LU66XZ1 COMPRESSOR

TECHNICAL SPECIFICATION

DONPER

HUANGSHI DONGBEI ELECTRICAL APPLIANCE CO., LTD.

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1. Compressor Type

Compressor model	LU66XZ1
Rated voltage/frequency	115-127V～60Hz
Refrigerant	R134a
Application	Low back pressure (L.B.P)
Cooling method	Static
Start torque	Low starting torque (LST)
Control device	Capillary tube
Motor type	RSCR
Capacitor	12μF

2. Performance Date

Displacement	Net Wt.	Cooling Capacity(≥95%)								COP(≥95%)	
		ASHRAE							CECOMAF	ASHRAE	CECOMAF
		-35	-30	-25	-23.3	-20	-15	-10	-25	-23.3	-25
cm^3	kg	w	w	w	w	w	w	w	w	w/w	w/w
6.6	8.9±0.4	90	131	195	215	261	328	398	159	1.56	1.16

Testing condition:

Test conditions	L.B.P	
	ASHRAE	CECOMAF
Evaporating Temp.	-23.3℃	-25℃
Ambient Temp.	+32.2℃	+32℃
Condensing Temp.	+54.4℃	+55℃
Suction Temp.	+32.2℃	+32℃
Subcooling Temp.	+32.2℃	+55℃

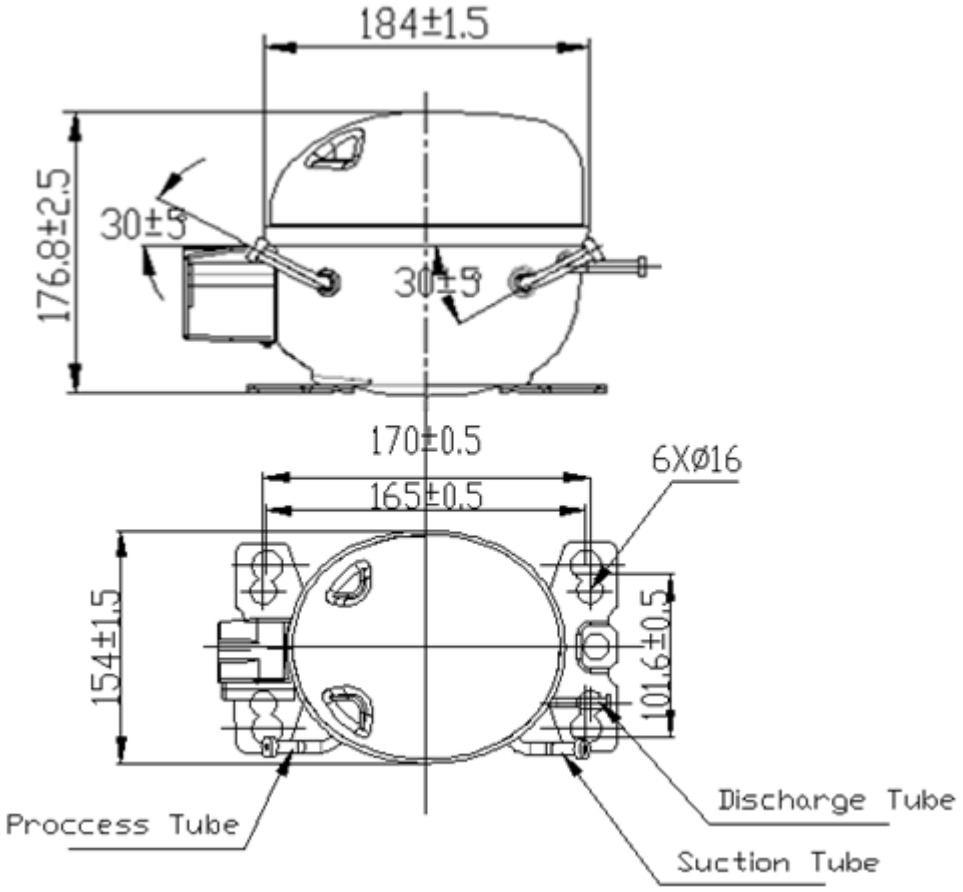
3. Running Condition

Ambient temp.	0～43℃
Evaporating temp.	-35～-15℃
Voltage range	100～127V
Max. condensing temp.	65℃
Max. winding temp.	130℃
Max. shell temp.	95℃
Max. discharge temp.	120℃
Start voltage	95V [0.5/0.5 (abs)]
Shell min. resistance to pressure	35bar

4. Compressor Mechanical Information

Oil type	Mineral ester
Viscosity	9.0～10.6 cst (40℃)
Oil charged	190±10ml
Min. oil volume in compressor	160ml
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	43.0dB(A)
Vibration	0.7 m/s^2
Protecting gas	Dry com.air 0.5～0.8bar (Dew point-60℃)

