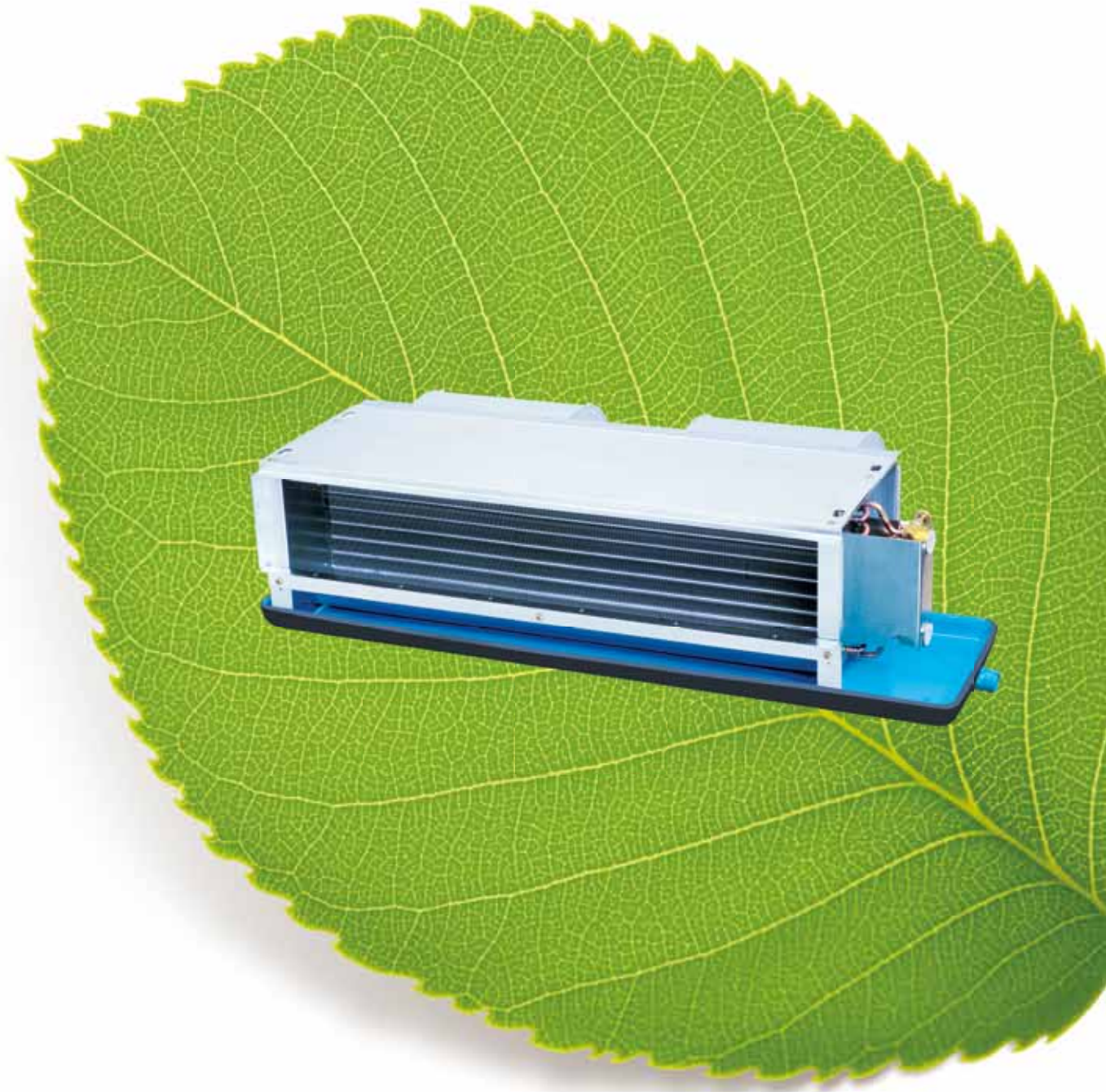




United Technologies

turn to the experts 



42CE

Fan Coil Unit

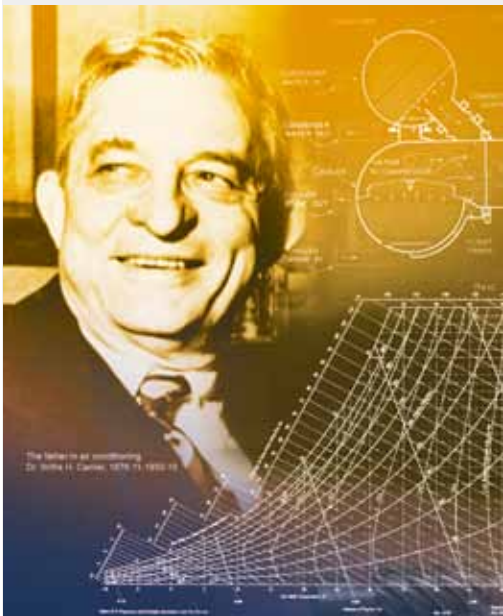
Air Volume: 340~2380m³/h



Carrier China

Carrier Corporation is a subsidiary of the United Technologies Corp. (UTC), which ranks the 150th in Fortune Top 500 in 2011 and has its operations in aerospace and building systems industries all over the world. From the time the founder Dr. Carrier invented the first system of modern air conditioning in 1902, Carrier has been the world leader in the air conditioning industry with its products and system solutions supplied to numerous famous buildings, and up to now, the network of distribution cover more than 170 countries all over the world. In 2011, Carrier ranked top in the HVAC industry field with its sales revenue of US \$12 billion.

