

NE6170BZ COMPRESSOR

TECHNICAL SPECIFICATION



HUANGSHI DONPER COMPRESSOR CO., LTD.

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INDEX

	Page
1. Compressor Type.....	2
2. Performance Data.....	2
3. Running Condition.....	2
4. Compressor Mechanical Information.....	3
5. Compressor Shape.....	3
6. Wiring Diagram.....	4
7. Fixing of mounting bracket and cabinet base.....	4
8. Starting relay and overload protector.....	5
9. Capacitor.....	6
10. Delivery State.....	6
11. Package、Storage and Transportation.....	7
12. Technical Items.....	7

1. Compressor Type

Compressor model	NE6170BZ
Rated voltage/frequency	115V~60Hz
Refrigerant	R134a
Application	Middle/High back pressure (M/HBP)
Cooling method	Fan Cooling
Start torque	High starting torque (HST)
Control device	Capillary tube
Motor type	CSIR
Running capacitor	/
Starting capacitor	150μF

2. Performance Data

Displacement	Net Wt.	Oil Charge	Cooling Capacity(≥95%)								COP(≥95%)		
			ASHRAE							CECOMAF	ASHRAE	CECOMAF	
			-15	-10	-5	0	5	7.2	10	-25	-23.3	-25	
cm ³	kg	ml	w	w	w	w	w	w	w	w	w	w/w	w/w
9.0	11.5±0.4	400±10	330	452	545	735	858	980	1044	848	2.20	1.89	

Note: These datas come from the test without a PTC relay

Testing condition:

Test conditions	LBP	
	ASHRAE	CECOMAF
Evaporating Temp.	+7.2°C	+5°C
Ambient Temp.	+35.0°C	+32°C
Condensing Temp.	+54.4°C	+55°C
Suction Temp.	+35.0°C	+32°C
Subcooling Temp.	+46.1°C	+55°C

