

Intelligent Elevator Air Conditioner

Product Operationer Manual



HANGZHOU HESHAN TECH CO.,LTD

Dear User:

Thank you very much for choosing "Heshan" brand intelligent elevator special air conditioner. The product has been awarded a number of national patents, and used in more than 40 countries and regions worldwide.

For more safe and convenient use of the intelligent elevator air conditioner, please read this manual carefully, and operate according to the instructions of this manual.

We will strive to meet the individual needs of customers, if there are small changes of products, it will not be notified again in the manual.

Thanks again! We hope you have a good use experience!

This manual is for below air conditioner model:

TK (D) -26Y (Z) , TK (D) -26Y/Q (Z) , TK (D) -35Y/Q (Z) , TK (D) -53Y/Q (Z) , TK (D) -18Y/Q, TK (D) -26Y/Q1 (Z) , TK (D) -35Y/Q1 (Z), TK (D) -09Y/Q,NK (D) -25Y/H,NK (D) -32Y/H

Y.19.01.1002223

Contents

1. Product Feature
2. Technical Data5
3. Component Name5
4. Instruction for the Display Board6
5. Key Function of the Remote Controller7
6. Running Guide9
7. Notice
8. Maintenance
9. Normal Failure Analysis and Restore13
10. Schematic Circuit Diagram15

1. Product Feature

Remote Control

Can remote control in the cabin or auto running control.

♦ No Water Drop

Multiple evaporation dealing to the condensation water, quick, safe, and electricity-saving. Long-term protection from the stainless bottom water pan, no water leakage.

• Quiet and Highly Efficient

International brand compressor, overall optimization to the cooling system, quiet and highly efficient.

• Simple Installation

Unified design, heat insulation soft duct for cold air in or out, convenient connection.

• Convenient Use

Every day turn on/off time could be controlled by computer program. Turn on the air condition only once for the whole Summer or Winter. Data restored and auto turn on after electricity blackout.

• Multiple Protection

Compressor overheated protection, time delayed protection, multiple protection against water overflow, safe and secure.

• Quality Reliable

Products through the CCC certification and CE certification, company through the China Quality Certification Center ISO9001 quality management system, ISO14001 environmental management system, OHSAS18001 occupational health and safety management system of professional certification.

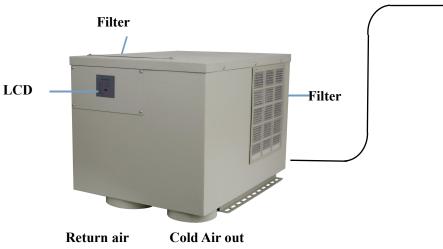
Model		TK-26Y	TK-26Y/Q	TKD-26Y	TKD-26Y/Q	TK-35Y/Q	TKD-35Y/Q
Cooling (W)		2600	2600	2600	2600	3500	3500
Heating (W)		/	/	2200	2200	/	2200
Air flow (m ³ /h)		400	400	400	400	570	570
Rated input current (A)	cool	4.3	4.3	4.3	4.3	5.8	5.8
	heat	/	/	10.0	10.0	/	10.3
Rated input power (W)	cool	930	930	930	930	1250	1250
	heat	/	/	2200	2200	/	2270
Voltage/frequency		220V~50Hz					
Noise dB (A)		< 53	< 53	< 53	< 53	< 55	< 55
Dimensions(L×W×H)m		615×455	545×455	615×455	545×455	640×570	640×570
m		×435	×435	×435	×435	×510	×510
Weight (kg)		40	39	40.5	39.5	57	57.5
Model		≤2000	≤2000	≤2000	≤2000	≤3000	≤3000

2. Technical Data

*Detail data see to air conditioner side nameplate.

3.Component Name

Main Machine Components Name:





Signal Receive Box



Remote Controller

Accessory Name:



Duct



Duct Tie



Return Air Cover





Cold Air Out Cover

Sponge

4. Instruction for the Display Board

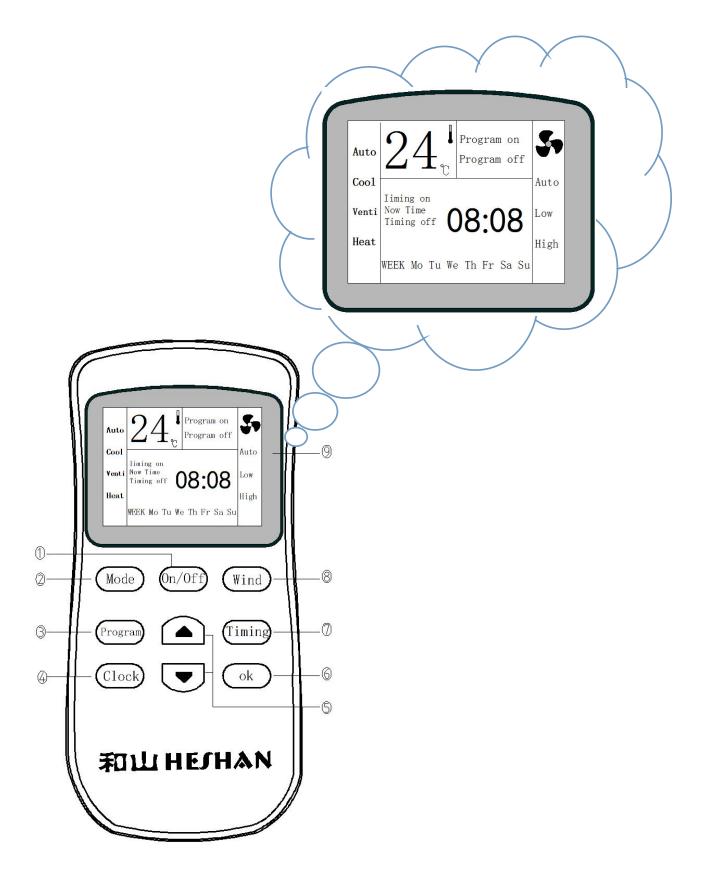


On/Off, press the key, air conditioner turn on, Press again, air conditioner turn off.
Water Level Light (20%, 50%, 80%, 100%).

◆ Running light, Light on, air conditioner is running, light off, air conditioner stop running.

◆ Program Light, light on, program control mode, light off, remote controller manual mode.

5. Key Function of the Remote Controller



1. "On/off" key press the key, air conditioner turn on, press again, turn off.

2. "Model" Key press the key to select: auto, cool, ventilation, heat mode.

3. "Program" Key press the key, Enter the program operation mode, according to the set timer turn/off weekly time, press the key, remote controller show program model on, remote receiver box program light in the car and air conditioner main machine LCD panel program lights turn on; press the key again, remote controller show program model off, remote receiver box program light in the car and air conditioner main machine LCD panel program lights turn off.

4. "Clock" key press for three seconds, enter now time and week set.

◆ Press for three seconds, show time, hour flash, press "▲" "▼" to adjust hour, press "ok" key to confirm;

• Then minutes flash, press " \blacktriangle " " \checkmark " to adjust minute, press "ok" key to confirm;

◆ Then Monday flash, press "▲" "▼" to adjust week, press "ok" key to confirm;
 Now time setting finished.

After set, the remote controller show right now time and week.

5. " \blacktriangle " " \checkmark " Key ,Press the key, the temperature rise or fall at one degree; or a week, or the clock forward or backward, and only when week, clock or timing key under flash, it can be used.

6. "OK" key, Press the key to confirm the current time ,week, the timing time(working days per week).

7. "Timing" key, press for three seconds, enter auto running time turn on, turn off and auto running weekdays set. press the key, can check the existed auto running time.

8. "Wind Speed" key, press the key, the wind speed can be automatic, low wind, high wind selection.

9.LCD Screen Show all the key information.

8

6.Running Guide

1.On/OFF

Under programmed timing mode, the air condition would be on and off automatically by the set time. Can also press on/off key on the main machine display board or on/off key on the remote controller to operate.

2. Operation Method of Cooling

- Press the "Mode" Key on the remote controller to select the working mode of "cooling". The initial value of temperature is 24℃.
- (2) Press the "▲"or "▼"keys to select the temperature needed. The temperature select range is from 16°C to 31°C.
- (3) Press the "Wind Speed" key to select high wind or low wind. High wind is suggested.
- 3.Operation Method of heating (only cooling type air conditioner has no such function)
- Press the "Mode" Key on the remote controller to select the working mode of "heating". The initial value of temperature is 20°C.
- (2) Press the "▲"or "▼"keys to select the temperature needed. The temperature select range is from 16°C to 31°C.

(3) Press the "Wind Speed" key to select high wind or low wind. High wind is suggested.

4. Operation Method of Ventilation:

(1) Press the "Mode" Key on the remote controller to select the working mode of ventilation.

(2) Press the "Wind Speed" key to select auto, high wind or low wind.

5. Operation Method of Auto running mode:

Press " running mode" key on the remote controller to choose auto running mode, If the temperature in the car more than 24° C, the air conditioner cooling mode; if lower than 18° C, heating mode(only cool type air conditioner ventilation mode). If between 18° C and 24° C, wind sending mode. The temperature and wind speed can't be set under auto mode.

