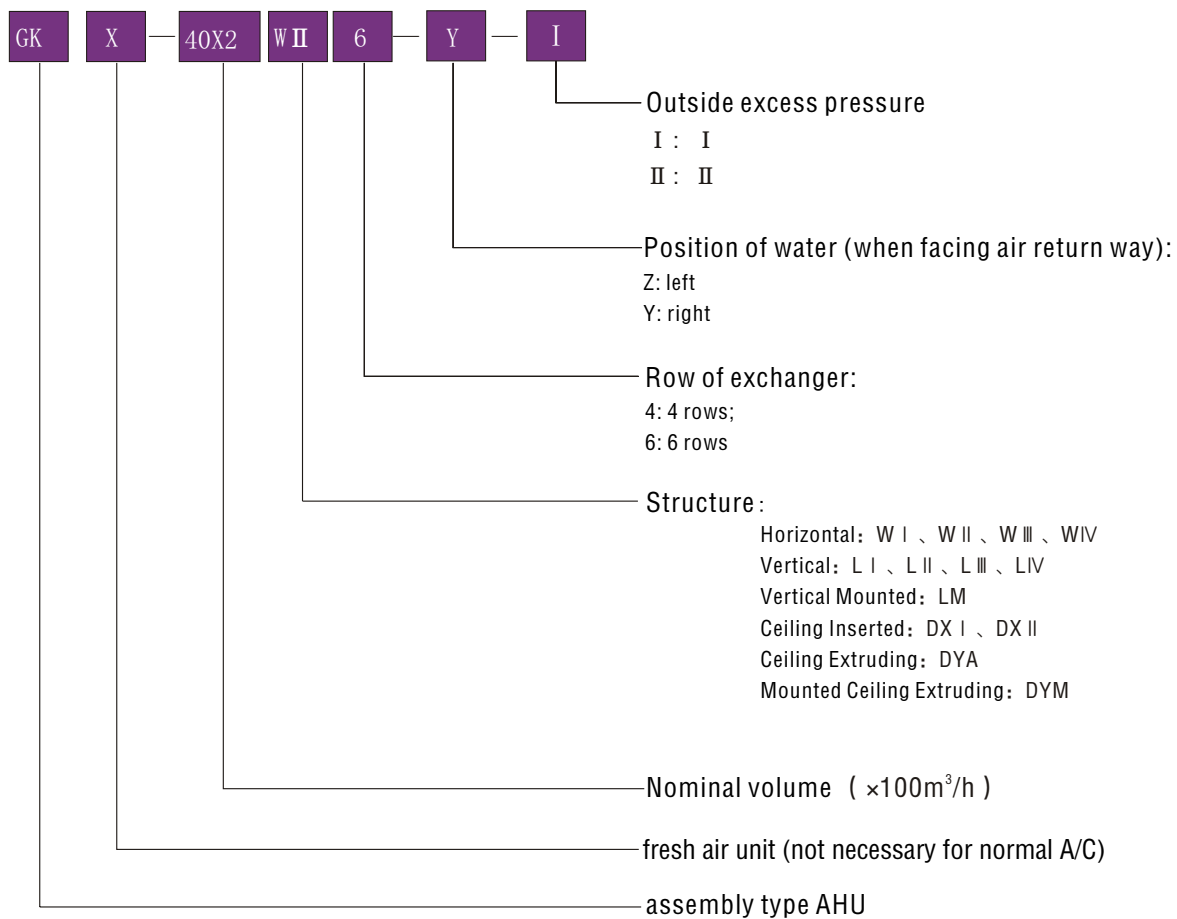


## 1 General Introduction

GK cabinet a/c series is a new product series developed based on the international advanced experience and it is developed after a considerable improvement in its structure, assembly workmanship and use of elements. GK cabinet a/c series has about 200 types such as W I 、 W II 、 W III 、 WIV 、 L I 、 L II 、 L III 、 LIV 、 LM and DX I 、 DX II 、 DYA、 DYM with the airflow range 1000~45000m<sup>3</sup>/h in order to meet different requirements of temperature and humidity under variable climate conditions. Also the control device for temperature and humidity and frequency control unit can be installed upon request. The product series has its features as small volume, light weight and easy to be installed on the spot. The unit can also be installed above the ceiling to save space to meet the requirement of big area.

