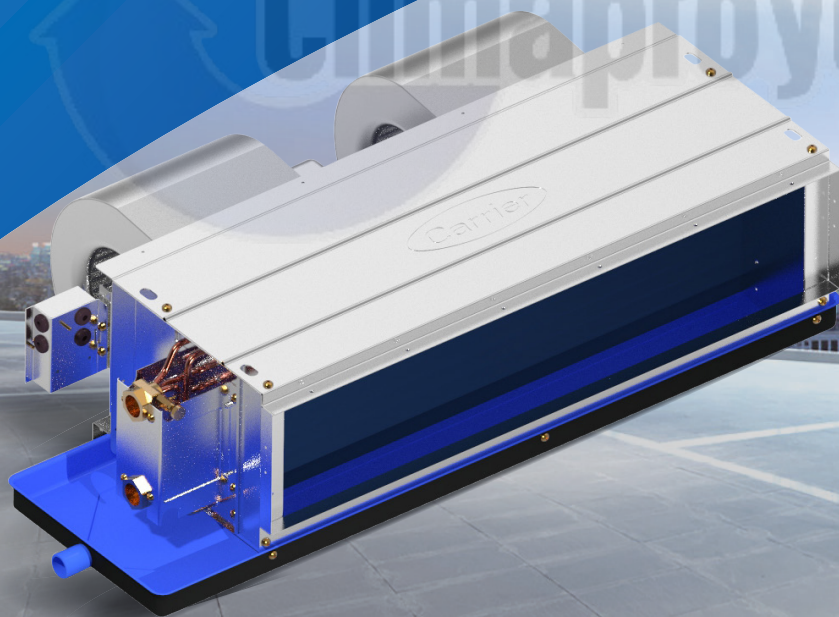




# 42CT AC & BLDC Motor Fan Coil Unit

Airflow: 340~2380m<sup>3</sup>/h







Carrier® is a leading global provider of innovative HVAC, refrigeration, fire, security and building automation technologies. Supported by the iconic Carrier name, the company's portfolio includes industry-leading brands such as Carrier, Kidde, Edwards, LenelS2 and Automated Logic. Carrier's businesses enable modern life, delivering efficiency, safety, security, comfort, productivity and sustainability across a wide

range of residential, commercial and industrial applications.

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



## Model number Nomenclature

0		<p>Product re-design key          0 : Initial design, comply with GB/T 19232-2003          (parameters refer to catalogue CAT_42CT_202006-06)          A : First design modify, comply with GB/T 19232-2019          (parameters refer to this catalogue)</p>
A		<p>Return air plenum &amp; filter          0 : Without          A : Unit with rear return air plenum          B : Unit with bottom return air plenum          C : Unit with rear return air plenum &amp; nylon filter          D : Unit with bottom return air plenum &amp; nylon filter</p>
1		<p>Customer source &amp; power          1 : Export to HongKong    220V-1Ph-50Hz    IP54 Motor (for AC)               220V~240V - 1Ph - 50Hz/60Hz    IP44 motor (for DC)          2 : Export 220V-1Ph-50Hz    IP20 Motor (for AC)               220V~240V - 1Ph - 50Hz/60Hz    IP44 Motor (for DC)          3 : Export 230V-1Ph-50Hz    IP20 Motor (for AC)          4 : Export 220V-1Ph-60Hz    IP20 Motor (for AC)          5 : Export 230V-1Ph-60Hz    IP20 Motor (for AC)          6 : Export 115V-1Ph-60Hz    IP20 Motor (for AC)          7 : Export 240V-1Ph-50Hz    IP20 Motor (for AC)</p>
L		<p>Unit connection direction (face to discharge air)          L : Left          R : Right</p>
A		<p>Drainpan          A : Standard drainpan          B : Lengthen drainpan          C : Stainless drainpan          D : Lengthen stainless drainpan</p>
0		<p>External static pressure          0 : 12Pa    standard          3 : 30Pa    with static pressure          5 : 50Pa    high static pressure          K : Brushless DC motor (0~10V)          U : Brushless DC motor @12pa (0~10V)          V : Brushless DC motor @30pa (0~10V)          W : Brushless DC motor @50pa (0~10V)</p>
20		<p>Coil Rows          20 : 2 Pipe 2 Row (002~008)          30 : 2 Pipe 3 Row (002~014)          31 : 4 Pipe 3 Row cooling+1Row heating (002-014)          40 : 2 Pipe 4 Row (002~014)</p>
002		<p>Unit size (Air Volume = Size X 170 m<sup>3</sup>/h)          002 : 340m<sup>3</sup>/h          003 : 510m<sup>3</sup>/h          .....</p>
CT		<p>Model letters          CT : Horizontal ceiling FCU</p>
↑ 42		<p>Product series          42 : Fan coil unit</p>

## Air Flow

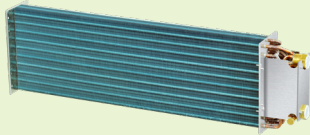
340~2380m<sup>3</sup>/h



## Features

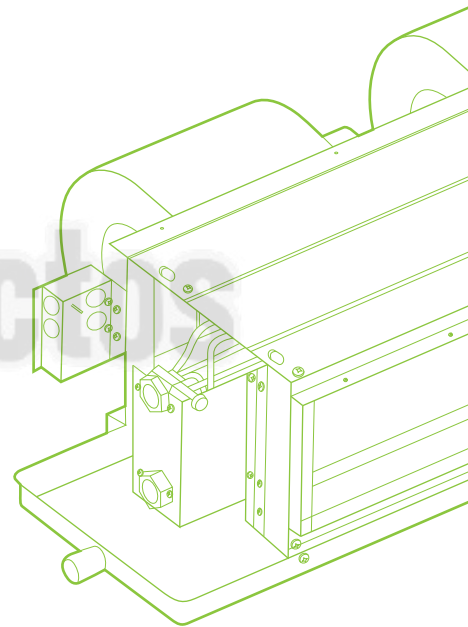
### High Efficiency

- Unit coil using the latest developed double-flanging structure of wide seam blue hydrophilic aluminum fin, advanced mechanical tube-expanding process, ensure copper tube optimally contacts with aluminum fin. Wide seam hydrophilic aluminum fin provide sufficient heat transfer channel for heat exchange, wide impeller provide uniformly air velocity environment for heat transfer. It makes the heat transfer more complete, which ensures the cooling capacity per input power of 42CT outperforms other similar products.



### Ultra Low Noise

- 42CT unit equipped with newly designed wide and large diameter impeller, low speed forward multi-blade blade. The fan casing is strengthened with reinforcing ribs for additional strength.
- It adopts NSK bearings, ensuring small vibration and low noise in operation.



