



United Technologies
turn to the experts

FB4P Fan Coil Units – 60Hz



Quality Assurance
Certificate Reg. No:
04 100 950420



Subject to change without notice

Manufacturer's Name: Saudi Airconditioning Manufacturing Co. Ltd.

Country of origin : Jeddah, Saudi Arabia

Nearest port of embarkation: Jeddah Islamic port

Product classification: Commercial and Residential

Product Data Catalog

FB4P – 60Hz

Nominal Cooling Capacity 4.0 – 5.0 Tons

HFC R-410A Refrigerant

FB4P Direct Expansion multipoise fan coil units are available in 2 sizes with nominal cooling capacity range from 4.0 to 5.0 Tons. Each unit is designed to occupy a minimum space. No complex system controls are required for Carrier fan coil units. Piping, drain, and wiring connections are readily accessible and mounting holes and slots are predrilled to save installation time and field labor expense. They are compact and ready to fit where needed in the basement, crawlspace, attic, utility room, or closet.

Contact your local Carrier representative for additional reference materials.

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Features / Benefits

- 2 sizes from 4.0 and 5.0 ton cooling capacity
- High static up to 0.6 water (150Pa) for all sizes
- A-coil design both sizes 48-60
- Efficient lanced sine-wave aluminum fins
- High-impact thermal plastic condensate pan
- Primary and secondary drain connection with brass inserts
- Multipoise design for maximum versatility
- Field installation heater packages
- Solid state interlock control board with built-in fuse
- Sweat type connection
- Multiple electric entries
- Inspection plate to facilitate cleaning the coil
- 3-speed motors for both sizes, in field selection
- Polyester powder painted steel cabinet to withstand harsh Middle Eastern climatic conditions
- 40VA, 208/230V transformer
- Permanent filter with aluminum frame 1 inch, flame retardant polyester fibers

FB4P direct expansion fan coil is designed for medium and high static pressure, up to 0.6 inches water (150Pa) with cooling capacity from 14.1 k watt (48 Mbtuh) to 17.6k watt (60 Mbtuh). FB4A series is available in two sizes with an cabinet insulation with density 32 kg/m³ airflow from 236 l/s (500 CFM) to 920 l/s minimize energy losses and increase unit (1880 CFM). FB4P series can be installed vertical or horizontal. Coils are made of efficient lanced sine-wave aluminum fins mechanically bonded to copper tubes for superior heat transfer. 1-inch thick rubber cabinet insulation with density 32 kg/m³ minimize energy losses and increase unit efficiency. FB4P series comes with polyester powder painted zinc coated galvanized steel casing. Super quite multi 3 speed motor for field selection & electric heaters are available option at field installation.

MODEL NUMBER NOMENCLATURE - FB4P - R410A SERIES

1	2	3	4	5	6	7	8	9	10	11	12	13	14
F	B	4	P	S	N	F	0	4	8	0	0	0	E

Model Type
F Series Fan Coils

Model Series
B = Standard

Positioning
4 = Multipoise

Series Version
P = Second Series

Source
S = SAMCO

Power Supply (V/Ph/Hz)
N = 230/1/60
S = 230/1/50

Cabinet
F = Single Piece Cabinet

Unit Size
048 = 48,000 Btuh
060 = 60,000 Btuh

Factory Installed Option
000 = Electric Heater (KW)

Controls
A = None
E = Electronic

Physical Data - FB4P Series

Unit Model	48	60
Unit size (Tons)	4.0	5.0
Motor HP	3/4	3/4
Number of Motor Speeds	3	
Evaporator Coil		
Coil Material (HP Tube)	3/8" Dia. Copper Tube	
Coil Material (Finplate)	Aluminum	
Number of Rows / Fins Per Inch	3 / 14.5	
Coil Type	A	
Coil Connection Size (Suction, Liquid) Inch	3/4" Dia. / 3/8" Dia.	
Drain Diameter Inch	3/4" Dia	
Refrigerant		
Metering Device	Bypass AccuRater	
Piston Size	0.076"	0.084"
Blower Diameter / Width, mm	269.75/ 241.3	
Filter Type	Washable Aluminum Filter	
Filter Qty. / Size (mm)	505.5 x 547.0	
Unit Dimensions		
Configuration	A	
Width, mm	560.4	
Depth, mm	536.5	
Height, mm	1260.5	1357.3
Net Weight, kg	71.2	79.4

Electrical Data

Indoor Model	Power Supply	Vol - Min	Vol - Max	Fan FLA	MCA	MOCP
FB4PSNF048000E	230V-1Phz-60Hz	207	253	6.0	7.5	15.0
FB4PSNF060000E						

