

Features ◆◆◆◆

◎High-grade configuration, reliable running

Global famous hermetic scroll compressor is used;external balance thermostatic expansion valve, solenoid valve and other refrigerating parts of renowned brands are adopted.

◎ Fully fresh air, high air quality

Fresh air coming from outside can be directly treated by the unit, and polluted indoor air due to human activities and building materials can be exhausted; fresh air, exhaust air channel heat exchange not only meet air conditioning requirements, but also ensures the absolute fresh air, fundamentally prohibiting cross contamination of air, and ozone disinfection UV germicidal lamp and high static pressure dust removal device are also optional

◎ Independent fresh air refrigerating system

Compared to conventional chilled water systems, the evaporation temperature of the unit is 8–100C higher, and a second heat exchange for the transfer of chilled water is not needed, enhancing refrigerating efficiency by at least 30%.

◎Cooling tower and outdoor unit not needed

Using pipe-piece evaporation condensation technology, make full use of fin surface evaporation of water film through the mass transfer and heat transfer can be realized within the refrigerant condenser cooling cold film, crew integration, structural design, no outdoor unit without the need for cooling towers and high-power cooling pumps, fans, pumps and engineering of distribution power significantly lower initial investment.

◎Patented all heat recovery technology having heat recovery efficiency at least 85% and evaporative condensation units up to 92%

Low-temperature low-humidity indoor exhaust air is used as the cooling air of the evaporative condenser, which not only uses the sensible heat (temperature difference) of the indoor air exhaust heat, but uses the latent heat (humidity difference), ensuring condensation effect is greatly better than that of the direct using outdoor air for cooling, preventing the energy loss due to air displacement and ventilation. Likewise, during heating of the unit, the high or low-temperature air exhausted from indoors can be used as the heat exchange source at the side of the evaporator. Compared with traditional central air conditioning systems, it saves energy for about 50%.

◎ No condensed water drain system (unique for evaporative condenser)

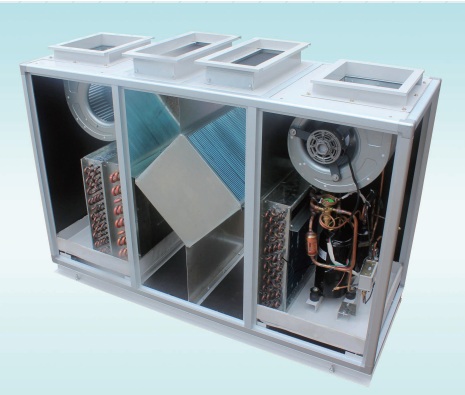
The condensed water coming from fresh air evaporation and to be treated can be directly introduced into the air exhaust condensation system of the unit as the cooling water, without the use of a condensed water discharge system. Because lower condensed water temperature, not only the cooling capacity can be recovered, but the advanced film-type water cooling method can be utilized, enabling the cooling water to sufficiently wet the condensing fins, reinforce the heat exchange of condensing plate, and effectively overcome the scale phenomenon due to the water film on the fin liable to “dry point”

◎ No independent ventilating system

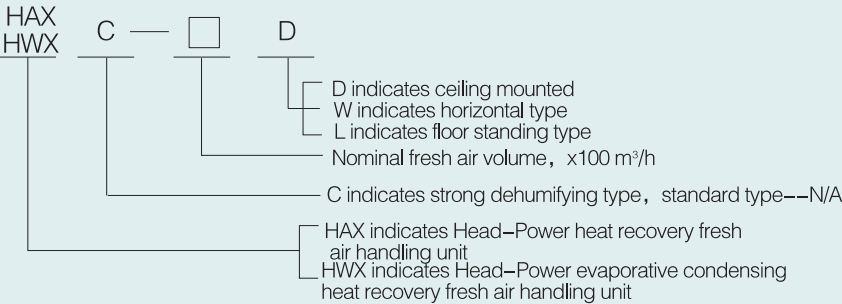
In the transitional seasons, fresh air can be used to bear indoor load, and only the supplying and exhaust fans are run to achieve automatic air exchange, without starting the compressor, meanwhile it’s no need of an independent air exchange system, greatly saving energy.