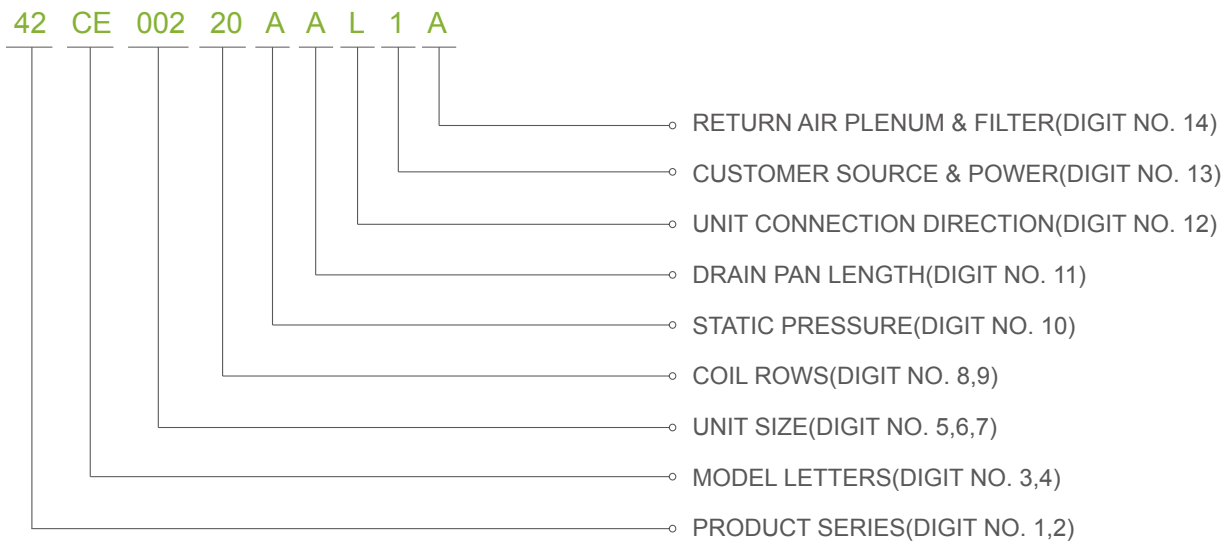
In China, there are 6 Carrier factories which have more than 2500 employees. As the world-class factory, Carrier has a number of technically advanced production lines, manufacturing commercial and residential chillers, compressors and air-side products. A wide range of products are able to meet diversified requirements of different customers. The global R&D center located in Shanghai has the capability of developing several major projects in the same time, with many advanced technical patents awarded to support Carrier stay most competitive in terms of technology advantage in the HVAC industry.



In 1998, Time magazine named Dr. Carrier one of its 20 most influential builders and titans of the 20th century.



