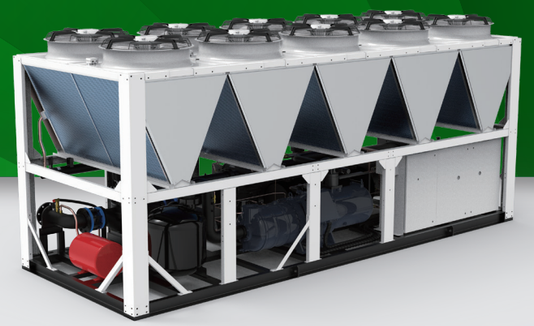
VECK AIR CONDITIONING

AIR COOLED SCREW CHILLER

T1/T3 FIXED SPEED/INVERTER



VECK AIR CONDITIONING

Veck Air Conditioning
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- Due to continuous improvement the contents may change without notice. The Company interpretation of the contents is final.
- Owing to ongoing technological updates and varying regional applicability, certain products in the series may not be available or suitable for use in all regions. For further details, please contact Veck.

WEBSITE LINKEDIN

V2501

Company Profile

VECK,founded in 2014 and headquartered in China,is a vibrant,energetic, passionate and imaginative young enterprise.Since its establishment,our sales has rapidly grown to 345million USD by year 2023. We are committed to meeting customer needs by creating customized, intelligent,high-quality air conditioning products to provide an exceptional experience for our valuable customers.

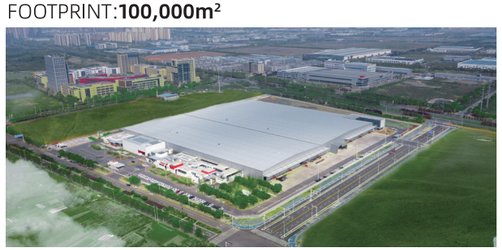
After achieving remarkable success in the Chinese market,we are bravely penetrating the international market. VECK aspires to be a pioneering enterprise in the global air conditioning industry, integrating innovation, creativity, and international standards to offer unparalleled service and cutting-edge products to global customers.

In addition to our 4 factories and research and development facilities in China, our Jakarta factory symbolizes VECK's expansion into global manufacturing and services beyond China. We plan to establish our manufacturing and service networks in major global regions to provide more timely and efficient products and services to global users.VECK aims to tirelessly work towards creating a greener, smarter future.

worldwide **5** BASES

CHEGNDU · CHINA
FOOTPRINT:**20,000m²**

ZHENJIANG · CHINA
FOOTPRINT:**100,000m²**



TIANJIN · CHINA
FOOTPRINT:**60,000m²**

JAKARTA·INDONESIA
FOOTPRINT:**4,000m²**

GUAGNZHOU · CHINA
FOOTPRINT:**15,977.71m²**

CONTENTS

Unit Type	Power supply	Ambient	Function Options			Cooling/Heating Capacity kW
			Cooling only	Heat pump	Free Cooling	300 500 700 900 1100 1300 1500 1700 kw
Fixed Speed	380V/3N/50Hz	T1	Y	Y	Y	332-838kw,1 Comp. 472-1660kw, 2 Compressor
	400V/3N/50Hz	T1	Y			332-838kw,1 Comp. 472-1660kw,2 Compressor
	460V/3N/60Hz	T1	Y			350-988kw, 1 Comp. 477-1694kw,2 Compressor
	400V/3N/50Hz	T3	Y			303-702kw,1 Comp. 426-1370kw, 2 Compressor
	380V/3N/60Hz	T3	Y			317-844kw, 1 Comp. 426-1503kw, 2 Compressor
Variable Speed	380V/3N/50Hz	T1	Y	Y	Y	332-838kw, 1 Comp. 472-1660kw, 2 Compressor
	400V/3N/50Hz	T1	Y			332-838kw, 1 Comp. 472-1660kw,2 Compressor
	460V/3N/60Hz	T1	Y			350-988kw, 1 Comp. 477-1694kw,2 Compressor
	400V/3N/50Hz	T3	Y			303-702kw，1 Comp. 426-1370kw,2 Compressor
	380V/3N/60Hz	T3	Y			317-844kw, 1 Comp. 426-1503kw,2 Compressor

Laboratory

Veck has a nationally certified up to 1650kW air-cooled chiller /psychrometric test station. The laboratory is divided into four testing rooms, each of which can be tested independently or in combination with adjacent rooms (up to 10 possible combinations). Different combinations can greatly enhance our laboratory testing capabilities and scope, and the performance of each chiller from Veck can be verified in the laboratory.
Veck's air-cooled test station uses a condensation heat recovery scheme to recover the heat of high-temperature refrigerant during the testing process. Using steam to simulate the heating and humidification required for the environment. Compared to traditional laboratories, it can save more than 35% of electricity, greatly reducing the energy consumption of products during the research and development process.

VECK

Designed to Be the Best,
Tested to Prove It.

-32℃-55℃
Ambient Temperature Range

20kw~1650kw
Cooling Capacity Range

10~90%
RH Range

200~110000^3/h
Air Flow Range

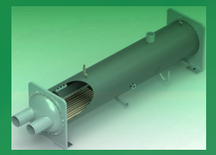
Product Features

VASW 240 2 2 N N C A T1

- VASW — Veck air cooled screw chiller
- 240 — Nominal cooling capacity: 240RT
- 2 — Number of compressor: 1,2
- 2 — Refrigerant: 2-R134a
- N — Other function: N-No
- N — Features: N-No
- C — Design series
- A — Power supply: A - 380V/3N/50Hz, B - 400V/3N/50Hz, C - 460V/3N/60Hz, D - 380V/3N/60Hz
- T1 — Working condition: T1/T3

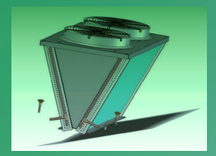
No.	Series	Power supply	Leaving water temperature	Ambient temperature	Voltage	Water flow
1	VASW-NNCAT1	380 3N～50Hz	4～20°C	5～45°C	±10% of rated voltage	50%～120% of rated water flow
1	VASW-NNCBT1	400V 3N～50Hz				
3	VASW-NNCCT1	460V 3N～60Hz				
2	VASW-NNCBT3	400V 3N～50Hz		5～52°C		
4	VASW-NNCDT3	380V 3N～60Hz				

High Efficiency Flooded Evaporator



Flooded shell and tube type evaporator having refrigerant in the shell and chilled water inside the tubes.
The refrigerant distributor can distribute refrigerant evenly, optimize the temperature field and improve the evaporation temperature, so as to improve the operating efficiency.
Removable water heads at both ends allow tube cleaning without disturbing the refrigerant circuit.
Tubes are mechanically expanded into tube sheets with double grooves to ensure leak tight and trouble free operation.

High Efficiency Air Side Heat Exchanger

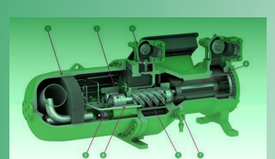


The air side heat exchanger applies the optimized V-shape with larger design,which can increase condensing surface area,effectively improve the air flow and ventilation effect.Thus the air distribution is more uniform and the unit can achieve a heat exchange with high efficiency.

High Efficiency Screw Compressor

Equipped with semi-hermetic compact compressors of well-known brand which offers the highest possible operational efficiency over a wide application range.
The compressor has the capability to provide infinite capacity control or 4 step capacity control to deliver the exact refrigeration
capacity required. And this flexible load matching design allows for full exploitation of low power consumption when ambient temperatures decrease or the required duty falls below maximum design conditions.

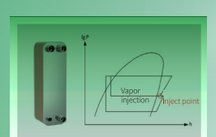
①high efficiency profile
②control slider:Part load down to 25%of full load
③long-ife bearings with pressure unloading
④specially adapted built-in motor
⑤integrated oil separator
⑥optimized oil management
⑦economiser(ECO)
⑧integrated check valve



High Precision EXV

This unit employs unique electronic expansion valve control mode to ensure the safety and stability of operation under various extreme working conditions. Therefore, it can adjust the refrigerant more precisely.

Economizer



The economizer circuit consisting of plate type heatexchanger,expansion valve and solenoid valve,boosts capacity, improves system efficiency and reduces operating costs.

Intelligent Control

Protection Function:

- High and low voltage protection
- Fan overload protection
- Power protection
- Oil level protection
- Compressor built-in protection
- High discharge temperature protection
- High/low water temperature protection
- High temperature difference protection between the inlet and outlet water
- High/low pressure difference protection between the high pressure and low temperature
- Frequent start-stop protection

Display Function:

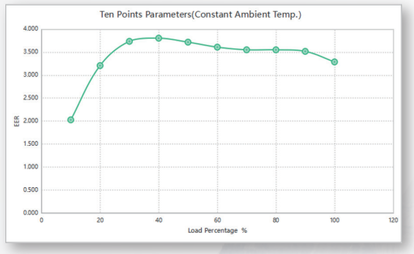
- Operation mode display
- Compressor load display
- Compressor continuous running time
- Inlet/outlet water temperature
- Environment temperature
- Compressor voltage/current display
- Discharge/Suction temperature
- High/Low pressure value display
- I/O working condition of the controller
- Fault indication(Location and Time)

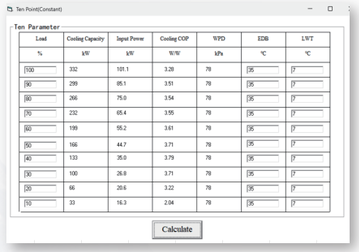
Control Function:

- Remote start/shutdown
- Time setting
- Remote Monitoring function (Reserved 485 communication interface)
- Power-down memory control function
- Restricted function of parameters beyond the limits
- PID energy regulating
- Frost protection of system water temperature
- Multiple password setting protection control function
- Fan grading control

Intelligent Selection Software

This intelligent selection software can calculate different kinds of working conditions according to clients' requirament.The software can simulate and check the operating conditions of the unit under different ambient temperatures, different water temperatures, different loads and different concentrations of fluid. And finally, the professional and specific technical selection report can be output to customer.





Fixed speed type-380/400V 3N~50Hz,T1

Model VASW-NNCA/BT1			09512	12012	14012	15512	180112	20512	22012	24012	13522	15022
Nominal cooling capacity		kW	332	420	489	548	637	716	779	838	472	522
		Ton	95	120	140	155	180	205	220	240	135	150
Cooling power input		kW	98.6	130.5	146.5	165.3	188.2	212.4	242.0	258.1	142.2	162.0
EER		kW/kW	3.37	3.21	3.34	3.31	3.39	3.37	3.22	3.24	3.32	3.22
Cooling rated current		A	181	225	263	292	335	372	426	451	252	288
Maximum operating current		A	222	268	313	347	393	430	508	520	299	333
Maximum startup current		A	358	488	615	683	845	845	965	965	418	478
Cooling rated current*		A	172	214	250	278	319	354	404	428	239	274
Maximum operating current*		A	211	255	297	330	373	409	483	494	284	317
Maximum startup current*		A	340	464	584	649	803	803	917	917	397	454
Power supply			380/400V 3N ～ 50Hz									
Refrigerant	Refrigerant		R134a									
	Refrigerant circuit		1								2	
Compressor	Compressor		Semi-hermetic screw compressor									
	Quantity		1								2	
	Loading/unloading		25% ～ 100% Stepless								12.5% ～ 100% Step-less	
	Startup Type		Y-△									
Fan	Air flow	m^2/h	147000	147000	196000	196000	245000	245000	294000	294000	196000	196000
	Quantity	Set	6	6	8	8	10	10	12	12	8	8
	Fan motor	kW	13.8	13.8	18.4	18.4	23.0	23.0	27.6	27.6	18.4	18.4
Water side heat exchanger	Heat exchanger		Highly Efficient Flooded Shell-and-Tube									
	Water flow	m^3/h	57.1	72.2	84.1	94.2	109.6	123.2	134.0	144.1	81.1	89.8
	Water pipe diameter	DN(mm)	125	125	125	125	150	150	150	150	125	125
	Water pressure drop	kPa	78	79	74	77	73	74	75	75	41	40
	Design pressure	MPa	1.0									
Dimensions	Length	mm	3600	3600	4795	4795	5990	5990	7185	7185	4795	4795
	Width	mm	2250									
	High	mm	2460									
Weight	Transportation	kg	3988	4463	5076	5127	6072	6147	6928	6976	5629	5690
	Operation	kg	4088	4563	5176	5227	6222	6297	7078	7126	5809	5870

Note:
1.Nominal cooling condition:chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 35°C.
2.*:Power supply: 400V 3N~50Hz.
3.Allowable voltage fluctuationrange is±10%.

Fixed speed type-380/400V 3N~50Hz,T1

Model VASW-NNCA/BT1			16522	18522	20522	24022	27522	31022	36022	40522	44022	47022
Nominal cooling capacity		kW	585	655	723	839	963	1096	1259	1431	1548	1660
		Ton	165	185	205	240	275	310	360	405	440	470
Cooling power input		kW	176.0	199.6	224.4	261.6	296.8	334.2	376.7	423.3	471.7	516.8
EER		kW/kW	3.32	3.28	3.22	3.21	3.25	3.28	3.34	3.38	3.28	3.21
Cooling rated current		A	324	363	398	451	530	591	669	742	828	901
Maximum operating current		A	395	435	496	537	618	693	778	860	999	1024
Maximum startup current		A	528	576	638	756	924	1030	1234	1275	1465	1477
Cooling rated current*		A	308	345	378	429	504	562	635	705	787	856
Maximum operating current*		A	375	413	471	510	587	659	739	817	949	973
Maximum startup current*		A	501	547	606	719	878	978	1172	1211	1391	1403
Power supply			380/400V 3N ～ 50Hz									
Refrigerant	Refrigerant		R134a									
	Refrigerant circuit		2									
Compressor	Compressor		Semi-hermetic screw compressor									
	Quantity		2									
	Loading/unloading		12.5% ～ 100% Stepless									
	Startup Type		Y-△									
Fan	Air flow	m^2/h	245000	245000	294000	294000	343000	392000	441000	490000	460000	460000
	Quantity	Set	10	10	12	12	14	16	18	20	20	20
	Fan motor	kW	23	23	27.6	27.6	32.2	36.8	41.4	46	46	46
Water side heat exchanger	Heat exchanger		Highly Efficient Flooded Shell-and-Tube									
	Water flow	m^3/h	100.6	112.7	124.3	144.3	165.7	188.5	216.5	246.1	266.2	285.6
	Water pipe diameter	DN(mm)	150	150	150	150	200	200	200	200	200	200
	Water pressure drop	kPa	68	68	64	68	66	66	66	67	69	67
	Design pressure	MPa	1.0									
Dimensions	Length	mm	5990	5990	7185	7185	8380	9575	10770	11965	11965	11965
	Width	mm	2250									
	High	mm	2460									
Weight	Transportation	kg	6881	6939	7599	8506	9169	10484	11324	12087	12346	12398
	Operation	kg	7061	7119	7779	8686	9349	10744	11584	12347	12606	12658

Note:
1.Nominal cooling condition:chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 35°C.
2.*:Power supply: 400V 3N~50Hz.
3.Allowable voltage fluctuationrange is±10%.

