

NE5165CZ COMPRESSOR

TECHNICAL SPECIFICATION



DONPER

HUANGSHI DONPER ELECTRICAL APPLIANCE CO., LTD.

2009. 02

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.....	5
8、 Starting relay.....	5
9、 Overload protector.....	6
10、 Package、 Storage and Transportation.....	7
11、 Technical Items.....	7~8

1. Compressor Type

Compressor model	NE5165CZ
Rated voltage/frequency	220V~50Hz
Refrigerant	R134a
Application	High back pressure (H. B. P)
Cooling method	Fan Cooling
Start torque	Low starting torque (LST)
Control device	Capillary tube
Motor type	CSIR

2. Performance Date

Displacement	Power	Net Wt.	Oil Charge	Cooling Capacity×95%									COP×93%	
				ASHRAE								CECOMAF	ASHRAE	CECOMAF
				-15	-10	-5	0	5	7.2	10	5	7.2	5	
cm ³	HP	kg	ml	w	w	w	w	w	w	w	W	W/w	W/w	
6.9	1/4	9.0	370	308	390	470	610	748	850	900	697	2.30	2.0	

Testing condition:

Test conditions	H.B.P	
	ASHRAE	CECOMAF
Evaporating Temp.	7.2	5
Ambient Temp.	35.0	32
Condensing Temp.	54.4	55
Suction Temp.	35.0	32
Subcooling Temp.	46.1	55

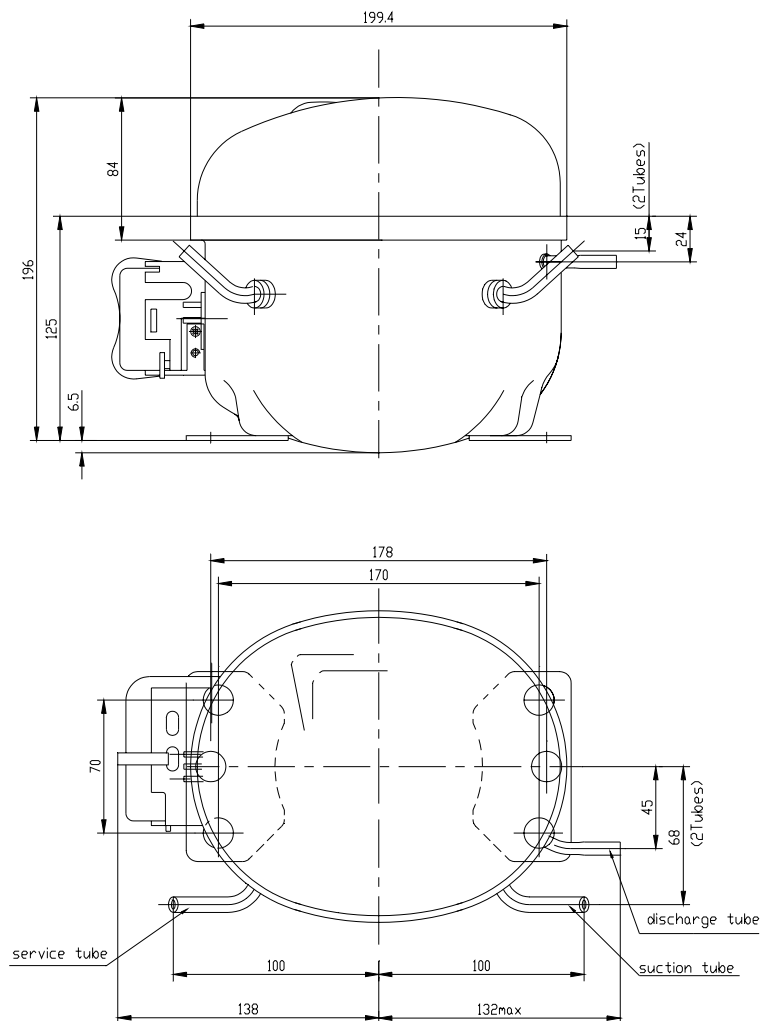
3. Running Condition

Ambient temp.	0~43℃
Evaporating temp.	-15~10℃
Voltage range	187~242V
Max. condensing temp.	65℃
Max. winding temp.	130℃
Max. shell temp.	95℃
Max. discharge temp.	145℃
Shell min. resistance to pressure	35bar

