

# canair

Made for Quebec

**THERM LUX**  
CLIMATISATION ET CHAUFFAGE

## 4CDH

R-454B

## HIGH EFFICIENCY



### CENTRAL HEAT PUMP SYSTEMS

4CDH SIDE DISCHARGE CENTRAL SYSTEM | HIGH EFFICIENCY



 **-30°C**

Exclusive distributor

 **DESCAIR**

Proud family and Quebec  
owned company since 1971



# IMPROVED COMFORT MADE EASY

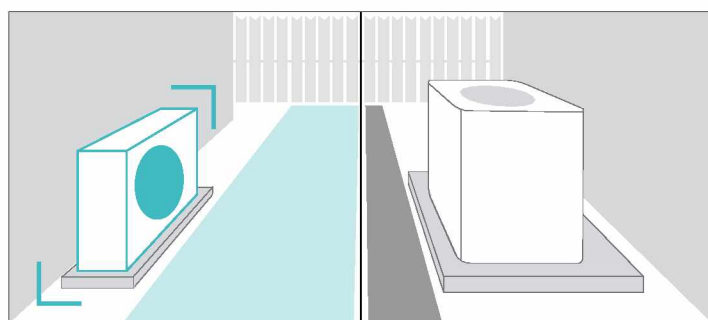


## HIGH EFFICIENCY SYSTEM

UP TO 19 SEER2  
AND 10.3 HSPF2

### COMPACT AND FLEXIBLE FORMAT

A slimmer design and lighter weight than top discharge systems. This system offers unparalleled flexibility to fit any home space.



Side discharge  
system

Top discharge  
system

### QUIET OPERATION

Thanks to Inverter technology, which allows for constant and adjustable operation, the system can operate at a significantly lower decibel level than the competition, providing additional acoustic comfort in any environment (indoor or outdoor).

### AN ENERGY-EFFICIENT PRODUCT

The intelligent constant airflow fan automatically measures pressure problems caused by blocked coils, dirty filters, etc. The motor responds to these conditions by adjusting power output and fan speeds to ensure optimal airflow. By providing the right amount of airflow, the system can effectively reduce energy waste caused by excessive airflow.

**-30°C**  
HEAT PUMPS





## STAYING COZY ON COLD DAYS

### Continuous Operation

Down to **-30°C/-22°F**

Up to **100%** Heating  
Output at

**-20°C/-4°F**

With COP  
Up to **1.8**



### A+ FOR PROFESSIONAL USE —

More units in your professional van or truck; 4 or 5 side discharge units instead of 1 or 2 top discharge units. Also, the unit is easy to transport to the installation site and to install on a stand because it can be carried by a single technician.

### A+ FOR CONSUMER —

Silent operation for all uses thanks to Inverter technology featuring constant and adjustable operation.