Due to low noise design, the product can be widely used in the HVAC works in hospitals, hotels theatres, office buildings, factories and other large public facilities etc.

## 2 Symbol Explanation



Example: GKX-40×2 WII 6-y-I represents cabinet a/c unit, with two air units whose volume is 8000m<sup>3</sup>/h, exchanger being 6-row horizontal blowing downward, pipe at right side, outside excess pressure being category I (or 350Pa).

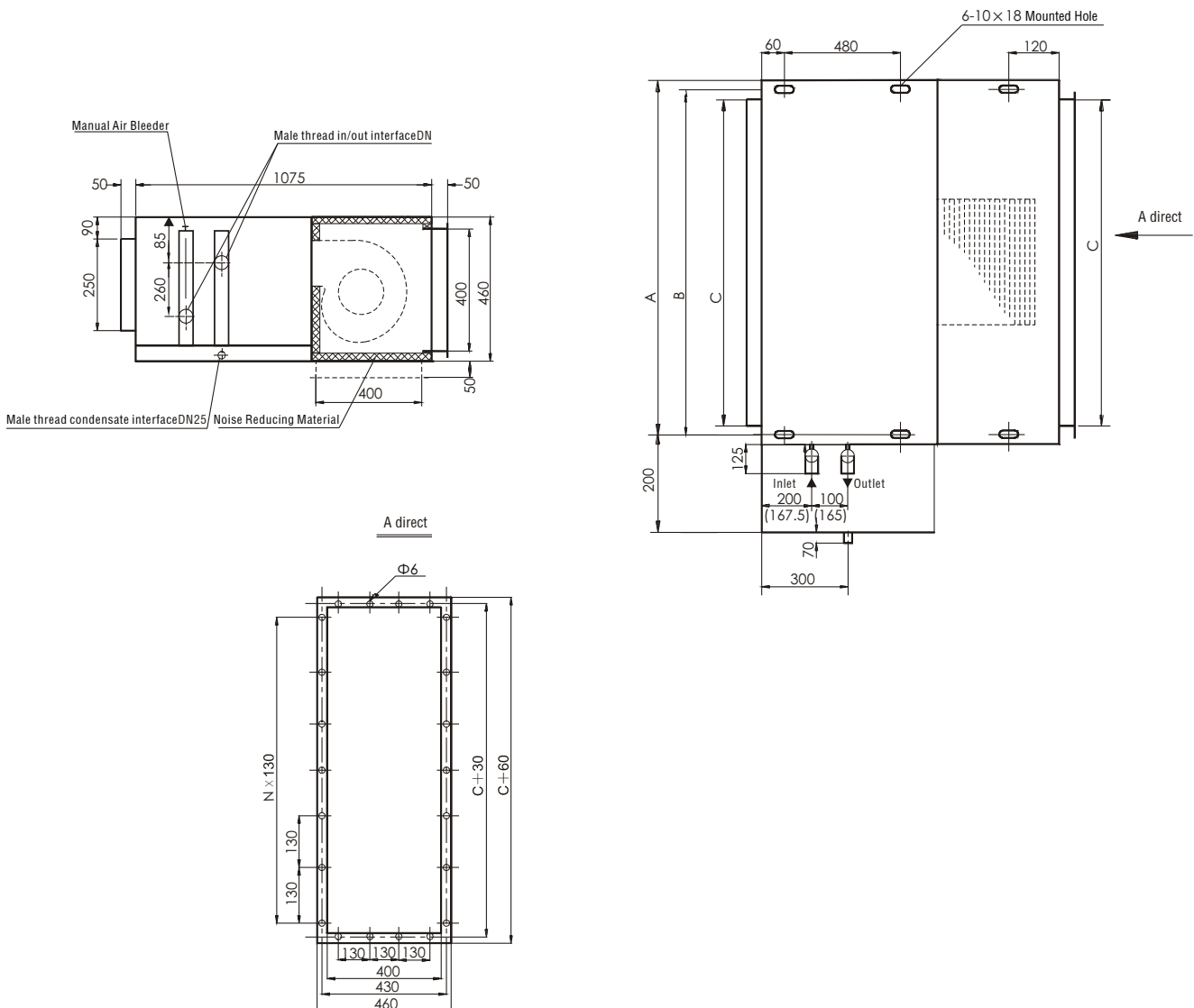
## 3 Characteristics

Concealed Ceiling  
Extruding: DYA



- The height of this product is only 460 mm. The patent is ZL 96 2 29383.0.
- A special even flow device is installed at the air outlet to guarantee the surface air speed on the fan coil being uniform
- The return air flow direction can be easily changed on the construction site, because the lower return air out can be changed with rear return air outlet.
- There is noise reducing material in the return air box so that the noise is kept at lower level
- The condensed water tray is made of stainless steel, free from the problem of erosion and rust.
- The stainless tray for collecting condensed water is installed outside and no negative pressure is obtained, discharging smooth.the protection of heat preservation material on water tray is guaranteed by two layers of metal
- Manual air release valve is installed outside, the rubber pipe is connected to the condensed water pipe, easy to debug.
- Direct maintenance and change of motor through air returning outlet.
- The condensed water tray can be lengthened under request, ensuring the valve within the water tray.
- ★ 220V power supply is required and electronics switch, temperature control device
