ARUKI®
Bringing Humanity Forward

R134a / R600a
LBP Refrigeration Compressor

PRODUCT CATALOGUE

www.aruki-aspt.com

R134a Series

ARUKI®

R134a LBP Compressor

Comes with mounting accessories, overload, relay and capacitor*

*Varies according to the type of motor

CE CCC RoHS

Product Specification

Code No.	Model	Disp. (cm^3)	HP	Capacity (W)	Current (A)	Efficiency COP (w/w)	Voltage / Frequency
R010702	SQD43H	4.3	1/8	111	0.75	1.10	220V – 240V / 50Hz
R010703	SQD52H	5.2	1/7	130	0.93		
R010704	LQD65HWX	6.5	1/6	168	1.15	1.20	
R010705	LQD75H	7.5	1/5	180	1.20		
R010706	LQD91H	9.1	1/4	208	1.40		
R010708	QQD110HF	11.0	1/3	320	1.92	1.25	
R010711	QWQ160HF	15.3	1/2	430	2.10		

Types of Electrical Motors

RSIR (Resistance Start-Induction Run)
LST motor. No capacitors.
Auxiliary winding is disconnected after start up.
Standard energy efficiency
Models: R010702, 03, 04, 05, 06

CSIR (Capacitor Start-Induction Run)
HST motor. With starting capacitor to produce a higher starting torque. Auxiliary winding is disconnected after start up. Standard energy efficiency
Models: R010708, 11

Product Features

Trustworthy quality
Widely recognized for superior quality and durability, Aruki ensures all compressors are delivered at best performance.

Trademark engravement
The engraved identification mark provides a recognizable authentication signature for genuine Aruki product.

Individual box packaging
Each Aruki compressor is individually packaged in a sturdy carton for better protection.

Wooden case for bulk order
Bulk orders are packed and delivered in wooden cases.

R600a Series

ARUKI®

R600a LBP Compressor

Comes with mounting accessories, overload, relay and capacitor*

*Varies according to the type of motor

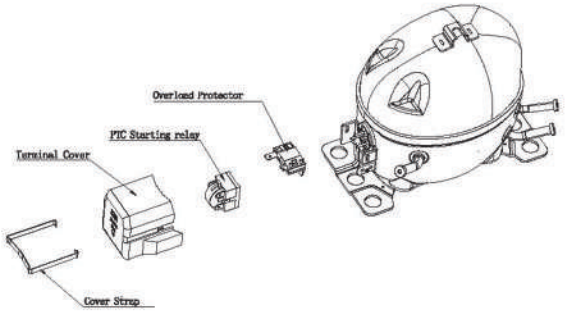
CE CCC RoHS

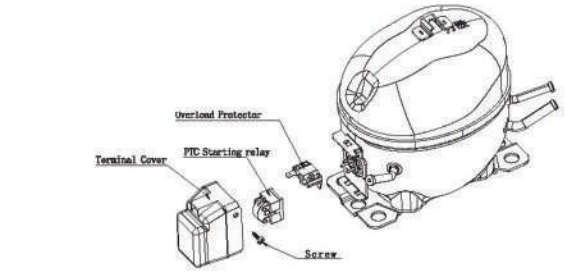
Product Specification

Code No.	Model	HP	Capacity (W)	Current (A)	Efficiency COP (w/w)	Voltage / Frequency
R010901	QD65Y(N)	1/9	110	0.66	1.30	220V – 240V / 50Hz
R010902	QD75Y(J)	1/8+	130	0.80		
R010903	QD85Y(J)	1/7+	145	0.85		
R010904	QD91Y(J)	1/6	155	0.87		
R010905	QD103Y(J)	1/6+	168	1.09	1.25	
R010906	QD110Y(J)	1/5	185	1.11		
R010907	QD142Y(WD)	1/4	240	1.20	1.30	

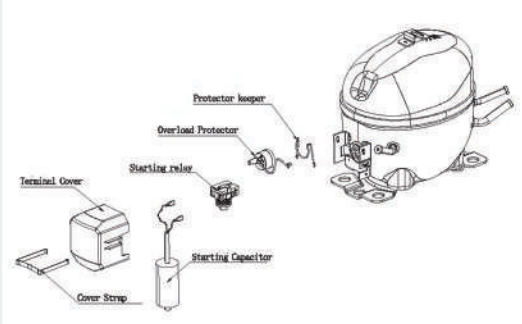
Types of Connectors

RSIR(PTC)

