
AG130XZ1

COMPRESSOR

TECHNICAL SPECIFICATION



DONPER

HUANGSHI DONGBEI ELECTRICAL APPLIANCE 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、 Rubber grommet.....	4
7、 Wiring Diagram.....	4
8、 Starting and Protector.....	5
9、 Delivery State.....	5
10、 Package、 Storage and Transportation.....	6
11、 Installation Notes.....	6
12、 Technical Items.....	6

1. Compressor Type

Compressor model	AG130XZ1
Rated voltage/frequency	110-127V~60Hz
Refrigerant	R134a
Application	Low back pressure (LBP)
Cooling method	Static
Start torque	Low starting torque (LST)
Control device	Capillary tube
Motor type	RSIR
Running capacitor	/
Nitrogen Charge	0.04~0.06 MPa

2. Performance Data

Displacement	Net Wt.	Oil Charge	Cooling Capacity(≥95%)								COP(≥95%)		Frequency	
			ASHRAE								CECOMAF	ASHRAE		CECOMAF
			-35	-30	-25	-23.3	-20	-15	-10	-25	-23.3	-25		
cm ³	kg	ml	w	w	w	w	w	w	w	w	w/w	w/w	Hz	
4.3	5.4± 0.5	140± 10	87	105	119	130	139	152	187	93	1.32	1.04	60	

These datas come from the test with a PTC relay.

Testing condition:

Test conditions	LBP	
	ASHRAE	CECOMAF
Evaporating Temp.	-23.3°C	-25°C
Ambient Temp.	+32.2°C	+32°C
Condensing Temp.	+54.4°C	+55°C
Suction Temp.	+32.2°C	+32°C
Subcooling Temp.	+32.2°C	+55°C

3. Running Condition

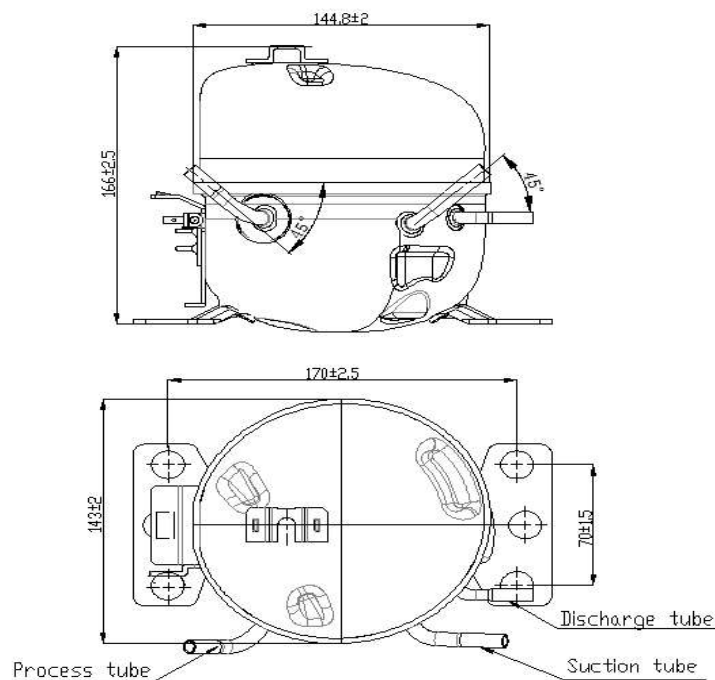
Ambient temp.	0~43°C
Evaporating temp.	-35~-15°C
Voltage range	100~127V
Max. condensing temp.	65°C
Max. winding temp.	130°C
Max. shell temp.	95°C
Max. discharge temp.	120°C

Start voltage	97V [0.5/0.5 MPa (abs)]
Shell min. resistance to pressure	3.5Mpa
Locked Rotor Amperage - LRA	15 A
Main resistance	6.3±15% Ω
Auxiliary resistance	8.6±15% Ω
Full load Amperage -F.L.A	1.1 A

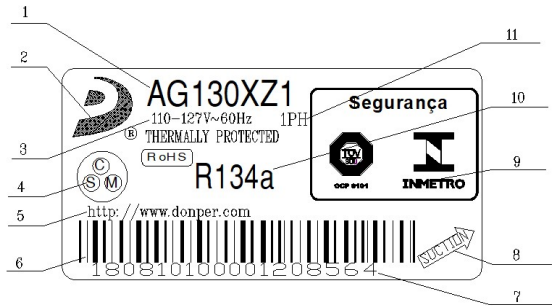
4. Compressor Mechanical Information

Oil type	Ester oil
Viscosity	9.8~10.2mm ² /S (40°C)
Oil charged	140±10ml
Min. oil volume in compressor	110ml
Diameter of suction tube (I.D.)	Φ6.5±0.1mm
Diameter of discharge tube(I.D.)	Φ4.9±0.1mm
Diameter of process tube (I.D.)	Φ6.5±0.1mm
Material of suction tube, process tube and discharge tube	copper tube
Compressor noise	43dB(A)
Vibration	0.9m/s ²
Moisture Especification max	≤100mg