Combination Matrix and Ratings

Cooling Only At T1 Condition*

Indoor Model	Outdoor Model	Indoor Type	Capacity (Btu/hr)	CFM	Input Watts	AMPS	E.E.R	▲ A.C. (kwh)
FB4PSNF048000E	38PKS48DS20-01	Ducted Split	47000	1759	4070	6.8	11.55	10989
	38PKS48DS30-01		47000	1777	4070	17.8	11.55	10989
FB4PSNF060000E	38PKS60DS20-01		54000	1723	4675	8.0	11.55	12623
	38PKS60DS30-01		54000	1766	4675	21.2	11.55	12623

Cooling Only At T3 Condition*

Indoor Model	Outdoor Model	Indoor Type	Capacity (Btu/hr)	CFM	Input Watts	AMPS	E.E.R
FB4PSNF048000E	38PKS48DS20-01	Ducted Split	42000	1810	4827	8.0	8.70
	38PKS48DS30-01		42000	1805	4827	21.0	8.70
FB4PSNF060000E	38PKS60DS20-01		47000	1731	5662	9.5	8.30
	38PKS60DS30-01		47000	1767	5662	25.8	8.30

Legend and Notes

FLA - Full Load Amps

MCA - Minimum Circuit Amps

MOCP - Maximum Overcurrent Protection

CFM - Cubic Feet per Minute

EER - Energy Efficiency Ratio

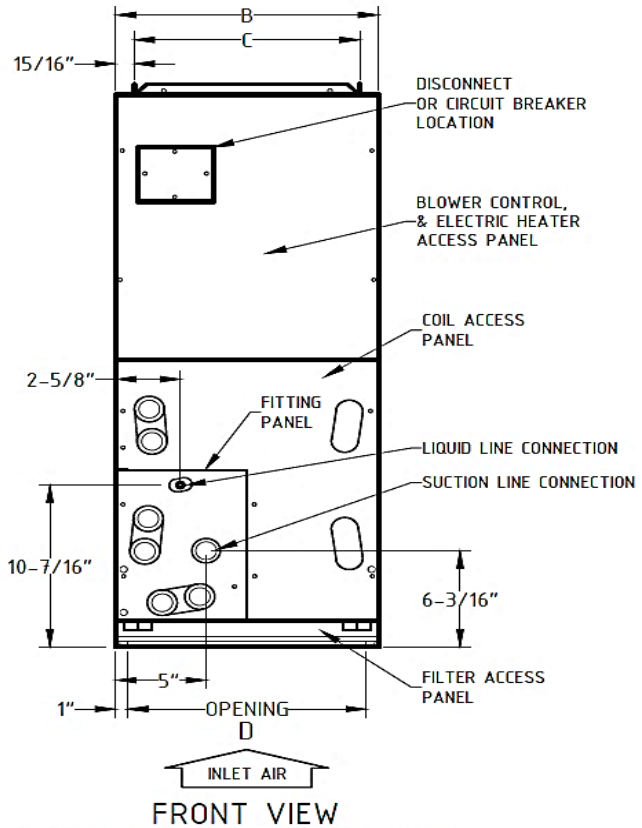
▲ (A.C.) Annual consumption is rated at 2700 hours x Input kW.A21

Notes:As per SASO 2682/2007 testing standard below:

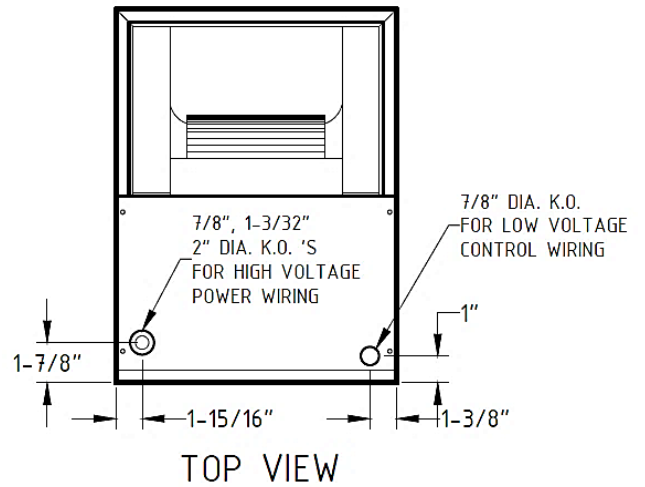
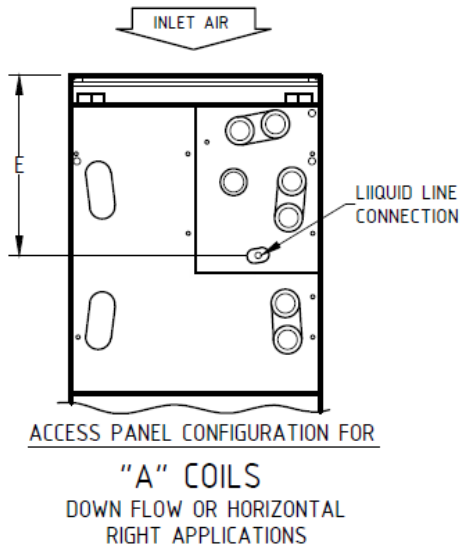
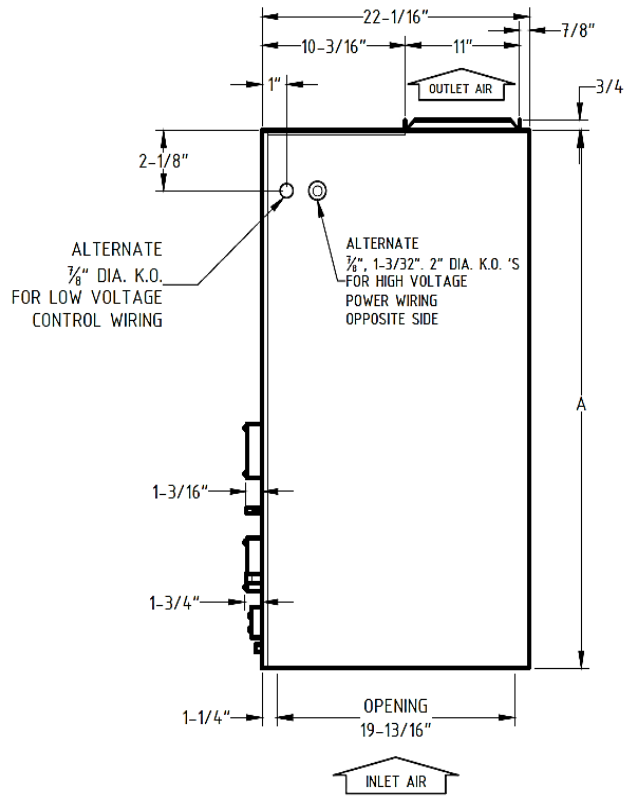
a) * T1 Cooling Standard: 80.6F db, 66.2F wb indoor entering-air temperature and 95.0F db, 75.2F wb air entering outdoor unit.

