



Heat pump 2012



Heat Pump 2012

Commercial Air Conditioner Business Units
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Note: The data in this book may be changed without notice for further improvement on quality and performance.

Corporate Introduction

Midea Group

From its humble beginnings in 1968, Midea has developed into a large corporation, covering HVAC, appliances, lighting, industrial components, logistics, and real estate. Its 40 years of relentless growth has brought its global turnover to \$14 billion USD in 2009. Consequently, Midea has created over 150,000 jobs both within China and all over the world. In addition to providing affordable goods to consumers worldwide, Midea is a responsible corporate citizen, and has contributed to several social causes.

Midea believes in creating value through rapid response to market demands, cost-efficient operations and consumer satisfaction. As a result, Midea wields vast production capacities to meet these demands, a fully integrated manufacturing process, and a comprehensive range of affordable, high-quality products to serve its global customers.

Today, Midea is a home appliance leader in China. The company continues to actively globalize its operation by opening plants in Vietnam, Belarus and Egypt. Additionally, Midea has several forthcoming plants in order to offer enhanced products and services closer to the market.



Midea CAC (MCAC)

As a key part of Midea Group, the Midea Central Air Conditioner (CAC) Business Unit is a professional CAC products supplier and commercial products solution expert. Since 1999 Midea central air-conditioner contributes to the commercial product R&D and technology innovation. By cooperating with the international enterprises plus the independent R&D, Midea CAC achieves big success in the commercial air-conditioner market and has established thousands of sample projects all over the world.

Right now Midea CAC is one of the most professional CAC products supplier as well as the professional project solution provider in marketing, sales, project design and after service etc.

MCAC Chongqing factory with 14 product lines concentrates on the water cooled centrifugal / screw/ scroll chillers, Air cooled screw/ scroll chillers, AHU/FCU etc.

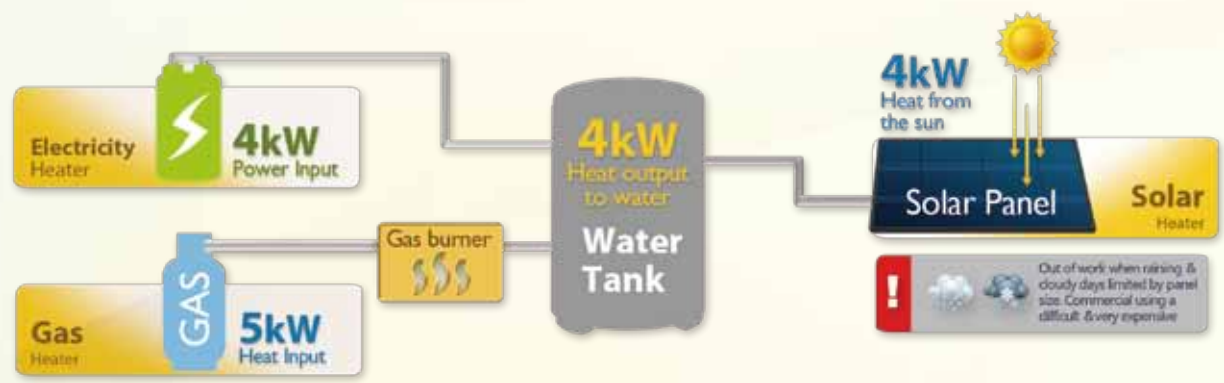
MCAC Shunde factory with 31 product lines concentrates on the VRF (DC inverter product/ Digital scroll product), split product, heat pump water heater, AHU/FCU etc.

Renewable

Heat pump is renewable and energy saving.



Why select HPWH?



Power consumption comparison under the same condition to heat 1 ton water from 15°C to 55°C(Data of Midea)

	Midea HPWH	Gas Water Heater	Electric Water Heater	Boiler	Solar Water Heater
Energy Resource	Air,electricity	Gas	Electricity	Diesel oil	Solar,electricity
Transfer Factor	860kcal/kW.h	24000kcal/m³	860kcal/kW.h	10200kcal/kg	860kcal/kW.h
Average Efficiency	4.6	0.8	0.95	0.7	2.7 (1/3 weather need Auxiliary Heater)
Consumption	10kW.h	2.08m³	48.9kW.h	5.6kg	17.5kW.h
Running Cost(USD)	0.9	5.9	4.3	6.5	1.5
Merit/Demerit	Green,safe,energy saving,friendly for environment and easy for installation	Risk potential danger of fire,explosion,and cause CO ₂ emission etc.	Risk electric shock emission etc.	Risk potential danger of oil leakage,fire, explosion,and cause CO ₂ emission etc.	Not easy for installation,large area will be occupied,and effective water tank volume is limited.

