1.Technical specifications

Model	GWHD(07)HANK3A4AI	GWHD(09)HANK3A4AI	GWHD(12)HANK3A4AI	
Fan Motor Speed (r/min) (H/M/L)	960/840/760	1030/840/760	1260/1020/900	
Output of Fan Motor (w)	6	6	22	
Input Power of Heater (w)	/	/	/	
Fan Motor Capacitor (uF)	1	1	1	
Fan Motor RLA(A)	0.14	0.14	0.2	
Fan Type-Piece	Cross flow fan - 1	Cross flow fan - 1	Cross flow fan - 1	
Diameter-Length (mm)	φ92 X 616	φ92 X 616	φ92 X 616	
Evaporator	Aluminum fin-copper tube			
Pipe Diameter (mm)	Φ7	Φ7	Ф7	
Row-Fin Gap(mm)	2-1.4	2-1.4	21.4	
Coil length (I) x height (H) x coil w idth (L)	618X325X25.4	618X325X25.4	618X323X254	
Swing Motor Model	MP24GA	MP24GA	MP24GA	
Output of Swing Motor (W)	2	2	2	
Euso (A)	PCB 3.15A	PCB 3.15A	PCB 3.15A	
	Transformer 0.2A	Transformer 0.2A	Transformer 0.2A	
Sound Pressure Level dB (A) (H/M/L)	36/32/28	36/32/28	40/36/30	
Sound Power Level dB (A) (H/M/L)***	46/42/38	46/42/38	50/46/38	
Dimension (W/H/D) (mm)	830X285X206	830X285X206	830X285X206	
Dimension of Package (L/W/H)(mm)	880X280 X384	880X280 X384	880X280 X384	
Net Weight /Gross Weight (kg)	12/16	12/16	12/16	

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The above data is subject to change without notice. Please refer to the nameplate of the unit.

2.Part name —







4.Wiring Diagram

These circuit diagrams are subject to change without notice, please refer to the one supplied with the unit.



1 Temperature Parameters

- Indoor preset temperature (Tpreset)
- Indoor ambient temperature (Tamb.)
- Indoor heat exchanger inlet pipe sensor temp. (Tinlet)
- Indoor heat exhanger pipe inside sensor temp. (Tinside)
- Indoor heat exchanger outlet pipe sensor temp. (Toutlet)

2 Basic Functions

2.1 Cooling mode

In this mode, the indoor fan will run at preset fan speed.

Protection function: Evaporator anti-freezing protection; When Cooling, indoor unit will run at preset fan speed; When dehumidifying, indoor will run at low fan speed.

 \succ Temp. can be set in the range of 16-30 $^\circ C$.

2. 2 Dehumidifying Mode

Indoor fan motor will run at low fan speed.

Protection function: the same with COOL mode.

 \blacktriangleright Temp. can be set in the range of 16-30 $^\circ \mathrm{C}$

2.3 Fan mode

Under this mode, indoor fan motor can select High, Mid, Low and Auto operation.

> Temp. can be set in the range of 16-30 $^{\circ}$ C.

2.4 Heat mode

When compressor stop running, fan motor enters into blowing surplus heat;

Due to the malfunction, the compressor stop running, indoor fan motor will run at blowing surplus heat.

Anti-cool wind: indoor fan motor will run after at least 2mins delay.

Blowing surplus heat: Indoor fan motor will blowing surplus heat at low speed for 60s, the fan speed

cannot be changed during blowing surplus heat.

 \succ Temp. can be set in the range of 16-30 $^\circ\!\mathrm{C}$

2.5 Auto mode

Under this mode, the system will accord to the ambient temperature change automatically select running modes (Cool, Fan, Heat). The protection function is the same as the protection function under Cool, Heat modes.

3 Other control

3. 1 Indoor fan motor control

Indoor fan motor can be set up as HIGH, MED, LOW by remote controller, at this time, fan motor will run at high, med, low, also can be set up as AUTO. Dehumidifying auto fan speed is low speed.

3. 2 Running figure and mode figure display

After powered on, all figures will be displayed, then only the Power/Run indicator turns on. When remote control to turn on the unit, the Power/Run will turns on, at the same time, displaying current setting running mode light, if to set up the sleep function or turn off the light button, that will turn off all display except the Power/Run indicator. When turn off the unit, only the Power/Run indicator light on.

Dual 8 display: when turn on the unit, the nixie tube will display current setting temperature (Setting temperature range is $16-30^{\circ}$ C) Fan speed display: Fan speed (low fan will light the most inside, middle fan will light the one in middle, high fan will light the one at outside, three will all be lighted for auto fan)

3. 3 Indicator display

When defrosting, defrosting light turns on, Power/Run indicator blinks.

3. 4 Indoor unit malfunction display and process.

