

**NE6188BZ COMPRESSOR**

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**TECHNICAL SPECIFICATION**



HUANGSHI DONGBEI ELECTRICAL APPLIANCE CO., LTD.

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## 1. Compressor Type

Compressor model	NE6188BZ
Rated voltage/frequency	110-120V~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
Starting capacitor	100 $\mu$ F

## 2. Performance Data

Displacement	Net Wt.	Oil Charge	Cooling Capacity( $\geq$ 95%) W							COP( $\geq$ 95%) W/W		
			ASHRAE							CECO MAF	ASHRAE	CECOMAF
			-15	-10	-5	0	5	7.2	10	5	7.2	5
cm <sup>3</sup>	kg	ml	w	w	w	w	w	w	w	w/w	w/w	
12.1	10.8 $\pm$ 0.4	370 $\pm$ 10	429	603	771	963	1200	1280	1450	1049	1.83	1.62

Testing condition:

Test conditions	HBP	
	ASHRAE	CECOMAF
Evaporating Temp.	+7.2 $^{\circ}$ C	+5 $^{\circ}$ C
Ambient Temp.	+35.0 $^{\circ}$ C	+32 $^{\circ}$ C
Condensing Temp.	+54.4 $^{\circ}$ C	+55 $^{\circ}$ C
Suction Temp.	+35.0 $^{\circ}$ C	+32 $^{\circ}$ C
Subcooling Temp.	+46.1 $^{\circ}$ C	+55 $^{\circ}$ C