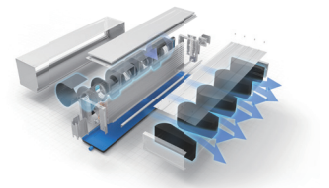
### Integrated Air Plenum Box (Option)

- Factory mounted integrated air plenum box, ensure better quality and appearance, reduce labor cost on jobsite. Along with the air plenum box, filter options can be offered to improve indoor air quality.

## Silencer (Option)

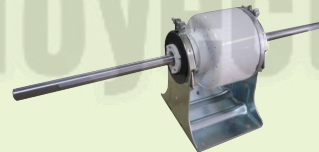
- Carrier proprietary technology design silencer absorb the noise generated by air outlet dynamic pressure, with build-in wing shape sound-absorbing sponge column, optimizing the system simulation through CFD tool. Sound level of unit can be greatly reduced ~3dB(A) without other performance impact, Silencer can be easy installed at FCU outlet, without any influence for unit air volume and ESP.

FCU Model	Silencer	ESP(Pa)	Air Volume (m <sup>3</sup> /h)	Sound Level (dB(A))	Noise Decrease (dB(A))
Unit 1 (2 fans)	without	30	1005.0	45.6	3.4
	with	30	1011.6	42.2	
Unit 2 (4 fans)	without	30	1333.1	46.0	3.5
	with	30	1351.4	42.5	
Unit 3 (4 fans)	without	12	1973.0	46.7	3.0
	with	12	1954.0	43.7	



## BLDC Motor (Option)

- The motor adopts a totally enclosed casing structure, and the motor efficiency is higher. It has great advantages in efficiency, noise and energy saving.



## Other Diversified Options

- 2 Pipe: 3row / 4row.
- Thermostat.
- Motorized 2-way or 3-way valves.
- Drain pan option: cold roll steel with powder coating or stainless steel, all with 6mm PEF insulation, standard or extended length design.
- Bottom or rear plenum box with or without filter options.
- Filter options: nylon filter (10mm) or aluminum filter (10mm or 25mm).



2-way valve

3-way valve



Aluminum filter



Thermostat for AC FCU



Thermostat for BLDC FCU

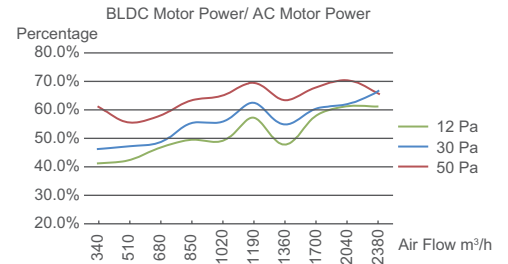


## Features of 42CT brushless DC motor FCU

Compared to traditional fan coils, Carrier 42CT brushless DC (BLDC) motor fan coils are featured by energy-saving, supreme comfort, intelligent control and reliability with up-to-date BLDC stepless motor and advanced control technology. Carrier 42CT BLDC fan coil is ideal choice for buildings seeking for both green and comfort.

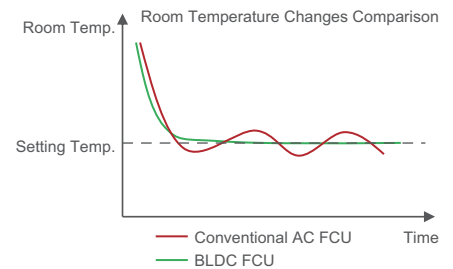
### Significant energy saving

- The energy consumption of 42CT BLDC FCU is only 40%~70% compared to conventional AC FCU.
- BLDC motor can adjust to only 300rpm with high efficiency, but AC motor can not regulate speed flexibly to meet requirements, and energy consumption is high when running at low speed.



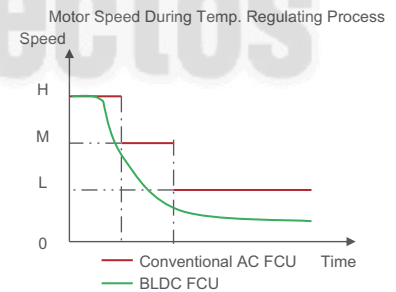
### Supreme comfort

- FCU regulates room temperature by water flow and fan speed control. Normally, conventional AC FCU only have three speed function to regulate air flow which is very limited. Considerable fluctuation of actual room temperature is inevitable. BLDC motor FCU have stepless speed function to regulate smoothly in large air flow range, and can make the room temperature constantly working together with water valve.
- Set precision of Carrier THT420 series LCD thermostat for 42CT BLDC FCU is up to 0.5°C, which meets supreme temperature control demand for comfort application.



### Super-quiet operation

- BLDC FCU have wide regulating range and can reduce motor speed when room temperature reach the setting point.
- Most of the time, the unit is operating at medium or low speed, where the noise level is much lower.
- Carbon brush noise, unavoidable in conventional AC FCU, is eliminated in the 42CT BLDC motor FCU. BLDC motor use ultra high frequency driving beyond the normal induction range of human ears to further reduce the noise of the unit during operation.



### Flexible control

- Carrier 42CT BLDC FCU can not only match Carrier THT420 series thermostat, but also be compatible with normal 0~10V thermostat on the market, so that users can choose their own thermostat to meet diverse needs of practical applications.
- The unit can provide stand alone or group control and can be connected to the room control unit (RCU) to reduce energy consumption.
- The MODBUS type FCU controller is equipped with RS485 communication interface, supports standard Modbus communication protocol, and facilitates access to the building automation (BA) system.



### Convenient application

- Modifying the external static pressure is easily done in the field by changing the dip switch settings between 12Pa, 30Pa and 50Pa, as required.
- THT420 series thermostat have timing function and convenient to set start and turn off time.
- Using IPM drive module, it has over current protection, overvoltage protection, undervoltage protection, plugging protection, overspeed protection and other functions.



