



# DAIKIN FCQ SERIES HEATING AND COOLING SYSTEMS

*ROUND FLOW SENSING  
CEILING-MOUNTED CASSETTE*  
Up to 21 SEER2 / Up to 10.3 HSPF2  
Up to 13.0 EER2  
INVERTER (VARIABLE-SPEED) COMPRESSOR




## Comfort

We offer a wide range of products, and always provide you with the ideal solution, whether for an apartment, condo or a house. Our units are whisper quiet and, with their specially designed airflow pattern, they create your ideal indoor climate.

Daikin units are designed to include features that let you create your own unique ecosystem. From the wide-angle louver design to the auto-swing and comfortable mode controller settings, effective heating and cooling is ensured throughout the space.

## Smart inverter technology

 Integrated with an inverter (variable-speed) compressor, Daikin systems deliver the capacity required to maintain desired room conditions, typically reducing energy consumption by up to 30% or more (compared to traditional fixed-speed ducted systems). This technology minimizes temperature fluctuations and provides continuous cooling and heating comfort.

## Energy efficiency

Our products are designed to be highly efficient all year round, and their low energy consumption is reflected in low energy bills for you.

## Flexibility

With space saving design, wide operation range and long pipe lengths you have maximum flexibility in your design to suit your needs.

## Reliability

Daikin products are renowned for their reliability. And you can rely on service to match, with industry leading warranties.\*



\* Complete warranty details available from your local dealer or at [www.daikincomfort.com](http://www.daikincomfort.com). The duration of warranty coverages in Texas differs in some cases.

# FCQ Series

## Individual comfort and control

Individual temperature control provides comfort for the entire space. With effective cooling and heating coverage at quiet operating sound levels, these systems combine superior comfort control with lifestyle convenience all at the touch of a button.

### Premium comfort features:

- » Energy Efficient – Up to 21 SEER2, up to 10.3 HSPF2, up to 13.0 EER2 – Inverter (variable-speed) compressor
- » Cooling Range 23°- 122°F DB (-5°- 50°C DB)
  - Low-Ambient cooling operation down to 0°F DB (-17.7°C DB) (with optional Air Adjustment Grille(s))
- » Heating Range -4°- 60°F WB (-20°- 15.5°C WB)
- » Capacity range from 1.5- 4 tons
- » True 360° Airflow and three room sensors enables optimized occupant comfort and efficiency
- » Energy efficient with DC fan motor and auto-logic that adjusts fan speed based on space load
- » Optional self-cleaning air filter panel to further increase efficiency and reduce maintenance costs
- » Very flexible with 18 different possible airflow patterns, ensuring ideal air distribution to maximize comfort and efficiency
- » Compact design to allow for installation in small ceiling voids
- » Enhanced indoor air quality and LEED® ready with MERV 13 filter options
- » Outside air integration possible of up to 20% of the nominal indoor air volume with optional fresh air intake kit

### Outdoor unit features:



#### Anti-Corrosion Treatment on Heat Exchanger



**Auto-Restart** – The unit memorizes the operation mode, airflow and temperature settings. Should there be a power failure when the unit is in operation, it will automatically return to the same operating conditions when the power is restored.



**Self-Diagnosis** – In the event that a problem develops with the unit, malfunction codes can be displayed on the liquid crystal panel of the remote control for fast and easy fault diagnosis.



**Self-Cleaning Air Filter Panel**



Dust from the air filter brush is deposited into the dust collection container during the fully automatic self-cleaning process.

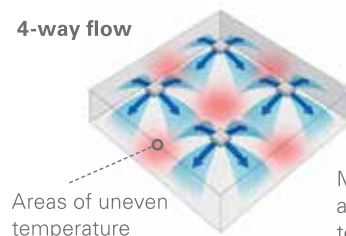


When indicated, the dust container in the unit is easily emptied with a standard vacuum cleaner.

### 4-Way Flow vs. Round Flow

Round Flow Ceiling Mounted Cassette type offers 360° airflow with improved temperature distribution.

