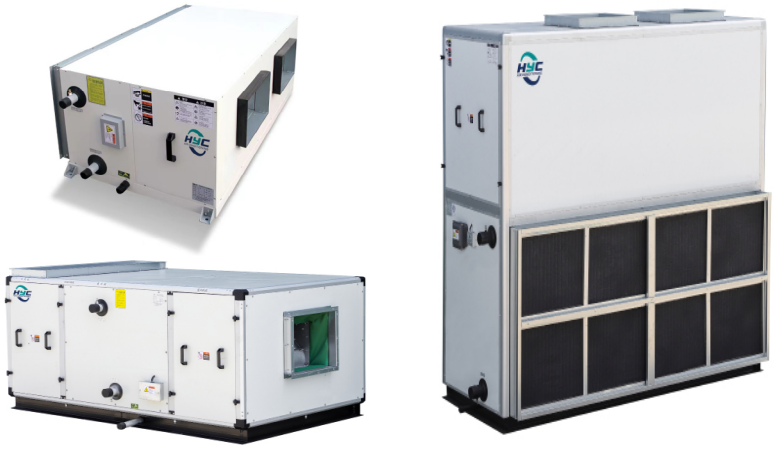
HYC HVAC SOLUTION



Compact Air Handling Unit

FEATURES

WIDE AIR FLOW RANGE
Standardly,ceiling type AHU air flow ranges from 2000 to 15000m3/h; horizontal/vertical type AHU air flow ranges from 2000 to 60000m3/h, able to fulfill various application requirements. Meanwhile, bigger air flow is available by tailor-made as customer special requirement.

PANEL STRUCTURE DESIGN
Panel is made of powder coated double steel (outer and inner both) with high pressure polyurethane foam fitting in between, thus offering a rigid and robust panel.
Frame is made of aluminum alloy which is fastened to the panel, as a result, the unit is strong and lightweight.

LOW AIR LEAKAGE
Thanks to the high pressure PU foam fitting, and special design insulation method to guarantee no low air leakage, to best minimize loss of energy.

LOW NOISE
Thanks to the rigidly bolted panel, dynamically and statically balanced fan assembly with spring isolator and closely integrated section, maximum to reduce the vibration and noise.

COIL DESIGN
All coils are designed by professional computer selection software, proved through the lab testing and real life application.

OPTIONAL
- AC inverter/EC inverter
- Jet ball air supply hole
- Explosion proof
- Multiple power sources avaiable

NOMENCLATURE

H A H 020 V I

- Coil Code
  I: I type coil; II: II type coil
- Unit Type
  S: Ceiling Concealed;
  H: Horizontal; V: Vertical
- Air Flow
  *100m^3/h
- AH: Air Handling Unit
- HYC Product

SPECIFICATION

Return air condition(ceiling type)

Model	Air flow	I type					II type					Drain pipe size	Drive type
		Rated cooling	Rated heating	Water flow	Pressure drop	Water pipe size	Rated cooling	Rated heating	Water flow	Pressure drop	Water pipe size		
	m³/h	kW	kW	l/s	kPa	DN	kW	kW	l/s	kPa	DN	DN	/
020S	2000	11.4	21.0	0.54	61.8	25	14.6	25.0	0.70	66.4	25	25	Direct drive
025S	2500	14.2	25.7	0.68	59.4	25	18.1	30.6	0.86	68.1	25	25	
030S	3000	17.3	31.2	0.83	53.2	25	22.0	38.3	1.05	70.	25	25	
040S	4000	23.2	42.4	1.11	76.5	25	29.6	50.3	1.41	75.3	32	25	Belt drive
050S	5000	27.9	51.2	1.33	68.4	32	35.8	62.7	1.71	75.8	32	25	
060S	6000	33.9	61.2	1.62	67.4	32	43.2	73.1	2.06	77.7	32	25	
070S	7000	39.8	71.9	1.90	78.5	32	48.8	84.3	2.33	77.8	40	25	
080S	8000	46.4	83.6	2.22	77.2	32	57.3	98.8	2.74	78.	40	25	
100S	10000	59.5	107.3	2.84	77.1	40	74.6	133.6	3.56	55.8	50	25	
120S	12000	69.2	131.5	3.31	78.1	50	85.4	159.7	4.08	76.9	50	25	
150S	15000	85.1	161.4	4.07	89.8	50	107.2	188.3	5.12	77.5	65	25	