- 6.Operation Method of program controlled auto On/Off:
- (1) Set the Benchmark Time on the remote controller
 - a.long press "clock" for three seconds, show time, hour flash, press"▲"
 "▼"to adjust hour, press"ok"key to confirm;
 - b.Then minutes flash, press"▲""▼"to adjust minute, press"ok"key to confirm;

c.Then Monday flash, press" \blacktriangle "" \blacktriangledown "" \blacktriangledown "to adjust week, press"ok"key to confirm; Now time setting finished.

(2) The default program control operation mode:

Remote control factory default timing, after the first power up, can press timing key to check. The default timing turn on time is "07:30" in the morning, turn off time is "18:00", every Monday to Friday, Saturday and Sunday no running. If factory default time no need to adjust, after set the present time, set the mode of operation, temperature, wind speed, then click on the "program" key and and after the sensor received (on the remote controller display "programmable open"), air conditioner will auto run by default timing.

(3) Personalized program control operation mode:

For example: the need for air conditioner in the morning "08:00" automatic on, the evening "18:30" automatic shutdown, running every Monday to Sunday, Saturday does not run, the operation is as follows:

- a. Long press "timing" button 3 seconds. The time display "07:30" and "07" flashing, press "▲" adjust the hour to "08", and then press OK button to confirm;
- b. After confirming display "08:30" and "30" flashing, press"▲""▼" button to adjust to the "00", and then press the OK button to confirm.
- c. After the confirmation shows the time off time "18:00", and "18" flashing, press "confirm" key to confirm;
- d. After confirmation of the display timing shutdown time "18:00" and "00" flashing, press "▲""▼"button will adjust to the "30", and then press the OK button to confirm.

- e. After the confirmation of shut down time, Monday flashes, press the "ok" button on Monday; Tuesday flashing, press "ok" button on Tuesday to set, Wednesday, Thursday, Friday, Saturday and in this setting, Saturday set and displayed, Sunday flicker, but without press "ok" key, press "▲"or"▼"button to skip, Sunday is not set, week bar display all set star days, "one, two, three, four, five and six", then press the OK button to confirm, weekly working days complete the setup; after confirmation the remote controller show now time and week.
- f. Use the remote controller to set the needed temperature, wind speed, press on the remote control "program" key, remote controller display program open, program light turn on At this time, the air conditioner into program operation state, working according to the preset mode, temperature, wind speed, off time, seven days for cycle.

**Timing Check

Press "timing" button, auto on hour and minute display; then click on the "timing" key again, timing shutdown hour and minute display; then click on the "timing" key, timing week display (a week which days run); press the "timing" button, back to current time display. Display the current time if without pressing any key in 5 seconds.

7.Method of Manual Operation

Press "Program" Key: Press the key, the remote controller show program off, air conditioner withdraw from program auto running, program light off.

7. Notice

- When operate the remote, only when the air condition give off a "di" sound, the set by the remote controller is accepted.
- Program model, must set on/off time.
- The air conditioner has three minute start-up delay function. When compressor stop work or electricity blackout, air conditioner compressor need 3 minute to start up.
- Under high temperature and high humidity conditions, the water condensing speed

faster than the evaporating speed which may lead to water level higher than 80%, the air conditioner will shift from Auto Cooling Mode to Ventilation Mode. The ventilation mode will prevent air conditioner from producing condensation water. The ventilation mode will switch to cooling mode automatically when the water level is below 80% again(also can let water out by manual operation)

- Under normal condition, the condensate water inside the air condition less than 80%. In case of condensate water arrive at 100%, air conditioner would shut off power.
- To deal with the condensation water completely, and make the air conditioner continually run at the cooling mode under the condition of high temperature and high humidity. The water dealing system has a delayed function. When turn off the air conditioner, if there is much water inside, the water dealing system would go on working. The running mode of air conditioner will shift from cooling mode to ventilation mode automatically and run continually till the water level is below 20%; If air conditioner fan is still working after turn off, its natural condition.
- If the air conditioner return air flow amount is too small or the filter net is blocked seriously, the air conditioner will start the frost-melting function, at the time the compressor would work intermittently.
- When the air conditioner doesn't work properly, should switch off the air conditioner, pull out the plug and ask the professionals to maintain and repair.
- If the remote has not used for a long time, take the batteries out.

8. Maintenance

Below parts need periodic clean and maintenance.

- Air conditioning return air plastic filter: screwed two self-tapping screws on the air conditioner box to take out the filter, washed with water, after dry, install back. Dust filter has accumulation of dust, will cause the air conditioner ventilation quantity small, the corresponding cooling or heating effect will decline. Recommended once every 30 days clean or to actual situation..
- Air conditioner heat side filter sheet: the dust filter sheet is fixed on two sides of air conditioner, clean it and washed with water, after dry, install back. When the filter is blocked, the heat dissipation effect of the condenser can be affected, and the cooling capacity is reduced accordingly. Recommended according to the actual needs of regular cleaning, usually once every 30 days.
- Air conditioner evaporator and condenser due to long-term air circulation, may in the surface area of the accumulation of dust, thus affecting the effect of heat transfer, the recommended annually before the summer of evaporator and condenser clean.

