

**V**ariable Refrigerant



# DAIKIN FCQ SERIES HEATING AND **COOLING SYSTEMS**

**ROUND FLOW SENSING CEILING-MOUNTED CASSETTE** Up to 18.6 SEER / Up to 10.2 HSPF Up to 13.0 EER





## 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 a variable-speed inverter 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/contractor or at www.daikincomfort.com or www.daikinac.com.



## **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 18.6 SEER, up to 10.2 HSPF, up to 13.0 EER - Variable-Speed, Inverter, 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.





BRC1E73











AZAI6WSPDKC BACRC-T-P01 BACRC-TH-P01 BACRC-THO-P01



**Self-Cleaning Air Filter Panel** 



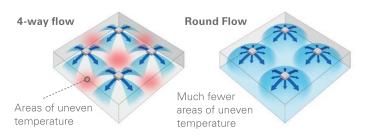
Dust from the air filter brush is deposited into the dust collection container during the fully automatic self-cleaning process.



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.



# FCQ SERIES HEATING AND COOLING SYSTEMS ROUND FLOW SENSING CEILING-MOUNTED UNITS Up to 18.6 SEER / Up to 10.2 HSPF / Up to 13.0 EER

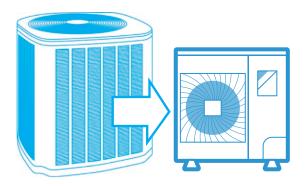


#### Feel the difference

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.



### 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.

#### Sound levels as low as:



100% rated heating capacity at -4°FWB (-20°CWB) for systems up to 3 tons (heat pump only)

## New drain pan

Newly designed drain pan on outdoor unit to help prevent condensate from freezing and causing damage to the fan and coil.





Single fan drain pan

Double fan drain pan

## Knowledge is power

In general, system performance is measured by a higher Seasonal Energy Efficiency Ratio (SEER) and Energy Efficiency Ratio (EER). Higher ratings mean lower operating costs. Similarly, a higher rated Heating Seasonal Performance Factor (HSPF) 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= energy out/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					
18.6	13.0				
SEER	EER				
10.2	4.5				
HSPF	COP				
	(Coefficient of Performance)				

Inverter Ducted Heat Pump Efficiency ratings















## 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\*.





## NEW! 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.



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





## **Coming Soon!**

## Daikin *Adaptive Touch Controller*



The Daikin Adaptive Touch Controller (ATC) is used to control SkyAir indoor units with advanced and configurable control logic. The ATC comes in 4 different models with a built-in temperature sensor, humidity sensor, CO<sub>2</sub> sensor, and occupancy sensor. The

ATC will also provide analog input, analog output, digital input, and digital output terminals to monitor auxiliary sensors and control auxiliary equipment. The built-in sensors can be combined with advanced logic to create actionable tasks based upon the sensor values. The ATC controller can be integrated with a compatible building management system (BMS) using  $BACnet^{TM}$  MS/TP.

## NEW! 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.

## NEW! 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.

<sup>\*</sup>Requires AZAI6WSCDKA Wi-Fi adaptor.

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

Indoor Unit		oor Unit	FCQ18TAVJUA		FC024TAVJUA		FCQ30TAVJUA		FCQ36TAVJUA		FCQ42TAVJUA		FCQ48TAVJUA	
	Outdoor Unit (Cooling Only) Outdoor Unit (Heat Pump)		RZR18TAVJUA RZQ18TAVJUA		RZR24TAVJUA RZO24TAVJUA		RZR30TAVJUA RZQ30TAVJUA		RZR36TAVJUA RZQ36TAVJUA		RZR42TAVJUA RZQ42TAVJUA		RZR48TAVJUA RZQ48TAVJUA	
Model														
	(1166	it i ump/	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.	2	3	.8	4.	5	4.	3	4.	0	3.	7	
EER Rated		13			12		9.3		11.4		10.3		9	
SEER		18.6		18.5		17.2		17.6		17		17		
HSPF*		10.1		10.2		10.2		9		8.6		9.3		
AHRI Cooling Only#		20570		205707035		205707036		205707037		205707038		205707039 205707011		
AHRI Heat Pum	p# Liquid		20580							20570	1/011			
Piping	Gas	in.	Ø 3/8 (Ø 9.5)											
Connections	Drain	(mm)	Ø 5/8 (Ø 15.8) Ø 1 (Ø 25.4)											
Max. Interunit	Dialii		7 V V V											
Piping Length	Piping Length ft (m)		164 (50) 230 (70)											
Max. Interunit I Difference	leight	(,	98.4 (30)											
Chargeless		Lbs (kg)	15 (4.5)											
Amount of Additional Charge of Refrigerant lb/ft (kg/m)			0.036 (0.0535)											
Operating Rang		°F DB (°C DB)	23° – 122°F (-5° – 50° C)											
Operating Range – Cooling with Optional Air of DB (°C DB) Adjustment Grille		0° - 122°F (-17.7° - 50°C)												
Operating Range - Heating* °F WB (°C WB)								-4° — 60°F (-2						
	Indoor Unit		FCQ18			TAVJU	FCQ30		FCQ36			TAVJU		TAVJU
A: 0 D :	Н	cfm	742 (		777 (		1112	,	1165	'	1218		1218	
Airflow Rate	M	(m³/min)	618 (		618 (				918 (		971 (27.5)		971 (	
Fan Type	L		4//(	477 (13.5) 477 (13.5) 671 (19.0) 671 (19.0) 742 (21.0) 742 (21.0)										
Air Direction Control			Turbo Fan N/A											
Air Filter		N/A												
Dimensions (H × W × D) in. (mm)		10-1/16 x 33-1/16 x 33-1/16 11-23/32 x 33-1/16 x 33-1/16 (256 x 840 x 840) (298 x 840 x 840) (298 x 840 x 840)												
Weight Lbs (kg)		63 (28.5)				70 (31.5)								
Sound Pressure Level (H / M / L / SL) dB(A)		35.5 / 3	32 / 28	36 / 32 / 28		43.5 / 38 / 32		44 / 38 / 32		45 / 40 / 35				
Outdoor Unit		t	RZR18T/ RZQ18T			AVJUA / FAVJUA	RZR30TAVJUA / RZQ30TAVJUA		RZR36T/ RZQ36T		RZR42T/ RZQ42T	AVJAU / TAVJUA		AVJUA / TAVJUA
Compressor	Motor Output	W	1,900			3,500								
Refrigerant Type		Туре				R-410A								
gordine	Charge	Lbs (kg)		6.4 (	2.9)		7.9 (3.6)							
Airflow Rate	Н	cfm (m³/min)	2682 (76)		3,741 (106)									
			39 x 37 x 12-5/8 (990 x 940 x 320)			52-15/16 x 35-7/16 x 12-5/8 (1345 x 900 x 320)								
Weight		Lbs (kg)	172 (78)			225 (102)					I			
Sound Pressure Level	Н	dB(A)	58	61*	58 61*		57	59*	57	59*	57	59*	57	59*