Fresh air condition(ceiling type)

Model	Air flow	I type					II type					Drain pipe size	Drive type
		Rated cooling	Rated heating	Water flow	Pressure drop	Water pipe size	Rated cooling	Rated heating	Water flow	Pressure drop	Water pipe size		
	m³/h	kW	kW	l/s	kPa	DN	kW	kW	l/s	kPa	DN	DN	/
020S	2000	26.6	27.7	1.27	77.3	25	31.3	30.8	1.50	57.9	32	25	Direct drive
025S	2500	30.6	31.5	1.46	54.6	32	40.3	38.9	1.93	69.6	32	25	
030S	3000	39.2	40.5	1.87	72.8	32	46.1	45.1	2.20	71.3	32	25	
040S	4000	49.5	51.2	2.37	78.2	40	63.4	61.7	3.03	78.7	40	25	Belt drive
050S	5000	64.7	63.4	3.09	75.6	40	75.5	70.9	3.61	73.4	50	25	
060S	6000	72.4	74.6	3.46	38.5	50	92.7	91.2	4.43	72C	50	25	
070S	7000	84.2	86.8	4.02	61.0	50	105.3	104.0	5.03	79.5	50	25	
080S	8000	98.7	101.5	4.72	78.9	50	120.9	119.2	5.78	77.1	50	25	
100S	10000	132.8	132.1	6.34	50.6	65	159.8	156.5	7.63	60.2	65	25	
120S	12000	148.8	154.6	7.11	69.1	65	184.8	179.9	8.83	73.9	65	25	
150S	15000	183.4	199.8	8.76	69.1	65	241.2	235.8	11.52	82.1	65	25	

The performance values refer to the following conditions:
- Cooling: Air inlet temperature: DB27 ºC /WB19.5 ºC, water inlet/outlet temperature: 7/12 ºC.
- Heating: Air inlet temperature: DB15 ºC, hot water inlet temperature: 60 ºC.
- HYC reserve the right to make changes for above parameters without prior notice.

SPECIFICATION

Return air condition(horizontal/vertical type)

Model	Air flow	I type						II type					
		Rated cooling	Rated heating	Water flow	Pressure drop	Water pipe size	Drain pipe size	Rated cooling	Rated heating	Water flow	Pressure drop	Water pipe size	Drain pipe size
	m³/h	kW	kW	l/s	kPa	DN	DN	kW	kW	l/s	kPa	DN	DN
020V/H	2000	10.8	21.2	1.9	17.4	32	25	14.5	27.1	2.5	44.8	32	25
030V/H	3000	17.0	34.2	2.9	28.7	32	25	22.3	41.2	3.8	71.6	32	25
040V/H	4000	23.2	46.8	4.0	45.3	32	25	29.2	53.9	5.0	34.8	32	25
050V/H	5000	27.8	56.6	4.8	38.9	32	25	34.4	63.8	5.9	30.3	32	25
060V/H	6000	34.8	68.9	6.0	59.5	40	25	41.9	77.2	7.2	40.3	40	25
070V/H	7000	40.5	79.4	7.0	72.1	50	25	50.2	92.0	8.6	50	50	25
080V/H	8000	48.0	7.0	8.3	38.5	50	25	58.5	106.1	10.1	74.7	50	25
090V/H	9000	51.9	101.5	8.9	35.8	50	25	64.4	119.2	11.1	75.7	50	25
105V/H	10500	59.4	114.8	10.2	50.6	50	25	73.2	137.5	12.6	48.8	50	25
120V/H	12000	69.8	175.5	12	73.4	50	25	87.9	163.8	15.1	75.6	50	25
135V/H	13500	78.6	157.3	13.5	48.2	65	32	103.5	187.1	17.8	39.0	65	32
150V/H	15000	89.3	171.9	15.4	49.1	65	32	113.8	206.4	19.6	38.1	65	32
180V/H	18000	106.2	209.3	18.3	66.4	65	32	135.6	246.0	23.3	51.2	65	32
210V/H	21000	125.8	246.1	21.6	85.3	65	32	156.7	287.9	27.0	62.0	65	32
240V/H	24000	146.9	284.2	25.3	39.0	65	32	180.8	331.2	31.1	84.0	65	32
270V/H	27000	166.3	319.8	28.6	43.0	65	32	204.1	370.5	35.1	85.5	65	32
300V/H	30000	185.1	355.8	31.8	43.5	65	32	224.9	412.0	38.7	39.0	65	32
330V/H	33000	203.5	390.8	35.0	58.0	80	32	251.6	455.1	43.3	52.0	80	32
350V/H	35000	219.2	415.1	37.7	66.5	80	32	270.5	484.8	46.5	59.5	80	32
400V/H	40000	229.5	448.7	39.5	69.2	80	32	298.1	544.6	51.3	52.5	80	32
450H	45000	247.3	482.6	42.5	71.5	80	32	340.3	616.1	58.5	59.8	80	32
500H	50000	274.1	537.2	47.1	79.1	80	32	377.9	683.9	65.0	65.9	80	32
600H	60000	360.8	670.1	62.1	68.5	80	32	450.4	706.8	77.5	52.5	80	32

