Carrier

United Technologies

turn to the experts

42C/V

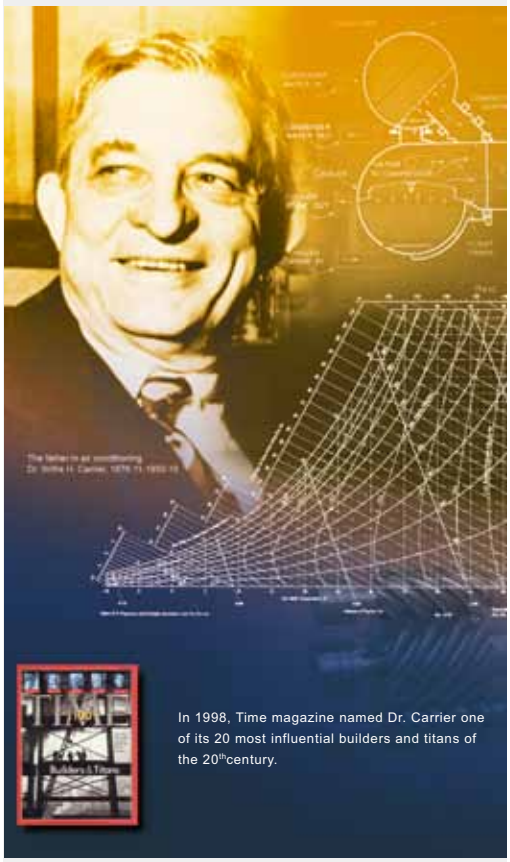
Fan Coil Unit

Air Flow: 340~2040m^3/h

Carrier China

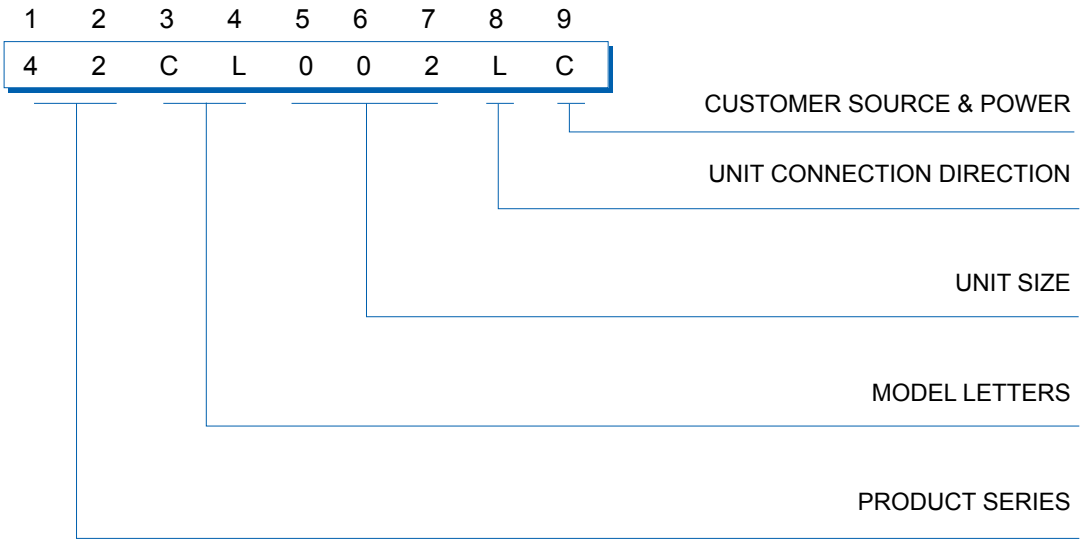
Carrier Corporation is a subsidiary of the United Technologies Corp. (UTC), which ranks the 150th in Fortune Top 500 in 2011 and has its operations in aerospace and building systems industries all over the world. From the time the founder Dr. Carrier invented the first system of modern air conditioning 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
  CL : Horizontal cabinet FCU
  VL : Vertical cabinet FCU
  VM : Vertical concealed FCU
  VP : Vertical concealed FCU (high static pressure)

- DIGIT NO.5、 6、7
  UNIT SIZE
  002 : 340m^3/h
  003 : 510m^3/h

- DIGIT NO.8
  UNIT CONNECTION DIRECTION (FACE TO DISCHARGE AIR)
  L : LEFT
  R : RIGHT

- DIGIT NO.9
  CUSTOMER SOURCE & POWER
  O : SALE IN LOCAL 220V-1Ph-50Hz (omissible)
  C : EXPORT 220V-1Ph-50Hz

Air Flow

340~2040m^3/h

Mechanical Specification

Carrier 42C/V is a range of fan coil units designed for horizontal/vertical, concealed/cabinet application.

- Seven size of various type of fan coil unit
- Airflow from 340-2040CMH, cooling capacity from 1800-11600w
- Left/Right connection

Minimum dimension

Compact design of 42C/V with thick depth of the unit.

High efficiency

Copper tubes are mechanically bonded into slit aluminum fin collars, which ensure the heat transferring better.

Low noise levels

Low noise level with optimized fan, low speed motor and special acoustic materials.

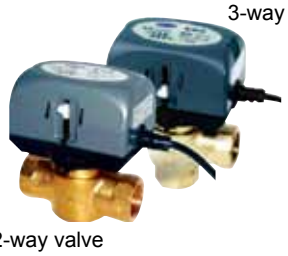
High Quality

Carrier quality philosophy embraces the product itself, its conception, design and the integrity of its declared performance (proven in rigorous laboratory tests) as well as the manufacturing process, materials and components used to create the product.

Easy Maintenance

42C/V use a heavy gage, galvanized steel with closed-cell, fire-retardant foam insulation. Water never touched the case, so that the corrosion is minimized and a long life is ensured. All coils are factory leakage tested. The motor/fan can be easily removed from the units, which makes it easy for maintenance.

Options



3-way valve

2-way valve

TMS710/720

TMS810

Thermostat

Various series of FCU with excellent performance

- 42CE: Horizontal Concealed Type
  (More details in 42CE catalog)

- 42VM: Vertical Concealed Type
  42VP: Vertical Concealed Type with High static pressure motor