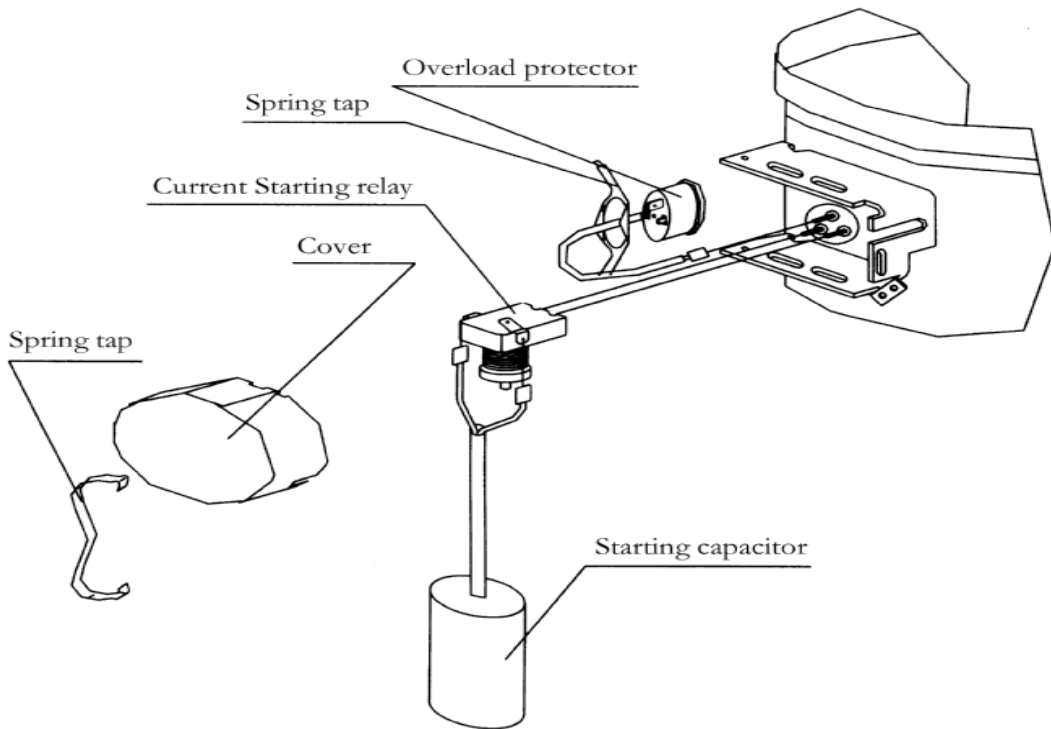
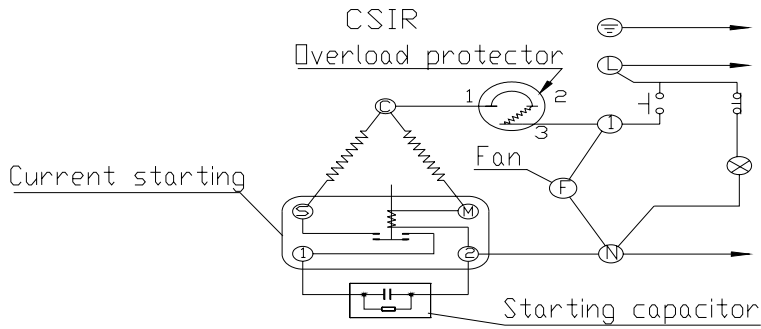
4. Compressor Mechanical Information

Oil type	POE ester
Oil charged	375ml
Min. oil volume in compressor	365ml
Diameter of suction tube (I.D.)	Φ8.1mm
Diameter of discharge tube(I.D.)	Φ6.1mm
Diameter of process tube (I.D.)	Φ8.1mm
Material of suction tube, process tube and discharge tube	copper tube
Protecting gas	Dry com.air 0.8~1.1bar (Dew point-60°C)

5. Compressor Shape



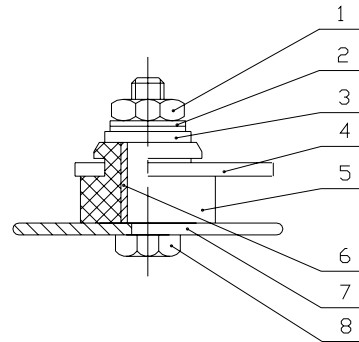
6. Wiring Diagram



Note: Each of the starting relay (QL₂-8.1), the overload protector (B94-105), the spring tap, the starting capacitor, the cover and the earth bolt 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: Four grommets and four sleeves are all provided by our company.