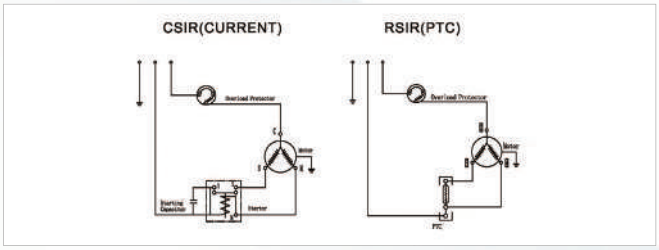




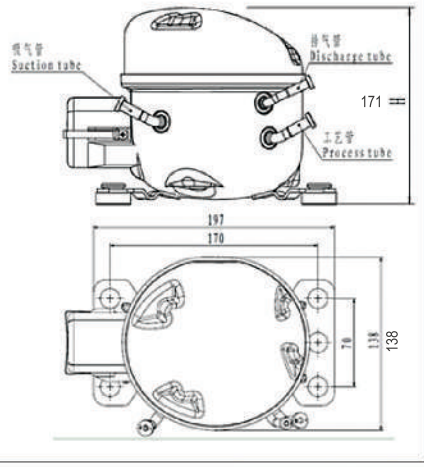
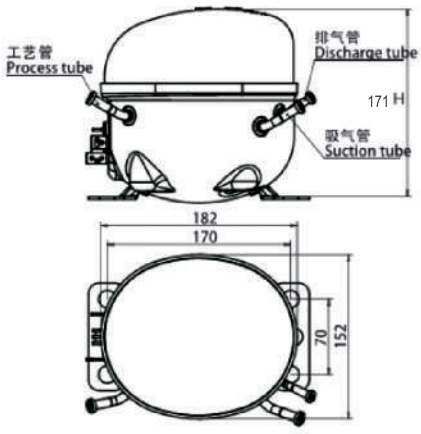
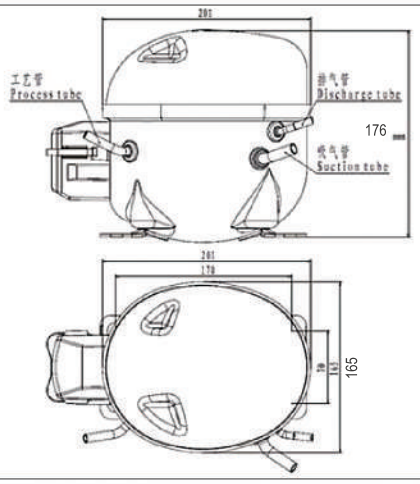
CSIR

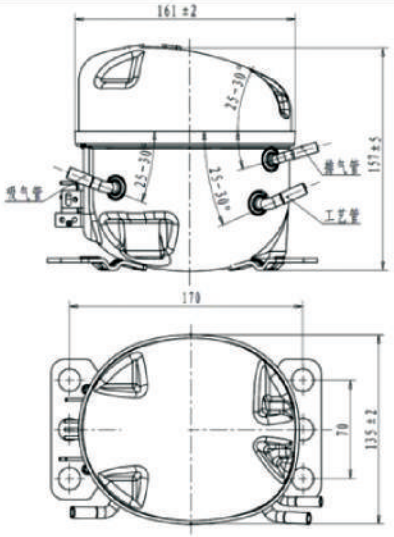
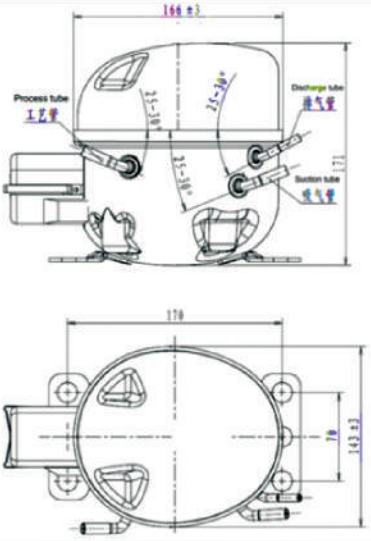
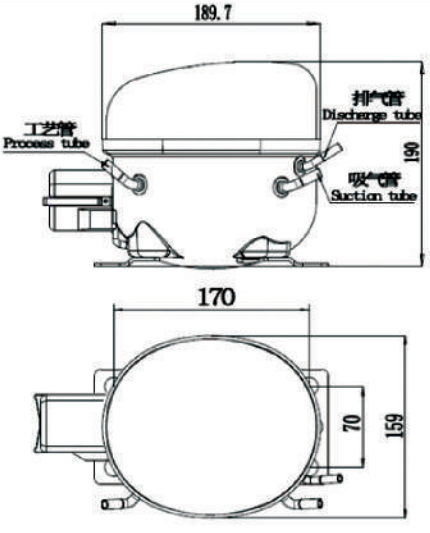