- ★ Air speed regulator can be installed in the unit.

## 4 Dimension Drawing



### 5 Dimension Form

Unit: mm

Specs. Size	15	15×2	20	20×2	25	25×2
A	530	980	680	1280	830	1580
B	490	940	640	1240	790	1540
C	450	900	600	1200	750	1500
N	3	6	4	9	5	11
DN	25(32)	32(40)	32(40)	40(50)	32(40)	40(50)
Weight ( kg )	75(103)	140(164)	100(115)	174(199)	109(129)	203(231)

Note:

- (1) the drawing represents left-outlet back air-returning unit; date in the bracket is applicable to new air unit.
- (2) downward air-returning and backward air-returning are available.

### 6 Parameter Form for 4-row Mounted Ceiling A/C Unit

Parameter Type	Rated air volume m <sup>3</sup> /h	excess pressurePa		Fan pow(kW)		Rated cooling capacity (kW)		Rated Heat (kW)		Cooling Water Volume (m <sup>3</sup> /h)		Cooling Water Resistance (Kpa)		NoisedB(A)
		I	II	I	II	Normal A/C	Fresh air	Normal A/C	Fresh air	Normal A/C	Fresh air	Normal A/C	Fresh air	
10	1000	125	80	0.25	0.18	5.58	11.15	6.70	14.74	0.96	1.92	1.13	1.58	54
10X2	2000	125	80	0.25×2	0.18×2	11.15	22.30	13.40	29.47	1.92	3.84	2.64	3.70	57
15	1500	120	70	0.25	0.18	8.35	16.70	10.05	22.10	1.44	2.88	2.01	2.82	54
15X2	3000	120	70	0.25×2	0.18×2	16.70	33.40	20.09	44.20	2.88	5.76	3.28	4.60	57
20	2000	200	110	0.32	0.25	11.15	22.30	13.40	29.47	1.92	3.84	1.80	2.52	57
20X2	4000	200	110	0.32×2	0.25×2	22.30	44.60	26.80	58.94	3.84	7.68	4.23	4.22	60
25	2500	280	150	0.45	0.32	13.94	27.88	18.74	36.84	2.40	4.80	2.64	3.70	57
25X2	5000	280	150	0.45×2	0.32×2	27.88	55.76	33.48	73.68	4.80	9.60	4.96	6.94	60
30	3000	250	200	0.45	0.37	16.70	33.40	20.00	44.20	2.88	5.76	3.22	4.51	57
30X2	6000	250	200	0.45×2	0.37×2	33.40	66.80	40.18	88.40	5.76	11.52	5.25	7.30	60