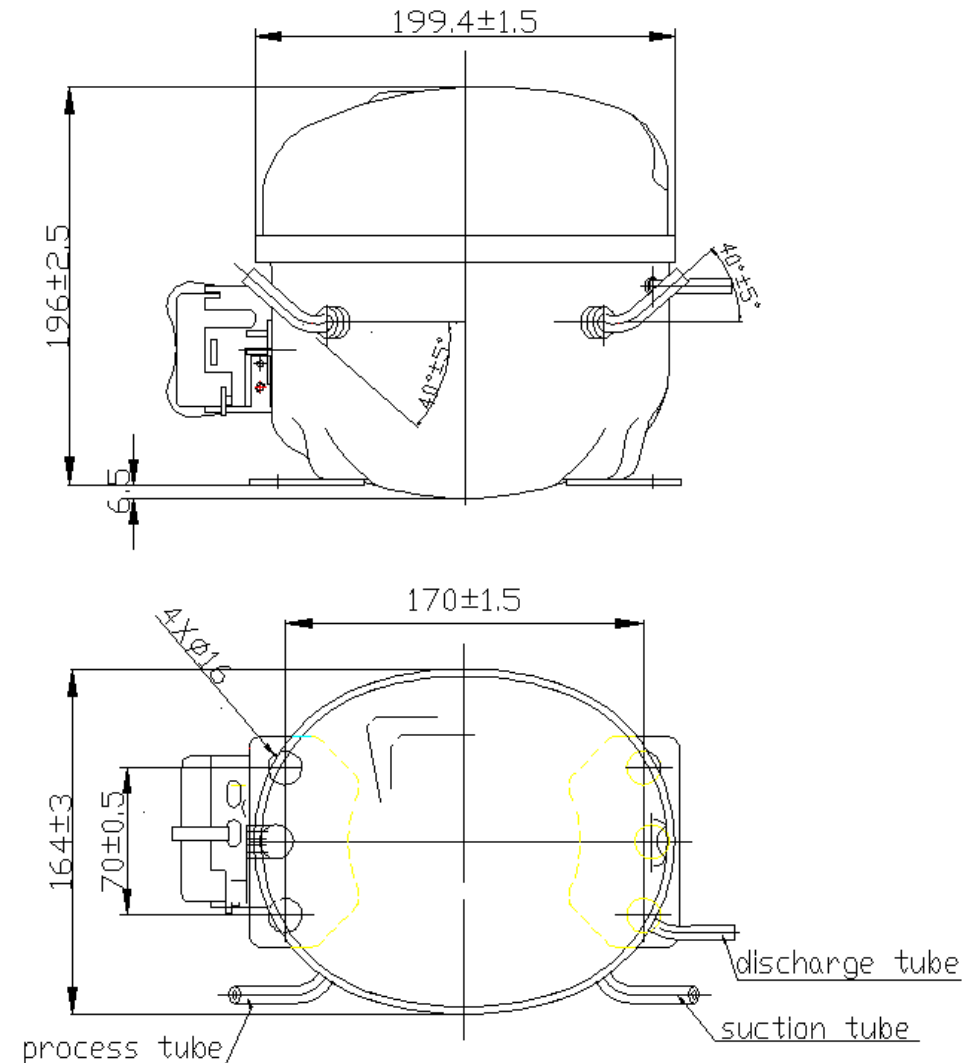
## 3. Running Condition

Ambient temp.	0~43 $^{\circ}$ C
Evaporating temp.	-15~15 $^{\circ}$ C
Voltage range	95~127V
Max. condensing temp.	65 $^{\circ}$ C
Max. winding temp.	130 $^{\circ}$ C
Max. shell temp.	110 $^{\circ}$ C
Max. discharge temp.	130 $^{\circ}$ C
Start voltage	95V [0.5/0.5MPa(abs)]
Shell min. resistance to pressure	35bar

#### 4. Compressor Mechanical Information

Oil type	POE
Viscosity	28.8~35.2 mm <sup>2</sup> /s(40°C)
Oil charged	370±10ml
Min. oil volume in compressor	320ml
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	56dB(A)
Vibration	1.8m/s <sup>2</sup>
Protecting gas	Dry com.air (Dew point-60°C)

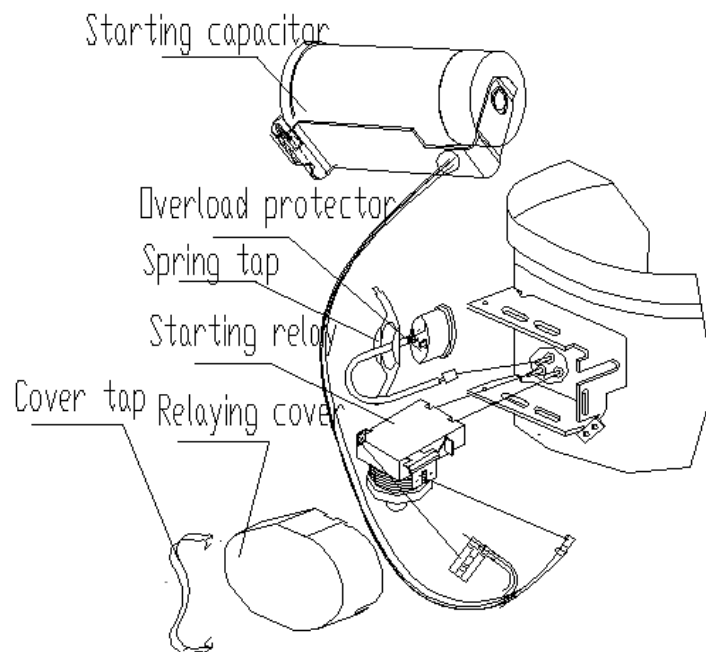
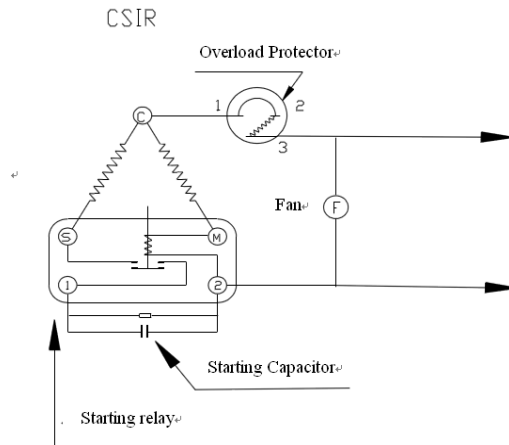
#### 5. Compressor Shape



Caution:Suction tube and process tube can not be exchanged

Unmarked tolerance: ±5mm

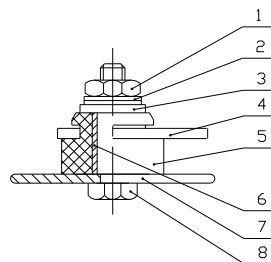
## 6. Wiring Diagram



Note: Each of the starting relay, the overload protector, the spring tap and the relaying cover 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



