/40		
Max Static Pressure	in WG	0.45	0.45	0.46	0.46	0.46		
Field Drain Pipe Size O.D.	in (mm)	1 (25.4)	1 (25.4)	1 (25.4)	1 (25.4)	1 (25.4)		

Performance may vary based on the compatible outdoor units. See respective pages for performance data.

COMPATIBILITY:

Indoor Unit	RAV-SP181BT-UL	RAV-SP241BT-UL	RAV-SP301BT-UL	RAV-SP361BT-UL	RAV-SP421BT-UL
Outdoor Unit Single Zone	RAV-SP180AT2-UL	RAV-SP240AT2-UL	RAV-SP300AT2-UL	RAV-SP360AT2-UL	RAV-SP420AT2-UL

TOSHIBA CARRIER SERIES

RAV*BT DUCTED STYLE 83



Toshiba Carrier Underceiling Indoor Unit

FEATURES

- Available in 208/230V
- Modes: Cool, Heat, Dry, Fan, Auto
- · Outside air intake
- Power-saving Mode
- Filter maintenance indicator
- Quiet indoor operation, as low as 34 dB(A)

COMPATIBLE WITH:

• RAV*AT Outdoor Unit Single Zone

(p 74)

CONTROLS

Sizes: 18/24/30/36/42

Controller not included with indoor unit. Must order:

Optional Wireless Remote Controller Optional Wired Remote Controller

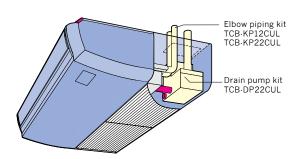


ACCESSORIES

Condensate Pump (208–230V optional)

Elbow Piping Kit

Systems can be programmed to operate in cooling-only mode with heating locked out





Optional
Wired Controller
(7-Day Programmable)
RBC-AMS54E-UL



Optional Wireless Controller



SPECIFICATIONS:

			RAV*CT Underceiling	1			
		•	Heat Pump				
			System				
Size		18	24	30	36	42	
Indoor Model		RAV-SP180CT-UL	RAV-SP240CT-UL	RAV-SP300CT-UL	RAV-SP360CT-UL	RAV-SP420CT-UL	
			Electrical				
Voltage		208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	
Power Supply			Indoor u	nit powered from out	door unit		
			Controls				
Wireless (°C, °F, Convertible	e)		Optio	onal – Dedicated °F o	or °C		
Wired (°C, °F, Convertible)			(Optional – Convertible	е		
			Operating Range				
Cooling Indoor DB Min–Max	°F (°C)	69~90 (21~32)	69~90 (21~32)	69~90 (21~32)	69~90 (21~32)	69~90 (21~32)	
Heating Indoor DB Min–Max	°F (°C)	59~83 (15~28)	59~83 (15~28) 59~83 (15~28) 59~83 (15~28)		59~83 (15~28)	59~83 (15~28)	
	•	,	Piping				
Pipe Connection Size – Liquid	in (mm)	1/4 (6.35)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	3/8 (9.52)	
Pipe Connection Size – Suction	in (mm)	1/2 (12.7)	5/8 (16)	5/8 (16)	5/8 (16)	5/8 (16)	
			Indoor				
Unit Width	in (mm)	35.8 (909)	46.5 (1,181)	62.8 (1,595)	62.8 (1,595)	62.8 (1,595)	
Unit Height	in (mm)	8.3 (210)	8.3 (210)	8.3 (210)	8.3 (210)	8.3 (210)	
Unit Depth	in (mm)	26.8 (680)	26.8 (680)	26.8 (680)	26.8 (680)	26.8 (680)	
Net Weight	lb (kg)	46 (20.8)	55 (24.9)	73 (33.1)	73 (33.1)	73 (33.1)	
Number of Fan Speeds		3	3	3	3	3	
Airflow (lowest to highest)	cfm	320/360/410	470/530/590	660/750/860	730/820/950	730/820/950	
Sound Pressure (lowest to highest)	dB(A)	34/37/40	37/40/42	38/42/45	40/44/47	40/44/47	

Performance may vary based on the compatible outdoor units. See respective pages for performance data.

COMPATIBILITY:

Indoor Unit	RAV-SP180CT-UL	RAV-SP240CT-UL	RAV-SP300CT-UL	RAV-SP360CT-UL	RAV-SP420CT-UL
Outdoor Unit Single Zone	RAV-SP180AT2-UL	RAV-SP240AT2-UL	RAV-SP300AT2-UL	RAV-SP360AT2-UL	RAV-SP420AT2-UL

TOSHIBA CARRIER SERIES

RAV*CT UNDERCEILING 85

24V INTERFACE 24V INTERFACE



FEATURES

- Control the Ductless System using a third-party thermostat¹
- One 24V Interface Kit per indoor head²
- Single and multi-zone applications
- Keeps the Inverter compressor operating as a variable-speed system³
- · Rated for outdoor and indoor mounting
- Dry mode contact for active dehumidification control
- · Remote on/off contact
- Auxiliary heat control through the thermostat⁴
- Diagnostic code display LEDs
- Power supplied through the outdoor unit

ACCESSORIES:

• 115V Transformer RCD#11203103000393 (Used only on Ductless Systems with 115V power.)

