



Intelligent Elevator Air Conditioner

Installation Manual

For Model

TK(D)-35Y/Q (R410A)
TK(D)-35Y/Q1 (R410A)

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Hangzhou Heshan Tech Co.,Ltd

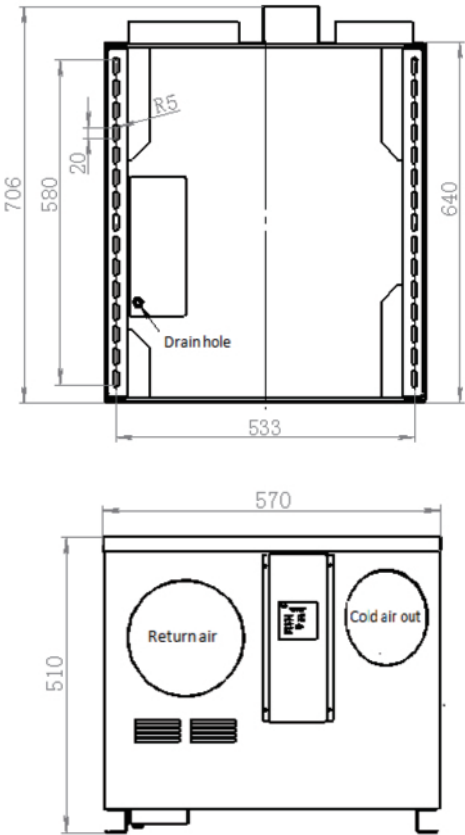
1.Main Technical Data:

Air Conditioner Model		TK-35Y/Q (R410A)	TKD-35Y/Q (R410A)
Rated Cooling Capacity (W)		3500	3500
Rated Heating Capacity (W)		/	2200
Rated Input Current (A)	Cooling	5.8	5.8
	Heating	/	10.3
Rated Cooling Input Power (W)	Cooling	1250	1250
	Heating	/	2270
Weight (KG)		57	57.5
Dimension (W×D×H) mm		640×570×510	
Power Supply		220V ~ 50Hz	
For Elevator (KG)		≤3000	
Insulated Voltage Grade		I	
Minimum Ventilation Area for Return Air (cm ²)		220	
Minimum Ventilation Area for Cool Air Out (cm ²)		180	

*Detail Model and Data Refer to Nameplate.











2.Bottom View and Face View Chart

TK(D)-35Y/Q(R410A)




3.Parts Name and Specification

(1) Standard Parts Name

 <p>Main Machine TK(D)–35Y/Q R410A</p>	 <p>Remote /1pc Model: KY1507 (8)</p>
 <p>Heat Insulation Sponge 0.5m² Thickness: 5mm\8mm For the Insulation of Air Tunnel between the Car top and Ceiling</p>	 <p>Cool Air Out Cover /1pc 395 × 60 × 135mm Connect Cool Air Duct and Car Top Rectangle Hole</p>
 <p>Heat Insulation Soft Cold Air Out Duct/ 1pc Φ 160 × 1500mm</p>	 <p>Heat Insulation Soft Return Air Duct/ 1pc Φ 200 × 2000mm</p>
 <p>Duct Tie /2pcs Φ 210–240mm Tight Cool air out duct</p>	 <p>Duct Tie /2pcs Φ 140–180mm Tight return air duct</p>
or	
 <p>Return Air Cover /1pc 395 × 60 × 175mm Connect Return Air Duct and Car Top Rectangle Opening</p>	 <p>Return Air Cap/ 1pc Φ 195 × 45mm Connect Return Air Duct and Car Top Circular Opening</p>

(2) Optional

	<p>Travelling cable specification:</p> <p>1.5mm² × 3core without steel core, for total length less than 70m cable; 1.5mm² × 3core with steel core, for 70 to 100m total length cable; 2.5mm² × 3core with steel core, for 100 to 160m total length cable;</p> <p>For elevator use more than 160 total length cable, need to consult our factory;</p> <p>*If elevator has free cable, no need to add cable for the air conditioner.</p>
Air Conditioner Cable	

4.Installing Notice

- 1.Moving and installation, the air conditioner should not be inverted, leaning angle should not be more than 30 degrees.
2. After the installation of air conditioner, should ensure that the top of the car have more than a 0.5m × 0.6m × 0.8m rectangular safety space
- 3.The installation of the air conditioner or the air conditioner bracket should not affect the normal operation of the elevator speed limiter.