Fixed type type-460V 3N～60Hz,T1

Model VASW-NNCCT1			10012	12012	14512	16512	19012	21012	24012	26012	28012
Nominal cooling capacity		kW	350	424	506	571	657	743	848	920	988
		Ton	100	120	145	165	190	210	240	260	280
Cooling power input		kW	105.5	131.7	154.2	176.2	197.2	224.4	252.4	285.1	305.4
Cooling rated current		A	155	185	212	250	278	316	352	398	424
EER		kW/kW	3.32	3.22	3.28	3.24	3.33	3.31	3.36	3.23	3.23
Maximum operating current		A	188	231	257	292	329	366	409	481	495
Maximum startup current		A	314	371	465	586	650	805	805	917	917
Power supply			460V 3N ～ 60Hz								
Refrigerant	Refrigerant		R134a								
	Refrigerant circuit		1								
Compressor	Compressor		Semi-hermetic screw compressor								
	Quantity		1								
	Loading/unloading		25% ～ 100% Stepless								
	Startup Type		Y- △								
Fan	Air flow	m^2/h	147000	147000	196000	196000	245000	245000	270000	315000	315000
	Quantity	Set	6	6	8	8	10	10	12	14	14
	Fan motor	kW	13.8	13.8	18.4	18.4	23.0	23.0	27.6	32.2	32.2
Water side heat exchanger	Heat exchanger		Highly Efficient Flooded Shell-and-Tube								
	Water flow	m^3/h	60.2	72.9	87.1	98.3	113.0	127.8	145.8	158.3	169.9
	Water pipe diameter	DN(mm)	125	125	125	125	150	150	150	150	150
	Water pressure drop	kPa	81	80	79	77	77	79	78	78	79
	Design pressure	MPa	1.0								
Dimensions	Length	mm	3600	3600	4795	4795	5990	5990	7185	8380	8380
	Width	mm	2250								
	High	mm	2460								
Weight	Transportation	kg	3999	4039	5063	5131	6026	6134	6856	7168	6506
	Operation	kg	4099	4139	5163	5231	6176	6284	7006	7318	6686

Note:
1.Nominal cooling condition:chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 35°C.
2.*:Power supply: 400V 3N~50Hz.
3.Allowable voltage fluctuationrange is±10%.

Fixed type type-460V 3N～60Hz,T1

Model VASW-NNCCT1			13522	16022	18022	20022	22522	24022	28522	32522	37022	42022	48022
Nominal cooling capacity		kW	477	554	627	689	784	848	996	1143	1299	1486	1694
		Ton	135	160	180	200	225	240	285	325	370	420	480
Cooling power input		kW	145.5	171.8	191.3	212.3	236.8	263.4	309.2	352.4	397.6	448.7	495.7
Cooling rated current		A	207	240	271	309	343	370	424	500	559	632	689
EER		kW/kW	3.28	3.22	3.28	3.24	3.31	3.22	3.22	3.24	3.27	3.31	3.42
Maximum operating current		A	251	289	329	369	414	463	507	584	652	732	804
Maximum startup current		A	355	399	461	499	548	602	719	878	976	1171	1207
Power supply			460V 3N~60HZ										
Refrigerant	Refrigerant		R134a										
	Refrigerant circuit		2										
Compressor	Compressor		Semi-hermetic screw compressor										
	Quantity		2										
	Loading/unloading		12.5% ～ 100% Stepless										
	Startup Type		Y- △										
Fan	Air flow	m^2/h	196000	196000	245000	245000	294000	294000	343000	392000	441000	490000	460000
	Quantity	Set	8	8	10	10	12	12	14	16	18	20	20
	Fan motor	kW	18.4	18.4	23	23	27.6	27.6	32.2	36.8	41.4	46	46
Water side heat exchanger	Heat exchanger		Highly Efficient Flooded Shell-and-Tube										
	Water flow	m^3/h	82.1	95.2	107.8	118.4	134.9	145.8	171.3	196.6	223.4	255.7	291.3
	Water pipe diameter	DN(mm)	125	125	150	150	150	200	200	200	200	200	200
	Water pressure drop	kPa	39	40	67	66	67	66	67	66	65	66	67
	Design pressure	MPa	1.0										
Dimensions	Length	mm	4795	4795	5990	5990	7185	7185	8380	9575	10770	11965	11965
	Width	mm	2250										
	High	mm	2460										
Weight	Transportation	kg	5609	6074	6292	7330	7635	8058	9543	10515	11488	11938	12822
	Operation	kg	5789	6254	6472	7510	7815	8238	9723	10695	11748	12198	13082

Note:
1.Nominal cooling condition:chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 35°C.
2.Allowable voltage fluctuationrange is±10%.

Fixed speed type-400V 3N～50Hz,T3

Model VASW-NNCBT3			09512	12012	14012	15512	180112	20512	22512	13522	15022
Nominal cooling capacity		kW	332	426	495	555	645	725	791	472	529
		Ton	95	120	140	155	180	205	225	135	150
Cooling power input		kW	98.6	125.1	142.4	162.7	181.4	204.6	232.0	142.2	154.9
Cooling rated current		A	172	206	244	274	308	342	389	239	263
EER		kW/kW	3.37	3.41	3.48	3.41	3.56	3.54	3.41	3.32	3.42
Nominal cooling capacity*		kW	300	375	441	494	577	645	699	423	474
		Ton	85	105	125	140	165	185	200	120	135
Cooling power input*		kW	123.7	154.5	175.3	198.0	221.5	250.1	279.0	175.9	193.0
Cooling rated current*		A	216	254	300	333	376	418	468	296	328
Maximum operating current		A	232	279	325	360	406	446	524	321	359
Maximum startup current		A	340	464	584	649	803	803	917	415	475
Power supply			400V 3N ～ 50Hz								
Refrigerant	Refrigerant		R134a								
	Refrigerant circuit		1							2	
Compressor	Compressor		Semi-hermetic screw compressor								
	Quantity		1							2	
	Loading/unloading		25% ～ 100% Stepless							12.5% ～ 100% Stepless	
	Startup Type		Y- △								
Fan	Air flow	m^2/h	147000	138000	184000	184000	230000	230000	276000	196000	184000
	Quantity	Set	6	6	8	8	10	10	12	8	8
	Fan motor	kW	13.8	13.8	18.4	18.4	23.0	23.0	27.6	18.4	18.4
Water side heat exchanger	Heat exchanger		Highly Efficient Flooded Shell-and-Tube								
	Water flow	m^3/h	57.1	73.3	85.1	95.5	111.0	124.8	136.2	81.3	91.0
	Water pipe diameter	DN(mm)	125	125	125	125	150	150	150	125	125
	Water pressure drop	kPa	78	81	76	79	74	76	77	46	46
	Design pressure	MPa	1.0								
Dimensions	Length	mm	3600	3600	4795	4795	5990	5990	7185	4795	4795
	Width	mm	2250								
	High	mm	2460								
Weight	Transportation	kg	3988	4688	5376	5427	6447	6522	7385	5629	5990
	Operation	kg	4088	4788	5476	5527	6597	6672	7535	5809	6170

Note:
1.Nominal cooling condition:chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 35°C.
2.*:The parameters in the condition of chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 46°C.
3.Allowable voltage fluctuationrange is±10%.

Fixed speed type-400V 3N～50Hz,T3

Model VASW-NNCBT3			16522	19022	21022	24022	28022	31522	36022	41022	44022
Nominal cooling capacity		kW	585	662	732	851	977	1111	1277	1450	1548
		Ton	165	190	210	240	280	315	360	410	440
Cooling power input		kW	172.2	193.7	214.0	250.0	285.2	325.4	365.8	409.4	471.7
Cooling rated current		A	301	337	362	411	486	549	619	684	787
EER		kW/kW	3.40	3.42	3.42	3.40	3.43	3.41	3.49	3.54	3.28
Nominal cooling capacity*		kW	529	600	664	753	870	993	1141	1295	1361
		Ton	150	170	190	215	245	280	325	370	385
Cooling power input*		kW	217.0	245.1	268.9	310.0	353.5	397.6	449.2	503.2	570.4
Cooling rated current*		A	379	426	455	510	602	671	760	841	952
Maximum operating current		A	413	455	522	559	643	720	804	890	1033
Maximum startup current		A	520	568	632	743	906	1009	1205	1248	1433
Power supply			400V 3N ～ 50Hz								
Refrigerant	Refrigerant		R134a								
	Refrigerant circuit		2								
Compressor	Compressor		Semi-hermetic screw compressor								
	Quantity		2								
	Loading/unloading		12.5% ～ 100% Stepless								
	Startup Type		Y- △								
Fan	Air flow	m^2/h	245000	230000	276000	276000	322000	368000	414000	460000	460000
	Quantity	Set	10	10	12	12	14	16	18	20	20
	Fan motor	kW	23	23	27.6	27.6	32.2	36.8	41.4	46	46
Water side heat exchanger	Heat exchanger		Highly Efficient Flooded Shell-and-Tube								
	Water flow	m^3/h	100.6	114.0	126.0	146.4	168.2	191.4	219.8	249.5	266.4
	Water pipe diameter	DN(mm)	150	150	150	150	150	200	200	200	200
	Water pressure drop	kPa	75	76	72	76	74	74	74	75	75
	Design pressure	MPa	1.0								
Dimensions	Length	mm	5990	5990	7185	7185	8380	9575	10770	11965	11965
	Width	mm	2250								
	High	mm	2460								
Weight	Transportation	kg	6881	7321	8056	8956	9701	10731	11869	12714	12966
	Operation	kg	7061	7501	8236	9136	9881	10911	12129	12974	13226

Note:
1.Nominal cooling condition:chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 35°C.
2.*:The parameters in the condition of chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 46°C.
3.Allowable voltage fluctuationrange is±10%.

Fixed speed type-380V 3N～60Hz,T3

Model VASW-NNCDT3			10012	12012	14512	16512	19012	21512	24512	27012
Nominal cooling capacity		kW	350	430	514	580	667	755	866	941
		Ton	100	120	145	165	190	215	245	270
Cooling power input		kW	105.5	127.6	149.9	169.4	192.2	217.9	242.5	275.3
Cooling rated current		A	187	218	251	293	329	373	411	468
EER		kW/kW	3.32	3.37	3.43	3.42	3.47	3.46	3.57	3.42
Nominal cooling capacity*		kW	315	386	456	513	596	670	771	832
		Ton	90	110	130	145	170	190	220	235
Cooling power input*		kW	132.6	161.2	184.9	209.3	233.8	266.4	296.7	331.3
Cooling rated current*		A	235	275	310	362	400	456	503	563
Maximum operating current		A	250	310	340	386	435	482	538	632
Maximum startup current		A	381	470	631	766	934	1019	1019	1160
Power supply			380V 3N ～ 60Hz							
Refrigerant	Refrigerant		R134a							
	Refrigerant circuit		1							
Compressor	Compressor		Semi-hermetic screw compressor							
	Quantity		1							
	Loading/unloading		25% ～ 100% Stepless							
	Startup Type		Y-△							
Fan	Air flow	m^2/h	147000	138000	184000	184000	230000	230000	276000	322000
	Quantity	Set	6	6	8	8	10	10	12	14
	Fan motor	kW	13.8	13.8	18.4	18.4	23.0	23.0	27.6	32.2
Water side heat exchanger	Heat exchanger		Highly Efficient Flooded Shell-and-Tube							
	Water flow	m^3/h	60.2	74.0	88.5	99.9	114.8	129.9	149.1	162.0
	Water pipe diameter	DN(mm)	125	125	125	125	150	150	150	150
	Water pressure drop	kPa	81	82	81	79	79	82	81	81
	Design pressure	MPa	1.0							
Dimensions	Length	mm	3600	3600	4795	4795	5990	5990	7185	8380
	Width	mm	2250							
	High	mm	2460							
Weight	Transportation	kg	3999	4264	5363	5431	6401	6516	7313	8097
	Operation	kg	4099	4364	5463	5531	6551	6666	7463	8247

Note:
1.Nominal cooling condition:chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 35°C.
2.*:The parameters in the condition of chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 46°C.
3.Allowable voltage fluctuationrange is±10%.

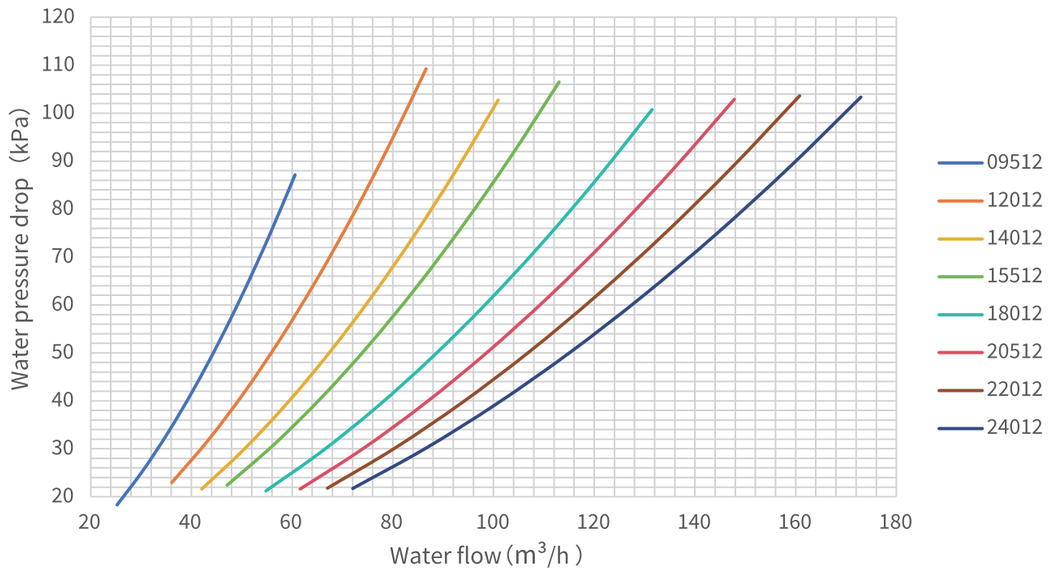
Fixed speed type-380V 3N～60Hz,T3

Model VASW-NNCDT3			13522	16022	18022	20022	22522	24522	29022	33022	37522	43022	48022
Nominal cooling capacity		kW	477	561	635	697	793	860	1011	1160	1318	1510	1694
		Ton	135	160	180	200	225	245	290	330	375	430	480
Cooling power input		kW	142.4	164.3	184.0	203.9	229.9	255.3	297.3	338.8	383.1	435.8	495.7
Cooling rated current		A	245	280	317	361	405	436	495	585	654	747	835
EER		kW/kW	3.35	3.41	3.45	3.42	3.45	3.37	3.40	3.42	3.44	3.46	3.42
Nominal cooling capacity*		kW	425	502	571	629	719	775	894	1031	1175	1345	1500
		Ton	120	145	160	180	205	220	255	295	335	380	425
Cooling power input*		kW	177.3	203.9	229.0	258.3	290.8	323.0	368.8	420.2	468.4	535.2	608.4
Cooling rated current*		A	305	347	395	457	512	552	614	726	800	917	1025
Maximum operating current		A	332	381	436	491	551	621	671	772	861	964	1060
Maximum startup current		A	441	513	542	627	664	780	967	1152	1365	1501	1549
Power supply			380V 3N ～ 60Hz										
Refrigerant	Refrigerant		R134a										
	Refrigerant circuit		2										
Compressor	Compressor		Semi-hermetic screw compressor										
	Quantity		2										
	Loading/unloading		12.5% ～ 100% Stepless										
	Startup Type		Y-△										
Fan	Air flow	m^2/h	196000	184000	230000	230000	276000	276000	322000	368000	414000	460000	460000
	Quantity	Set	8	8	10	10	12	12	14	16	18	20	20
	Fan motor	kW	18.4	18.4	23	23	27.6	27.6	32.2	36.8	41.4	46	46
Water side heat exchanger	Heat exchanger		Highly Efficient Flooded Shell-and-Tube										
	Water flow	m^3/h	82.0	96.5	109.2	119.9	136.4	148.0	174.0	199.6	226.8	259.9	291.6
	Water pipe diameter	DN(mm)	125	125	150	150	150	150	200	200	200	200	200
	Water pressure drop	kPa	43	45	76	74	74	74	76	74	73	74	74
	Design pressure	MPa	1.0										
Dimensions	Length	mm	4795	4795	5990	5990	7185	7185	8380	9575	10770	11965	11965
	Width	mm	2250										
	High	mm	2460										
Weight	Transportation	kg	5609	5974	6667	7315	8085	8115	9675	10732	11770	12702	12822
	Operation	kg	5789	6154	6847	7495	8265	8295	9855	10912	12030	12962	13082

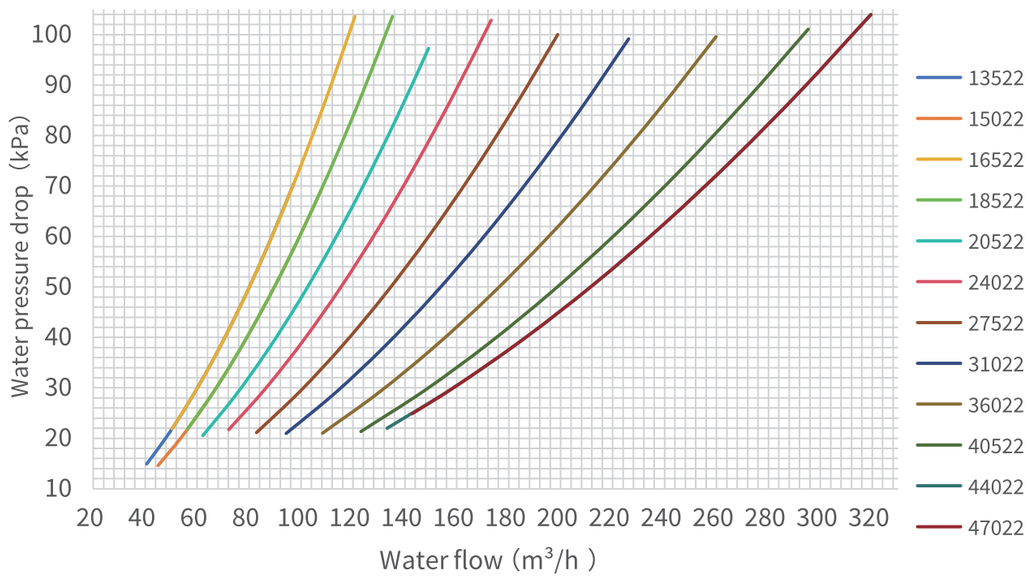
Note:
1.Nominal cooling condition:chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 35°C.
2.*:The parameters in the condition of chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 46°C.
3.Allowable voltage fluctuationrange is±10%.