COMPATIBLE WITH

•	40MPHA High Wall	(p 22)
•	40MAQ High Wall	(p 28)
•	40MHH High Walll	(p 40)
•	40MBCQ Cassette	(p 30)
•	40MBDQ Ducted	(p 32)
•	40MBFO Console	(p 34)

24V Interface for Third-Party Thermostat

KSAIC0301230 Ductless Indoor + Outdoor Single Zone 208–230V

KEY FEATURES:

Maintain Inverter Compressor Technology

The new 24V Interface keeps the Inverter compressor operating as a variable-speed system when using a third-party thermostat, making adjustments to maintain more consistent operation.

Easy & Flexible Installation

Experience quick and easy installation between either a single or multi-zone outdoor unit and the fan coil. The interface can be installed either indoors or outdoors.

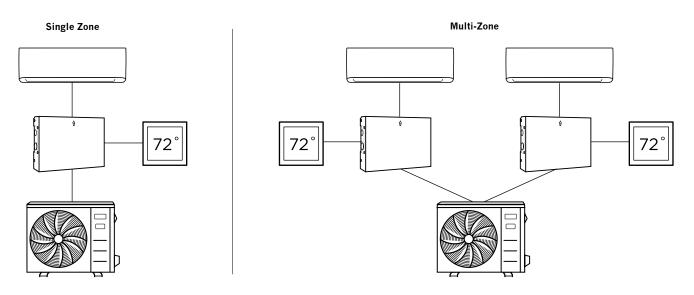
Consumer Choice & Control

Consumers can choose the type of thermostat they want to use without adversely affecting the efficiency or performance of their Ductless Systems.

COMPATIBILTY:

	Compatibility Table							
Type of Indoor unit	Indoor Family Name	Single Zone Outdoor Family Name	Multi-zone Outdoor Family Name	208/230V				
	40MPHA	38MPRA	38MGR	All Sizes				
High Wall	40MAQ	38MA*R	38MGR	All Sizes				
	40MHH	38MHR	38MGR	All Sizes				
Cassette	40MBCQ	38MA*R	38MGR	All Sizes				
Ducted	40MBDQ	38MA*R	38MGR	All Sizes Except Size 58 (See Note)				
Console	40MBFQ	38MA*R	38MGR	All Sizes Except Sizes 12 and 58 (See Note)				

Note: The indoor unit requires an updated control board for compatibility with the 24V Interface Kit. High Wall units starting with Serial #4316V10001 are shipped with the compatible control board. Ducted units starting with Serial #4616V10001 are shipped with the compatible control board. For other model numbers not shown on the table above, please contact your ductless representative. Ducted size 58 Console sizes 12 and 58 starting with serial #1419V1001 are shipped with compatible control board.



Notes:

- ¹ Third-party thermostats used with the 24V Interface Kit will replace the wireless Remote Controller included with the unit.
- Consult with dealer for more information.
- ² When using in a Multi-zone System not all the indoor heads require a 24V Interface Kit.
- ³ A conventional 5-wire thermostat is required.
- ⁴ A secondary output is necessary for auxiliary heat control.

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24V INTERFACE 24V INTERFACE



FEATURES

- Match a multi-family air handler with a single zone outdoor and a third-party thermostat¹
- One 24V Interface Kit per system
- Keeps the Inverter compressor operating as a variable-speed system²
- Rated for outdoor and indoor mounting
- · Remote on/off contact
- Auxiliary heat control through the thermostat³
- Diagnostic code display LEDs

COMPATIBLE WITH:

- 38MA*R Outdoor Unit Single Zone
- · FMA4 Vertical Fan Coil
- · FMC Cased Horizontal Fan Coil
- FMU Uncased Horizontal Fan Coil
- FV4C Fan Coil

24V Interface for Multi-Family Air Handler

KSAICO301230 Ductless Outdoor*** Matched With Multi-Family Air Handler

KEY FEATURES:

Easy & Flexible Installation

Experience quick and easy installation of the condensing unit, the 24V Interface and the fan coil or furnace/cased coil. Features like customizable airflow adjustments and self-configuring/diagnostic capabilities ensure application flexibility and easier servicing, benefitting contractors and multi-family property managers.

Off-the-shelf Combinations

Reduce inventory management by using the 38MA*R Variable Speed Condensing unit, fan coils, furnaces and cased coils that are already available.