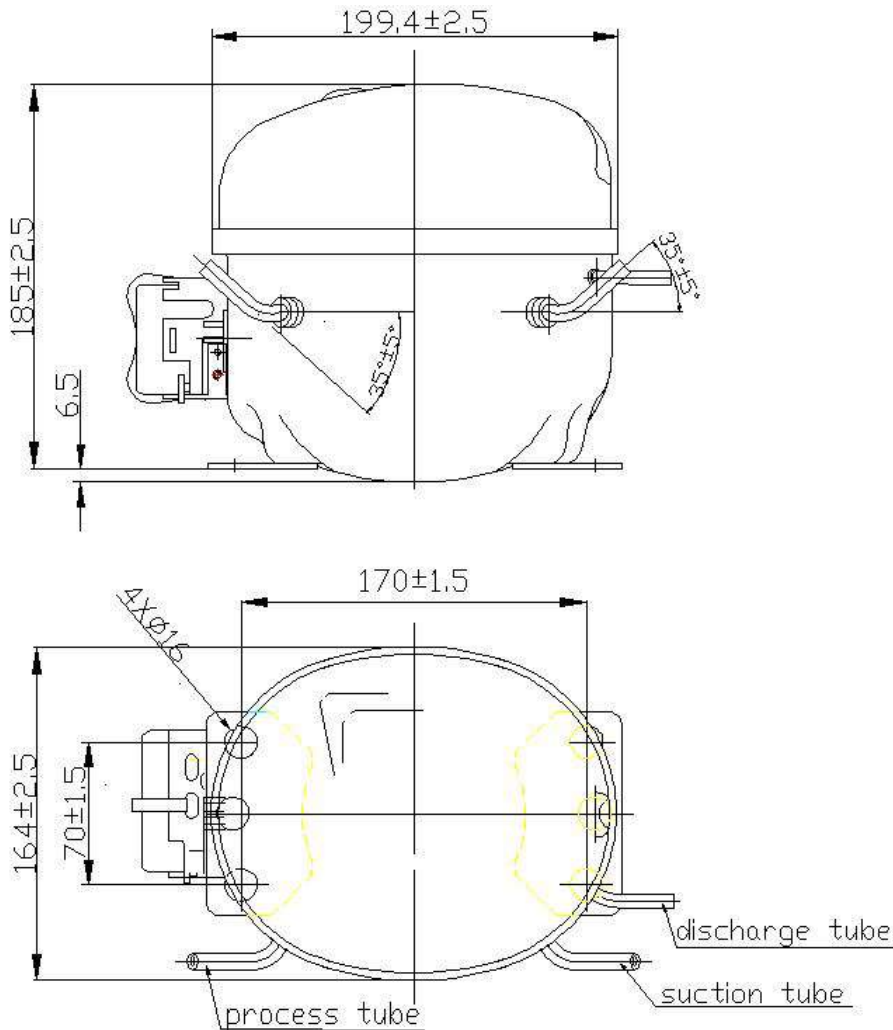
3. Running Condition

Ambient temp.	0~43°C
Evaporating temp.	-15~15°C
Voltage range	187~254V
Max. condensing temp.	65°C
Max. winding temp.	130°C
Max. shell temp.	95°C
Max. discharge temp.	120°C
Start voltage	187V [0.8/0.8MPa(abs)]
Shell min. resistance to pressure	35bar

4. Compressor Mechanical Information

Oil type	POE oil
Viscosity	30~34mm ² /s(40°C)
Oil charged	400±10ml
Diameter of suction tube (I.D.)	Φ 8.15 ± 0.1mm
Diameter of discharge tube(I.D.)	Φ 6.15 ± 0.1mm
Diameter of process tube (I.D.)	Φ 6.15 ± 0.1mm
Material of suction tube, process tube and discharge tube	Copper tube
Compressor noise	≤53dB(A)
Vibration	≤1.2m/s ²
Protecting gas	Dry com.air (Dew point-60°C)

5. Compressor Shape

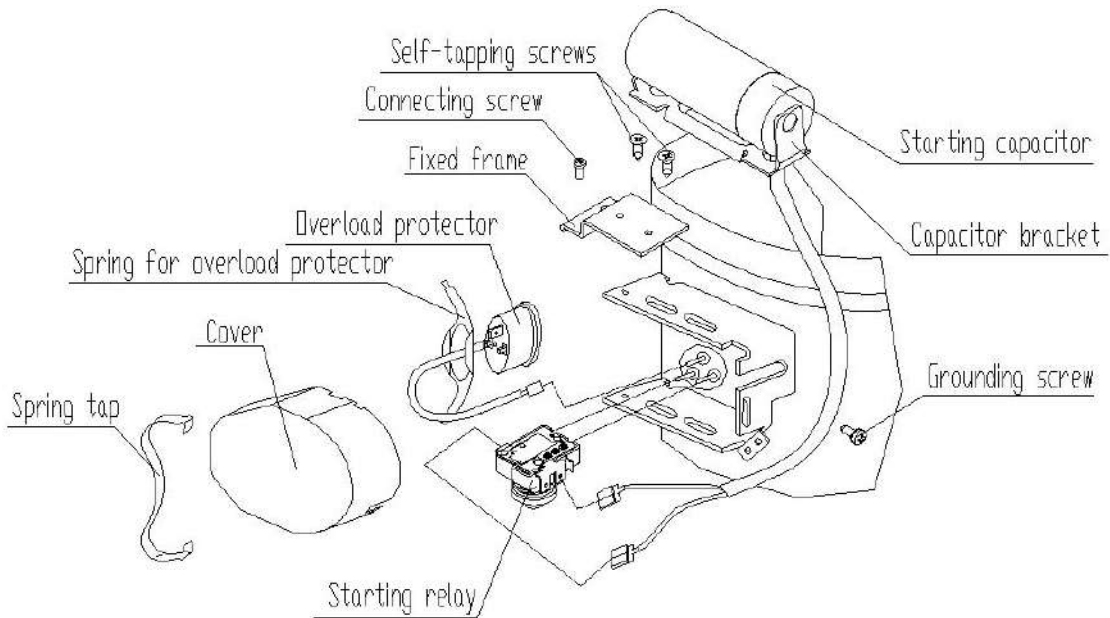
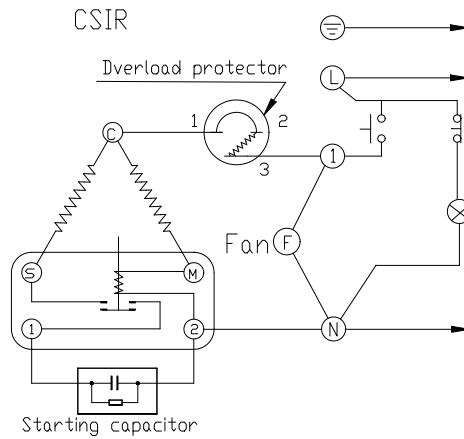