- 42CL: Horizontal Cabinet Type

- 42VL: Vertical Cabinet Type

Technical Data

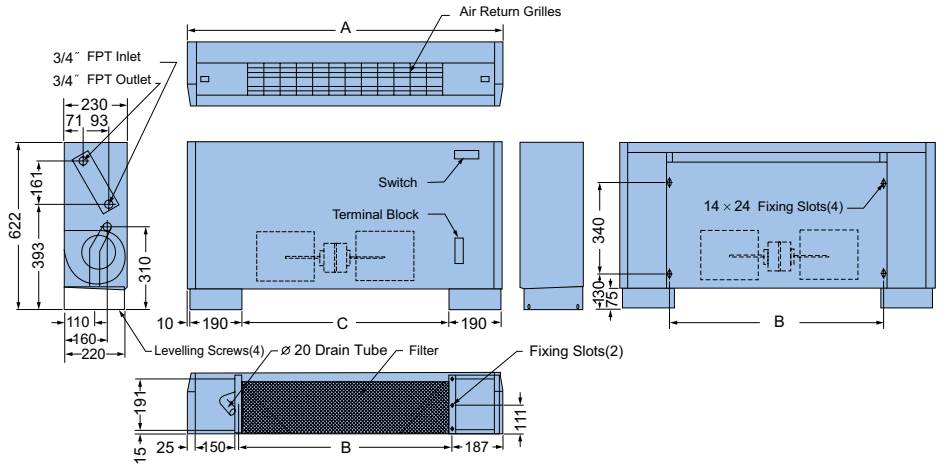
CL/VL/VM/VP

Model		002	003	004	006	008	010	012
Nominal Airflow m^3/h	High	340	510	680	1020	1360	1700	2040
	Med	265	405	535	790	1060	1360	1595
	Low	195	305	405	585	790	1020	1180
Cooling Capacity kW	_	1800	2700	3700	5400	7400	9200	11600
Heating Capacity kW	_	3020	4500	6000	8720	12200	14900	18950
Input Power W	VL/VM/CL	31	46	62	95	132	152	180
	VP	44	59	72	108	156	174	212
Sound dB(A)	VL/VM/CL	37	35	40	45	45	48	49
	VP	40	42	42.5	47	47	50	52
Water Flow l/min	_	5.5	8	11	16	22	26	32
Water Pressure Drop Kpa	_	8	17	24	40	40	40	32
Fan	Type	Centrifugal, Front Curve						
	Qty	1	1	2	2	4	4	4
Motor	Type	Permanent Capacitive, Ball bearing						
	Qty	1	1	1	1	2	2	2
Coil	Type	Copper tube, double slit sheet						
	Working Pressure	1.6MPa						
Coil Connection	In-Out	3/4″FPT						
	Condensing Drain	3/4″MPT						
Net Weight Kg	VL	19	21	23.5	28	38	39.5	48
	CL	19.5	21.5	24.5	30	41	42.5	52
	VM/VP	14	15	18	22	32	33.5	41
Accessories		Thermostat, Moterized Valve						

Note: 1. Cooling capacity based on: Entering water temperature 7℃, water temperature rise 5℃, Air temperature: 27℃/19.5℃, DB/WB.
2. Heating capacity based on: Entering water temperature 60℃, Air temperature 21℃, DB.
3. Nominal Airflow, cooling capacity, heating capacity based on: ESP=0Pa(VL/CL/VM), ESP=30Pa (VP)
4. Performance data are based on high speed.

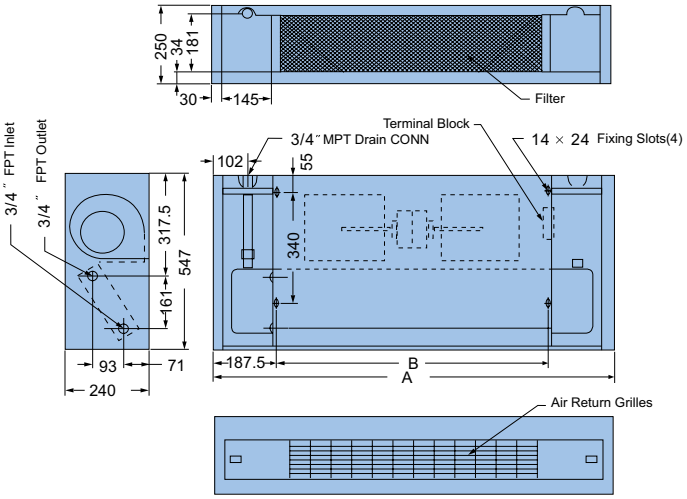
Dimension

42VL



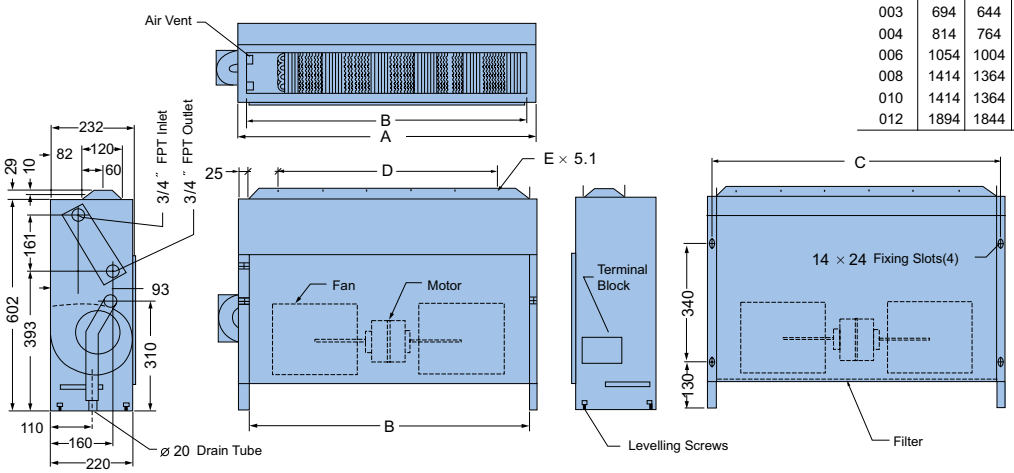
42VL	Dimension		
	A	B	C
002	924	549	524
003	1044	669	644
004	1164	789	764
006	1404	1029	1004
008	1764	1389	1364
010	1764	1389	1364
012	2244	1869	1844

42CL



42CL	Dimension	
	A	B
002	924	549
003	1044	669
004	1164	789
006	1404	1029
008	1764	1389
010	1764	1389
012	2244	1869

42VM/VP



42 VM/VP	Dimension				
	A	B	C	D	E
002	574	524	549	360	10
003	694	644	669	4480	12
004	814	764	789	600	14
006	1054	1004	1029	840	18
008	1414	1364	1389	1200	24
010	1414	1364	1389	1200	24
012	1894	1844	1869	1688	32

Performance Data

Cooling Capacity

(W)

