



turn to the experts™ 



42CE

Fan Coil Unit



Carrier improves the world around us; Carrier improves people's lives; our products and services improve building performance; our culture of improvement will not allow us to rest when it comes to the environment.



Carrier China

Carrier Corporation is a subsidiary of the United Technologies Corp. (UTC), which ranks 123th in Fortune Top 500 in 2009 and has its operation in aerospace and building systems industries all over the world.

Carrier is the largest supplier of HVAC and refrigeration equipment around the world, and also a global leader to provide energy management and sustainable building services. Its products and sales cover China and other 170-plus countries. From the time our founder Dr. Carrier invented the first system of modern air conditioning in 1902, Carrier has been the world leader in the air conditioning industry, and up to now, holds several thousands of air-conditioning patented technologies as well as 11 R&D centers in China and other countries. In 2009, Carrier ranked top in the industry with its sales volume of US \$11.4 billion.

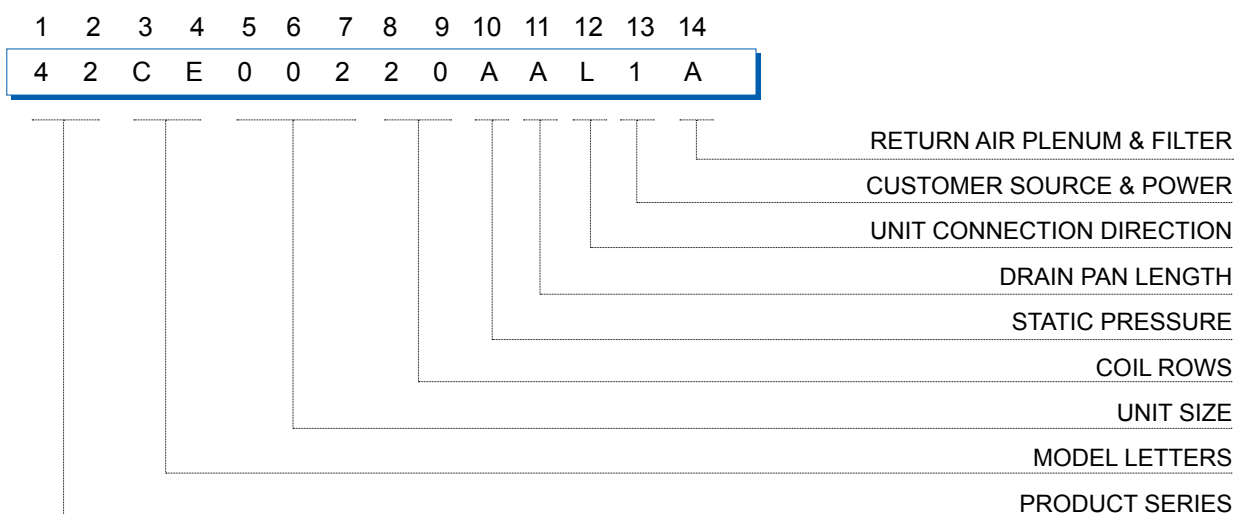
In 1987, Carrier established its first joint venture in Shanghai, China. Today, Carrier has more than 2,000 Chinese employees, and around the country, there are over 40 sales and after-sale service organizations to provide customers with quality products.

The world-class Carrier factory in China has a number of technically advanced production lines of units and compressors, manufacturing commercial and residential central air-conditioning units and air-end products. A wide range of products are able to meet diversified requirements of different customers.

Contents

Model number Nomenclature/Air Flow	-----	1
Features	-----	2
Technical Parameter	-----	4
Dimension	-----	5
Fan Performance	-----	7
42CE Fan Coil Unit	-----	8

Model number Nomenclature



- DIGIT NO. 1,2
product series
42 : fan coil unit
- DIGIT NO. 3,4
model letters
CE : horizontal ceiling FCU
- DIGIT NO. 5,6,7
unit size (airflow=unit size × 170 m³/h)
002 : 340m³/h
003 : 510m³/h
- DIGIT NO. 8,9
coil rows
20 : 2Row cooling
30 : 3Row cooling
31 : 3Row cooling + 1Rows heating
- DIGIT NO. 10
external static pressure
0 : 12Pa standard
3 : 30Pa with static pressure
5 : 50Pa high static pressure
- DIGIT NO. 11
drainpan
A : standard drainpan
B : lengthen drainpan
C : stainless drainpan
D : lengthed stainless drainpan
- DIGIT NO. 12
unit connection direction (face to discharge air)
L : left
R : right
- DIGIT NO.13
customer source & power
0 : sale in local 220V-1Ph-50Hz (omissible)
1 : export to Hongkong 220V-1Ph-50Hz
2 : export 220V-1Ph-50Hz
3 : export 230V-1Ph-50Hz
4 : export 220V-1Ph-60Hz
5 : export 230V-1Ph-60Hz
6 : export 115V-1Ph-60Hz
7 : export 240V-1Ph-50Hz
- DIGIT NO. 14
return air plenum & filter
0 : without both (omissible)
A : unit with rear return air plenum
B : unit with bottom return air plenum
C : unit with rear return air plenum & nylon filter
D : unit with bottom return air plenum & nylon filter