Lineup 2012

Sanitary Hot Water

1.5~7.2KW

7-24



M-Thermal

6~16KW

25-33



Pool/Spa

6~90KW

34-38



Commercial Application

10~77KW

39-50



Heat Recovery

3.5~20KW

51-59



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Hot Water

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M-Thermal
(Space heating)

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How to read the models

RSJ - 200 / (M) S - 540V

Design Code

S 380V 50HZ 3ph
R 380V-415V 50HZ 3ph
- 220/220-240V~50HZ 1ph

Type Code
M Middle-temperature Cycle-heating Type
Omit for direct heating

Heating Capacity (20kw)

Midea Heat Pump Water Heater

L RSJ F - V 120 / N1 - 610

Design Code

Refrigerant Type
N1:R410a
N2:R407c
N3:R134a
N4:H₂O
N5: CO₂
Omit for R22

Heating Capacity (12Kw)

Compressor type
V: DC Inverter Compressor
D: Digital Scroll Compressor
Omit for Fixed Speed Compressor

Split Type
Omit for integrative type

Midea Air To Water Heat Pump

Heating and cooling
Omit for heating

Combo type 150/190L(50Hz)

RSJ-15/150RDN3-C
RSJ-15/190RDN3-C

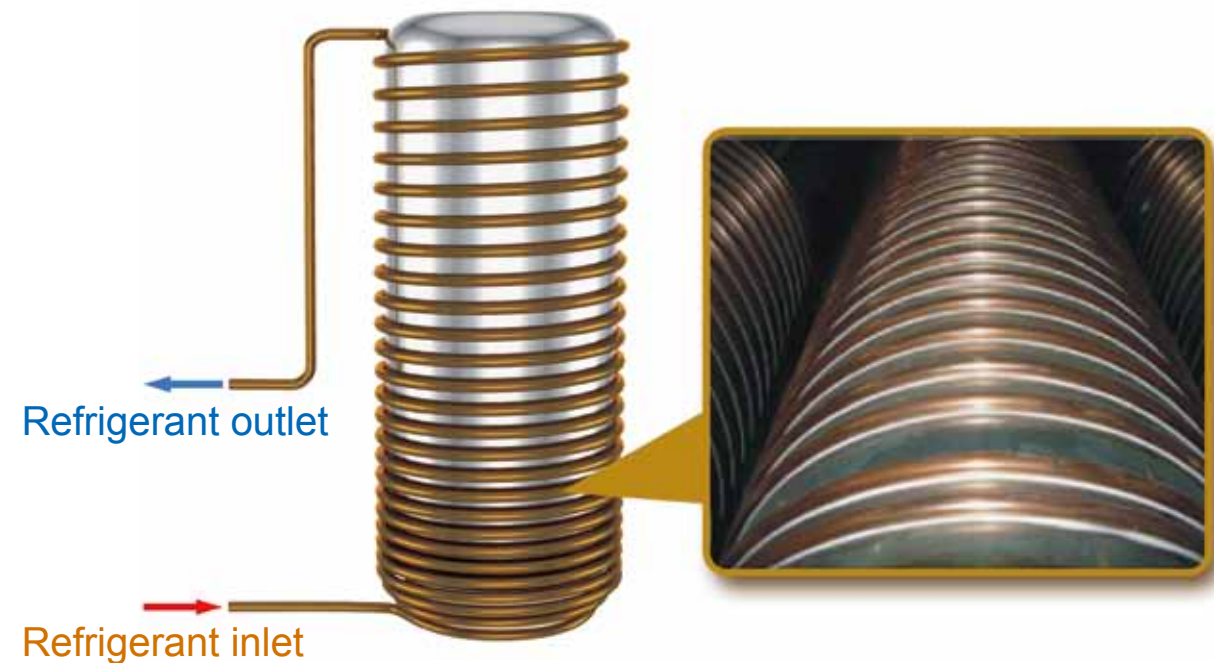
COP: 3.5
(A15/12, W15/45)
Ambient: -30°C~43°C



Features

- R134a gas, environmentally friendly.
 - Output water temperature: 38°C~70 °C.
 - Multi modes: Economical, Hybrid and E-heater.
 - CE approval.
 - Automatic weekly anti-legionella function.
 - Indoor and outdoor use.
- Multi protection: PT valve, double high water Temp. Protection switches.(Manual/Automatic)
 - The condenser coil is wrapped around outside the tank. No contamination potential.
 - Close Refrigerant circuit, easy for plumber installation.
 - The model with wire controller(model:KJRH-90A/E) can be customized.

Coil is wrapped outside the tank. No contamination potential.