Water Pressure Drop Curve- Fixed speed

Water pressure drop curve-Single compressor（380/400V 3N～50Hz T1）

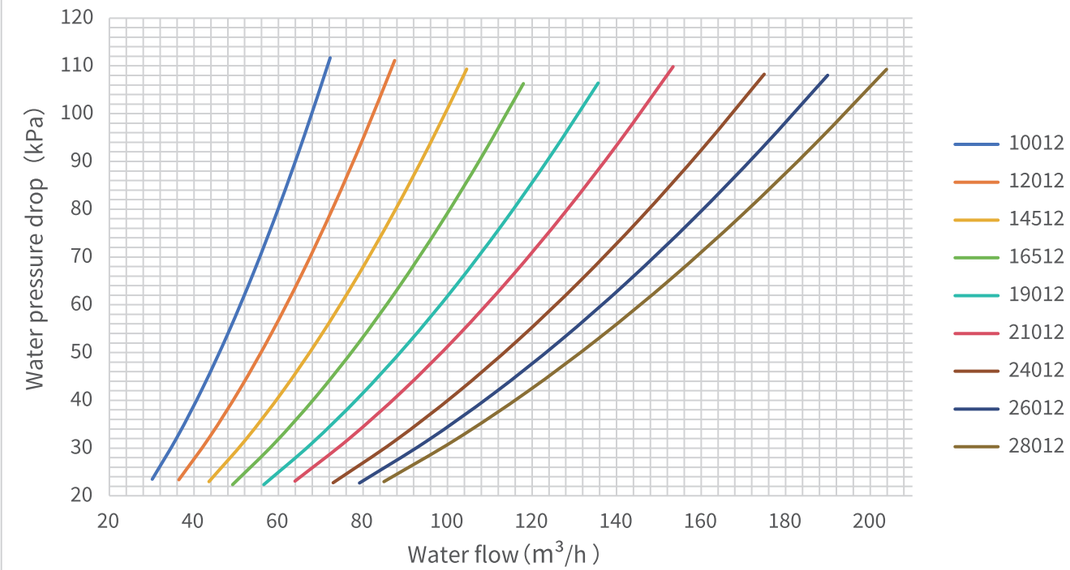


Water pressure drop curve-Dual compressors（380/400V 3N～50Hz T1）

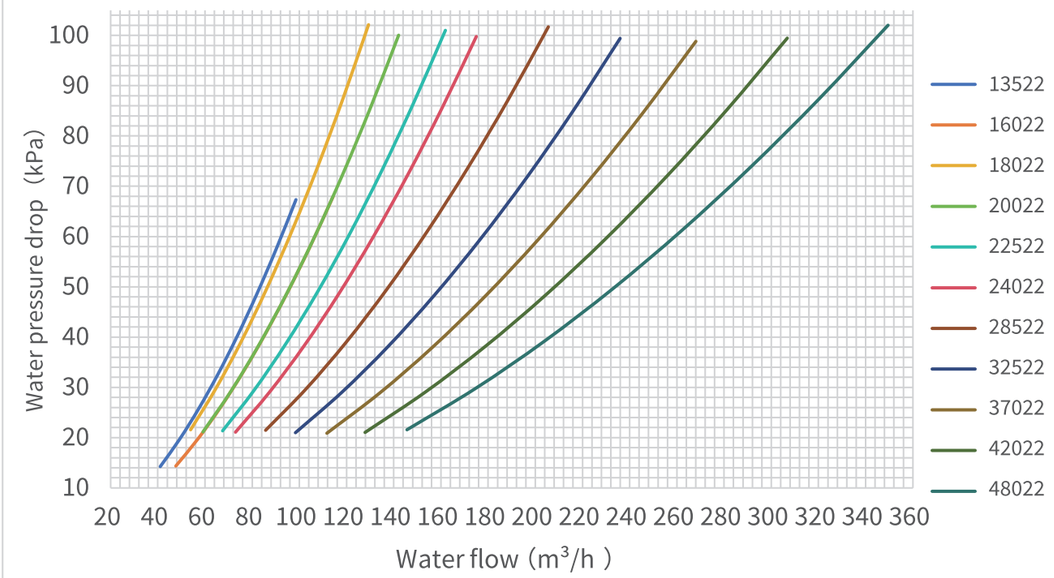


Water Pressure Drop Curve- Fixed speed

Water pressure drop curve-Single compressor（460V 3N～60Hz T1）

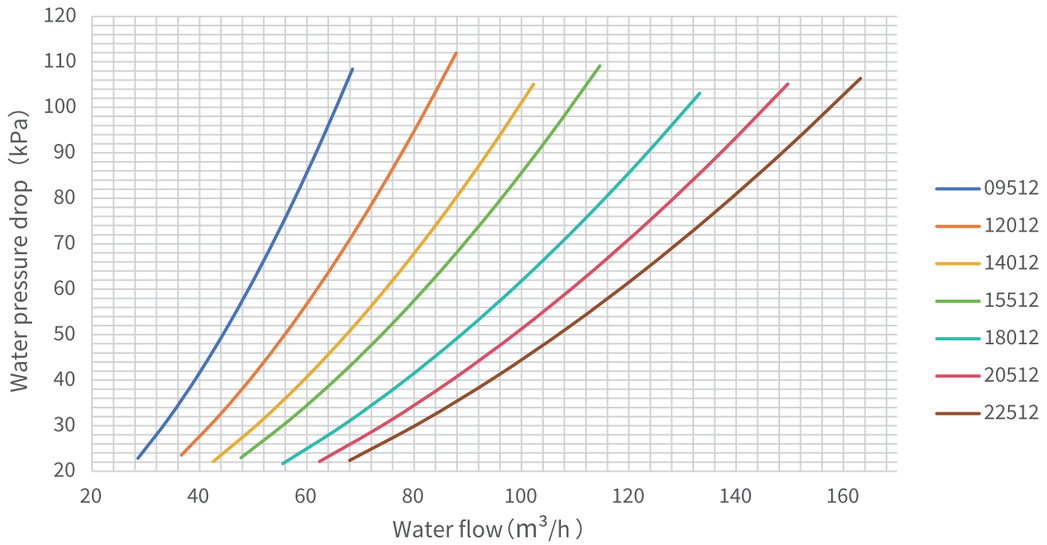


Water pressure drop curve-Dual compressors（460V 3N～60Hz T1）

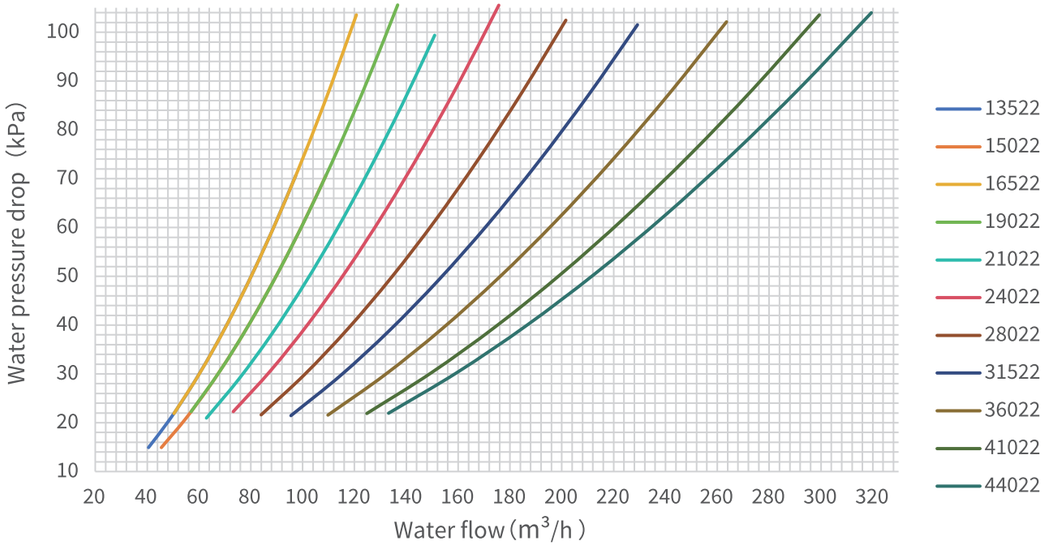


Water Pressure Drop Curve- Fixed speed

Water pressure drop curve-Single compressor（400V 3N～50Hz T3）

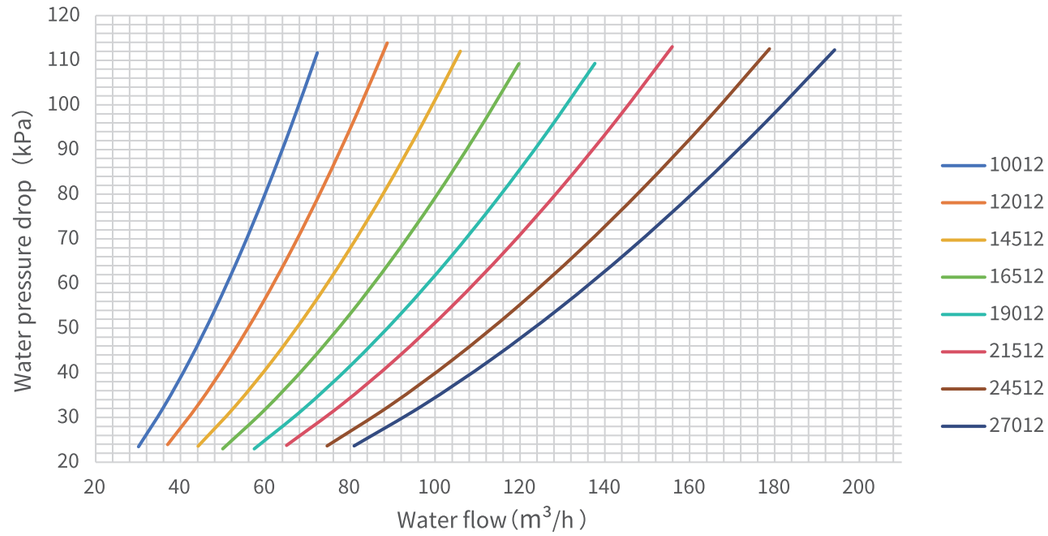


Water pressure drop curve-Dual compressors（400V 3N～50Hz T3）

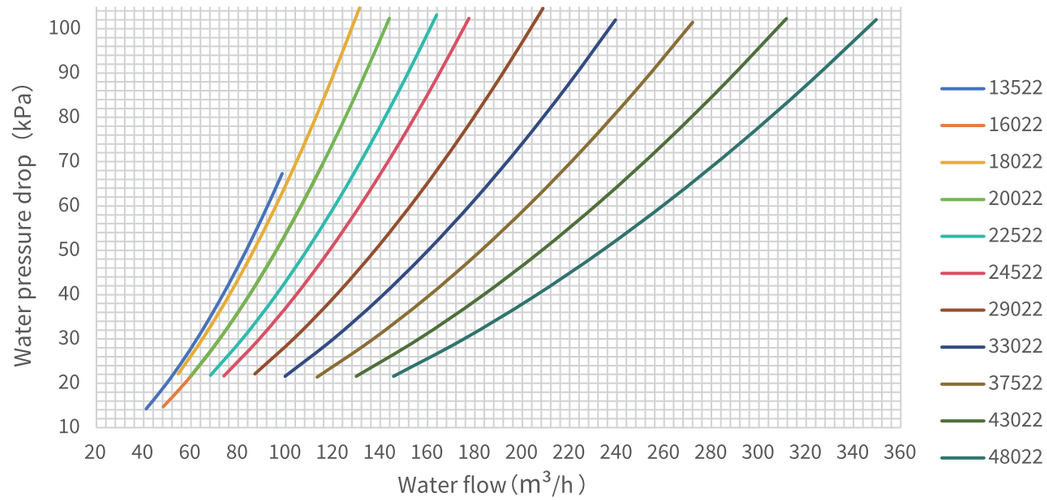


Water Pressure Drop Curve- Fixed speed

Water pressure drop curve-Single compressor（380V 3N～60Hz T3）



Water pressure drop curve-Dual compressors（380V 3N～60Hz T3）

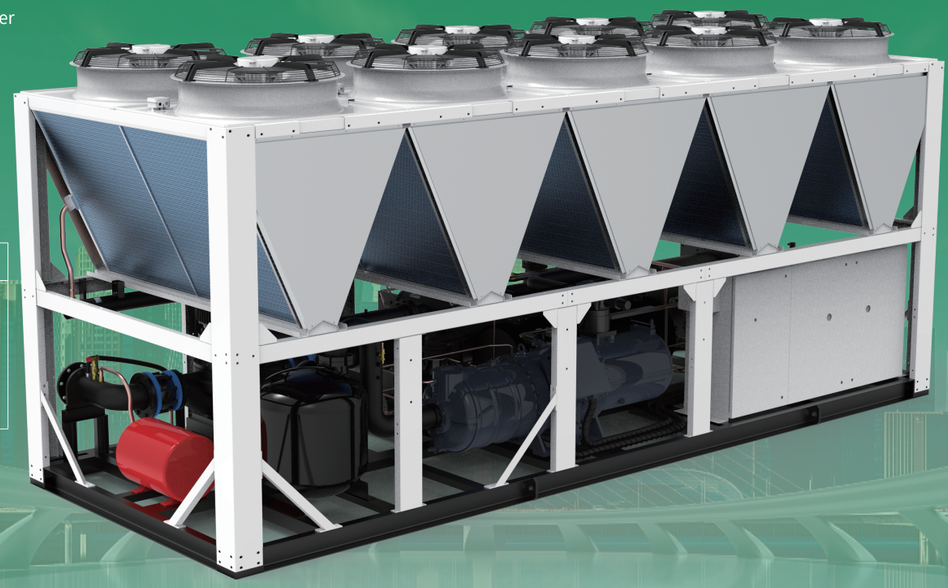


Product Features

VASW 240 2 2 N N C A T1 V

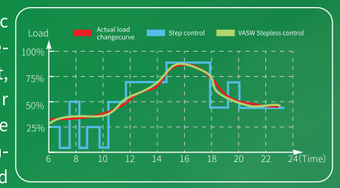
- V — Inverter type
- T1 — Working condition: T1/T3
- A — Power supply: A - 380V/3N/50Hz, B - 400V/3N/50Hz, C - 460V/3N/60Hz, D - 380V/3N/60Hz
- C — Design series
- N — Features: N-No
- N — Other function: N-No
- 2 — Refrigerant: 2-R134a
- 2 — Number of compressor: 1,2
- 240 — Nominal cooling capacity: 240RT
- VASW — Veck air cooled screw chiller