Air Flow

340~2500m³/h

Features

42CE Fan Coil Units are the new energy saving products improved with advanced technology by Carrier. The units have advanced technology of low noise fan, air condition manufacture process and the last lanced sine wave fin. 42CE is developed to be an ultra-tranquil, high efficiency, convenient using and compact configuration product.

Ultra-tranquil

The units use the wide wheel of latest design and low speed forward-curved blades, which are most suitable for the motor. Addition with good insulated noise eliminated material, unit noise is 2~5dB(A) lower than the same type unit.



High efficiency

Aluminum lanced sine wave fin coils with copper tubing assure highly efficient heat transfer between primary and secondary coil surfaces.



Ultra thin

The unit height is only 230mm so that they can save installation space and meet the requirement of all kinds of situations.



Agile selection

Considering of the specialties and limit of installation, Carrier offer different drain pan to the consumer.

- Standard drain pan-reduce the installation space, especially to the narrow installation space.
- Lengthened drain pan-well collect possible sweating from field installed valves.
- External drain pan-350mm length can be selected to meet the requirement of all kind of condition.

Beside the characteristic above, the units have more development below

- Change the terminal from close to open structure and the wiring of motor to metal tube to assure more safety and reliability.
- The latest noise eliminated fiberglass insulation can assure not only the good appearance and perfect performance but also well-insulated performance measuring up the international standard under the testing of most abominable sweat condition.
- The round wheel of latest design can apply high temperature situation reliably.
- The drain pan and insulation are mould holistically to make the process more easy and better as well as prevent the leak when welding the drain pan.

NOTE: Distinguish the direction of right or left by facing to the air outlet.

Accessories

3-way valve



2-way valve



Thermostat



Remote Controller

Technical Parameter

TECHNICAL DATA (3R COIL)

Performance \ Model		002	003	004	005	006	008	010	012	014
Air Volume m³/h	HIGH	340	510	680	850	1020	1360	1700	2040	2380
	MED	265	405	535	680	790	1060	1360	1595	1904
	LOW	195	305	405	510	585	790	1020	1180	1428
Cooling Capacity W		2300	3200	4250	5000	5900	8100	9800	11050	13000
Heating Capacity W		3600	5100	6450	7870	9300	12500	15200	17200	20500
Power Input W	12 Pa	32	46	56	75	94	134	150	180	225
	30 Pa	40	52	72	87	102	155	172	210	240
	50 Pa	46	63	84	98	112	174	195	236	290
Noise dB(A)	12 Pa	36	38	41	43	45	46	47	50	51
	30 Pa	40	41	44	46	47	48	49	51	53
	50 Pa	42	44	46	47	49	50	51	53	54
Water Flow l/min		7.7	10.1	13.2	16.7	19.7	24.2	29.7	32.5	39.3
Water Drop KPa		25	26	35	30	32	35	50	50	53
Fan	Type	Centrifugal, forward-curved Blades								
Motor	Type	Permanent Split Capacitor								
Coil	Row	3								
	Working Pressure	1.6 MPa								
CONNS	In-Out	3/4" FPT								
	Condensing Drain	3/4" MPT								
Net Weight	Kg	13.4	14.9	16.9	18.2	19.5	26.9	29.5	33.6	39.5
Options		Thermostat, Motorized Valve, Return Air Plenum								

