

COMPRESSOR MODEL	CLIENT	VERSION NUMBER	DATE
VMH1113Y 220-240V~ 50Hz/60Hz	Whirlpool	JXPR-1.0	2019-02-20

R600a HERMETIC COMPRESSOR

TECHNICAL SPECIFICATION

(MODEL: VMH1113Y)

JIAXIPERA COMPRESSOR CO., LTD.

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Application

Application	LBP
Range of evaporating temperature	-35℃ to -10℃
Refrigerant	R600a
Control device	Capillary tube
Compressor cooling	Static cooling
Rating voltage、frequency	220-240V~ 50Hz/60Hz
Starting torque	L.S.T
Starting capability	176V@0.25/0.25 MPa(gauge)
Ambient temperature	0~43℃
Max. steady condensing temperature	60℃
Max. peak condensing temperature	70℃
Max. discharge pressure	0.98 MPa(gauge)
Max. winding temperature	130℃

Normal Performance

Test standard	ASHRAE				
Speed range(RPM)	1320-4500				
Speed (RPM)	1320	1600	2400	3000	4500
Cooling Capacity (W)	66	82	124	155	210
Power consumption (W)	40.7	48.2	72.1	91.2	131.3
COP (W/W)	1.62	1.70	1.72	1.70	1.60
Current (A)	0.44	0.50	0.72	0.91	1.25

Mechanical information

Mechanical information		
Displacement		8.9cm ³
Suction muffler		Semi-direct
Oil	Oil type	Alkyl benzene or mineral
	Oil grade	ISO5 or ISO7
	Initial charge	130±10ml
	Recharge	85%
Weight (with oil charge)		4.8±0.4kg

Motor Data

Motor type	PMSM
Motor protection	External protection
Approved voltage range (V)	176-264
Terminal Resistance (Ω, 25 °C)	18.1±7% (Aluminum)

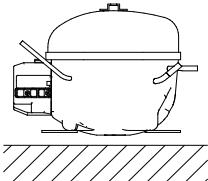
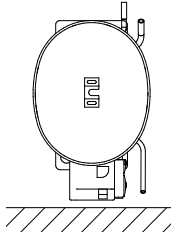
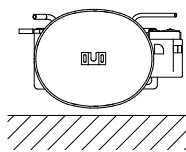
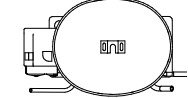
Exterior character

Base plate	170×70mm
Top bracket or top piece	Optional

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Water tray		Optional
Connection tube	Suction tube	Inner-dia.6.1~6.2mm, copper
	Process tub	Outer-dia.6.0~6.1mm, copper
	Discharge tube	Inner-dia. 5.1~5.2mm, copper

Packaging and transport

Compressor		108pcs/ pallet		
Accessory		/		
Shipment position	Upright	Electrical down	Tubes up	Tubes down
				 Stand for half an hour before use

Handling during appliance assemble

Vacuum level	Max. 0.6mbar(abs.)
Max. opening connection time	15min
Inclination during assemble	Max. 5°
Running in vacuum condition	Not allowed
Use of non-special oil	Not allowed
Liquid return to compressor	Not allowed
Connected to supply(220-240V~) without inverter	Forbidden
Max storage time before assemble	1 year after product date

Other recommendation

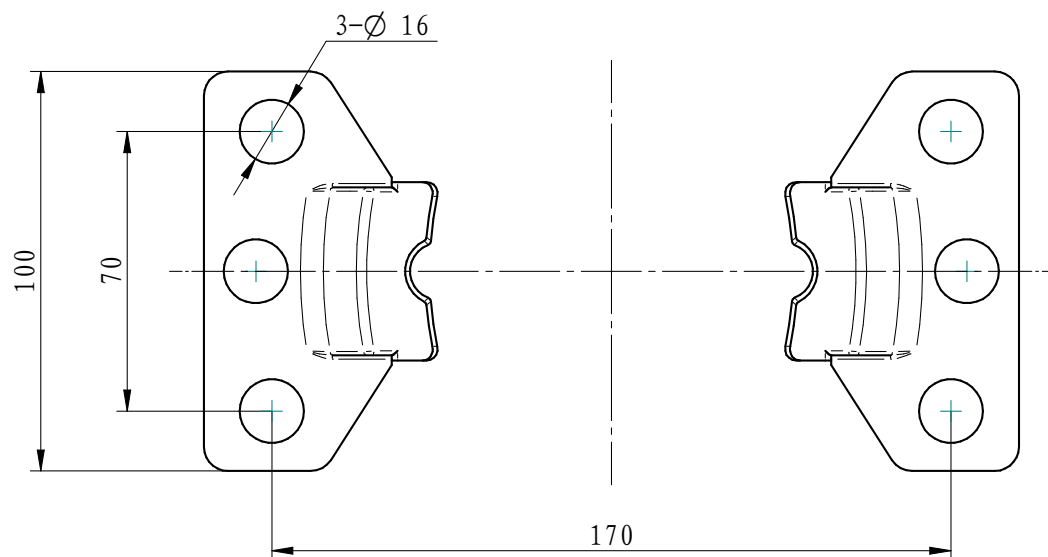
A impacted compressor can't be used
Don't use antifreeze
The refrigeration system must be used for R600a exclusively
Assure oil return correctly
Don't start compressor when it is in vacuum
Avoid contamination of mineral oil(in vacuum pump) or paraffin
Any cooling system and assembly parts, parameter, process parameter change related with compressor in the appliances should inform Jiaxipera.