# Technical Parameter

## Technical Data (2R Coil)

Performance	Model	002	003	004	005	006	007	008
Air Volume m <sup>3</sup> /h	High	340	510	680	850	1020	1190	1360
	Med	270	400	530	670	800	940	1070
	Low	200	300	400	500	600	700	800
Total Cooling Capacity W	12 Pa	1900	2950	3600	4500	5600	6500	7300
	30 Pa	1900	2950	3600	4500	5500	6500	7300
	50 Pa	1850	2900	3600	4500	5400	6400	7200
Sensible Cooling Capacity W	12 Pa	1470	2230	2800	3490	4290	4970	5650
	30 Pa	1470	2230	2800	3490	4240	4970	5650
	50 Pa	1445	2200	2800	3490	4200	4920	5600
Heating Capacity W	12 Pa	3200	5150	6500	7850	9750	11150	12950
	30 Pa	3200	5150	6500	7550	9750	11150	12950
	50 Pa	3150	5050	6400	7700	9750	11150	12900
Power Input W (AC)	12 Pa	34	44	60	69	92	112	130
	30 Pa	40	56	67	83	105	121	138
	50 Pa	45	62	76	95	109	131	165
Power Input W (DC)	12 Pa	14	18	28	37	48	61	58
	30 Pa	18	25	36	47	58	72	73
	50 Pa	24	33	46	60	71	87	94
Sound Level dB(A)	12 Pa	32.5	35.5	39	41	43	45.5	44
	30 Pa	36.5	37.5	40	42	42	44.5	43
	50 Pa	39	41	43	44.5	44.5	45	45.5
Water Flow(cooling/heating) l/min		6.0	9.0	10.2	13.2	16.2	18.6	21.0
Water Pressure Drop(cooling/heating) KPa		11.0	26.0	19.0	28.0	27.0	37.0	33.0
FCEER w/w (AC)	12 Pa	56.0	60.0	55.0	58.0	54.0	49.0	49.0
	30 Pa	46.0	53.0	50.0	49.0	49.0	47.0	47.0
	50 Pa	42.0	43.0	44.0	44.0	47.0	43.0	40.0
FCEER w/w (DC)	12 Pa	125.0	123.0	106.0	94.0	92.0	82.0	97.0
	30 Pa	94.0	95.0	85.0	77.0	77.0	71.0	79.0
	50 Pa	74.0	75.0	67.0	65.0	64.0	61.0	64.0
FCCOP w/w (AC)	12 Pa	93.0	105.0	100.0	102.0	95.0	85.0	88.0
	30 Pa	81.0	79.0	90.0	82.0	85.0	82.0	84.0
	50 Pa	74.0	74.0	79.0	75.0	81.0	73.0	71.0
FCCOP w/w (DC)	12 Pa	218.0	228.0	196.0	175.0	171.0	147.0	177.0
	30 Pa	163.0	174.0	156.0	141.0	144.0	129.0	143.0
	50 Pa	123.0	135.0	124.0	132.0	120.0	109.0	116.0
Fan	Type	Centrifugal, forward multi-blade						
Motor	Type	Permanent Split Capacitor (AC)/PMSM(DC)						
Coil	Rows	2						
	Working Pressure	1.6 MPa						
Connecting	In-out	3/4" FPT						
	Drain connection	3/4" MPT						
Net Weight Kg-AC		10.0	11.4	11.8	13.6	15.0	16.0	20.9
Net Weight Kg-DC		10.6	12.0	12.4	14.2	15.6	16.6	21.5
Plenum Box Net Weight Kg		2	2.4	2.7	2.8	3.3	3.5	4.1
Options		Thermostat, 2Way/3Way Valve, Plenum Box						

- Note:
- The coil data is the performance in high speed with relevant static pressure
  - Cooling conditions: inlet water 7°C, temperature rise 5°C, entry air temperature DB 27°C, WB 19.5°C  
Heating conditions: inlet water 60°C, same water flow as the cooling conditions, entry air temperature DB 21°C  
Heating capacity based on inlet water 45°C, please refer to FCU selection software.
  - Sound level is tested per GB/T 19232-2019
  - FCEER means fan coil cooling energy efficiency ratio and FCCOP means fan coil heating coefficient of performance, defined per GB/T 19232-2019

# Technical Parameter

## Technical Data (3R Coil)

Performance	Model	002	003	004	005	006	007	008	010	012	014
Air Volume m <sup>3</sup> /h	High	340	510	680	850	1020	1190	1360	1700	2040	2380
	Med	270	400	530	670	800	940	1070	1340	1610	1890
	Low	200	300	400	500	600	700	800	1000	1200	1400
Total Cooling Capacity W	12 Pa	2350	3350	4300	5300	6300	7200	8300	9850	11600	13000
	30 Pa	2300	3350	4200	5300	6200	7200	8250	9850	11400	13000
	50 Pa	2300	3350	4250	5200	6150	7050	8300	9750	11400	12850
Sensible Cooling Capacity W	12 Pa	1660	2400	3130	3860	4600	5300	6100	7350	8700	9900
	30 Pa	1640	2400	3080	3860	4560	5300	6080	7350	8600	9900
	50 Pa	1640	2400	3100	3815	4530	5230	6100	7300	8600	9800
Heating Capacity W	12 Pa	3550	5350	6950	8700	10350	11900	14250	16600	19000	22400
	30 Pa	3550	5450	6900	8700	10500	11900	14250	16600	19000	21500
	50 Pa	3550	5350	6900	8700	10500	11900	13950	16600	19500	22300
Power Input W (AC)	12 Pa	34	44	60	68	91	112	129	147	183	221
	30 Pa	40	56	67	82	104	121	136	169	206	245
	50 Pa	45	62	75	94	109	131	161	195	228	281
Power Input W (DC)	12 Pa	14	19	29	37	48	67	59	88	110	139
	30 Pa	18	26	37	47	58	73	75	101	130	166
	50 Pa	24	34	47	60	71	90	96	122	158	195
Sound Level dB(A)	12 Pa	32.5	34	39	40	43.5	45	44	47	49	51
	30 Pa	34	37.5	39	40	42	45	43.5	46.5	47.5	49
	50 Pa	36.5	40.5	41.5	42	44.5	46	45.5	48	49.5	50
Water Flow(cooling/heating) l/min		7.2	9.6	12.0	15.6	18.0	20.4	23.4	28.2	33.0	37.2
Water Pressure Drop(cooling/heating) KPa		22.0	22.0	20.0	30.0	27.0	27.0	27.0	40.0	40.0	45.0
FCEER w/w (AC)	12 Pa	64.0	69.0	65.0	68.0	60.0	55.0	57.0	53.0	52.0	48.0
	30 Pa	56.0	56.0	58.0	57.0	55.0	55.0	55.0	49.0	48.0	46.0
	50 Pa	47.0	50.0	54.0	51.0	53.0	50.0	48.0	45.0	43.0	41.0
FCEER w/w (DC)	12 Pa	130.0	139.0	120.0	106.0	101.0	92.0	106.0	87.0	76.0	70.0
	30 Pa	102.0	107.0	97.0	86.0	85.0	78.0	87.0	76.0	65.0	61.0
	50 Pa	80.0	85.0	77.0	71.0	70.0	68.0	73.0	65.0	55.0	54.0
FCCOP w/w (AC)	12 Pa	97.0	111.0	110.0	113.0	102.0	93.0	98.0	91.0	91.0	83.0
	30 Pa	88.0	91.0	99.0	95.0	91.0	90.0	93.0	85.0	83.0	75.0
	50 Pa	75.0	80.0	87.0	85.0	88.0	81.0	80.0	76.0	77.0	71.0
FCCOP w/w (DC)	12 Pa	215.0	240.0	206.0	180.0	174.0	158.0	185.0	153.0	132.0	120.0
	30 Pa	166.0	183.0	166.0	144.0	147.0	135.0	150.0	134.0	115.0	105.0
	50 Pa	130.0	144.0	133.0	116.0	126.0	115.0	124.0	116.0	97.0	93.0
Fan	Type	Centrifugal, forward multi-blade									
Motor	Type	Permanent Split Capacitor (AC)/PMSM(DC)									
Coil	Rows	3									
	Working Pressure	1.6 MPa									
Connecting	In-out	3/4" FPT									
	Drain connection	3/4" MPT									
Net Weight Kg-AC		10.5	12	12.5	14.4	15.9	17	22.2	24.5	27.2	28.5
Net Weight Kg-DC		11.3	12.8	13.3	15.2	16.7	17.8	23	25.3	28	29.3
Plenum Box Net Weight Kg		2	2.4	2.7	2.8	3.3	3.5	4.1	6	6.7	7.3
Options		Thermostat, 2Way/3Way Valve, Plenum Box									