The performance values refer to the following conditions:
- Cooling: Air inlet temperature: DB27 ºC /WB19.5 ºC, water inlet/outlet temperature: 7/12 ºC.
- Heating: Air inlet temperature: DB15 ºC, hot water inlet temperature: 60 ºC.
- HYC reserve the right to make changes for above parameters without prior notice.

SPECIFICATION

Fresh air condition(horizontal/vertical type)

Model	Air flow	I type						II type					
		Rated cooling	Rated heating	Water flow	Pressure drop	Water pipe size	Drain pipe size	Rated cooling	Rated heating	Water flow	Pressure drop	Water pipe size	Drain pipe size
	m³/h	kW	kW	l/s	kPa	DN	DN	kW	kW	l/s	kPa	DN	DN
020V/H	2000	26.8	30.1	4.6	31.8	40	25	32.4	33.1	5.6	66.5	40	25
030V/H	3000	38.9	43.1	6.7	44.0	40	25	46.2	48.1	7.9	89.6	40	25
040V/H	4000	53.6	57.5	9.2	62.5	50	25	62.9	66.5	10.8	55.8	50	25
050V/H	5000	67.3	72.7	11.6	64.3	50	25	79.0	83.1	13.6	53.5	50	25
060V/H	6000	80.2	84.2	13.8	78.3	50	25	96.5	99.8	16.6	74.9	50	25
070V/H	7000	87.9	94.0	15.1	40.5	65	25	114.8	115.2	19.7	31.4	65	25
080V/H	8000	101.0	107.5	17.4	57.7	65	25	127.0	133.5	21.8	42.8	65	25
090V/H	9000	115.2	122.3	19.8	58.5	65	25	139.2	145.1	23.9	40.7	65	25
105V/H	10500	131.5	153.6	22.6	78.6	65	25	160.9	166.0	27.7	60.0	65	25
120V/H	12000	156.1	174.1	26.8	82.7	65	25	192.1	195.3	33.0	89.0	65	25
135V/H	13500	170.9	193.5	29.4	27.2	80	32	220.4	222.5	37.9	61.5	80	32
150V/H	15000	192.0	219.8	33.0	27.8	80	32	250.8	251.5	43.1	62.8	80	32
180V/H	18000	228.6	256.1	39.3	37.5	80	32	292.1	295.0	50.2	74.4	80	32
210V/H	21000	275.3	302.4	47.4	51.5	80	32	330.1	335.4	56.8	83.2	80	32
240V/H	24000	318.5	347.3	54.8	73.2	80	32	364.5	379.1	62.7	80.0	80	32
270V/H	27000	358.1	388.7	61.6	76.54	80	32	408.7	427.0	70.3	82.0	80	32
300V/H	30000	383.2	419.8	65.9	70.0	80	32	443.9	472.5	76.4	80.0	80	32
330V/H	33000	443.8	481.0	76.3	87.5	80	32	501.2	521.7	86.2	84.0	80	32
350V/H	35000	453.2	489.0	78.0	76.5	80	32	551.6	576.9	94.9	83.9	80	32
400V/H	40000	475.8	521.2	81.8	40.3	80	32	588.0	621.2	101.1	*83.5	80	32
450H	45000	534.7	593.3	92.0	45.3	80	32	645.8	677.9	111.1	*79.8	80	32
500H	50000	603.8	662.1	103.9	51.6	80	32	725.5	772.3	124.8	*89.9	80	32
600H	60000	818.7	826.9	140.8	55.5	80	32	988.4	881.6	170.0	106.0	80	32

