

HL Y70AA COMPRESSOR

TECHNICAL SPECIFICATION

(220-240V~50Hz)

CHANGHONG HUAYI COMPRESSOR CO., LTD.

1 . Compressor Type

Compressor model	HLY70AA
Rated voltage/frequency	220-240V~50Hz
Refrigerant	R600a
Application	Low back pressure (LBP)
Cooling method	Static Cooling
Control device	Capillary tube
Motor type	RSIR
Capacitor	/

2 . Performance Data

Displ.(cm ³)	Capacity(W) ≥95%	Inp.Pow.(W) ≤115%	Rated Current(A) ≤110%	COP(W/W) ≥95%
6.9	116	86	0.65	1.35

Testing condition:

Test conditions	LBP
	ASHRAE
Evaporating Temp.	-23.3℃
Ambient Temp.	32.2℃
Condensing Temp.	54.4℃
Suction Temp.	32.2℃
Subcooling Temp.	32.2℃

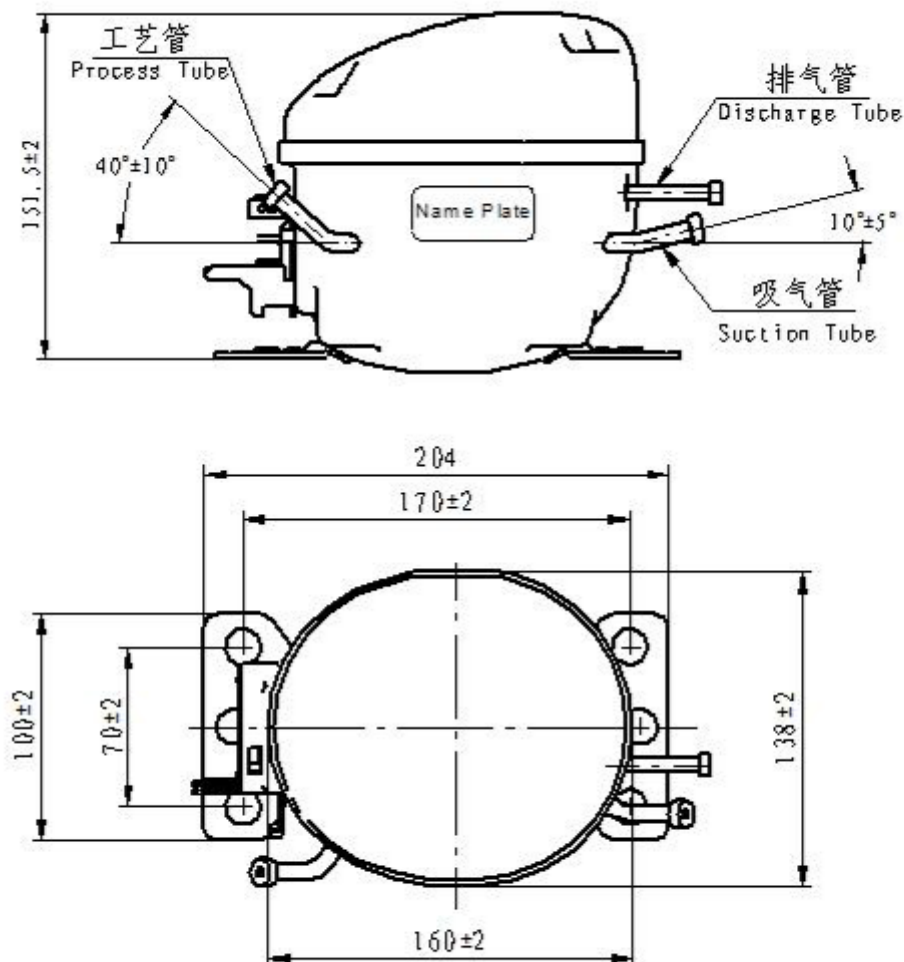
3 . Running Condition

Ambient temp.	10~43℃
Evaporating temp.	-35~-15℃
Voltage range	187~254V
Max. condensing temp.	65℃
Max. winding temp.	130℃
Max. shell temp.	95℃
Max. discharge temp.	125℃