8.Starting relay

Model: NE5165CZ

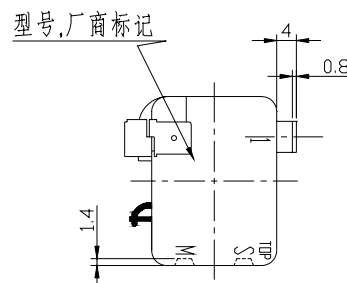
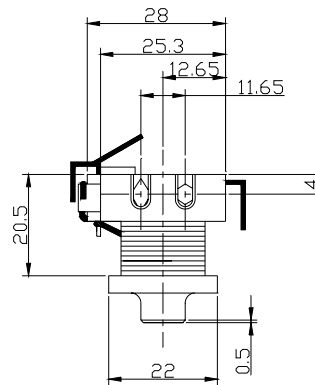
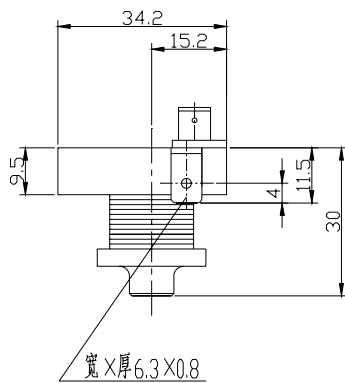
Type:Starting relay

max current: 8.1A

Resistance of Starting relay(25C): 6.8A (for each supplier)

Starting relay Supplier: Bixi Radio Factory Fushan Tongbao CO., LTD

Flammability: Anti-flammability

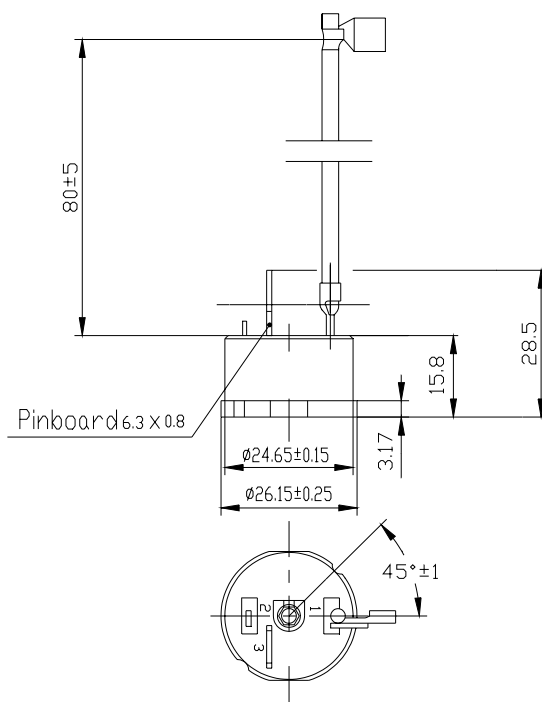


9. Overload protector

Compressor model		NE5165CZ
Prote-ctor	Type	B94-105
	Max.T.C Amp.(25°C) A	9.4
	Trip time	S
	Reset time	S
	Open temp.	±5°C
	Close temp.	±9°C
	Min. T.C. Amp.(90°C) A	2.15

Assembly force $\leq 75\text{N}$ Disassembly force $\geq 9\text{N}$

Flammability: Anti-flammability



10. Package, Storage and Transportation

Package type	unreusable
Quantity	80pcs/box
Transportation	By truck or train
Storage	Max. 2 layers
Cross Weight	854 Kg
Net Weight	824 Kg
Volume	1.03 m ³
Dimension: length × width × height (cm)	109 × 89 × 106
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 (a short time before compressor installed in the refrigerator).
Trans. test requirement	No allowable compressor's damage and performance loss.

11. 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 whith 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 chlorion and moisture, and must be free of paraffin and silicon oil.
- (17)、 The organic substance non-compatable with R134a cannot be used in the refrigeration system.