■ Combo type 150/190L(50Hz)

Model			CE-RSJ-15/150RDN3-C			CE-RSJ-15/190RDN3-C		
Running mode			Economy	Hybrid	E-heater	Economy	Hybrid	E-heater
Running ambient temp		℃	5~43	-30~43	-30~43	5~43	-30~43	-30~43
Output water Temp		℃	Default 60℃,38℃~70℃			Default 60℃,38℃~70℃		
Power supply		Ph-V-Hz	1-220~240-50			1-220~240-50		
Storage size		Ltr	150			190		
Water heating	Capacity	kW	1.50	1.86	2.00	1.50	1.86	2.00
	Cop	kW/kW	3.45	1.45	1.00	3.50	1.45	1.00
	Max. current	A	2.3	9.5		2.3	9.5	
Ambient temp		℃	-30~43			-30~43		
Unit	Dimension (D×H)	mm	Φ568×1,430			Φ568×1,580		
	Packing (W×H×D)	mm	730×1,520×700			730×1,660×700		
	Net/gross weight	kg	87/98			93/107		
Noise level		dB(A)	48			48		
Refrigerant type/quantity		kg	R134a/0.8			R134a/0.8		
Refrigerant design pressure		MPa	3.0/1.2			3.0/1.2		
Tank design pressure			0.2~0.8			0.2~0.8		
System protection			TCO, TDO, PT valve, automatic			TCO, TDO, PT valve, automatic		
Air flow		m³/h	300			300		
Compressor	Type		ROTARY			ROTARY		
	Brand		GMCC			GMCC		
	Capacity	kW	1.390/1.405			1.390/1.405		
	Input	kW	0.515/0.540			0.515/0.540		
Fan motor	Brand		welling			welling		
	Input	w	30			30		
	Speed	r/min	890/580/380			890/580/380		
Water pipeline	Water inlet pipe	mm	DN20			DN20		
	Water outlet pipe	mm	DN20			DN20		
	Drainage pipe	mm	DN20			DN20		
	PT valve joint	mm	DN20			DN20		
Max. pressure		MPa	0.8			0.8		
Heat exchanger			Dividing wall type heat exchanger			Dividing wall type heat exchanger		
E-heater		kW	2.0×1			2.0×1		
Hot water yield		m³/h	0.042	0.048	0.057	0.042	0.048	0.057
Loading Quantity	20/40/40H	Pcs	24/51/51			24/51/51		

Remark:
1. The test conditions: outdoor temp. 15/12°C(DB/WB), inlet water temp. 15°C, outlet water temp.45°C.
2. The specification may be changed for product improvement, please refer to the nameplate.

Combo type 300L(50Hz)

CE-RSJ-35/300RDN3-B
CE-RSJ-35/300RDN3-C(1*)

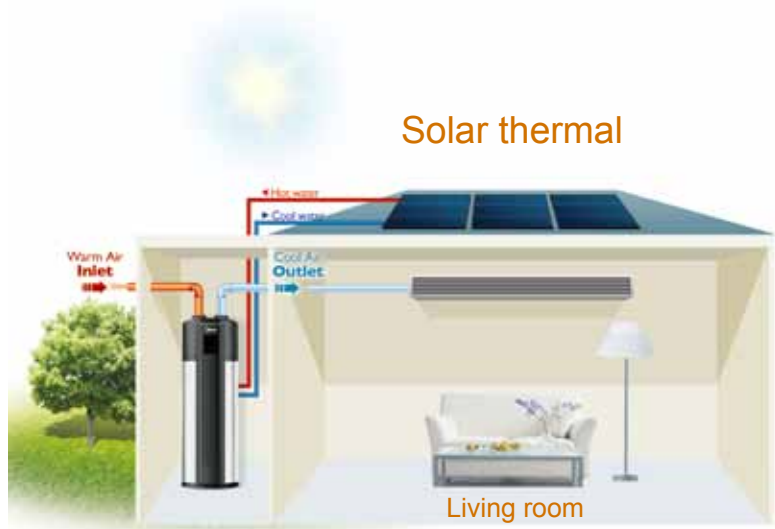
COP: 3.6
(A15/12, W15/45)
Ambient: -30°C~43°C



Features

- R134a gas, environmentally friendly.
 - Water output temperature: 38°C~60 °C.
 - Multi modes: Economical, Hybrid and E-heater.
 - CE approval.
 - Built-in heater exchanger, compatible to solar thermal or boilers.(Optional)
 - Automatic weekly anti-legionella function.
 - The model with wire controller(model:KJRH-90A/E) can be customized
- 30Pa air outlet pressure enables ducted length up to 10 meters.
 - Multi protection: PT valve, double high water Temp Protection switches.(Manual/Automatic).
 - Four-way valve for automatic defrosting.
 - No contamination potential, the condenser coil is wrapped around outside the tank.
 - Close Refrigerant circuit, easy for plumber installation.