#### 4-way flow



Areas of uneven temperature

#### Round Flow



Much fewer areas of uneven temperature

**FCQ SERIES HEATING AND COOLING SYSTEMS**  
**ROUND FLOW SENSING CEILING-MOUNTED UNITS**  
 Up to 21 SEER2 / Up to 10.3 HSPF2 / Up to 13.0 EER2



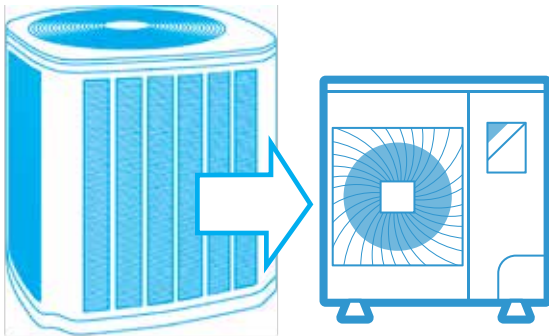
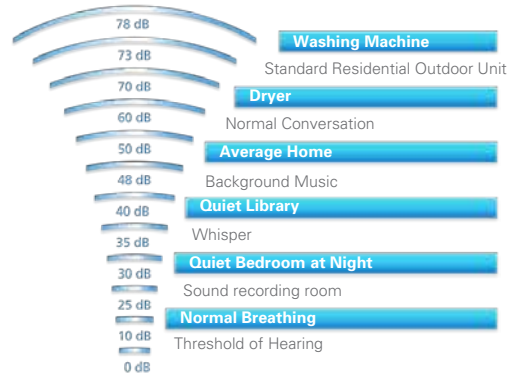
**Feel the difference**

Designed for absolute comfort, Daikin's *Round Flow* sensing cassette *SkyAir* units provide an excellent comfort level, energy efficiency and flexibility due to advanced control functions based on input from three room sensors (occupancy, air temperature, and surface temperature).

**Hear the difference**

Utilizing inverter technology to maintain comfort settings, Daikin systems most often operate at low speeds with indoor sound levels as low as 27 decibels (dB) and outdoor sound levels as low as 57 dB.

Sound levels as low as:



**See the difference**

A Daikin inverter system is designed for installation where space is limited, such as with zero lot lines, or limited to roof, wall or terrace areas. The compact and lightweight design, when compared to traditional solutions allows the Daikin inverter system to be used in homes with the strictest of limitations with relative ease.

**Advanced Water-shedding drain pan**

Engineered with multiple drain holes and channels providing effective water shedding.



Single fan drain pan

Double fan drain pan

**Knowledge is power**

In general, system performance is measured by a higher Seasonal Energy Efficiency Ratio (SEER2) and Energy Efficiency Ratio (EER2). Higher ratings mean lower operating costs. Similarly, a higher rated Heating Seasonal Performance Factor (HSPF2) and Coefficient of Performance (COP) means a more efficient air-source heat pump.

**Why is it important?**

The COP of a heat pump is the ratio of:  $COP = \frac{\text{energy out}}{\text{energy in}}$ . When the COP is >1, the result is a system providing more heating energy than energy consumed. As the COP increases, the higher the efficiency — resulting in lower utility costs.

Up to	
<b>21 SEER2</b>	<b>13.0 EER2</b>
<b>10.3 HSPF2</b>	<b>4.5 COP2</b> <small>(Coefficient of Performance)</small>

Inverter Ducted Heat Pump Efficiency ratings

COP

.85	.95	1.00
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FCQ SERIES 4.5 COP2



## You're always in control.

### Individual comfort and control

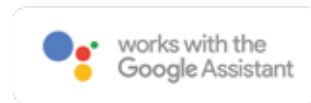
Daikin systems have an available infrared remote controller allowing you to access all functions at the click of a button.

### From anywhere in the world. Or your living room.

It can happen to anyone. You forgot to change the temperature of your heat pump system or air conditioner before leaving the house, or you will be delayed returning home and wish to avoid needlessly heating or cooling your home. What in the past would have resulted in wasted energy is no longer a problem. With the DKN App, you are always in control. You can use your tablet or smart-phone to access your Daikin system via the internet\*.



\*Requires AZAI6WSCDKA Wi-Fi adaptor.



## Daikin Madoka Remote Controller



Daikin is pleased to introduce the *Madoka* remote controller for the North American FCQ & *SkyAir* indoor units. The *Madoka* features a sleek and stylish design with an intuitive interface including touch button control. It retains advanced functions

for indoor unit control. It can be commissioned and managed with ease through a Bluetooth® configuration app or via the onboard menus. The *Madoka* provides 3 configurable display modes: Text (default), Icon, and Scale to help meet project and occupant needs. Learn more at [www.daikinac.com](http://www.daikinac.com).