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

AIR ADJUSTMENT GRILLE						
KPW5G112	RZR18TAVJUA, RZR24TAVJUA, RZO18TAVJUA, RZO24TAVJUA					
KPW5F80 (X2)	RZQ30TAVJUA, RZQ36TAVJUA, RZQ42TAVJUA, RZQ48TAVJUA, RZR30TAVJUA, RZR36TAVJUA, RZR42TAVJUA, RZR48TAVJUA					

FCO ACCESSORIES WITH:							
Accessory	Item#	Self-Cleaning Filter Panel (BYCQ125BGW1)	Standard Sensing Decoration Panel (BYCQ125B-W1)				
Navigation Remote Controller	BRC1E731	Yes <sup>1</sup>	Yes <sup>1</sup>				
Remote Sensor Kit	KRCS01-4B	Yes	Yes				
Outside Air Intake Kit		Not Available	Yes				
Long-Life Replacement Air Filter		Not Available	Yes				
Panel Spacer	KDBP55H160FA	Yes	Yes				

Optional face plates available to provide a more intuitive user intercase and disable specific functions.

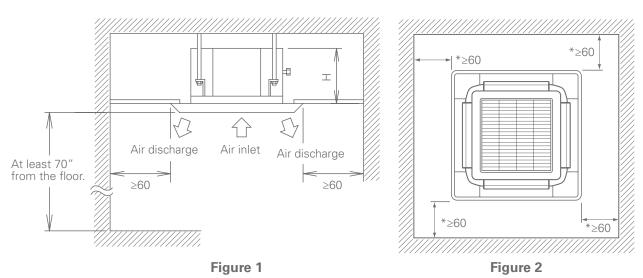


#### Ease of installation

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.

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

Space required for installation (in.)

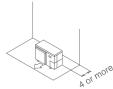


## For RZR18/24/30/36/42/48TAVJUA, RZQ18/24/30/36/42/48TAVJUA

Space required for installation (in.)

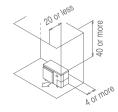
#### (A) When an obsruction is present on the the air inlet side

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

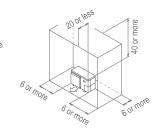


present on both sides



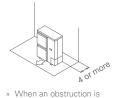


» When an obstruction is present also on the air inlet side and both sides

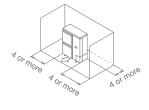


#### (A) When an obsruction is present on the the air inlet side

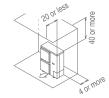
- When the upward area is open (1) When one outdoor unit is installed individually
  - When an obstruction is present only on the air inlet side



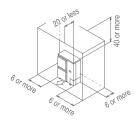
present on both sides



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



» 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 which celebrated its 95th anniversary in May 2019. The company is recognized as one of the largest HVAC (Heating, Ventilation, Air Conditioning) manufacturers in the world. 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.



## NEW! 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.



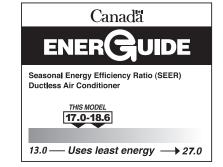


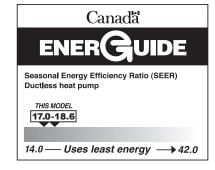


#### **WARNINGS:**

- » 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.