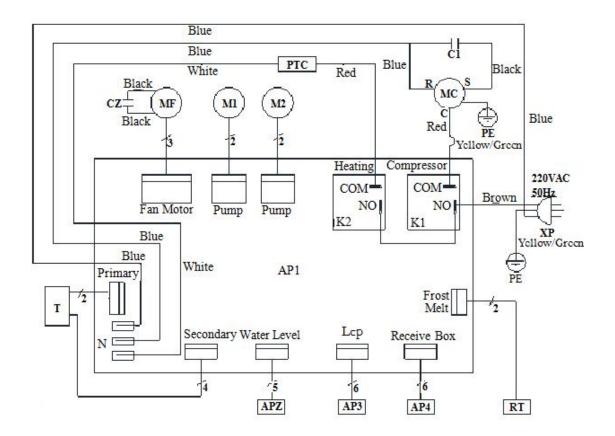
• Water processing system clean: water pump, a water pipe, a permeability sink, water pump cotton filter , water level sensor, microcomputer control board .Water pump, water pipe, water sink are recommended to be cleaned before use every year . Pump filter cotton is mainly used for filtration of suspended particulate to ensure pump internal and condenser surface cleaning. If the filter cotton dirty, the condensed water can't be evaporated away, resulting in air conditioning water level protection and cooling stopped , so usually if it is found dirty the filter cotton ,it should be replaced, generally once a year replacement. Use a screwdriver to open the air conditioner box cover and a refrigeration system cover plate, and the water pump press cover, take out the water pump and filter cotton, clean water pump, and replace the new filter .

Faults	Check Items	Reasons and Action
Press the remote controller, no sound is heard	 Whether the remote display is clear or not? Whether the remote receiving probe blocked? 	 Remote run out of battery, change batter. Regulate the location and direction of the remote receiving probe.
Air conditioner do not turn on/off under program running condition	 If time set correct if "program" light is on 	 Correct set current time and timing time, turn on program, make program light on
The fan did not stop when turn off the air conditioner	• Whether the water level indicator light is over 20% or not	• If there is much condensation water, air conditioner will continue dealing with water and fan will delay to stop till the water level is down to below 20%
Cold air out too small , temperature too low at cold air out	 Air in and air out channel area too small, dust filter net blocked Evaporator icing, or blocked by dust Fan mode set as low wind. Air in and out duct blocked or squashed 	 25 type air conditioner return air cross-sectional area more than 170cm², cold air out cross-sectional area more than130 cm²; 32 type return air cross-sectional area more than 220cm², cold air out cross-sectional area more than180cm² Clean the filter and evaporator dust and ice Set high wind mode. Air in out are satisfy above request

9. Normal Failure Analysis and Restore

No cooling occasionally	• Whether the ambient humidity large? water level at 80% ?	 Clean the dust filter net, the condenser and the evaporator Screw off bottom blockage to drain water
Cool for a while and then not cool, then cool again	 Whether set the temperature too high? Whether temperature sensor blown directly by cold wind ? 	 reduce temperature regulate the location of temperature probe
Toomuchwater formed atcold wind out	• Whether the cold wind blow to metal surface?	• Sticking heat insulation sponge to make cold air not contact metal directly
No cooling, running light flash every four seconds	• Temperature sensor damaged? Does it have good contact?	• Reinsert the sensor cable or replace it
No cooling, running light flash twice every four seconds	• Water level probe normal? Does it have good contact?	• Clean the probe and reinsert it
No cooling for a long time	• Whether 80% water level?	 Open main machine block screw at bottom to drain water. Check if pump, water pipe, sink is dirty or blocked, clean them Check water pump filter sponge, replace it.

10. Schematic Circuit Diagram



XP: Power JacketT:TransformerMC: CompressorMF: Fan MotorAP1:PCBAP2:Water Level SensorAP3:LCDAP4:Remote Receive BoxC2:Fan CapacitorM1:Water pumpM2:Water pumpC1: Compressor CapacitorRT: Frost melt SensorPE: GroundingPTC: Electrical Heater (for heating model)

Hangzhou Heshan Tech co.,Ltd

Address: NO.25, Futai Road, Zhongtai Industrial Area, Yuhang,

Hangzhou, Zhejiang, China

Post Code: 311121

Tel.:+86-571-88733750

Fax.:+86-571-88731670

Website: www.kincol.com/english

E-mail: zgwy@kincol.com