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 : 2R cooling
30 : 3R cooling
31 : 3R cooling + 1R heating

🍃 DIGIT NO. 10
external static pressure
0 : 12Pa standard
3 : 30Pa mid static pressure
5 : 50Pa high static pressure

🍃 DIGIT NO. 11
drainpan
A : standard drainpan
B : lengthen drainpan
C : stainless drainpan
D : lengthen 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 mainland 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

340~2380m³/h

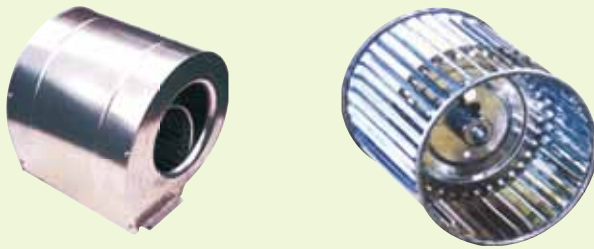
Features

Excellent performance and efficiency

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.

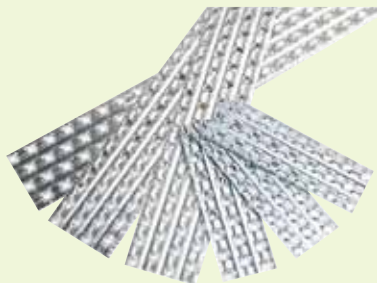
Ultra-tranquil

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.



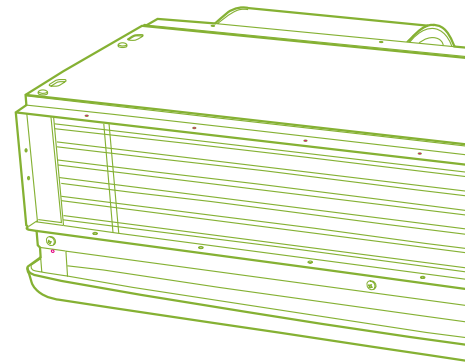
High efficiency

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.

Options



TMS710/720



TMS810

Thermostat



UV-C Sterilizing Lamp



Remote Controller

Technical Parameter

TECHNICAL DATA (2R COIL)

Performance		Model	002	003	004	005	006	008
Air Volume m ³ /h	HIGH		340	530	700	880	1020	1430
	MED		270	420	560	700	810	1140
	LOW		200	310	420	520	610	850
Cooling Capacity		W	1900	2820	3640	4500	5400	7200
Heating Capacity		W	3100	4400	5820	6900	8400	11160
Power Input W	12 Pa		32	46	56	75	94	134
	30 Pa		40	54	72	87	102	155
	50 Pa		46	65	84	98	112	174
Noise dB(A)	12 Pa		36	38	41	43	45	46
	30 Pa		40	41	44	46	47	48
	50 Pa		42	44	46	47	49	50
Water Flow		l/min	5.4	8.1	10.4	12.9	15.5	20.6
Water Drop		KPa	20	28	30	30	38	38
Fan	Type	Centrifugal, forward-curved Blades						
Motor	Type	Permanent Split Capacitor						
Coil	Row	2						
	Working Pressure	1.6 MPa						
CONNS	In-Out	3/4" FPT						
	Condensing Drain	3/4" MPT						
Net Weight		Kg	12.7	14.2	16.1	17.4	18.5	25.8
Options		Thermostat, Motorized Valve, Return Air Plenum						

TECHNICAL DATA (3R COIL)

Performance		Model	002	003	004	005	006	008	010	012	014
Air Volume m ³ /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	4150	5000	6200	8100	9800	11500	13500
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	6.6	9.2	11.9	14.3	17.8	23.2	28.1	32.9	38.6
Water Drop		KPa	25	21	30	30	32	28	40	40	50
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 °C, Temperature Rise 5 °C, Entering Air Temperature 27 °C DB, 19.5 °C WB.
Heating Conditions: Entering Water 60 °C, Air 21 °C 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.

Technical Parameter

TECHNICAL DATA (3+1R COIL)

Performance		Model	002	003	004	005	006	008
Air Volume m ³ /h	HIGH		340	510	680	850	1020	1360
	MED		265	405	535	680	790	1060
	LOW		195	305	405	510	585	790
Cooling W			2200	2900	3850	4750	5800	7900
Heating W			1900	2740	3300	4150	4900	6400
Power Input W	12 Pa		32	46	56	75	94	134
	30 Pa		40	52	72	87	102	155
	50 Pa		46	63	84	98	112	174
Noise dB(A)	12 Pa		36	38	41	43	45	46
	30 Pa		40	42	44	46	47	48
	50 Pa		42	44	46	47	49	50
Water Flow l/min	Cooling		6.3	8.3	11.0	13.6	16.6	22.6
	Heating		2.8	4.0	4.8	6.0	7.1	9.3
Water Drop KPa	Cooling		22	20	30	30	30	32
	Heating		9	11	14	17	20	23
Fan	Type	Centrifugal, forward-curved Blades						
Motor	Type	Permanent Split Capacitor						
Coil	Row	3+1						
	Working Pressure	1.6 MPa						
CONNS	In-Out	3/4" FPT						
	Drain	3/4" MPT						
Net Weight	Kg		14.4	16.0	18.1	19.5	21.0	28.7
Options		Thermostat, Motorized Valve, Return Air Plenum						