4 . Compressor Mechanical Information

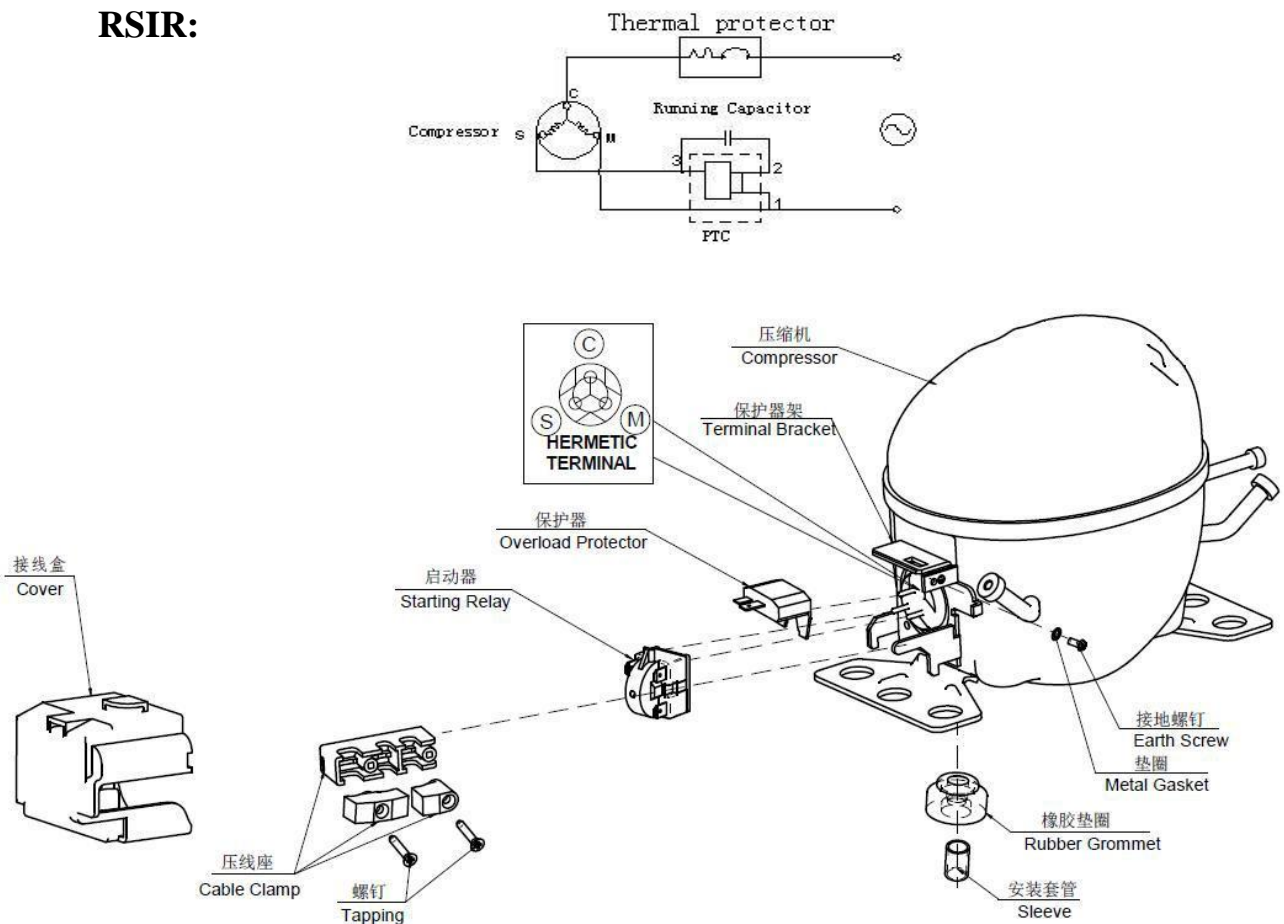
Oil type	Mineral
Oil charged	105±10ml
Diameter of suction tube (I.D.)	$\Phi 6.1 \begin{smallmatrix} 0.1 \\ 0 \end{smallmatrix}$ mm
Diameter of discharge tube(I.D.)	$\Phi 4.9 \begin{smallmatrix} 0.1 \\ 0 \end{smallmatrix}$ mm
Diameter of process tube (I.D.)	$\Phi 6.1 \begin{smallmatrix} 0.1 \\ 0 \end{smallmatrix}$ mm
Material of suction tube, process tube and discharge tube	copper tube
Compressor noise	≤40dB(A)
Vibration	≤0.7m/s ²

5 . Compressor Shape (connection on suction and process can not be inverted)