b) ** T3 Cooling Standard: 84.2F db, 66.2F wb indoor entering-air temperature and 114.8F db, 75.2F wb air entering outdoor unit.

Unit Dimensional Drawing



SHOWN WITH "A" COIL DETAILS CONNECTION LOCATIONS FOR UPFLOW OR HORIZONTAL APPLICATIONS



Unit Size	Coil Type	A		B		C		D		E	
		in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
048	A	49-5/8	1260.5	21-1/8	536.5	19-1/4	489.0	19-1/8	485.8	15-11/16	398.3
060	A	53-7/16	1375.3	21-1/8	536.5	19-1/4	489.0	19-1/8	485.8	19-1/2	495.3

Unit Connection Sizes:

- Suction: 048 & 060 – 7/8" I.D Sweat
- Liquid: 3/8" I.D Sweat
- Condensate: 3/4" FPT

Detailed Performance Data

Matching 38P with FB4P

Nom Cap. Mbtuh	Evaporator Air		Condenser Air Entering Deg. F																	
			75			85			95			105			115			120		
	CFM	EWB	Cap. MBH		kW*	Cap. MBH		kW*	Cap. MBH		kW*	Cap. MBH		kW*	Cap. MBH		kW*	Cap. MBH		kW*
			Tot	Sen		Tot	Sen		Tot	Sen		Tot	Sen		Tot	Sen		Tot	Sen	
48	1300	72.0	55.0	28.3	3.4	52.4	27.2	3.7	49.8	26.2	4.1	47.0	25.1	4.5	44.0	23.9	4.9	42.2	23.3	5.2
		66.2	50.2	36.5	3.4	47.6	35.3	3.7	45.0	34.1	4.1	42.4	33.0	4.5	38.8	31.5	4.9	36.8	30.7	5.1
		62.0	46.3	42.0	3.3	44.1	40.9	3.7	41.9	39.8	4.1	39.5	38.4	4.5	35.9	35.9	4.9	34.3	34.3	5.1
		57.0	44.8	44.8	3.3	43.0	43.0	3.7	41.3	41.3	4.1	39.2	41.3	4.5	35.9	35.9	4.9	34.4	34.4	5.1
	1500	72.0	55.9	29.6	3.4	53.4	28.6	3.7	50.7	27.6	4.1	47.8	26.4	4.5	44.7	25.2	4.9	43.0	24.7	5.2
		66.2	51.3	39.0	3.4	48.6	37.8	3.7	46.0	36.6	4.1	43.3	35.4	4.5	39.8	34.1	4.9	37.8	33.3	5.2
		62.0	47.9	45.4	3.4	45.6	44.2	3.7	43.2	42.7	4.1	40.9	40.9	4.5	37.8	37.8	4.9	36.2	36.2	5.1
		57.0	47.1	47.1	3.3	45.2	45.2	3.7	43.1	43.1	4.1	40.9	40.9	4.5	37.8	37.8	4.9	36.2	36.2	5.1
	1750	72.0	56.8	31.2	3.4	54.3	30.2	3.7	51.5	29.1	4.1	48.6	28.0	4.5	45.4	26.7	5.0	43.8	26.3	5.2
		66.2	52.3	41.9	3.4	49.6	40.7	3.7	<u>47.0</u>	39.5	4.1	44.2	38.2	4.5	40.8	37.0	4.9	38.8	36.2	5.2
		62.0	49.3	49.3	3.4	47.2	47.2	3.7	44.8	44.8	4.1	42.6	42.6	4.5	39.6	39.6	4.9	38.0	38.0	5.2
		57.0	49.4	49.4	3.4	47.2	47.2	3.7	44.9	44.9	4.1	42.6	42.6	4.5	39.6	39.6	4.9	38.0	38.0	5.2
60	1300	72.0	62.8	31.5	3.8	60.5	30.6	4.3	57.3	29.3	4.7	53.4	27.8	5.2	49.0	26.1	5.7	46.7	25.3	5.9
		66.2	57.9	39.6	3.8	55.0	38.4	4.2	51.4	36.8	4.7	47.2	35.0	5.1	42.6	33.1	5.6	40.2	32.1	5.8
		62.0	53.9	45.2	3.8	50.5	43.6	4.2	46.6	41.7	4.6	42.5	39.7	5.0	38.3	37.5	5.5	36.3	36.3	5.7
		57.0	50.2	50.2	3.8	47.5	47.5	4.1	44.5	44.5	4.5	41.3	44.5	5.0	38.0	38.0	5.5	36.3	36.3	5.7
	1500	72.0	63.9	32.8	3.9	61.8	32.0	4.3	58.6	30.8	4.7	54.7	29.4	5.2	50.2	27.7	5.7	47.8	26.8	5.9
		66.2	59.3	41.9	3.8	56.4	40.9	4.2	52.8	39.4	4.7	48.6	37.7	5.1	44.1	35.8	5.6	41.6	34.8	5.9
		62.0	55.5	48.5	3.8	52.4	47.1	4.2	48.5	45.2	4.6	44.3	43.1	5.1	40.5	40.5	5.5	38.6	38.6	5.8
		57.0	53.2	53.2	3.8	50.3	50.3	4.2	47.2	47.2	4.6	43.9	43.9	5.0	40.4	40.4	5.5	38.6	38.6	5.8
	1750	72.0	64.8	33.9	3.9	62.7	33.2	4.3	59.6	32.1	4.7	55.6	30.7	5.2	51.1	29.1	5.7	48.6	28.2	5.9
		66.2	60.3	44.0	3.8	57.5	43.1	4.2	<u>54.0</u>	41.8	4.7	49.6	40.1	5.1	45.1	38.3	5.6	42.6	37.3	5.9
		62.0	56.7	51.4	3.8	53.7	50.2	4.2	50.1	48.4	4.7	46.1	46.1	5.1	42.5	42.5	5.6	40.6	40.6	5.9
		57.0	55.2	55.2	3.8	52.6	52.6	4.2	49.5	49.5	4.7	46.1	46.1	5.1	42.4	42.4	5.6	40.5	40.5	5.9

Notes:

1. kW* — Total System Power Input
2. Ewb — Entering Wet-Bulb
3. SHC — Sensible Heat Capacity (1000 Btuh) Gross
4. ***Bold, Italics, Underlined*** - Standard Ratings
5. Formulas:
 - a) Leaving db = Entering - Sensible Heat Cap / (1.09 x CFM)
 - b) Leaving wb = wb corresponding to air leaving coil (hwb)
 - c) hwb Leaving = hwb entering - total cap(Btuh)/(4.5 X CFM)
6. Direct interpolation is permissible. Do not extrapolate.

Fan Performance

Fan Performance English - FB4P Air Flow (CFM)

E.S.P. in.wg.	0			0.2			0.3			0.4		
	Unit	H	M	L	H	M	L	H	M	L	H	M
FB4PSNF048000E	1880	1740	1425	1785	1660	1395	1700	1585	1360	1615	1510	1315
FB4PSNF060000E	1880	1740	1425	1785	1660	1395	1700	1585	1360	1615	1510	1315

Fan Performance English - FB4P Air Flow (CFM) - Continued

E.S.P. in.wg.	0.5			0.6		
	Unit	H	M	L	H	M
FB4PSNF048000E	1520	1435	1255	1430	1350	117
FB4PSNF060000E	1520	1435	1255	1430	1350	117

Fan Performance SI - FB4P Air Flow (m³/hr)

E.S.P. in.wg.	0			50			75			100		
	Unit	H	M	L	H	M	L	H	M	L	H	M
FB4PSNF048000E	3194	2956	2421	3033	2820	2370	2888	2693	2311	2744	2566	2234
FB4PSNF060000E	3194	2956	2421	3033	2820	2370	2888	2693	2311	2744	2566	2234

