

# HLY14AA COMPRESSOR

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## TECHNICAL SPECIFICATION

(220-240V~50Hz)

CHANGHONG HUAYI COMPRESSOR CO., LTD.

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## 1. Compressor Type

|                         |                         |
|-------------------------|-------------------------|
| Compressor model        | HLY14AA                 |
| Rated voltage/frequency | 220-240V~50Hz           |
| Refrigerant             | R600a                   |
| Application             | Low back pressure (LBP) |
| Cooling method          | Static Cooling          |
| Control device          | Capillary tube          |
| Motor type              | RSCR (PTC)              |
| Capacitor               | 5μF                     |

## 2. Performance Data (220V ~ 50Hz)

| Displ.(cm <sup>3</sup> ) | Capacity(W)<br>≥95% | Inp.Pow.(W)<br>≤115% | Rated Current(A)<br>≤110% | COP (W/W)<br>≥95% |
|--------------------------|---------------------|----------------------|---------------------------|-------------------|
| 13.1                     | 235                 | 144.2                | 0.75                      | 1.63              |

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℃  |

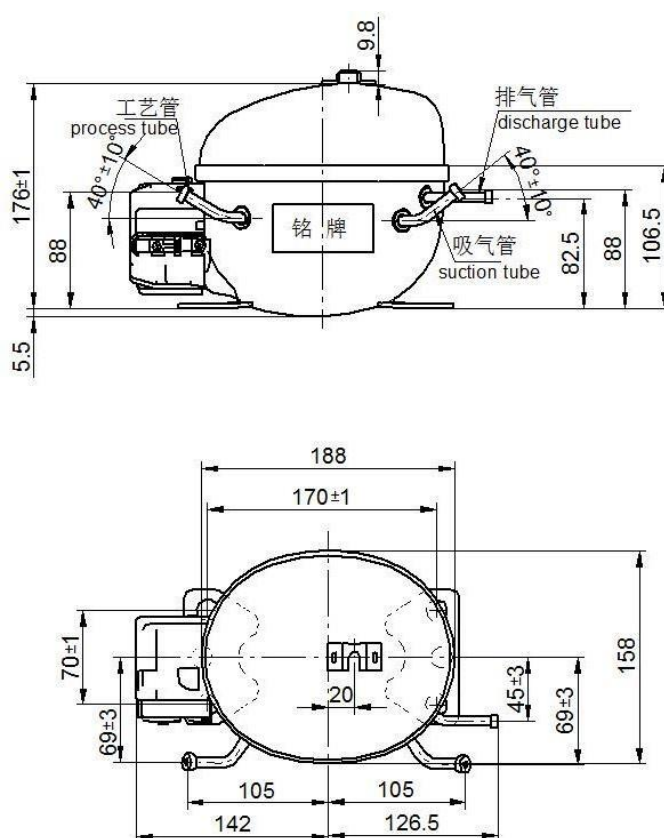
## 3. Running Condition

|                       |          |
|-----------------------|----------|
| 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.  | 110℃     |