◎ Advanced control, safe and reliable

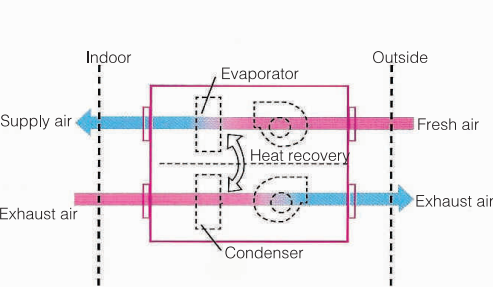
All Chinese LCD interface and microcomputer intelligent controller are adopted, have advanced control and complete functions; mechanical and electrical integrated design achieves unit start/ shutdown program management, timing control, failure warning and fault self-diagnosis and other functions; the controller boasts optimal automatic control and powerful anti-interference capacity; multiple protections for e.g. lack of phase, phase sequence and unbalance, compressor overload, start delay, and abnormal air suction and discharge pressure, and so on, ensuring running safety.



Model number nomenclature ◆◆◆◆



◎sketch of operational principle



Heat recovery fresh air handling unit

Item	Model No		HAX015	HAX025	HAX030	HAX040	HAX050	HAX060	HAX070	HAX080	HAX100	HAX120	HAX150	HAX180	HAX200	HAX250	HAX300	HAX350
Nominal Cooling Capacity	KW		9	12	16	19	23	28	33	36	46	56	69	80	92	112	138	167
Nominal Heating Capacity	KW		9.5	12.6	16.7	20	24.3	30	35	39	49	60	73	85	98	120	148	180
Power Supply			220V~50HZ		380V/3PH~50HZ													
Refrigerant			R22/R407C															
Exhaust Air System	Air Volume	M³/h	1500	2500	3000	4000	5000	6000	7000	8000	10000	12000	15000	18000	20000	25000	30000	35000
	ESP	Pa	80	100	120	150	180	180	220	240	240	250	300	350	400	420	480	500
	Motor Power	KW	0.3	0.55	0.75	0.75	1.1	1.5	2.2	2.2	3	4	4	5.5	7.5	7.5	11	15
Fresh Air System	Air Volume	M³/h	1500	2500	3000	4000	5000	6000	7000	8000	10000	12000	15000	18000	20000	25000	30000	35000
	ESP	Pa	80	100	120	150	180	220	240	250	280	300	350	400	430	450	520	550
	Motor Power	KW	0.3	0.55	0.75	0.75	1.1	1.5	2.2	2.2	3	4	4	5.5	7.5	7.5	11	15
humidifying system (optional)	Type		Wet film humidifier															
	Humidifying	Kg/h	3	5	5	8	8	10	10	15	15	20	20	25	25	36	36	45
	Size	mm	DN16							DN20				DN25				
Heat Exchange Efficiency			>87%															
Compressor	Type		Rotor				Hermetic Scroll											
	Power	KW	1.7	2.25	2.5	3	3.75	4.5	3.75+1.7	3.75+2.2	3.75X2	4.5X2	3.75X3	4.5X3	3.75X4	9X2	9X2+3.75	9X3
Noise Level	dB(A)		48	50	50	51	52	52	53	53	55	56	58	60	62	65	68	68
Weight	kg		310	370	390	550	590	650	780	820	890	920	980	1180	1480	1550	1780	1920

Heat recovery fresh air handling unit (Strong Dehumidifying type)