Fan Performance SI - FB4P Air Flow (m³/hr) - Continued

E.S.P. in.wg.	125			150		
	Unit	H	M	L	H	M
FB4PSNF048000E	2582	2438	2132	2430	2294	199
FB4PSNF060000E	2582	2438	2132	2430	2294	199

Estimated Sound Power Level 60Hz (dBA)

Unit	Conditions		Octave Band Center Frequency*						
	CFM	E.S.P	63	125	250	500	1000	2000	4000
FB4PSNF048000E	1785	0.2	69	65	61	58	56	54	50
FB4PSNF060000E	1785	0.2	70	66	62	59	57	55	51

Minimum CFM and Motor Speed Selection

Unit	Heater kW									
	3	5	8	9	10	15	18	20	24	30
FB4PSNF048000E	—	—	1400	1400	1400	1400	1400	1400	1400	1400
FB4PSNF060000E	—	—	1400	1400	1400	1400	1400	1400	1400	1400

Factory Installed Filter Static Pressure Drop (in.wg.)

Unit	CFM								
	400	600	800	1000	1200	1400	1600	1800	2000
FB4PSNF048000E	—	—	—	—	—	0.092	0.12	0.152	—
FB4PSNF060000E	—	—	—	—	—	0.092	0.12	0.152	—

Electric Heater Static Pressure Drop (in.wg.)

Unit Size: 48 - 60		
Heater Elements	kW	E.S.P Correction
0	0	+0.04
2	8, 10	+0.02
3	9, 15	0
4	20	-0.02
6	18, 24, 30	-0.10

Notes: Sound pressure assumes "standard room", 3 meters from exit, no ducts, ducts will further reduce sound.

Legend:

CFM - Cubic Feet per Minute

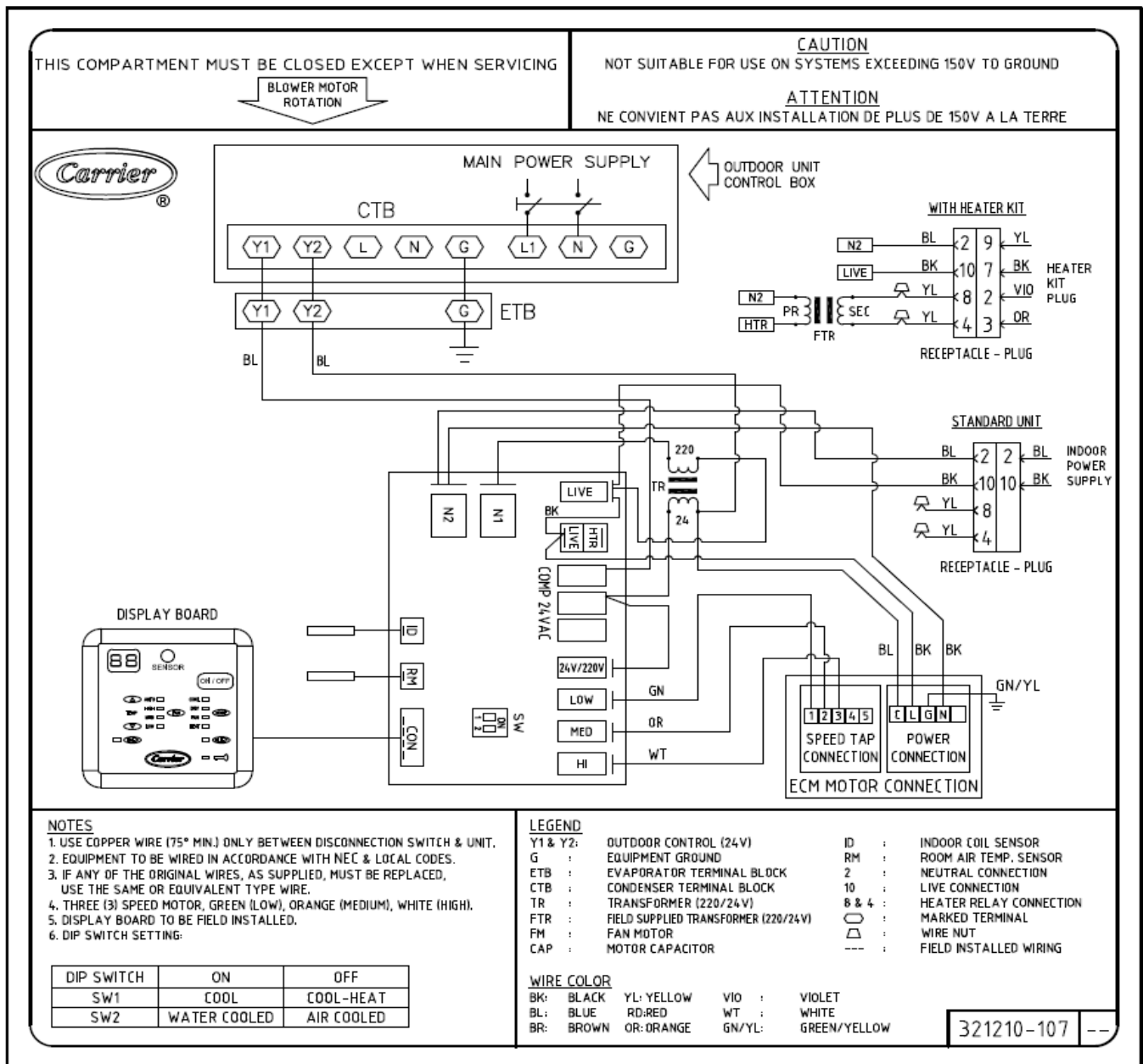
in.wg - Inch Water Gage

Pa - Pascal

dBA - Decibel

E.S.P - External Static Pressure

Typical Wiring Schematic



**Wiring Diagram: FCU FB ECM Motor Cool and Electric Heater
Application: 60Hz (48 - 60)**

Controller For Ducted Fan Coil Units

Features: The controller is used to control air cooled ducted split unit, supports the following functions:

- Modes: Cool, Dry, Fan, Heat
- Indoor fan speed: Auto, High, Medium, Low
- Sleep mode
- Compressor protections:
 - Comp 3 minutes restart protection
 - Indoor coil anti-freeze
 - Room sensor and indoor coil sensor failure monitoring
- Non volatile memory – keep system settings
- Programmable On/Off timer
- Random restart to minimize voltage dip during compressor first cut in cycle upon power up.

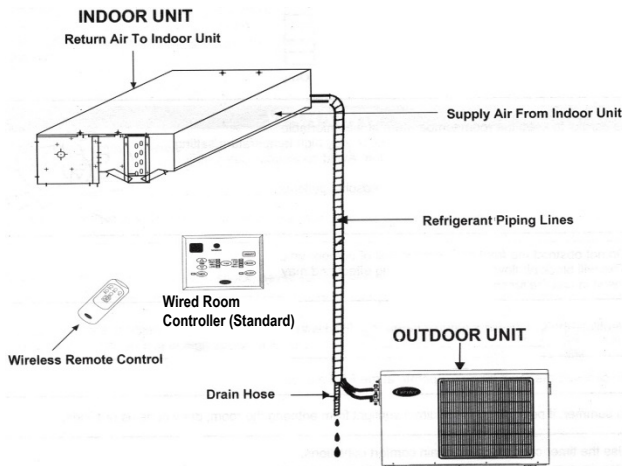
Hardware Setting: A 2 way DIP switch is used to configure:

DIP Switch	On	Off
SW1	Cool	Cool-Heat
SW2	Water System	DX System

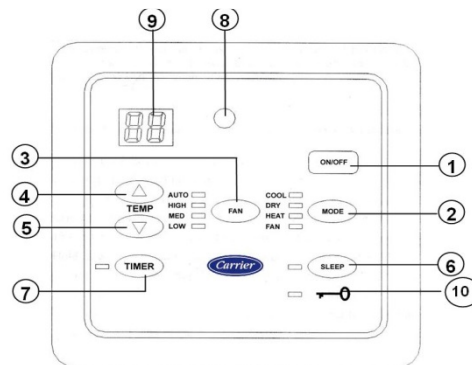
Error Code: If multiple faults happen at the same time, the corresponding error code will be shown one after another

