

# RUIDONG

COMBINED AIR HANDLING UNIT



## RUIDONG GROUP

[www.ruidonggroup.com](http://www.ruidonggroup.com)



**Ruidong Group Co., Ltd is one modern large-scale enterprise integrating design, production, sales and installation of central air-conditioning products.**

Ruidong is located in Dezhou City, Shandong Province. The Beijing-Shanghai High-speed Railway and Beijing-Shanghai Expressway passing through the city, make Dezhou become a key coordinate of the national economic artery. The registered capital of the group is one hundred fifty five and a half million yuan, covering an area of 300,000 square meters and construction area of 180,000 square meters.

### **Main business coverage:**

#### **1. Host series:**

- Water cooled series: centrifugal cold (hot) water unit, screw type cold water unit, screw type water (ground) source cooling and heating unit, scroll type water (ground) source cooling and heating unit.
- Air cooled series: screw type cold (hot) water unit, modular type cold (hot) water unit, mini type cold (hot) water unit, VRV series unit.
- Packaged Unitary unit: constant temperature and humidity unit, air (water) cooled unitary unit, dehumidification unit.

#### **2. Direct expansion series:** Rooftop packaged unit, ducted split unit.

#### **3. Terminal series:** Purification air handling unit, combined air handling unit, fresh air unit, fan coil unit series.





## ENTERPRISE PROFILE

4. **Ventilation series:** Fire exhaust fan, roof fan, axial fan, diagonal fan, centrifugal fan, etc.
5. **Engine room equipment:** cyclone sand remover, water separator (separator), decontamination device, demineralized water device, plate heat exchange unit, constant pressure equipment, etc.
6. **Air conditioning accessories:** All kinds of fire valves, regulating valves, tuyere series.
7. **Other products:** Low-temperature industrial chillers, air-conditioning equipment for planting and breeding industries.

The R & D team composed of high-tech talents will continue to introduce new products, advanced production equipment and adopt the international ISO9001 quality management system as a strong guarantee for product quality. Precision testing equipment and rigorous testing methods are the fundamental insurance of quality and are timely and thoughtful. After-sales service solves the problems that may arise in use for you.

The company has established a complete sales and service system. Set up offices in 18 cities including Beijing, Tianjin, Shanghai, Xi'an, Shenyang, Chengdu and other cities to provide users with timely, efficient and high-quality pre-sales, sales and after-sales services.

Ruidong Air Conditioning wishes you: Cooling air for propitious summer, spring returns with warm air from Ruidong.



## CERTIFICATIONS

Ruidong group always takes "create first-class quality, offer sincere service" as the quality concept, builds customer-oriented quality management system, focuses on teamwork and insists on continuous innovation.



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# 1. BRIEF INTRODUCTION

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The RZK series combined air handling unit is one kind of central air-conditioning equipment that uses cold water or hot water (steam) as the medium and combines several sections with independent or multiple functions.

RZK series air handling units have the functions of cooling, heating, de-humidification, humidification, filtration, purification, sterilization and noise reduction for selection.

RZK series air handling units can be widely used in industrial production, commercial use, office buildings, and various commercial buildings, such as textiles, chemical fiber, pharmaceuticals, food production, cigarettes, cosmetics, machinery manufacturing, power plants, and light industrial production, as well as comfortable air-conditioning field in theaters, stadiums, restaurants, shopping malls, apartments, office buildings and other places.

## Characteristics

1. Various forms and complete models. Using advanced air-conditioning technology and brand-new design concepts, with a scientific and rigorous working attitude and advanced research and development methods, we produce modular air-conditioning units with complete models and diverse structures. The unit adopts a modular design concept, and the height and width directions are in mm as a modular unit. Due to the standard modular design, it is convenient to accurately determine the external dimensions of the unit.

2. The outer frame of the unit is made of broken bridge aluminum alloy profiles, matched with high-strength three-dimensional angle joints, and the aluminum alloy surface is anodized, and the appearance is beautiful. The base is made of channel steel or U-shaped steel plate, and the structure is firm, which can ensure no deformation during transportation and hoisting.

3. The insulation board material of the unit is all made of hard polyurethane material, which minimizes heat conduction. The panel adopts double-sided color steel plate, which is anti-rust and corrosion-resistant, beautiful and colorful. The frame and panel adopt external screwless design, and the panel and frame can be easily disassembled, which is convenient for repair and maintenance management. Polyurethane material has extremely strong thermal insulation properties, with a thermal conductivity of only  $0.0202\text{W/m}\cdot\text{k}$ , which can effectively reduce heat loss and ensure that no condensation occurs in any area.

4. The fan adopts a double-inlet multi-wing centrifugal high-efficiency fan, imported bearings, and high-efficiency motors. It has the advantages of low noise, high efficiency, stable operation, low bearing temperature rise, and wide operating temperature and humidity range;

The transmission form of the fan has two forms: external rotor direct drive and belt drive;

The external rotor fan is easy to install and maintain, and there is no need to perform a second dynamic and static balance check before installation;

Belt driven fan can obtain a variety of air volume and pressure. Flexible use. The transmission structure is meticulously designed, and after assembly, it undergoes secondary dynamic and static balance verification to achieve the best transmission effect;

The base of the fan adopts rubber or anti-shear spring damper to reduce vibration and noise;



5. The heat exchanger with computer-aided precision calculation, with precision processing equipment and production technology, has high heat exchange efficiency. It has the characteristics of large heat exchange temperature difference and corrosion resistance.

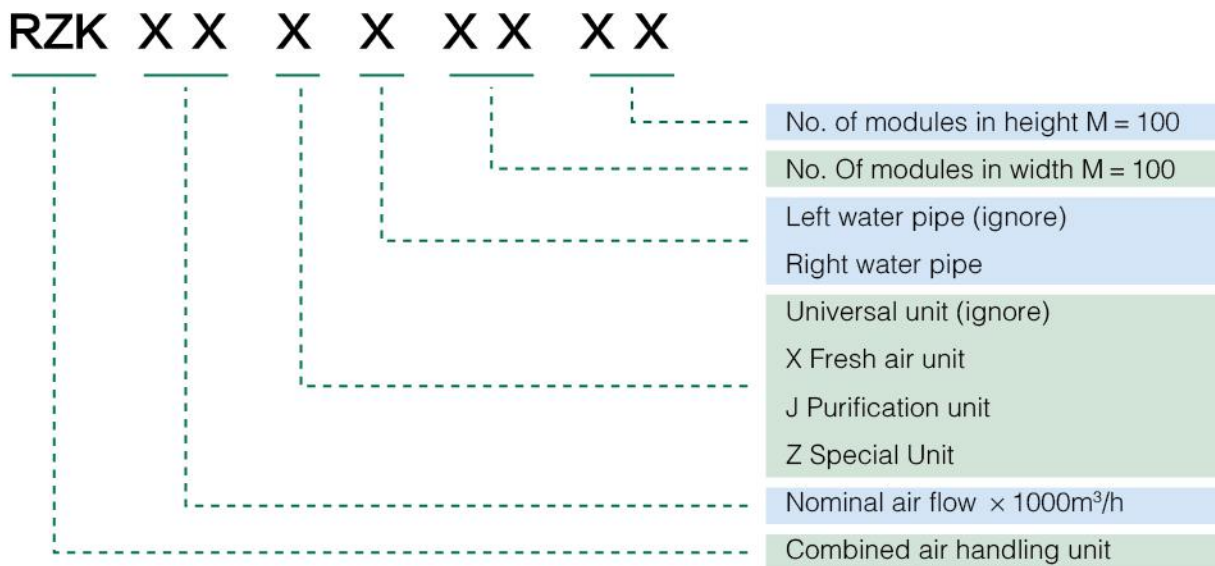
6. It can be matched with various air filters, with high filtration efficiency, low wind resistance, detachable and easy to clean.

7. The tuyere of each functional section of the unit is equipped with flange interface, and the interface size adopts the series size specified by the national standard, and the special size can also be made according to user requirements. The air valve is an optional accessory.

## RZK series combined air handling unit has the following performance:

- Fresh air section
- Return air section
- Fresh & return air section
- Primary filter section
- Medium filter section
- Middle section
- Exhaust section
- Secondary air return section
- Heat recovery section
- Cooling coil(Heating coil) section
- Humidification section
- Supply fan section
- Anechoic section
- Other demended section

## 2. NAMING SCHEME



## 3. SPECIFICATION

### 3.1 Air flow

No.	Unit model -RZK	Module model -RZK	Nominal air flow m <sup>3</sup> /h	Inner size		Face velocity ( m/s )									
				W(mm)	H(mm)	2	2.25	2.5	2.75	2.85	3	3.5	4	4.5	5
1	020	0607	2000	700	600	1692	1880	2031	2143	2256	2632	3008	3384	3760	4137
2	025	0608	2500	800	600	2052	2280	2463	2600	2736	3192	3648	4105	4561	5017
3	029	0609	2900	900	600	2412	2680	2895	3056	3216	3752	4289	4825	5361	5897
4	033	0610	3300	1000	600	2772	3080	3327	3512	3696	4313	4929	5545	6161	6777
5	038	0611	3800	1100	600	3132	3480	3759	3968	4177	4873	5569	6265	6961	7657
6	026	0707	2600	700	700	2176	2417	2611	2756	2901	3384	3868	4351	4835	5318
7	037	0709	3700	900	700	3102	3446	3722	3929	4135	4825	5514	6203	6892	7582
8	043	0710	4300	1000	700	3564	3960	4277	4515	4753	5545	6337	7129	7921	8713
9	048	0711	4800	1100	700	4027	4475	4833	5101	5370	6265	7160	8055	8950	9845
10	041	0809	4100	900	800	3446	3829	4135	4365	4595	5361	6126	6892	7658	8424
11	048	0810	4800	1000	800	3960	4401	4753	5017	5281	6161	7041	7921	8801	9681
12	054	0811	5400	1100	800	4475	4972	5370	5668	5966	6961	7955	8950	9944	10939
13	060	0812	6000	1200	800	4989	5544	5987	6320	6652	7761	8870	9978	11087	12196
14	066	0813	6600	1300	800	5504	6115	6604	6971	7338	8561	9784	11007	12230	13453
15	072	0814	7200	1400	800	6018	6687	7221	7623	8024	9361	10698	12036	13373	14710
16	057	0910	5700	1000	900	4753	5281	5703	6020	6337	7393	8449	9505	10561	11617
17	072	0912	7200	1200	900	5987	6652	7184	7584	7983	9313	10644	11974	13305	14635
18	081	1012	8100	1200	1000	6735	7484	8082	8532	8981	10477	11974	13471	14968	16464
19	089	1013	8900	1300	1000	7430	8255	8916	9411	9906	11557	13209	14860	16511	18162
20	097	1014	9700	1400	1000	8124	9027	9749	10291	10832	12638	14443	16248	18054	19859
21	11	1015	10600	1500	1000	8819	9798	10582	11170	11758	13718	15677	17637	19597	21556
22	11	1016	11400	1600	1000	9513	10570	11415	12050	12684	14798	16912	19026	21140	23254
23	090	1112	9000	1200	1100	7484	8315	8981	9479	9978	11641	13305	14968	16631	18294
24	12	1115	11800	1500	1100	9798	10887	11758	12411	13064	15242	17419	19597	21774	23952



