



turn to the experts™ 



42CE

Fan Coil Unit

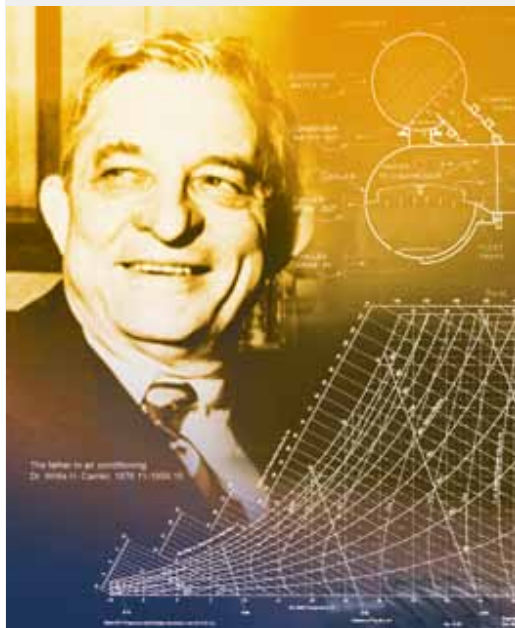
Air Volume: 340~2380m³/h
50Pa ESP in Med Speed



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.

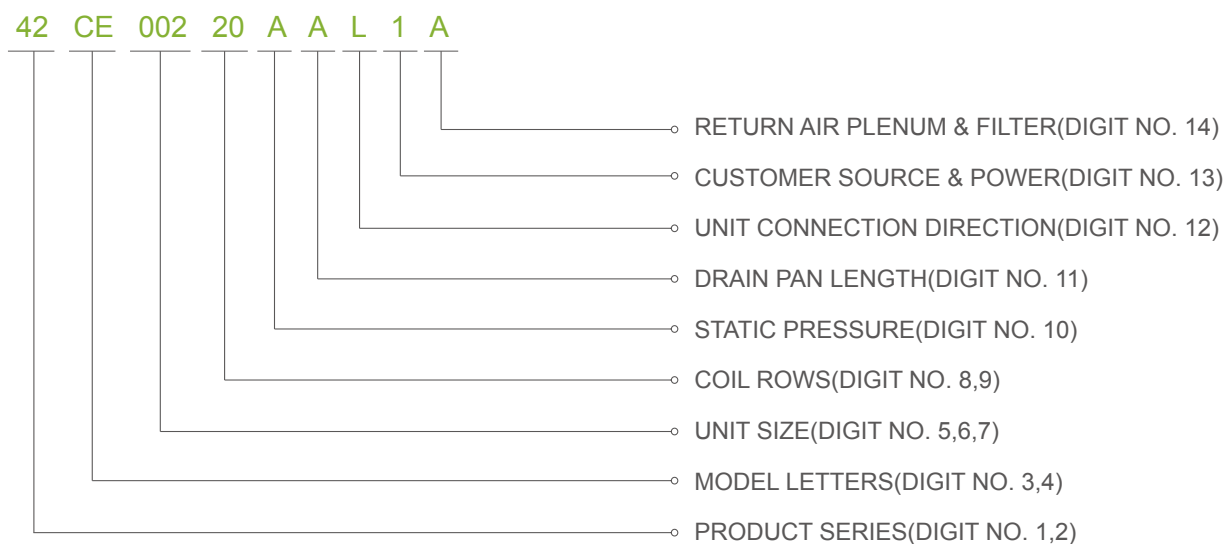
In China, there are 6 Carrier factories which have more than 2500 employees. As the world-class factory, Carrier has a number of technically advanced production lines, manufacturing commercial and residential chillers, compressors and air-side products. A wide range of products are able to meet diversified 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
30 : 3R cooling
40 : 4R cooling

🍃 DIGIT NO. 10
external 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
M : export 220V-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

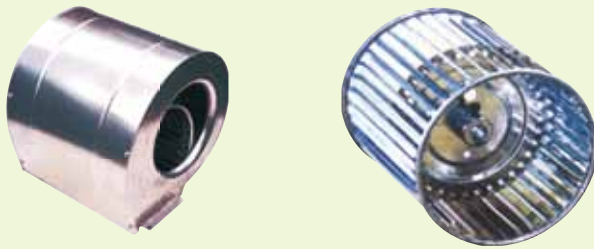
Features

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.