No Additional Heat Strip Needed

Due to the high heating capabilities, there is no need to purchase an additional heat strip to be installed on site, which reduces costs and installation times.

Note: Indoor unit's TXV/Piston required to be removed. It is recommended to use the Piping Adaptor Kit RCD#331831-701 sold separately facilitating the piping installation.

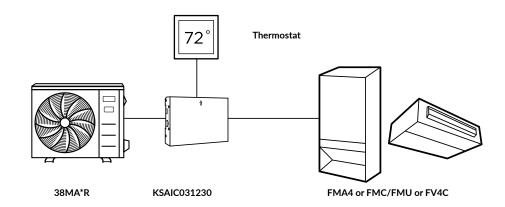
COMPATIBILTY:

	Compatibility Table							
Indoor Unit	Nominal System Size MBTUH	Outdoor Model Number	Indoor Model Number					
	12	38MAQB12R3	FMA4X1800AL1					
FMA4	18	38MAQB18R3	FMA4X1800AL1					
Vertical	24	38MAQB24R3	FMA4X2400AL1					
Fan Coil 30	38MAQB30R3	FMA4X3000AL1						
	36	38MAQB36R3	FMA4X3600AL1					
	12	38MAQB12R3	FMC4Z1800AL1					
FMC	18	38MAQB18R3	FMC4Z1800AL1					
Cased Horizontal	24	38MAQB24R3	FMC4Z2400AL1					
Fan Coil	30	38MAQB30R3	FMC4Z3000AL1					
Turi oon	36	38MAQB36R3	FMC4Z3600AL1					
	12	38MAQB12R3	FMU4Z1800AL1					
FMU	18	38MAQB18R3	FMU4Z1800AL1					
Uncased Horizontal	24	38MAQB24R3	FMU4Z2400AL1					
Fan Coil	30	38MAQB30R3	FMU4Z3000AL1					
Turi oon	36	38MAQB36R3	FMU4Z3600AL1					
	12	38MAQB12R3	FV4CNF002L00					
FV4C	18	38MAQB18R3	FV4CNF002L00					
FV4C Fan Coil	24	38MAQB24R3	FV4CNF002L00					
i ali Guli	30	38MAQB30R3	FV4CNF003L00					
	36	38MAQB36R3	FV4CNF003L00					

Note: The FMA4P units are not an acceptable match with these condensing units due to the PSC motor.

Select Proper Blower Speed

Before operating the unit, ensure that the proper blower speed has been selected. Fan speeds are selected manually. Refer to the installation manual of the indoor unit for instructions on how to change the fan speed on the indoor fan coil and select the taps (see Compatibility Table) for the proper matches.



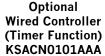
Notos:

- ¹ Third-party thermostats used with the 24V Interface Kit will replace the wireless Remote Controller included with the unit.
- Consult with dealer for more information.
- A conventional 5-wire thermostat is required.
 A secondary output is necessary for auxiliary heat control.

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COMPATIBILITY CONTROLS:







Optional Wired Controller (7-Day Programmable) KSACN0401AAA or KSACN0501AAA

	Indoor Unit Type		High Wall			Cassette	Ducted	Console
	Indoor Family Name	Single Zone/Multi-zone	40MPHA	40MAQ	40MHH	40MBCQ	40MBDQ	40MBFQ
	KSACN0101AAA	Single Zone & Multi-zone		0		0	0	0
Wired Controllers	KSACN0401AAA	Single Zone & Multi-zone	0	0†	0			O 12‡
	KSACN0501AAA	Single Zone & Multi-zone				0	•	O 18-58
24V Interface	KSAIC0301230	Single Zone & Multi-zone	0	O 230V	O 230V	0	0	0
	KSAIF0101AAA	Single Zone & Multi-zone			O 9/12/24k			
	KSAIF0201AAA	Single Zone & Multi-zone			O 18k			
Wi-Fi® Kits	KSAIF0301AAA	Single Zone & Multi-zone		0				
	KSAIF0401AAA	Single Zone & Multi-zone				0	0	O 18-58
	KSAIF0601AAA	Single Zone & Multi-zone	•					

0	Optional	
•	Standard	

Notes:

† 7-day programmable compatible with indoor units starting with Serial Number 0216V10001.

Compatible with indoor units starting with Serial Number 0117V10001.

24V interface; Compatible with indoor units starting with Serial Number 4216V10001

Units built prior to these serial numbers would require a Control Board Replacement on the indoor unit.

Ducted size 58 Console sizes 12 and 58 starting with Serial Number 1419V1001 are shipped with compatible control board.