No.	Unit model -RZK	Module model -RZK	Nominal air flow m³/h	Inner size		Face velocity ( m/s )									
				W(mm)	H(mm)	2	2.25	2.5	2.75	2.85	3	3.5	4	4.5	5
25	13	1116	12700	1600	1100	10570	11744	12684	13389	14093	16442	18791	21140	23489	25838
26	14	1117	13600	1700	1100	11341	12602	13610	14366	15122	17642	20163	22683	25203	27723
27	15	1217	15000	1700	1200	12476	13862	14971	15802	16634	19406	22179	24951	27723	30496
28	16	1218	15800	1800	1200	13155	14616	15785	16662	17539	20463	23386	26309	29232	32155
29	16	1317	16100	1700	1300	13425	14916	16109	17004	17899	20883	23866	26849	29832	32816
30	17	1318	17200	1800	1300	14350	15945	17220	18177	19134	22323	25512	28701	31890	35079
31	18	1319	18300	1900	1300	15276	16974	18331	19350	20368	23763	27158	30552	33947	37342
32	19	1418	19100	1800	1400	15945	17717	19134	20197	21260	24803	28346	31890	35433	38976
33	20	1419	20400	1900	1400	16974	18860	20368	21500	22631	26403	30175	33947	37719	41491
34	22	1420	21600	2000	1400	18002	20003	21603	22803	24003	28004	32004	36005	40005	44006
35	22	1519	21900	1900	1500	18247	20274	21896	23112	24329	28384	32438	36493	40548	44603
36	23	1520	23200	2000	1500	19352	21503	23223	24513	25803	30104	34404	38705	43005	47306
37	25	1521	24600	2100	1500	20458	22731	24550	25914	27278	31824	36370	40917	45463	50009
38	26	1621	26300	2100	1600	21886	24317	26263	27722	29181	34044	38908	43771	48635	53498
39	28	1622	27700	2200	1600	23069	25632	27682	29220	30758	35884	41011	46137	51264	56390
40	31	1624	30500	2400	1600	25435	28261	30522	32217	33913	39565	45217	50869	56521	62173
41	30	1722	29500	2200	1700	24573	27303	29488	31126	32764	38225	43685	49146	54607	60068
42	31	1822	30500	2200	1800	25409	28232	30491	32185	33879	39525	45171	50818	56464	62111
43	32	1922	31700	2200	1900	26386	29318	31663	33422	35182	41045	46909	52772	58636	64499
44	33	1923	33300	2300	1900	27775	30861	33330	35182	37033	43205	49378	55550	61722	67894
45	35	1924	35000	2400	1900	29164	32404	34996	36941	38885	45366	51846	58327	64808	71289
46	37	1925	36700	2500	1900	30552	33947	36663	38700	40737	47526	54315	61105	67894	74684
47	38	2025	38000	2500	2000	31684	35204	38021	40133	42245	49286	56327	63368	70409	77450
48	40	2026	39800	2600	2000	33124	36805	39749	41957	44166	51526	58887	66248	73609	80970

No.	Unit model -RZK	Module model -RZK	Nominal air flow m³/h	Inner size		Face velocity ( m/s )									
				W(mm)	H(mm)	2	2.25	2.5	2.75	2.85	3	3.5	4	4.5	5
49	41	2126	41200	2600	2100	34307	38119	41169	43456	45743	53367	60990	68614	76238	83862
50	44	2226	44000	2600	2200	36673	40748	44008	46453	48898	57047	65197	73346	81496	89645
51	48	2228	47800	2800	2200	39862	44291	47835	50492	53150	62008	70866	79724	88583	97441
52	50	2328	49900	2800	2300	41553	46170	49864	52634	55404	64638	73872	83106	92340	101574
53	54	2330	53900	3000	2300	44877	49864	53853	56845	59836	69809	79782	89754	99727	109700
54	58	2430	57800	3000	2400	48201	53557	57842	61055	64269	74980	85692	96403	107114	117826
55	55	2528	55400	2800	2500	46170	51300	55404	58482	61560	71820	82080	92340	102600	112860
56	62	2531	62100	3100	2500	51710	57456	62052	65500	68947	80438	91930	103421	114912	126403
57	69	2534	68700	3400	2500	57251	63612	68701	72518	76334	89057	101779	114502	127224	139946
58	62	2630	61800	3000	2600	51526	57251	61831	65266	68701	80151	91601	103051	114502	125952
59	68	2830	67800	3000	2800	56512	62791	67814	71582	75349	87908	100466	113024	125582	138141
60	73	2832	72800	3200	2800	60698	67442	72838	76884	80931	94419	107908	121396	134885	148373
61	78	2834	77900	3400	2800	64884	72094	77861	82187	86512	100931	115350	129768	144187	158606
62	83	2836	82900	3600	2800	69070	76745	82884	87489	92094	107443	122792	138141	153490	168839
63	88	2838	87900	3800	2800	73256	81396	87908	92791	97675	113954	130234	146513	162792	179071
64	96	2940	95700	4000	2900	79720	88578	95664	100979	106294	124009	141725	159440	177156	194872
65	100	3140	102000	4000	3100	86553	96170	101941	109634	115404	134639	153873	173107	192341	211575
66	110	3242	110000	4200	3200	93633	104036	110279	118601	124844	145651	166458	187266	208073	228880
67	120	3246	122000	4600	3200	103236	114707	121589	130766	137648	160590	183531	206472	229414	252355
68	130	3546	134000	4600	3500	113824	126472	134060	144178	151766	177060	202355	227649	252943	278238
69	150	3750	153000	5000	3700	129645	144050	152693	164217	172860	201671	230481	259291	288101	316911
70	180	3855	175000	5500	3800	148280	164755	174640	187821	197706	230657	263608	296559	329510	362461
71	210	4358	209000	5800	4300	177108	196787	208594	224337	236144	275502	314859	354216	393574	432931
72	240	4565	242000	6500	4500	205438	228264	241960	260222	273917	319570	365223	410876	456529	502182



### 3.2 Length of main sections

No.	Unit model -RZK	Module model -RZK	Nominal air flow m <sup>3</sup> /h	Length of main sections(mm)												Fan Model	Others
				Mix	Plate filter	Bag filter	Fresh air	Cooling water retaining	Heating	Fan	Air balancing	Silencing	Air outlet	Middle			
1	020	0607	2000	600	100	500	1200	800	300	800	700	900	600	600	250	Length of heat recovery section dehumidification section shall be selected separately according to the specific situation.  Combustion section: 3000;  Activated carbon section: 100-500	
2	025	0608	2500	600	100	500	1200	800	300	800	700	900	600	600	250		
3	029	0609	2900	600	100	500	1200	800	300	800	700	900	600	600	250		
4	033	0610	3300	600	100	500	1200	800	300	800	700	900	600	600	250		
5	038	0611	3800	600	100	500	1200	800	300	800	700	900	800	600	250		
6	026	0707	2600	600	100	500	1200	800	300	800	700	900	800	600	250		
7	037	0709	3700	600	100	500	1200	800	300	800	700	900	600	600	250		
8	043	0710	4300	600	100	500	1200	800	300	800	700	900	600	600	250		
9	048	0711	4800	600	100	500	1200	800	300	800	700	900	600	600	250		
10	041	0809	4100	600	100	500	1200	800	300	800	700	900	600	600	250		
11	048	0810	4800	600	100	500	1200	800	300	800	700	900	600	600	280		
12	054	0811	5400	600	100	500	1200	800	300	800	700	900	600	600	280		
13	060	0812	6000	600	100	500	1200	800	300	1000	700	900	600	600	280		
14	066	0813	6600	600	100	500	1200	800	300	1000	700	900	600	600	280		
15	072	0814	7200	600	100	500	1200	800	300	1000	700	900	600	600	280		
16	057	0910	5700	600	100	500	1200	800	300	800	700	900	600	600	315		
17	072	0912	7200	600	100	500	1200	800	300	1000	700	900	600	600	315		
18	081	1012	8100	600	100	500	1200	800	300	1000	700	900	600	600	315		
19	089	1013	8900	600	100	500	1200	800	300	1000	700	900	600	600	355		
20	097	1014	9700	600	100	500	1200	800	300	1000	700	900	600	600	355		
21	11	1015	10600	600	100	500	1200	800	300	1000	700	900	600	600	355		
22	11	1016	11400	600	100	500	1200	800	300	1200	700	900	700	600	355		
23	090	1112	9000	600	100	500	1200	800	300	1000	700	900	700	600	315		
24	12	1115	11800	600	100	500	1200	800	300	1200	700	900	700	600	355		

No.	Unit model -RZK	Module model -RZK	Nominal air flow m <sup>3</sup> /h	Length of main sections(mm)												Fan Model	Others
				Mix	Plate filter	Bag filter	Fresh air	Cooling water retaining	Heating	Fan	Air balancing	Silencing	Air outlet	Middle			
25	13	1116	12700	800	100	500	1500	800	300	1200	700	900	700	600	355	Length of heat recovery section dehumidification section shall be selected separately according to the specific situation.  Combustion section: 3000;  Activated carbon section: 100-500	
26	14	1117	13600	800	100	500	1500	800	300	1300	700	900	700	600	450		
27	15	1217	15000	800	100	500	1500	800	300	1300	700	900	700	600	450		
28	16	1218	15800	800	100	500	1500	800	300	1300	700	900	700	600	450		
29	16	1317	16100	800	100	500	1500	800	300	1300	700	900	700	600	450		
30	17	1318	17200	800	100	500	1500	800	300	1300	700	900	800	600	450		
31	18	1319	18300	800	100	500	1500	800	300	1300	700	900	800	600	450		
32	19	1418	19100	800	100	500	1500	800	300	1300	700	900	800	600	450		
33	20	1419	20400	800	100	500	1500	800	300	1300	700	900	800	600	450		
34	22	1420	21600	800	100	500	1500	800	300	1300	700	900	800	600	450		
35	22	1519	21900	800	100	500	1500	800	300	1400	700	900	800	600	500		
36	23	1520	23200	900	100	500	1500	800	300	1400	700	1200	800	600	500		
37	25	1521	24600	900	100	500	1500	800	300	1400	700	1200	800	600	500		
38	26	1621	26300	900	100	500	1500	800	300	1400	700	1200	800	600	500		
39	28	1622	27700	900	100	500	1500	800	300	1500	700	1200	800	600	560		
40	31	1624	30500	900	100	500	1500	800	300	1500	700	1200	800	600	560		
41	30	1722	29500	900	100	500	1500	800	300	1500	700	1200	800	600	560		
42	31	1822	30500	900	100	500	1500	800	300	1400	700	1200	800	600	500		
43	32	1922	31700	900	100	500	1500	800	300	1500	700	1200	800	600	560		
44	33	1923	33300	900	100	500	1500	800	300	1600	700	1200	800	600	630		
45	35	1924	35000	900	100	500	1800	800	300	1600	700	1200	800	600	630		
46	37	1925	36700	900	100	500	1800	800	300	1600	700	1200	800	600	630		
47	38	2025	38000	900	100	500	1800	800	300	1700	700	1200	800	600	710		
48	40	2026	39800	900	100	500	1800	800	300	1600	700	1200	800	600	630		



No.	Unit model -RZK	Module model -RZK	Nominal air flow m <sup>3</sup> /h	Length of main sections(mm)												Fan Model	Others
				Mix	Plate filter	Bag filter	Fresh air	Cooling water retaining	Heating	Fan	Air balancing	Silencing	Air outlet	Middle			
49	41	2126	41200	900	100	500	1800	800	300	1700	700	1200	800	600	710	Length of heat recovery section dehumidification section shall be selected separately according to the specific situation.	
50	44	2226	44000	1000	100	500	1800	800	300	1700	700	1200	1000	600	710		
51	48	2228	47800	1000	100	500	1800	800	300	1700	700	1200	1000	600	710		
52	50	2328	49900	1000	100	500	1800	800	300	1800	700	1200	1000	600	800		
53	54	2330	53900	1000	100	500	1800	800	300	1800	700	1200	1000	600	800		
54	58	2430	57800	1000	100	500	1800	800	300	1800	700	1200	1000	600	800		
55	55	2528	55400	1000	100	500	1800	800	300	1800	700	1200	1000	600	800		
56	62	2531	62100	1200	100	500	1800	800	300	1800	700	1200	1000	600	800		
57	69	2534	68700	1200	100	500	1800	800	300	1800	700	1200	1000	600	800		
58	62	2630	61800	1200	100	500	1800	800	300	1800	700	1200	1000	600	800		
59	68	2830	67800	1200	100	500	1800	800	300	1800	700	1200	1000	600	800		
60	73	2832	72800	1200	100	500	2200	800	300	1800	700	1200	1000	600	800		
61	78	2834	77900	1200	100	500	2200	800	300	2100	700	1200	1000	600	900		
62	83	2836	82900	1200	100	500	2200	800	300	2100	700	1200	1000	600	900		
63	88	2838	87900	1200	100	500	2200	800	300	2100	700	1200	1000	600	900		
64	96	2940	95700	1200	100	500	2200	800	300	2300	700	1200	1000	600	1000		
65	100	3140	102000	1200	100	500	2200	800	300	2300	700	1200	1000	600	1000		
66	110	3242	110000	1200	100	500	2200	800	300	2300	700	1200	1000	600	1000		
67	120	3246	122000	1500	100	500	2200	800	300	2300	700	1200	1200	600	1000		
68	130	3546	134000	1500	100	500	2200	800	300	2800	700	1200	1200	600	2*800		
69	150	3750	153000	1500	100	500	2200	800	300	2800	700	1200	1200	600	2*800		
70	180	3855	175000	1500	100	500	2200	800	300	3000	700	1200	1200	600	2*900		
71	210	4358	209000	1500	100	500	2200	800	300	3200	700	1200	1200	600	2*1000		
72	240	4565	242000	1500	100	500	2200	800	300	3200	700	1200	1200	600	2*1000		