Model	Entering Water Temperature ˚C	Water flow l/min	Water Pressure Drop kPa	Entering Air Temperature ˚C									
				17.0WB		18.0WB				19.0WB			
				24.0DB		25.0DB		26.0DB		26.0DB		27.0DB	
				TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
002	5	4	5	1580	1270	1710	1280	1710	1380	1840	1290	1840	1380
		5.5	8	1840	1420	2000	1430	2000	1540	2150	1440	2150	1550
		7	13	2020	1510	2200	1540	2200	1650	2360	1560	2360	1660
		8.5	17	2160	1580	2350	1620	2350	1720	2520	1640	2520	1740
	6	4	5	1440	1220	1650	1230	1580	1330	1710	1230	1710	1340
		5.5	8	1690	1350	1840	1360	1840	1470	2000	1380	2000	1480
		7	13	1860	1430	2020	1450	2020	560	2200	1480	2200	1580
		8.5	17	1990	1490	2160	1520	2160	1630	2350	1550	2350	1650
	7	4	5	1310	1170	1440	1170	1440	1280	1580	1190	1580	1280
		5.5	8	1540	1280	1690	1290	1690	1400	1840	1310	1840	1420
		7	13	1690	1350	1860	1370	1680	1480	2020	1400	2020	1500
		8.5	17	1800	1400	1990	1430	1990	1540	2160	1450	2160	1560
	8	4	5	1190	1130	1310	1130	1310	1230	1440	1140	1440	1230
		5.5	8	1380	1210	1540	1220	1540	1330	1690	1240	1690	1350
		7	13	1520	1260	1690	1290	1690	1400	1860	1310	1860	1420
		8.5	17	1630	1300	1800	1340	1800	1440	1990	1370	1990	1480
	9	4	5	1050	1050	1190	1090	1190	1190	1310	1090	1310	1200
		5.5	8	1230	1130	1380	1160	1380	1260	1540	1170	1540	1280
		7	13	1350	1170	1520	1210	1520	1300	1690	1230	1690	1310
		8.5	17	1440	1200	1630	1240	1630	1340	1800	1280	1800	1340
	10	4	5	920	920	1050	1050	1050	1050	1190	1060	1190	1150
		5.5	8	1070	1060	1230	1000	1230	1190	1380	1120	1380	1210
		7	13	1190	1080	1350	1110	1350	1220	1520	1150	1520	1260
		8.5	17	1270	1090	1440	1150	1440	1240	1630	1190	1630	1280
003	5	6	10	2380	1910	2580	1920	2580	2070	2780	1930	2780	2080
		8	17	2670	2060	2910	2080	2910	2230	3130	2110	3130	2260
		10	26	2880	2150	3130	2190	3130	2340	3360	2210	3360	2440
		12	35	3040	2220	3280	2260	3280	3350	3540	2290	3540	2240
	6	6	10	1990	1740	2190	1770	2190	1910	2280	1780	2380	1920
		8	17	2230	1850	2450	1870	2450	2020	2670	1910	2670	2050
		10	26	2410	1910	2640	1950	2640	2110	2580	1990	2880	2140
		12	35	2520	1950	2780	2000	2780	2150	3040	2050	3040	2200
	7	6	10	1790	1670	1990	1690	1990	1840	2190	1710	2190	1850
		8	17	2010	1740	2230	1780	2230	1920	2450	1800	2450	1950
		10	26	2160	1790	2410	1840	2410	1980	2640	1870	2640	2010
		12	35	2280	1830	2520	1870	2520	2020	2780	1920	2780	2070
	8	6	10	1590	1590	1790	1620	1790	1770	1990	1630	1990	1780
		8	17	2010	1740	2230	1780	2230	1920	2450	1800	2450	1950
		10	26	2160	1790	2410	1840	2410	1980	2640	1870	2640	2010
		12	35	2280	1830	2520	1870	2520	2020	2780	1920	2780	2070
	9	6	10	1590	1590	1790	1620	1790	1770	1990	1630	1990	1780
		8	17	1790	1640	2010	1670	2010	1810	2230	1710	2230	1850
		10	26	1920	1660	2160	1720	2160	1860	2410	1760	2410	1900
		12	35	2020	1690	2280	1740	2280	1880	2520	1800	2520	1930
	10	6	10	1400	1400	1590	1550	1590	1590	1790	1560	1790	1710
		8	17	1560	1540	1790	1570	1790	1710	2010	1600	2010	1740
		10	26	1690	1540	1920	1590	14920	1730	2160	1640	2160	1780
		12	35	1770	1550	2020	1600	2020	1740	2280	1670	2280	1800

Note: Performance data are based on high speed. To calculate Med and Low speed data refers to the capacity multiplier vs. speed table .

Performance Data

Cooling Capacity

(W)

Model	Entering Water Temperature ˚C	Water flow l/min	Water Pressure Drop kPa	Entering Air Temperature ˚C											
				19.5WB		20.0WB				21.0WB				22.0WB	
				27.0DB		27.0DB		28.0DB		26.0DB		27.0DB		30.0DB	
				TH	SH	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
002	5	4	5	1910	1340	1970	1290	1970	1380	2110	1300	2110	1380	2230	1380
		5.5	8	2220	1500	2300	1540	2300	1560	2450	1470	2450	1570	2610	1570
		7	13	2450	1620	2540	1570	2540	1670	2700	1580	2700	1690	2870	1700
		8.5	17	2620	1700	2710	1650	2710	1770	2880	1670	2880	1780	3070	1790
	6	4	5	1780	1290	1840	1240	1840	1340	1970	1240	1970	1340	2110	1340
		5.5	8	2070	1440	2150	1400	2150	1490	2300	1410	2300	1500	2450	1510
		7	13	2280	1540	2360	1500	2360	1600	2540	1510	2540	1620	2700	1620
		8.5	17	2430	1620	2520	1570	2520	1670	2710	1590	2710	1690	2880	1710
	7	4	5	1640	1240	1710	1200	1710	1290	1840	1200	1840	1290	1970	1290
		5.5	8	1290	1370	2000	1330	2000	1430	2150	1340	2150	1430	2300	1440
		7	13	2120	1470	2200	1420	2200	1520	2360	1440	2360	1540	2540	1550
		8.5	17	2260	1520	2350	1490	2350	1580	2520	1510	2520	1600	2710	1630
	8	4	5	1510	1190	1580	1150	1580	1240	1710	1150	1710	1240	1840	1240
		5.5	8	1770	1300	1840	1270	1840	1360	2000	1280	2000	1370	2150	1380
		7	13	1940	1380	2020	1340	2020	1440	2200	1360	2200	1450	2360	1480
		8.5	17	2070	143	2160	1400	2160	1500	2350	1420	2350	1520	2520	1550
	9	4	5	1380	1150	1440	1100	1440	1200	1580	1100	1580	1200	1710	1200
		5.5	8	1620	1230	1690	1200	1690	1290	1840	1210	1840	1300	2000	1310
		7	13	1780	1300	1860	1270	1860	1360	2020	1290	2020	1380	2200	1400
		8.5	17	1900	1350	1990	1310	1990	1410	2160	1340	2160	1430	2350	1450
	10	4	5	1240	1100	1310	1060	1310	1150	1440	1060	1440	1150	1580	1150
		5.5	8	1450	1170	1540	1130	1540	1230	1690	1150	1690	1240	1840	1260
		7	13	1600	1220	1690	1190	1690	1280	1860	1210	1860	1300	2020	1330
		8.5	17	1710	1260	1800	1220	1800	1310	1990	1260	1990	1350	2160	1370
003	5	6	10	2880	2010	2980	1940	2980	2080	3170	1950	3170	2080	3380	2080
		8	17	3230	2190	3350	2120	3350	2270	3570	2130	3570	2280	3790	2280
		10	26	3490	2300	3610	2230	3610	2380	3850	2260	3850	2400	4080	2410
		12	35	3660	2380	3790	2310	3790	2470	4050	2340	4050	2490	4290	2500
	6	6	10	2690	1930	2780	1860	2780	2000	2980	1870	2980	2010	3170	2010
		8	17	3010	2080	3130	2020	3130	2160	3350	2040	3350	2170	3570	2190
		10	26	3240	2190	3360	2130	3360	2270	3610	2150	3610	2290	3850	2300
		12	35	3410	2260	3540	2200	3540	2350	3790	2230	3790	2370	4050	2400
	7	6	10	2490	1860	2580	1790	2580	1930	2780	1800	2780	1930	2980	1940
		8	17	2790	1990	2910	1930	2910	2070	3130	1940	3130	2080	3350	2090
		10	26	3000	2070	3130	2010	3130	2160	3360	2050	3360	2190	3610	2200
		12	35	3160	2140	3280	2080	3280	2220	3540	2120	3540	2260	3790	2280
	8	6	10	2290	1780	2380	1720	2380	1850	2580	1720	2580	1860	2780	1860
		8	17	2570	1880	2670	1830	2670	1970	2910	1850	2910	1990	3130	2000
		10	26	2770	1970	2880	1910	2880	2050	3130	19440	3130	2080	3360	2090
		12	35	2910	2010	3040	1970	3040	2110	3270	2000	3280	2140	3540	2160
	9	6	10	2080	1710	2190	1640	2190	1780	2380	1650	2380	1790	2580	1790
		8	17	2350	1790	2450	1730	2450	1870	2670	1760	2670	1900	2910	1910
		10	26	2520	1850	2640	1800	2640	1930	2880	1830	2880	1970	3130	1990
		12	35	2650	1880	2780	1840	2780	1980	3040	1880	3040	2010	3280	2050
	10	6	10	1880	1640	1990	1570	1990	1710	2190	1580	2190	1720	2380	1720
		8	17	2120	1700	2230	1640	2230	1780	2450	1660	2450	1800	2670	1810
		10	26	2280	1730	2410	1690	2410	1810	2640	1720	2640	1850	2880	1880
		12	35	2400	1760	2520	1720	2520	1850	2780	1770	2780	1990	3040	1930