WI-FI® SMARTPHONE CONTROL COMPATIBILITY:



The use of the Wi-Fi® Accessory Kits on some indoor units would disable the ability to use the Wired Controllers in some instances:

		Wired Control	Wireless Control
High-Tier High Wall	40MPHA	•	•
Mid-Tier High Wall	40MAQ		•
Entry-Tier High Wall	40MHH		•
Ducted	40MBCQ	•	•
Cassette	40MBDQ	•	•
Console 18-58	40MBFQ	•	•

Note

The use of the 24V interface will disable system's Wi-Fi® module. Please consider using a Wi-Fi® Thermostat when using the 24V interface. Wi-Fi® kits cannot be used on networks requiring a user login.

Wi-Fi® kits are only supported with networks using WPA-PSK/WPA2-PSK encryption and no encryption. WPA-PSK/WPA2-PSK encryption is recommended. Please consult the installation instructions and Owners Manuals of the individual kits for more information.

Standard Features Glossary

24-Hour Timer

Set the unit to start and stop automatically in a 24-hour period.

Airflow Pane

360° air outlet creates a soft and gentle airflow, which circulates throughout the whole space and provides an even temperature distribution in the room.

Auto Defrosting

Prevents the evaporator from freezing and maintains dehumidifying effect in low temperature environments.

Auto Restart Function

If the air conditioner shuts off unexpectedly due to a power outage, it will restart with the previous settings automatically when the power resumes.

Built-In Basepan Heater

A heating belt is fitted on the base plate of the outdoor unit to prevent water accumulation, which improves heat transfer efficiency.

Built-In Condensate Lift Pump

A powerful, built-in drain pump can lift the condensing water up to 29 inches.

Control Box Inside the Cassette

Easy maintenance with the box right inside the Cassette indoor unit. The integrated design provides a more compact size for easier installation.

Convenient Temperature Controls

An intuitive, easy-to-use remote control displays temperature and other functions on a bright, clear LCD screen.

Convertible Return Air Inlet

The air inlet can be installed either at the back or bottom of the ducted unit, allowing for flexible installation to meet the needs of each job.

Crankcase Heater

A heating belt is fitted on the compressor to prevent frosting water accumulation, which improves heat transfer efficiency.

Diamond Outdoor Unit Design

An innovative outdoor unit reduces noise level by more than 3 dB(A), with higher reliability, easier maintenance and improved performance.

Eco Mode

Provides the ultimate energy savings and a comfortable sleeping environment with an intelligent eight-hour night cycle program that saves up to 60% of energy.

Extra-Low Temperature Heating

When it's cold outside, it's warm inside. High Tier and Mid-Tier Ductless systems can be used as a primary heat source, with heat output down to ·22° F.

Follow Me

A temperature sensor built into the Remote Controller will sense its surrounding temperature. The unit will adjust the room temperature more accurately to give you comfort.

Golden Fin Coating

A coating on the condenser preventing build-up of mold and bacteria while improving heat transfer efficiency.

High Ambient Cooling

The indoor space can be cooled to a desired, comfortable indoor temperature, even when outside temperatures reach up to 122° F.

High Heating Operation

The High Tier and Mid-Tier systems can be a primary heat source, with High Heating down to -22° F, so when it's cold outside, it's warm inside

Independent Vane Control

Airflow direction from individual outlets can be controlled separately to achieve the optimal airflow based on a room's configuration.

Inverter Technology

With the Inverter, the outdoor unit uses only the energy required to meet the desired temperature requirements of the indoor unit, thus lowering energy consumption.

Louver Position Memory

A horizontal louver will automatically move to the same position that was set the last time the unit was on.

Low Ambient Cooling

Even when it's cold outside, but warm inside, the air conditioner will keep the area cool – perfect for server rooms and commercial kitchens.

Refrigerant Leak Detection

The indoor unit shows error code "EC" and stops automatically when refrigerant leakage is detected. This protects the compressor from high temperature damage due to refrigerant leakage.

Single and Multi-zone Compatible

A Single Zone outdoor unit can be paired with any indoor unit type. One Multi-zone unit can be leveraged for up to five indoor units of any style.

Sleep Mode

This function enables the system to automatically increase cooling or decrease heating by around four degrees for the first two hours, then holds steady for the next five hours. After that, it will switch off. This function achieves both energy savings and comfort at night.

Stepless Frequency Adjustment

Precise control maintains a stable and constant room temperature while reducing the sound level and saving energy.

Two-Way Draining

Connections, piping and drainage can be installed from both the left and right on the High Wall.

Universal Matching

Get maximum flexibility with up to five different indoor units connected to one outdoor unit. Maintain a different temperature in each room for ultimate comfort, with the best indoor unit choice for each. Universal matching units are also available for Single Zone outdoor units. One outdoor unit can match any type of indoor unit.

Wired Remote Controller

Compared to an infrared remote controller, a Wired Controller can be fixed on the wall and makes air conditioner operation more convenient for larger setups or ducted units.

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