Indoor: Under any status, detect indoor all kinds of sensor malfunction, continuously 30s, not in the temperature upper and lower limit, the will alarm malfunction. Sensor malfunction temperature upper and lower limits:

Indoor ambient sensor (15K sensor, 15K voltage dividing)	≤-40° C	≥1 4 2 ° C
Indoor inlet pipe sensor (20K sensor, 20K voltage dividing)	≪- 40 °C	≥136 ° C
Indoor pipe inside sensor (20K sensor, 20K voltage dividing)	≤-40' C	≥136°C
Indoor outlet pipe sensor (20K sensor, 20K voltage dividing)	≪- 4 ● ' C	≥136°C

Malfunction display:

- E4: Unit stop for compressor air exhaust protection;
- E5: Unit stop for low voltage over current protection;
- E6: Unit stop for communication malfunction;
- E7: Modes confliction (Only in multiple unit);
- F1: Indoor ambient sensor open, short circuit; F2: Indoor evaporator sensor open, short circuit;
- F3: Outdoor ambient sensor open, short circuit;
- F4: Outdoor evaporator sensor open, short circuit;
- F5: Outdoor air exhaust sensor open, short circuit;
- H3: Compressor overload protection;

H4: System abnormal (unit stop for overload): Under cool mode, unit will stop running when outdoor tube temp. be detected is very high; Under heat mode, unit will stop running when indoor tube temp. be detected is very high;

H5: Unit stop for modular protection;

HC: Unit stop for PFC protection.

Above malfunction and unit is turned on (including unit stop for temperature), indoor should stop at once and display malfunction, unit off do not display malfunction, receiving remote control signal, but do not do any process except the Unit Off operation; Above malfunction existed when unit turned off, at this time when turn on the unit, the malfunction will be displayed and unit cannot be turned on. Compressor has stopped 3mins and malfunction disappeared, it will resume to normal running mode.

E7: Modes confliction, after resumed, the normal displaying status will be resumed at once;

confliction when heat mode change to cool mode, blow surplus heat for 60s, the fan motor will stop, the confliction when cool mode change to heat mode, the fan motor will stop to run.

4. Buttons control on remote controller

4. 1 ON/OFF

Each time the on/off button of the remote controller is pressed, the On/Off state will switch once.

4. 2 MODE Selection Press the Mode button on the remote controller to select and display the following modes:

AUTO, COOL, DRY, FAN, HEAT, AUTO.

4. 3 TEMP Setting Button

Each time TEMP/or TEMP/button is pressed, the set temperature will be increased or decreased by \mathcal{C} . Adjusting range is 16-30 °C. In AUTO mode, this button does not function.

4. 4 Auto button

If press AUTO button under off status of the unit, the unit will run under auto mode with swing. If press AUTO button under on staus of the unit, the unit will be stopped. If remote controller command is given, the main unit will run under the command.



4. 5TIMER ON/OFF

Setting range:0-24hours, 0-10hours, every time, the timer will be increased 0.5hr, after 10hours timer, 1hour will be increased.

4. 6 Sleep Function

Setting SLEEP function under COOL or DEHUMIDIFY mode, the preset temperature will automatically rise by 1°Cafter 1hour and rise by another 1°C after 2hours. Preset temperature will rise by 2°C in total within 2 hours. After that, the unit will run at this preset temperature, the indoor fan will run at preset speed.

Setting SLEEP function under HEAT mode, the preset temperature will automatically decrease by 1°C after 1 hour and decrease by another 1°C after 2hours. Preset temperature will decrease by 2°C, in total within 2 hours. After that, the unit will run at this preset temperature, the indoor fan will run at preset speed.

No sleep function under fan mode and auto mode.

4.7 Buzzer

When the unit energized, pressed, or receive a signal from remote control, the buzzer will give out a beep.

4. 8 Swing Control

4.8.1 Upper and lower swing control

After powered on, the upper and lower swing motor will firstly anticlock wise rotate the guide louver to Position 0, turn off vent; After unit is turned on, if the setting swing function hasn't set up, the upper and lower guide louver will clockwise roate to the level air outlet position L. When turn on the unit and to set up the swing function at the same time, the guide louver will swing between I, D. The guide louver has seven kinds of swing status: Position L, Position A, Position B, Position C, Position D, swing between Position L and D, stop at any position from L to D. When turning off the unit, the guide louver will close up to Postion 0.



4.8.2 Left and right swing control After powered on, the left and right swing motor will drive the swing louver to the middle Position. When turning on the unit, if the Left and Right Swing hasn't been set up that the swing louver will stay at the middle postion. If to set up the Swing by the remote control that will stay at the position which is indicated by the remote control. When setting up the Left and Right Swing, there are seven kinds of swing status: Left Position, secondary Left Position, Middle Position, secondary Right Postion, Left Position, swing between Left Position and Right Position and Stop.