**Madoka Quick Set App**  
Available for download on iOS and Android devices.



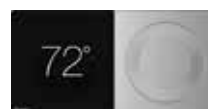
## Daikin DKN Plus Interface



The new Daikin DKN Plus Interface (AZAI6WSPDKC) enables the energy-efficient control of Daikin air conditioners by a third-party thermostat or an automation system. With this interface, third party devices or systems

can control the *SkyAir* indoor units through the DKN Cloud NA App via Wi-Fi, Cloud API, Modbus®, BACnet™ MS/TP, or thermostat relay contacts. This interface can be commissioned easily through the DKN Cloud NA app via Bluetooth® Low Energy (BLE). Learn more at [www.daikinac.com](http://www.daikinac.com).

## Daikin One+ Smart Thermostat



The Daikin *One+* smart thermostat is now available for *SkyAir* indoor unit models. With the new translation adaptor, connecting the Daikin *One+* smart thermostat provides several user features including remote monitoring, control and geofencing using the Daikin *One* home app, *Google*, and *Amazon* voice assistants. Learn more at [www.daikinone.com](http://www.daikinone.com).

# FCQ SERIES HEATING AND COOLING SYSTEMS *ROUND FLOW SENSING* CEILING-MOUNTED UNITS

Model	Indoor Unit		FCQ18AAVJU		FCQ24AAVJU		FCQ30AAVJU		FCQ36AAVJU		FCQ42AAVJU		FCQ48AAVJU	
	Outdoor Unit (Cooling Only)		RZR18TBVJUA		RZR24TBVJUA		RZR30TBVJUA		RZR36TBVJUA		RZR42TBVJUA		RZR48TBVJUA	
	Outdoor Unit (Heat Pump)		RZQ18TBVJUA		RZQ24TBVJUA		RZQ30TBVJUA		RZQ36TBVJUA		RZQ42TBVJUA		RZQ48TBVJUA	
			Cooling	Heating*	Cooling	Heating*	Cooling	Heating*	Cooling	Heating*	Cooling	Heating*	Cooling	Heating*
Capacity Rated	Btu/h		18,000	20,000	24,000	27,000	30,000	34,000	36,000	40,000	42,000	47,000	48,000	54,000
COP Rated*			4.3		3.8		4.5		4.3		4.0		3.5	
EER2 Rated			13		12		13		12.1		10.3		8.2	
SEER2			18.5		18.6		21		20		18.9		18	
HSPF2			9.2		9.1		10.1		10		10.2		10.3	
AHRI Cooling Only#			211635139		211635140		211635141		211635142		211635143		211635144	
AHRI Heat Pump#			211635162		211635163		211635164		211635165		211635166		211635167	
Piping Connections	Liquid	in. (mm)	Ø 3/8 (Ø 9.5)											
	Gas		Ø 5/8 (Ø 15.8)											
	Drain		Ø 1 (Ø 25.4)											
Max. Interunit Piping Length	ft. (m)		164 (50)				230 (70)							
Max. Interunit Height Difference			98.4 (30)											
Chargeless	Lbs (kg)		15 (4.5)											
Amount of Additional Charge of Refrigerant	lb/ft (kg/m)		0.036 (0.0535)											
Operating Range - Cooling	°F DB (°C DB)		23° - 122°F (-5° - 50° C)											
Operating Range - Cooling with Optional Air Adjustment Grille	°F DB (°C DB)		0° - 122°F (-17.7° - 50°C)											
Operating Range - Heating*	°F WB (°C WB)		-4° - 60°F (-20° - 15.5°C)											
Indoor Unit			FCQ18AAVJU		FCQ24AAVJU		FCQ30AAVJU		FCQ36AAVJU		FCQ42AAVJU		FCQ48AAVJU	
Airflow Rate	H	cfm (m³/min)	742 (21.0)		777 (22.0)		1,059 (30)		1,253 (35.5)		1,253 (35.5)		1,253 (35.5)	
	M		618 (17.5)		618 (17.5)		882 (25.0)		918 (26.0)		971 (27.5)		971 (27.5)	
	L		477 (13.5)		477 (13.5)		671 (19.0)		671 (19.0)		741 (21.0)		741 (21.0)	
Fan Type			Turbo Fan											
Air Direction Control			N/A											
Air Filter			N/A											
Dimensions (H x W x D)	in. (mm)		9-11/16 x 33-1/16 x 33-1/16 (246 x 840 x 840)				11-1/32 x 33-1/16 x 33-1/16 (288 x 840 x 840)							
Weight	Lbs (kg)		51 (23)				58 (26)							
Sound Pressure Level (H / M / L / SL)	dB(A)		38 / 32 / 28				42 / 37 / 32		47 / 38 / 32		47 / 40 / 35			
Outdoor Unit			RZR18TBVJU / RZQ18TBVJU		RZR24TBVJUA / RZQ24TBVJUA		RZR30TBVJUA / RZQ30TBVJUA		RZR36TBVJUA / RZQ36TBVJUA		RZR42TBVJUA / RZQ42TBVJUA		RZR48TBVJUA / RZQ48TBVJUA	
Compressor	Motor Output	W	1900				3,500							
Refrigerant	Type		R-410A											
	Charge	Lbs (kg)	6.4 (2.9)				7.9 (3.6)							
Airflow Rate	H	cfm (m³/min)	2,682 (76)				3,741 (106)							
Dimensions (H x W x D)	in. (mm)		39 x 37 x 12-5/8 (990 x 940 x 320)				52-15/16 x 35-7/16 x 12-5/8 (1,345 x 900 x 320)							
Weight	Lbs (kg)		172 (78)				225 (102)							
Sound Pressure Level	H	dB(A)	58	61*	58	61*	57	59*	57	59*	57	59*	57	59*