## PEACE OF MIND

THANKS TO ITS RELIABILITY

#### BACKYARD





#### ROOF/TERRACE/BALCONY



#### RESTRICTED SPACES



TONS			1.5	2	2.5
Indoor Unit			4CDH2018F21	4CDH2024F21	4CDH2030F21
Outdoor Unit			4CDH2018C21	4CDH2024C21	4CDH2030C21
AHRI Reference #			215449704	215449705	215449706
CERTIFICATION					
			●	●	●
			●	●	●
EFFICIENCY					
Capacity	Cooling	BTU/hr.	18,000 (5,600 ~ 22,000)	23,000 (7,200 ~ 27,000)	30,000 (12,800 ~ 39,000)
	Heating	BTU/hr.	19,000 (6,000 ~ 22,000)	24,000 (7,100 ~ 30,000)	34,000 (10,300 ~ 38,500)
SEER2		BTU/W	19.0	18.3	16.8
EER2		BTU/W	12.5	11.7	11.7
HSPF2 IV		BTU/W	9.7	10.0	10.0
HSPF2 V		BTU/W	8.0	8.0	8.3
Outdoor Operating Conditions	Cooling	°C	-30 ~ 50	-30 ~ 50	-30 ~ 50
		°F	-22 ~ 122	-22 ~ 122	-22 ~ 122
	Heating	°C	-30 ~ 24	-30 ~ 24	-30 ~ 24
		°F	-22 ~ 75	-22 ~ 75	-22 ~ 75
Heating at -15°C (5°F)	Rated Capacity	BTU/W	18,000	21,600	32,600
	COP	W/W	2.00	1.87	1.96
INDOOR UNIT					
ELECTRICAL DATA					
Power Supply		V/ph/Hz	115-208-230 / 1 / 60	115-208-230 / 1 / 60	115-208-230 / 1 / 60
Min. Circuit Ampacity		A	5.5 / 4.0	5.5 / 4.0	8.0 / 6.0
Max. Fuse		A	15	15	15
FEATURES					
Indoor Fan Motor	Model		ZKFD-250-8-1	ZKFD-250-8-1	ZKFD-375-8-1-1
	RLA	A	2	3	4.5
Power		HP	1/3 HP	1/2 HP	1/2 HP
Indoor Airflow	Turbo / Hi / Mi / Lo	CFM	618.0 / 576.8 / 529.7 / 488.5	824.0 / 759.3 / 694.5 / 629.8	988.8 / 894.7 / 806.4 / 712.2
Indoor Noise Level	Turbo / Hi / Mi / Lo	dB(A)	N/A / 41 / 39 / 33	N/A / 44 / 42 / 28	47.0 / 46.0 / 43.0 / 27.5
Indoor Static Pressure Range		in. wg.	0-0.8	0-0.8	0-0.8
DIMENSIONS AND WEIGHT					
Supply Opening	W x D	in	15.63 x 10.24	15.63 x 10.24	19.13 x 10.24
Dimensions	W x D x H	in	17.52 x 21.02 x 45.00	17.52 x 21.02 x 45.00	21.02 x 21.02 x 49.02
Net Weight		lbs	105.82	105.60	128.97
OUTDOOR UNIT					
ELECTRICAL DATA					
Power Supply		V/ph/Hz	208-230 / 1 / 60	208-230 / 1 / 60	208-230 / 1 / 60
Min. Circuit Ampacity		A	16.0	19.0	29.5
Max. Fuse		A	20	20	30
FEATURES					
Outdoor Airflow		CFM	1,765.7	1,765.7	3,001.8
Outdoor Noise Level	Hi	dB(A)	59.0	60.0	60.5
Refrigerant			R-454b	R-454b	R-454b
Refrigerant Charge		oz	74.08	74.08	105.82
Additional Refrigerant		oz/ft	0.7	0.7	0.7
Preloaded		ft	24.6	24.6	24.6
Refrigerant Piping	Liquid & Gas	in	3/8 & 3/4	3/8 & 3/4	3/8 & 3/4
	Max. Piping Length	ft	98.4	164.0	164.0
	Max. Height Diff.	ft	65.6	82.0	82.0
Connection Wiring			AWG 20-2	AWG 20-2	AWG 20-2
DIMENSIONS AND WEIGHT					
Dimensions	W x D x H	in	35.04 x 13.46 x 26.50	35.04 x 13.46 x 26.50	37.24 x 16.14 x 31.89
Net Weight		lbs	101.41	102.29	164.02

	3	4	5
	4CDH2036F21	4CDH2048F21	4CDH2060F21
	4CDH2036C21	4CDH2048C21	4CDH2060C21
	215449707	215449708	215449709
	•	•	•
	•	•	•
	36,000 (9,700 ~ 42,000)	48,000 (15,600 ~ 51,000)	54,000 (11,400 ~ 56,300)
	37,000 (11,000 ~ 48,000)	50,000 (15,500 ~ 57,300)	56,000 (8,100 ~ 64,500)
	17.3	16.5	16.0
	11.7	10.5	10.0
	10.3	9.5	9.0
	8.6	8.0	8.0
	-30 ~ 50	-30 ~ 50	-30 ~ 50
	-22 ~ 122	-22 ~ 122	-22 ~ 122
	-30 ~ 24	-30 ~ 24	-30 ~ 24
	-22 ~ 75	-22 ~ 75	-22 ~ 75
	39,000	46,000	52,000
	1.90	1.90	1.80
	115-208-230 / 1 / 60	115-208-230 / 1 / 60	115-208-230 / 1 / 60
	8.0 / 6.0	14.5 / 11.0	14.5 / 11.0
	15	15	15
	ZKFD-375-8-1-1	ZKFD-750-8-1-1	ZKFD-750-8-1-1
	4.5	7.8	8.3
	1/2 HP	3/4 HP	1 HP
	1,189.0 / 1,083.0 / 971.2 / 865.2	1,601.0 / 1,471.5 / 1,283.1 / 1,094.8	1,807.0 / 1,583.3 / 1,359.7 / 1,136.0
	49 / 48.0 / 45.5 / 25.5	N/A / 52 / 50 / 34	54.5 / 52 / 49.5 / 34.5
	0-0.8	0-0.8	0-0.8
	19.13 x 10.24	22.64 x 10.24	22.64 x 10.24
	21.02 x 21.02 x 49.02	24.49 x 21.02 x 52.99	24.49 x 21.02 x 52.99
	129.41	162.92	162.92
	208-230 / 1 / 60	208-230 / 1 / 60	208-230 / 1 / 60
	29.0	38.0	40.0
	30	40	40
	3,001.8	3,037.1	2,648.6
	62.5	65.0	65.0
	R-454b	R-454b	R-454b
	126.99	134.04	183.42
	0.7	0.7	0.7
	24.6	24.6	24.6
	3/8 & 3/4	3/8 & 3/4	3/8 & 3/4
	246.0	246.0	246.0
	98.4	98.4	98.4
	AWG 20-2	AWG 20-2	AWG 20-2
	38.58 x 16.34 x 38.39	38.58 x 16.34 x 38.39	37.48 x 16.34 x 52.48
	204.15	201.06	242.95