- Note:
- The coil data is the performance in high speed with relevant static pressure
  - Cooling conditions: inlet water 7°C, temperature rise 5°C, entry air temperature DB 27°C, WB 19.5°C  
Heating conditions: inlet water 60°C, same water flow as the cooling conditions, entry air temperature DB 21°C  
Heating capacity based on inlet water 45°C, please refer to FCU selection software.
  - Sound level is tested per GB/T 19232-2019
  - FCEER means fan coil cooling energy efficiency ratio and FCCOP means fan coil heating coefficient of performance, defined per GB/T 19232-2019



# Technical Parameter

## Technical Data (3+1R Coil)

Performance	Model	002	003	004	005	006	007	008	010	012	014
Air Volume m <sup>3</sup> /h	High	340	510	680	850	1020	1190	1360	1700	2040	2380
	Med	270	400	530	670	800	940	1070	1340	1610	1890
	Low	200	300	400	500	600	700	800	1000	1200	1400
Total Cooling Capacity W	12 Pa	2250	3200	4150	5010	5850	6900	8200	9600	11250	12600
	30 Pa	2250	3200	4100	4900	5850	6900	8200	9600	11200	12600
	50 Pa	2250	3150	4050	4950	5850	6800	8050	9600	11200	12600
Sensible Cooling Capacity W	12 Pa	1600	2330	3040	3700	4350	5120	6030	7180	8490	9580
	30 Pa	1600	2330	3020	3640	4350	5120	6030	7180	8460	9580
	50 Pa	1600	2300	2990	3670	4350	5070	5950	7180	8460	9580
Heating Capacity W	12 Pa	2150	3000	3700	4450	5500	6300	7500	8500	10300	11500
	30 Pa	2200	3000	3700	4450	5500	6300	7500	8500	10300	11500
	50 Pa	2100	2950	3700	4450	5500	6300	7350	8350	10200	11500
Power Input W (AC)	12 Pa	33	44	59	68	91	112	129	145	182	221
	30 Pa	40	56	66	82	101	114	137	168	204	245
	50 Pa	45	62	75	92	108	131	159	188	222	271
Power Input W (DC)	12 Pa	14	19	29	38	50	64	63	88	113	139
	30 Pa	19	26	37	48	60	73	79	101	134	166
	50 Pa	24	34	47	61	73	90	100	123	163	195
Sound Level dB(A)	12 Pa	32.5	34.5	39	41.5	44.5	45.5	43.5	47	48.5	50.5
	30 Pa	35	36	40	43	43	46	43	47	47.5	48.5
	50 Pa	38	40	42	44.5	46.5	47	45	48.5	48.5	48.5
Water Flow(cooling) l/min		6.6	9	12	14.4	18.6	19.8	24	27	31.8	34.8
Water Flow(heating) l/min		3	4.2	5.4	6	7.8	9	10.8	12.6	14.4	16.2
Water Pressure Drop(cooling) KPa		21	20	19	29	27	25	28	36	40	50
Water Pressure Drop(heating) KPa		30	10	16	24	37	18	27	36	26	34
FCEER w/w (AC)	12 Pa	62.0	66.0	64.0	64.0	58.0	55.0	56.0	57.0	52.0	48.0
	30 Pa	52.0	55.0	57.0	53.0	52.0	54.0	54.0	51.0	48.0	44.0
	50 Pa	47.0	48.0	51.0	48.0	50.0	48.0	47.0	47.0	45.0	40.0
FCEER w/w (DC)	12 Pa	128.0	134.0	113.0	104.0	95.0	87.0	102.0	83.0	76.0	70.0
	30 Pa	100.0	102.0	92.0	83.0	80.0	75.0	84.0	73.0	65.0	61.0
	50 Pa	80.0	81.0	74.0	70.0	67.0	65.0	69.0	63.0	56.0	53.0
FCCOP w/w (AC)	12 Pa	60.0	65.0	60.0	61.0	55.0	52.0	53.0	53.0	52.0	44.0
	30 Pa	51.0	51.0	54.0	50.0	50.0	51.0	51.0	47.0	46.0	41.0
	50 Pa	44.0	46.0	47.0	45.0	48.0	44.0	43.0	42.0	42.0	37.0
FCCOP w/w (DC)	12 Pa	134.0	148.0	115.0	110.0	98.0	90.0	106.0	82.0	82.0	73.0
	30 Pa	103.0	108.0	91.0	88.0	82.0	79.0	85.0	70.0	70.0	63.0
	50 Pa	80.0	83.0	72.0	70.0	68.0	64.0	68.0	60.0	58.0	55.0
Fan	Type	Centrifugal, forward multi-blade									
Motor	Type	Permanent Split Capacitor (AC)/PMSM(DC)									
Coil	Rows	3R cooling+1R heating									
	Working Pressure	1.6 MPa									
Connecting	In-out	3/4" FPT									
	Drain connection	3/4" MPT									
Net Weight Kg-AC		11.4	13.0	13.5	15.5	17.1	18.3	23.7	26.0	28.9	30.3
Net Weight Kg-DC		12.0	13.6	14.1	16.1	17.7	18.9	24.3	26.6	29.5	30.9
Plenum Box Net Weight Kg		2	2.4	2.7	2.8	3.3	3.5	4.1	6	6.7	7.3
Options		Thermostat, 2Way/3Way Valve, Plenum Box									

- Note:
- The coil data is the performance in high speed with relevant static pressure
  - Cooling conditions: inlet water 7°C, temperature rise 5°C, entry air temperature DB 27°C, WB 19.5°C  
Heating conditions: inlet water 60°C, same water flow as the cooling conditions, entry air temperature DB 21°C  
Heating capacity based on inlet water 45°C, please refer to FCU selection software.
  - Sound level is tested per GB/T 19232-2019
  - FCEER means fan coil cooling energy efficiency ratio and FCCOP means fan coil heating coefficient of performance, defined per GB/T 19232-2019