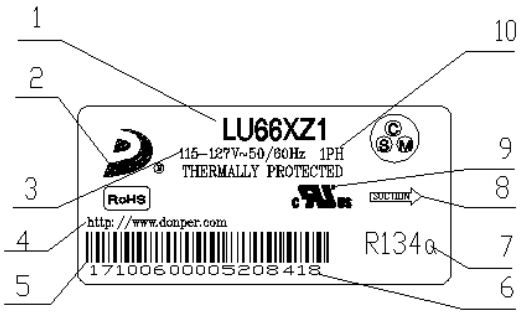
5. Compressor Shape

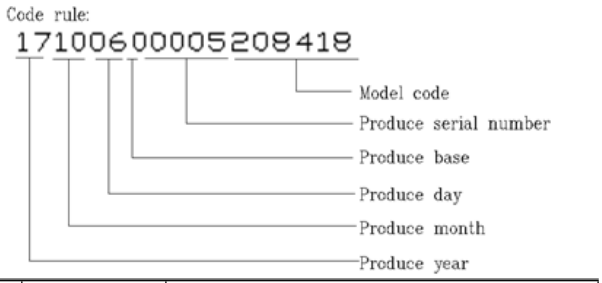


Caution:Suction tube and process tube can not be exchanged

Unmarked tolerance:±5mm

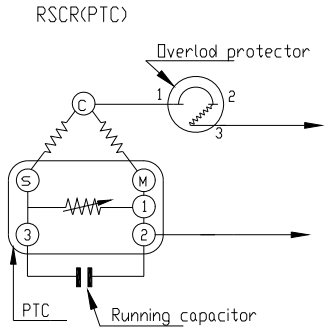
Unmarked Angle: ±10°

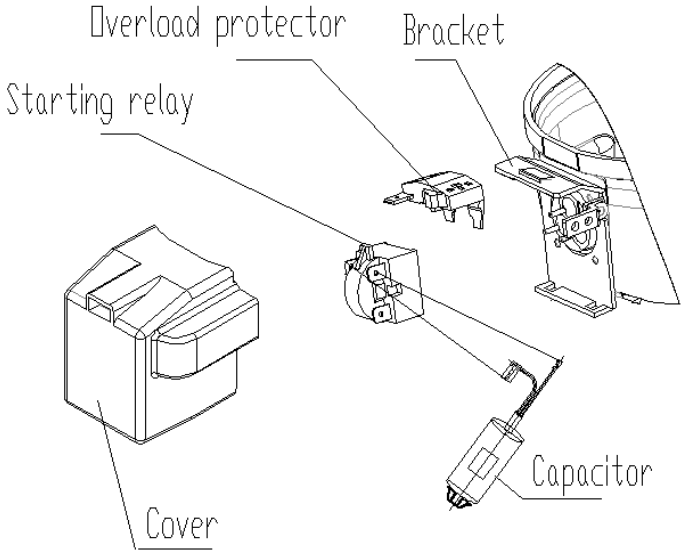




NO	Content	NO	Content
1	Compressor Model	2	Registered trade mark
3	Rated voltage/frequency	4	Company website
5	Bar code	6	Bar code of number
7	Refrigerating fluid	8	Suction sign
9	Certification mark	10	Single-phase power

6. Wiring Diagram





Note: Each of the starting relay、the overload protector、the cover is separately provided by our company.

7. Starting relay and overload protector

7.1.Starting relay

Model: QP2-4.7C or QP2-4R7C

Type: Starting relay

max current: 12A

max working voltage:----180V

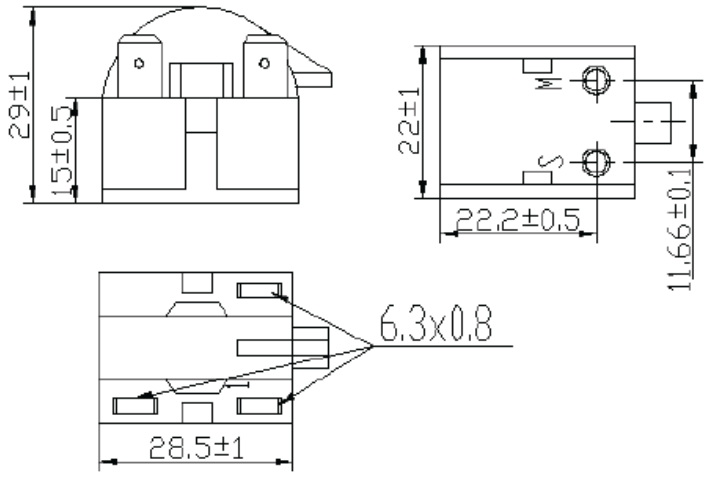
Resistance of Starting relay(25C):----- 4.7±20% Ω

Flammability:Anti-flammability

Supplier: Changshu Tianyin Electromechanical CO., LTD.

Hangzhou Starshuaier Electric Appliance Co.,LTD.