#### 4. Compressor Mechanical Information

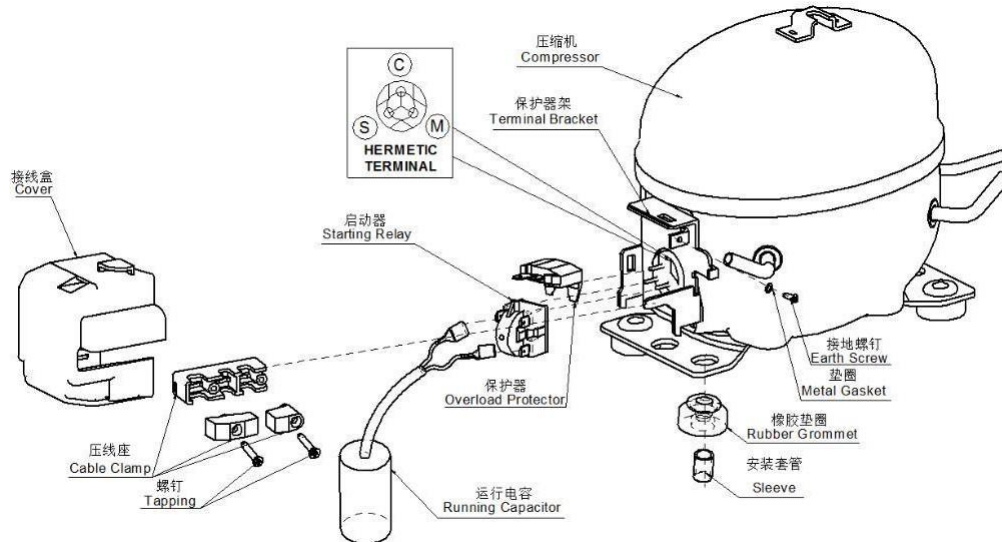
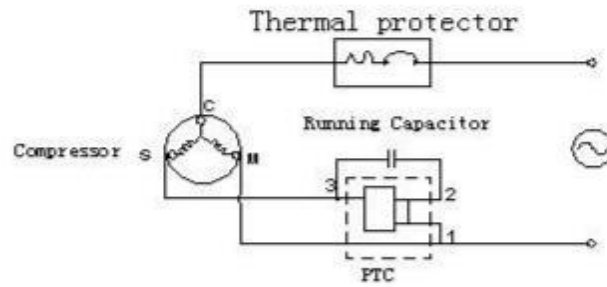
|   |                        |
|---|------------------------|
| Oil type  | Mineral                |
| Oil charged   | 180±10ml               |
| Diameter of suction tube (I.D.)                           | $\Phi 6.1^{+0.1}_0$ mm |
| Diameter of discharge tube(I.D.)                          | $\Phi 4.9^{+0.1}_0$ mm |
| Diameter of process tube (I.D.)                           | $\Phi 6.1^{+0.1}_0$ mm |
| Material of suction tube, process tube and discharge tube | copper tube            |
| Compressor noise  | ≤42dB(A)               |
| Vibration   | ≤0.8m/s <sup>2</sup>   |

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



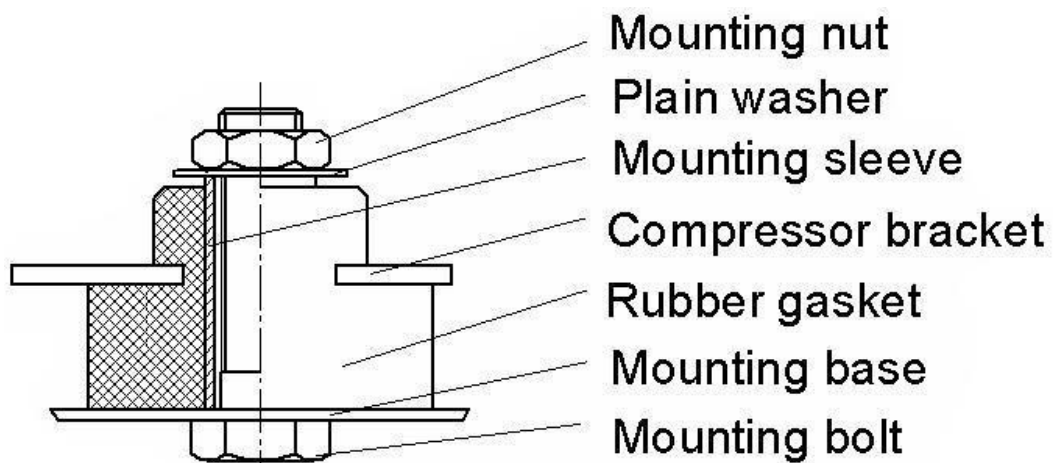
## 6 · Wiring Diagram

**RSCR:**



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. starter relay and Thermal protector