Fault	Error code
Room sensor fault	E1
Indoor coil sensor fault	E2
Comp fault	E4

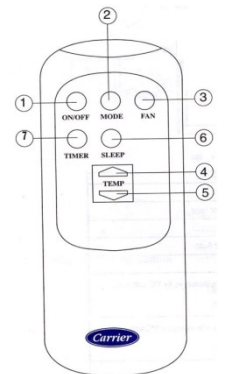
Split System Description



Wired Room Controller



Wireless Room Controller



Notes: The wired room controller is mounted on the wall and can control all system functions without wireless remote control.

1) On/Off Key: If you press this key, the system will begin operation, Press the key again, and operation stops. (You can hear a receiving beep). If you press this key immediately after turning off the system, the compressor will not operate for 3 minutes to prevent overloading.

2) Operation Mode Selection Key: Toggles the operation mode: Cool, Dry, Heat, or Fan only

- “COOL” Led Lights on when selecting COOL mode.
- “DRY” Led Lights on when selecting DRY mode.
- “HEAT” Led Lights on when selecting Heat mode.
- “FAN” Led Lights on when selecting FAN mode.

3) Fan Speed Selection Key: Toggles the fan speed: Auto, High, Medium, or Low, Note: Fan key is invalid in Dry mode.

4) Temperature Up Key: By pressing Temperature up Key, the setting temperature increases by 1°C with each press.