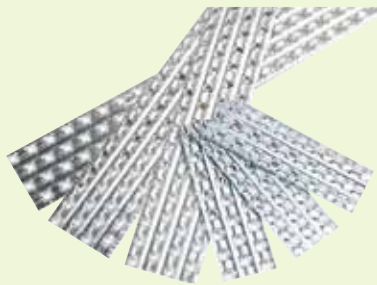
Ultra-tranquil

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.



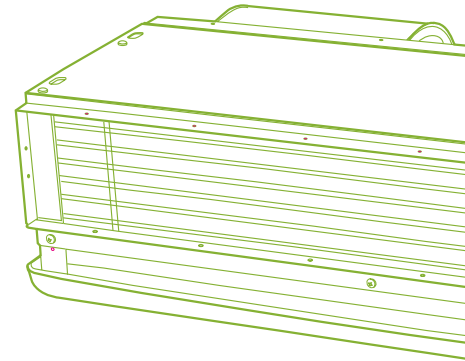
High efficiency

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



Thermostat



Technical Parameter

TECHNICAL DATA (3R COIL)

Performance	Model	002	003	004	005	006	008	010	012	014
Air Volume m³/h	H 50Pa	340	510	680	850	1020	1360	1700	2040	2380
	M 50Pa	265	405	535	680	790	1060	1360	1595	1904
	L 25Pa	195	305	405	510	585	790	1020	1180	1428
Cooling Capacity W	H 50Pa	2300	3200	4150	5000	6200	8100	9800	11500	13500
	M 50Pa	1879	2670	3542	4246	4909	6784	8418	9341	11167
	L 25Pa	1451	2114	2837	3396	3919	5409	6840	7510	9107
Heating Capacity W	H 50Pa	3600	5100	6450	7870	9300	12500	15200	17200	20500
	M 50Pa	2906	4198	5302	6590	7609	10277	12836	14319	17349
	L 25Pa	2219	3293	4200	5195	5969	8092	10241	11347	13886
Power Input W	H 50Pa	46	63	84	98	112	174	195	236	290
	M 50Pa	44	60	80	93	104	162	181	221	270
	L 25Pa	35	48	64	74	83	130	145	177	216
Noise dB(A)	H 50Pa	42	44	46	47	49	50	51	53	54
	M 50Pa	41	43	45	46	48	49	50	52	53
	L 25Pa	38	40	42	43	45	46	47	48	49
Water Flow l/min	H 50Pa	6.6	9.2	11.9	14.3	17.8	23.2	28.0	32.9	38.6
	M 50Pa	5.4	7.6	10.1	12.2	14	19.4	24.1	26.7	32
	L 25Pa	4.2	6.1	8.1	9.7	11.2	15.5	19.6	21.5	26.1
Water Drop Kpa	H 50Pa	25	21	30	30	32	28	50	50	53
	M 50Pa	17	19	26	23	24	26	38	37	41
	L 25Pa	10	12	17	15	16	17	27	26	29
Fan	Type	Centrifugal, forward-curved Blades								
Motor	Type	Permanent Split Capacitor								
Coil	Row	3								
	Tube Diameter	7mm								
	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
Accessories		Thermostat, Motorized Valve, Return Air Plenum								

Note: 1. 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.
2. 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 (4R COIL)