The performance values refer to the following conditions:

- Cooling: Air inlet temperature: DB27 ºC /WB19.5 ºC, water inlet/outlet temperature: 7/12 ºC.
- Heating: Air inlet temperature: DB15 ºC, hot water inlet temperature: 60 ºC.
- With * means the water inlet/outlet temperature difference ＞ 5 ºC in order to reduce pressure drop of water pipe.
- HYC reserve the right to make changes for above parameters without prior notice.

Ceiling standard unit

Model	Coil	Motor power with related ESP(Pa)							
		120	160	200	240	280	320	360	400
020S	I type	0.37	0.37	0.37	0.45				
	II type	0.37	0.45	0.45	0.55				
025S	I type	0.45	0.45	0.55	0.55				
	II type	0.45	0.55	0.55	0.55				
030S	I type	0.75	0.75	0.75	0.75				
	II type	0.75	0.75	0.75	0.75				
040S	I type		0.75	0.75	0.75	1.1	1.1	1.1	1.1
	II type		0.75	1.1	1.1	1.1	1.1	1.1	1.5
050S	I type		1.1	1.1	1.1	1.5	1.5	1.5	1.5
	II type		1.1	1.1	1.5	1.5	1.5	1.5	1.5
060S	I type			1.5	1.5	2.2	2.2	2.2	2.2
	II type			1.5	2.2	2.2	2.2	2.2	2.2
070S	I type			2.2	2.2	2.2	2.2	3	3
	II type			2.2	2.2	2.2	3	3	3
080S	I type			2.2	2.2	2.2	3	3	3
	II type			2.2	2.2	3	3	3	3
100S	I type			2.2	3	3	3	3	3
	II type			3	3	3	3	3	4
120S	I type			3	3	3	3	4	4
	II type			3	3	3	4	4	4
150S	I type					4	4	4	4
	II type					4	4	5.5	5.5

SPECIFICATION

Vertical standard unit

Model	Coil	Motor power with related ESP(Pa)										
		120	170	220	270	320	370	420	470	520	570	520
020V	I type	0.55	0.55	0.55	0.55	0.55						
	II type	0.55	0.55	0.55	0.55	0.75						
030V	I type	0.55	0.75	0.75	0.75	1.1						
	II type	0.75	0.75	0.75	1.1	1.1						
040V	I type	1.1	1.1	1.1	1.1	1.1	1.5					
	II type	1.1	1.1	1.1	1.1	1.5	1.5					
050V	I type	1.1	1.1	1.1	1.5	1.5	1.5					
	II type	1.1	1.1	1.5	1.5	1.5	1.5					
060V	I type	1.5	1.5	1.5	2.2	2.2	2.2					
	II type	1.5	1.5	2.2	2.2	2.2	2.2					
070V	I type	1.5	1.5	1.5	2.2	2.2	2.2	2.2				
	II type	1.5	1.5	2.2	2.2	2.2	2.2	2.2				
080V	I type	2.2	2.2	2.2	2.2	2.2	3	3				
	II type	2.2	2.2	2.2	2.2	3	3	3				
090V	I type	2.2	2.2	2.2	2.2	3	3	3				
	II type	2.2	2.2	2.2	3	3	3	3				
105V	I type	2.2	3	3	3	3	3	4				
	II type	3	3	3	3	3	4	4				
120V	I type	2.2	3	3	3	3	4	4	4	4		
	II type	3	3	3	3	4	4	4	4	5.5		
135V	I type	3	3	3	4	4	4	4	5.5	5.5		
	II type	3	3	4	4	4	4	5.5	5.5	5.5		
150V	I type	3	4	4	4	5.5	5.5	5.5	5.5	5.5		
	II type	4	4	4	5.5	5.5	5.5	5.5	5.5	7.5		
180V	I type			5.5	5.5	5.5	5.5	7.5	7.5	7.5		
	II type			5.5	5.5	5.5	7.5	7.5	7.5	7.5		
210V	I type			5.5	7.5	7.5	7.5	7.5	11	11		
	II type			7.5	7.5	7.5	7.5	11	11	11		
240V	I type			5.5	7.5	7.5	7.5	11	11	11	11	
	II type			7.5	7.5	7.5	11	11	11	11	11	
270V	I type			7.5	7.5	11	11	11	11	11	11	15
	II type			7.5	11	11	11	11	11	11	15	15
300V	I type			11	11	11	11	11	15	15	15	15
	II type			11	11	11	11	15	15	15	15	
330V	I type			11	11	11	11	15	15	15	15	15
	II type			11	11	11	15	15	15	15	15	15
350V	I type			11	11	11	11	11	15	15	15	15
	II type			11	11	11	11	15	15	15	15	15
400V	I type				11	15	15	15	15	15	18.5	18.5
	II type				15	15	15	15	15	18.5	18.5	18.5