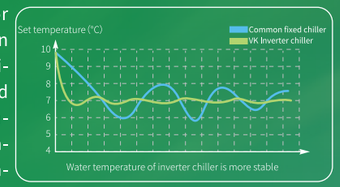
No.	Series	Power supply	Leaving water temperature	Ambient temperature	Voltage	Water flow
1	VASW-NNCAT1V	380 3N～50Hz	4～20°C	-10～45°C	±10% of rated voltage	70%～130% of rated water flow
1	VASW-NNCBT1V	400V 3N～50Hz				
3	VASW-NNCCT1V	460V 3N～60Hz				
2	VASW-NNCBT3V	400V 3N～50Hz		-10～52°C		
4	VASW-NNCDT3V	380V 3N～60Hz				



Compressor Stepless Regulation

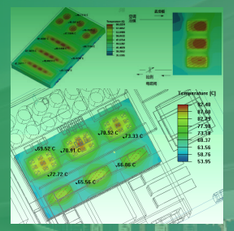
The high-efficiency semi-hermetic twin-screw compressor, which is specially designed for the R134a refrigerant, can realize stepless regulation for energy through its slide valve. The energy regulation range of a single-compressor unit is from 25% to 100%, and regulation range of a dual-compressor unit is from 12.5% to 100%, which can well avoid the problems faced by ordinary units such as frequent start and stop, large fluctuations in water temperature and especially, excessive temperature and humidity control in technological places, thus minimizing the operation cost.





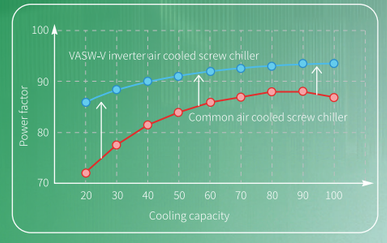
Advanced Refrigerant Cooling Inverter

With the advanced refrigerant cooling inverter, the unit inverter is more compact and dissipates heat better. This can take away 90% heat generated by the inverter while in operation, make the electrical components live longer, and allow the inverter to operate without compromised capacity even at very high temperatures.



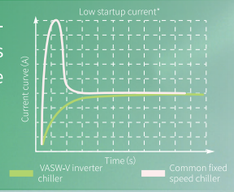
High Power Factor

For a conventional air-cooled screw unit, its power factor is low, which even decreases as the unit load decreases. For the VWSW-V unit, its power factor can reach up to 0.95 while operating at full load. Therefore, the unit consumes less electricity and resolves the problem of power factor decreasing with the decrease of load.



Zero in-rush current

The unit adopts inverter starting mode, which produces zero in-rush current during the starting process and enables a stable operation.Meanwhile, reduce the requirements for the capacity of the transformer.



Inverter type-380/400V 3N～50Hz,T1

Model VASW-NNCA/BT1			09512	12012	14012	15512	180112	20512	22012	24012
Nominal cooling capacity		kW	332	420	489	548	637	716	779	838
		Ton	95	120	140	155	180	205	220	240
Cooling power input		kW	101.1	133.8	150.2	169.4	192.9	217.7	248.0	264.5
EER		kW/kW	3.28	3.14	3.25	3.23	3.30	3.29	3.14	3.17
Cooling rated current		A	169	218	249	279	319	357	407	433
Maximum operating current		A	222	268	313	347	393	430	508	520
Cooling rated current *		A	161	207	237	265	303	339	387	411
Maximum operating current *		A	211	255	297	330	373	409	483	494
Power supply			380/400V 3N ～ 50Hz							
Refrigerant	Refrigerant		R134a							
	Refrigerant circuit		1							
Compressor	Compressor		Semi-hermetic screw compressor							
	Quantity		1							
	Loading/unloading		25%-100% Slide valve + inverter							
	Startup Type		VSD							
Fan	Air flow	m^2/h	147000	147000	196000	196000	245000	245000	294000	294000
	Quantity	Set	6	6	8	8	10	10	12	12
	Fan motor	kW	13.8	13.8	18.4	18.4	23.0	23.0	27.6	27.6
Water side heat exchanger	Heat exchanger		Highly Efficient Flooded Shell-and-Tube							
	Water flow	m^3/h	57.1	72.2	84.1	94.2	109.6	123.2	134.0	144.1
	Water pipe diameter	DN(mm)	125	125	125	125	150	150	150	150
	Water pressure drop	kPa	78	79	74	77	73	74	75	75
	Design pressure	MPa	1.0							
Dimensions	Length	mm	4100	4100	5295	5295	6490	6490	7685	7685
	Width	mm	2250							
	High	mm	2460							
Weight	Transportation	kg	3988	4463	5076	5127	6072	6147	6928	6976
	Operation	kg	4088	4563	5176	5227	6222	6297	7078	7126

Note:
1.Nominal cooling condition:chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 35°C.
2.*:Power supply: 400V 3N~50Hz.
3.Allowable voltage fluctuationrange is±10%.

Inverter type-380/400V 3N～50Hz,T1

Model VASW-NNCA/BT1			13522	15022	16522	18522	20522	24022	27522	31022	36022	40522	44022	47022
Nominal cooling capacity		kW	472	522	585	655	723	839	963	1096	1259	1431	1548	1660
		Ton	135	150	165	185	205	240	275	310	360	405	440	470
Cooling power input		kW	145.8	166.0	180.4	204.5	230.0	268.1	304.2	342.5	386.1	433.9	483.5	529.8
EER		kW/kW	3.23	3.15	3.24	3.20	3.14	3.13	3.17	3.20	3.26	3.30	3.20	3.13
Cooling rated current		A	240	274	303	341	380	436	503	564	636	711	792	865
Maximum operating current		A	299	333	395	435	496	537	618	693	778	860	999	1024
Cooling rated current *		A	228	260	288	324	361	414	478	536	605	676	753	821
Maximum operating current *		A	284	317	375	413	471	510	587	659	739	817	949	973
Power supply			380/400V 3N ～ 50Hz											
Refrigerant	Refrigerant		R134a											
	Refrigerant circuit		2											
Compressor	Compressor		Semi-hermetic screw compressor											
	Quantity		2											
	Loading/unloading		12.5%-100% Slide valve + inverter											
	Startup Type		VSD											
Fan	Air flow	m^2/h	196000	196000	245000	245000	294000	294000	343000	392000	441000	490000	460000	460000
	Quantity	Set	8	8	10	10	12	12	14	16	18	20	20	20
	Fan motor	kW	18.4	18.4	23	23	27.6	27.6	32.2	36.8	41.4	46	46	46
Water side heat exchanger	Heat exchanger		Highly Efficient Flooded Shell-and-Tube											
	Water flow	m^3/h	81.1	89.8	100.6	112.7	124.3	144.3	165.7	188.5	216.5	246.1	266.2	285.6
	Water pipe diameter	DN(mm)	125	125	150	150	150	150	200	200	200	200	200	200
	Water pressure drop	kPa	69	65	68	68	64	68	66	66	66	67	69	67
	Design pressure	MPa	1.0											
Dimensions	Length	mm	5295	5295	6490	6490	7685	7685	8880	9575	10770	11965	11965	11965
	Width	mm	2250											
	High	mm	2460											
Weight	Transportation	kg	5629	5690	6881	6939	7599	8506	9169	10484	11324	12087	12346	12398
	Operation	kg	5809	5870	7061	7119	7779	8686	9349	10744	11584	12347	12606	12658

Note:
1.Nominal cooling condition:chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 35°C.
2.*:Power supply: 400V 3N~50Hz.
3.Allowable voltage fluctuationrange is±10%.

Inverter type-460V 3N～60Hz,T1

Model VASW-NNCCT1-V			10012	12012	14512	16512	19012	21012	24012	26012	28012
Nominal cooling capacity		kW	350	424	506	571	657	743	848	920	988
		Ton	100	120	145	165	190	210	240	260	280
Cooling power input		kW	108.2	135.0	158.0	180.6	202.1	230.0	258.7	292.2	313.1
Cooling rated current		A	148	180	209	242	271	307	344	390	416
EER		kW/kW	3.24	3.14	3.20	3.16	3.25	3.23	3.28	3.15	3.16
Maximum operating current		A	188	231	257	292	329	366	409	481	495
Power supply			460V 3N ～ 60Hz								
Refrigerant	Refrigerant		R134a								
	Refrigerant circuit		1								
Compressor	Compressor		Semi-hermetic screw compressor								
	Quantity		1								
	Loading/unloading		25%-100% Slide valve + inverter								
	Startup Type		VSD								
Fan	Air flow	m^2/h	147000	147000	196000	196000	245000	245000	270000	315000	315000
	Quantity	Set	6	6	8	8	10	10	12	14	14
	Fan motor	kW	13.8	13.8	18.4	18.4	23.0	23.0	27.6	32.2	32.2
Water side heat exchanger	Heat exchanger		Highly Efficient Flooded Shell-and-Tube								
	Water flow	m^3/h	60.2	72.9	87.1	98.3	113.0	127.8	145.8	158.3	169.9
	Water pipe diameter	DN(mm)	125	125	125	125	150	150	150	150	150
	Water pressure drop	kPa	81	80	79	77	77	79	78	78	79
	Design pressure	MPa	1.0								
Dimensions	Length	mm	4100	4100	5295	5295	6490	6490	7685	8880	8880
	Width	mm	2250								
	High	mm	2460								
Weight	Transportation	kg	3999	4039	5063	5131	6026	6134	6856	7168	6506
	Operation	kg	4099	4139	5163	5231	6176	6284	7006	7318	6686

Note:
1.Nominal cooling condition:chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 35°C.
2.Allowable voltage fluctuationrange is±10%.

Inverter type-460V 3N～60Hz,T1

Model VASW-NNCCT1-V			13522	16022	18022	20022	22522	24022	28522	32522	37022	42022	48022
Nominal cooling capacity		kW	477	554	627	689	784	848	996	1143	1299	1486	1694
		Ton	135	160	180	200	225	240	285	325	370	420	480
Cooling power input		kW	149.2	176.1	196.1	217.7	242.7	270.0	316.9	361.2	407.6	459.9	508.1
Cooling rated current		A	201	235	263	295	328	361	419	485	544	615	675
EER		kW/kW	3.20	3.14	3.20	3.16	3.23	3.14	3.14	3.16	3.19	3.23	3.33
Maximum operating current		A	251	289	329	369	414	463	507	584	652	732	804
Power supply			460V 3N ～ 60Hz										
Refrigerant	Refrigerant		R134a										
	Refrigerant circuit		2										
Compressor	Compressor		Semi-hermetic screw compressor										
	Quantity		2										
	Loading/unloading		12.5%-100% Slide valve + inverter										
	Startup Type		VSD										
Fan	Air flow	m^2/h	196000	196000	245000	245000	294000	294000	343000	392000	441000	490000	460000
	Quantity	Set	8	8	10	10	12	12	14	16	18	20	20
	Fan motor	kW	18.4	18.4	23	23	27.6	27.6	32.2	36.8	41.4	46	46
Water side heat exchanger	Heat exchanger		Highly Efficient Flooded Shell-and-Tube										
	Water flow	m^3/h	82.1	95.2	107.8	118.4	134.9	145.8	171.3	196.6	223.4	255.7	291.3
	Water pipe diameter	DN(mm)	125	125	150	150	150	200	200	200	200	200	200
	Water pressure drop	kPa	39	40	67	66	67	66	67	66	65	66	67
	Design pressure	MPa	1.0										
Dimensions	Length	mm	5295	5295	6490	6490	7685	7685	8880	9575	10770	11965	11965
	Width	mm	2250										
	High	mm	2460										
Weight	Transportation	kg	5609	6074	6292	7330	7635	8058	9543	10515	11488	11938	12822
	Operation	kg	5789	6254	6472	7510	7815	8238	9723	10695	11748	12198	13082

Note:
1.Nominal cooling condition:chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 35°C.
2.Allowable voltage fluctuationrange is±10%.

Inverter type-400V 3N～50Hz,T3

Model VASW-NNCBT3V			09512	12012	14012	15512	180112	20512	22512
Nominal cooling capacity		kW	332	426	495	555	645	725	791
		Ton	95	120	140	155	180	205	225
Cooling power input		kW	101.1	128.3	146.0	166.8	186.0	209.8	237.9
Cooling rated current		A	161	199	230	261	293	327	372
EER		kW/kW	3.28	3.32	3.39	3.33	3.47	3.46	3.32
Nominal cooling capacity*		kW	300	375	441	494	577	645	699
		Ton	85	105	125	140	165	185	200
Cooling power input*		kW	126.9	158.5	179.8	203.1	227.2	256.6	286.1
Cooling rated current*		A	202	246	283	318	358	400	447
Maximum operating current		A	232	279	325	360	406	446	524
Power supply			400V 3N ～ 50Hz						
Refrigerant	Refrigerant		R134a						
	Refrigerant circuit		1						
Compressor	Compressor		Semi-hermetic screw compressor						
	Quantity		1						
	Loading/unloading		25%-100% Slide valve + inverter						
	Startup Type		VSD						
Fan	Air flow	m^2/h	147000	138000	184000	184000	230000	230000	276000
	Quantity	Set	6	6	8	8	10	10	12
	Fan motor	kW	13.8	13.8	18.4	18.4	23.0	23.0	27.6
Water side heat exchanger	Heat exchanger		Highly Efficient Flooded Shell-and-Tube						
	Water flow	m^3/h	57.1	73.3	85.1	95.5	111.0	124.8	136.2
	Water pipe diameter	DN(mm)	125	125	125	125	150	150	150
	Water pressure drop	kPa	78	81	76	79	74	76	77
	Design pressure	MPa	1.0						
Dimensions	Length	mm	4100	4100	5295	5295	6490	6490	7685
	Width	mm	2250						
	High	mm	2460						
Weight	Transportation	kg	3988	4688	5376	5427	6447	6522	7385
	Operation	kg	4088	4788	5476	5527	6597	6672	7535

Note:
1.Nominal cooling condition:chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 35°C.
2.*:The parameters in the condition of chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 46°C.
3.Allowable voltage fluctuationrange is±10%.