5. Compressor Shape



Note: Suction tube and process tube can be changed



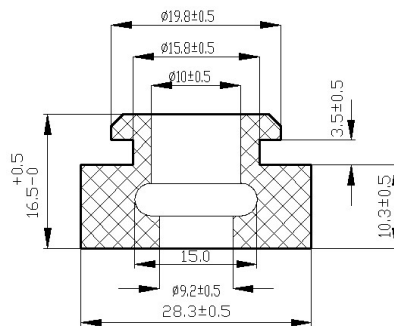
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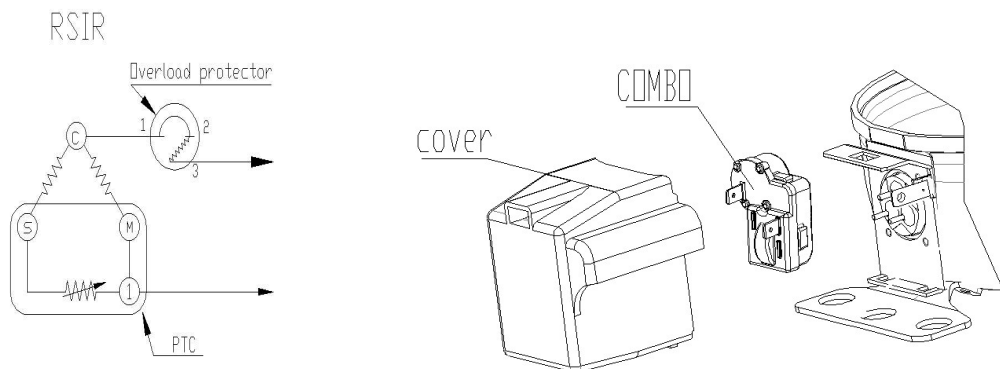
Model code
 Produce serial number
 Produce base
 Produce month
 Produce year

NO	Content	NO	Content
1	Compressor Model	2	Registered trade mark
3	Rated voltage/frequency	4	Wiring mark
5	Company website	6	Bar code
7	Bar code of number	8	Suction sign
9	Certification mark	10	Refrigerating fluid
11	Single-phase power		

6. Rubber grommet



7. Wiring Diagram

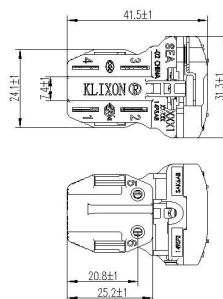
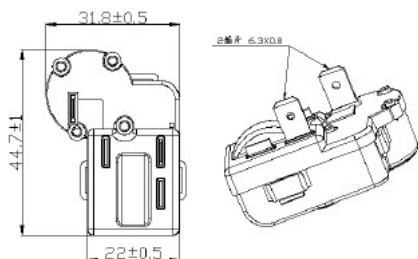


8. Starter and protector

Compressor model		AG130XZ1	
Starting relay	Model	ZHB73-135P4.7	8EA14C1-02
	Supplier	Tianyin	Sensata
	Resistance of Starting relay Ω	4.7±20%	4.7±20%
	Run time S	0.2~1.5	0.2~1.5
	Reset time S	≤85	≤85
	Max working voltage V	180	180
	Max current A	12	12
Protector	Model	ZHB73-135P4.7	3TM232SF1
	Supplier	Tianyin	Sensata
	Max.T.C Amp.(25°C) A	7.3	7.3
	Trip time S	5~15	5~15
	Reset time S	30~150	30~150
	Open temp. ±5°C	135	135
	Close temp. ±9°C	57	61

ZHB73-135P4.7

8EA14C1-02+3TM232SF1



9. Delivery State

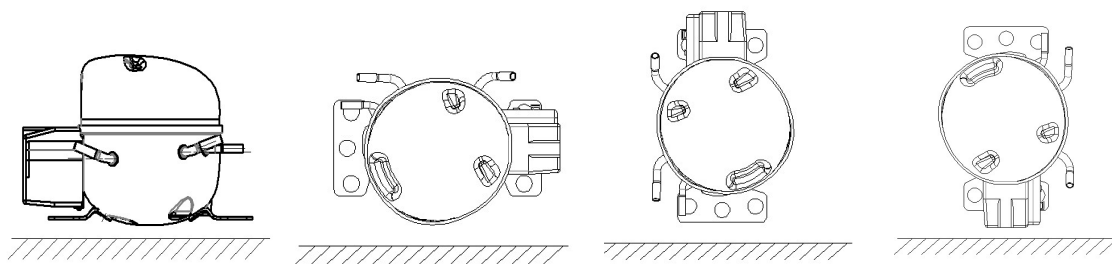
No.	Name	Model	Quantity	CODE
1.	Compressor	AG130XZ1	1pcs	
2.	MOUNTING ACCESSORIES			
2.1	Rubber grommet	H model (QET.1-03B)	4 pcs	On the Compressor
3.	ELECTRICAL ACCESSORIES			
3.1	COMBO	8EA14C1-02+ 3TM232SF1 ZHB73-135P4.7	1 pcs	On the Compressor
3.2	Relay cover assembly	A1E	1 pcs	

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

10. Package、Storage and Transportation

Package type	unrecyclable	
Quantity	140pcs/pallet	
Transportation	By sea	
Storage	Max. 2 layers	
Gross Weight	Kg	796±56
Net Weight	Kg	756±56
Volume	m ³	1.09
Dimension: length×width×height (cm)	114×89×111	
Main components	Plywood supporter、upper plywood 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.	

11. Installation Notes



Direction one:front

Direction two:

Direction three:

Direction four:

Three tubes upward

Discharge tubes upward

Binding post upwards

Notes: Direction three: Binding post upwards need to keep the system in the operation position for 8 hours before plug in the energy to prevent oil inflow into plastic suction Muffler.

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.