SPECIFICATION

Horizontal standard unit

Model	Coil	Motor power with related ESP(Pa)								
		170	220	270	320	370	420	470	520	570
020H	I type	0.55	0.55	0.55	0.55	0.75				
	II type	0.55	0.55	0.55	0.75	0.75				
030H	I type	0.75	0.75	0.75	1.1	1.1				
	II type	0.75	0.75	1.1	1.1	1.1				
040H	I type	1.1	1.1	1.1	1.1	1.5				
	II type	1.1	1.1	1.1	1.5	1.5				
050H	I type		1.1	1.5	1.5	1.5	1.5	2.2		
	II type		1.5	1.5	1.5	1.5	2.2	2.2		
060H	I type		1.5	2.2	2.2	2.2	2.2	2.2		
	II type		2.2	2.2	2.2	2.2	2.2	3		
070H	I type		1.5	2.2	2.2	2.2	2.2	2.2		
	II type		2.2	2.2	2.2	2.2	2.2	3		
080H	I type		2.2	2.2	2.2	3	3	3		
	II type		2.2	2.2	3	3	3	3		
090H	I type		2.2	2.2	3	3	3	3		
	II type		2.2	3	3	3	3	4		
105H	I type		3	3	3	3	4	4		
	II type		3	3	3	4	4	4		
120H	I type		3	3	3	4	4	4		
	II type		3	3	4	4	4	4		
135H	I type		3	4	4	4	4	5.5		
	II type		4	4	4	4	5.5	5.5		
150H	I type		4	4	5.5	5.5	5.5	5.5	5.5	
	II type		4	5.5	5.5	5.5	5.5	5.5	7.5	
180H	I type		5.5	5.5	5.5	5.5	7.5	7.5	7.5	
	II type		5.5	5.5	5.5	7.5	7.5	7.5	7.5	
210H	I type		5.5	7.5	7.5	7.5	7.5	11	11	
	II type		7.5	7.5	7.5	7.5	11	11	11	
240H	I type		5.5	7.5	7.5	7.5	11	11	11	
	II type		7.5	7.5	7.5	11	11	11	11	
270H	I type		7.5	7.5	11	11	11	11	11	11
	II type		7.5	11	11	11	11	11	11	15
300H	I type		11	11	11	11	11	15	15	15
	II type		11	11	11	11	15	15	15	15
330H	I type				11	11	15	15	15	
	II type				11	15	15	15	15	
350H	I type				11	11	11	15	15	
	II type				11	11	15	15	15	
400H	I type				15	15	15	15	15	
	II type				15	15	15	15	18.5	
450H	I type				15	15	18.5	18.5	18.5	
	II type				15	18.5	18.5	18.5	18.5	
500H	I type				18.5	18.5	22	22	22	
	II type				18.5	22	22	22		
600H	I type					18.5	18.5	18.5	22	22
	II type					18.5	18.5	22	22	