Performance	Model	002	003	004	005	006	008	010	012	014
Air Volume m ³ /h	H 50Pa	315	470	630	780	940	1250	1565	1880	2190
	M 50Pa	244	373	492	626	727	975	1251	1467	1752
	L 25Pa	181	284	377	474	544	735	949	1097	1328
Cooling Capacity W	H 50Pa	2616	3498	4313	5271	6277	8529	10398	11835	13896
	M 50Pa	2074	2884	3554	4451	5159	7012	8749	9819	11759
	L 25Pa	1572	2272	2856	3544	4092	5565	7014	7819	9468
Heating Capacity W	H 50Pa	3792	5184	7066	7968	9888	13968	15763	18960	22320
	M 50Pa	2984	4234	5683	6637	7962	11202	13082	15430	18539
	L 25Pa	2248	3310	4465	5230	6186	8658	10331	12032	14616
Power Input W	H 50Pa	46	63	84	98	112	174	195	236	290
	M 50Pa	44	60	80	93	104	162	181	221	270
	L 25Pa	35	48	64	74	83	130	145	177	216
Noise dB(A)	H 50Pa	42	44	46	47	49	50	51	53	54
	M 50Pa	41	43	45	46	48	49	50	52	53
	L 25Pa	38	40	42	43	45	46	47	48	49
Water Flow l/min	H 50Pa	7.5	10.0	12.3	15.1	18.0	24.4	29.8	33.9	39.8
	M 50Pa	5.9	8.3	10.2	12.7	14.8	20.1	25	28.1	33.7