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Accessories

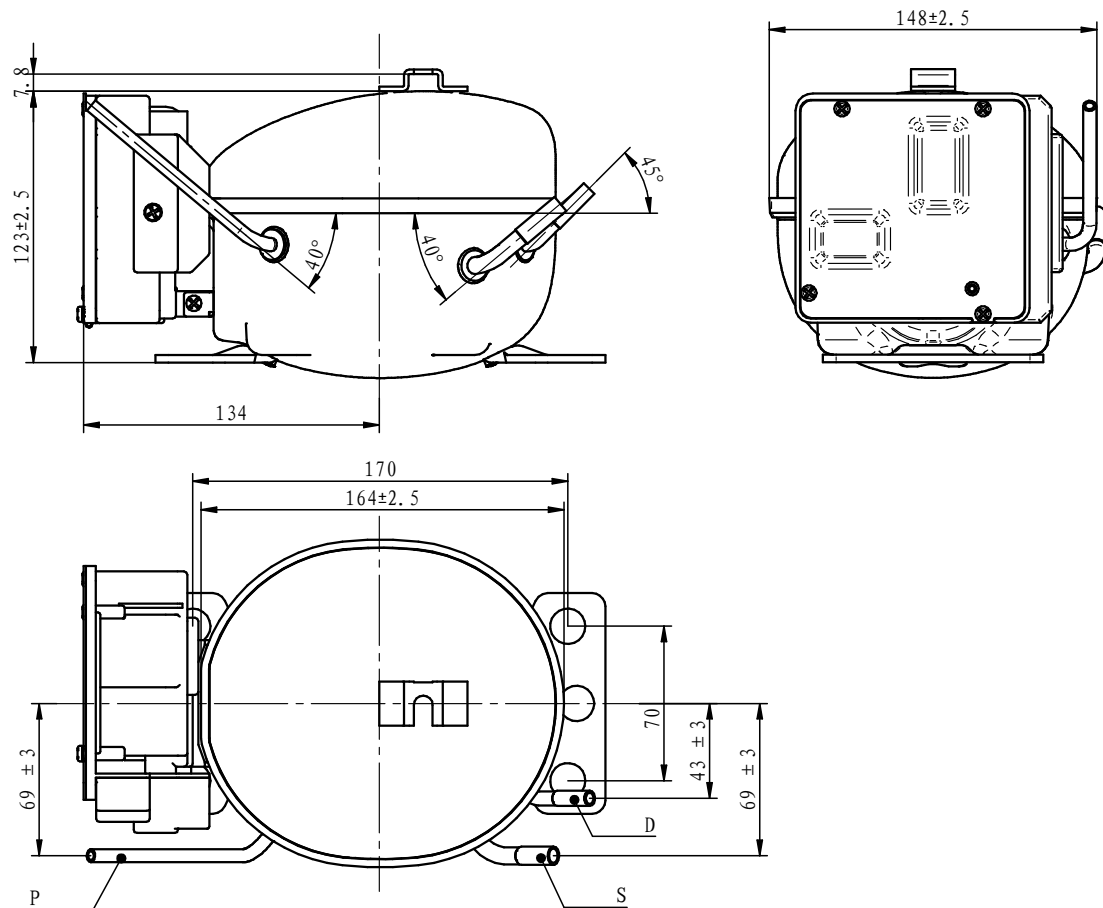
No.	Designation	Specification	Quantity
1	Inverter box	14.32.360	1
2	Inverter cable	14.37.383	1
3	Earth wire	24.20.103	1
4	Inverter Controller	JXPR-AS01	1
5	Overload protector	4MPS51C9-01	1
6	Earth screw	M4×8	1