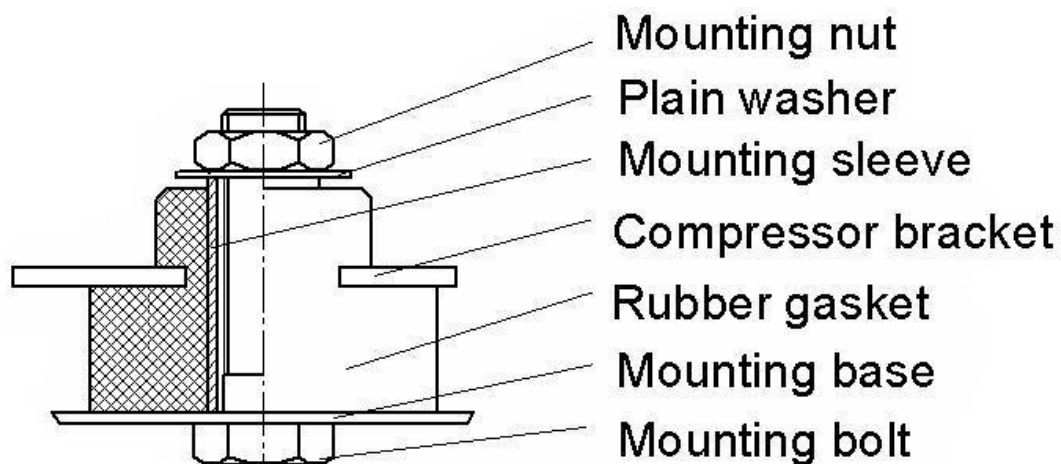
6 . Wiring Diagram

RSIR:



Note: Each of the starting relay、the thermal protector、the spring tap、the terminal cover and the screw assembly is separately provided by our company.

7 . Fixing Of Mounting Bracket and Cabinet Base



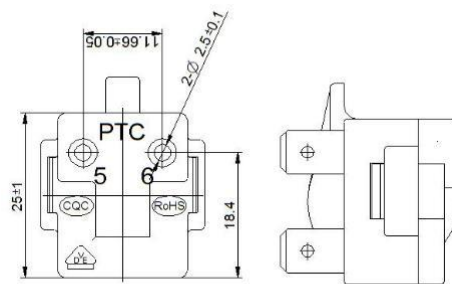
8. Assembly of starter and overload protector

8.1 Starting relay

Model: QPS2-A15MD3、QP2-15L

Starting relay	Type	QPS2-A15MD3	QP2-15L
	Trip Time	S	0.15~1.5
	Reset time	S	<80
	Max. working voltage	V	350
	Max current	A	8

Flammability: Anti-flammability

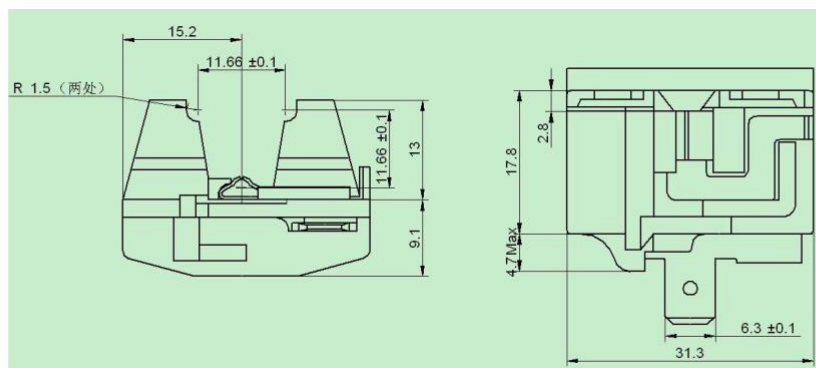


8.2 Thermal protector

Model: DRB16S61A2、BT35-135

Model			DRB16S61A2	BT35-135
Thermal Protector	Max.T.C Amp.(25℃)	A	3.5	
	Trip time	S	6~14	
	Reset time	S	20~150	
	Open temp.	±5℃	135	
	Close temp.	±9℃	61	
	Min. T.C. Amp.(70℃)	A	1.10~1.40	