	L 25Pa	4.5	6.5	8.2	10.1	11.7	15.9	20.1	22.4	27.1
Water Drop KPa	H 50Pa	25	27	32	38	43	48	54	58	67
	M 50Pa	16	19	23	28	31	34	40	42	50
	L 25Pa	9	12	16	19	21	23	27	28	34
Fan	Type	Centrifugal, forward-curved Blades								
Motor	Type	Permanent Split Capacitor								
Coil	Row	4								
	Tube Diameter	9.52 mm								
	Working Pressure	1.6 MPa								
CONNS	In-Out	3/4"FPT								
	Condensing Drain	3/4" MPT								
Net Weight	Kg	15	16.1	18.9	20.4	22	30.1	33	37.5	44
Accessories		Thermostat, Motorized Valve, Return Air Plenum								

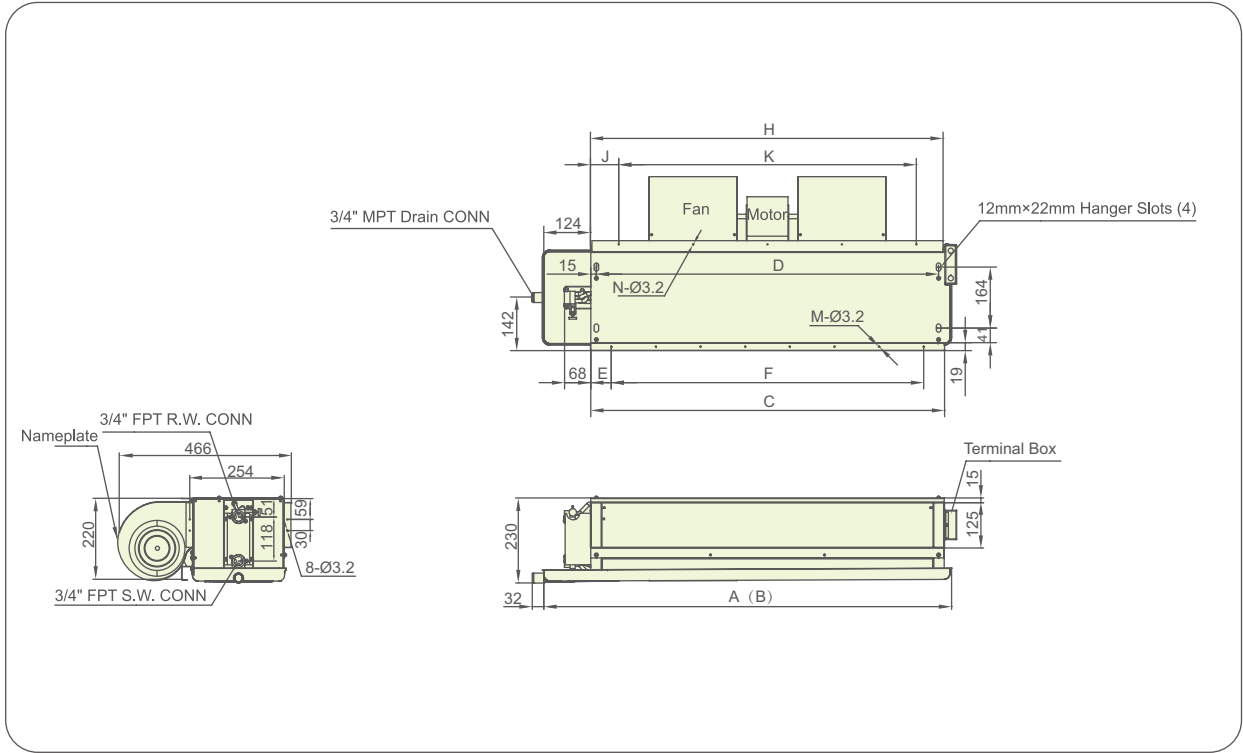
- Note: 1. Cooling Conditions: Entering Water 7℃, Temperature Rise 5℃, Entering Air Temperature 27℃DB, 19.5℃WB.
Heating Conditions: Entering Water 60℃, Air 21℃DB, the same water flow as the cooling conditions.
2. The noise is tested in the anechoic test room, measured with a fine audiometer located 1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