### 7 Parameter Form for 6-row Mounted Ceiling A/C Unit

Parameter Type	Rated volume m <sup>3</sup> /h	excess pressurePa		Fan pow(kW)		Rated cooling capacity (kW)		Rated Heat (kW)		Cooling Water Volume (m <sup>3</sup> /h)		Cooling Water Resistance (Kpa)		NoisedB(A)
		I	II	I	II	Normal A/C	Fresh air	Normal A/C	Fresh air	Normal A/C	Fresh air	Normal A/C	Fresh air	
10	1000	95	50	0.25	0.18	7.25	14.50	8.38	18.43	1.25	2.49	2.40	3.47	54
10X2	2000	95	50	0.25×2	0.18×2	14.50	29.00	16.75	36.84	2.49	4.98	5.82	8.15	57
15	1500	90	45	0.25	0.18	10.86	21.71	12.56	27.62	1.87	3.74	4.40	6.20	54
15X2	3000	90	45	0.25×2	0.18×2	21.70	43.42	25.11	55.25	3.74	7.48	7.20	10.14	57
20	2000	170	80	0.32	0.25	14.50	29.00	16.75	36.84	2.49	4.98	3.96	5.54	57
20X2	4000	170	80	0.32×2	0.25×2	29.00	58.00	33.50	73.68	4.98	9.96	9.31	13.04	60
25	2500	230	130	0.45	0.32	18.12	36.24	23.43	46.05	3.12	6.24	5.81	8.13	57
25X2	5000	230	130	0.45×2	0.32×2	36.24	72.48	41.85	92.10	6.24	12.48	10.91	15.28	60
30	3000	200	170	0.45	0.37	21.71	43.42	25.00	55.25	3.74	7.48	7.08	9.92	57
30X2	6000	200	170	0.45×2	0.37×2	43.42	86.84	50.23	110.5	7.48	14.96	11.55	16.17	60

## 8 Selection Reference

- 1, Units with the same air volume are different in other features, such as the installation space, air pressure and noise. For example, the air volume of GK-40 and GK-20×2 both is 4000m<sup>3</sup>/h, but GK-20×2 has a lower noise, less air pressure, bigger width and smaller height.
- 2, The temperature of refrigerant water shall be no less than 5℃; and the temperature of heating water shall be no higher than 60 5℃.
- 3, The water In/out duct shall be equipped with stop valve as well as thermometer, pressure meter and water filter. If necessary, balanced valve is required.
- 5, We can provide non-standard design if required.

## 9 Technical Parameters Explanation

- 1, The rated refrigerated output and heating output is calculated under the nominal working conditions, just for customer's reference.
- 2, Cool water temperature: supplying water 7℃; return water 12℃.  
hot water temperature: supplying water 55℃; return water 45℃.
- 3, Normal A/C in the form refers to: the temperature of inlet dry ball is 27℃, temperature of wet ball is 19.5℃ in cooling; the temperature of inlet dry ball is 20℃ in heating.
- 4, New air unit in the form refers to : the temperature of inlet dry ball is 34℃, temperature of wet ball is 28℃ in cooling; the temperature of inlet dry ball is -4℃ in heating.

## 10 About Installation

- 1, GK series features smooth running and low vibration. Vibration absorbing base is necessary if high vibration attenuation is required.
- 2, The in/out duct of A/C unit is usually that the inlet duct is at the downside and the outlet duct is at the upside (vertical mounted units excluded). The condensed water outlet duct shall be at the lowest point. Valves shall be installed at the outside for in/out ducts for the maintenance and adjustment of flux. In consideration of negative pressure, water lock is necessary for the condensed water duct.
- 3, Air duct and water duck connected to the A/C units shall be supported separately from the units.
- 4, Before supply water, it is important to ensure the system free of any dirt. This is to guarantee the exchange efficiency.
- 5, Before the initial start-up, check the wiring connections, grounding condition and if there are any remaining dirt. When everything is ready, start the fan and check the rotation direction.
- 6, Heat preservation shall be applied to the joint part of air outlet and air duct.
- 7, Heat preservation shall be extended to the side panel of the units.

## 11 About Maintenance

- 1, Start the fan and pump, and the unit will run. Release the gas if necessary.
- 2, In idle time, the unit shall be filled with water to avoid erosion. In winter, certain anti-frost crack measures shall be applied.
- 3, In winter, the temperature of applying hot water shall be no less than 60℃; and the temperature of the blowing air shall be no less than 40℃.
- 4, The air filter shall be cleaned or replaced periodically.
- 5, Apply full-range maintenance after running for two years. Use appropriate chemicals to clean the heat exchanger. The supplier may provide charged services.
- 6, Check the wiring connection, protection devices and the grounding to remove all potential dangers.

## 12 About Order

- 1, Customers shall specify the detailed type, specification and working conditions of the A/C units.
- 2, The location of inlet duct, outlet duct and condensed water duct shall be specified.
- 3, Electric control box shall be ordered separately in required.
- 4, We provide non-standard products to your special requirements.