### 3.3 Cooling specification- fresh air condition

No.	Unit model -RZK	Nominal air flow m <sup>3</sup> /h	Fresh air condition											
			2Rows			4Rows			6Rows			8Rows		
			Sensible cooling kW	Total cooling kW	Water flow m <sup>3</sup> /h	Sensible cooling kW	Total cooling kW	Water flow m <sup>3</sup> /h	Sensible cooling kW	Total cooling kW	Water flow m <sup>3</sup> /h	Sensible cooling kW	Total cooling kW	Water flow m <sup>3</sup> /h
1	0607	2000	6	14	2.4	11	25	4.3	13	31	5.3	15	35	6.0
2	0608	2500	7	17	2.9	13	30	5.2	17	38	6.5	19	43	7.3
3	0609	2900	9	20	3.4	16	37	6.3	20	46	7.9	22	52	8.9
4	0610	3300	10	24	4.1	19	43	7.4	23	54	9.3	26	60	10.4
5	0611	3800	12	28	4.8	22	50	8.7	27	63	10.8	31	71	12.1
6	0709	3700	11	26	4.5	20	46	8.0	25	58	10.0	28	65	11.2
7	0710	4300	13	29	5.0	23	53	9.1	29	66	11.4	32	74	12.7
8	0809	4100	14	31	5.3	25	57	9.8	31	71	12.2	35	80	13.7
9	0810	4800	15	35	6.0	27	63	10.9	34	79	13.6	38	88	15.2
10	0811	5400	17	38	6.5	30	70	12.0	38	87	15.0	42	97	16.8
11	0812	6000	18	42	7.2	33	76	13.1	41	95	16.3	46	106	18.3
12	0813	6600	21	48	8.3	38	86	14.9	47	108	18.6	53	121	20.8
13	0814	7200	23	52	8.9	41	95	16.4	52	119	20.5	58	133	22.9
14	0910	5700	17	40	6.9	31	72	12.4	39	90	15.5	44	101	17.3
15	0912	7200	21	49	8.4	39	89	15.3	48	111	19.1	54	124	21.4
16	1012	8100	24	56	9.6	44	102	17.5	55	127	21.8	62	142	24.5
17	1013	8900	26	61	10.5	48	110	19.0	60	138	23.7	67	155	26.6
18	1014	9700	29	67	11.5	53	122	21.1	67	153	26.3	75	171	29.5
19	1015	10600	33	76	13.1	60	138	23.7	75	172	29.6	84	193	33.1
20	1115	11800	36	83	14.3	65	150	25.9	82	188	32.3	92	211	36.2
21	1116	12700	39	90	15.5	71	163	28.1	89	204	35.1	99	228	39.3
22	1117	13600	42	97	16.7	77	177	30.4	96	221	38.0	108	248	42.6
23	1217	15000	45	104	17.9	82	190	32.6	103	237	40.8	115	265	45.7
24	1218	15800	48	111	19.1	88	202	34.8	110	253	43.5	123	283	48.7
25	1317	16100	51	118	20.3	94	215	37.0	117	269	46.3	131	301	51.8
26	1318	17200	54	126	21.7	100	228	39.2	125	287	49.4	140	321	55.2
27	1319	18300	58	134	23.0	106	241	41.5	133	305	52.5	149	341	58.7
28	1418	19100	61	141	24.3	111	256	44.0	139	320	55.0	156	358	61.6
29	1420	21600	67	155	26.7	122	282	48.4	153	352	60.5	171	394	67.8
30	1519	21900	69	160	27.5	126	290	49.9	158	363	62.4	177	407	69.9

Remarks: Cooling conditions: inlet air DB 35°C, WB 28°C; inlet and outlet water temperature 7°C/12°C.



No.	Unit model -RZK	Nominal air flow m <sup>3</sup> /h	Fresh air condition											
			2Rows			4Rows			6Rows			8Rows		
			Sensible cooling kW	Total cooling kW	Water flow m <sup>3</sup> /h	Sensible cooling kW	Total cooling kW	Water flow m <sup>3</sup> /h	Sensible cooling kW	Total cooling kW	Water flow m <sup>3</sup> /h	Sensible cooling kW	Total cooling kW	Water flow m <sup>3</sup> /h
31	1520	23200	72	165	28.4	130	300	51.6	163	375	64.5	183	420	72.2
32	1621	26300	80	183	31.5	145	333	57.2	181	416	71.6	203	466	80.1
33	1722	29500	90	206	35.4	163	375	64.5	204	469	80.7	228	525	90.3
34	1822	30500	94	217	37.3	171	394	67.8	214	493	84.8	240	552	95.0
35	1922	31700	97	224	38.5	177	406	69.9	221	508	87.4	247	569	97.9
36	1924	35000	107	246	42.3	195	448	77.1	243	560	96.3	273	627	107.9
37	2025	38000	113	260	44.7	205	472	81.2	257	590	101.5	287	661	113.7
38	2026	39800	120	276	47.5	218	502	86.3	273	627	107.8	305	702	120.8
39	2126	41200	122	280	48.2	221	508	87.4	276	635	109.2	309	710	122.1
40	2226	44000	125	287	49.4	227	522	89.9	284	653	112.3	318	731	125.8
41	2228	47800	151	348	59.9	275	633	108.8	344	791	136.1	385	886	152.4
42	2328	49900	156	359	61.7	284	654	112.4	355	817	140.5	398	915	157.4
43	2330	53900	167	385	66.2	304	700	120.4	380	875	150.5	426	980	168.6
44	2528	55400	165	378	65.0	299	688	118.3	374	860	147.9	419	963	165.7
45	2531	56000	179	413	71.0	326	750	129.1	408	938	161.3	457	1051	180.7
46	2630	62100	191	440	75.7	348	800	137.6	435	1000	172.0	487	1120	192.6
47	2534	68700	206	474	81.5	375	862	148.3	469	1078	185.4	525	1207	207.7
48	2830	67800	203	468	80.5	370	850	146.3	462	1063	182.8	518	1191	204.8
49	2832	66000	218	502	86.3	397	913	157.0	496	1141	196.3	556	1278	219.8
50	2834	72800	235	539	92.7	426	981	168.7	533	1226	210.9	597	1373	236.2
51	2836	75000	243	560	96.3	442	1018	175.0	553	1272	218.8	619	1425	245.0
52	2838	82900	264	607	104.4	480	1103	189.8	600	1379	237.2	672	1544	265.7
53	2940	95700	273	627	107.8	496	1140	196.1	620	1425	245.1	694	1596	274.5
54	3140	102000	289	664	114.2	525	1208	207.8	657	1510	259.7	735	1691	290.9
55	3242	110000	318	731	125.7	578	1329	228.6	722	1661	285.7	809	1860	320.0
56	3246	122000	367	845	145.3	668	1536	264.2	835	1920	330.2	935	2150	369.9
57	3546	134000	398	915	157.4	723	1664	286.2	904	2080	357.8	1013	2330	400.7
58	3750	153000	460	1059	182.1	837	1925	331.1	1046	2406	413.8	1172	2695	463.5
59	3855	175000	520	1197	205.9	946	2176	374.3	1183	2720	467.8	1325	3046	524.0
60	4358	209000	610	1404	241.5	1110	2552	438.9	1387	3190	548.7	1553	3573	614.5
61	4565	242000	763	1754	301.7	1387	3190	548.6	1733	3987	685.8	1941	4465	768.1

Remarks: Cooling conditions: inlet air DB 35°C, WB 28°C; inlet and outlet water temperature 7°C/12°C.

### 3.4 Cooling specification- return air condition

No.	Unit model -RZK	Nominal air flow m <sup>3</sup> /h	Fresh air condition											
			2Rows			4Rows			6Rows			8Rows		
			Sensible cooling kW	Total cooling kW	Water flow m <sup>3</sup> /h	Sensible cooling kW	Total cooling kW	Water flow m <sup>3</sup> /h	Sensible cooling kW	Total cooling kW	Water flow m <sup>3</sup> /h	Sensible cooling kW	Total cooling kW	Water flow m <sup>3</sup> /h
1	0607	2000	5	7	1.2	9	12	2.1	10	14	2.5	13	17	2.8
2	0608	2500	6	8	1.4	10	14	2.4	12	17	2.9	15	19	3.3
3	0609	2900	6	9	1.5	11	16	2.8	14	19	3.3	17	22	3.8
4	0610	3300	8	11	1.9	14	20	3.4	17	24	4.1	21	28	4.7
5	0611	3800	9	13	2.2	16	23	4.0	20	28	4.7	24	32	5.5
6	0709	3700	8	12	2.1	15	21	3.6	18	25	4.3	22	29	5.0
7	0710	4300	9	13	2.2	17	24	4.1	21	29	5.0	25	33	5.7
8	0809	4100	10	14	2.4	19	26	4.5	22	31	5.4	28	36	6.2
9	0810	4800	11	16	2.8	21	29	5.0	25	35	6.0	31	40	6.9
10	0811	5400	13	18	3.1	23	32	5.5	27	38	6.6	34	44	7.6
11	0812	6000	14	19	3.3	25	35	6.0	30	42	7.2	37	48	8.3
12	0813	6600	16	22	3.8	29	40	6.9	34	48	8.3	42	55	9.5
13	0814	7200	17	24	4.1	31	44	7.6	38	53	9.1	47	61	10.4
14	0910	5700	13	18	3.1	24	33	5.7	28	40	6.8	35	46	7.8
15	0912	7200	16	23	4.0	29	41	7.1	35	49	8.5	44	57	9.7
16	1012	8100	18	26	4.5	34	47	8.1	40	56	9.7	50	65	11.2
17	1013	8900	21	30	5.2	39	54	9.3	46	65	11.1	57	75	12.8
18	1014	9700	24	33	5.7	43	60	10.3	51	72	12.4	64	83	14.2
19	1015	10600	26	36	6.2	46	65	11.2	56	78	13.4	69	90	15.4
20	1115	11800	28	39	6.7	51	71	12.2	61	85	14.7	75	98	16.9
21	1116	12700	30	42	7.2	54	76	13.1	65	91	15.7	81	105	18.0
22	1117	13600	32	45	7.7	58	81	13.9	69	97	16.7	86	112	19.2
23	1217	15000	34	48	8.3	62	87	15.0	75	104	18.0	92	120	20.7
24	1218	15800	36	51	8.8	66	92	15.8	79	110	19.0	98	127	21.8
25	1317	16100	38	53	9.1	69	97	16.7	83	116	20.0	103	134	23.0
26	1318	17200	40	57	9.8	73	103	17.7	89	123	21.2	110	142	24.4
27	1319	18300	43	60	10.3	77	109	18.7	94	130	22.4	116	150	25.8
28	1418	19100	45	63	10.8	81	114	19.6	98	137	23.5	121	157	27.1
29	1420	21600	49	69	11.9	89	125	21.5	107	150	25.8	133	173	29.7
30	1519	21900	51	72	12.4	94	131	22.5	112	157	27.0	139	181	31.1

Remarks: Cooling conditions: inlet air DB 35°C, WB 28°C; inlet and outlet water temperature 7°C/12°C.