Dimensions

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	115	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

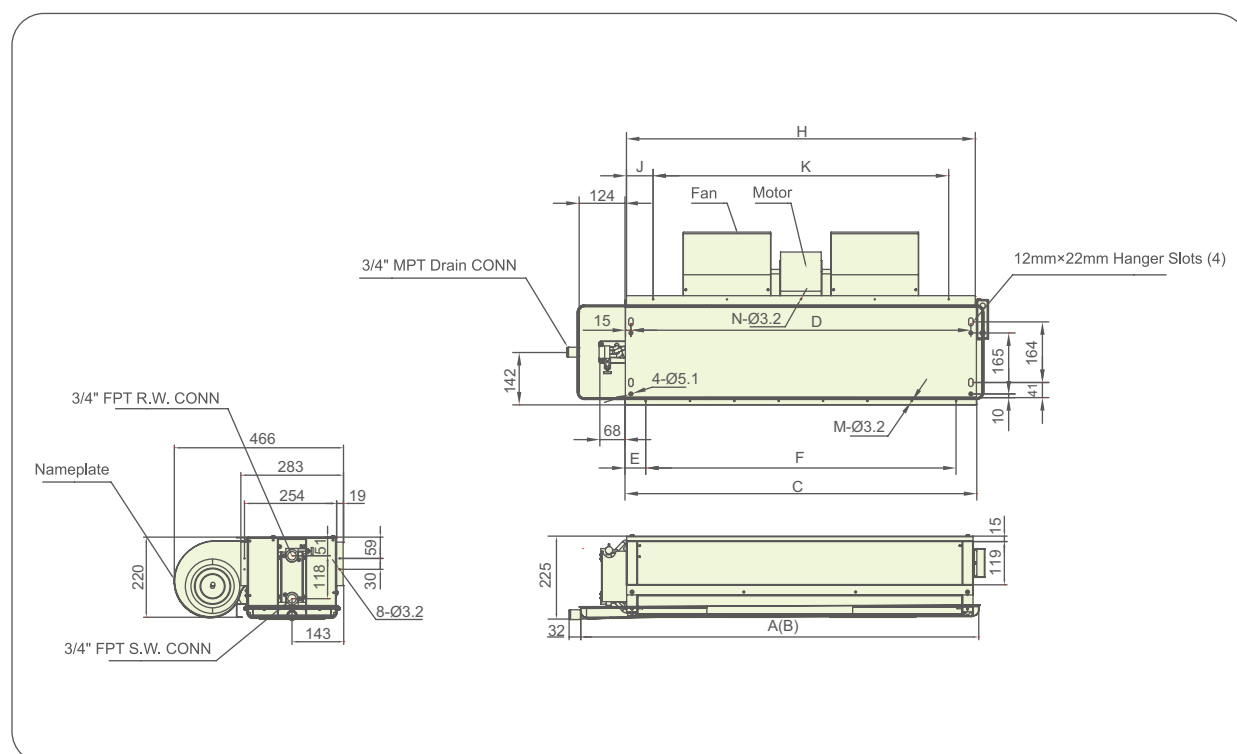


Dimensions

4R COIL

Type	Dimension										
	A	B	C	D	E	F	H	J	K	M	N
42CE002	690	770	550	520	35	480	544	72	400	10	6
42CE003	770	890	630	600	75	480	624	112	400	12	6
42CE004	890	970	720	720	75	600	744	72	600	14	6
42CE005	970	1090	800	800	55	720	824	112	600	16	8
42CE006	1090	1410	920	920	55	840	944	72	800	18	8
42CE008	1410	1530	1240	1240	95	1080	1264	32	1200	26	10
42CE010	1530	1770	1360	1360	95	1200	1384	92	1200	28	10
42CE012	1770	2010	1600	1600	95	1440	1624	112	1400	32	12
42CE014	2010	2250	1870	1840	95	1680	1864	132	1600	36	14

Note: B is the dimension of lengthen drain pan



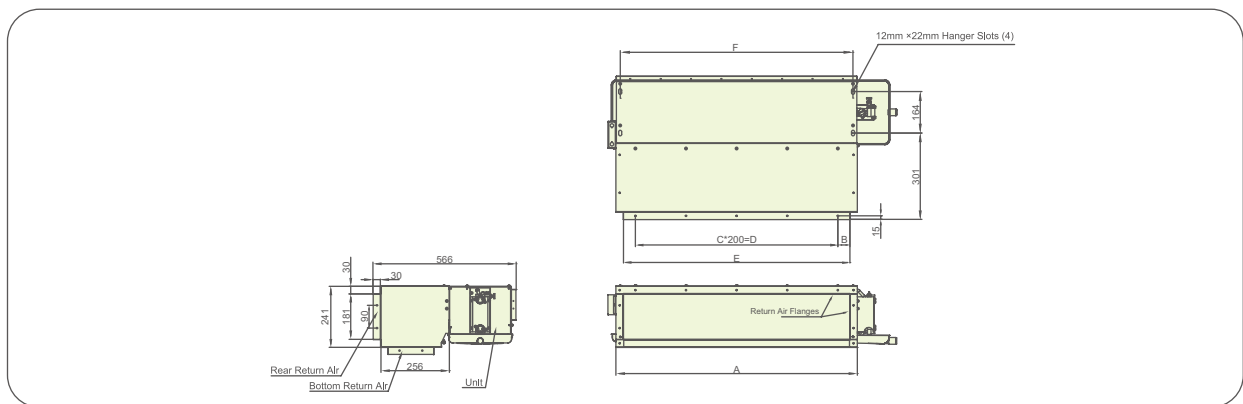
Dimensions

3R Return Air Plenum

PART ND.	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.