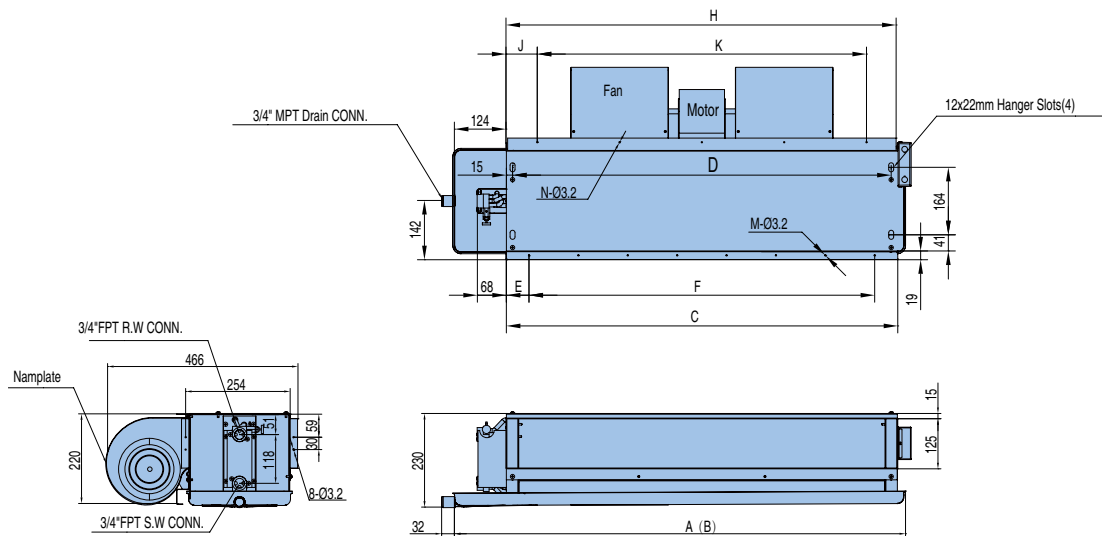
- Note:
1. The data is the performance in high speed with relevant static pressure.
 2. Cooling Conditions: Entering Water 7℃, Temperature Rise 5℃, Entering Air Temperature 27℃ DB, 19.5℃ WB.
Heating Conditions: Entering Water 60℃, Air 21℃ DB, the same water flow as the cooling conditions.
 3. The noise is tested in the anechoic test room, measured with a fine audiometer located 1 meter away from the unit front panel and the unit bottom panel.

Dimensions

Fan Coil Unit (2R COIL / 3R COIL)

Model	Dimension										
	A	B	C	D	E	F	H	J	K	M	N
42CE002	690	770	550	520	35	480	550	75	400	10	6
42CE003	770	890	630	600	75	480	630	115	400	12	6
42CE004	890	970	750	720	75	600	750	75	600	14	6
42CE005	970	1090	830	800	55	720	830	115	600	16	8
42CE006	1170	1410	1030	1000	95	840	1030	115	800	18	8
42CE008	1410	1530	1270	1240	95	1080	1270	35	1200	26	10
42CE010	1530	1770	1390	1360	95	1200	1390	95	1200	28	10
42CE012	1770	2010	1630	1600	95	1440	1630	115	1400	32	12
42CE014	2010	2250	1870	1840	95	1680	1870	135	1600	36	14