- Air conditioners should be installed on the beam, should not be directly installed on the car top, otherwise vibration and noise produced.
- Make sure the top height is compliance with the requirements, when the heavy frame fully compressed buffer, air conditioner top will not hit the bottom component of shaft top.
- The air conditioner air out channel, cold air should not contact with the metal surface, so as to avoid condensation.
- When paste sponge, paste surface and sponge surface both are required to attach glue. After three minutes, the surface feels no sticky to finger, attach the sponge.
- If the shaft temperature is too high, the cooling effect of the air conditioner condenser will be decreased, and the shaft should be connected with the outside air, and the temperature in the well will not exceed 45 Celsius degree.
- Air conditioner has side filters and back filters, it should be blocked, otherwise cooling effect decreased.
- Air conditioner body should not lean, and should horizontal level, otherwise it may cause false action of water level control system.
- Air conditioner bottom has an emergency drainage hole, the installation of the main machine should pay attention to the convenient maintenance
- The upper cover of the air conditioner is strictly prohibited to be pressed and knocked.
- The power cord must be guaranteed to be well grounded.
- After the installation of air conditioner, adjust the elevator balance coefficient according to the actual situation

5.Installation Steps

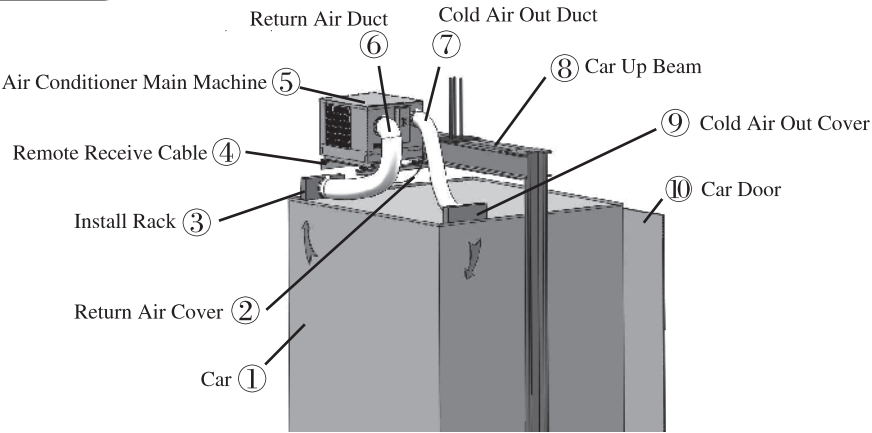
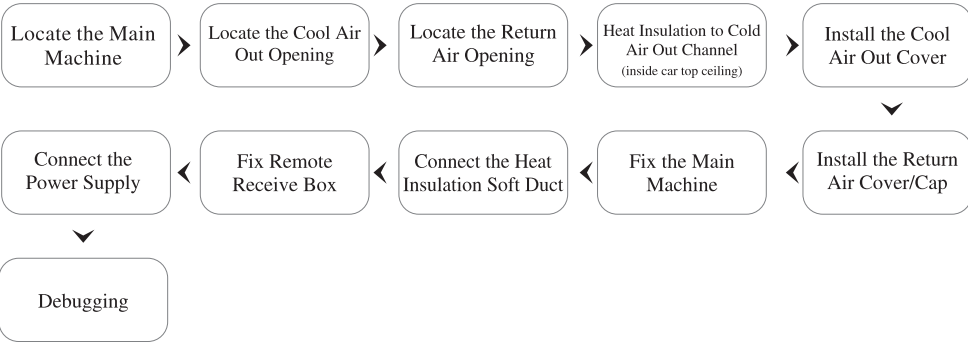