Flexible duct installation



Dining room



Cellar



Storage room



Combo type 300L(50Hz)

Model			RSJ-35/300RDN3-B			RSJ-35/300RDN3-C		
Running mode			Economy	Hybrid	E-heater	Economy	Hybrid	E-heater
Running ambient temp		°C	-7~43	-30~43	-30~43	-7~43	-30~43	-30~43
Outwater Temp		°C	Default 55°C,38°C~60°C					
Power supply		Ph-V-Hz	1-220~240-50					
Storage size		Ltr	300					
Water heating	Capacity	kW	3.00	3.00	3.00	3.00	3.00	3.00
	Cop	kW/kW	3.60	3.60	1.00	3.60	3.60	1.00
	Max. current	A	6.5	18.7	13.0	6.5	18.7	13.0
Ambient temp		°C	-30~43					
Unit	Dimension (D×H)	mm	Φ650×1,920					
	Packing (W×H×D)	mm	750×2,150×780					
	Net/gross weight	kg	123/150			117/144		
Noise level		dB(A)	46.6					
Refrigerant type/quantity		kg	R134a/1.2					
Refrigerant design pressure		MPa	3.0/1.2					
Tank design pressure		MPa	0.15~1.0					
Throttling type			Electric expansion vavle					
System protection			TCO1, TCO2, PT valve, automatic defrosting, high-pressure protector, over-load protectortemp. electric leakage protector etc					
Air flow		m³/h	414/355/312					
Compressor	Type		Rotary					
	Brand		Guangzhou Mitsubishi electric					
	Capacity	Btu/h	9,500					
	Input	kW	0.9					
Fan motor	Input	w	80					
	Speed	r/min	620/530/465					
Water pipeline	Water inlet pipe	mm	DN20					
	Water outlet pipe	mm	DN20					
	Drainage pipe	mm	DN20					
	PT valve joint	mm	DN20					
Max. pressure		MPa	1.2					
Design pressure		MPa	0.15~1.0					
Heat exchanger			Dividing wall type heat exchanger					
Solar heat exchanger	Water inlet pipe	mm	DN20			/		
	Water outlet pipe	mm	DN20			/		
	Heat exchanger		Stainless steel SUS316L			/		
	Dim.×Length	mm	22×10,000			/		
	Max. pressure	MPa	0.7			/		
E-heate		kW	3.0					
Hot water yield		m³/h	0.086					
Loading Quantity	20'/40'/40H	Pcs	21/47/47					

Remark:
1. The test conditions: outdoor temp. 15/12°C(DB/WB), inlet water temp. 15°C, outlet water temp.45°C.
2. The specification may be changed for product improvement, please refer to the nameplate.
NOTE:
(1*)CE-RJS-35/300RDN3-B with solar coil
CE-RJS-35/300RDN3-C without solar coil

Combo type R134a—190L

RSJ-15/190RDN3-D

COP: 3.6
(A15/12, W15/45)
Ambient: -30°C~43°C



Features

- R134a gas, environmentally friendly.
 - Water output temperature: 38°C~70°C.
 - Multi modes: economy, E-heater and vocation.
 - Automatically select mode.
 - CE and Intertek approval.
 - No contamination potential, the condenser coil is wrapped around outside the tank.
- 15 Pa air outlet pressure enables ducted length up to 5 meters
 - User-friendly LCD display for easy interaction.
 - Reserved port and optional remote controller.
 - Automatic weekly anti-legionella function.
 - Four-way valve for automatic defrosting.
 - Multi protection: PT valve, double high water temp protection switches (manual and automatic).
 - Close refrigerant circuit, easy for plumber installation.

Flexible duct installation



Dining room



Cellar



Storage room



Specification

Model		RSJ-15/190RDN3-D	
Running mode		Econmy	E-heater
Running ambient temp		°C	-7~43
Outwater Temp		°C	Default 55°C,38°C~70°C
Power supply		Ph-V-Hz	1-120~240-50
Storage size		Ltr	190
Water heating	Capacity	kW	1.50
	Cop	kW/kW	3.60
	Max. current	A	6.5
Ambient temp		°C	-30~43
Unit	Dimension (D×H)	mm	Ø568x1,640
	Packing (W×H×D)	mm	675x1.715x690
	Net/gross weight	kg	94/110
Noise level		dB(A)	38
Refrigerant type/quantity		kg	R134a/0.95
Refrigerant design pressure		MPa	3.0/1.2
Tank design pressure		MPa	0.15~1.0
System protection		TCO1, TCO2, PT valve, automatic defrosting, high-pressure protector,over-load protector temp. electric leakage protector etc.	
Air flow		414/355/312	
Compressor	Type	Rotary	
	Brand	GMCC	
	Capacity	4740	
	Input	Btu/h	0.515
Fan motor	Input	w	28
	Speed	r/min	900/815/680
Water pipeline	Water inlet pipe	mm	DN20
	Wate outlet pipe	mm	DN20
	Drainage pipe	mm	DN20
	PTvalve joint	mm	DN20
Max.pressure		MPa	1.2
Design pressure		MPa	0.15
Heat exchanger		Dividing wall type heat exchanger	
E-heater		Kw	3.0
Hot water yield		m³/h	0.043
Loading Quantity		Pcs	24/51/51

Remark:
1. The test conditions: outdoor temp. 15/12 °C (DB/WB), inlet water temp. 15 °C , outlet water temp.45 °C .
2. The specification may be changed for product improvement, please refer to the nameplate.