Capacity multiplier vs. speed table

Model	Med		Low	
	TH	SH	TH	SH
002	0.85	0.83	0.70	0.66
003	0.86	0.84	0.71	0.67

Performance Data

Cooling Capacity

(W)

Model	Entering Water Temperature ℃	Water flow l/min	Water Pressure Drop kPa	Entering Air Temperature ℃									
				17.0WB		18.0WB				19.0WB			
				24.0DB		25.0DB		26.0DB		26.0DB		27.0DB	
				TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
004	5	8	13	3190	2570	3450	2590	3450	2790	3920	2610	3720	2800
		11	18	3690	2840	3990	2870	3990	3080	4300	2900	4300	3110
		14	20	4020	3010	4360	3060	4360	3280	4800	3090	4800	3310
		17	31	4280	3140	4630	3190	4630	3410	4990	3230	4990	3450
	6	8	13	2620	2480	3190	2490	3190	2700	3450	2500	3540	2700
		11	18	3270	2700	3690	2730	3690	2940	3990	2770	3990	2970
		14	20	3690	2850	4020	2900	4020	3120	4360	2940	4360	3150
		17	31	3920	2950	4280	3010	4280	3230	4630	3060	4630	3280
	7	8	13	2650	2370	2920	2400	2920	2590	3190	2410	3190	2610
		11	18	3070	2560	3370	2590	3370	2800	3690	2630	3690	2840
		14	20	3360	2670	3690	2730	3690	2940	4020	2780	4020	2990
		17	31	3560	2770	3920	2730	3920	3040	4280	2880	4280	3090
	8	8	13	2380	2280	2650	2300	2650	2500	2920	2310	2920	2510
		11	18	2770	2420	3070	2470	3070	2660	3370	2500	3370	2700
		14	20	3020	2510	3360	2570	3360	2780	3690	2630	3690	2830
		17	31	3210	2570	3560	2650	3560	2850	3920	2710	3920	2920
	9	8	13	2130	2130	2380	2210	2380	2380	2650	2220	2650	2420
		11	18	2450	2270	2770	2330	2770	2520	3070	2360	3070	2560
		14	20	2690	2340	3020	2410	3020	2610	3360	2470	3360	2660
		17	31	2850	2370	3210	2470	3210	2660	3560	2540	3560	2730
	10	8	13	1860	1860	2130	2130	2130	2130	2380	2140	2380	2340
		11	18	2150	2130	2450	2190	2450	2380	2770	2230	2770	2430
		14	20	2350	2150	2690	2230	2690	2430	3020	2300	3020	2490
		17	31	2490	2170	2850	2270	2850	2470	3210	2360	3210	2550
006	5	12	18	4630	3690	5010	3710	5010	4000	5400	3740	5400	4010
		15	27	5020	3870	5440	3920	5440	4310	5860	3950	5860	4230
		18	37	5310	4000	5760	4060	5760	4350	6200	4110	6200	4400
		21	57	5540	4110	5000	4150	5000	4470	6470	4220	6470	4510
	6	12	18	4240	3520	4630	3560	4630	3840	5010	3580	5010	3860
		15	27	4610	3680	5020	3730	5020	4010	5440	3770	5440	4050
		18	37	4870	3890	5310	3850	5310	4140	5760	3910	5760	4190
		21	57	5080	3870	5540	3940	5540	4230	6000	4000	6000	4290
	7	12	18	3860	3370	4240	3410	4240	3690	4630	3430	4630	3710
		15	27	4190	3490	4610	3540	4610	3830	5020	3590	5020	3860
		18	37	4430	3570	4870	3640	4870	3920	5310	3700	5310	3980
		21	57	4620	3630	5080	3710	5080	3990	5540	3780	5540	4060
	8	12	18	3480	3220	3860	3260	3860	3540	4240	3280	4240	3560
		15	27	3770	3290	4190	3350	4190	3630	4610	3410	4610	3680
		18	37	3990	3350	4430	3430	4430	3700	4870	3500	4870	3770
		21	57	4150	3380	4620	3480	4620	3760	5080	3560	5080	3830
	9	12	18	3080	3070	3480	3110	3480	3400	3860	3140	3860	3420
		15	27	3350	3110	3770	3160	3770	3440	4190	3220	4190	3490
		18	37	3550	3130	3990	3210	3990	3480	4430	3290	4430	3550
		21	57	3700	3140	4150	3240	4150	3510	4620	3340	4620	3590
	10	12	18	2700	2700	3080	2970	3080	3080	3480	3000	3480	3280
		15	27	2930	2910	3350	2980	3350	3240	3770	3050	3770	3300
		18	37	3110	2960	3550	2990	3550	3260	3990	3080	3990	3340
		21	57	3230	2980	3700	3010	3700	3260	4150	3110	4150	3360

Note: Performance data are based on high speed. To calculate Med and Low speed data refers to the capacity multiplier vs. speed table .