Chart 1 AC System

6.Detail Installation

(1) Fix Main Machine

① Main Machine Install Chart :

*** Fix to up beam by rack**

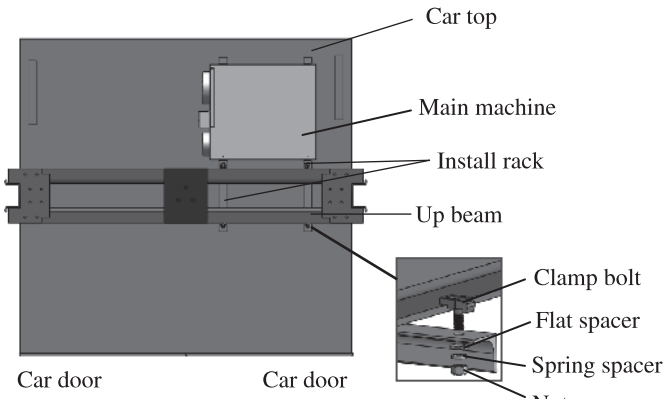


Chart 2.a

*** Fix directly on the up beam**

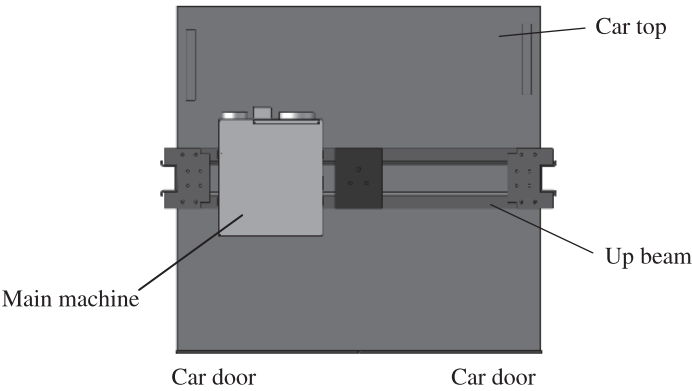


Chart 2.b

- I、 Install rack is normally connected to the beam with 4 clamp bolts., As shown in figure 2.a
- II、 The air conditioner is fixed to the install rack by 4 M8 bolts, damping rubber pad must be put between the air conditioner and up beam, as shown in chart 3. Air conditioner must maintain horizontal level and fixed.