INDOOR  
UNIT



OUTDOOR  
UNITS



1.5 t to 4 t



5 t



Wi-Fi wired controller  
(included)



One of the most compatible  
systems in its category.



Comfort in all conditions,  
comfort in every room.



Pleasantly reliable  
and surprisingly affordable.



**EASY TO INSTALL,  
TO USE AND PROFITABLE**  
THANKS TO THE ECM MOTOR



## EASY MAINTENANCE AIR HANDLING UNIT



### INDOOR UNIT FEATURES

- Multi-position (up/down/left/right) ● Constant air flow system up to 0.8 in. wg. ● Aluminium coil ● Optional auxiliary heat kit up to 25 kW ● Electronic expansion valve included ● 115/230 V compatible ● Integrated A2L refrigerant leak detection system (R-454b)

### SIMPLIFIED MAINTENANCE

The sliding top cover is easy to remove.

### ELECTRICAL COMPONENTS

Just two integrated printed circuit boards (PCB). The first board is the main control board; the second is a functional board for the 24 V thermostat, DIP switch, cable control and 88 LED display. High efficiency manufacturing, easy maintenance, cables joined using a connector.

### FILTER

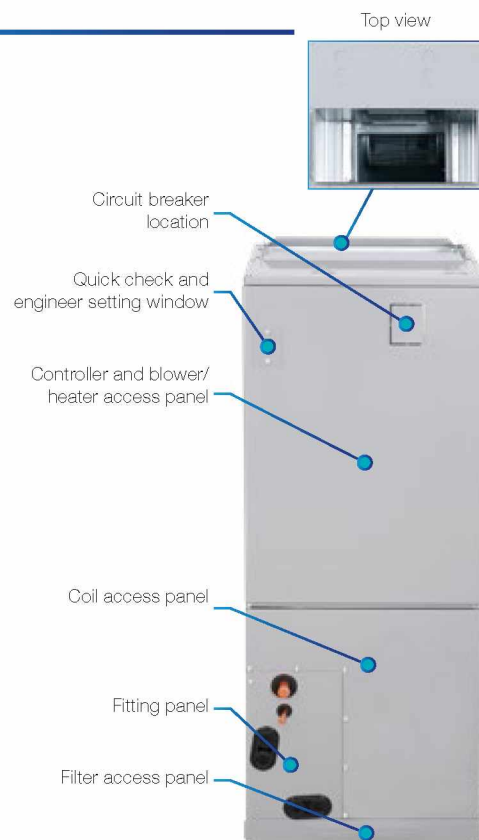
Simplified filter maintenance.

### ELECTRIC HEATING UNIT

Just one piece. High efficiency manufacturing, simplified installation and maintenance.

### MODULAR SLIDING EVAPORATOR

The evaporator coil has a modular design that can be easily removed for maintenance by the user thanks to the sliding feature. It's easy to remove and can be set up to meet the specific needs of different installation spaces.



## FEATURES



### HEATING AND COOLING UP TO -30°C

A heat pump designed to give you optimum efficiency and performance in heating and cooling.



### SELF-CLEANING FEATURE

To clean and dry the indoor and outdoor coil for the prevention of mould and mildew.



### "FOLLOW ME" FEATURE

For maintaining the temperature wherever the remote control is located.



### DRAFT STOPPER FEATURE

For a nice warm sensation when starting the unit in heating mode.



### AUTOMATIC RESTART

As soon as service is restored following a power failure, while maintaining the previously selected settings.