Combo type 190L(60Hz)

UL-RSJ-15/190RDN3-C

Ambient: -5°F~130°F



Features

- EF>2.2 (Energy Factor)rating.
 - R134a gas, environmentally friendly.
 - Water output temperature: 100°F~140°F.
 - Multi modes: Auto mode,economic mode and electric mode.
 - UL and Energy Star approval.
- 5m ducted length with 10 Pa.
 - Multi protection: PT valve, double high water Temp.
 - Protection switches.(Manual/Automatic).
 - No contamination potential, the condenser coil is wrapped around outside the tank.
 - Close Refrigerant circuit, easy for plumber installation.

Ducted length up to 5 meters



■ Combo type 190L(60Hz)

Model			UL-RSJ-15/190RDN3-C		
Running mode			Economic	Auto	Electric
Running ambient temp		°F	45~115	45~115	-5~130
Outwater Temp		°F	Default 120°F,100°F~140°F		
Power supply		Ph-V-Hz	1-208/240-60		
Storage size		Ltr	190		
Water heating	Capacity	kW	1.50	1.50	4.00
	Max. input	kW	0.80	4.50	4.00
	Ef	-	2.20	2.20	0.82
	FHD	US Gal	-	56.00	52.00
	Max. current	A	6.5	21.6	18.7
Ambient temp		°F	-5~130		
Unit	Dimension (D×H)	mm	Φ568×1,640		
	Packing (W×H×D)	mm	675×1750×690		
	Net/gross weight	kg	96.5/110.6		
Noise level		dB(A)	48		
Refrigerant type/quantity		kg	R134a/0.8		
Refrigerant design pressure		PSIA	331/86 at ambient 70°F		
Tank design pressure		PSI	150		
Throttling type			Thermal expansion vavle		
System protection			TCO, TDO, PT valve		
Air flow		m³/h	370/280/200		
Compressor	Type		Recip		
	Brand		Embraco		
	Input	kW	0.7		
Fan motor	Brand		welling		
	Input	w	40		
	Speed	r/min	970/750/550		
Water pipeline	Water inlet pipe		NPT 3/4		
	Water outlet pipe		NPT 3/4		
	Drainage pipe		NPT 3/4		
	PT valve joint		NPT 3/4		
Max. pressure		MPa	1.0		
E-heater		kW	4.0×2		
Loading Quantity	20'/40'/40H	Pcs	24/51/51		

Remark:
1. The test conditions: 10 CFR Part 430 Energy Conservation Program for Consumer Products: Test Procedure for Water Heaters
2. The specification may be changed for product improvement, please refer to the nameplate.

Wall-hung combo 80L

RSJ-15GW/80RDN3

Ambient: -30°C~43°C



Features

- COP 3.2 energy saving.
- R134a gas environmentally friendly.
- Water output temperature 38°C~70°C .
- Multi mode: Economical, E-heater, appoint and valley rates.
- CE approval.
- 15pa air outlet pressure enables ducted length up to 6 meter.
- Automatic weekly anti-legionella function.
- Multi protection: double high water temp protection switches (manual and automatic).
- Optional remote controller.
- User-friendly LCD display for easy interaction.
- Four-way valve for automatic defrosting.
- Close refrigerant circuit, easy for plumber install.

Easy for plumber installation and high efficiency.



Wall-Mounted monoblock

Model		CE-RSJ-15GW/80RDN3	
Running mode		Heat Pump	E-heater
Running ambient temp.	°C	-7~43	-30~38
Outwater Temp.	°C	Default 65°C,38°C~70°C	
Power supply		Ph-V-Hz	1-220~240-50
Storage size		Ltr	80
Water heating	Capacity	kW	1.3
	Cop	kW/kW	3.2
	Max. current	A	3.5
Unit	Dimension (D×H)	mm	Φ480×1,250
	Packing (W×H×D)	mm	600×1,350×580
	Net/gross weight	kg	77/85
Noise level		dB(A)	42
Refrigerant type/quantity		kg	R134a/0.6
Refrigerant design pressure		MPa	2.8/1.2
Tank design pressure		MPa	0~0.8
Air flow		m³/h	250
Compressor	Type	Rotary	
	Brand	Midea-Toshiba	
	Capacity	Btu/h	4,750
	Input	kW	0.52
Fan motor	Brand	welling	
	Input	w	34
	Speed	r/min	880/720/600
Water pipeline	Water inlet pipe	mm	DN15
	Water outlet pipe	mm	DN15
	Drainage pipe	mm	M50
Air duct	diameter	mm	90
	length	m	6
Hot water yield		m³/h	0.037
Loading Quantity		Pcs	48/102/136

Remark:
1. The test conditions: outdoor temp. 20/15°C(DB/WB), inlet water temp. 15°C, outlet water temp.55°C.
2. The specification may be changed for product improvement, please refer to the nameplate.