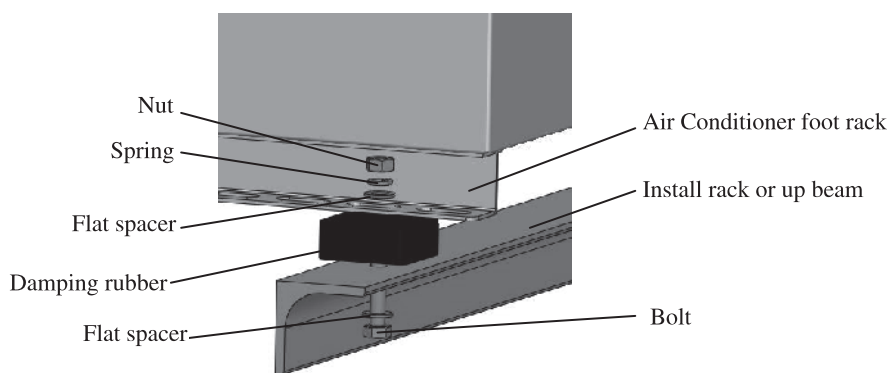


Chart 3

(2) Install Cold Air Out

①Install Chart

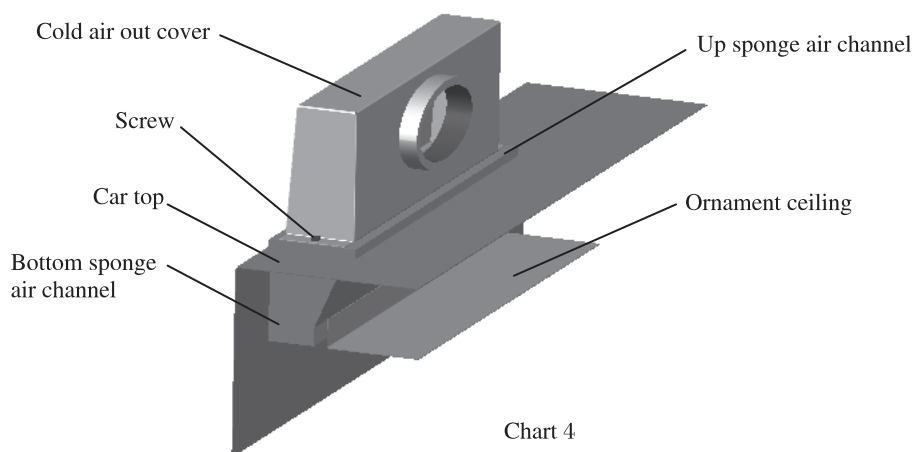
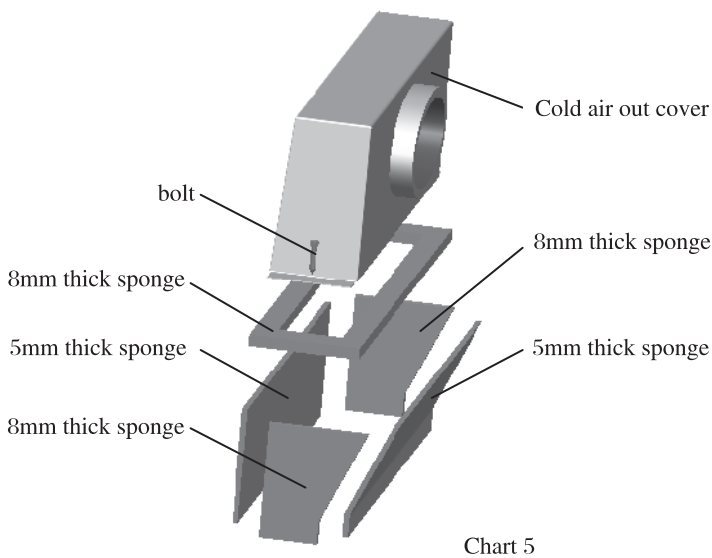


Chart 4

I、 Normally use one fan hole as the cold air out hole, if really need to open an air hole, hole area should be bigger than 180cm²。

II、 The cold air out hole, should let the cold air get into the car.

②The heat insulation in the cold air out channel
(in the interlayer between car top and car ornament ceiling)



- I、 Before attach sponge, clean cold air out hole surrounding area and air channel surface.
- II、 It should form a Car cylindrical air guide channel (chart 5),between car top and car ornament ceiling so the cold air can blow directly into the car through the channel, to avoid the cold wind to the upper ceiling and sucked back into the air conditioner, but also to prevent the car wall and ceiling surface condensation water forming.

(3) Return Air Installing

Return air cover or cap is connected to car top by bolt, as 6.a, 6.b show.

- Note:**
- ① If the car top has two fans, remove the fan, one fan hole used as the return air hole, the other as cold air out hole; if the car top has only one fan, remove the fan, use the fan hole as cold air out hole. It is required to open a hole (diameter 195mm) or rectangular hole as return air hole.
 - ② Return air hole should close to air conditioner, cross sectional area should be more than 220cm²,return air hole should connect to the inside of the elevator car, cross sectional area should be more than 300cm².