No.	Unit model -RZK	Nominal air flow m <sup>3</sup> /h	Fresh air condition											
			2Rows			4Rows			6Rows			8Rows		
			Sensible cooling kW	Total cooling kW	Water flow m <sup>3</sup> /h	Sensible cooling kW	Total cooling kW	Water flow m <sup>3</sup> /h	Sensible cooling kW	Total cooling kW	Water flow m <sup>3</sup> /h	Sensible cooling kW	Total cooling kW	Water flow m <sup>3</sup> /h
31	1520	23200	54	75	12.9	98	137	23.6	117	164	28.3	145	189	32.5
32	1621	26300	62	87	15.0	113	158	27.2	135	190	32.6	168	218	37.5
33	1722	29500	69	96	16.5	125	175	30.1	150	210	36.1	186	242	41.5
34	1822	30500	73	103	17.7	134	187	32.2	160	224	38.6	199	258	44.4
35	1922	31700	75	106	18.2	137	192	33.0	165	230	39.6	204	265	45.6
36	1924	35000	84	117	20.1	152	213	36.6	183	256	44.0	226	294	50.6
37	2025	38000	88	124	21.3	161	225	38.7	193	270	46.4	239	311	53.4
38	2026	39800	93	130	22.4	169	237	40.8	203	284	48.9	252	327	56.3
39	2126	41200	95	132	22.7	171	241	41.5	206	289	49.7	256	332	57.1
40	2226	44000	98	137	23.6	178	249	42.8	213	299	51.4	264	344	59.1
41	2228	47800	117	164	28.2	214	299	51.4	256	359	61.7	317	413	71.0
42	2328	49900	122	171	29.4	222	311	53.5	267	373	64.2	330	429	73.8
43	2330	53900	134	188	32.3	244	341	58.7	292	409	70.4	362	471	80.9
44	2528	55400	132	184	31.6	239	335	57.6	287	402	69.1	356	462	79.5
45	2531	56000	143	201	34.6	261	365	62.8	313	438	75.3	387	504	86.6
46	2630	62100	153	214	36.8	278	389	66.9	333	467	80.3	413	537	92.3
47	2534	68700	165	231	39.7	300	420	72.2	360	504	86.7	446	580	99.7
48	2830	67800	163	228	39.2	296	414	71.2	355	497	85.4	439	571	98.3
49	2832	66000	180	252	43.3	327	458	78.8	393	550	94.5	486	632	108.7
50	2834	72800	189	265	45.6	344	482	82.9	413	578	99.5	512	665	114.4
51	2836	75000	197	276	47.5	358	501	86.2	429	601	103.4	532	691	118.9
52	2838	82900	213	299	51.4	388	543	93.4	465	652	112.1	576	749	128.9
53	2940	95700	220	309	53.1	401	561	96.5	481	673	115.8	596	774	133.2
54	3140	102000	237	332	57.1	431	603	103.7	517	724	124.5	640	832	143.1
55	3242	110000	260	365	62.8	474	663	114.0	568	796	136.8	704	915	157.4
56	3246	122000	284	398	68.5	517	724	124.5	621	869	149.4	769	999	171.8
57	3546	134000	308	431	74.1	560	784	134.8	672	941	161.8	832	1082	186.1
58	3750	153000	355	497	85.5	646	904	155.5	775	1085	186.6	960	1248	214.6
59	3855	175000	403	564	97.0	732	1025	176.3	879	1230	211.6	1088	1415	243.3
60	4358	209000	474	663	114.0	861	1206	207.4	1034	1447	248.9	1280	1664	286.3
61	4565	242000	592	829	142.6	1077	1508	259.4	1293	1810	311.3	1601	2081	357.9

Remarks: Cooling conditions: inlet air DB 35°C, WB 28°C; inlet and outlet water temperature 7°C/12°C.

### 3.5 Heating specification- fresh air condition

No.	Unit model -RZK	Nominal air flow m <sup>3</sup> /h	Fresh air condition							
			2Rows		4Rows		6Rows		8Rows	
			Total cooling kW	Water flow m <sup>3</sup> /h	Total cooling kW	Water flow m <sup>3</sup> /h	Total cooling kW	Water flow m <sup>3</sup> /h	Total cooling kW	Water flow m <sup>3</sup> /h
1	0607	2000	14	1.2	23	2.0	30	2.6	38	3.3
2	0608	2500	18	1.6	29	2.5	38	3.3	48	4.1
3	0609	2900	22	1.9	35	3.0	46	4.0	58	5.0
4	0610	3300	26	2.2	41	3.5	54	4.6	68	5.8
5	0611	3800	29	2.5	47	4.0	62	5.3	78	6.7
6	0709	3700	27	2.3	43	3.7	56	4.9	71	6.1
7	0710	4300	31	2.6	49	4.2	64	5.5	81	7.0
8	0809	4100	33	2.8	52	4.5	68	5.9	86	7.4
9	0810	4800	36	3.1	58	5.0	76	6.5	96	8.3
10	0811	5400	41	3.5	65	5.6	85	7.3	108	9.3
11	0812	6000	44	3.8	71	6.1	93	8.0	118	10.1
12	0813	6600	50	4.3	80	6.9	105	9.0	133	11.4
13	0814	7200	55	4.7	88	7.6	116	9.9	146	12.5
14	0910	5700	42	3.6	67	5.8	88	7.6	111	9.5
15	0912	7200	51	4.4	82	7.1	108	9.3	136	11.7
16	1012	8100	59	5.1	94	8.1	123	10.6	156	13.4
17	1013	8900	65	5.6	104	8.9	137	11.7	172	14.8
18	1014	9700	73	6.2	116	10.0	152	13.1	192	16.5
19	1015	10600	79	6.8	127	10.9	167	14.3	210	18.1
20	1115	11800	87	7.5	139	12.0	182	15.7	230	19.8
21	1116	12700	97	8.3	155	13.3	203	17.5	257	22.1
22	1117	13600	107	9.2	171	14.7	224	19.3	283	24.4
23	1217	15000	118	10.1	188	16.2	247	21.2	311	26.8
24	1218	15800	126	10.8	201	17.3	264	22.7	333	28.6
25	1317	16100	133	11.4	213	18.3	280	24.0	353	30.3
26	1318	17200	137	11.8	219	18.8	288	24.8	364	31.3
27	1319	18300	141	12.1	225	19.4	296	25.5	374	32.2
28	1418	19100	144	12.4	231	19.9	303	26.1	383	32.9
29	1420	21600	159	13.7	254	21.8	333	28.7	421	36.2
30	1519	21900	166	14.3	266	22.9	349	30.0	441	37.9

Remarks: Heating conditions: inlet air DB 7°C; inlet and outlet water temperature 60°C/50°C.



No.	Unit model -RZK	Nominal air flow m <sup>3</sup> /h	Fresh air condition							
			2Rows		4Rows		6Rows		8Rows	
			Total cooling kW	Water flow m <sup>3</sup> /h	Total cooling kW	Water flow m <sup>3</sup> /h	Total cooling kW	Water flow m <sup>3</sup> /h	Total cooling kW	Water flow m <sup>3</sup> /h
31	1520	23200	176	15.2	282	24.3	370	31.8	467	40.2
32	1621	26300	201	17.3	321	27.6	421	36.2	532	45.7
33	1722	29500	223	19.2	357	30.7	469	40.3	591	50.9
34	1822	30500	238	20.5	381	32.8	500	43.0	631	54.3
35	1922	31700	246	21.1	393	33.8	516	44.4	651	56.0
36	1924	35000	267	23.0	427	36.7	560	48.2	707	60.8
37	2025	38000	282	24.2	451	38.8	592	50.9	747	64.2
38	2026	39800	297	25.5	475	40.9	623	53.6	787	67.7
39	2126	41200	302	26.0	483	41.5	633	54.4	800	68.8
40	2226	44000	312	26.8	499	42.9	655	56.3	826	71.1
41	2228	47800	371	31.9	593	51.0	778	66.9	982	84.5
42	2328	49900	386	33.2	617	53.1	810	69.6	1022	87.9
43	2330	53900	415	35.7	664	57.1	872	74.9	1100	94.6
44	2528	55400	408	35.1	653	56.2	857	73.7	1082	93.0
45	2531	56000	445	38.3	712	61.2	935	80.4	1179	101.4
46	2534	68700	512	44.0	819	70.4	1075	92.4	1356	116.7
47	2630	62100	474	40.8	759	65.3	996	85.7	1257	108.1
48	2830	67800	504	43.4	807	69.4	1059	91.1	1337	114.9
49	2832	66000	542	46.6	867	74.6	1138	97.9	1436	123.5
50	2834	72800	594	51.1	950	81.7	1247	107.2	1573	135.3
51	2836	75000	616	53.0	986	84.8	1294	111.3	1633	140.4
52	2838	82900	668	57.4	1068	91.8	1402	120.6	1769	152.1
53	2940	95700	690	59.3	1104	94.9	1449	124.6	1829	157.3
54	3140	102000	742	63.8	1187	102.1	1558	134.0	1966	169.1
55	3242	110000	816	70.2	1306	112.3	1714	147.4	2163	186.0
56	3246	122000	891	76.6	1425	122.6	1870	160.8	2360	203.0
57	3546	134000	964	82.9	1543	132.7	2025	174.2	2556	219.8
58	3750	153000	1113	95.7	1781	153.2	2338	201.0	2950	253.7
59	3855	175000	1261	108.5	2018	173.5	2649	227.8	3342	287.4
60	4358	209000	1484	127.7	2375	204.3	3117	268.1	3934	338.3
61	4565	242000	1855	159.5	2968	255.2	3896	335.0	4916	422.8

Remarks: Heating conditions: inlet air DB 7°C; inlet and outlet water temperature 60°C/50°C.

### 3.6 Heating specification- return air condition

No.	Unit model -RZK	Nominal air flow m <sup>3</sup> /h	Fresh air condition							
			2Rows		4Rows		6Rows		8Rows	
			Total cooling kW	Water flow m <sup>3</sup> /h	Total cooling kW	Water flow m <sup>3</sup> /h	Total cooling kW	Water flow m <sup>3</sup> /h	Total cooling kW	Water flow m <sup>3</sup> /h
1	0607	2000	13	1.1	21	1.8	27	2.3	34	13
2	0608	2500	16	1.4	26	2.2	34	2.9	42	16
3	0609	2900	19	1.6	30	2.6	40	3.4	50	19
4	0610	3300	23	2.0	37	3.2	48	4.2	61	23
5	0611	3800	27	2.3	43	3.7	57	4.9	72	27
6	0709	3700	25	2.2	40	3.4	53	4.5	66	25
7	0710	4300	29	2.5	46	4.0	61	5.2	77	29
8	0809	4100	31	2.7	50	4.3	65	5.6	82	31
9	0810	4800	34	2.9	54	4.7	71	6.1	90	34
10	0811	5400	38	3.3	61	5.2	80	6.9	101	38
11	0812	6000	41	3.5	66	5.6	86	7.4	109	41
12	0813	6600	46	4.0	74	6.3	97	8.3	122	46
13	0814	7200	51	4.4	82	7.0	107	9.2	135	51
14	0910	5700	39	3.4	62	5.4	82	7.0	103	39
15	0912	7200	47	4.0	75	6.5	99	8.5	125	47
16	1012	8100	54	4.6	86	7.4	113	9.8	143	54
17	1013	8900	62	5.3	99	8.5	130	11.2	164	62
18	1014	9700	69	5.9	110	9.5	145	12.5	183	69
19	1015	10600	76	6.5	122	10.5	160	13.7	201	76
20	1115	11800	84	7.2	134	11.6	176	15.2	223	84
21	1116	12700	91	7.8	146	12.5	191	16.4	241	91
22	1117	13600	100	8.6	160	13.8	210	18.1	265	100
23	1217	15000	107	9.2	171	14.7	225	19.3	284	107
24	1218	15800	114	9.8	182	15.7	239	20.6	302	114
25	1317	16100	121	10.4	194	16.6	254	21.9	321	121
26	1318	17200	129	11.1	205	17.6	270	23.2	340	129
27	1319	18300	136	11.7	216	18.6	286	24.6	359	136
28	1418	19100	142	12.2	227	19.5	298	25.6	376	142
29	1420	21600	148	12.7	237	20.4	311	26.7	392	148
30	1519	21900	154	13.2	246	21.2	323	27.8	408	154