\* Applicable to heat pump models only, refer to installation manual for more details.

OUTDOOR UNIT	OPTIONAL ACCESSORIES
KPW5G112	Air Adjustment Grille (RZR18, 24; RZQ18, 24)
KPW5F80 x 2	Air Adjustment Grille (RZR30, 36, 42, 48; RZQ30, 36, 42, 48)
KEHJ5A160E	Drain Pan Heater (RZQ18, 24, 30, 36, 42, 48)
KPS00344	Snow Visor (RZR18, 24, 30, 36, 42, 48; RZQ18, 24, 30, 36, 42, 48)
VRVQA-SH-SF	Snow Hood Kit (RZR18, 24; RZQ18, 24)
VRVQA-SH-DF	Snow Hood Kit (RZR30, 36, 42, 48; RZQ30, 36, 42, 48)

# FCQ SERIES WALL-MOUNTED *ROUND FLOW* SENSING CEILING-MOUNTED CASSETTE INSTALLATION

## Ease of installation

Connected by a pair of refrigerant lines, few electrical connections, and no ductwork, indoor and outdoor units can be easily installed in existing spaces with minor disruption and often in a single day's work. The compact and lightweight designs combined with piping lengths up to 230 ft. and minimal wiring allow installation with minimal time and costs.

## FCQ18/24/30/36/42/48AAVJU

Space required for installation (in.)