Model No		HAXC010	HAXC015	HAXC020	HAXC025	HAXC030	HAXC040	HAXC050	HAXC060	HAXC080	HAXC100	HAXC120	HAXC160	HAXC200	
Nominal Cooling Capacity	KW	8.8	11.5	15.5	22	26.5	34	44	53	66	78	108	155	216	
Nominal Heating Capacity	KW	9.3	12.1	16	23	27.5	35.5	46	55	69	81	112	160	224	
Power Supply		220V~50HZ			380V/3PH~50HZ										
Refrigerant		R22/R407C													
Fresh Air System	Air Volume	m³/h	1000	1500	2000	2500	3000	4000	5000	6000	8000	10000	12000	16000	20000
	ESP	Pa	80	100	120	120	180	180	220	240	250	300	350	420	480
	Motor Power	KW	0.2	0.3	0.55	0.55	0.75	1.1	1.1	1.5	2.2	3	4	4	5.5
Exhaust Air System	Air Volume	m³/h	1800	2800	3500	4500	5500	7000	8500	10000	13000	16000	20000	28000	33000
	ESP	Pa	100	120	150	150	180	220	240	250	300	350	400	450	550
	Motor Power	KW	0.55	0.75	1.1	1.1	1.5	2.2	2.2	3	4	4	7.5	11	15
humidifying system (optional)	Type	Wet film humidifier													
	Humidifying	Kg/h	3	5	5	8	8	10	10	15	15	20	20	25	25
	Size	mm	DN16						DN20					DN25	
Heat Exchange Efficiency		> 85%													
Compressor	Type	Rotor				Hermetic Scroll									
	Power	KW	1.7	2.25	2.5	3.75	4.5	3.75+2.25	3.75x2	4.5x2	3.75X3	4.5X3	9x2	9x3	9x4
Noise Level	dB(A)	48	50	50	51	52	52	53	53	56	58	60	65	68	
Weight	Kg	300	370	390	520	570	630	780	870	920	980	1150	1450	1650	

Notes: 1. Rated cooling conditions: Indoor exhaust air DB/WB: 27°C/19.5°C, outdoor fresh air DB/WB: 34°C/28°C;
2. Rated heating conditions: Indoor exhaust air DB/WB: 21°C/15°C, outdoor fresh air DB/WB: 7°C/6°C;
3. Work environment temperature: -1 5°C ~ 43°C;
4. In winter, user may use an auxiliary heater and fresh air pre-heater (must be used in case of below -5°C ambient temperature). Heating type: electric heating, hot water coil or steam coil heating;
5. The humidifying system is optional.

Evaporative condensing heat recovery fresh air handling unit

Model No		HWX015	HWX025	HWX030	HWX040	HWX050	HWX060	HWX070	HWX080	HWX100	HWX120	HWX150	HWX180	HWX200	HWX250	HWX300	HWX400	
Nominal Cooling Capacity	KW	12.5	23	27.5	36	45	56	68	81	90	110	135	158	185	226	275	358	
Nominal Heating Capacity	KW	11.8	20.5	24	34	40	51	56	69	78	95	124	141	165	208	245	305	
Power Supply		220V-50HZ	380V/3PH-50HZ															
Refrigerant		R22/R407C																
Fresh Air System	Air Volume	m³/h	1500	2500	3000	4000	5000	6000	7000	8000	10000	12000	15000	18000	20000	25000	30000	40000
	ESP	Pa	80	100	150	120	180	180	220	240	240	250	300	350	400	420	450	500
	Motor Power	KW	0.3	0.55	0.75	0.75	1.1	1.5	2.2	2.2	3	4	4	5.5	7.5	7.5	11	15
Exhaust Air System	Air Volume	m³/h	1200	2000	2400	3200	4000	4800	5600	6400	8000	9600	12000	14500	16000	20000	24000	28000
	ESP	Pa	10	80	10	100	10	150	20	180	20	220	20	240	20	250	20	240
	ESP	Pa	10	80	10	100	10	150	20	180	20	220	20	240	20	250	20	240
	Motor Power	KW	0.12	0.5	0.16	0.55	0.16	0.55	0.48	0.75	0.48	1.1	0.55	1.1	0.55	1.5	0.9	1.5
	Motor Power	KW	0.12	0.5	0.16	0.55	0.16	0.55	0.48	0.75	0.48	1.1	0.55	1.1	0.55	1.5	0.9	1.5
	Water Pump Power	KW	0.3	0.3	0.3	0.3	0.55	0.55	0.55	0.75	0.75	1.1	1.1	1.5	1.5	1.5	1.8	2.2
	Water Supplement Flow	m³/h	0.025	0.03	0.036	0.05	0.06	0.072	0.086	0.1	0.12	0.144	0.186	0.22	0.24	0.3	0.372	0.48
	Heat Exchange Efficiency	> 92%																
Compressor	Type	Rotor	Hermetic Scroll															
	Power	KW	2.25	3.75	4.5	3.75+2.25	3.75x2	4.5x2	3.75x3	4.5x3	3.75x4	9x2	9x2+3.75	9x3	9x3+3.75	9x4	9x5	9x6
Noise Level	dB(A)	48	50	50	51	52	52	53	53	55	56	58	60	62	65	68	72	
Weight	Kg	350	420	450	590	630	680	830	860	930	960	1020	1250	1580	1680	1850	2050	