No.	Unit model -RZK	Nominal air flow m <sup>3</sup> /h	Fresh air condition							
			2Rows		4Rows		6Rows		8Rows	
			Total cooling kW	Water flow m <sup>3</sup> /h	Total cooling kW	Water flow m <sup>3</sup> /h	Total cooling kW	Water flow m <sup>3</sup> /h	Total cooling kW	Water flow m <sup>3</sup> /h
31	1520	23200	160	13.8	256	22.0	336	28.9	424	36.5
32	1621	26300	178	15.3	285	24.5	374	32.1	472	40.6
33	1722	29500	203	17.5	325	27.9	426	36.7	538	46.3
34	1822	30500	216	18.6	346	29.7	454	39.0	572	49.2
35	1922	31700	223	19.2	357	30.7	468	40.3	591	50.8
36	1924	35000	246	21.2	394	33.8	517	44.4	652	56.1
37	2025	38000	259	22.3	414	35.6	544	46.8	686	59.0
38	2026	39800	273	23.5	437	37.6	573	49.3	723	62.2
39	2126	41200	278	23.9	441	37.9	583	50.1	736	63.3
40	2226	44000	287	24.7	459	39.5	603	51.8	761	65.4
41	2228	47800	345	29.7	552	47.5	725	62.3	914	78.6
42	2328	49900	359	30.9	574	49.4	754	64.8	951	81.8
43	2330	53900	389	33.5	622	53.5	817	70.3	1031	88.7
44	2528	55400	382	32.9	611	52.6	802	69.0	1012	87.1
45	2531	56000	417	35.9	667	57.4	876	75.3	1105	95.0
46	2534	68700	436	37.5	698	60.0	916	78.7	1155	99.4
47	2630	62100	445	38.3	712	61.2	935	80.4	1179	101.4
48	2830	67800	430	37.0	688	59.2	903	77.7	1140	98.0
49	2832	66000	462	39.7	739	63.6	970	83.4	1224	105.3
50	2834	72800	506	43.5	810	69.6	1063	91.4	1341	115.3
51	2836	75000	525	45.2	840	72.2	1103	94.8	1391	119.6
52	2838	82900	559	48.1	894	76.9	1174	101.0	1481	127.4
53	2940	95700	578	49.7	925	79.5	1214	104.4	1532	131.7
54	3140	102000	621	53.4	994	85.4	1304	112.2	1646	141.5
55	3242	110000	678	58.3	1085	93.3	1424	122.4	1797	154.5
56	3246	122000	740	63.6	1184	101.8	1554	133.6	1961	168.6
57	3546	134000	825	71.0	1320	113.5	1733	149.0	2186	188.0
58	3750	153000	952	81.9	1523	131.0	1999	171.9	2523	217.0
59	3855	175000	1113	95.7	1781	153.1	2337	201.0	2949	253.7
60	4358	209000	1310	112.7	2096	180.3	2751	236.6	3472	298.5
61	4565	242000	1638	140.9	2621	225.4	3440	295.8	4341	373.3

### 3.7 Filter configuration table

No.	Unit model -RZK	Nominal air flow m³/h	Filter size(Inch)									Filter class ( G3、G4、F6、F7 )	
			24*24	24*20	24*16	20*24	20*20	20*16	16*24	20*16	16*16		
			595*595	595*490	595*393	490*595	490*490	490*393	393*595	393*490	393*393		
1	0607	2000		1									595*490*1
2	0608	2500		1									595*490*1
3	0609	2900								2			393*490*2
4	0610	3300					1			1			490*490*1 393*490*1
5	0611	3800					2						490*490*2
6	0707	2600	1										595*595*1
7	0709	3700								2			393*595*2
8	0710	4300				1			1				490*595*1 393*595*1
9	0711	4800				2							490*595*2
10	0809	4100								2			393*595*2
11	0810	4800				1			1				490*595*1 393*595*1
12	0811	5400				2							490*595*2
13	0812	6000	1			1							595*595*1 490*595*1
14	0813	6600	2										595*595*2
15	0814	7200				1			2				490*595*1 393*595*2
16	0910	5700							2			2	393*393*2 490*393*2
17	0912	7200							4				490*393*4
18	1012	8100		1	1		1	1					595*393*1 490*393*1 595*490*1 490*490*1
19	1013	8900		2	2								595*393*2 595*490*2
20	1014	9700		2	2								595*393*2 595*490*2
21	1015	10600					2	2		1	1		490*393*2 393*393*1
22	1016	11400					3	3					490*490*2 393*490*1 490*393*3 490*490*3
23	1112	9000		2			2						595*490*2 490*490*2
24	1115	11800					4			2			490*490*4 393*490*2
25	1116	12700					6						490*490*6
26	1117	13600		2			4						595*490*2 490*490*4
27	1217	15000	1	1		2	2						595*595*1 490*595*2 595*490*1 490*490*2
28	1218	15800	2	2		1	1						595*595*2 490*595*1 595*490*2 490*490*1
29	1317	16100	2			4							595*595*2 490*595*4
30	1318	17200	4			2							595*595*4 490*595*2
31	1319	18300	6										595*595*6
32	1418	19100		2	4		1	2					595*490*2 490*490*1 595*393*4 490*393*2



No.	Unit model -RZK	Nominal air flow m³/h	Filter size(Inch)									Filter class ( G3、G4、F6、F7 )	
			24*24	24*20	24*16	20*24	20*20	20*16	16*24	20*16	16*16		
			595*595	595*490	595*393	490*595	490*490	490*393	393*595	393*490	393*393		
33	1419	20400		3	6								595*393*6 595*490*3
34	1420	21600		3	6								595*393*6 595*490*3
35	1519	21900		6	3								595*393*3 595*490*6
36	1520	23200		6	3								595*393*3 595*490*6
37	1521	24600					8	4					490*490*8 490*393*4
38	1621	26300					12						490*490*12
39	1622	27700		3			9						595*490*3 490*490*9
40	1624	30500		9			3						595*490*9 490*490*3
41	1722	29500	1	2		3	6						595*595*1 490*595*3 595*490*2 490*490*6
42	1822	30500	2	1		6	3						595*595*2 490*595*6 595*490*1 490*490*3
43	1922	31700	3			9							595*595*3 490*595*9
44	1923	33300	6			6							595*595*6 490*595*6
45	1924	35000	9			3							595*595*9 490*595*3
46	1925	36700	12										595*595*12
47	2025	38000	12										595*595*12
48	2026	39800	12										595*595*12
49	2126	41200		16									595*490*16
50	2226	44000	4	12									595*595*4 595*490*12
51	2228	47800	2	6		3	9						595*595*2 490*595*3 595*490*6 490*490*9
52	2328	49900	4	4		6	6						595*490*4 595*595*4 490*595*6 490*490*6
53	2330	53900	8	8		2	2						595*490*8 595*595*8 490*595*2 490*490*2

No.	Unit model -RZK	Nominal air flow m <sup>3</sup> /h	Filter size(Inch)									Filter class ( G3、G4、F6、F7 )
			24*24	24*20	24*16	20*24	20*20	20*16	16*24	20*16	16*16	
			595*595	595*490	595*393	490*595	490*490	490*393	393*595	393*490	393*393	
54	2430	57800	12	4		3	1					595*490*4 595*595*12 490*595*3 490*490*1
55	2528	55400	8			12						595*595*8 490*595*12
56	2531	62100	20									595*595*20
57	2534	68700	12			12						595*595*12 490*595*12
58	2630	61800	16			4						595*595*16 490*595*4
59	2830	67800	8	12		2	3					595*595*8 490*595*2 595*490*12 490*490*3
60	2832	72800	10	15								595*595*10 595*490*15
61	2834	77900	4	6		8	12					595*595*4 490*595*8 595*490*6 490*490*12
62	2836	82900	8	12		4	6					595*595*8 490*595*4 595*490*12 490*490*6
63	2838	87900	12	18								595*595*12 595*490*18
64	2940	95700	18	12								595*595*18 595*490*12
65	3140	102000	30									595*595*30
66	3242	110000	25			10						595*595*25 490*595*10
67	3246	122000		24			24					595*490*24 490*490*24
68	3546	134000	12	12		12	12					595*595*12 490*595*12 595*490*12 490*490*12
69	3750	153000	40	8								595*595*40 595*490*8
70	3855	175000	48			6						595*595*48 490*595*6
71	4358	209000	36	6		24	4					595*595*36 490*595*24 595*490*6 490*490*4
72	4565	242000	49			28						595*595*49 490*595*28

12" corresponds to 295, 16" corresponds to 393, 20" corresponds to 490, 24" corresponds to 595

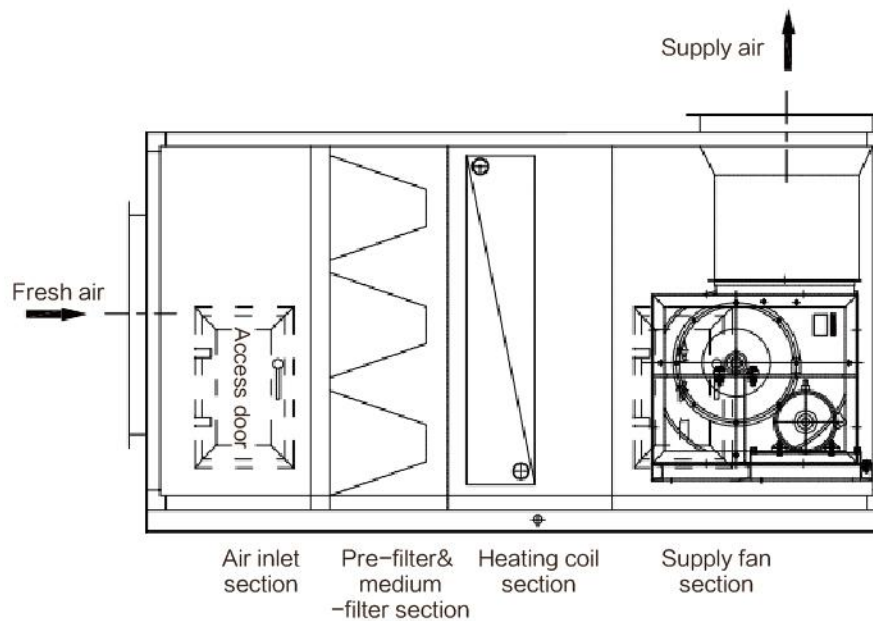
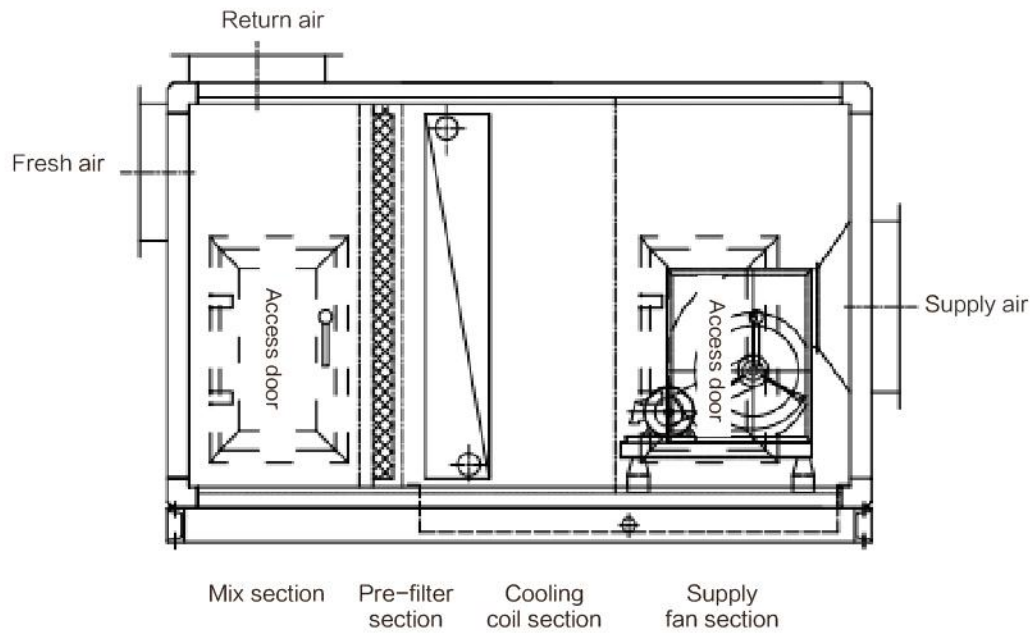