Inverter type-400V 3N～50Hz,T3

Model VASW-NNCBT3V			13522	15022	16522	19022	21022	24022	28022	31522	36022	41022	44022
Nominal cooling capacity		kW	472	529	586	662	732	851	977	1111	1277	1450	1548
		Ton	135	150	165	190	210	240	280	315	360	410	440
Cooling power input		kW	145.8	158.7	176.5	198.5	219.3	256.3	292.4	333.6	374.9	419.6	483.5
Cooling rated current		A	228	249	281	315	344	397	460	523	588	655	753
EER		kW/kW	3.24	3.33	3.32	3.34	3.34	3.32	3.34	3.33	3.41	3.46	3.20
Nominal cooling capacity*		kW	423	474	530	600	664	753	870	993	1141	1295	1361
		Ton	120	135	150	170	190	215	245	280	325	370	385
Cooling power input*		kW	180.5	197.9	222.6	251.3	275.7	318.0	362.6	407.9	460.7	516.0	585.0
Cooling rated current*		A	282	311	354	399	432	493	570	639	722	805	910
Maximum operating current		A	321	359	413	455	522	559	643	720	804	890	1033
Power supply			400V 3N ～ 50Hz										
Refrigerant	Refrigerant		R134a										
	Refrigerant circuit		2										
Compressor	Compressor		Semi-hermetic screw compressor										
	Quantity		2										
	Loading/unloading		12.5%-100% Slide valve + inverter										
	Startup Type		VSD										
Fan	Air flow	m^2/h	196000	184000	245000	230000	276000	276000	322000	368000	414000	460000	460000
	Quantity	Set	8	8	10	10	12	12	14	16	18	20	20
	Fan motor	kW	18.4	18.4	23	23	27.6	27.6	32.2	36.8	41.4	46	46
Water side heat exchanger	Heat exchanger		Highly Efficient Flooded Shell-and-Tube										
	Water flow	m^3/h	81.3	91.0	100.8	114.0	126.0	146.4	168.2	191.3	219.8	249.5	266.4
	Water pipe diameter	DN(mm)	125	125	125	150	150	150	150	200	200	200	200
	Water pressure drop	kPa	46	46	75	76	72	76	74	74	74	75	75
	Design pressure	MPa	1.0										
Dimensions	Length	mm	5295	5295	6490	6490	7685	7685	8880	9575	10770	11965	11965
	Width	mm	2250										
	High	mm	2460										
Weight	Transportation	kg	5629	5990	6881	7321	8056	8956	9701	10731	11869	12714	12966
	Operation	kg	5809	6170	7061	7501	8236	9136	9881	10911	12129	12974	13226

Note:
1.Nominal cooling condition:chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 35°C.
2.*:The parameters in the condition of chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 46°C.
3.Allowable voltage fluctuationrange is±10%.

Inverter type-380V 3N~60Hz,T3

Model VASW-NNCDT3V			10012	12012	14512	16512	19012	21512	24512	27012
Nominal cooling capacity		kW	350	430	514	580	667	755	866	941
		Ton	100	120	145	165	190	215	245	270
Cooling power input		kW	108.2	130.8	153.7	173.7	197.0	223.4	248.6	282.2
Cooling rated current		A	179	212	247	283	320	362	402	457
EER		kW/kW	3.23	3.29	3.34	3.34	3.39	3.38	3.48	3.33
Nominal cooling capacity*		kW	316	385	456	513	596	670	771	832
		Ton	90	110	130	145	170	190	220	235
Cooling power input*		kW	136.0	165.2	189.7	214.6	239.7	273.1	304.1	339.6
Cooling rated current*		A	225	268	305	350	389	443	492	550
Maximum operating current		A	250	310	340	386	435	482	538	632
Power supply			380V 3N ～ 60Hz							
Refrigerant	Refrigerant		R134a							
	Refrigerant circuit		1							
Compressor	Compressor		Semi-hermetic screw compressor							
	Quantity		1							
	Loading/unloading		25%-100% Slide valve + inverter							
	Startup Type		VSD							
Fan	Air flow	m^2/h	147000	138000	184000	184000	230000	230000	276000	322000
	Quantity	Set	6	6	8	8	10	10	12	14
	Fan motor	kW	13.8	13.8	18.4	18.4	23.0	23.0	27.6	32.2
Water side heat exchanger	Heat exchanger		Highly Efficient Flooded Shell-and-Tube							
	Water flow	m^3/h	60.3	73.9	88.5	99.9	114.8	129.9	149.1	162.0
	Water pipe diameter	DN(mm)	125	125	125	125	150	150	150	150
	Water pressure drop	kPa	81	82	81	79	79	82	81	81
	Design pressure	MPa	1.0							
Dimensions	Length	mm	4100	4100	5295	5295	6490	6490	7685	8880
	Width	mm	2250							
	High	mm	2460							
Weight	Transportation	kg	3999	4264	5363	5431	6401	6516	7313	8097
	Operation	kg	4099	4364	5463	5531	6551	6666	7463	8247

Note:
1.Nominal cooling condition:chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 35°C.
2.*:The parameters in the condition of chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 46°C.
3.Allowable voltage fluctuationrange is±10%.

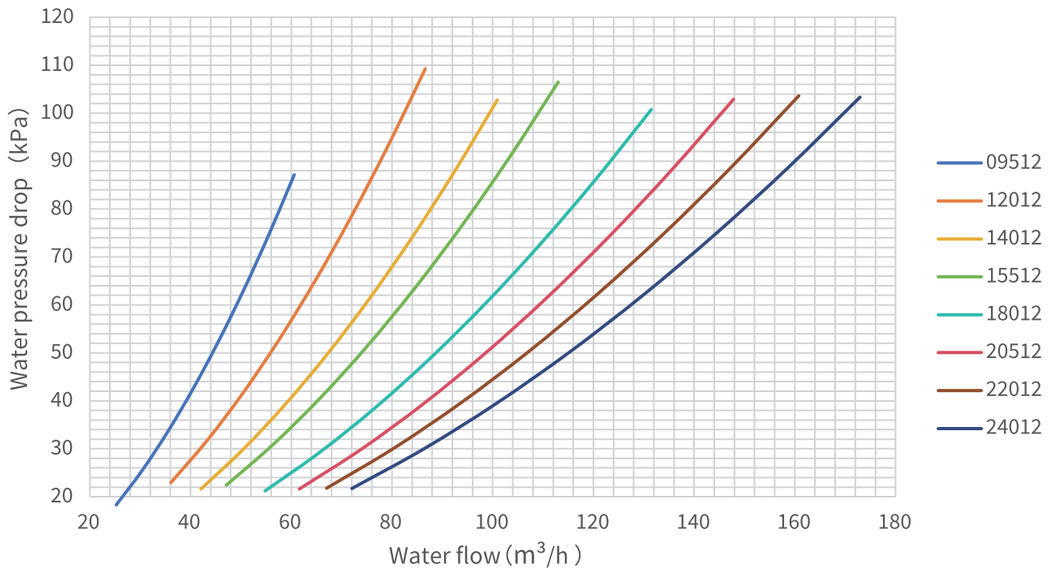
Inverter type-380V 3N~60Hz,T3

Model VASW-NNCDT3V			13522	16022	18022	20022	22522	24522	29022	33022	37522	43022	48022
Nominal cooling capacity		kW	477	561	635	697	793	860	1011	1160	1318	1510	1693
		Ton	135	160	180	200	225	245	290	330	375	430	480
Cooling power input		kW	146.0	168.4	188.6	209.0	235.6	261.6	304.7	347.3	392.7	446.7	508.1
Cooling rated current		A	238	273	307	344	388	424	488	565	636	724	817
EER		kW/kW	3.27	3.33	3.37	3.33	3.37	3.29	3.32	3.34	3.36	3.38	3.33
Nominal cooling capacity*		kW	426	501	571	629	719	775	895	1031	1175	1345	1498
		Ton	120	145	160	180	205	220	255	295	335	380	425
Cooling power input*		kW	181.9	209.1	234.9	264.9	298.2	331.1	378.1	431.0	480.4	548.9	623.9
Cooling rated current*		A	297	339	382	436	491	537	606	701	778	890	1003
Maximum operating current		A	332	381	436	491	551	621	671	772	861	964	1060
Power supply			380V 3N ～ 60Hz										
Refrigerant	Refrigerant		R134a										
	Refrigerant circuit		2										
Compressor	Compressor		Semi-hermetic screw compressor										
	Quantity		2										
	Loading/unloading		12.5%-100% Slide valve + inverter										
	Startup Type		VSD										
Fan	Air flow	m^2/h	196000	184000	230000	230000	276000	276000	322000	368000	414000	460000	460000
	Quantity	Set	8	8	10	10	12	12	14	16	18	20	20
	Fan motor	kW	18.4	18.4	23	23	27.6	27.6	32.2	36.8	41.4	46	46
Water side heat exchanger	Heat exchanger		Highly Efficient Flooded Shell-and-Tube										
	Water flow	m^3/h	82.0	96.5	109.2	119.9	136.4	148.0	174.0	199.6	226.8	259.9	291.3
	Water pipe diameter	DN(mm)	125	125	150	150	150	150	200	200	200	200	200
	Water pressure drop	kPa	43	45	76	74	74	74	76	74	73	74	74
	Design pressure	MPa	1.0										
Dimensions	Length	mm	5295	5295	6490	6490	7685	7685	8880	9575	10770	11965	11965
	Width	mm	2250										
	High	mm	2460										
Weight	Transportation	kg	5609	5974	6667	7315	8085	8115	9675	10732	11770	12702	12822
	Operation	kg	5789	6154	6847	7495	8265	8295	9855	10912	12030	12962	13082

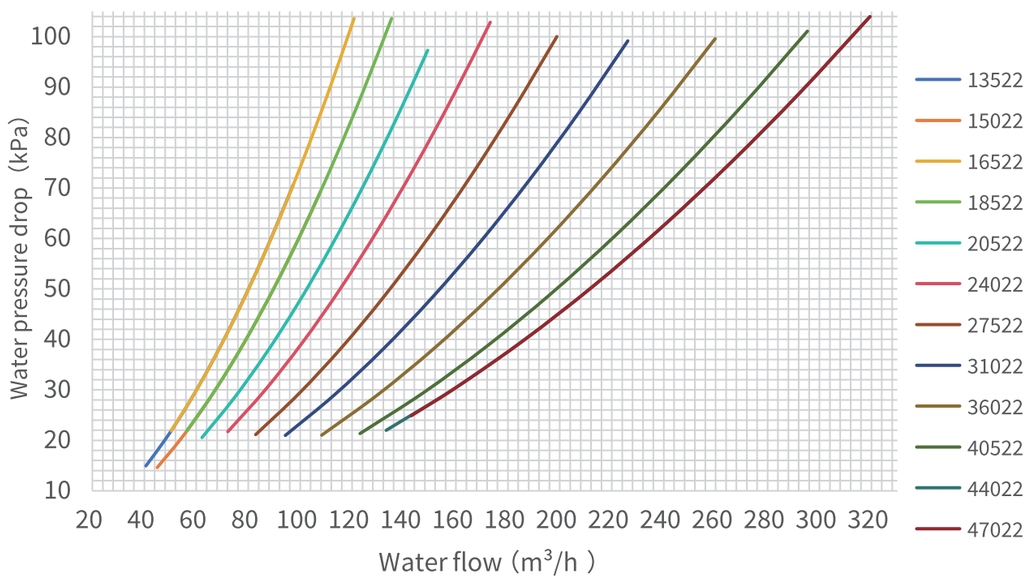
Note:
1.Nominal cooling condition:chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 35°C.
2.*:The parameters in the condition of chilled water outlet temperature is 7°C,ambinet dry bulb temperature is 46°C.
3.Allowable voltage fluctuationrange is±10%.

Water Pressure Drop Curve- Inverter Type

Water pressure drop curve-Single compressor（380/400V 3N～50Hz T1）

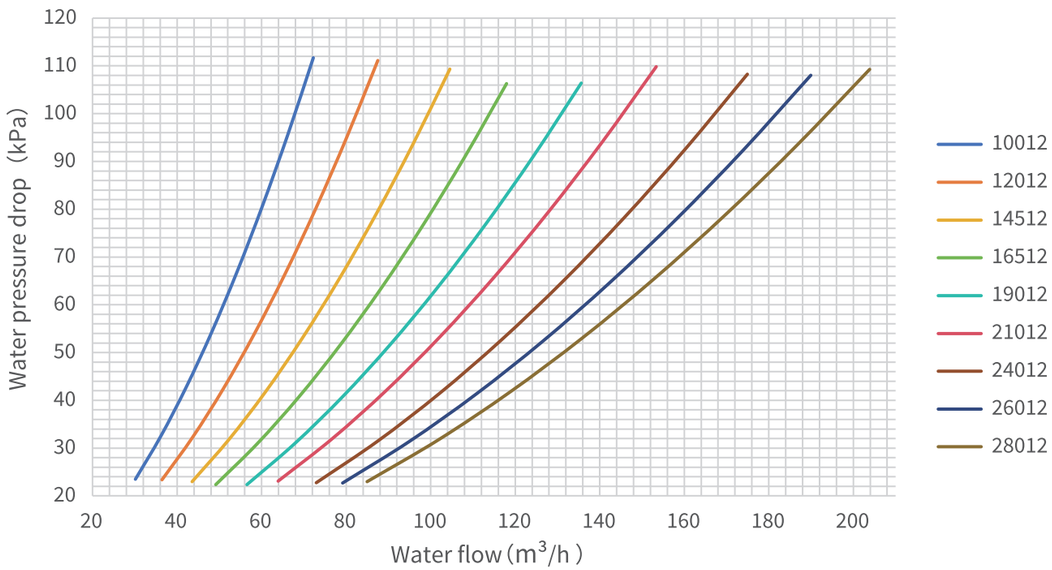


Water pressure drop curve-Dual compressors（380/400V 3N～50Hz T1）

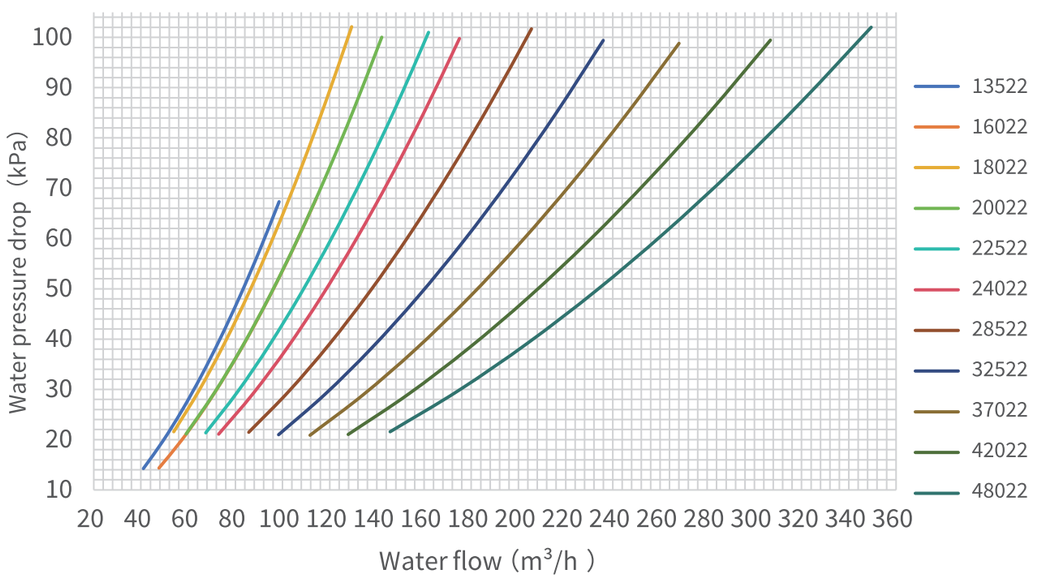


Water Pressure Drop Curve- Inverter Type

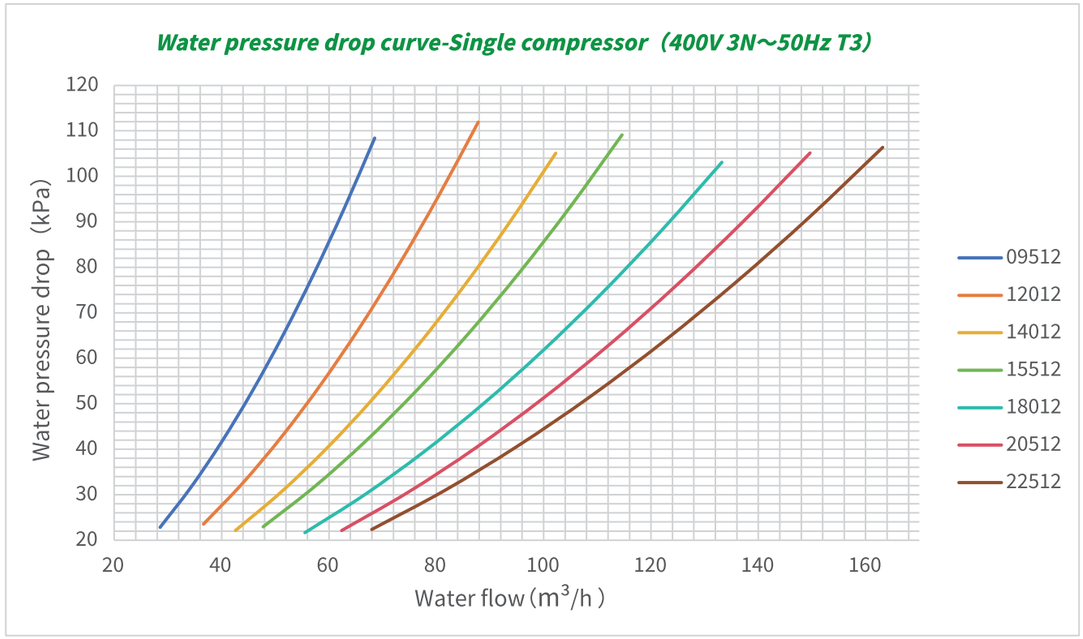
Water pressure drop curve-Single compressor（460V 3N～60Hz T1）