When turning on the unit, to set up the Left and Right swing that left and right swing motor will make the louver swing. When canceling the setting, the swing louver will stop at the current position. When turning off the unit that the left and right swing will keep the original

position. 4. 9 Selection method for capacity code

Indoor unit capacity selection (S2 code for capacity code selection position):

Code position	Indoor unit capacity selection
S2 code , turn pin 1 to on position	Indoor unit is 18
S2 code , turn pin 2 to on position	Indoor unit is 20
S2 code , turn pin 3 to on position	Indoor unit is 22
S2 code , turn pin 4 to on position	Indoor unit is 25
S2 code , turn pin 1, 4 to on position	Indoor unit is 28
S2 code , turn pin 1, 3, 4 to on position	Indoor unit is 32
S2 code , turn pin 1, 2, 3, 4 to on position	Indoor unit is 35
S2 code , turn pin 1, 2, 3, 4 to off position Meanwhile to turn S1 code pin 1 to on position	Indoor unit is 40
S2 code , turn pin 1, 2, 3, 4 to on position Meanwhile to turn S1 code pin 1 to on position	Indoor unit is 45

6.Dissassembly

Operating Procedures / Photos

1. Disassemble the front panel, filter

Pull the panel open. Firstly, screw off the screw fixing the top cover of the electric box and remove the top cover. Then, pull away the connection terminal. Pull the panel outward with force along the groove fixing the panel of the panel body to remove the panel. Push the filter inward and then upward to remove the filter.



2. Disassemble the guide louver

Bend the guide louver so that the movable lock of guide louver is released to remove the guide louver.



Guide louve

3. Disassemble the front case

Open the 3 screw covers at the front case and screw off 5 screws. Pull out the movable latch at the front case with hand and then pull it backwards to disassemble the front case.



Screws

4. Disassemble the electric cover

Press the 3 clasps in by till they loose, then lift up wards the electric cover.



5. Disassemble water tray

Screw off the fixing screws fixing the water tray with a screw driver, and pull out the terminal board of the step motor. Pull upwards the water tray. Remove the water tray.



6. Disassemble the electric box

Remove the grounding wire of the evaporator, and remove the temperature sensor for the pipe. Remove the connection lines for the indoor motor. Screw off the screws fixing the electric box. Remove the electric box



7. Disassemble evaporator

The lower rear clamp plate can be removed by just screwing off one screw with a screw driver. Screw off two screws at both left/right sides of the evaporator and take out the evaporator with hand, so that the side board catch of the evaporator is disengaged from the groove. Remove the evaporator carefully and take care to protect theconnection pipe.



8.Disassemble motor

Screw off the two screws fixing the motor pressure plate with a screw driver and remove the pressure plate. Screw off the three fixing screws at the axle sleeve and remove the motor.



Motor Press Plate





No	Description	Part Code			
		GWHD(07)HANK3A4AI	GWHD(09)HANK3A4AI	GWHD(12)HANK3A4AI	Qty
1	Wall-mounting Frame	01252384	01252384	01252384	1
2	Pipe clamp	26112425	26112425	26112425	1
3	Hook	26272421	26272421	26272421	2
4	Rear Case	222020382	222020382	222020382	1
5	Evaporator Assy	01002240	01002240	01002239	1
6	Cross Flow Fan	10352405	10352405	10352405	1
7	Ring of Bearing	76712015	76712015	76712015	1
8	Left clamp of motor	261124281	261124281	261124281	1
9	Drainage Pipe	0523001401	0523001401	0523001401	1
10	Water Tray	201820344	201820344	201820344	1
11	Swing Louver b	105120472	105120472	105120472	10
	Connecting Lever	105824398	105824398	105824398	1
	Swing Louver a	105120462	105120462	105120462	2
12	Front Case	200023014	200023014	200023014	1
13	Screw Cover	242524409	242524409	242524409	3
14	Filter	11122440	11122440	11122440	2
15	Front Panel	200023044	200023044	200023044	1
16	Little Front Panel 1	27212136	27212136	27212136	1
17	Remote Control Y512SB	30515037	30515037	30515037	1
18	LCD 5253F	305452081	305452081	305452081	1
19	Guide lour(up)	105120512	105120512	105120512	1
20	Guide lour(down)	105120532	105120532	105120532	1
21	Stepping Motor MP24GA	15212102	15212102	15212102	1
22	Right clamp of motor	26112429	26112429	26112429	1
23	Bearing holder	26152423	26152423	26152423	1
	Motor FN6E	150120522	150120522	/	1
24	Motor FN22D	/	/	150120622	
25	Electric Box Cover	201220091	201220091	201220091	1
26	Covering plate	20102123	20102123	20102123	1
27	Terminal board GT4A3A4	42011138	42011138	42011138	1
28	Electric box	20102108	20102108	20102108	1
20	Main Board 8252AJ	300382031	300382031	/	1
23	Main Board M82D2J	/	/	30130086	1
30	Fuse T3.15AL 250V	46010014	46010014	46010014	1
31	Room Sensor15K	390000451	390000451	390000451	1
	Tube Sensor(20K)	3900019816	3900019816	3900019816	1
32	Tube Sensor(20K)	3900019815	3900019815	3900019815	1
	Tube Sensor(20K)	3900019814	3900019814	3900019814	1
33	Transformer 48X26G	43110233	43110233	43110233	1
34	Connection clamp	24242004	24242004	24242004	1
35	Connecting Cable	400204056	400204056	400204056	1

The above data are subject to be changed without notice.