QP2-4.7C or QP2-4R7C



7.2. Overload protector

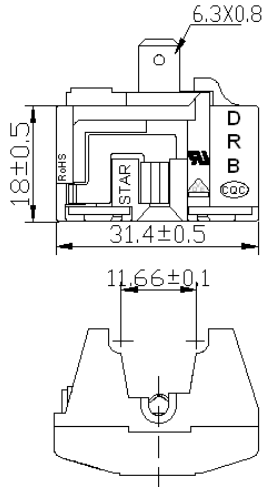
Compressor model			LU66XZ1
Prote-ctor	Type		DRB26N61A2
	Max.T.C Amp.(25℃)	A	7.5
	Trip time	S	5~15
	Reset time	S	20~150
	Open temp.	±5℃	120
	Close temp.	±9℃	61

Assembly force≤80N Disassembly force≥12.5N

Flammability:Anti-flammability

Supplier: Hangzhou Starshuaier Electric Appliance Co.,LTD.

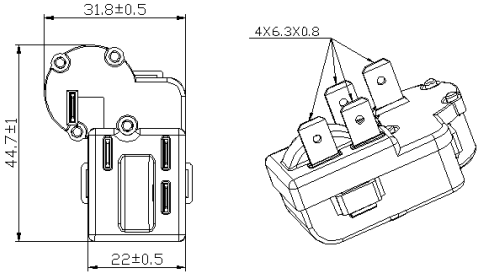
DRB26N61A2



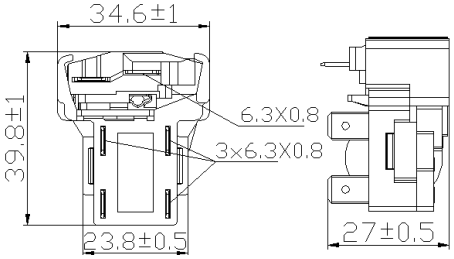
7.3.Combo starting relay and overload protector

Compressor model		LU66XZ1	
Type		ZHB78-130P4.7	QPS2-B4R7MD3+DRB26N61A2
Starting relay	Max working current A	12	
	Max working voltage V	180	
	Resistance of Starting relay (25C) Ω	4.7±20%	
	Trip time S	0.7～2.2	
	Reset time S	≤100	
	Proof TRACKING	PTI 175V	
Overload protector	Max.T.C Amp.(25℃) A	7.8	7.5
	Trip time S	5~15	
	Reset time S	20~150	
	Open temp. ±5℃	130	120
	Close temp. ±9℃	57	61
	Proof TRACKING	PTI 175V	
Flammability Class		UL94-V0	
Assembly force		≤150N（The first time）	
Disassembly force		≥37.5N（The sixth time）	

ZHB78-130P4.7



QPS2-B4R7MD3+DRB26N61A2



8. Capacitor

Compressor model			LU66XZ1
Capacitor	Model	μF	12
	Rated voltage	V.AC	250
	Supplier		Shanghai haoyue Electronics CO.,LTD

9.Delivery State

No.	Name	Model	Quantity	CODE
1.	**Compressor**	**LU66XZ1**	**1 pcs**	
2	**Rubber plug**	**Φ6.4**	**1pcs**	
3		**Φ8.2**	**2pcs**	
4	**PTC Starting relay**	**QP2-4.7C**	**1 pcs**	**on compressor**
		QP2-4R7C		
	Overload protector	**DRB26N61A2**	**1 pcs**	
	Or combo starting relay and overload protector	**ZHB78-130P4.7**	**1 pcs**	
		QPS2-B4R7MD3 +DRB26N61A2		
5	**Running Capacitor**	**12μF**	**1 pcs**	
6	**Cover**	**A1**	**1 pcs**	
7	**Rubber grommet**	**QET.1-03V**	**4 pcs**	**On compressor(Big hole)**

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	92pcs/box
Transportation	By Sea
Storage	Max. 2 layers
Gross Weight Kg	848.8±36.8
Net Weight Kg	818.8±36.8
Volume m^3	0.96
Dimension: length×width×height (cm)	109×89×99
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.

11. Technical Items

⑴、Don't take off the rubber plugs before using and installing compressor to prevent dust and moisture.

⑵、Don't turn down or incline the compressor during storage, transportation or installation and avoid vibration and shock.

⑶、The compressor must be kept horizontally during running, the inclination angle must be less than 5°.

⑷、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.

⑸、The interval of compressor operation must be more than 4 minutes in order to obtain a pressure balance in the systems.

⑹、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.

⑺、The design of refrigeration system must be suitable to insure the oil could flow back to compressor.

⑻、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

To keep the compressor stably running ,the running temperature of Max. winding can't beyond 130℃.

⑼、Widen the evaporating Temp. range of the compressor should be approved by DONPER.

⑽、Compressor should be stored in a dry place.

⑾、Compressor accessories (eg: starting relay, overload protector etc.) are put in the accessories box instead of fixing on the compressor.

⑿、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.

⒀、It's necessary to keep the compressor without rubber plug as short time as possible (max time 10 min).

⒁、R134a systems require a filter with drying agent which suitable for R134a refrigerant

⒂、The vacuum pump and the charging system must only be dedicated to R134a.

⒃、The refrigeration system should minimize the content of chlorion and moisture, and must be free of paraffin and silicon oil.

⒄、The organic substance non-compatable with R134a cannot be used in the refrigeration system.