### OUTDOOR HEAT CABLES

Installed at the base of the outdoor unit, but also around the compressor to prevent ice build-up and ensure a smooth start-up.



### A2L REFRIGERANT LEAKAGE DETECT

Indoor unit will show error code -ec- and stops automatically when refrigerant leakage is detected.



### WIRED WI-FI CONTROLLER

This non-polarity controller, equipped with an infrared receiver, allows you to control all functions.



### SELF-DIAGNOSIS AND AUTO-PROTECTION

Once abnormal operation or parts failure happen, the unit will shut off automatically to protect the system. Meanwhile it will indicate protection or error code for fast service.



### EMERGENCY USAGE

When temperature sensor error happens, the air conditioner will display error code and stop immediately, while Canair AC will display error and continue running in a proper status, to avoid an urgent need of the AC.



### AUTO-DEFROST

Prevent evaporator from freezing and maintain dehumidifying under low temperature environment.



### SIMPLIFIED INSTALLATION AND MAINTENANCE

Thanks to its compact and lightweight design, this heat pump fits easily into a variety of spaces.





### QUIET SYSTEM

The indoor unit's variable-speed system operates at a lower decibel level than the competition.

## ELECTRICAL ELEMENTS

INDOOR UNIT													
AMPERAGE ELECTRICAL ELEMENTS													
230 V		#1 CIRCUIT			#2 CIRCUIT			#3 CIRCUIT			TOTAL		
Model	kW	AMP	MCA	MOP	AMP	MCA	MOP	AMP	MCA	MOP	AMP	MCA	MOP
EAH-05E(UL)	5	18	23	30							18	23	30
EAH-10E(UL)	10	36	46	60							36	46	60
EAH-15E(UL)	15	18	23	30	36	46	60				54	69	90
EAH-20E(UL)	20	36	46	60	36	46	60				72	92	120
EAH-25E(UL)	25	18	23	30	36	46	60	36	46	60	90	115	150

## CASED A-COILS

TONS			1.5	1.5	2	2	2.5
MODEL			CEB-24MX1421	CEB-24MX1721	CEB-24MX1421	CEB-24MX1721	CEB-36MX1421
Compatible Outdoor Unit			4CDH2018C21	4CDH2018C21	4CDH2024C21	4CDH2024C21	4CDH2030C21
AHRI Reference #			216621485	216621486	216621487	216621488	216621489
CERTIFICATION							
			●	●	●	●	●
			●	●	●	●	●
EFFICIENCY							
Capacity	Cooling	BTU/hr.	18,000	18,000	24,000	24,000	30,000
	Heating	BTU/hr.	19,000	19,000	25,000	25,000	32,000
SEER2		BTU/W	16.1	16.1	16.0	16.0	15.3
HSPF2 IV		BTU/W	9.5	9.5	9.5	9.5	9.3
HSPF2 V		BTU/W	7.8	7.8	7.0	7.0	7.7
Heating at -15°C (5°F)	Rated Capacity	BTU/W	18,000	18,000	21,000	21,000	30,400
	COP	W/W	2.06	2.06	1.80	1.80	1.80
Indoor Coil	Type of fins		Hydrophilic Aluminum	Hydrophilic Aluminum	Hydrophilic Aluminum	Hydrophilic Aluminum	Hydrophilic Aluminum
Regulator type			VET	VET	VET	VET	VET
Drain Pipe Outdoor Diameter		in	3/4	3/4	3/4	3/4	3/4
Refrigerant			R-454b	R-454b	R-454b	R-454b	R-454b
Refrigerant Piping	Liquid & Gas	in	3/8 & 3/4	3/8 & 3/4	3/8 & 3/4	3/8 & 3/4	3/8 & 3/4
DIMENSIONS AND WEIGHT							
Dimensions	W x D x H	in	14-1/2 x 21 x 18	17-1/2 x 21 x 18	24-1/2 x 21 x 18	17-1/2 x 21 x 18	14-1/2 x 21 x 23-1/2
Net Weight		lbs	43	42	42	53	67



### A-COIL

The tubes and fins of the coil are made entirely of aluminium, which protects from the corrosive elements circulating inside house as well as offering maximum heat transfer.

### DURABLE CABINET

Galvanized steel with a polyester urethane finish, 50% more corrosion-resistant than regular finishes.

### INSTALLATION

Vertical up, vertical down or horizontal.