Note: B is the dimension of lengthen drain pan

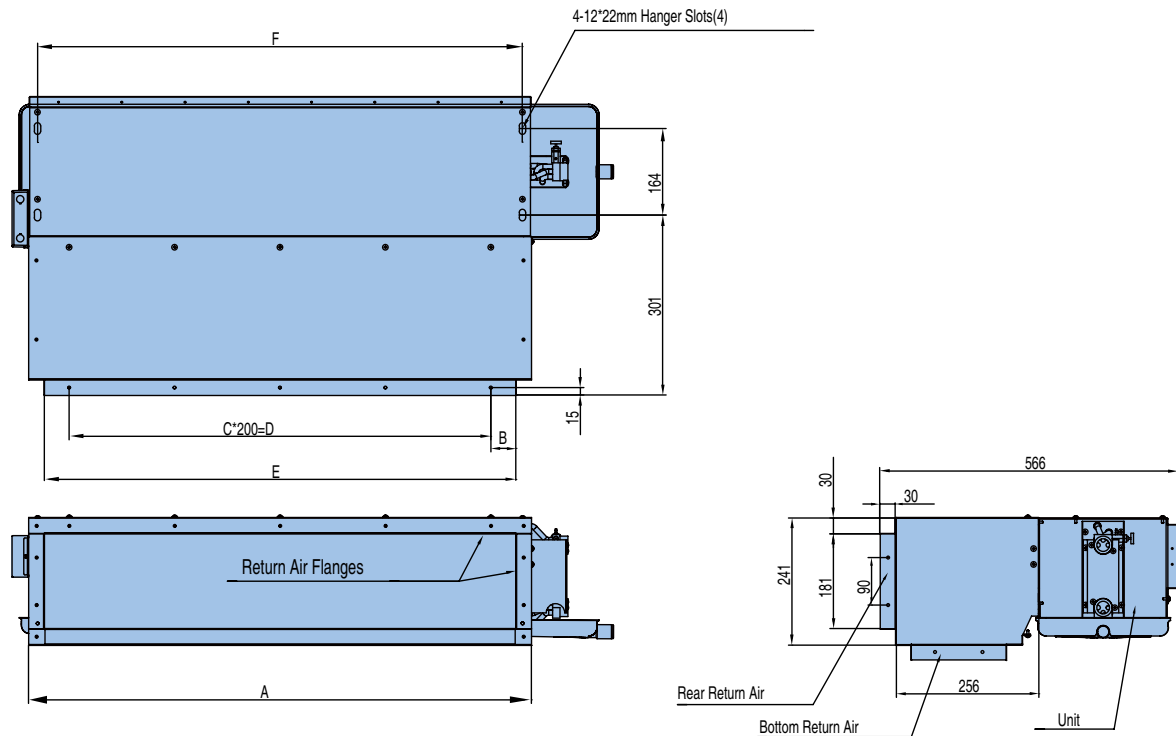


Dimensions

42CE Return Air Plenum

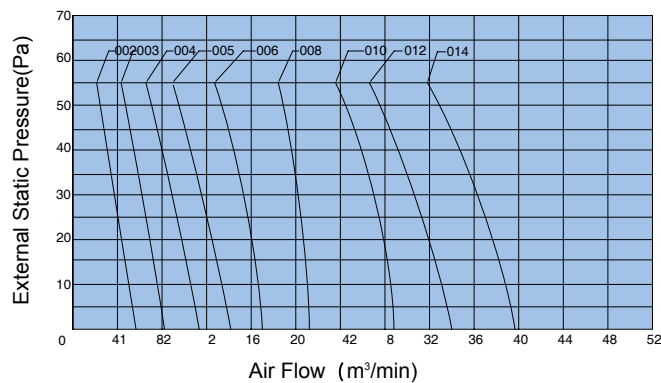
PART NO.	Dimension						USED IN
	A	B	C	D	E	F	
42CE402900	554	47	2	400	494	520	42CE002
42CE403900	634	87	2	400	574	600	42CE003
42CE404900	754	47	3	600	694	720	42CE004
42CE405900	834	87	3	600	774	800	42CE005
42CE406900A	1034	87	4	800	974	1000	42CE006
42CE408900	1274	107	5	1000	1214	1240	42CE008
42CE410900	1394	67	6	1200	1334	1360	42CE010
42CE412900	1634	87	7	1400	1574	1600	42CE012
42CE414900	1874	107	8	1600	1814	1840	42CE014

- Note: 1. With Rear/Bottom air return plenum
 2. Easily connect with Rear/Bottom air return plenum in the jobsite
 3. No filter in the air plenum, please install the filter at the return air duct