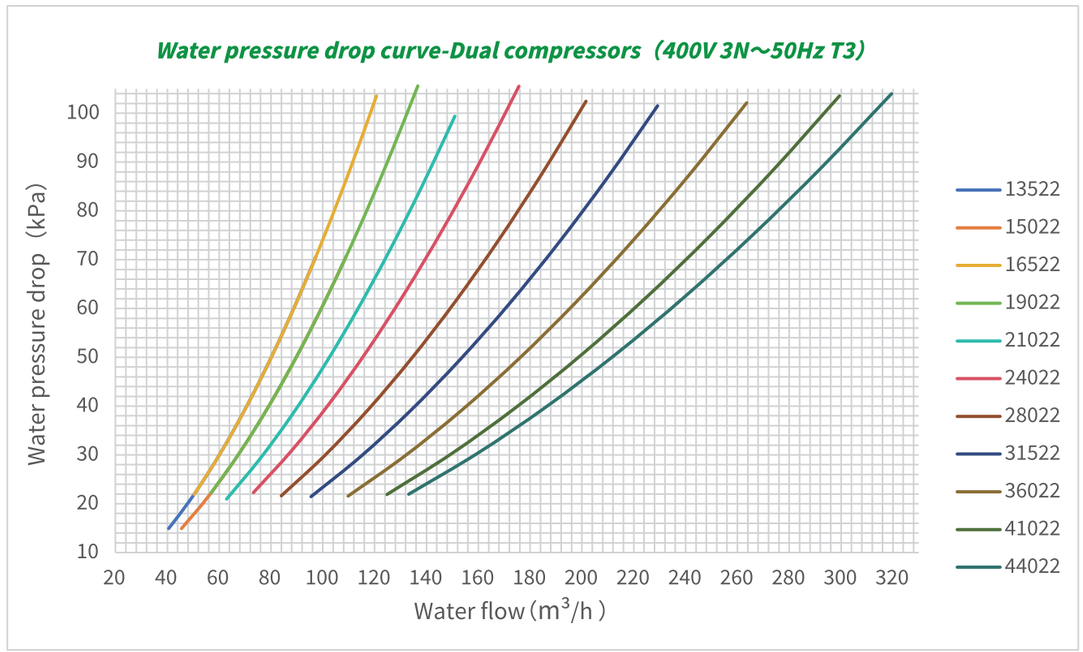


Water pressure drop curve-Dual compressors（460V 3N～60Hz T1）

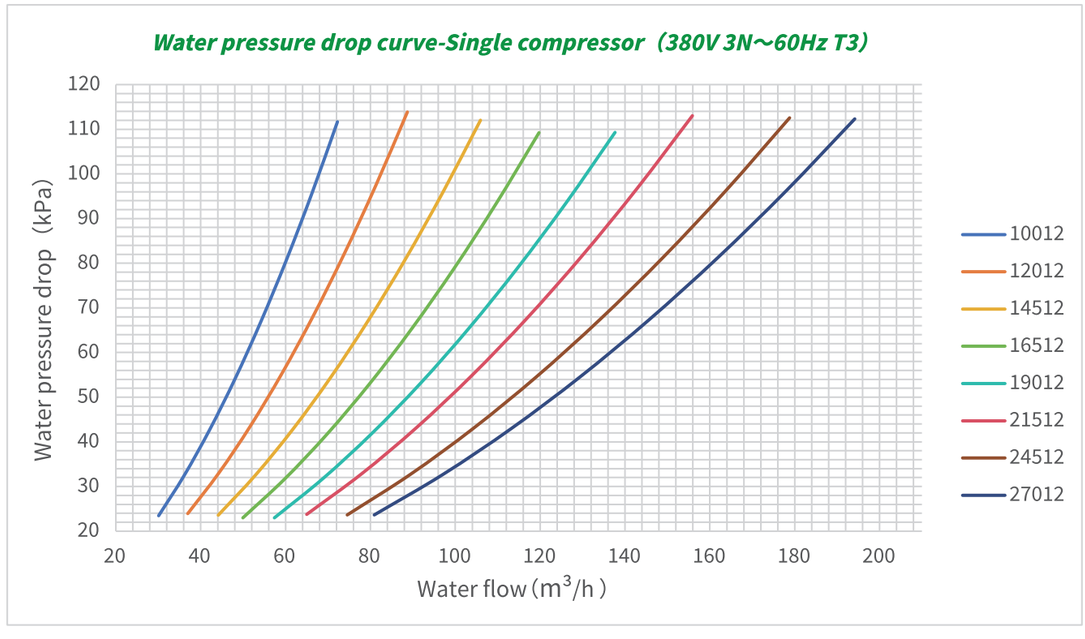


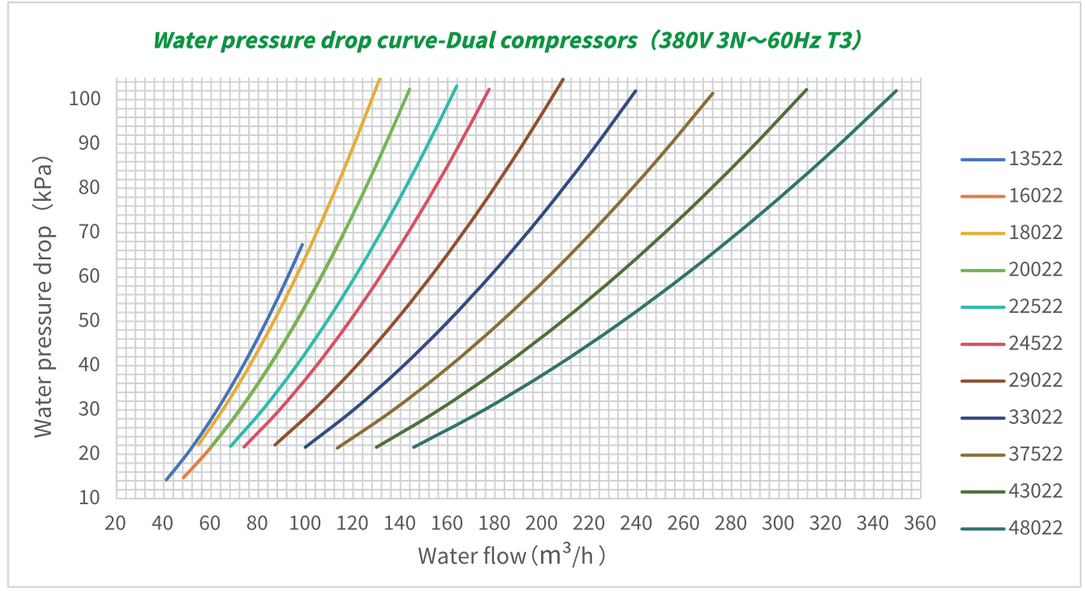
Water Pressure Drop Curve- Inverter Type





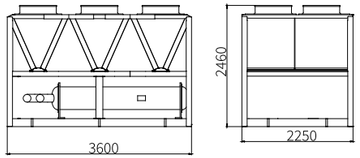
Water Pressure Drop Curve- Inverter Type



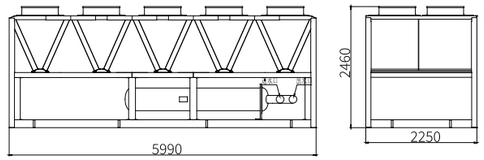


Outline Drawing(380V/400V_50Hz_T1(VASW-NNCA/BT1)

09512 12012



18012 20512



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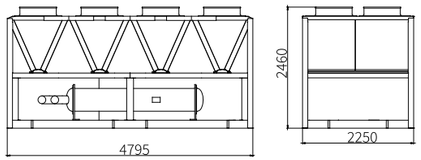

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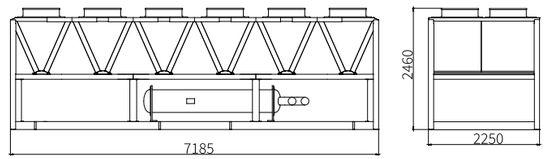
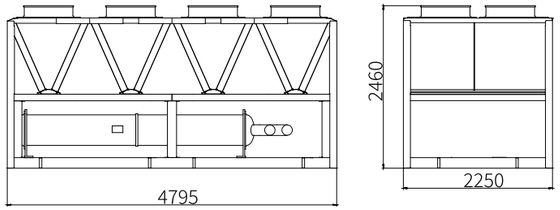
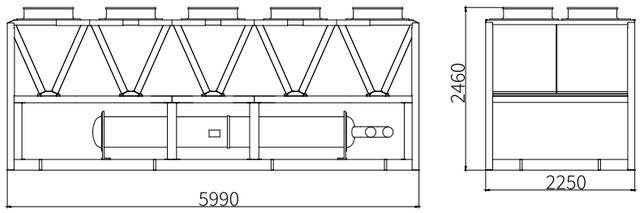


13522 15022

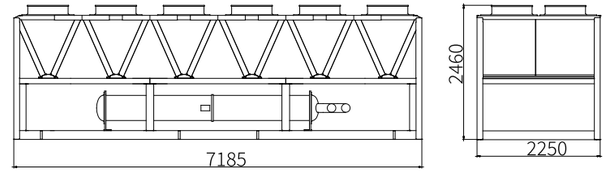


16522 18522



Outline Drawing(380V/400V_50Hz_T1(VASW-NNCA/BT1)

20522 24022



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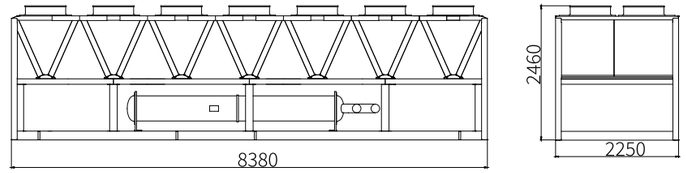
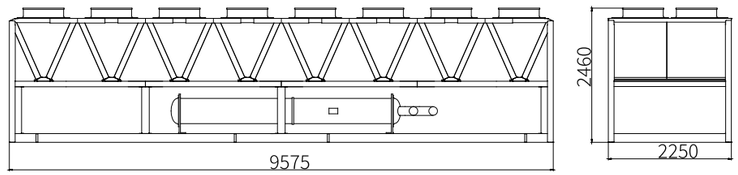
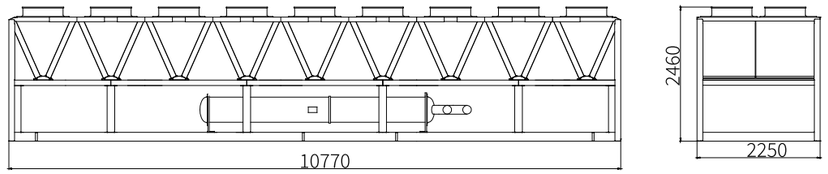


31022



36022



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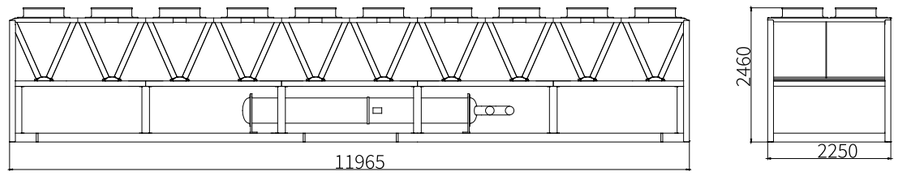
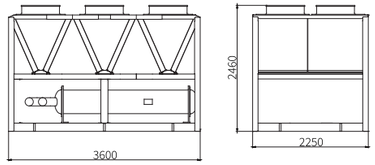
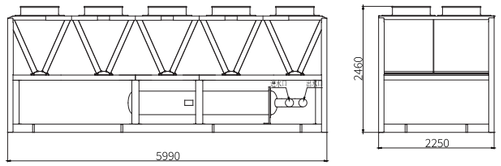


Outline Drawing(460V_60Hz_T1(VASW-NNCCT1)

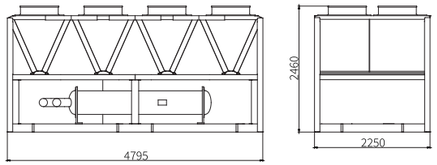
10012 12012



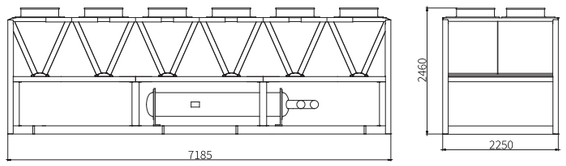
19012 21012



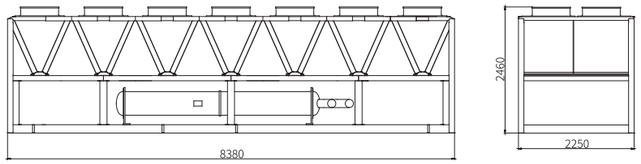
14512 16512



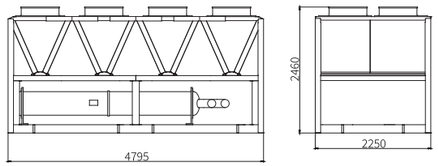
24012



26012 28012

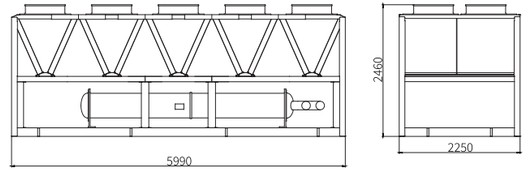


13522 16022

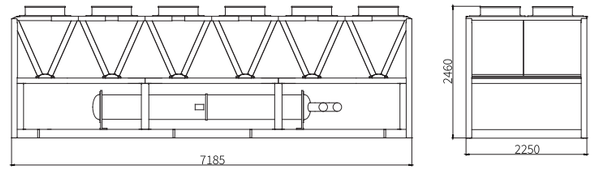


Outline Drawing(460V_60Hz_T1(VASW-NNCCT1)

18022 20022



22522 24022



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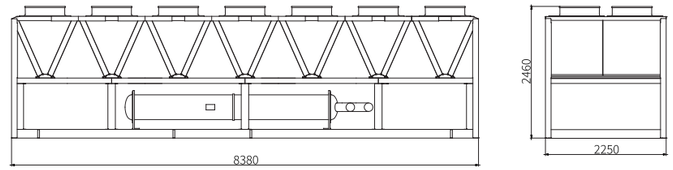