### 3.8 Power table

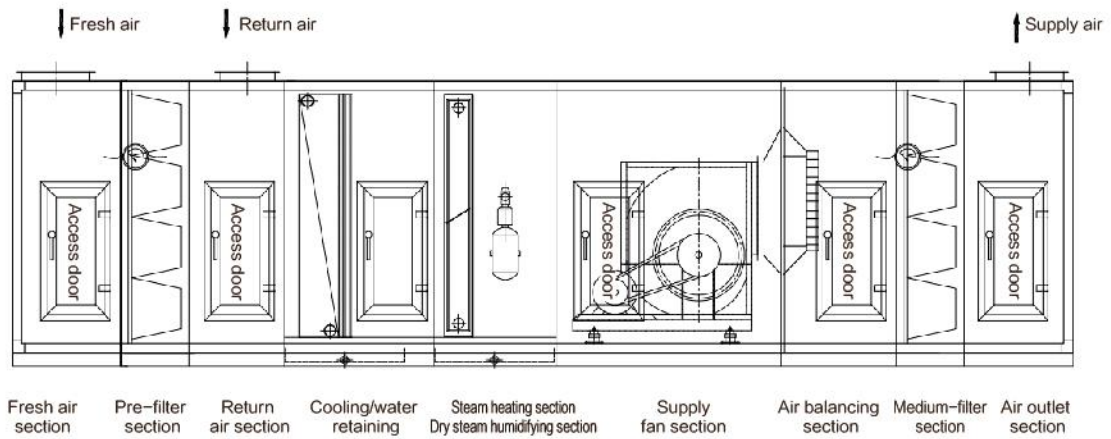
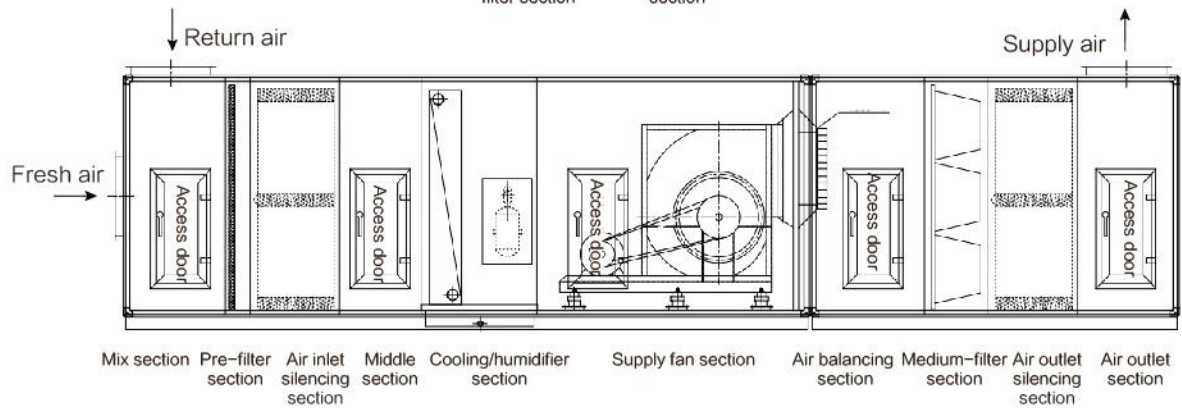
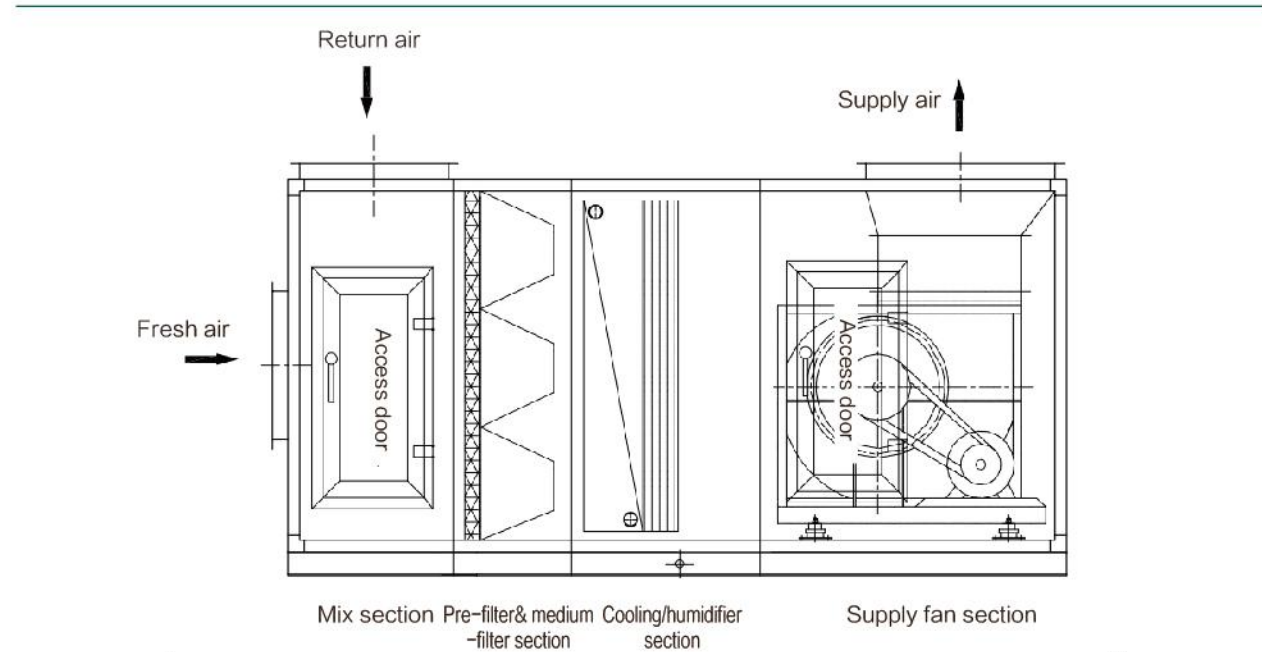
Unit model -RZK	External static pressure								Fan total pressure								
	<300	300 400	400 500	500 600	600 700	700 800	800 900	900 1000	1000 1100	1100 1200	1200 1300	1300 1400	1400 1500	1500 1600	1600 1700	1700 1800	>1800
030	0.75	0.75	1.1	1.1	1.5	2.2	2.2	2.2	3	3	3	3	4	4	4	4	4
040	0.75	1.1	1.5	2.2	2.2	3	3	3	4	4	5.5	5.5	5.5	5.5	5.5	5.5	5.5
050	1.5	1.5	2.2	3	3	3	4	4	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
060	1.5	1.5	2.2	3	3	3	4	4	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
080	1.5	2.2	2.2	3	3	4	4	5.5	5.5	7.5	7.5	11	11	11	11	11	11
100	2.2	3	4	4	5.5	5.5	5.5	7.5	7.5	7.5	7.5	11	11	11	11	11	11
120	2.2	3	4	5.5	5.5	5.5	7.5	7.5	7.5	7.5	11	11	11	11	11	11	11
150	3	4	5.5	5.5	7.5	7.5	7.5	11	11	11	11	15	15	15	15	15	15
200	4	5.5	5.5	7.5	7.5	11	11	11	15	15	15	15	15	18.5	18.5	18.5	18.5
250	5.5	7.5	11	11	11	15	15	15	18.5	18.5	18.5	18.5	22	22	22	22	22
300	7.5	7.5	11	11	11	15	15	18.5	18.5	18.5	22	30	30	30	30	30	30
350	7.5	11	11	15	15	18.5	22	22	22	30	30	30	30	30	30	30	30
400	7.5	11	11	15	15	18.5	22	22	30	30	30	30	37	37	37	37	37
500	11	11	15	18.5	18.5	22	22	30	30	30	37	37	45	45	45	45	45
600	11	15	15	18.5	22	30	30	30	37	37	37	45	45	45	55	55	55
800	15	18.5	18.5	22	22	30	30	37	37	45	45	45	45	55	75	75	75
100	15	18.5	22	30	30	30	37	37	45	45	55	55	55	75	75	75	75
120	22	30	30	37	37	45	45	55	55	55	75	75	75	75	90	90	90
140	22	30	37	37	45	55	75	75	75	75	75	90	90	90	110	110	110
160		37	45	45	55	75	55	75	90	90	90	90	110	110	132	132	132
180			45	55	75	75	75	90	90	90	90	110	110	132	132	132	160
200				75	75	75	55	110	110	110	110	132	132	132	160	160	160
220					90	90	110	110	110	132	132	132	160	160			