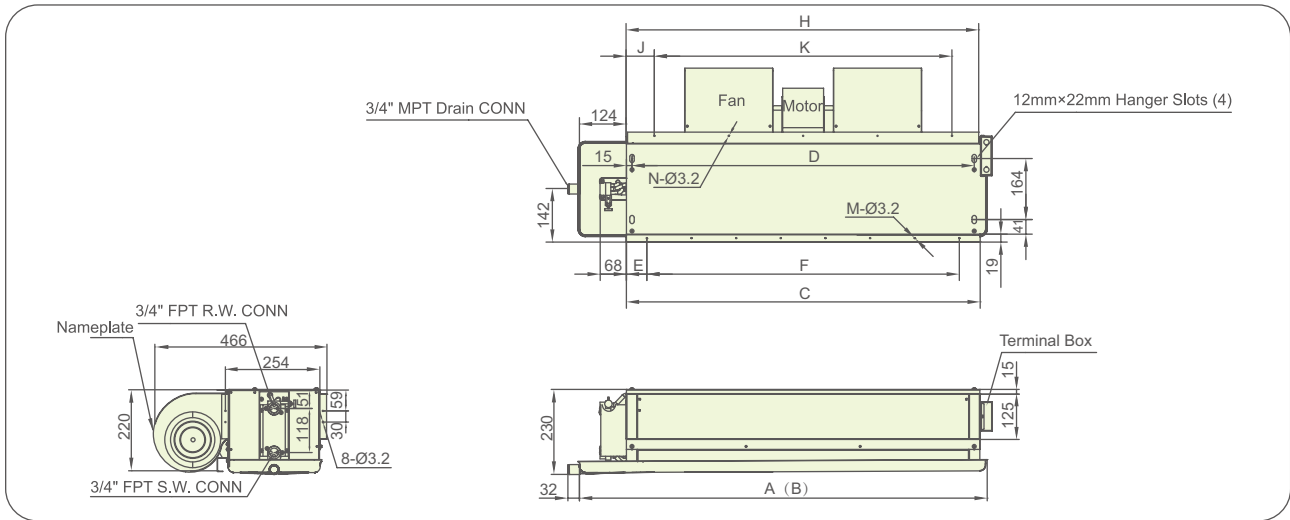
- Note:
1. The data is the performance in high speed with relevant static pressure.
 2. Cooling Conditions: Entering Water 7 °C, Temperature Rise 5 °C, Entering Air Temperature 27 °C DB, 19.5 °C WB.
Heating Conditions: Entering Water 60 °C, Entering/leaving temperature difference is 10 °C, enter air temperature 21 °C DB.
 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

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

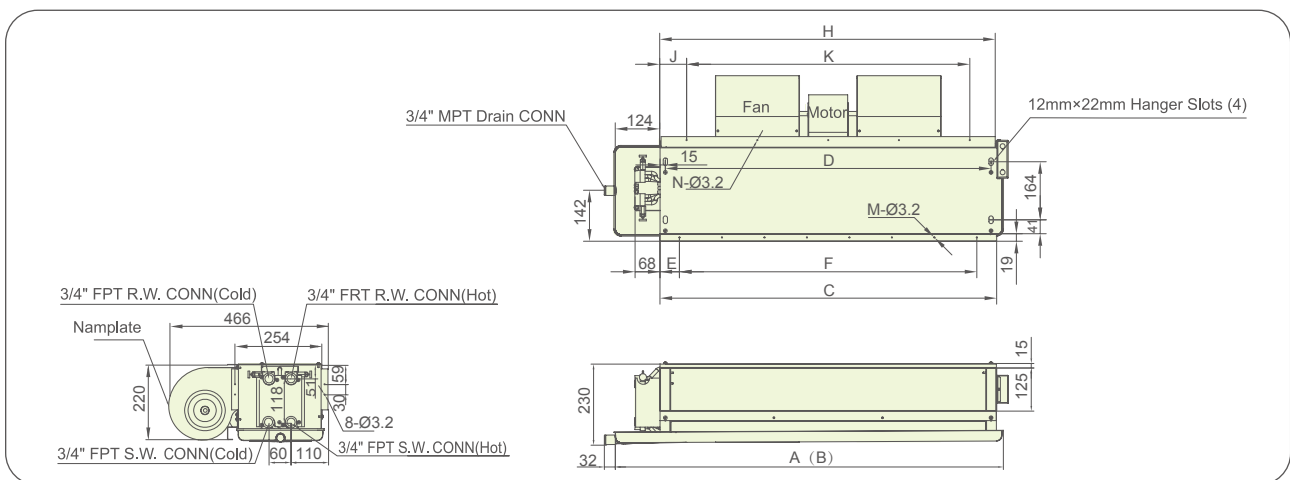
Note: B is the dimension of lengthen drain pan