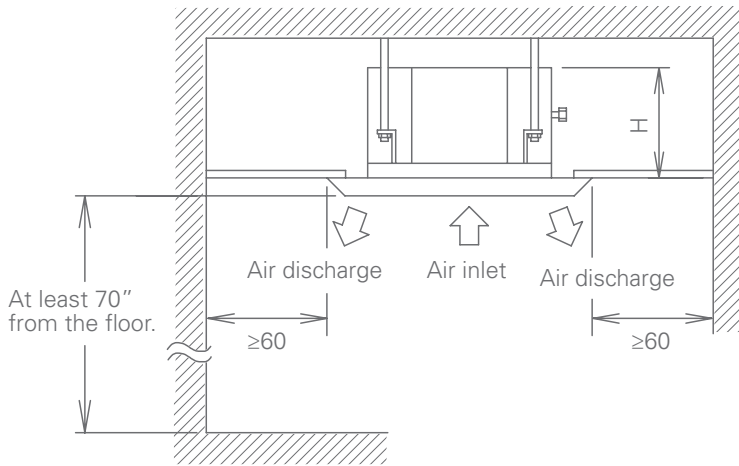


Figure 1

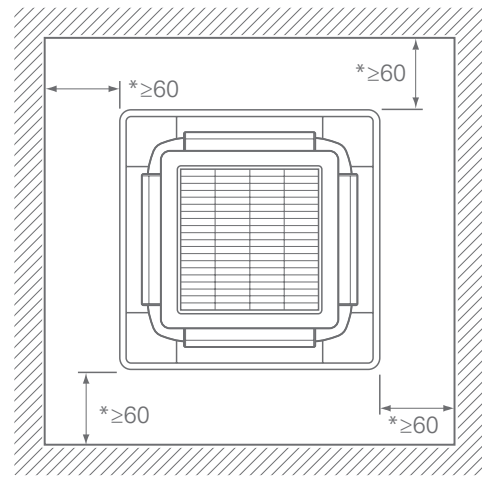


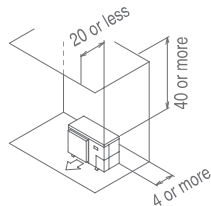
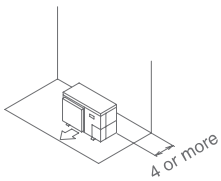
Figure 2

## For RZR18/24/30/36/42/48TBVJUA, RZQ18/24/30/36/42/48TBVJUA

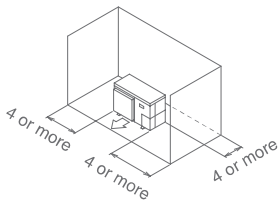
Space required for installation (in.)

### (A) When an obstruction is present on the air inlet side

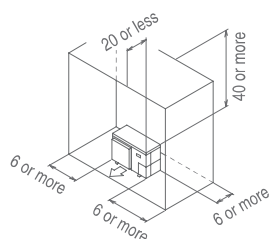
- » When the upward area is open
  - (1) When one outdoor unit is installed individually
    - » When an obstruction is present only on the air inlet side
  - (1) When one outdoor unit is installed individually
    - » When an obstruction is present also on the air inlet side



- » When an obstruction is present on both sides

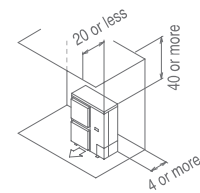
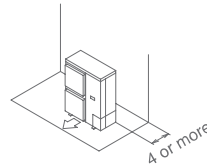


- » When an obstruction is present also on the air inlet side and both sides

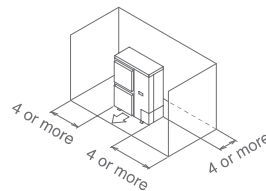


### (A) When an obstruction is present on the air inlet side

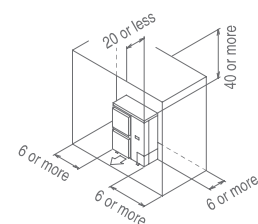
- » When the upward area is open
  - (1) When one outdoor unit is installed individually
    - » When an obstruction is present only on the air inlet side
  - (1) When one outdoor unit is installed individually
    - » When an obstruction is present also on the air inlet side



- » When an obstruction is present on both sides



- » When an obstruction is present also on the air inlet side and both sides



## About Daikin:

Daikin Industries, Ltd. (DIL) is a global Fortune 1000 company and is recognized as one of the largest HVAC (Heating, Ventilation, Air Conditioning) manufacturers in the world. Founded in 1924, Daikin is approaching 100 years of HVAC worldwide leadership. DIL is primarily engaged in developing indoor comfort systems and refrigeration products for residential, commercial, and industrial applications. Its consistent success is derived, in part, from a focus on innovative, energy-efficient, and premium quality indoor climate and comfort management solutions.

## Daikin *SplitXpress* Selection Tool

The new interactive *SplitXpress* mobile app and website provide a complete product selection tool to streamline system selection for single and multi-zone projects. Users can create equipment selections and add accessories / pricing details to quickly share quotes with customers. Available for free on the *App Store* (iOS) and *Google Play* (Android), and at <https://splitxpress.daikincity.com>.



## WARNINGS:

- » Always use a licensed installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- » Use only those parts and accessories supplied or specified by Daikin. Ask a licensed contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- » Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.
- » For any inquiries, contact your local Daikin sales office.



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## ADDITIONAL INFORMATION

Before purchasing this appliance, read important information about its estimated annual energy consumption, yearly operating cost, or energy efficiency rating that is available from your retailer.



Our continuing commitment to quality products may mean a change in specifications without notice.

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