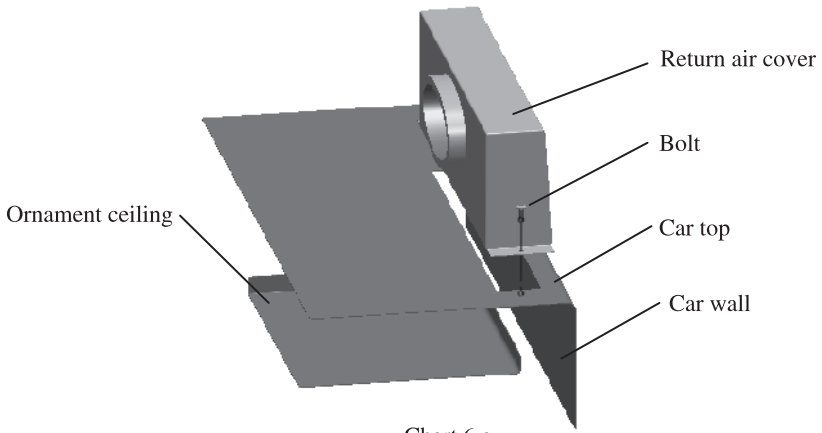


Chart 6.a

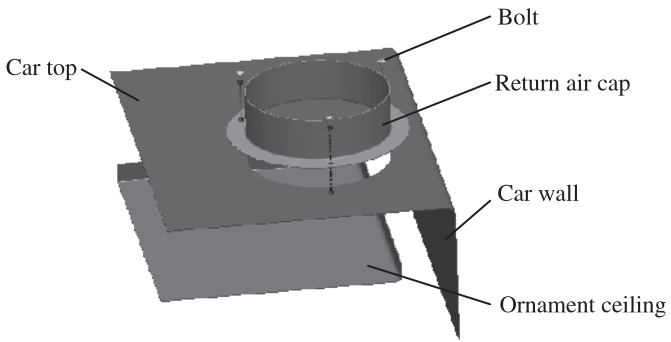


Chart 6.b

(4) Connect the Duct

Duct is used to connect the cold air out and return air, the length is standard length, when install, need to install according to actual required length. Wrap the duct to the air conditioner and air cover, tighten it by duct tie as chart 7 Show.

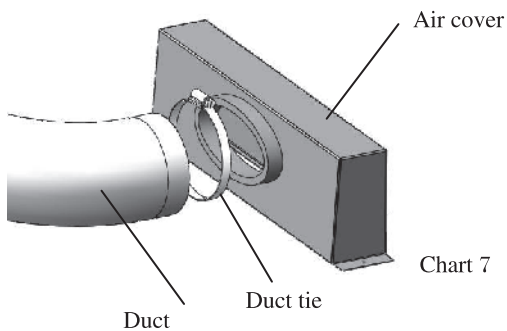
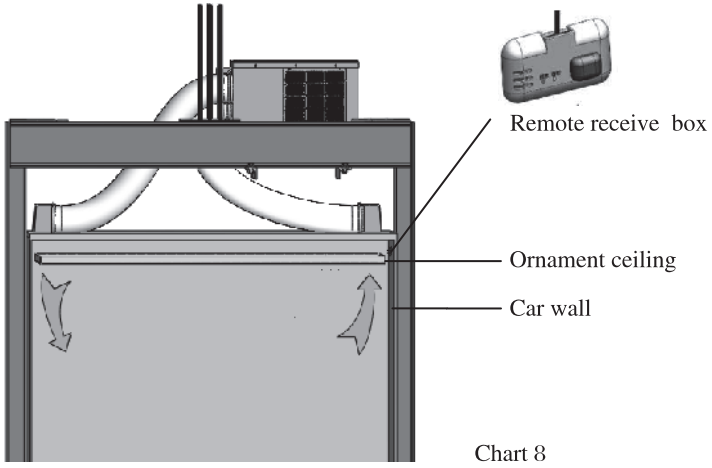


Chart 7

(5) Fix the Remote Receive Box



- ① Install the remote receive box in the slot between car walls and decorative ceiling as shown in chart 8, should avoid it below by cold air.
- ② Clean the car wall place that need to attach the receive box, tear off the double-sided adhesive protection paper and paste the receive box to car wall.

(6) Connect the Power Supply

The original travelling cable has spare wire, wire diameter is about 0.75mm², in order to increase the cable safety, need at least two pieces of cable combined to form wire cross-sectional area 1.5mm², in this case can be used for air conditioner.

Air conditioner cable must be three core cable, two power wires, one ground wire, wire cross-sectional area not less than 1.5 mm². Cable from shaft top to bottom pit, in order to eliminate cable distortion, should hang the cable for a period of time, the suspension part should not have a joint.