### REFRIGERANT LEAKAGE DETECT

Indoor unit will show error code -ec- and stop automatically when refrigerant leakage is detected. This function can better protect the compressor being damaged by high temperature due to refrigerant leakage.





	2.5	2.5	3	3	4	5	5
	CEB-36MX1721	CEB-36MX2121	CEB-36MX1721	CEB-36MX2121	CEB-60MX2121	CEB-60MX2121	CEB-60MX2421
	4CDH2030C21	4CDH2030C21	4CDH2036C21	4CDH2036C21	4CDH2048C21	4CDH2060C21	4CDH2060C21
	216621490	216621491	216621492	216621493	216684081	216720951	216720952
	•	•	•	•	•	•	•
	•	•	•	•	•	•	•
	30,000	30,000	36,000	36,000	48,000	60,000	60,000
	32,000	32,000	36,000	36,000	48,000	55,000	58,000
	16.0	16.0	15.8	15.8	15.2	16.0	15.2
	10.0	10.0	9.4	9.4	8.5	8.5	8.1
	8.5	8.5	7.9	7.9	6.6	6.9	6.8
	32,000	32,000	36,000	36,000	42,000	45,000	42,000
	1.85	1.85	1.90	1.90	1.80	1.80	1.83
	Hydrophilic Aluminum	Hydrophilic Aluminum	Hydrophilic Aluminum	Hydrophilic Aluminum	Hydrophilic Aluminum	Hydrophilic Aluminum	Hydrophilic Aluminum
	VET	VET	VET	VET	VET	VET	VET
	3/4	3/4	3/4	3/4	3/4	3/4	3/4
	R-454b	R-454b	R-454b	R-454b	R-454b	R-454b	R-454b
	3/8 & 3/4	3/8 & 3/4	3/8 & 3/4	3/8 & 3/4	3/8 & 3/4	3/8 & 7/8	3/8 & 7/8
	17-1/2 x 21 x 23-1/2	21 x 21 x 24	17-1/2 x 21 x 23-1/2	21 x 21 x 24	21 x 21 x 28	21 x 21 x 28	24-1/2 x 21 x 28
	60	60	60	60	67	67	87

## WARRANTIES

As part of our commitment to quality service, we offer a basic limited **10-year parts and compressor warranty** on your system with the possibility to upgrade it with a **limited 10-year warranty on labor**.



**BASIC  
WARRANTY**  
**10** Compressor  
YEARS & Parts

**ADDITIONAL  
WARRANTY**  
**10** Labor  
YEARS

**REDUCED CARBON  
EMISSIONS THANKS TO  
THE ECO-FRIENDLY R-454B  
REFRIGERANT**

This A2L refrigerant emits a global warming potential (GWP) of 466, which is significantly lower than that of older refrigerants. A key factor for customers concerned about their carbon footprint.



## Notes

Heat pumps **made for Quebec's climate**, with **quality products** and a warranty **tailored to your needs**.



## RIDE THE CANAIR WAVE

Our Quebec summers are getting sweeter as the years go by and it's getting increasingly difficult to relax and sleep easy at night when humidex levels trigger extreme weather notifications on our smartphones. It's time to up your indoor cooling game! Whether you're set up with a mini-split or a central air unit, a **Canair** system is designed to help you stay dry as a bone during those hot summer months. In cooling mode, a **Canair** heat pump can even find the heat inside your home, absorb it, and release it outdoors.

**It doesn't even need cold air to operate.**



## DO THE GREEN WAVE

A **Canair** cooling system runs on electricity and produces much less harmful greenhouse gas emissions compared to conventional natural gas systems.

**A better choice for the planet.**



## WAVES OF SAVINGS WITH CANAIR

Whether it's for a new build or a retrofit, a **Canair** system is an ideal solution to keep your home cool at optimal operational levels in the summer. In fact, if you're looking to replace an existing traditional air conditioning system, consider the very low incremental cost to make the switch.

**Reduce your energy bills while keeping your household cool.**







# canair

Made for Quebec

**INVERTER** TECHNOLOGY

Heat pumps made  
for Quebec's climate.

**canair.com**

Exclusive distributor

**DESCAIR**

Proud family and Quebec  
owned company since 1971



**BEST  
MANAGED  
COMPANIES**

Platinum  
member

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CANADA 2024

YOUR RETAILER

**THERM LUX**  
CLIMATISATION ET CHAUFFAGE

**canair**  
Made for Quebec

**INVERTER** TECHNOLOGY

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**COLD  
CLIMATE V6.1**