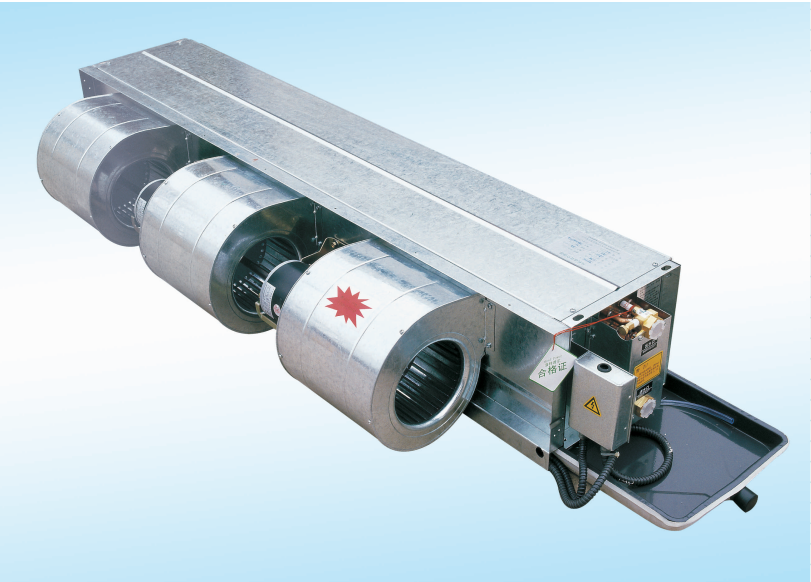
Evaporative condensing heat recovery fresh air handling unit (Strong Dehumidifying type)

Item		Model No		HWXC010	HWXC015	HWXC020	HWXC025	HWXC030	HWXC040	HWXC050	HWXC060	HWXC080	HWXC100	HWXC120	HWXC160	HWXC200	HWXC250	HWXC300														
Nominal Cooling Capacity		KW	11	20	24	34	40	48	64	80	96	132	150	200	261	310	396															
Nominal Heating Capacity		KW	10.2	18.9	21.3	31	38	45	60	76	91	125	142	190	248	295	396															
Power Supply		220V-50HZ	380V/3PH-50HZ																													
Refrigerant		R22/R407C																														
Fresh Air System	Air Volume	m³/h	1000	1500	2000	2500	3000	4000	5000	6000	8000	10000	12000	16000	20000	25000	30000															
	ESP	Pa	80	100	120	120	180	180	220	240	250	300	350	400	400	450	500															
	Motor Power	KW	0.2	0.3	0.55	0.55	0.75	1.1	1.1	1.5	2.2	3	4	4	5.5	7.5	11															
Exhaust Air System	Air Volume	m³/h	1000	1500	2000	2500	3000	4000	5000	6000	8000	10000	12000	16000	20000	25000	30000															
	ESP	Pa	10	100	10	120	10	150	10	180	10	200	20	240	20	300	20	300	20	350	20	350	20	400	20	450	20	450				
	Motor Power	Kw	0.15	0.2	0.15	0.28	0.15	0.55	0.2	0.55	0.25	0.75	0.25	1.1	0.45	1.1	0.45	1.5	0.55	2.2	0.9	3	0.9	3	1.1	4	1.5	5.5	2.2	7.5	3	11
	Cooking pump power	Kw	0.3	0.3	0.3	0.3	0.55	0.55	0.75	0.75	1.1	1.1	1.5	1.5	2.2	2.2	3	3	3	4	4	5.5	5.5	7.5	7.5	11	11	11	11			
	Water supplement flow	m³/h	0.025	0.03	0.036	0.05	0.06	0.072	0.086	0.1	0.12	0.186	0.22	0.24	0.3	0.372	0.48															
Heat Exchange Efficiency		> 90%																														
Compressor	Type	Rotor	Hermetic Scroll																													
	Power	KW	2.25	3.75	4.5	3.75+2.25	3.75x2	4.5x2	3.75x3	4.5x3	9x2	9x2+3.75	9x3	9x4	9x5	9x6	9x7															
Noise Level		dB(A)	48	50	50	51	52	52	53	53	56	58	60	65	68	70	72															
Weight		Kg	350	420	450	490	630	680	830	860	930	960	1030	1220	1550	1660	2000															