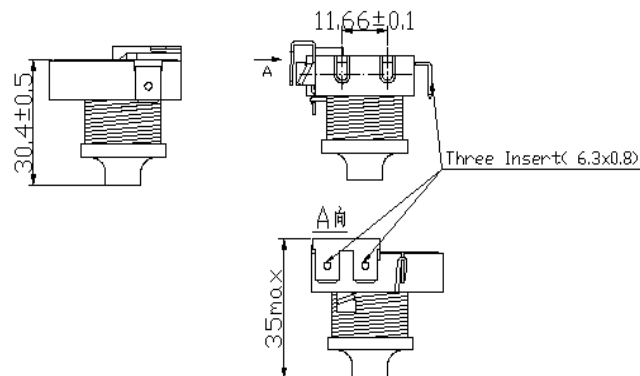
Note: Equipment assembly is all provided by our company. Above is just for reference, details can refer to delivery state.

## 8. Starting relay and overload protector

### 8.1. Starting relay

Compressor model		NE6188BZ
Prote- ctor	Type	QL2-14.9
	Max. Close Current A	14.9
	Min Open Currente S	12.5
	Supplier	Hangzhou Star shuaier Electric Appliance Co.,Ltd

Flammability: Anti-flammability



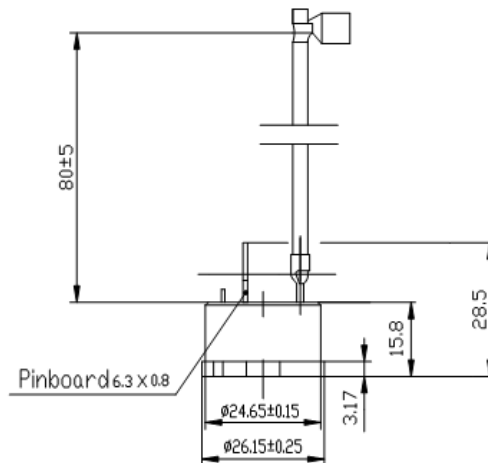
### 8.2. Overload protector

Compressor model		NE6188BZ
Prote- ctor	Type	B210-120
	Max.T.C Amp.(25°C) A	210
	Trip time S	9~16
	Reset time S	10~80
	Open temp. ±5°C	120
	Close temp. ±9°C	61

Supplier: Guangzhou Senbao Electrical Applicances Co.,Ltd

First assembly force ≤ 80N Sixth disassembly force ≥ 12.5N

Flammability: Anti-flammability



## 9. Capacitor

Compressor model		NE6188BZ
Starting Capacitor	Model $\mu\text{F}$	100
	Rated voltage V.AC	330
	Supplier and model	FUXIN JIEKEDA ELECTRONIC CO.LTD CD60 Huangshan Zhenzhou Electronic Technology Co., Ltd. CD60

## 10. Delivery State

No.	Name	Model	Quantity	CODE
1	Compressor	NE6188BZ	1pcs	
2	Rubber plug	$\Phi 10.3$	1pcs	
		$\Phi 8.2$	2pcs	
3	Rubber grommet	A model	4pcs	
4	Starting relay	QL2-14.9	1pcs	Hangzhou Star shuaier Electric Appliance Co.,Ltd.
5	Overload protector	B210-120	1pcs	Guangzhou Senbao Electrical Applicances Co.,Ltd
6	Starting capacitor	100 $\mu\text{F}$	1pcs	Huangshan Zhenzhou Electronic Technology Co., Ltd
				FUXIN JIEKEDA ELECTRONIC CO.LTD
7	Relaying cover	E1	1pcs	
8	Earth bolt	QET.1-25	1pcs	
9	Sleeve	$\Phi 10 \times 17$	4pcs	
10	Cover tap	QET-09B	1pcs	
11	Spring tap	QET-07	1pcs	
12	Anchor bolt assembly	M6*30	4pcs	
13	Nut	M6	4pcs	

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 state” are all provided by our company.

## 11. Package、Storage and Transportation

Package type	unrecyclable
Quantity	80 pcs/box
Transportation	By sea
Storage	Max. 2 layers
Cross Weight            Kg	952 ± 32
Net Weight                Kg	912 ± 32
Volume                    m <sup>3</sup>	1.05
Dimension: length×width×height (cm)	109 × 89 × 108
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℃.When continuously operating under the maximum ambient temperature 43℃, 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 with 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.