Performance Data

Cooling Capacity

(W)

Model	Entering Water Temperature ˚C	Water flow l/min	Water Pressure Drop kPa	Entering Air Temperature ˚C											
				19.5WB		20.0WB				21.0WB				22.0WB	
				27.0DB		27.0DB		28.0DB		26.0DB		27.0DB		30.0DB	
				TH	SH	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
004	5	8	13	3850	2710	3980	2620	3980	2800	4240	2630	4240	2810	4510	2800
		11	18	4450	3010	4610	2920	4610	3130	4910	2940	4910	3140	5220	3150
		14	20	4860	3220	5040	3130	5040	3340	5370	3150	5370	3360	5710	3370
		17	31	5160	3360	5350	3270	5350	3490	5700	3300	5700	3510	6060	3540
	6	8	13	3580	2610	3720	2510	3720	2710	3980	2502	3980	2710	4240	2710
		11	18	4140	2880	4300	2790	4300	2990	4610	2810	4610	3010	4910	3020
		14	20	4540	3060	4800	2980	4700	3170	5040	3000	5040	3210	5370	3220
		17	31	4810	3190	4990	3100	4990	3310	5350	3140	5350	3350	5700	3370
	7	8	13	3310	2510	3450	2420	3450	2610	3720	2430	3720	2620	3980	2620
		11	18	3840	2740	3390	2660	3990	2860	4300	2690	4300	2870	4610	2900
		14	20	4200	2910	4360	2830	4360	3020	4800	2860	4800	3060	5040	3080
		17	31	4450	3010	4630	2940	4630	3140	4990	2980	4990	3170	5350	3210
	8	8	13	3060	2420	3190	2330	3190	2510	3450	2340	3450	2520	3720	2520
		11	18	3540	2620	3690	2540	3690	2720	3990	2560	3990	2741	4300	2770
		14	20	3860	2740	4020	2670	4020	2870	4360	2710	4360	2910	4700	2930
		17	31	4090	2840	4280	2770	4280	2970	4630	2810	4630	3010	4990	3050
	9	8	13	2790	2330	2920	2230	2920	2460	3190	2240	3190	2430	3450	2430
		11	18	3220	2480	3370	2410	3370	2590	3690	2430	3690	2620	3990	2640
		14	20	3520	2590	3690	2510	3690	2710	4020	2560	4020	2760	4360	2780
		17	31	3740	2660	3920	2611	3920	2760	4280	2650	4280	2840	4630	2880
	10	8	13	2520	2240	2650	2150	2650	2340	2920	2160	2920	2340	3190	2350
		11	18	2920	2350	3070	2270	3070	2470	3370	2310	3370	2490	3690	2510
		14	20	3190	2430	3360	2360	3360	2550	3690	2420	3690	2590	4020	2640
		17	31	3380	2490	3560	2430	3560	2620	3920	2490	3920	2670	4280	2720
006	5	12	18	5590	3770	5790	3760	5790	4020	6180	3780	6180	4040	6560	4040
		15	27	6070	4110	6280	3990	6280	4260	6700	4010	6700	4280	7120	4290
		18	37	6420	4280	6640	4150	6640	4430	7090	4190	7090	4450	7540	4480
		21	57	6700	4400	6920	4270	6920	4550	7390	4310	7390	4580	7850	4610
	6	12	18	5210	3730	5400	3610	5400	3870	5790	3630	5790	3880	6180	3880
		15	27	5650	3930	5860	3800	5860	4080	6280	3840	6280	4110	6700	4120
		18	37	5980	4070	6200	3950	6200	4220	6640	3990	6640	4260	7090	4280
		21	57	6230	4180	6470	4060	6470	4340	6920	4110	6920	4370	7390	4410
	7	12	18	4830	3580	5010	3450	5010	3720	5400	3480	5400	3730	5790	3740
		15	27	5230	3740	5440	3630	5440	3900	5860	3660	5860	3920	6280	3940
		18	37	5540	3860	5760	3760	5760	4020	6200	3790	6200	4060	6640	4090
		21	57	55770	3950	6000	3850	6000	4120	6470	3900	6470	4160	6920	4200
	8	12	18	4430	3430	4630	3310	4630	3470	5010	3330	5010	3590	6400	3590
		15	27	4810	3560	5020	3450	5020	3720	5440	3490	5440	3740	5860	3770
		18	37	5090	36960	5310	3560	5310	38910	5760	3610	5760	3860	6200	3900
		21	57	5310	3730	5540	3630	5540	39890	6000	3690	6000	3940	6470	3990
	9	12	18	4050	3290	4240	3160	4240	3430	4630	3190	4630	3440	5010	3450
		15	27	4400	3380	4610	3280	4610	3540	5020	3310	5020	3570	6440	3610
		18	37	4650	3450	4870	3420	4870	3620	5310	3410	5310	3660	5760	3710
		21	57	4850	3500	5080	340	5080	3680	5540	3480	5540	3730	6000	3780
	10	12	18	3660	3150	3860	3020	3860	3290	4240	3060	4240	3310	4630	3330
		15	27	3980	3200	4190	3110	4190	3360	4610	3150	4610	3400	5020	3430
		18	37	4210	3240	4430	3150	4430	3410	4870	3220	4870	3470	5310	3510
		21	57	4380	3280	4620	3200	4620	3440	5080	3270	5080	3510	5540	3580

Capacity multiplier vs. speed table

Model	Med		Low	
	TH	SH	TH	SH
004	0.87	0.85	0.74	0.70
006	0.89	0.87	0.74	0.70

Performance Data

Cooling Capacity

(W)