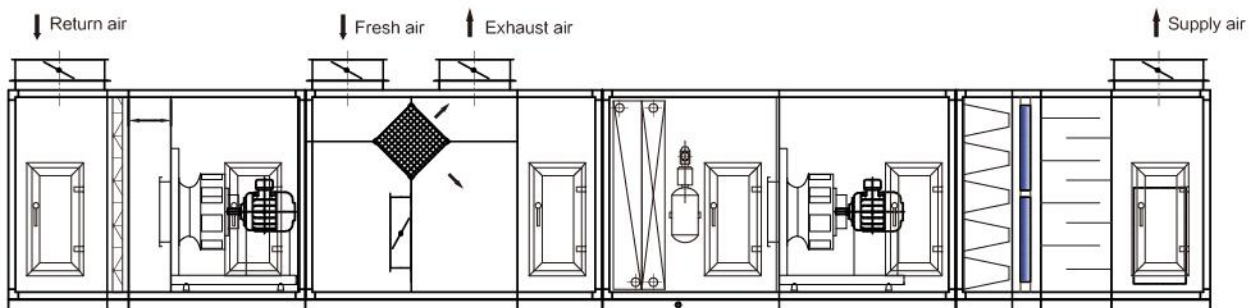
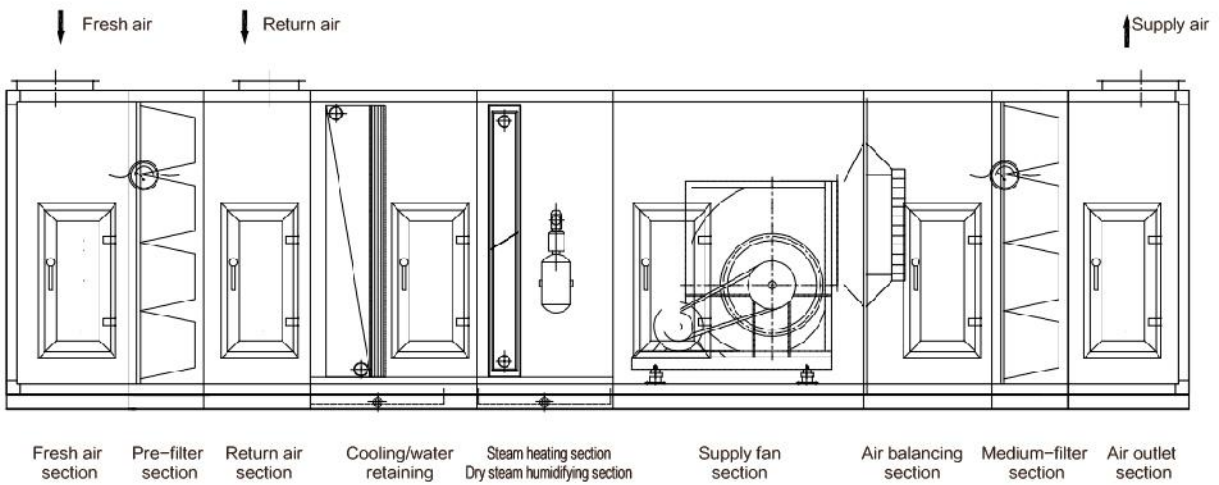
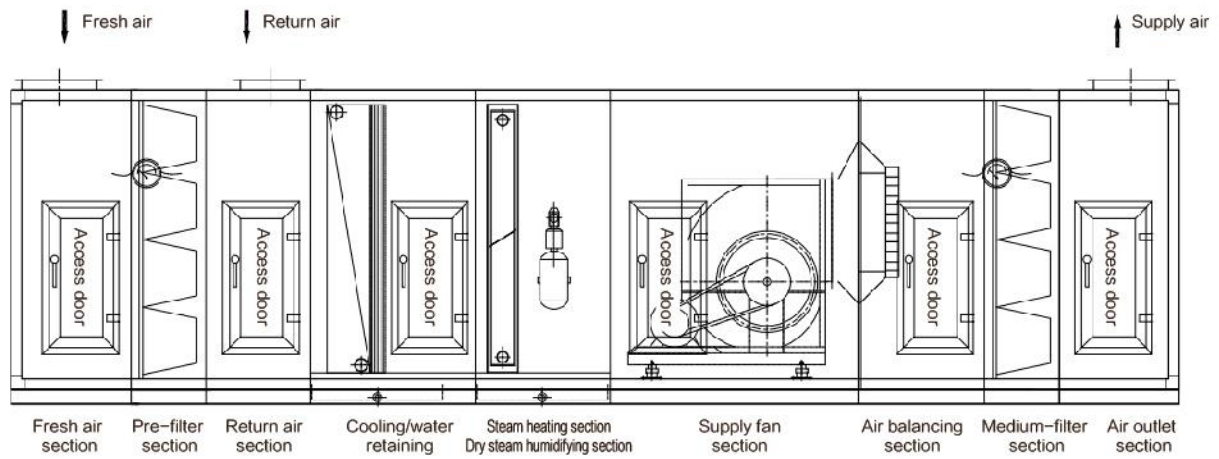
Remarks: Above data only for reference

## 4. UNIT DIAGRAM

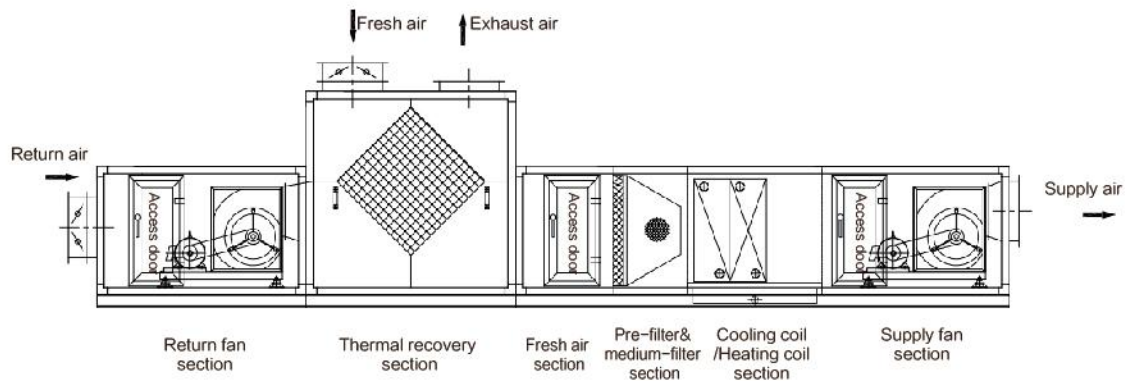
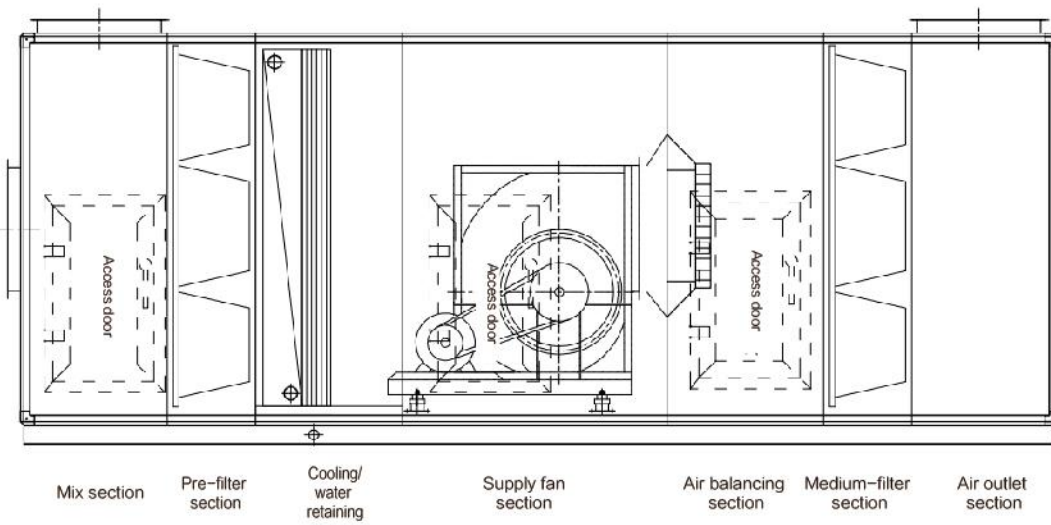
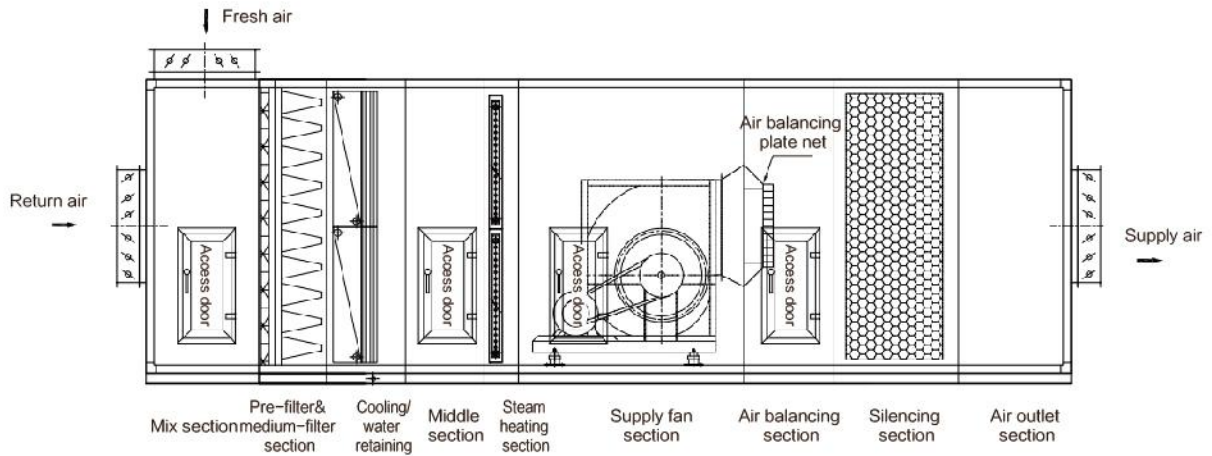


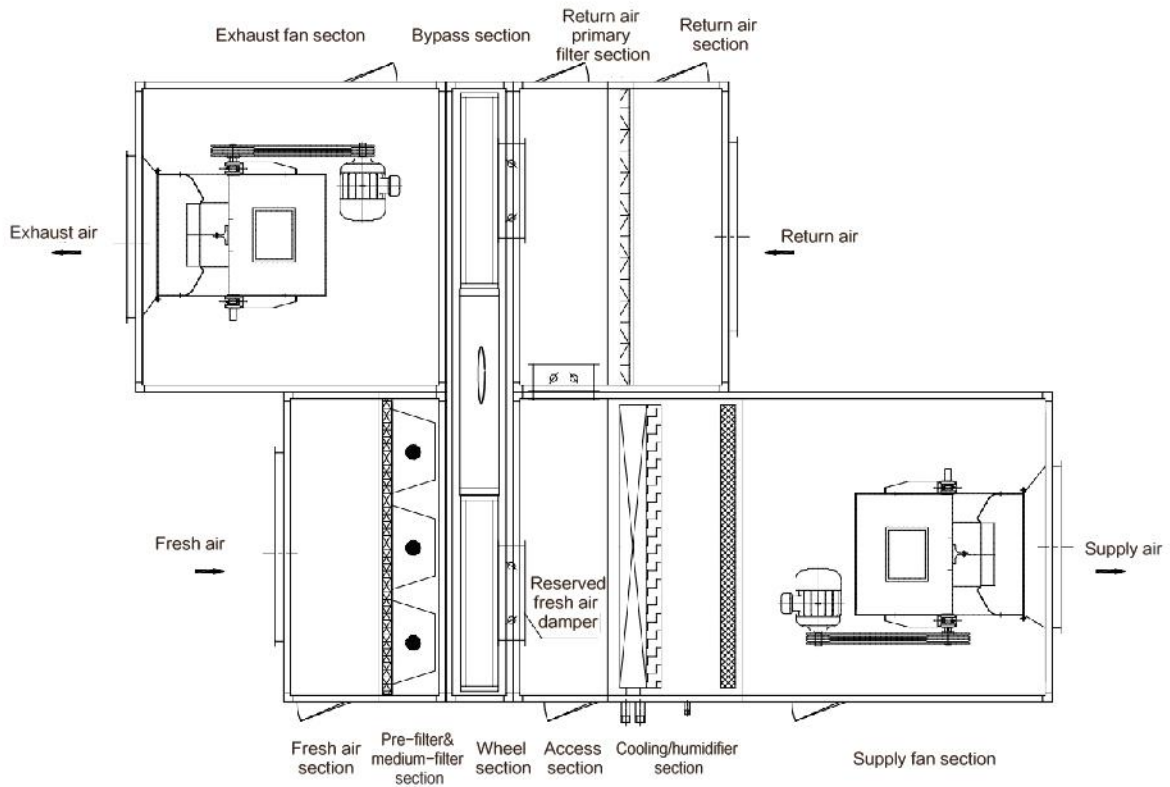
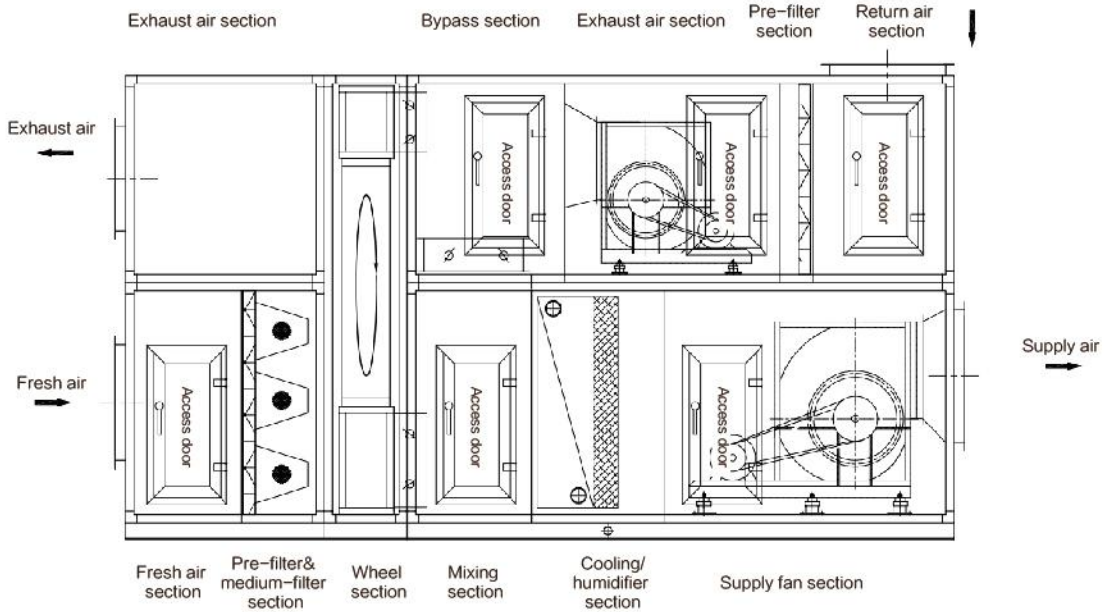