# Technical Parameter

## Technical Data (4R Coil)

Performance	Model	002	003	004	005	006	007	008	010	012	014
Air Volume m <sup>3</sup> /h	High	340	510	680	850	1020	1190	1360	1700	2040	2380
	Med	270	400	530	670	800	940	1070	1340	1610	1890
	Low	200	300	400	500	600	700	800	1000	1200	1400
Total Cooling Capacity W	12 Pa	2600	3650	4650	5850	6950	7600	9350	11100	12800	14150
	30 Pa	2600	3700	4650	5750	6950	7600	9350	11100	12600	14250
	50 Pa	2600	3600	4550	5700	6950	7550	9250	11000	12600	14200
Sensible Cooling Capacity W	12 Pa	1770	2550	3300	4130	4900	5500	6600	7950	9340	10450
	30 Pa	1770	2580	3300	4080	4900	5500	6600	7950	9240	10520
	50 Pa	1770	2530	3250	4050	4900	5470	6550	7950	9240	10500
Heating Capacity W	12 Pa	3900	5650	7550	8900	11100	12150	15000	17750	20900	23600
	30 Pa	3900	5700	7540	8900	11050	12150	14700	17750	20800	23600
	50 Pa	3900	5700	7400	8950	11100	12150	14700	17600	20900	23600
Power Input W (AC)	12 Pa	34	44	59	68	91	112	129	147	183	221
	30 Pa	40	55	67	82	102	119	137	169	205	245
	50 Pa	45	62	75	94	108	131	160	194	225	282
Power Input W (DC)	12 Pa	14	19	29	38	50	64	63	88	113	139
	30 Pa	19	26	37	48	60	73	79	101	134	166
	50 Pa	24	34	47	61	73	90	100	123	163	195
Sound Level dB(A)	12 Pa	32.5	34.5	39	41.5	44.5	45.5	43.5	47	48.5	50.5
	30 Pa	35	36	40	43	43	46	43	47	47.5	48.5
	50 Pa	38	40	42	44.5	46.5	47	45	48.5	48.5	48.5
Water Flow(cooling/heating) l/min		7.8	10.8	13.2	16.2	19.8	21.6	27	31.8	36.6	40.8
Water Pressure Drop(cooling/heating) KPa		30	18	17	28	28	26	27	36	33	43
FCEER w/w (AC)	12 Pa	67.0	76.0	72.0	75.0	66.0	60.0	64.0	61.0	58.0	52.0
	30 Pa	59.0	63.0	65.0	63.0	60.0	59.0	62.0	57.0	55.0	50.0
	50 Pa	55.0	55.0	58.0	56.0	58.0	53.0	51.0	52.0	51.0	45.0
FCEER w/w (DC)	12 Pa	134.0	154.0	129.0	115.0	108.0	97.0	119.0	91.0	92.0	77.0
	30 Pa	104.0	118.0	104.0	95.0	93.0	84.0	97.0	81.0	80.0	69.0
	50 Pa	83.0	94.0	83.0	78.0	78.0	71.0	80.0	70.0	67.0	60.0
FCCOP w/w (AC)	12 Pa	103.0	117.0	118.0	121.0	107.0	97.0	103.0	97.0	97.0	86.0
	30 Pa	88.0	95.0	105.0	102.0	96.0	95.0	95.0	90.0	89.0	81.0
	50 Pa	79.0	85.0	93.0	91.0	93.0	85.0	84.0	80.0	84.0	74.0
FCCOP w/w (DC)	12 Pa	213.0	256.0	221.0	186.0	181.0	162.0	200.0	156.0	158.0	133.0
	30 Pa	167.0	196.0	178.0	149.0	153.0	140.0	163.0	136.0	138.0	117.0
	50 Pa	132.0	153.0	143.0	121.0	130.0	120.0	132.0	126.0	116.0	104.0
Fan	Type	Centrifugal, forward multi-blade									
Motor	Type	Permanent Split Capacitor (AC)/PMSM(DC)									
Coil	Rows	4									
	Working Pressure	1.6 MPa									
Connecting	In-out	3/4" FPT									
	Drain connection	3/4" MPT									
Net Weight	Kg-AC	10.9	12.5	13.0	15.0	16.6	17.8	23.2	25.5	28.4	29.8
Net Weight	Kg-DC	11.5	13.1	13.6	15.6	17.2	18.4	23.8	26.1	29.0	30.4
Plenum Box Net Weight	Kg	2	2.4	2.7	2.8	3.3	3.5	4.1	6	6.7	7.3
Options		Thermostat, 2Way/3Way Valve, Plenum Box									

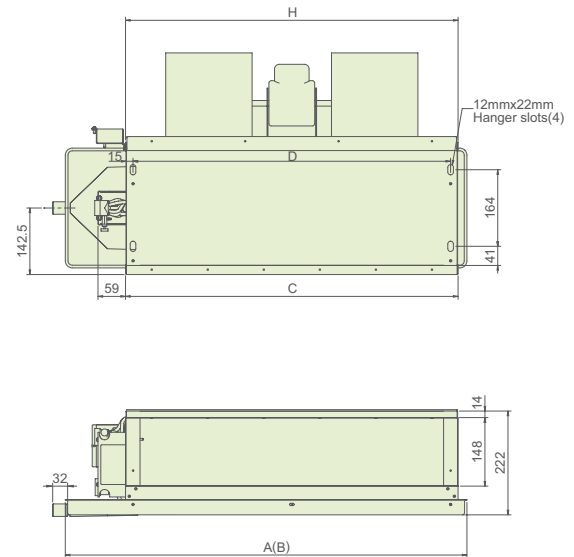
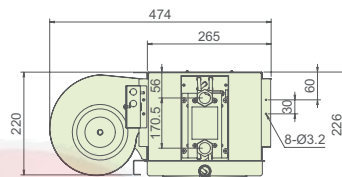
- Note:
- The coil data is the performance in high speed with relevant static pressure
  - Cooling conditions: inlet water 7°C, temperature rise 5°C, entry air temperature DB 27°C, WB 19.5°C  
Heating conditions: inlet water 60°C, same water flow as the cooling conditions, entry air temperature DB 21°C  
Heating capacity based on inlet water 45°C, please refer to FCU selection software.
  - Sound level is tested per GB/T 19232-2019
  - FCEER means fan coil cooling energy efficiency ratio and FCCOP means fan coil heating coefficient of performance, defined per GB/T 19232-2019

## Dimensions

### 2 Pipe

UNIT	A	B	C	D	H
42CT002	642	742	492	460	488
42CT003	782	882	632	600	628
42CT004	862	962	712	680	708
42CT005	942	1042	792	760	788
42CT006	1102	1202	952	920	948
42CT007	1182	1282	1032	1000	1028
42CT008	1422	1522	1272	1240	1268
42CT010	1472	1572	1322	1290	1318
42CT012	1672	1772	1522	1490	1518
42CT014	1832	1932	1682	1650	1678

Note: B is the dimension of lengthen drain pan.