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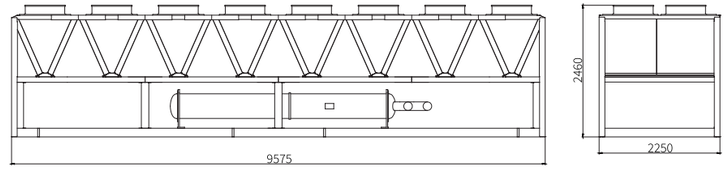

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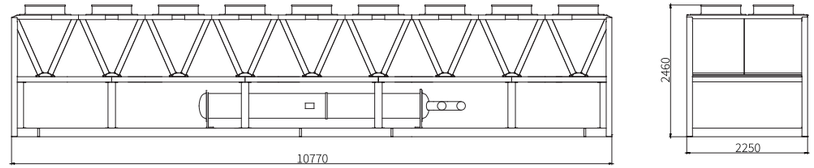

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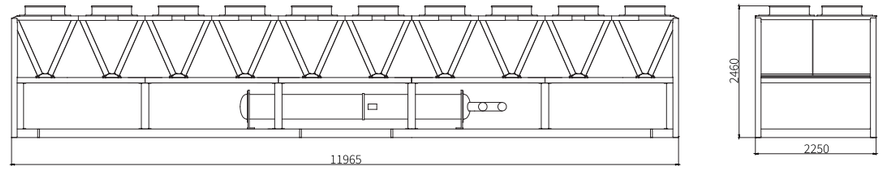
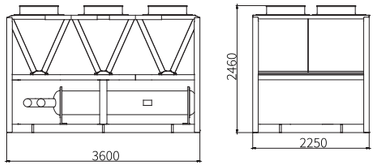
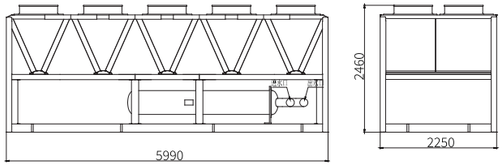


Outline Drawing(400V_50Hz_T3(VASW-NNCBT3)

09512 12012



18012 20512



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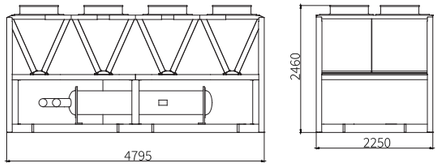

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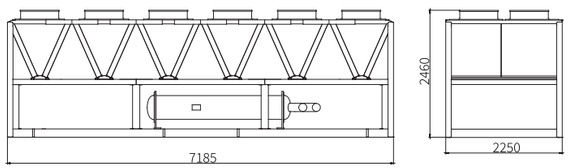

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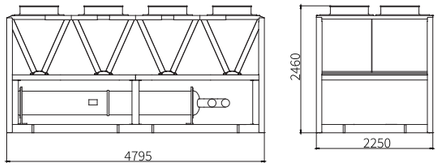
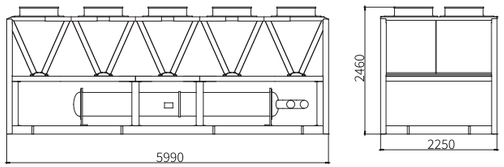
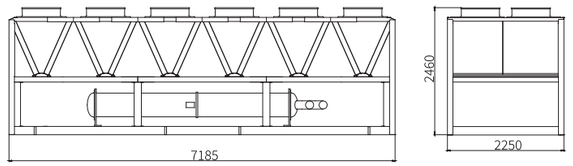


16522 19022



Outline Drawing(400V_50Hz_T3(VASW-NNCBT3)

21022 24022



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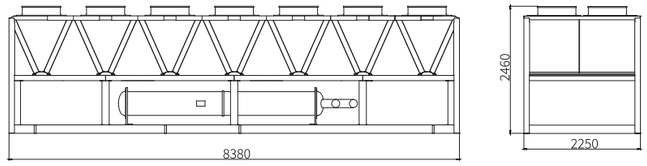
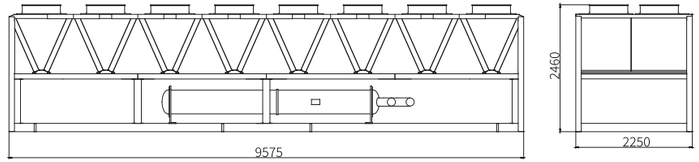


31522



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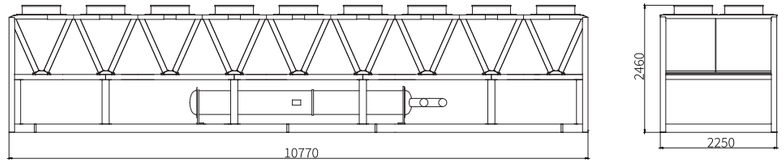

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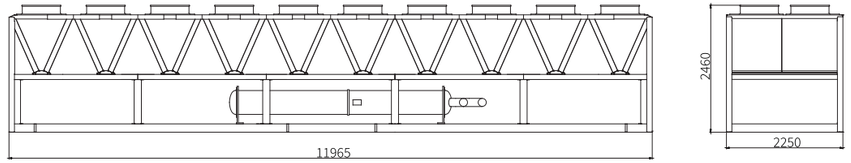
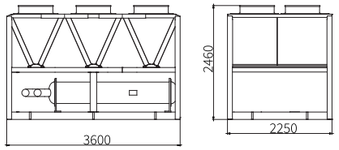
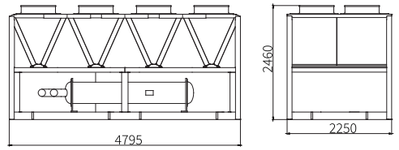


Outline Drawing(380V_60Hz_T3(VASW-NNCDT3)

10012 12012



14512 16512



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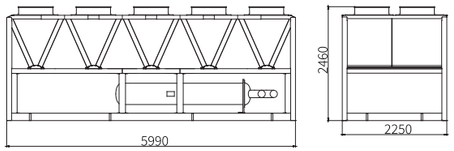

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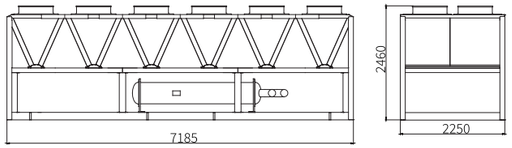

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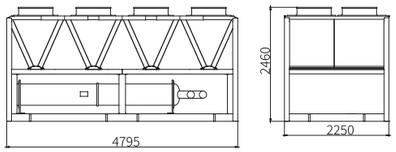
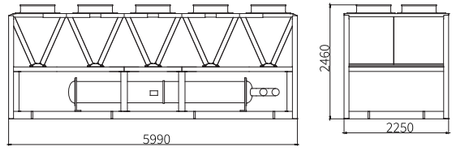
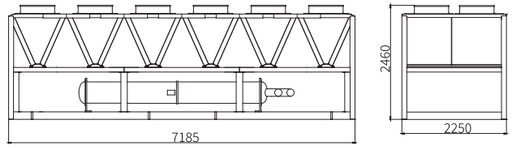


Outline Drawing(380V_60Hz_T3(VASW-NNCDT3)

18022 20022



22522 24522



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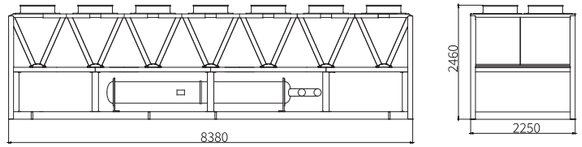

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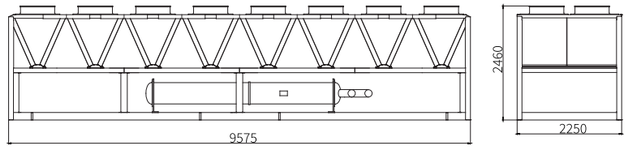

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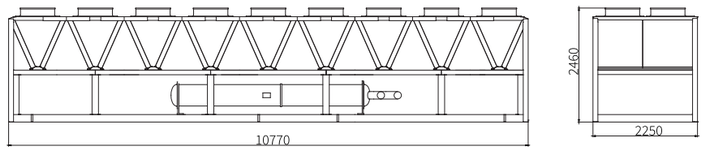
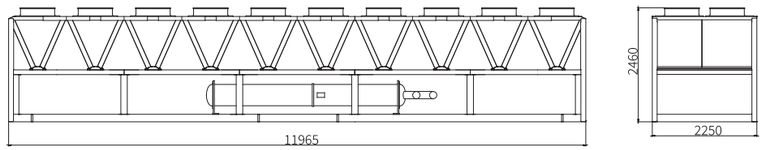
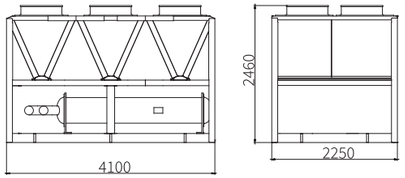


43022 48022



Outline Drawing(380V/400V_50Hz_T1(VASW-NNCA/BT1-V)

09512 12012



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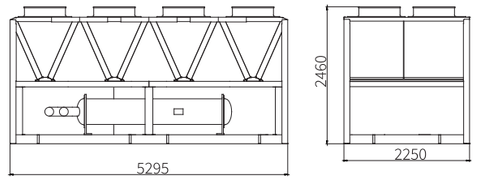
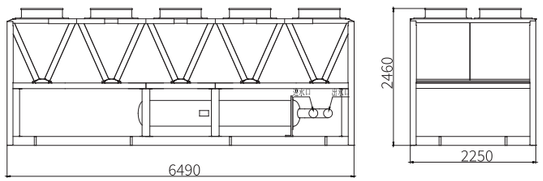


18012 20512



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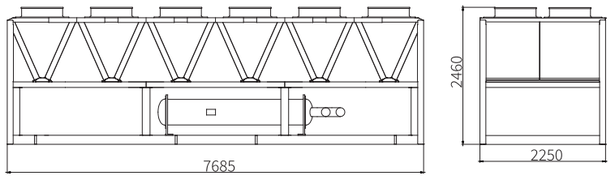

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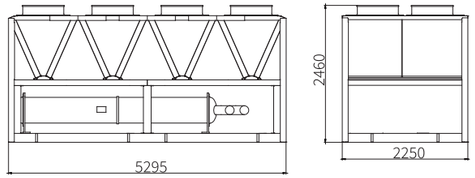
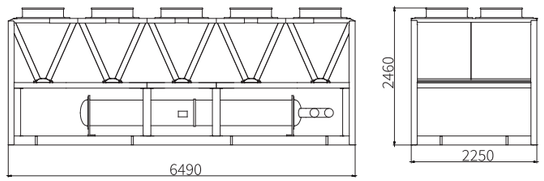
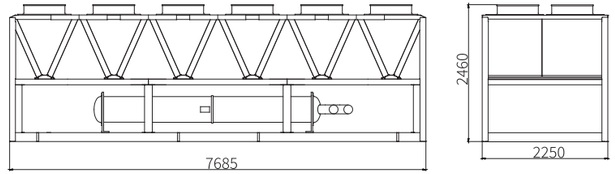


16522 18522

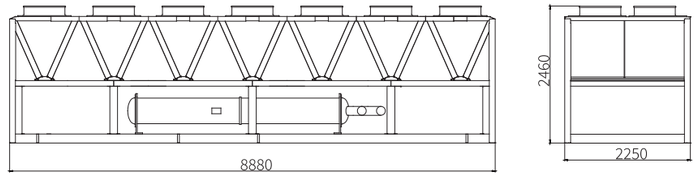


Outline Drawing(380V/400V_50Hz_T1(VASW-NNCA/BT1-V)

20522 24022



27522



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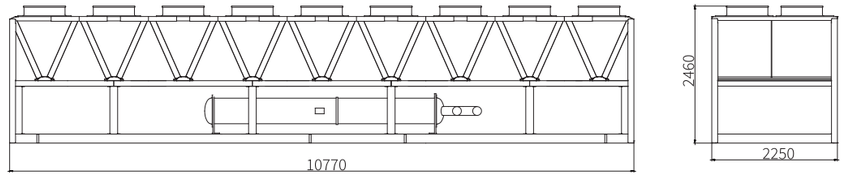

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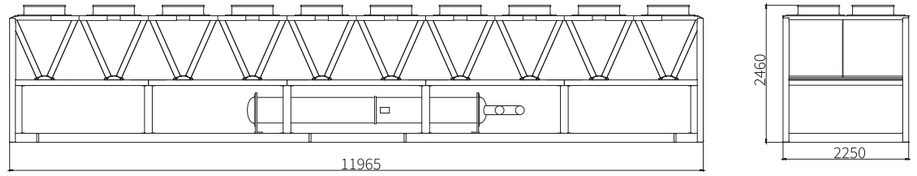

Outline Drawing(460V_60Hz_T1(VASW-NNCCT1-V)

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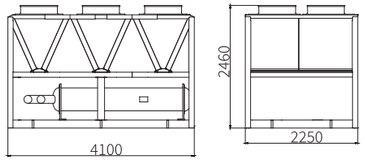
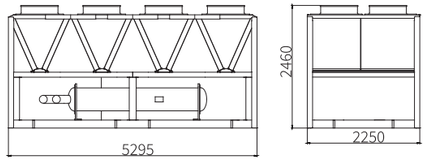


14512 16512



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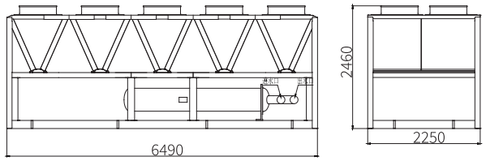

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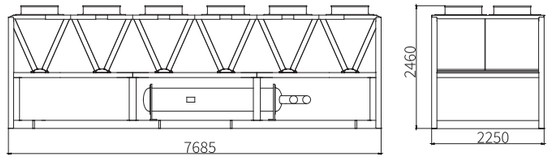
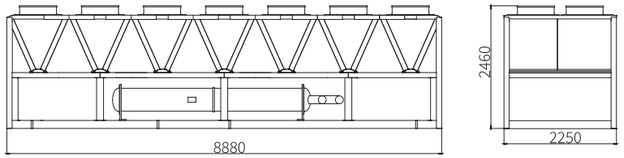
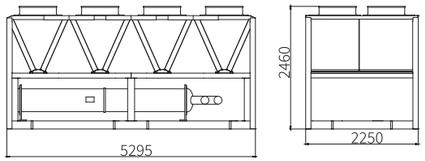


26012 28012

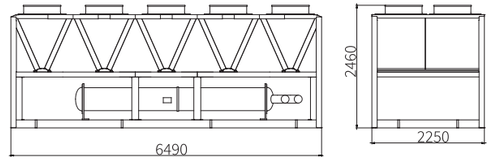


13522 16022



Outline Drawing(460V_60Hz_T1(VASW-NNCCT1-V)

18022 20022



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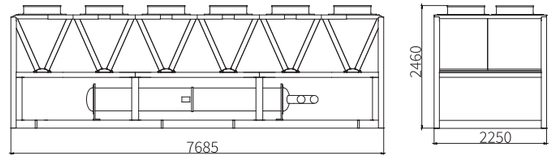

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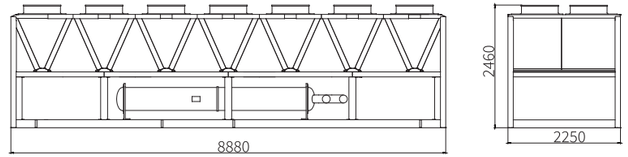