Figure 1: Mounting Schematic



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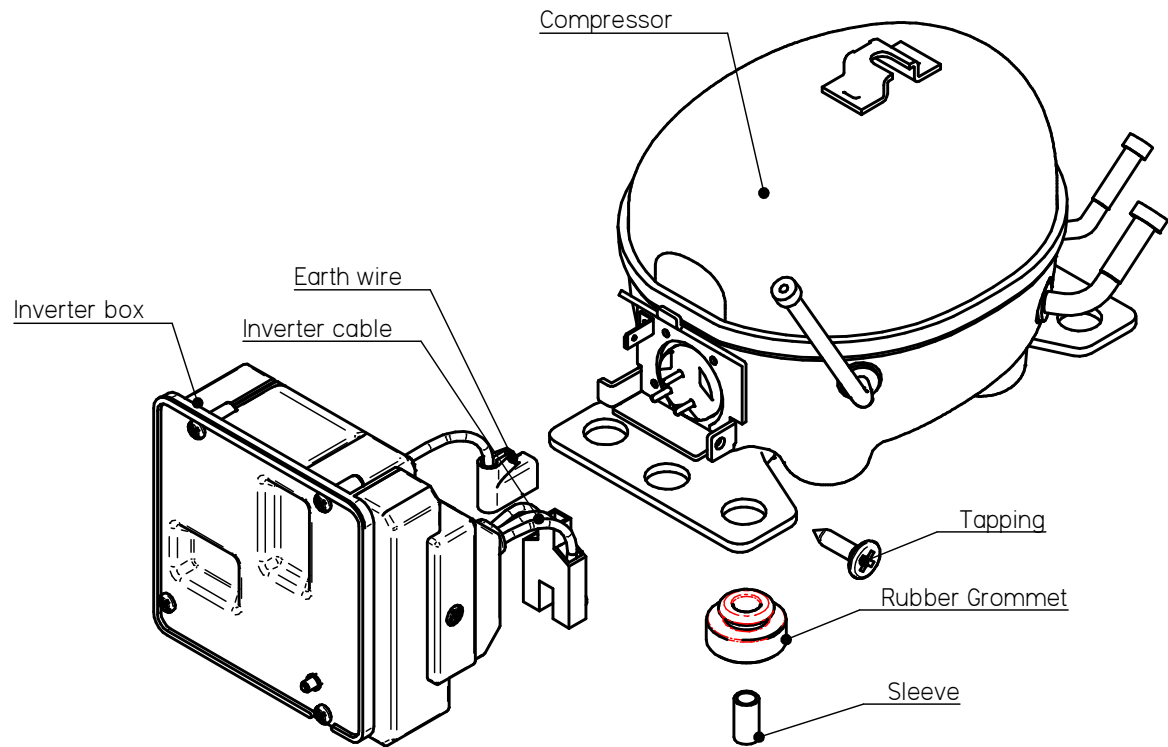
Figure 2: Overall Dimension



Connecting tube		
Suction(S)	Process(P)	Discharge(D)
Φ6.1~6.2 Inner-dia.	Φ6.0~6.1 Outer-dia.	Φ5.1~5.2 Inner-dia.

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Figure 3: Assembly and Accessories



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Inverter Specification

1 Basic Configuration

Inverter model	Compressor model	Control mode	Supply	Speed Range
JXPR-AS01	VMH1113Y	Frequency	220-240V~ 50Hz/60Hz	1320~4500 RPM

1.1 Electric Specification

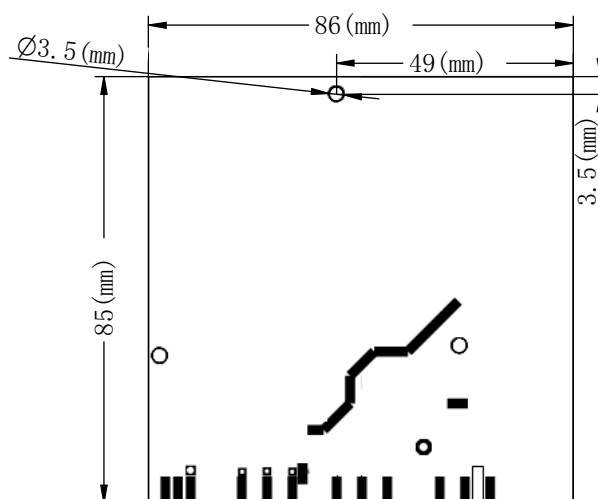
Designation	Unit	Parameter
Voltage range	V	170~270
Voltage frequency	Hz	50/60
Maximum input current	A	1.6
Maximum input power	W	240
Output frequency range	Hz	44~150
Maximum output current	A	1.5
Maximum output power	W	220

Note: The compressor can reach up to 4500rpm depending on the working load and input voltage