3+1R 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

Note: B is the dimension of lengthen drain pan

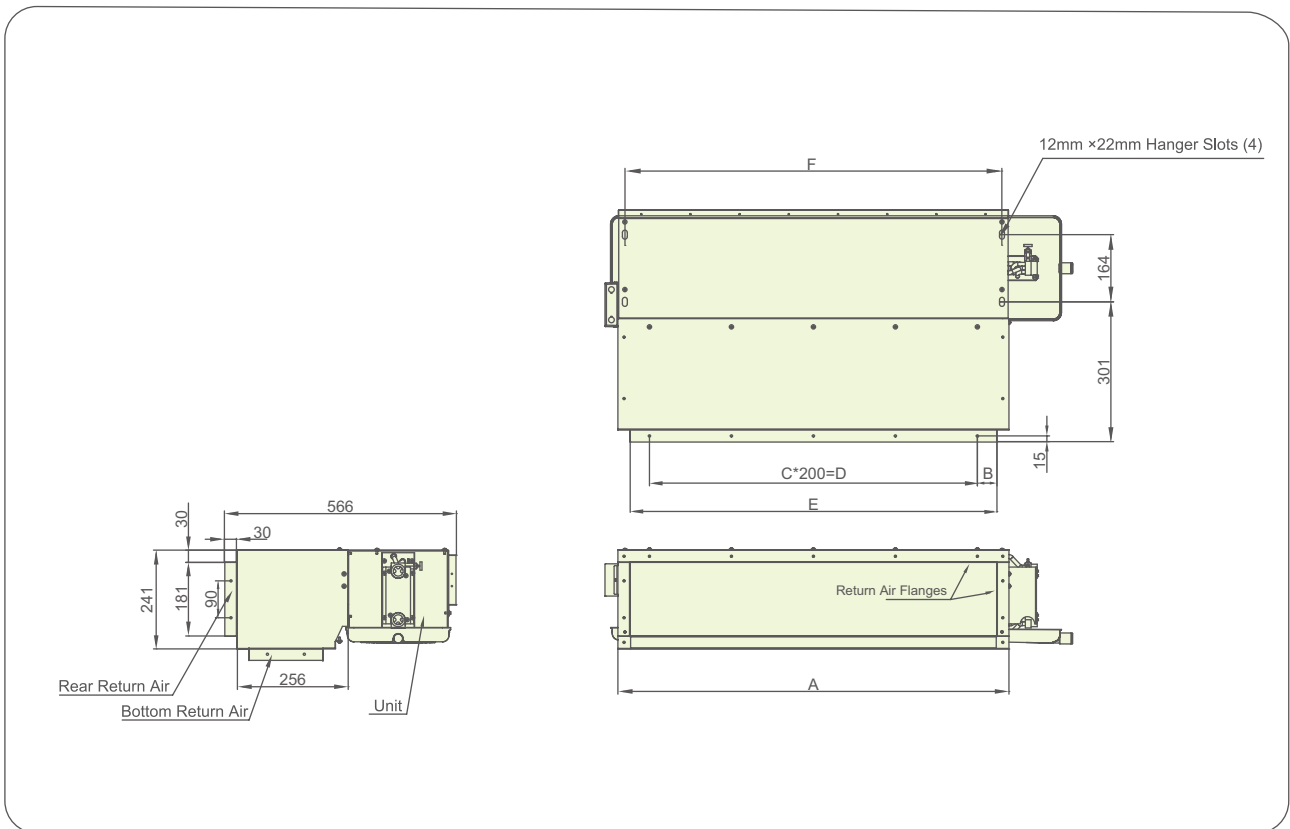


Dimensions

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

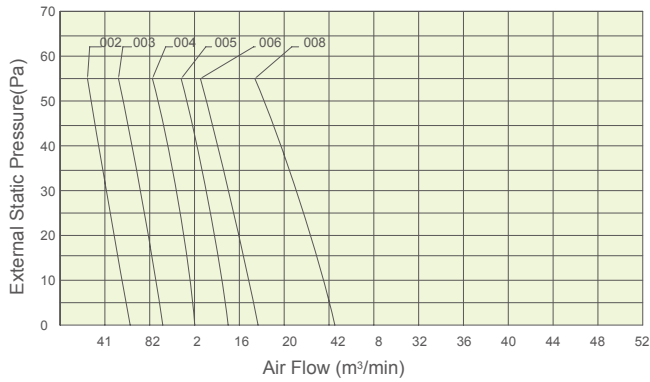
- Note: 1. With Rear/Bottom air return plenum
 2. Easily connect with Rear/Bottom air return plenum in the jobsite