Caution:Suction tube and process tube can not be exchanged

Unmarked tolerance: ± 5mm

Unmarked Angle: ± 10°

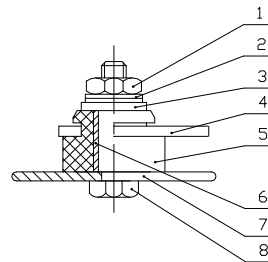
6. Wiring Diagram



Note: Each of the starting relay, the overload protector, the cover, the spring tap, the spring for overload protector, the capacitor, the fixed frame, the capacitor bracket and the grounding screw is separately provided by our company.

7. Fixing of mounting bracket and cabinet base

- 1、 Hexagon nut
- 2、 Spring washer
- 3、 Flat washer
- 4、 Compressor mounting bracket
- 5、 Rubber grommet
- 6、 Sleeve
- 7、 Cabinet base
- 8、 Screw



Note: Equipment assembly is all provided by our company. Above is just for reference, details can refer to delivery state.

8. Starting relay and overload protector

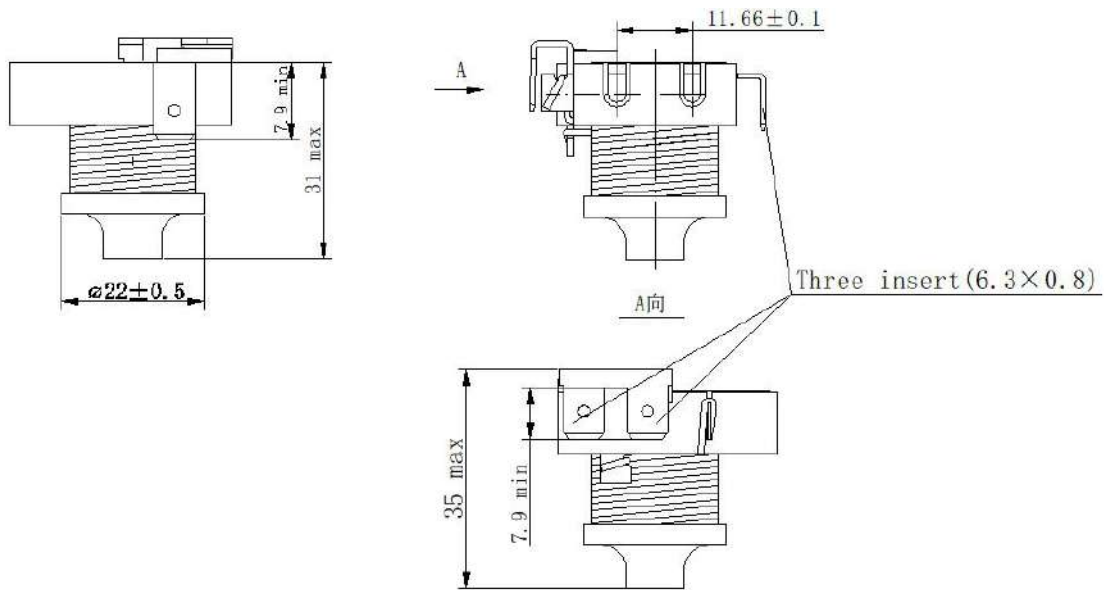
8.1 Starting relay

Model	JQZQL2-12.2	
Supplier	Hangzhou Star shuaier Electric Appliance Co.,Ltd	
Max.Close Current	A	12.2
Min Open Current	A	10.2

Assembly force ≤ 100N Disassembly force ≥ 25N

Flammability: Anti-flammability

QL2-12.2

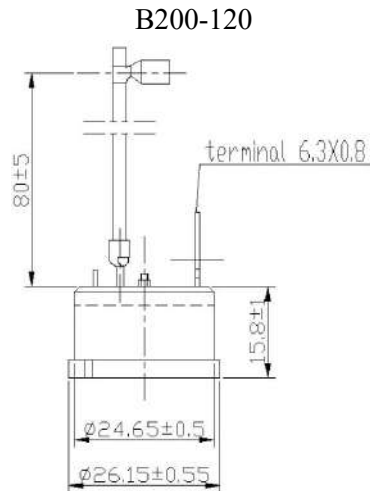


8.2 Overload protector

Model	DRB-B200-120	
Supplier	Hangzhou Star shuaier Electric Appliance Co.,Ltd	
Max.T.C Amp.(25°C)	A	20.0
Trip time	S	6~16
Reset time	S	10~80
Open temp.	±5°C	120
Close temp.	±9°C	61