Split type (AU-RSJF-30/CN3)

AU-RSJF-30/CN3

COP: 3.6
(A15/12, W15/45)
Ambient: -30°C~43°C



Features

- COP 3.6 energy saving.
 - R134a gas environmentally friendly.
 - Water output temperature 38°C~55°C .
 - Multi mode: Economical ,E-heater ,appoint and valley rates .
 - WMK SMK and CE approval.
 - Multi protection: PT valve, double high water. temp protection switches (manual &automatic).
- Electronic expansion valve for throttling ,high efficiency.
 - Easy control and restart function.
 - Four-way valve for automatic defrosting.
 - Automatic anti-freezing.
 - Close refrigerant circuit, easy for plumber installation.
 - Double-wall heat exchanger to prevent refrigerant leakage.

Flexible duct installation



Specification

Model			RSJF-30/CN3	
Running mode			Economy	E-heater
Power supply		Ph-V-Hz	1-220~240-50	
Ambient temp.		°C	-7~45	-20~45
Output water Temp.		°C	Default 50°C, 40°C~55°C	
Storage size of optional tank		Ltr	315(Optional 200~400L)	
Water heating	Capacity	kW	3.3	3.6
	Input	kW	0.92	3.6
	Cop	kW/kW	3.59	1.00
	rate power input	kW	1.40	/
	Max. current	A	6.8	16
Outdoor unit	Dimension (WxHxD)	mm	617x1,058x360	
	Packing (WxHxD)	mm	735x1,105x430	
	Net/gross weight	kg	70/73	
Outdoor noise level		dB(A)	52	
Refrigerant type/quantity		kg	R134a/0.75	
Refrigerant design pressure		MPa	2.7/ 1.0	
Tank design pressure		MPa	0.15/ 1.0	
Air flow		m³/h	1400	
Compressor	Type		ROTARY	
	Brand		Mitsubishi	
	Capacity	kW	2.785	
	Input	kW	0.895	
Fan motor	Brand		fans-tech	
	Input	w	70	
	Speed	r/min	860/610	
Water pipeline	Water inlet pipe	mm	DN20	
	Water outlet pipe	mm	DN20	
Hot water yield		m³/h	0.6	0.69
Loading Quantity		20'/40'/40H	Pcs	30/63/84

Remark:
1. The test conditions: outdoor temp. 20/15°C(DB/WB), inlet water temp. 15°C, outlet water temp. 55°C.
2. The specification may be changed for product improvement, please refer to the nameplate.



Split type (water cycle)

RSJF-32/CN3-A
RSJF-32/CN1-A
RSJF-50/CN1-B
RSJF-72/CN1-B

Ambient: -15°C~43°C



Features

- R134a/R410a gas, environmentally friendly.
- Max. water output temperature: 60°C(R410a).
- CE approval.
- Four-way valve for automatic defrosting.
- Double-wall heat exchanger to prevent refrigerant leakage.
- Built-in water pump.
- Close Refrigerant circuit, easy for plumber installation.
- User-friendly control interface,easy to control



Double-wall heat exchanger



Split type-water cycle(R410a/R134a)