Fan Performance

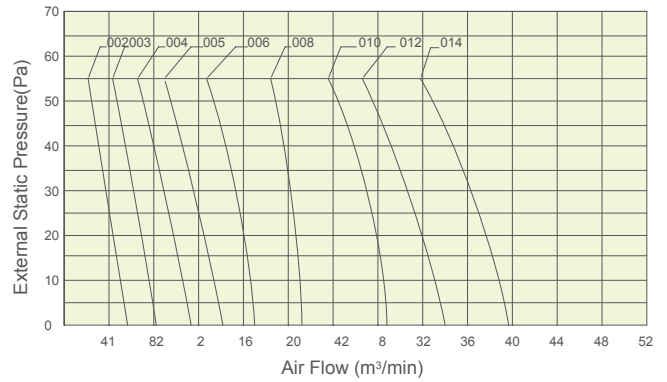
2R Standard Unit

42CE002200~42CE008200



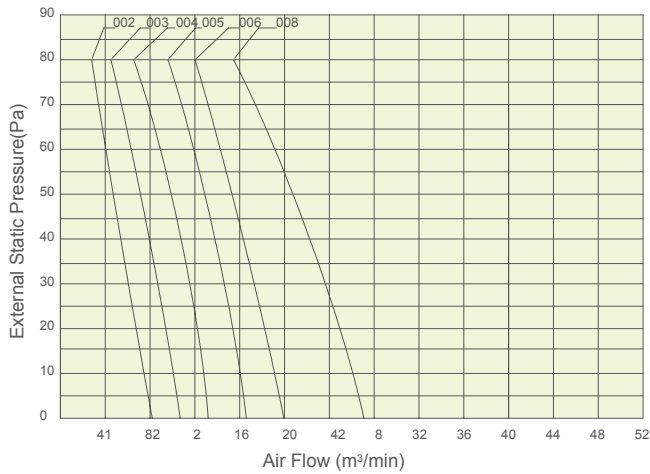
3/(3+1)R Standard Unit

42CE002300~42CE014300/42CE002310~42CE008310



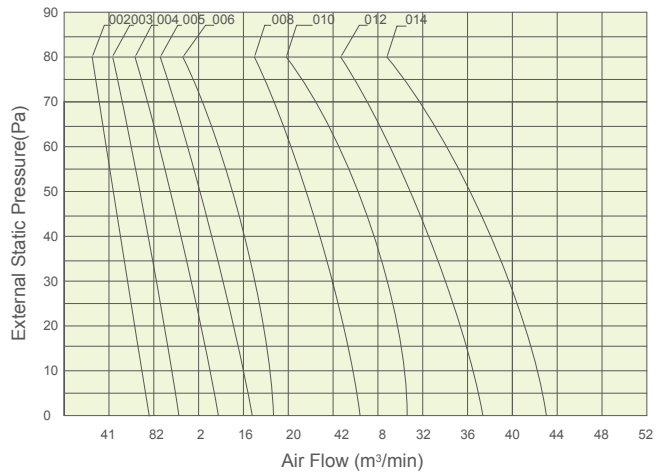
2R With Static Pressure Unit

42CE002203~42CE008203



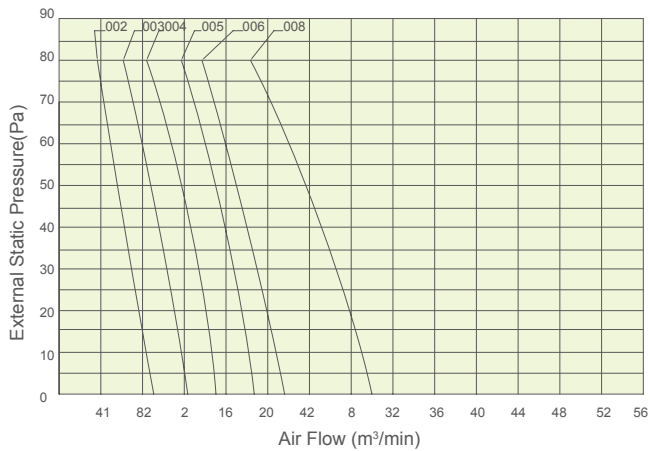
3/(3+1)R With Static Pressure Unit

42CE002303~42CE014303/42CE002313~42CE008313



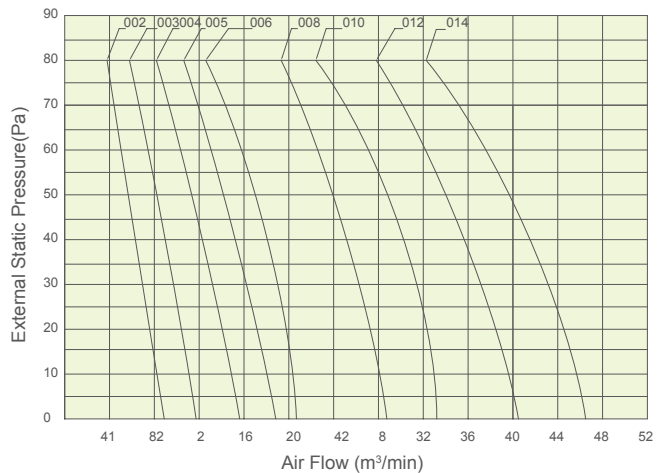