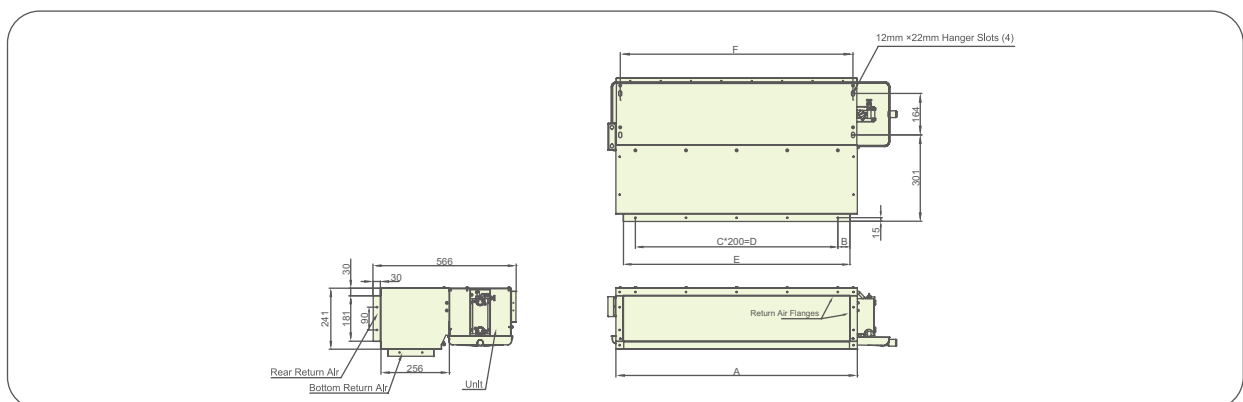


4R Return Air Plenum

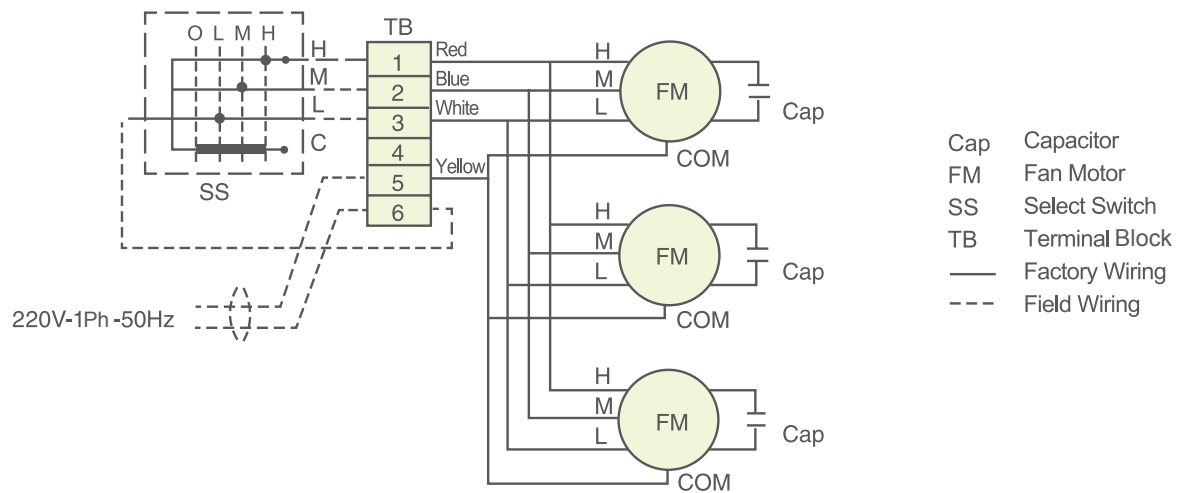
PART ND.	Dimension						USED IN
	A	B	C	D	E	F	
42CE402900	554	47	2	400	494	520	42CE002
42CE403900	634	87	2	400	574	600	42CE003
42CE404900	754	47	3	600	694	720	42CE004
42CE405900	834	102	3	600	774	800	42CE005
42CE406900	954	47	4	800	894	920	42CE006
42CE408900	1274	107	5	1000	1214	1240	42CE008
42CE410900	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.



Electric Diagram



Power:220V-1Ph-50Hz

Type		002	003	004	005	006	008	010	012	014
Power Input (W)	H 50Pa	46	63	84	98	112	174	195	236	290
	M 50Pa	44	60	80	93	104	162	181	221	270
	L 25Pa	35	48	64	74	83	130	145	177	216
Current (A)	H 50Pa	0.21	0.29	0.38	0.45	0.51	0.79	0.89	1.07	1.32
	M 50Pa	0.20	0.27	0.36	0.42	0.47	0.74	0.82	1.00	1.23
	L 25Pa	0.16	0.22	0.29	0.34	0.38	0.59	0.66	0.80	0.98



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.



Version:	CAT_42CE ME_E-1301_02
Supersede:	CAT_42CE ME_E-1205_01
Effective Date:	Feb, 2013