Model			CE-RSJF-32/CN3-A	CE-RSJF-32/CN1-B	CE-RSJF-50/CN1-B	CE-RSJF72/CN1-B
Power supply		Ph-V-Hz	1-220~240-50	1-220~240-50	1-220~240-50	1-220~240-50
Ambient temp.		°C	-7~43	-15~43	-15~43	-15~43
Outwater Temp.		°C	Default 50°C, 40°C~70°C			
Storage size of optional tank		Ltr	260/300/350/400/500			
Water heating	Capacity	kW	3.00	3.00	4.30	6.50
	Input	kW	0.98	0.81	1.11	1.60
	Cop	kW/kW	3.06	3.70	3.87	4.06
	Max. current	A	5.3	7.5	8.3	11.1
Outdoor unit	Dimension (W×H×D)	mm	790×765×275	790×765×275	790×765×275	845×945×335
	Packing (W×H×D)	mm	905×807×355	905×807×355	905×807×355	965×1,009×395
	Net/gross weight	kg	60/64	56/60	62/66	81/86.5
Outdoor noise level		dB(A)	53	53	55	55
Refrigerant type/quantity		kg	R134a/0.75	R410a/0.95	R410a/1.2	R410a/1.3
Refrigerant design pressure		MPa	3.0/1.5	4.4/2.2	4.4/2.2	4.4/2.2
Tank design pressure		MPa	0.2~0.7			
Throttling type			Electric expansion vavle	Electric expansion vavle	Electric expansion vavle	Electric expansion vavle
Air flow		m³/h	2,000	2,000	2,000	3,200
Compressor	Type		Rotary	Rotary	Rotary	Rotary
	Brand		MITSUBISHI	Toshiba	Toshiba	Toshiba
	Capacity	kW	2.75	2.88	3.6	5.8
	Input	kW	0.96	1.03	1.35	1.99
Fan motor	Input	w	74	74	74	134
	Speed	r/min	770/ 480	770/ 480	770/ 480	830/450
Water pipeline	Water inlet pipe	mm	DN20	DN20	DN20	DN20
	Water outlet pipe	mm	DN20	DN20	DN20	DN20
	Water circulating pipe	mm	DN20	DN20	DN20	DN20
Hot water yield		m³/h	0.516	0.516	0.74	1.12
Loading Quantity		Pcs	76/160/240	76/160/240	76/160/240	64/134/134
Model (water tank)			LSX-260XP/D	LSX-300XP/D	LSX-350XP/D	LSX-400XP/D
Dimension		mm	Φ560×1,623	Φ560×1,853	Φ630×1,667	Φ630×1,884
Packing (W×H×D)		mm	630×1,710×635	630×1,960×635	690×1,760×705	690×1,980×705
Net/gross weight		kg	49/57	55/63	55/64	66/76
Loading Quantity		Pcs	30/63/84	27/54/72	27/60/60	24/54/54

Remark:
1. The test conditions: outdoor temp. 7/6°C(DB/WB), inlet water temp. 30°C, outlet water temp.35°C.
2. The specification may be changed for product improvement, please refer to the nameplate.

Split type (Refrigerant cycle)

RSJ-28/RD-190XP/A

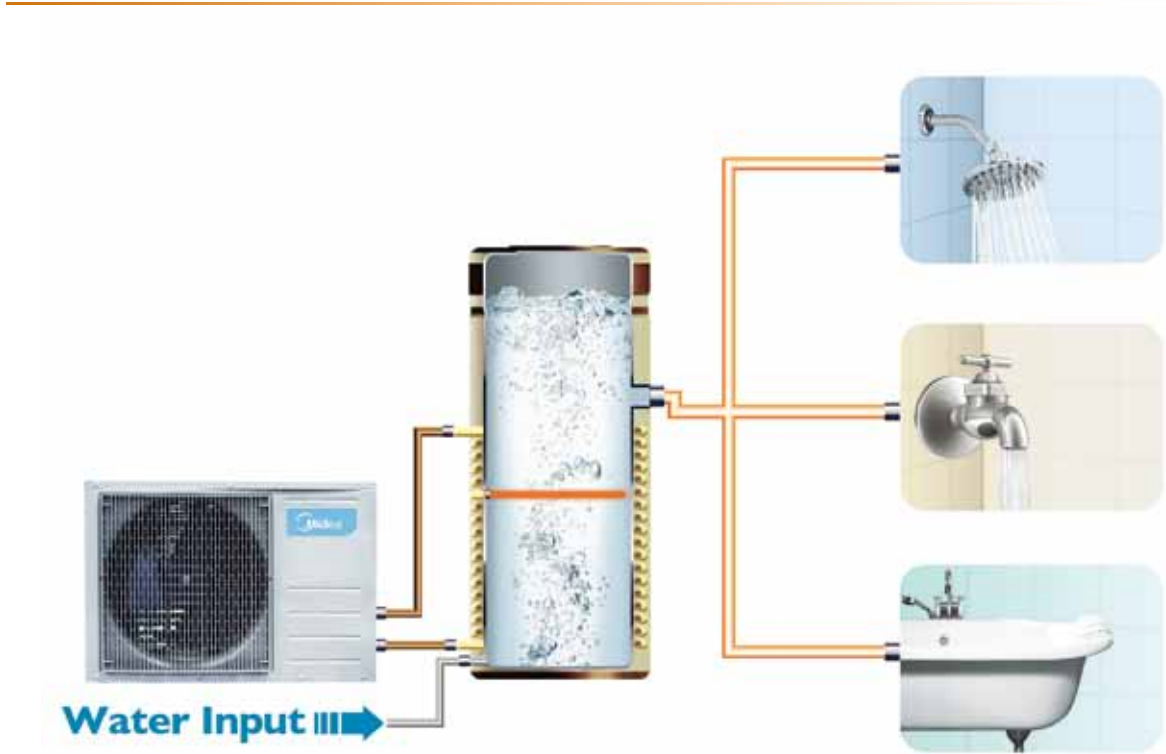
Ambient: -30°C~43°C



Features

- Water output temperature: 38°C~70°C.
- Heating element inside the tank.
- Easy installation and maintenance.
- No contamination potential, the condenser coil is wrapped around outside of the tank.