Model	Entering Water Temperature ˚C	Water flow l/min	Water Pressure Drop kPa	Entering Air Temperature ˚C									
				17.0WB		18.0WB				19.0WB			
				24.0DB		25.0DB		26.0DB		26.0DB		27.0DB	
				TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
008	5	16	20	6590	5230	7140	5280	7140	5690	7700	5310	7700	5710
		22	36	7370	5610	7980	5680	7980	6090	8590	5730	8590	6140
		28	55	7870	5830	8520	5920	8520	6340	9190	6000	9190	6410
		34	79	8220	5960	8910	6080	8910	6500	9590	6160	6590	6580
	6	16	20	6050	5010	6590	5060	6590	5470	7140	5090	7140	5490
		22	36	6760	5300	7370	5380	7370	5800	7980	5450	7980	5860
		28	55	7210	5490	7870	590	7870	6000	8520	5690	8520	6080
		34	79	7540	5610	8220	5730	8220	6140	8910	5830	8910	6230
	7	16	20	5500	4790	6050	4840	6050	5250	6590	4880	6590	5270
		22	36	6140	5010	6760	5110	6760	5500	7370	5190	7370	5570
		28	55	6560	5150	7210	5270	7210	5660	7870	5370	7870	5760
		34	79	6850	5250	7540	5370	7540	5770	8220	5490	8220	5880
	8	16	20	4940	4570	5500	4620	5500	5020	6050	4660	6050	5060
		22	36	5520	4720	6140	4810	6140	5210	6760	4910	6760	5290
		28	55	5910	4800	6560	4940	6560	5330	7210	5050	7210	5430
		34	79	6160	4860	6850	5010	6850	5400	7540	5150	7540	5520
	9	16	20	4400	4360	4940	4420	4940	4810	5500	4470	5500	4850
		22	36	4910	4420	5520	4520	5520	4910	6140	4630	6140	5000
		28	55	5250	4450	5910	4610	5910	4980	6560	4730	6560	5110
		34	79	5480	4480	6160	4650	6160	5020	6850	4800	6850	5160
	10	16	20	3850	3850	4400	4210	4400	4400	4940	4260	4940	4650
		22	36	4300	4010	4910	4230	4910	4610	5520	4350	5520	4710
		28	55	4590	4080	5250	4270	5250	4620	5910	4410	5910	4770
		34	79	4790	4090	5480	4280	5480	4630	6160	4450	6160	4790
010	5	19	28	7820	6200	8470	62660	8470	6750	9130	6300	9130	6770
		25	45	8370	6370	9060	6450	9060	6910	9750	6500	9750	6970
		31	67	8700	6440	9420	6540	98420	7010	10160	6630	10160	7090
		37	90	8740	6480	9690	6610	9690	7060	10430	6690	10430	7150
	6	19	28	7180	5940	7820	6000	7820	6490	8470	6040	8470	6510
		25	45	7680	6020	8370	6110	8370	6590	9060	6190	9060	6650
		31	67	7970	6070	8700	6180	8700	6630	9420	6290	9420	6720
		37	90	8200	6100	8930	6230	8930	66670	99690	6340	9690	6770
	7	19	28	6520	5680	7170	5740	7170	6220	7810	5780	7810	6250
		25	45	6970	5700	7670	5800	7670	6250	8360	5890	8360	6320
		31	67	7240	5750	7960	5820	7960	6300	8690	5930	8690	6360
		37	90	7430	5790	8180	5840	8180	6320	8920	5920	8920	6380
	8	19	38	5860	5420	6520	5480	6520	5950	7170	5530	5050	6000
		25	45	6270	5460	6970	5520	6970	5980	7680	5570	7680	6040
		31	67	6530	5480	7250	5560	7250	6000	7970	5590	7970	6080
		37	90	6700	5500	7450	5580	7450	6020	8200	5610	7200	6100
	9	19	38	4760	4720	5350	4790	5350	5210	5960	4840	5960	5250
		25	45	5580	5020	6270	5130	6270	5580	6980	5260	6980	5680
		31	67	5800	5040	6530	5150	6530	5600	7250	5280	7250	5700
		37	90	5960	5050	66700	5160	6700	5620	7450	5300	7450	5710
	10	19	38	4570	4380	5220	4600	5220	4960	5860	4770	5860	5120
		25	45	4880	4410	5570	4620	5570	5000	6260	4800	6260	5160
		31	67	5080	4430	5810	4640	5810	5020	66540	4820	6540	5180
		37	90	5200	4440	5960	4650	5960	5030	6700	4840	6700	5200

Note: Performance data are based on high speed. To calculate Med and Low speed data refers to the capacity multiplier vs. speed table .

Performance Data

Cooling Capacity

(W)

Model	Entering Water Temperature ˚C	Water flow l/min	Water Pressure Drop kPa	Entering Air Temperature ˚C											
				19.5WB		20.0WB				21.0WB				22.0WB	
				27.0DB		27.0DB		28.0DB		26.0DB		27.0DB		30.0DB	
				TH	SH	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
008	5	16	20	7970	5540	8250	5350	8250	5730	5790	5537	8790	5350	9340	5750
		22	36	8910	5970	9210	5790	9210	6190	980	5830	9830	6210	10440	6230
		28	55	9510	6230	9840	6060	9840	6470	10500	6120	10500	6540	11150	6550
		34	79	9930	6410	10280	6250	10280	6650	10970	6320	10970	6710	11650	6750
	6	16	20	7420	5300	7700	5130	7700	5510	8250	5150	7250	5520	8790	5540
		22	36	8290	5690	8590	5510	8590	5910	9210	5570	9210	5940	9830	5980
		28	55	8850	5920	9190	5760	9190	6150	9840	5830	9840	6210	10500	6250
		34	79	9250	6070	9590	5920	9590	6320	10280	6000	10280	6380	10970	6430
	7	16	20	6870	5090	7140	4920	7140	5290	7700	4940	7700	5310	8250	5333
		22	36	6780	5410	7980	5250	7980	5630	8590	5300	8590	5680	9210	5710
		28	55	8200	5610	8520	5450	8520	5840	9190	5540	9190	5910	9840	5950
		34	79	8560	5730	8910	5590	8910	5980	9590	5690	9590	60660	10280	6120
	8	16	20	6320	4880	6590	4710	6590	5080	7140	4730	7140	5110	7700	5120
		22	36	7060	5130	7370	4980	7370	5350	7980	5050	7980	5410	8590	5450
		28	55	7550	5290	7870	5150	7870	5520	8520	5230	8520	5610	9190	5660
		34	79	7890	5400	8220	5270	8220	5630	8910	5360	8910	5720	9590	5800
	9	16	20	5770	4980	6050	4500	6050	4870	6590	4540	6590	4900	7140	4920
		22	36	6440	4960	6760	4710	6760	5080	7370	4780	7370	5140	7980	5200
		28	55	6880	4980	7210	4850	72101	5210	7870	4940	7870	5290	8520	5370
		34	79	7200	5050	7540	4930	7540	5290	8220	5050	8220	5400	8910	5490
	10	16	20	5220	4480	5500	4300	5500	4680	6050	4340	6050	4700	6590	4720
		22	36	5840	4580	6140	4440	6140	4800	6760	4520	6760	4870	7370	4930
		28	55	6230	4650	6560	4540	6560	4880	7210	4640	7210	4990	7870	5070
		34	79	6510	4700	6850	4590	6850	4940	7540	4720	7540	5060	8220	5160

Capacity multiplier vs. speed table

Model	Med		Low	
	TH	SH	TH	SH
008	0.86	0.84	0.73	0.69
010	0.86	0.84	0.73	0.69

Performance Data

Cooling Capacity

(W)