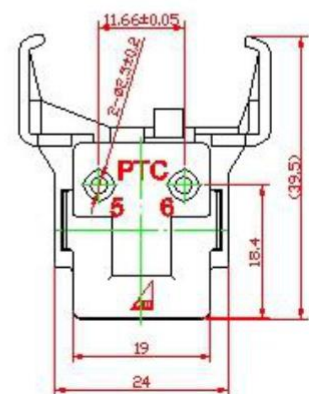
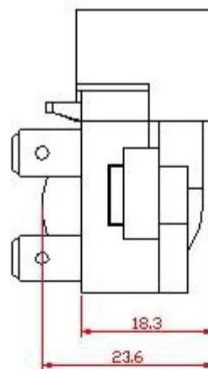
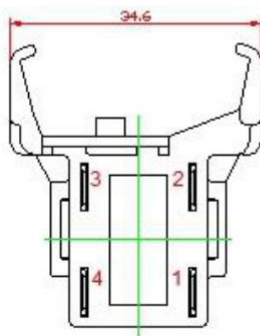
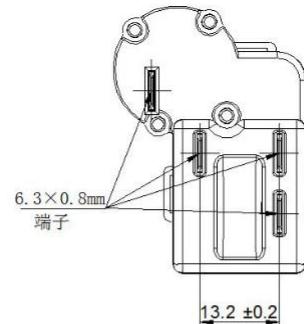
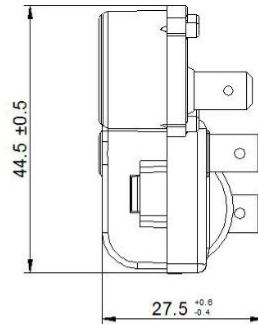
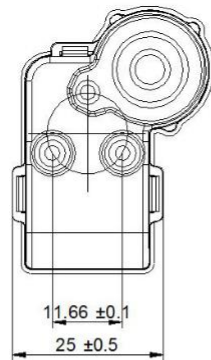
Flammability: Anti-flammability



8.3 Combined Starter and Overload protector

Model: ZHB38-135P15、QP2-15L/ BT35-135

Model		ZHB38-135P15	QP2-15L/ BT35-135
Max working voltage	V	350	350
Max current	A	8	8
Max.T.C Amp. (25℃)	A	3.8	3.5
Trip time	±5S	10	10
Reset time	S	20~150	20~150
Open temp.	±5℃	135	135
Close temp.	±9℃	57	61
Min. T.C. Amp (.70℃)	±15A	1.25	1.25
Dimension		6.3*0.8	6.3*0.8



9. Delivery State

No.	Name	Model	Quantity	CODE
1	Compressor	HLY70AA	1pcs	
2	MOUNTING ACCESSORIES			
2.1	Rubber Gasket		4 pcs	E.24.12.201
2.2	Plain Washer		4 pcs	CTE983-2
2.3	Mounting Sleeve		4 pcs	CTE943-2
2.4	Mounting Bolt	M6×30(8.8)	4 pcs	GB5781-86
2.5	Mounting Nut	M6	4 pcs	GB6170-86
3	ELECTRICAL ACCESSORIES			
3.1	Starting Relay	QPS2-A15MD3、QP2-15L	1 pcs	Optional
	Thermal Protector	DRB16S61A2、BT35-135	1 pcs	
3.2	Combined Starter and Overload protector	ZHB38-135P15 QP2-15L/ BT35-135	1pcs	
3.3	Running Capacitor	/	1pcs	/
3.4	Plastic cover		1 pcs	B.24.01.59XL
3.5	Screw Assembly		1 pcs	E.14.24.201

Notes: 1.All electrical parts and equipment assembly are supplied separately, not installed on the compressor.

2. All electrical parts and equipment assembly according to Delivery states are all provided by our company

10. Package、Storage and Transportation

Package type	unreusable
Quantity	105pcs/box
Transportation	By truck or train
Storage	Max. 2 layers
Volume m ³	0.93
Dimension: length×width×height (mm)	1120 × 820 × 1010
Main components	Wooden supporter、foam divider、plastic sheet、cardboard cover、wrapping
Movement	Keep the compressor in normal or vertical position (a short time before compressor installed in the refrigerator).
Trans. test requirement	No allowable compressor's damage and performance loss.

11. Technical Items

1. After pulling off rubber plugs from the compressor tubes, please connect the compressor to the refrigeration system within 5 minutes. It is advisable to take off the first plug from process tube. No dust or humidity in the air is permitted to enter the compressor.
2. Earth connection should be fixed permanently and reliably.
3. The compressor must be mounted horizontally without tilting an angle more than 5° .
4. Maximum operating ambient temperature is at 43°C .
5. When the compressor starts, balance pressure inside refrigeration system must be less than 0.3Mpa (Absolute).
6. The compressor must not be restarted unless at an interval of more than 5 minutes.
7. Please keep the compressor always vertically and never upset it during transportation while avoiding any vibration and shock.
8. Please store the compressor in a dry and ventilated place and keep it away from any humidity.
9. Please follow the transportation warning marks on the package for layer limitation. Do not roll the whole packages when loading or unloading.
10. Storage expiry is 6 months from the date of production. If it expired, please check the nitrogen pressure inside compressor and recharge it when it is necessary.