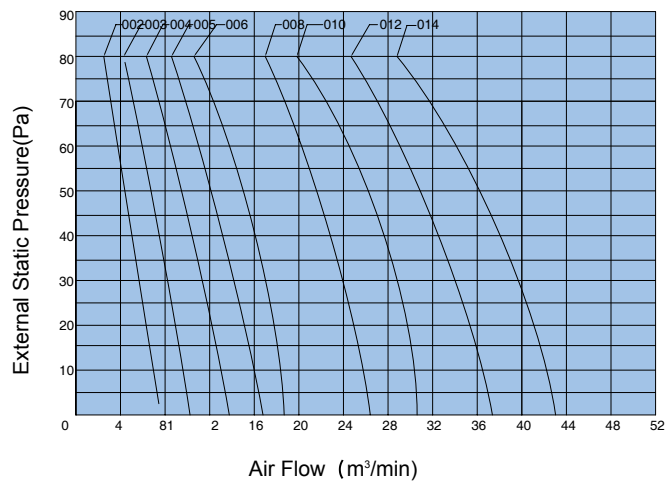
3/(3+1)R Standard Unit

42CE002300~42CE014300/42CE002310~42CE008310



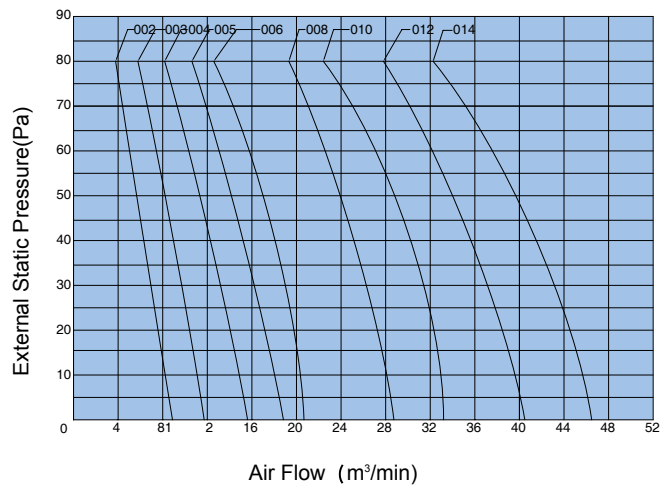
3/(3+1)R With Static Pressure Unit

42CE002303~42CE014303/42CE002313~42CE008313

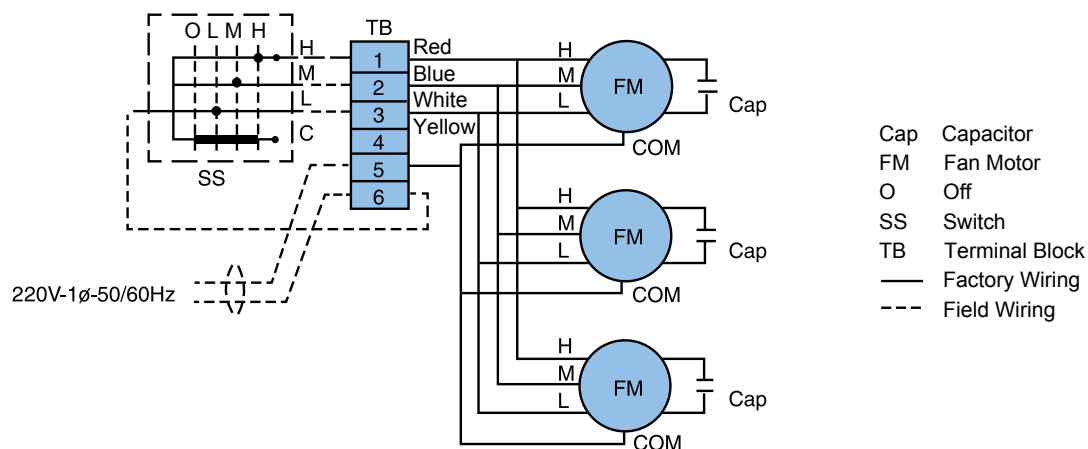


3/(3+1)R High Static Pressure Unit

42CE002305~42CE014305/42CE002315~42CE008315



42CE Fan Coil Unit



Power: 220V-1Ph-50Hz Type		002	003	004	005	006	008	010	012	014
Power Input (W)	2row 12Pa	32	46	56	75	94	134	-	-	-
	2row 30Pa	40	54	72	87	102	155	-	-	-
	2row 50Pa	46	65	84	98	112	174	-	-	-
	3row 12Pa	32	46	56	75	94	134	150	180	225
	3row 30Pa	40	52	72	87	102	155	172	210	240
	3row 50Pa	46	63	84	98	112	174	195	236	290
	3+1row 12Pa	32	46	56	75	94	134	-	-	-
	3+1row 30Pa	40	52	72	87	102	155	-	-	-
	3+1row 50Pa	46	63	84	98	112	174	-	-	-
Current (A)	2row 12Pa	0.15	0.21	0.25	0.34	0.43	0.61	-	-	-
	2row 30Pa	0.18	0.25	0.33	0.40	0.46	0.70	-	-	-
	2row 50Pa	0.21	0.30	0.38	0.45	0.51	0.79	-	-	-
	3row 12Pa	0.15	0.21	0.25	0.34	0.43	0.61	0.68	0.82	1.02
	3row 30Pa	0.18	0.24	0.33	0.40	0.46	0.70	0.78	0.95	1.09
	3row 50Pa	0.21	0.29	0.38	0.45	0.51	0.79	0.89	1.07	1.32
	3+1row 12Pa	0.15	0.21	0.25	0.34	0.43	0.61	-	-	-
	3+1row 30Pa	0.18	0.24	0.33	0.40	0.46	0.70	-	-	-
	3+1row 50Pa	0.21	0.29	0.38	0.45	0.51	0.79	-	-	-

Carrier Corporation identified six specific areas of concentration that directly impact how we, as a world manufacturer, balance our customer's needs for comfort with the environment's needs for responsible consumption.