Model	Entering Water Temperature ˚C	Water flow l/min	Water Pressure Drop kPa	Entering Air Temperature ˚C									
				17.0WB		18.0WB				19.0WB			
				24.0DB		25.0DB		26.0DB		26.0DB		27.0DB	
				TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
012	5	24	14	9470	7410	10260	7480	10260	8050	11040	7540	11040	8090
		30	22	10050	7630	10890	7730	10890	8290	11720	7820	11720	8370
		36	33	10470	7730	11340	7910	11340	8470	12210	8000	12210	8560
		42	45	10770	7900	11680	8020	11680	8580	12570	8140	12570	8690
	6	24	14	8680	7060	9470	7140	9470	7700	10260	7210	10260	7760
		30	22	9210	7230	10050	73440	10050	7900	10890	7440	10890	8010
		36	33	9590	7350	10470	7480	10470	8020	11340	7590	11340	8130
		42	45	9870	7420	10770	7570	10770	8120	11680	7700	11680	8230
	7	24	14	7890	6710	8680	6800	8680	7360	9470	6870	9470	7420
		30	22	8370	6830	9210	6950	9210	7500	10050	7060	10050	7590
		36	33	8720	6900	9590	7050	9590	7580	10470	7180	10470	7710
		42	45	8980	6950	9870	7120	9870	7650	10770	7270	10770	7780
	8	24	14	7090	6370	7890	6470	7890	7020	8680	6550	8680	7080
		30	22	7540	6420	8370	6560	8370	7090	7210	6680	9210	7200
		36	33	7850	6450	8720	6620	8720	7140	9590	6770	9590	7280
		42	45	8080	6470	8980	6650	8980	7180	9870	6830	9870	7330
	9	24	14	6300	5980	7090	6140	7090	6690	7890	6230	7890	6760
		30	22	6700	5990	7540	6160	7540	6750	8370	6300	8370	6820
		36	33	6980	6010	7850	6180	7850	6790	8720	6350	8720	6840
		42	45	7190	6040	8080	6190	8080	6830	8980	6370	89980	6860
	10	24	14	5520	5520	6300	5710	6300	6190	7090	5920	7090	6380
		30	22	5860	5580	6700	5730	6700	6220	7540	6000	7540	6400
		36	33	6110	5610	6980	5770	6980	6270	7850	6050	7850	6420
		42	45	6280	5740	7190	5820	7190	6300	8080	6090	8080	6440

Note: Performance data are based on high speed. To calculate Med and Low speed data refers to the capacity multiplier vs. speed table .

Cooling Capacity

(W)

Model	Entering Water Temperature ˚C	Water flow l/min	Water Pressure Drop kPa	Entering Air Temperature ˚C											
				19.5WB		20.0WB				21.0WB				22.0WB	
				27.0DB		27.0DB		28.0DB		26.0DB		27.0DB		30.0DB	
				TH	SH	TH	SH	TH	SH	TH	SH	TH	SH	TH	SH
012	5	24	14	11430	7840	11830	7590	11830	8130	12620	7630	12620	8150	13410	8160
		30	22	12140	8183	12560	7890	12560	8420	13400	8070	13400	8070	14240	8500
		36	33	12640	8330	13080	8090	13080	8630	13960	8160	13960	8690	14830	8730
		42	45	13010	8470	13470	8230	13470	8770	14360	8320	14360	8840	15260	8900
	6	24	14	10640	7500	11040	7270	11040	7790	11830	7320	11830	7830	12620	7840
		30	22	11300	7750	11720	7510	11720	8050	12560	7580	12560	8090	13400	8140
		36	33	11770	7910	12210	7690	12210	8220	13080	7770	13080	8290	13960	8340
		42	45	12120	8020	12570	7820	12570	8340	13470	7910	13470	8420	14360	8490
	7	24	14	9860	7180	10260	6830	10260	7470	11040	6990	11040	7500	11830	7540
		30	22	10470	7370	10890	7150	10890	7680	11720	7220	11720	7730	12560	7780
		36	33	10900	7500	11340	7290	113470	7800	12210	7390	12210	7890	13080	7950
		42	45	11220	7580	11680	7400	11680	7900	12570	7500	12570	8000	113470	8080
	8	24	14	9070	6850	9470	6630	9470	7140	10260	6690	10260	7190	11040	7200
		30	22	9630	6990	10050	6780	10050	7290	10890	6870	10890	7670	11720	7430
		36	33	10030	7080	10470	6880	10470	7400	11340	7000	11340	7570	12570	7680
		42	45	10330	7150	10770	6970	10770	7470	11680	7090	11680	7570	12570	7680
	9	24	17	8280	6540	8680	6320	8680	6830	9470	6370	9470	6870	10260	6920
		30	22	8790	6620	9210	6420	9210	6920	10050	6510	10050	7000	10890	7070
		36	33	9150	6660	9590	6490	9590	6980	10470	6610	10470	7090	11340	7190
		42	45	9430	6700	9870	6540	9870	7010	10770	6680	10770	7150	11670	7260
	10	24	14	7490	6220	8790	6000	8790	6510	8680	6070	8680	6570	9470	6620
		30	22	7950	6230	8370	6050	8370	6540	9210	6150	9210	6640	10050	6720
		36	33	8280	6250	8720	6080	8720	6560	9590	6220	9590	6690	10470	6790
		42	45	8520	6250	8980	6110	8980	6570	9870	6260	9870	6720	10770	6850

Capacity multiplier vs. speed table

Model	Med		Low	
	TH	SH	TH	SH
012	0.89	0.87	0.73	0.69
014	0.89	0.87	0.73	0.69

Performance Data

Heating Capacity

(W)

Model	Water flow l/min	Entering Water Temperature kPa	Entering Air Temperature ˚C								
			Entering Water Temperature˚C								
			21.0DB								
			40	45	50	55	60	65	70	78	80
002	4	5	1490	1880	2280	2660	3060	3450	3850	4230	4630
	5.5	8	1580	2000	2420	2840	3260	3680	4090	4510	4930
	7	13	1650	2080	2520	2950	3400	3830	4260	4700	5130
	8.5	17	1700	2150	2590	3050	3490	3940	4380	4840	5280
003	6	10	2150	2720	3280	3850	4420	4990	5550	6120	6680
	8	17	2270	2860	3450	4060	4650	4250	5850	6440	7040
	10	26	2350	2970	3580	4200	4810	5430	6060	6680	7290
	12	34	1410	3050	3680	4310	4940	5580	6210	6840	7480
004	8	13	2920	3690	4470	5230	6000	6770	7540	8300	9080
	11	18	3120	3930	4760	5570	6400	7220	8040	8860	9680
	14	20	3240	4110	4970	5820	6680	7520	8390	9230	10090
	17	31	3350	4230	5120	6000	6870	7760	8640	9520	10410
006	12	18	4080	5150	6230	7300	8390	9460	10530	11610	12680
	15	27	4240	5370	6490	7600	8720	9840	10960	12070	13200
	18	37	4370	5520	6680	7830	8980	10130	11280	12430	13600
	21	57	4480	5650	6840	8010	9190	10360	11550	12720	13900
008	16	20	5900	7450	9000	10560	12110	13670	15210	16770	18320
	22	36	6230	7870	9150	11150	12790	14430	16070	17710	19350
	28	55	6450	8160	9860	11560	13260	14960	16670	18360	20060
	34	79	6630	8370	10110	11860	13610	15350	17100	18840	20590
010	19	28	7000	8840	10080	12540	14380	16230	18060	19910	21750
	25	45	7070	8940	10390	12670	14530	16390	18260	20120	21980
	31	67	7140	9030	10910	12790	14680	16560	18450	20320	22200
	37	90	7210	9100	11000	12900	14800	16700	18600	20500	22400
012	24	14	8220	10390	12550	14710	16860	19030	21190	23350	25520
	30	22	8500	10730	12970	15210	17450	19680	21920	24160	26390
	36	33	8710	11000	13290	15580	17880	20170	22460	24760	27050
	42	45	8870	11210	13550	15890	18220	20560	22890	25260	27560

Heating Performance correction

Heating capacity is based on 21℃ DB entering air temperature and high speed air flow.