1.2 Working and storage condition

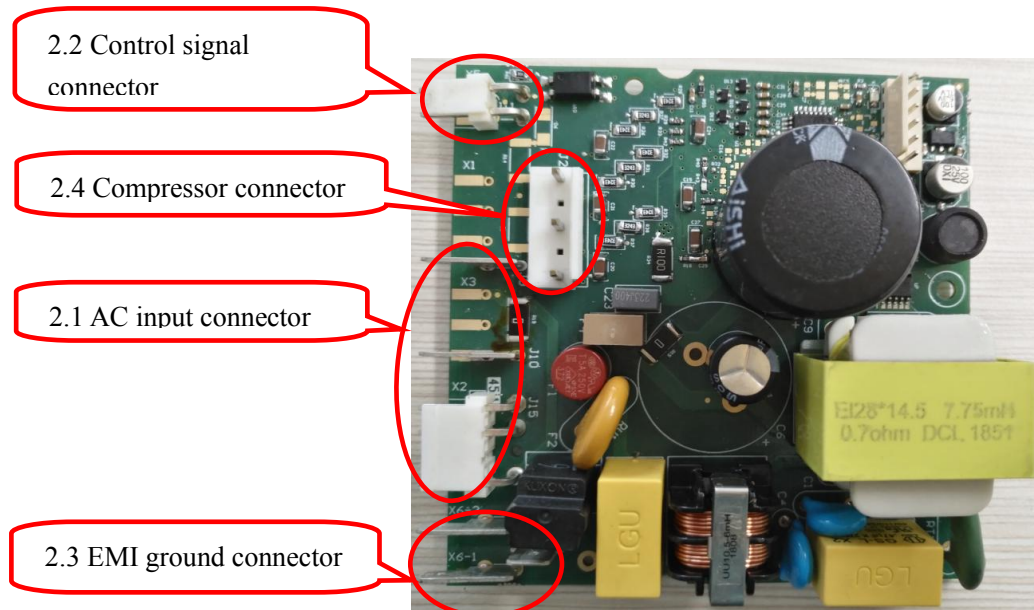
Designation	Unit	Parameter
Working temperature range	℃	-20~50
Working maximum relative humidity	%	85
Storage temperature range	℃	-40~80
Storage maximum relative humidity	%	85

1.3 Inverter size



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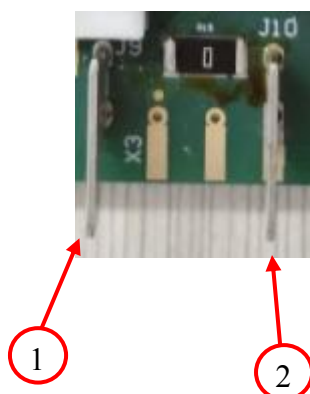
2 AC Input、EMI ground、inverter and compressor connector terminals



Warning: The control input cable (low voltage) must not be connected with high voltage or power supply cables, avoid the electrical hazard and potential equipment damage!

2.1 AC input connector

Description	Specification
Tab connector, 2 ways	4.8×0.8
Header connector, 4 ways /3 ways	B3P4S-VH(LF)(SN)



1 Neutral
2 Phase

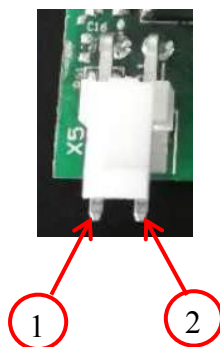


1 Neutral
2 Neutral
3 Phase

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2.2 Control signal connector

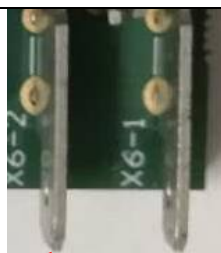
Description	Specification
Header connector, 2 ways	B2PS-VH(LF)(SN)



- 1. Negative
- 2. Positive

2.3 EMI ground connector

Description	Specification
Tab connector, 2 way	4.8×0.8
Tab connector, 1 way	6.3×0.8



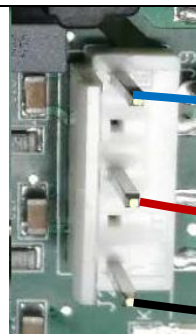
- 1. GND
- 2. GND



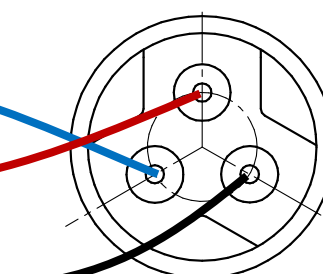
- 1. GND

2.4 Compressor connector

Description	Specification
Header connector, 5 ways /3 ways	B3P5-VH(LF)(SN)



Inverter motor
connector



Compressor
hermetic terminals

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3 Compressor speed control

3.1 Input control signal

Control signal is square wave, amplitude 5~15V, duty cycle 40~60%.

Control signal F(Hz)	Speed N(rpm)
0~35	0
35~44	1320
44~150	$30 \times F$
150~180	4500
>180	0