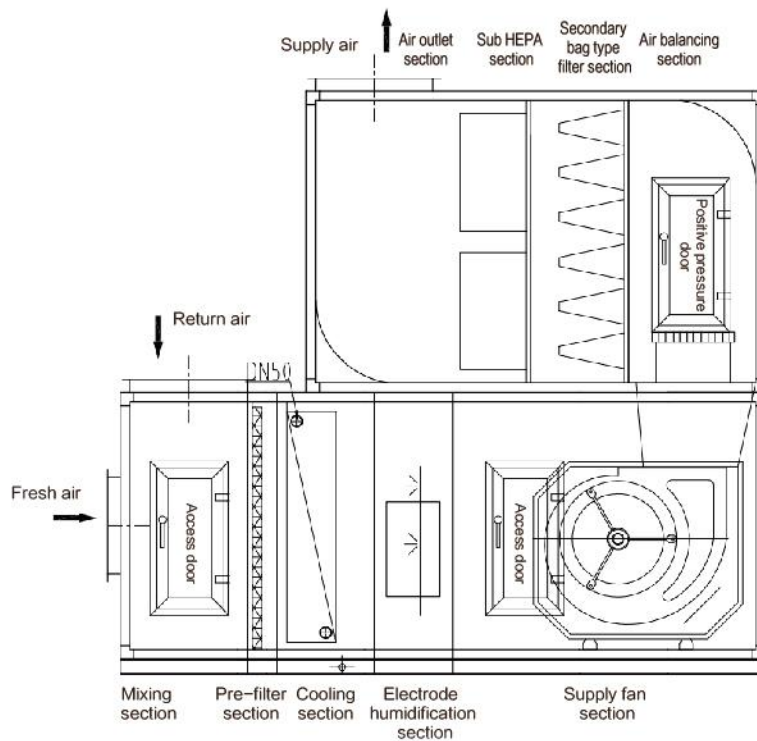
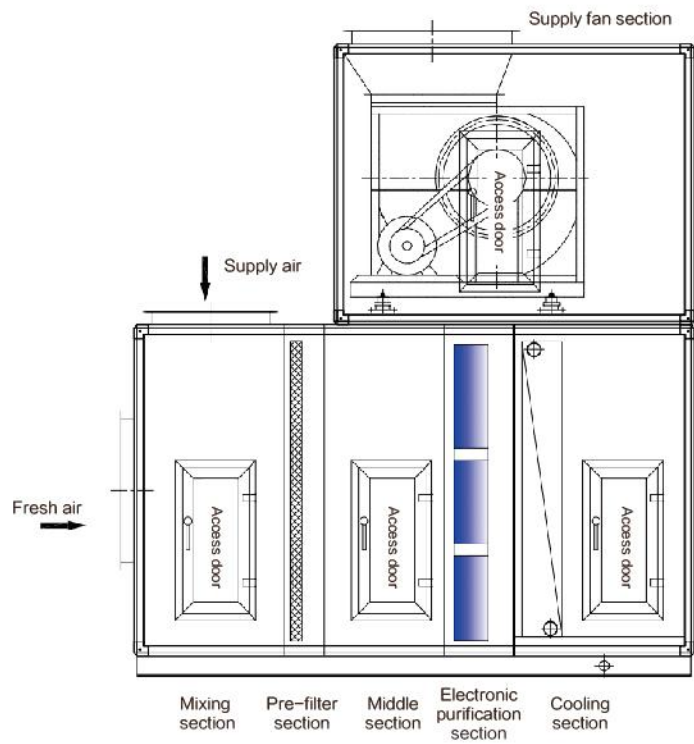












## 5. INSTALLATION REQUIREMENTS

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### Preparation before installation

1. Inspect before unpacking the equipment, carefully check the manufacturer's load list, separate the equipment of each system and transport it to each air-conditioning room.

Note: If there are devices with the same model but different technical parameters, do not confuse them to avoid installation errors.

2. Check whether each functional section is complete, whether the pipeline direction is right, whether the number of rows of heat exchangers in the cooling section or heating section, the number of strings per unit length, and the overall dimensions are consistent with the equipment information.

3. Check the technical parameters of the fan and the motor, and check whether the fan type matches the airflow direction of the system.

4. Check whether the surface of the cabinet is damaged, especially whether the fins of the heat exchanger have large-area bumps and scratches caused by overlap.

5. The cooling coil or heating coil should have a certificate of conformity. Within the time limit specified in the technical documents, the water pressure test may not be done before installation without damage on the surface, otherwise the water pressure test should be done. The test pressure is equal to 1.5 times the maximum working pressure of the system, and must not be lower than 0.6MPa, the test time is 2-3min, and the pressure must not drop.

6. The foundation of the air conditioning unit should be inspected. The foundation of the air-conditioning unit should be a concrete platform foundation, and the diagonal horizontal error should not be greater than 5mm. The length and width of the foundation should be added to the outside by 100mm according to the external dimensions of the air-conditioning unit. The height of the foundation should take into account the condensate drainage pipe, the height of the seal and the slope of the drain. The air conditioner unit can be placed directly on the foundation with 5-10mm rubber sheet, or on the I-beam or channel steel with rubber sheet.

7. Check if there is any leakage in the drain pan. Kerosene can be used for leakage test. And pay attention to whether the splicing of the box wall panels and the connection between the box wall panels and the water pan are in the downstream direction.

8. Check the integrity of the parts of the air conditioning unit, repair damaged parts, and replace severely damaged parts. Correction should be made to the skewed fins in the surface cooler and heater. The air valves can be opened and closed flexibly and the valve blades are straight. The dust on the cabinet and various parts should be wiped clean.

### Installation of combined air conditioning unit

1. Check the position and level of the foundation, level and level the assembly of each functional section, and the connection should be tight, firm and reliable.

2. The air conditioning unit with surface cooler can be assembled from left to right or from right to left. The drainage pipe of the condensate of the surface cooler section should be unblocked, the condensed water should not overflow, and the condensate joint should be installed with a water seal to prevent the air inside the air conditioning unit from leaking or outdoor air entering the air conditioning unit.

3. When the housing and fan of the fan section are transported separately, the empty section body of the fan section should be installed first, and then the fan and motor are installed in the section body. If the fan and electric motor are too large, the inspection door of the fan should not be able to enter. The bottom plate of the empty section should be installed first. After the fan and electric motor are connected to the bottom plate, the side and top plates can be assembled.

4. The connection method between the functional segments should be connected according to the instructions or technical manuals provided by the manufacturer, and the installation must be tight. The connection of each functional section usually adopts the form of bolt-filled closed-cell sponge rubber plate, U-shaped carlan-filled closed-cell sponge rubber plate and inserting strip connection.

5. The relevant assembly sequence of each functional section of the modular air conditioning unit must meet the specified design requirements. If there is an error, it may cause the air treatment process and the air treatment effect to be poor.



6. The installation problems of modular air-conditioning units may exist in various functional sections. Generally, there are two situations where the design requirements are not met:

The first is due to the confusion of the air conditioning unit construction site management, which led to errors in the assembly procedure.

The second is because the installer did not carefully follow the pre-designed drawings for construction, or there was behavior that did not correctly understand the drawings. For the installation of each functional section, there may be certain differences, so you must be careful during the assembly process.

For combined air handling units assembled on site, air leakage detection should be carried out when necessary.

## 6. USE AND MAINTENANCE

1. Regularly check the tightness of the fan belt. When it is found to be too loose, the adjustment screw can be used to adjust it. If it is damaged, it needs to be replaced in time.

2. Regularly check the operation of the fan bearing, whether there is any abnormal sound or the operating temperature is too high. Bearings should be regularly oiled (generally The running time does not exceed 1800 hours/time).

3. Regularly check the blockage of the filter. When the primary and secondary effect filter in the unit reaches 2 times the initial resistance or the unit's pressure difference device alarms, it should be replaced in time. The replaced filter can be cleaned and blow-dried to check that it is not damaged and can be used again. The number of cleanings is 2-3 times.

4. Regularly check whether various screws are loose, and tighten them in time when they are found to be loose.

5. Regularly check the operation of electrical components, whether the contactor contacts are in good contact, and whether the motor running current is within the specified range

Within range.

6. When the unit is not operating in winter, if the room where the unit is placed may be icing, the water in the unit should be drained or replaced with non-freezing liquid to prevent damage to the surface cooler due to icing (the surface cooler is Ice damage is not covered by the warranty).

7. After a certain number of years of operation, it is inevitable that there will be fouling in the heat exchange tube, which will cause the heat exchange efficiency to decrease. At this time, please wash the inside of the heat exchanger in time. If the scale is serious, you can use chemicals to clean it. But before cleaning, please make sure that the cleaning agent is not corrosive to the copper pipe.

8. The surface of the heat exchanger should be inspected and cleaned regularly or during shutdown to prevent dust from adhering to the surface of the heat exchanger and affecting the heat exchange effect.

9. The unit should have special personnel for operation management to ensure the normal operation of the equipment, and the management personnel should carefully record the operation.

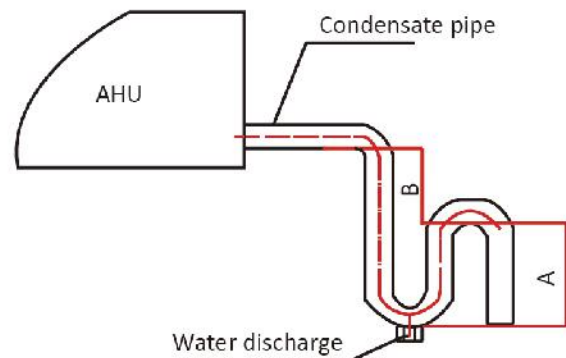


Diagram of water seal

Note:

When it is negative pressure,  $A=B \geq P/10+20\text{mm}$

When positive pressure,  $A > P/10+20\text{mm}$   $B \geq 30\text{mm}$

P is the air pressure value at this position.

## 7. ORDER INSTRUCTIONS

The following parameters must be indicated when ordering:

Air volume, air pressure (total pressure or residual pressure), cooling capacity, heating capacity, heating form, hot water (temperature), steam (pressure), equipment functions and other important parameters.

## TESTING CENTER



Testing center covers an area of 6500 square meters; total investment of 50 million RMB, is the largest and most complete detection device in the north of China , the testing range is from household air conditioner to the centrifuge chillers.

Testing center adopt internationally renowned brand measuring instruments, including the United States Agilent data acquisition, Japan Yokogawa power meter, Saibi Ling platinum thermal resistance, to ensure the test accuracy.

Testing center can test multi-unit, air-cooled unit, fan coil unit, ceiling air handling unit, modular air handling unit, purifying air conditioning unit, water loop heat unit, air-cooled module chiller and air-cooled screw chiller.



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# MAIN PROJECTS

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This document has been proofread many times, but there may still be errors or omissions, please understand.