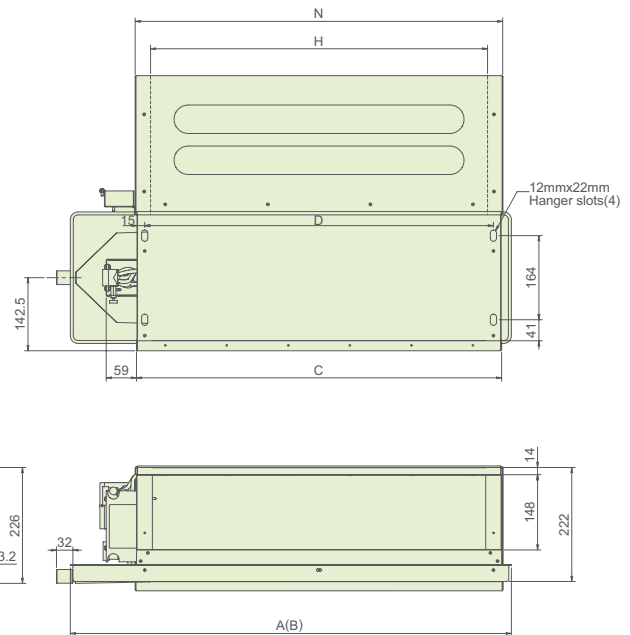
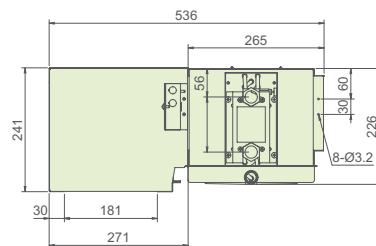


Note: Wiring box of AC&DC product is different on depth, please refer to units at jobsite.

### 2 Pipe with bottom air plenum

UNIT	A	B	C	D	H	N
42CT002	642	742	492	460	434	494
42CT003	782	882	632	600	574	634
42CT004	862	962	712	680	654	714
42CT005	942	1042	792	760	734	794
42CT006	1102	1202	952	920	894	954
42CT007	1182	1282	1032	1000	974	1034
42CT008	1422	1522	1272	1240	1214	1274
42CT010	1472	1572	1322	1290	1264	1324
42CT012	1672	1772	1522	1490	1464	1524
42CT014	1832	1932	1682	1650	1624	1684

Note: B is the dimension of lengthen drain pan.



Note: Wiring box of AC&DC product is different on depth, please refer to units at jobsite.

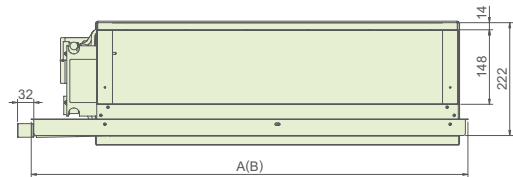
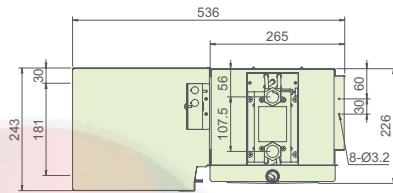
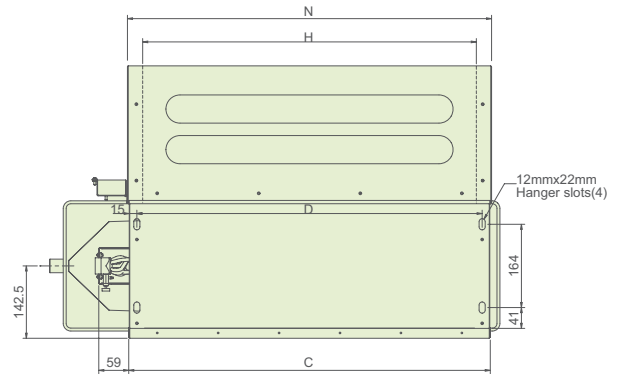


# Dimensions

## 2 Pipe with rear air plenum

UNIT	A	B	C	D	H	N
42CT002	642	742	492	460	434	494
42CT003	782	882	632	600	574	634
42CT004	862	962	712	680	654	714
42CT005	942	1042	792	760	734	794
42CT006	1102	1202	952	920	894	954
42CT007	1182	1282	1032	1000	974	1034
42CT008	1422	1522	1272	1240	1214	1274
42CT010	1472	1572	1322	1290	1264	1324
42CT012	1672	1772	1522	1490	1464	1524
42CT014	1832	1932	1682	1650	1624	1684

Note: B is the dimension of lengthen drain pan.

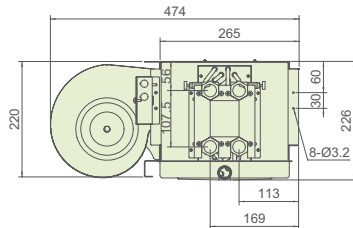
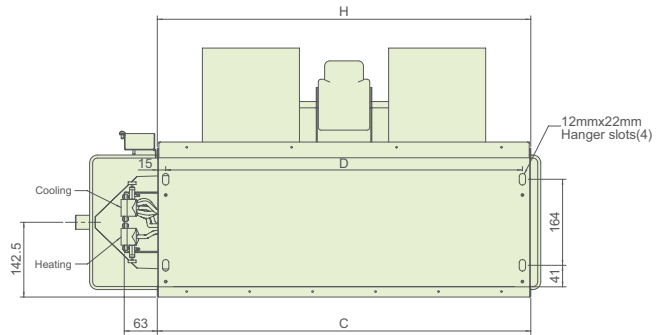


Note: Wiring box of AC&DC product is different on depth, please refer to units at jobsite.

## 4 Pipe

UNIT	A	B	C	D	H
42CT002	642	742	492	460	488
42CT003	782	882	632	600	628
42CT004	862	962	712	680	708
42CT005	942	1042	792	760	788
42CT006	1102	1202	952	920	948
42CT007	1182	1282	1032	1000	1028
42CT008	1422	1522	1272	1240	1268
42CT010	1472	1572	1322	1290	1318
42CT012	1672	1772	1522	1490	1518
42CT014	1832	1932	1682	1650	1678

Note: B is the dimension of lengthen drain pan.