Notes: 1. Rated cooling conditions: Indoor exhaust air DB/WB: 27°C/19.5°C, outdoor fresh air DB/WB: 34°C/28°C;
2. Rated heating conditions: Indoor exhaust air DB/WB: 21°C/15°C, outdoor fresh air DB/WB: 7°C/6°C;
3. Work environment temperature: -1 5°C ~ 43°C;
4. In winter, user may use an auxiliary heater and fresh air pre-heater (must be used in case of below 0°C ambient temperature). Heating type: electric heating, hot water coil or steam coil heating;

Features

- 1) Products can be divided into six categories: horizontal ceiling concealed or visible erection; standing concealed or visible erection; clip erection; luxury column type and luxury wall type.
- 2) The surface cooler is made of high-quality thin-wall copper tube and two-bridge aluminum fin, boasts high heat transfer efficiency and low water resistance.
- 3) Capacitor start motor, imported low-noise ball bearings, no need of additional lubricants, having high, medium and low three levels of speeds.
- 4) The wind wheel enjoys good dynamic balance; turbine volute fan boasts low power, large wind quantity and low noise.
- 5) Easy erection or removal, the left and right parts can be changed; a dew containing trough is provided to prevent condensation dripping.
- 6) The condensed water tray is formed with one shaping process, without welds or joints; the surface is subject to plastic spray treatment, greatly extending service life.
- 7) Flexible and convenient configurations: High static pressure fan and return air box can be provided if required.



Fan coil units

Model No		FP200	FP300	FP400	FP500	FP600	FP800	FP1000	FP1200	FP1400
Rated Air Volume (m³/h)	H	360	560	710	830	1080	1400	1700	2100	2500
	M	240	350	480	560	700	950	1160	1510	2150
	L	150	210	320	380	450	610	720	930	1630
Cooling Capacity (W)	Total	H	2030	3150	4080	4976	5480	7720	8600	10630
	Sensible	H	1479	2300	2964	3521	4259	5750	6410	7945
	Total	M	1702	2870	3400	4110	4490	6900	7500	9150
	Sensible	M	1131	1815	2262	2687	3087	4542	5155	6500
	Total	L	1569	2400	2810	3230	3850	6010	6740	8400
Heating Capacity (W)	Total	L	929	1400	1735	2021	2409	3614	4121	5166
	Sensible	L	929	1400	1735	2021	2409	3614	4121	5166
	Sensible	L	929	1400	1735	2021	2409	3614	4121	5166
Noise Level dB (A)	H	≤36	≤37	≤38	≤42	≤44	≤44	≤46	≤47	≤52
	M	≤38	≤39	≤41	≤44	≤46	≤47	≤49	≤51	≤53
	L	≤38	≤39	≤41	≤44	≤46	≤47	≤49	≤51	≤53
Power Input (W)	Standard	44	46	68	84	107	135	164	198	248
	High Static Pressure	54	57	73	86	121	147	170	227	259
ESP (Pa)	Standard	20		30		40		50		
	High Static Pressure	20		30		40		50		