Assembly force ≤ 80N Disassembly force ≥ 12.5N

Flammability: Anti-flammability



9. Capacitor

Model	µF	150
Rated voltage	V.AC	250
Supplier and model	Huangshan Zhenzhou Electronic Technology Co., Ltd. CD60	

10. Delivery State

No	Name	Model	Quantity	CODE
1	Compressor	NE6170BZ	1pcs	
2	Rubber plug	Φ10.3	1pcs	Installed on the compressor
		Φ8.2	2pcs	Installed on the compressor
3	Rubber grommet	A model	4pcs	
4	Starting relay	JQZQL2-12.2	1pcs	Hangzhou Star shuaier Electric Appliance Co.,Ltd.
5	Overload protector	DRB-B200-120	1pcs	Hangzhou Star shuaier Electric Appliance Co.,Ltd.
6	Starting capacitor	150µF	1pcs	Huangshan Zhenzhou Electronic Technology Co., Ltd
7	Cover	E1	1pcs	
8	Grounding screw	QET.1-24C	1pcs	
9	Sleeve	Φ10×17	4pcs	
10	Spring tap	QET-09B	1pcs	
11	Spring for overload protector	QET-07	1pcs	
12	Anchor bolt assembly	QET-44	4pcs	M6×30
13	Nut	QET-27	4pcs	
14	Fixed frame	Q34L-14A	1pcs	
15	Capacitor bracket	Q34L-13A	1pcs	
16	Connecting screw	M4×8	1pcs	
17	Self-tapping screws	ST4.2×13	2pcs	

Notes:1.Except for special remarks,all electrical parts and equipment assembly are supplied separately, not installed on the compressor.

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

11. Package、Storage and Transportation

Package type	unrecyclable
Quantity	80pcs/box
Transportation	By sea
Storage	Max. 2 layers
Cross Weight Kg	955±32
Net Weight Kg	920±32
Volume m ³	0.99
Dimension: length×width×height cm	109×89×102
Main components	Wooden supporter、upper wooden cover、foam divider、plastic sheet、cardboard cover、rain-proof cover、wrapping
Movement	Keep the compressor in normal or vertical position
Trans. test requirement	No allowable compressor’s damage and performance loss.

12. Technical Items

- (1)、Don’t take off the rubber plugs before using and installing compressor to prevent dust and moisture.
- (2)、Don’t turn down or incline the compressor during storage, transportation or installation and avoid vibration and shock.
- (3)、The compressor must be kept horizontally during running, the inclination angle must be less than 5°.
- (4)、A special polyester oil is charged in the R134a compressor and the charging volume has been optimized by DONPER. Don’t pour out or add any refrigerant oil.
- (5)、The interval of compressor operation must be more than 4 minutes in order to obtain a pressure balance in the systems.
- (6)、Don’t start or run in the case of vacuum or charge high voltage in the compressor. The compressor cannot be used to vacuumize the refrigeration system.
- (7)、The design of refrigeration system must be suitable to insure the oil could flow back to compressor.
- (8)、The maximum ambient temperature of the compressor operation is 43°C.When continuously operating under the maximum ambient temperature 43°C, the condensing pressure and the peak pressure should not exceed as showing in the following table.

Refrigerant	R134a
Max. condensing pressure	1.59MPa
Peak	2.0MPa

- (9)、Widen the evaporating Temp. range of the compressor should be approved by DONPER.
- (10)、Compressor should be stored in a dry place.
- (11)、Compressor accessories (eg: starting relay, overload protector etc.) are put in the accessories box instead of fixing on the compressor.
- (12)、The stocking period must be less than 6 months after the date of production. If longer, you have to check whether the filled gas is sufficient. Replenishment must be done if necessary.
- (13)、It's necessary to keep the compressor without rubber plug as short time as possible (max time 10 min).
- (14)、R134a systems require a filter with drying agent which suitable for R134a refrigerant
- (15)、The vacuum pump and the charging system must only be dedicated to R134a.
- (16)、The refrigeration system should minimize the content of chlorine and moisture, and must be free of paraffin and silicon oil.
- (17)、The organic substance non-compatible with R134a cannot be used in the refrigeration system.