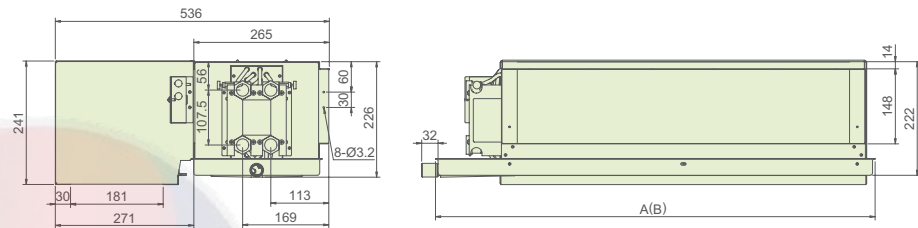
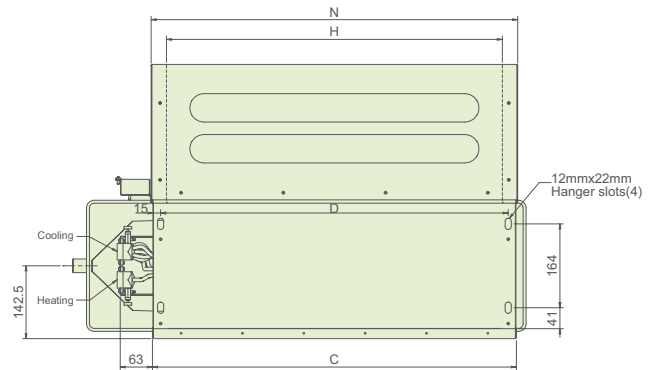
Note: Wiring box of AC&DC product is different on depth, please refer to units at jobsite.

## Dimensions

### 4 Pipe with bottom air plenum

UNIT	A	B	C	D	H	N
42CT002	642	742	492	460	434	494
42CT003	782	882	632	600	574	634
42CT004	862	962	712	680	654	714
42CT005	942	1042	792	760	734	794
42CT006	1102	1202	952	920	894	954
42CT007	1182	1282	1032	1000	974	1034
42CT008	1422	1522	1272	1240	1214	1274
42CT010	1472	1572	1322	1290	1264	1324
42CT012	1672	1772	1522	1490	1464	1524
42CT014	1832	1932	1682	1650	1624	1684

Note: B is the dimension of lengthen drain pan.

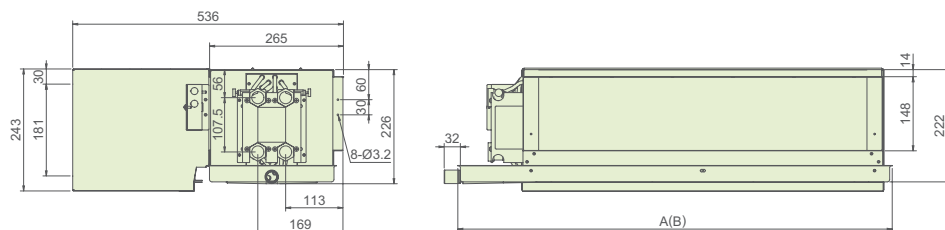
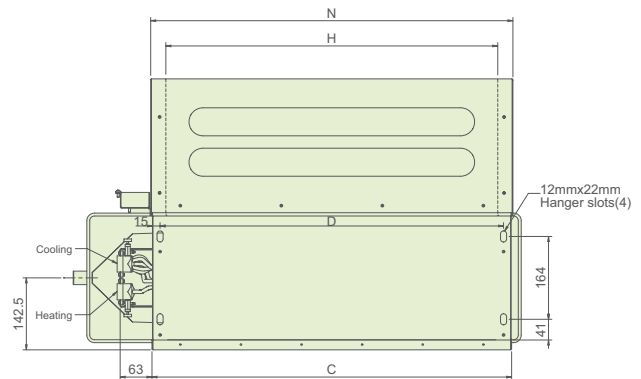


Note: Wiring box of AC&DC product is different on depth, please refer to units at jobsite.

### 4 Pipe with rear air plenum

UNIT	A	B	C	D	H	N
42CT002	642	742	492	460	434	494
42CT003	782	882	632	600	574	634
42CT004	862	962	712	680	654	714
42CT005	942	1042	792	760	734	794
42CT006	1102	1202	952	920	894	954
42CT007	1182	1282	1032	1000	974	1034
42CT008	1422	1522	1272	1240	1214	1274
42CT010	1472	1572	1322	1290	1264	1324
42CT012	1672	1772	1522	1490	1464	1524
42CT014	1832	1932	1682	1650	1624	1684

Note: B is the dimension of lengthen drain pan.



Note: Wiring box of AC&DC product is different on depth, please refer to units at jobsite.

## Electrical Data

### 2R coil

Current (A)	Model	002	003	004	005	006	007	008
AC	12 Pa	0.15	0.20	0.27	0.31	0.42	0.51	0.59
	30 Pa	0.18	0.25	0.30	0.38	0.48	0.55	0.63
	50 Pa	0.20	0.28	0.35	0.43	0.50	0.60	0.75
DC	12 Pa	0.06	0.08	0.13	0.17	0.22	0.28	0.26
	30 Pa	0.08	0.11	0.16	0.21	0.26	0.33	0.33
	50 Pa	0.11	0.15	0.21	0.27	0.32	0.40	0.43

Note: Current of DC unit is parameter under active power

### 3R coil

Current (A)	Model	002	003	004	005	006	007	008	010	012	014
AC	12 Pa	0.15	0.20	0.27	0.31	0.41	0.51	0.59	0.67	0.83	1.00
	30 Pa	0.18	0.25	0.30	0.37	0.47	0.55	0.62	0.77	0.94	1.11
	50 Pa	0.20	0.28	0.34	0.43	0.50	0.60	0.73	0.89	1.04	1.28
DC	12 Pa	0.06	0.09	0.13	0.17	0.22	0.30	0.27	0.40	0.50	0.63
	30 Pa	0.08	0.12	0.17	0.21	0.26	0.33	0.34	0.46	0.59	0.75
	50 Pa	0.11	0.15	0.21	0.27	0.32	0.41	0.44	0.55	0.72	0.89