### 8.1 Starting relay

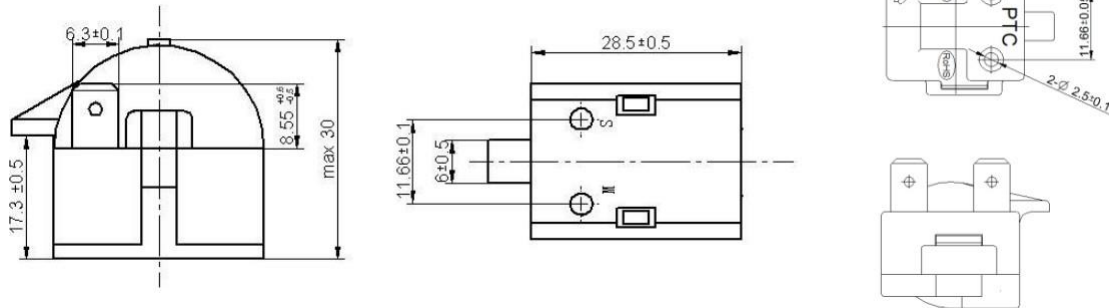
Model: QP2-12/B3 /QP2-15L

Type: Starting relay

max current: 8A

max working voltage: 350 V

Flammability: Anti-flammability

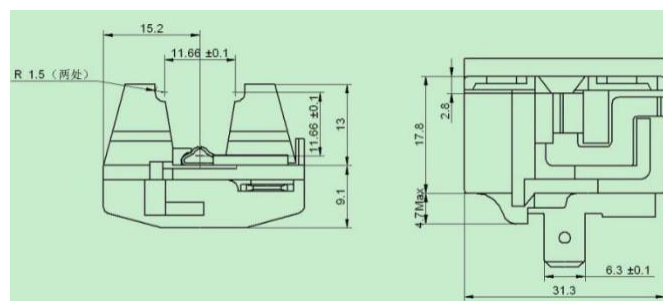


### 8.2 Thermal protector

Model: BT62-125, TB62-125

| model             |                      |      | BT62-125  | TB62-125  |
|-------------------|----------------------|------|-----------|-----------|
| Thermal Protector | Max.T.C Amp.(25°C)   | A    | 6.2       | 6.2       |
|                   | Trip time            | S    | 6~14      | 6~14      |
|                   | Reset time           | S    | 50~150    | 50~150    |
|                   | Open temp.           | ±5°C | 125       | 125       |
|                   | Close temp.          | ±9°C | 69        | 69        |
|                   | Min. T.C. Amp.(70°C) | A    | 1.50~1.89 | 1.50~1.89 |

Flammability: Anti-flammability



## 9. Delivery State

| No.  | Name                   | Model              | Quantity | CODE        |
|------|------------------------|--------------------|----------|-------------|
| 1.   | Compressor             | HLY14AA            | 1 pcs    |             |
| 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              | 4 pcs    | GB5781-86   |
| 2.5. | Mounting Nut           | M6                 | 4 pcs    | GB6170-86   |
| 3.   | ELECTRICAL ACCESSORIES |                    |          |             |
| 3.1. | Starting Relay         | QP2-12/B3, QP2-15L | 1 pcs    |             |
| 3.2. | Thermal Protector      | BT62-125, TB62-125 | 1 pcs    |             |
| 3.3. | Terminal Cover         | E. 24. 01. 59      | 1 pcs    |             |
| 3.4. | Screw Assembly         |                    | 1 pcs    | E.14.24.201 |
| 3.5. | Running capacitor      | 5 μ F              | 1 pcs    |             |

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                               | 72 pcs/box   |
| Transportation                         | By truck or train  |
| Storage                                | Max. 2 layers  |
| Volume m <sup>3</sup>                  | 0.88   |
| Dimension:<br>length×width×height (mm) | 1120×820×960   |
| 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  $5^{\circ}$ .
4. Maximum operating ambient temperature is at  $43^{\circ}\text{C}$ .
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.