Note: the length and diameter of the air conditioner cable needed, refer to optional accessories traveling cable selection recommendations.

Air conditioner socket is 16A specification, the brown wire (live wire) connected to L, the blue wire (zero wire) with N, yellow-green wire (ground wire) with E, car top socket

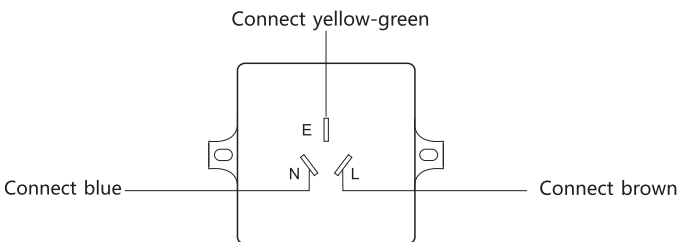


Chart 9

connection as shown in chart 9. The Machine room power supply side need to install a separate air switch for air conditioner, for only cooling type air conditioner with 10A air switch, cooling and heating type air conditioner with 15A air switch. Air switch must control live cable and is connected with the socket L end, machine room air wiring diagram as shown in chart 10.

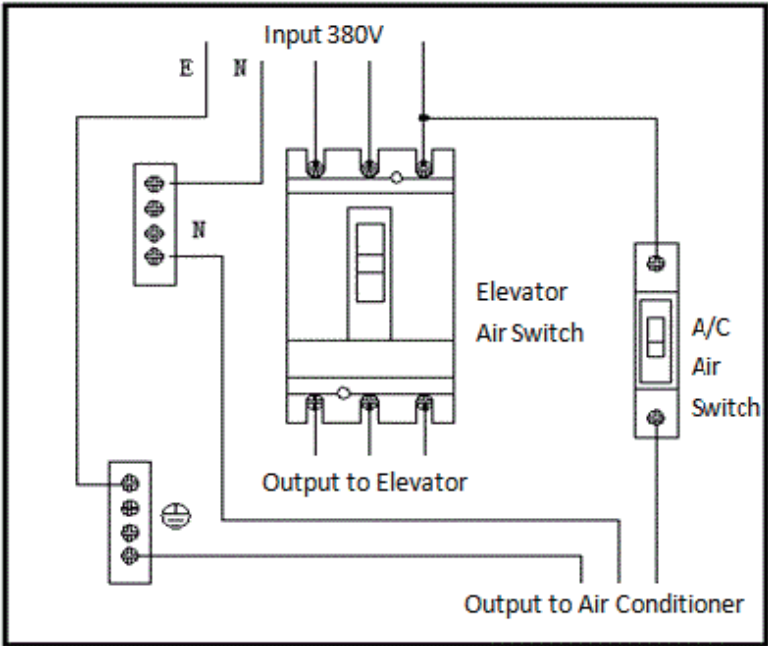


Chart 10

(7) Debugging

- ① After the air conditioner installed, the plug inserted into the socket, a “di” sound will be heard.
- ② Click on the "on / off" button on the air conditioner main machine panel, "running" light turn on, air conditioner enter automatic mode of the manual control mode.
- ③ Enter the car to check the air supply outlet of the air conditioner, the air return air is clear from block, whether the air flow is normal or not.
- ④ Use remote controller to check if the remote control receive box able to receive signal.
- ⑤ Set the benchmark time of the remote control, according to the user time required to set the program control auto turn on/off time (operating method, see the product manual remote control operation content)
- ⑥ Set operation mode and the temperature required on the remote controller, and then press the "program" key (remote controller show program on) car remote control receive box program light turn on, air conditioner into automatic program operation state.

7.Installing Tool Used

Open Hole Punch Tool		
		
The pistol electric drill	Twist drill (Φ4.2、Φ8.5、Φ10.5、Φ12.5)	Polisher
Cover Duct Install Tool		
		
Screwdriver Slot or Cross	Sockets (7mm/8mm)	Cutter
Attach Sponge Tool		
		
Brush	Glue	Steel Tape
Fix Air Conditioner Tool		
		
Wrench		



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