Note: Current of DC unit is parameter under active power

### 3+1R/4R coil

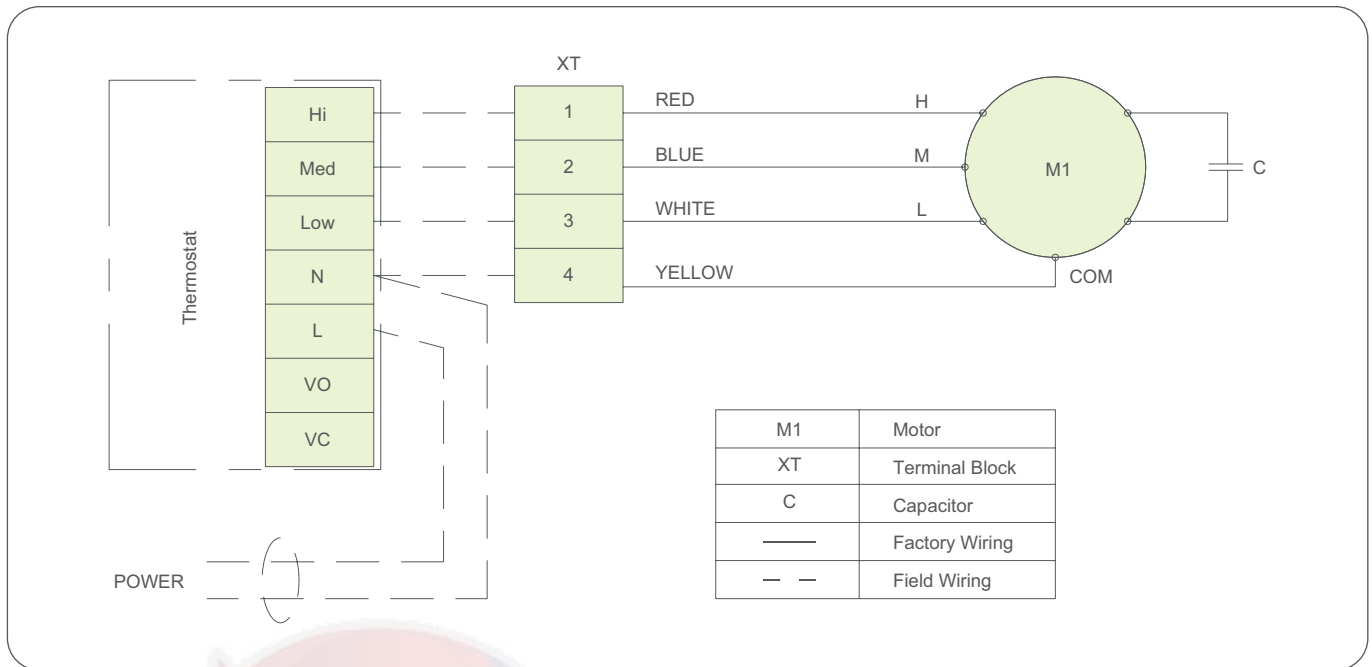
Current (A)	Model	002	003	004	005	006	007	008	010	012	014
AC	12 Pa	0.15	0.20	0.27	0.31	0.41	0.51	0.59	0.66	0.83	1.00
	30 Pa	0.18	0.25	0.30	0.37	0.46	0.52	0.62	0.76	0.93	1.11
	50 Pa	0.20	0.28	0.34	0.42	0.49	0.60	0.72	0.85	1.01	1.23
DC	12 Pa	0.06	0.09	0.13	0.17	0.23	0.29	0.29	0.40	0.51	0.63
	30 Pa	0.09	0.12	0.17	0.22	0.27	0.33	0.36	0.46	0.61	0.75
	50 Pa	0.11	0.15	0.21	0.28	0.33	0.41	0.45	0.56	0.74	0.89

Note: Current of DC unit is parameter under active power

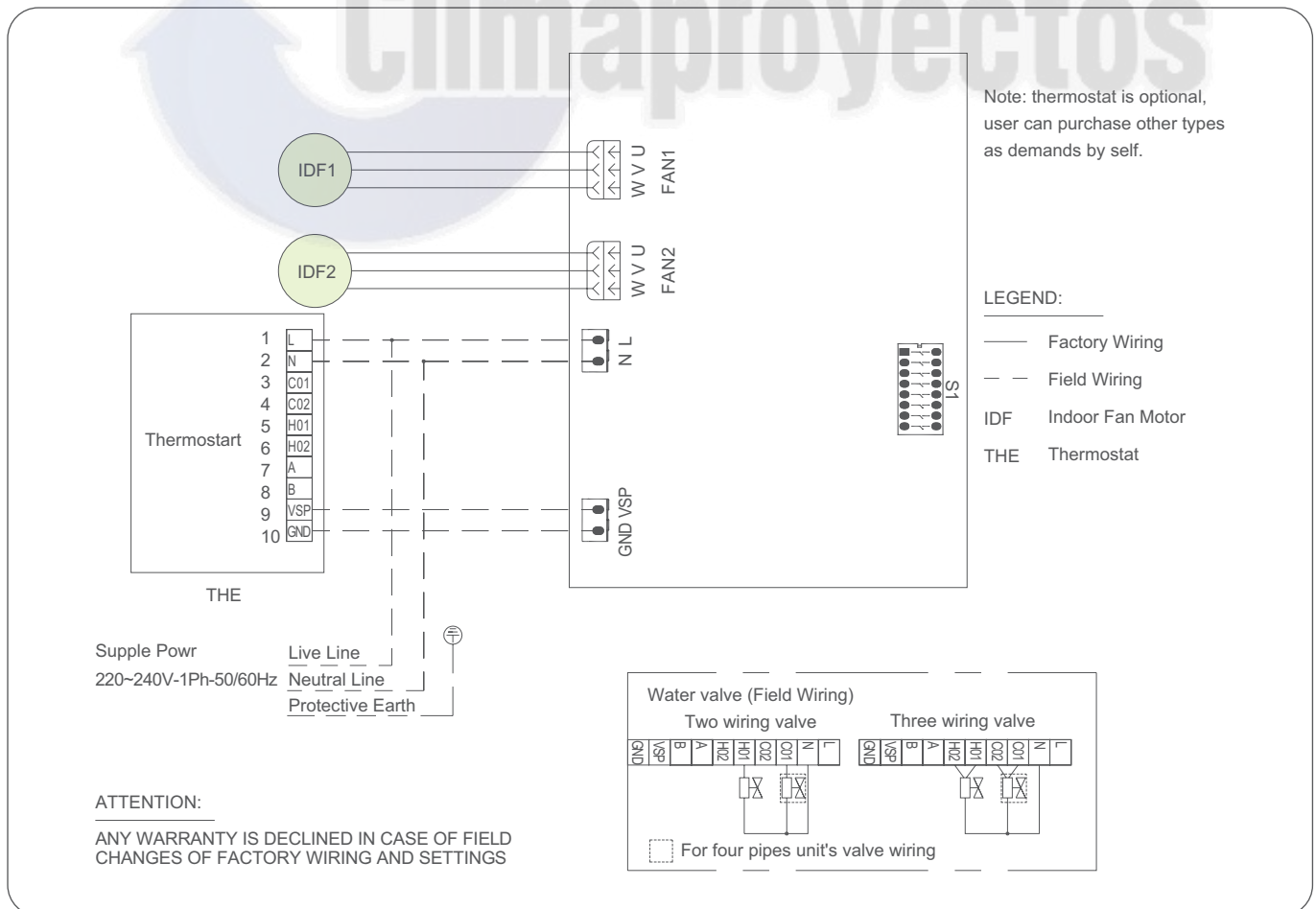


# Diagram

## AC Unit



## BLDC Unit



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