5) Temperature Down Key: By pressing temperature down key, the setting temperature decreases by 1°C with each press. If you set the desired room temperature, then system will maintain the room temperature as set. Upon setting the desired room temperature the system will maintain the room temperature

Cool Mode: If the room temperature is higher than the setting, the compressor will automatically turn on provide a cooling effect. On the hand, if the room temperature is lower than the setting, the compressor will automatically turn off to stop cooling operation. If indoor fan is programed to be turned off with comp signal, it will turn off once comp is cut off

Heat Mode: If the room temperature is lower than the setting, the Electric heater will automatically turn on to provide a heating effect. If the room temperature is higher than the setting, the heater will automatically turn off to stop heating operation. If indoor fan is programed to be turned off with heater signal, it will turn off once heater is cut off but subject to 30 sec dispersing remaining heat timing.

Dry Mode: The fan speed runs automatically at low speed and compressor stopping and running is controlled by the difference between room and setting temperatures and by continuous running time. If indoor fan is programed to be turned off with comp signal, it will turn off once comp is cut off
 - In Dry mode, the humidity is reduced in the space to be air-conditioned.

Fan Mode: There will be no cooling or heating effects; only the fans of indoor unit will run for ventilation at the selected speed (High, Med, and Low).
 - In COOL or HEAT mode and if AUTO fan speed is selected; Fan speed is automatically selected by controller according to the difference between setting temperature and room temperature, fan will be continuously running at low speed after setting temperature is achieved.

Notes:

- a) Temperature setting range is 16°C to 30°C or 60°F to 85°F.
- b) Hold down at the same time for about 5 seconds, Temp down and fan keys will toggle the temperature setting from degree C to degree F and vice versa.
- c) Press any temperature key will flash the current setting temperature for 4 seconds, Should there be no further key press, it will revert to room temperature display. Temperature display range is 0 C to 50 C or 32 F to 99 F.
- d) Temp keys are invalid in Fan mode.

6) Sleep Key: Press this key to set the SLEEP timer and then the sleep led will light on, to cancel the sleep timer press this key again.

- Sleep function for healthy sleep to control automatically the room temperature and stop automatically the operation of the air conditioner after certain set off time.
- Sleep mode is valid in cool or heat mode and invalid in Fan mode.

7) Timer Key: Upon count down of the set hours, the system will switch from OFF to ON or vice-versa.

- OFF Timer Function to stop automatically, the air conditioner after certain set OFF time.
- ON Timer Function to start automatically, the air conditioner after certain set ON time.
- * Timer setting is 1 Hour to 24 Hour. The timer led will light on when operating the Timer Function
 First key press will flash the digital display and Timer Led for 3 seconds.

Notes:





- a) The digital displays show the number of hours previously set, only the Timer Led flashes.
- b) Subsequent 3 seconds will show the number of hours previously set; only the timer led flashes.
- c) Should there be no further key press, it will revert to normal mode.
- d) Should Timer key is not released timer setting will increase automatically every 0.5-second.

8) Sensor: Receives the remote controller's signal

9) Display Screen: Displays the set temperature and displays also the TIMER settings when adjusting it.

10) Key Lock Mode: To activate key lock mode, hold down for 3 seconds, temp. Down Key (5) and Mode Key (2). In key lock mode, all keys are not valid except ON/OFF Key (1) to turn ON/OFF the system.

Notes:

- a) Hold down Temp Down and Sleep button for one second to enter into coil temperature display mode. Press Temp Up key to display indoor coil temperature, High Fan LED flashes. With the same sequence to exit coil temperature display mode. Temperature display range is -9C to 78 °C.
- b) Hold down  and  buttons for only 1 second (5 sec to toggle between °C and °F temperature) to activate temperature display setting and auto fan LED flashes. Repeat the same sequence to cancel this function. Press  or  button to change the setting from 1 to 2. "1" means disable room temperature display and "2" means enable room temperature display.

Menu	Parameter	Set Range	Default value	Remarks
1	Temperature display, Auto fan LED flashing	1~2	1	1: Disable room temp display
				2: Enable room temp display
2	Cool mode fan control function, Auto & High fan LED flashing	1~2	1	1: Comp OFF, Fan ON
				2: Comp OFF, Fan OFF
3	Heat mode fan control function, Auto & Medium fan LED flashing	1~2	1	1: Heater OFF, Fan ON
				2: Heater OFF, Fan OFF