Wiring diagram



Compressor size and measurement

Series	Models		
	SQD43H SQD52H	LQD65H LQD75H LQD91H	QQD110HF QWQ160HF
R134a			

Series	Models		
	QD91Y	QD103Y QD110Y	QD142Y
R600a			

测试工况 Test Conditions	低背压 LBP ASHRAE	低背压(℃) LBP CECOMAF	中/高背压(℃) M/HBP
蒸发温度Evap Temp℃	-23.3	-25	7.2
环境温度Amb Temp℃	32.2	32	32.2
过冷温度Subcooling Temp℃	32.2	55	46.1
冷凝温度Cond Temp℃	54.4	55	54.4
吸气温度Suction Temp℃	32.2	32	35

单位换算
Conversion Table

1、kcal/hx1.163=w
2、kcal/hx3.968=Btu/h
3、wx3.412=Btu/h
4、wx0.864=kcal/h
5、EER=copx3.412
6、Capacity(at50Hz)x1.16=Capacity(at60Hz)

Remark: All data is subject to change without notice

Aruki compressor storage and installation requirements

1. The compressor should be stored in a dry and drafty space
2. Compressors should not be tilted or inverted during storage or transportation.
3. Installation position must not be tilted at more than 5 degrees.
4. Rubber plugs should not be removed from the discharge tube to prevent humidity and impurity. The installation should be completed within 10 minutes after removing the rubber plugs.
5. The charging volume of refrigerant oil has been optimized by our company. Do not alter the oil capacity randomly.
6. The working temperature of the compressor working environment should not be higher than 43°C. The current input power in its continuous operation should not exceed the limitation of the compressor at the highest room temperature (43°C).

Aruki compressor diagnosis guides

All Aruki compressors have undergone rigorous quality inspection and operational testing.
In the rare event that an Aruki compressor encounters a faulty issue, the following guidelines shall provide a preliminary diagnosis.

A. External assessment

A1. Check the exterior of the compressor for signs of falling or bumping.

B. Overload protector, PTC starter inspection

B1. Certain models of Aruki compressors may need to be equipped with a capacitor, the designated capacitor should be used together during installation. The starting performance of the compressor might be affected if the capacitor is not applied.

B2. For models with PTC starters, measure the starting relay with a multimeter. If the resistance is zero or infinite, the starter is short circuit or open.The normal resistance value should be 15 (22) or + / - 5 Ω.

B3. For models with overload protector, use a multimeter to measure the overload protector. If the resistance value is infinite, the protector is short circuit or open. A working overload protector should always connected with the socket.

C. Compressor motor resistance checking

C1. A multimeter resistance test can be used to check the internal winding of the compressor by touching the compressor terminals. Generally speaking, the resistance of the main and secondary phase windings of most compressors is in the range of 10-90 ohms. Any unusually high or low resistance could indicate a fault with the compressor's internal motor.

D. Pressure check

D1. Start the compressor and blocks the discharge pipe with finger to feel if the pressure is strong enough. A weak dischage pressure may indicate a blockage or motor faulty.

*If the problem persists, please contact Aruki sales office for further assistance.

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