Example:

Given: Unit size: 006

Water flow: 18l/min

Entering water temperature: 60℃

Entering air temperature: 18℃ DB

From heating capacity table, unit 006 provides 8980W heating capacity when operating at 60℃ entering water and 21℃ DB entering air temperature.

The coil heating capacity per 1℃ temperature difference is:

8980 / (60-21) =230W/℃

Actual heating capacity at 18℃ DB entering air temperature is:

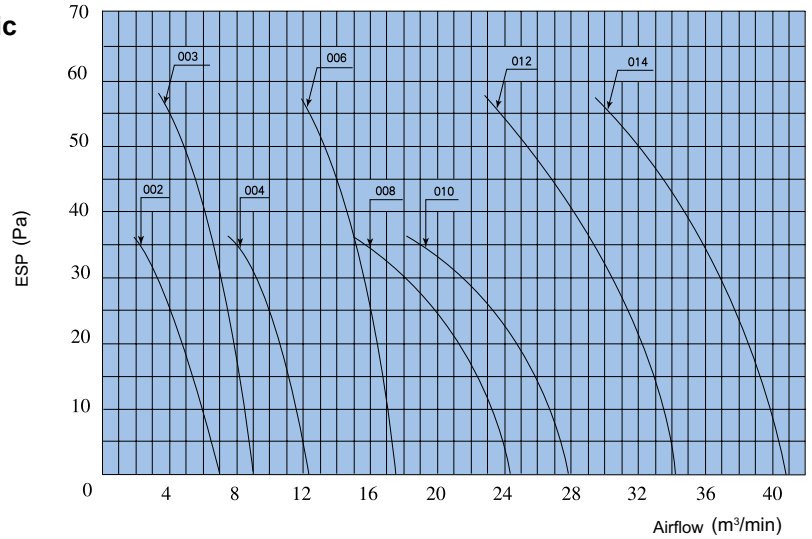
230 X (60-18) = 9660W

Capacity multiplier vs. speed table

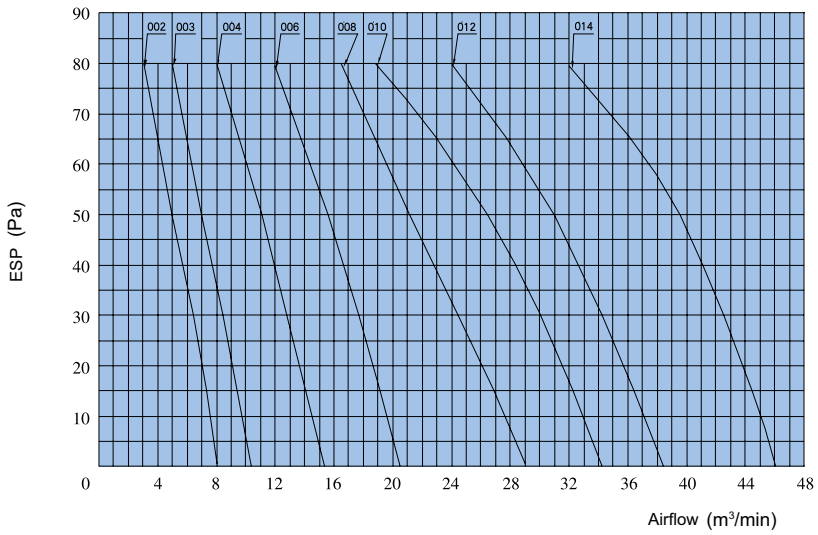
Model	Med	Low
002	0.84	0.72
003	0.85	0.73
004	0.86	0.74
006	0.87	0.75
008	0.86	0.74
010	0.86	0.74
012	0.87	0.75
014	0.87	0.75

Fan Performance

Standard Static Pressure Unit



High Static Pressure Unit



Based on dry air condition, high speed, without filter and grills.

Copacity multiplier vs. speed table (cooling)

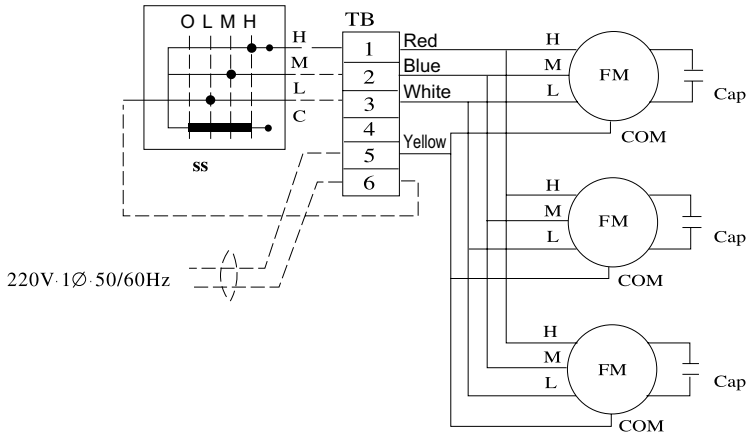
		002	003	004	006	008	010	012
Med	TH	0.85	0.86	0.87	0.89	0.86	0.86	0.89
	SH	0.83	0.84	0.85	0.87	0.84	0.84	0.87
Low	TH	0.7	0.71	0.74	0.74	0.73	0.73	0.73
	SH	0.66	0.67	0.7	0.7	0.69	0.69	0.69

Copacity multiplier vs. speed table (heating)

		002	003	004	006	008	010	012
Med	TH	0.84	0.85	0.86	0.87	0.86	0.86	0.87
Low	SH	0.72	0.73	0.74	0.75	0.74	0.74	0.75

Electric Data

Electric Diagram



Cap Capacitor
FM Fan & Motor
SS Switch
O Off
TB Terminal Block
----- Factory Wiring
----- Field Wiring
One motor used in model 002,003,004,005,006
Two motors used in model 008,010,012

Motor input power

Model		002	003	004	006	008	010	012
Power (W)	VL/CL/VM	31	46	62	95	132	152	180
	VP	44	59	72	108	156	174	212
Current (A)	VL/CL/VM	0.14	0.21	0.28	0.43	0.6	0.69	0.82
	VP	0.2	0.27	0.33	0.49	0.71	0.79	0.96

Model	42CL、VM、Vp							42VL						
	002	003	004	006	008	010	012	002	003	004	006	008	010	012
Base Unit	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Filter	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Speed Switch	●	●	●	●	●	●	●	○	○	○	○	○	○	○
Thermostat	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Note: ○ Refers to the standard accessory
● Refers to the options. Customers need to order it dividually

improve buildings™

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

United Technologies
Climate | Controls | Security

Version:	CAT_42CV_E-1301_02_CHK
Supersede:	CAT_42CV_E-1204_01_CHK
Effective Date:	Feb, 2013