2R High Static Pressure Unit

42CE002205~42CE008205

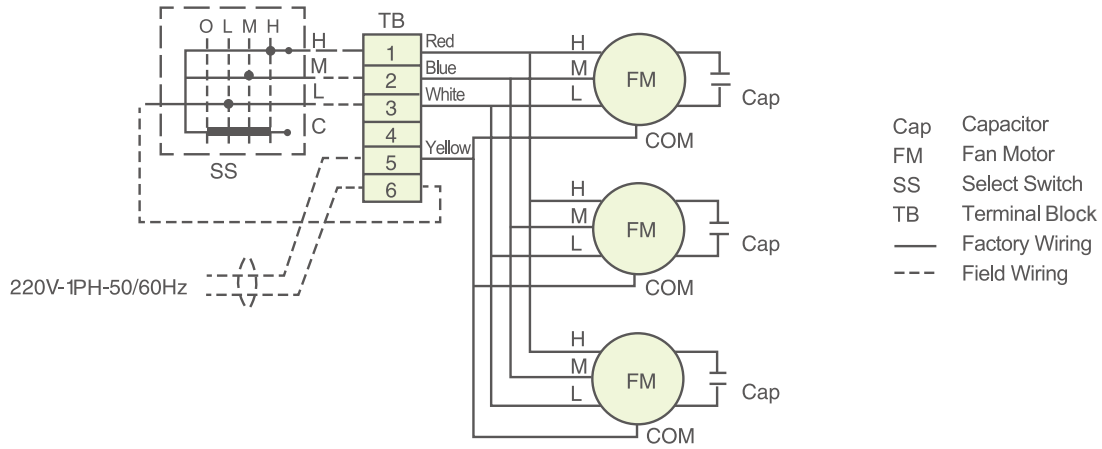


3/(3+1)R High Static Pressure Unit

42CE002305~42CE014305/42CE002315~42CE008315



Electric Diagram



Power:220V-1PH-50Hz

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



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.



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Supersede:	CAT_42CE_E-1204_01_CHK
Effective Date:	Feb, 2013