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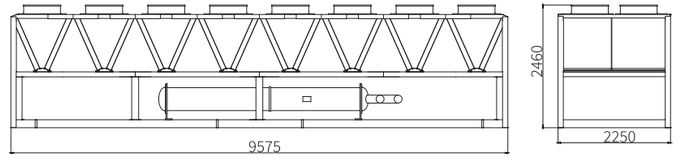

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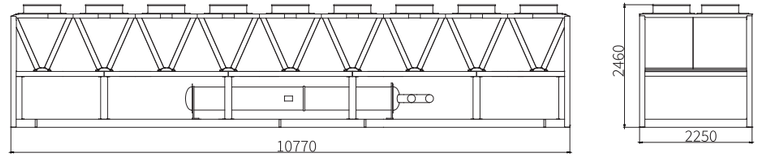

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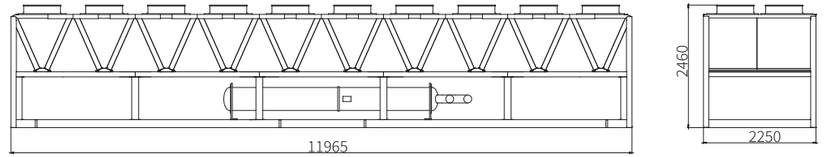
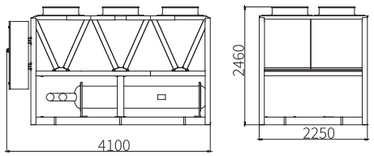
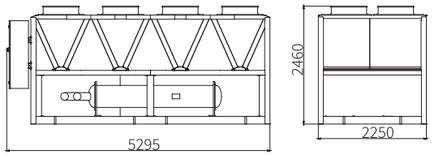


Outline Drawing(400V_50Hz_T3(VASW-NNCBT3-V)

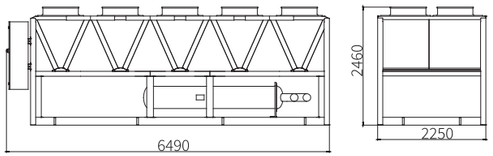
09512 12012



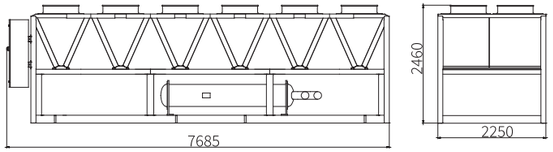
14012 15512



18012 20512



22512



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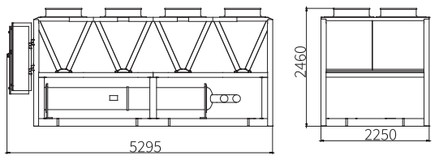
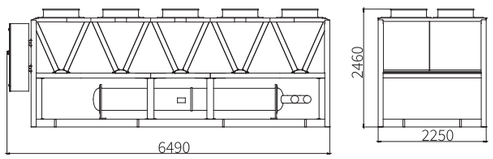
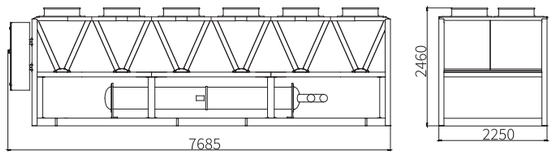


16522 19022



Outline Drawing(400V_50Hz_T3(VASW-NNCBT3-V)

21022 24022



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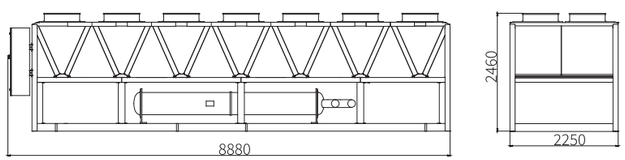
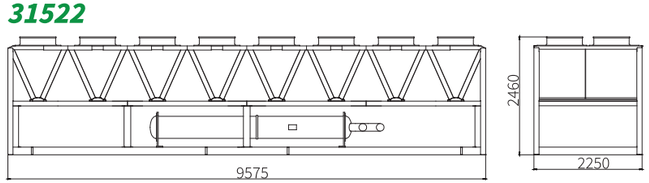
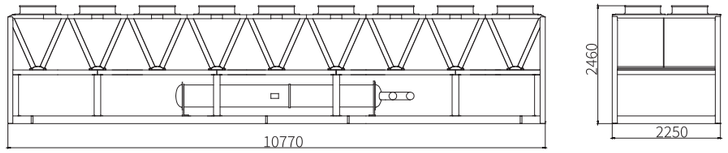


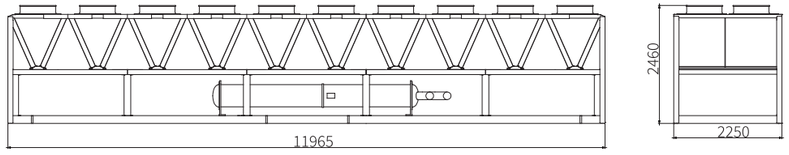
31522



36022

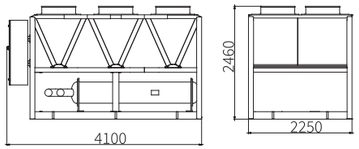


41022 44022

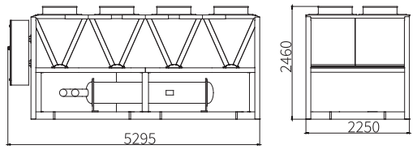


Outline Drawing(380V_60Hz_T3(VASW-NNCDT3-V)

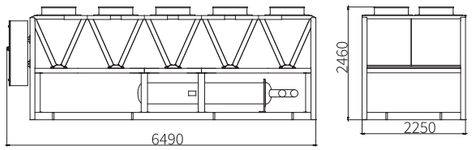
10012 12012



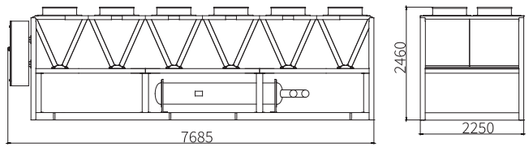
14512 16512



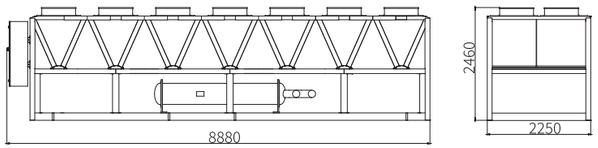
19012 21512



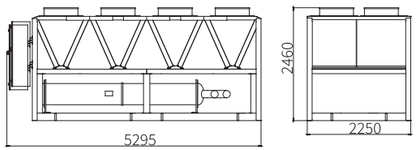
24512



27012

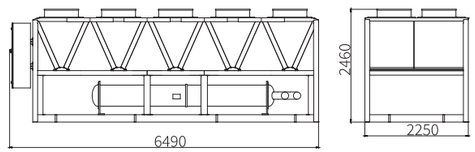


13522 16022

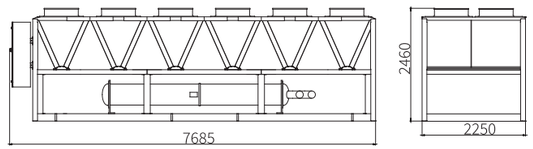


Outline Drawing(380V_60Hz_T3(VASW-NNCDT3-V)

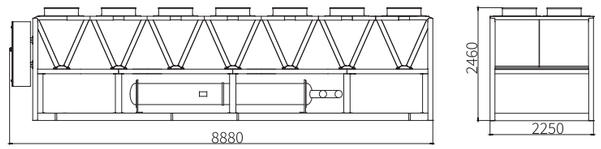
18022 20022



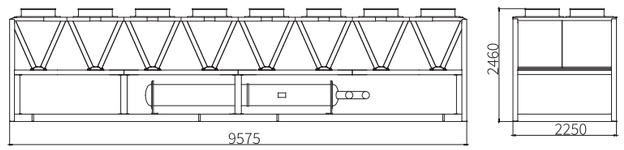
22522 24522



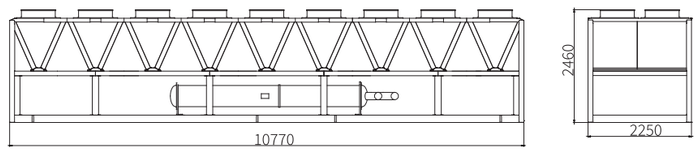
29022



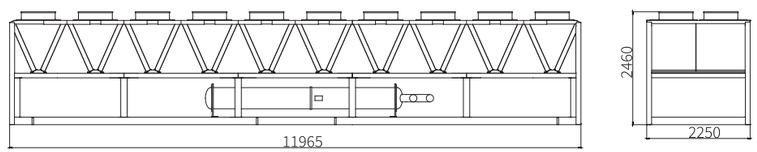
33022



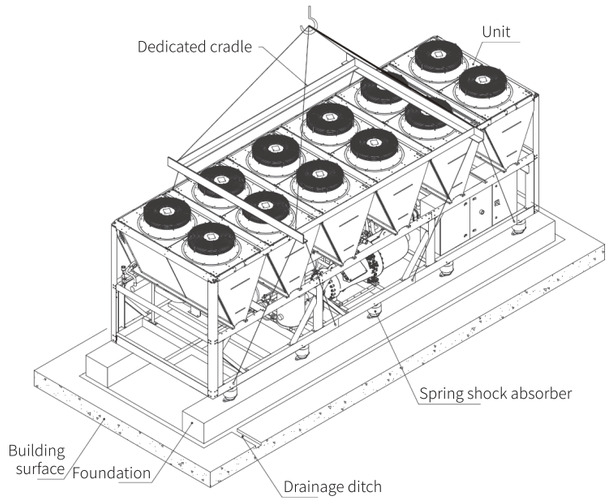
37522



43022 48022

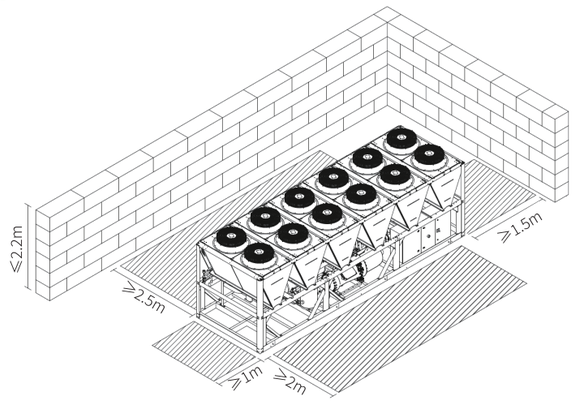


Unit Lifting



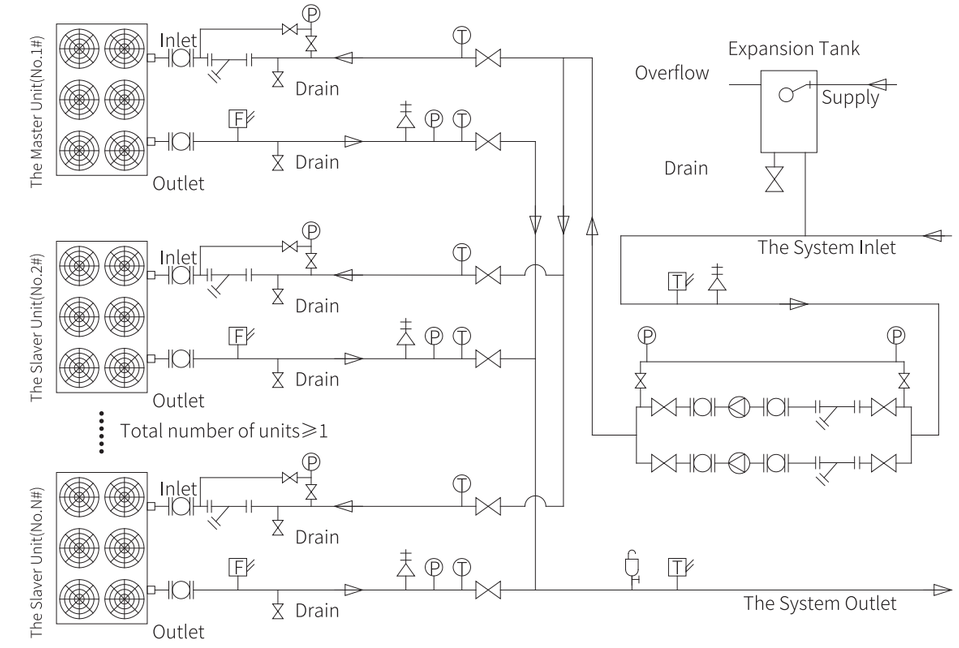
1.Unit should be installed in a well ventilated, less dust and sand, air blowing or inhalation is not hindered place, to avoid strong monsoon influence fan blowing;
2.The installation place of the unit shall not be the place where there are acid-base gas articles and inflammable and explosive articles. It shall be installed in a place not affected by high temperature, steam or oil pollution and where thore is no other heatsource nearby, so as not to be inhaled and affect the efficiency;
3.When cooling water tower is installed near the installation site of the unit, steam should be avoided to infiltrate into the unit to avoid short-circuit or leakage during power distribution and commissioning;
4.The installation site of the unit can reserve appropriate service space. It is suggested to reserve the minimum space as shown in the figure below;
5.For places with large amount of snow in winter, anti-skis shall be installed on the top of the unit to prevent abnormal operation of the unit or even crushing the unit.

Unit Installation



note:
1.When lifting the unit, please operate according to the schematic diagram, and the lifting position must be in accordance with the identification of the lifting point of the unit;
2.When hoisting the unit, a special person shall be assigned to command and take warning measures to ensure the safety of personnel and products;
3. During the hoisting process of the unit, the unit shall try to maintain the level, and rise or move at a steady and slow speed. It is strictly prohibited to tilt the unit more than 10 degrees and control the swing amplitude。

Module Combination & Water system configuration



- When the unit is connected to the external water pipe system, the actual project needs to be installed by professionals according to the construction specification standards and design requirements. The drawing water piping diagram is for reference only.
- In the refrigerating circulating water system, in order to buffer the expansion or contraction of the water volume caused by the change of water temperature and the influence of the water pressure on the water system, the water expansion equipment must be installed and selected according to the relevant national standard.
- The air-conditioning circulating water of the unit should use demineralized water. Do not use ground water, hard water or other sewage. The PH value of circulating water should be less than 6.8-8, the total hardness should not exceed 70, and the water quality should be monitored regularly. If the water quality is poor, please install the water treatment system by yourself.
- The pump inlet must be equipped with a filter to prevent foreign matter from entering the water side heat exchanger.
- The unit inlet and outlet pipes shall be fully insulated and exposed to prevent heat, to ensure cold, heat preservation and moisture resistance.
  The unit inlet and outlet pipes shall be equipped with shock-absorbing hoses to reduce the vibration of the body and pass through the water pipes to each room.
- A water pipeline shut-off valve should be installed near the inlet and outlet pipes of the unit to facilitate separation of the body from the water piping during future maintenance.
- When installing the pipeline valve, the valve body should be considered to move, adjust and replace the space to facilitate the operation of the system.
- In order to prevent the air from staying in the pipe, please install the automatic exhaust valve at the highest point of the water circulation pipe and the gas gathering place to improve the operation efficiency of the unit. When installing the expansion water tank or the exhaust valve, the horizontal pipe of the water piping system must be upward. Slope construction of slope 1/250.
- The unit is installed at a low temperature below 0 °C. When the pipeline is frozen for a long time, the anti-freezing function and drainage function must be provided during the design and construction of the water pipeline to prevent the water in the pipeline from damaging the unit due to freezing. To realize the automatic antifreeze function of the unit in winter, it is necessary to ensure that the power supply of the unit and the pump is not cut off. The start and stop control of the pump is connected to the electric control box of the unit. See the electrical wiring diagram.
- When the unit modules are combined, they must be piped in the same way. High temperature rods must be installed in the total inlet and outlet pipes.