Carrier Accessories

Electric Heaters

Heater Part No.	kW @ 240V	Volts/Ph	Stages (kW Operating)	Internal Circuit Protection	Fan Coil Size Used With	Heating Cap** @ 230V
KFCEH0501N05	5	230/1	5	None	048 - 060	15,700
KFCEH0801N08	8	230/1	8	None	048 - 060	25,100
KFCEH0901N10	10	230/1	10	None	048 - 060	31,400
KFCEH3201F20	20	230/1	5, 20	Fuse‡	048 - 060	62,800
KFCEH1601315	15	230/3	5,15	None	048 - 060	47,100
KFCEH2001318	18	230/3	6, 12, 18	None	048 - 060	56,500
KFCEH3401F24	24	230/3*	8, 16, 24	Fuse	048 - 060	78,300
KFCEH3501F30	30	230/3*	10, 20, 30	Fuse	048 - 060	94,100
KFCEH2401C05	5	230/1	5	Circuit Breaker	048 - 060	15,700
KFCEH2501C08	8	230/1	8	Circuit Breaker	048 - 060	25,100
KFCEH2601C10	10	230/1	10	Circuit Breaker	048 - 060	31,400
KFCEH3301C20	20	230/1	5, 20	Circuit Breaker	048 - 060	62,800
KFCEH2901N09	9	230/1†	3, 9	None	048 - 060	28,200
KFCEH3001F15	15	230/1	5, 15	Fuse‡	048 - 060	47,100
KFCEH3101C15	15	230/1	5, 15	Circuit Breaker	048 - 060	47,100

* Field convertible to 1 phase.

† Field convertible to 3 phase.

‡ Single point wiring kit required for these heaters in Canada.

** Blower motor heat not included.

Smart Heat

Heater Part No.	kW @ 240V	Volts/Ph	Stages (kW Operating)	Internal Circuit Protection	Fan Coil Size Used With	Heating Cap* @ 230V
KFCEH0201H15	15	230/1	3, 8, 11, 15	Fuse	48	47,100
KFCEH0301H20	20	230/1	5, 10, 15, 20	Fuse	60	62,800

* Blower motor heat not included.

When using units with 20-, 24-, and 30-kw electric heaters, maintain a 1-in. clearance from combustible materials to discharge plenum and ductwork and maintain a distance of 36 in. from the unit. Use an accessory downflow base to maintain proper clearance on downflow installations.

Use flexible connectors between ductwork and unit to prevent transmission of vibration. When electric heater is installed, use heat resistant material for flexible connector between ductwork and unit at discharge connection. Ductwork passing through unconditioned space must be insulated and covered with vapor barrier.

Accessories

Item	Accessory Part No*	Fan Coil Size Used With
Disconnect Kit	KFADK0101DSC	48-60
Downflow Base Kit	KFACB0301CFB	
Downflow Conversion Kit	KFADC0401ACL	
Single-Point Wiring Kit	KFASP0101SPK	
Filter Kit (12 Pack)	KFAFK0312LRG	
Power Plug Kit (25 Pack)	KFAPP0125PLG	
PVC Condensate Trap Kit (50 Pack)	KFAET0150ETK	
Air Cleaner 240-volt Conversion Kit	KEAVC0201240	
Downflow/Horizontal Conversion Gasket Kit	KFAHD0101SLP	

* Factory-authorized and listed, field installed.

Guide Specifications

Cooling Only/Electric Heat Fan Coil Unit HVAC Guide Specifications Size Range: 4 to 5 Nominal Tons

General

System Description

The fan coil unit is designed for outdoor (or under ceiling) installation, electrically controlled cooling and heating (option). Unit shall be designed for vertical and horizontal installation. Standard unit shall include permanent filter with aluminum frame. Unit shall be designed for medium and high external static pressure up to 0.7 inch water.

Quality Assurance

- A. Unit shall be rated in accordance with SASO 2682/2007.
- B. Unit shall be designed in accordance with ISO 9001:2000, and shall be manufactured in a facility registered by ISO 9001:2000.
- C. Unit casing shall be capable of withstanding 500 hour salt spray exposure per ASTM B117.
- D. Installation and adhesive shall meet NFPA90A requirements for flame spread and smoke generation.

Products

- A. The unit shall be factory assembled single piece cooling unit, with optional electric heat (field installation). Unit cabinet shall be constructed of galvanized steel bonderized and powder painted enamel finish. The unit shall be insulated with rubber insulation that is 10 mm thickness & 32 kg/m³ density.
- B. Unit cabinet panels shall be single skin. Cabinet panels shall be easily removable for service.
- C. Unit shall have a permanent type filter with 1 inch aluminum frame. Filter shall be flame retardant polyester fibers. Filters shall be accessible through an access panel.
- D. Units shall have high impact thermal plastic sloped condensate pan. Unit shall have primary and secondary drain connection with brass inserts. Unit shall have additional external drain pan for the coil connection condensate water.
- E. The unit fan wheel shall be directly connected to the motor. The fan wheel shall be made from steel with a corrosion resistance finish, it shall be a dynamically balanced and double inlet forward curved blades. Unit fan wheel chamber shall be made from galvanized steel.
- F. Unit coil shall have aluminum fins mechanically bonded to seamless smooth copper tubes with all joints brazed. Unit coil shall be accessible through an access panel for cleaning. The coil connection shall be sweat type.
- G. The unit fan motor shall have permanently lubricated sleeve bearing. The motor shall have overload protection and B class insulation. Unit shall have multiple electric entries for more flexibility.
- H. Unit control board shall be 24 VAC and UL listed.