Heating element inside the tank to guarantee hot water supply



Split type-refrigerant cycle

Model			RSJ-28/RD-190XP/A		
Running mode			Economy	Hybrid	E-heater
Running ambient temp		°C	-7~43	-30~43	-30~43
Outwater Temp		°C	Default 50°C, 38°C~70°C		
Power supply		Ph-V-Hz	1-220-50		
Storage size		Ltr	190		
Water heating	Capacity	kW	2.80	2.40	2.00
	Input	kW	0.90	1.50	2.00
	Cop	kW/kW	3.11	1.60	1.00
	Max. current	A	11.6		
Ambient temp		°C	-30~43		
Outdoor unit	Dimension (D×H)	mm	700×534×234		
	Packing (W×H×D)	mm	825×585×375		
	Net/gross weight	kg	28/30		
Noise level		dB(A)	49		
Refrigerant type/quantity		kg	R22/0.77		
Refrigerant design pressure		MPa	3.3/1.65		
Tank design pressure		MPa	0.15~0.7		
Throttling type			Electric expansion vavle		
Compressor	Type		Rotary		
	Brand		Midea-Toshiba		
	Capacity	kW	2.5		
	Input	kW	0.82		
Fan motor	Input	w	60		
	Speed	r/min	870/690/44		
Water pipeline	Water inlet pipe	mm	DN15		
	Water outlet pipe	mm	DN15		
	Heat exchanger		Dividing wall type heat exchanger		
E-heater		kW	2.0		
Hot water yield		m³/h	0.06	0.052	0.043
Loading Quantity	20'/40'/40H	Pcs	168/344/344		
Model (water tank)			PLSX-190(28)TP/A		
Packing (W×H×D)		mm	730×1,430×700		
Net/gross weight		kg	75/85		
Loading Quantity	20'/40'/40H	Pcs	31/75/75		

Remark:
1. The test conditions: outdoor temp. 20/15°C(DB/WB), inlet water temp. 15°C, outlet water temp.55°C.
2. The specification may be changed for product improvement, please refer to the nameplate.

Split type (Refrigerant cycle)

RSJF-32/R
RSJF-50/R

Tank: 150/200/260L
Ambient: -7°C~43°C

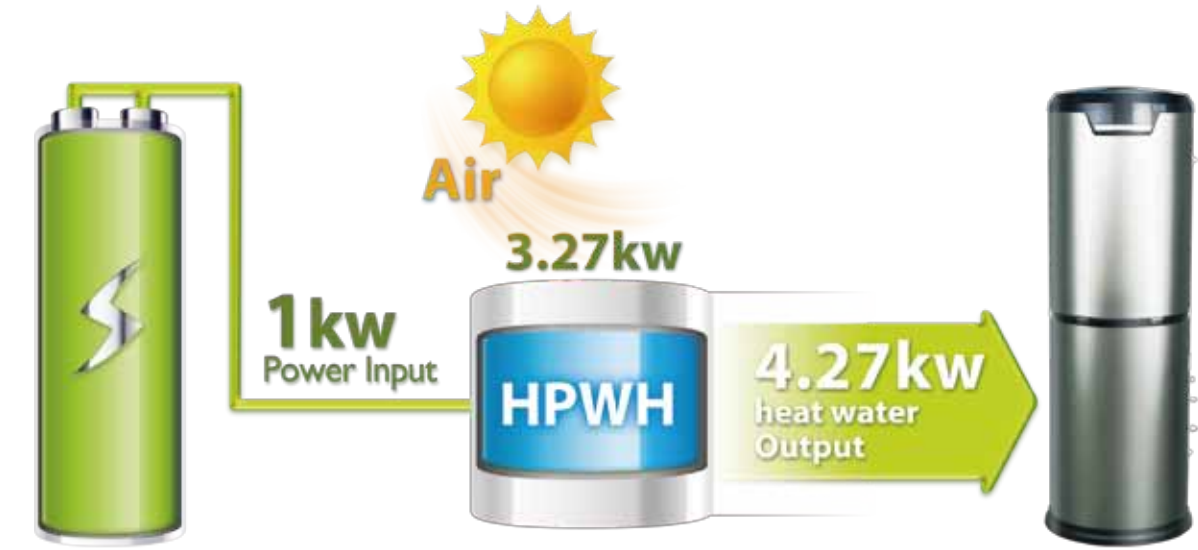


Features

- Max. water output temperature:55°C.
- No contamination potential, the condenser coil is wrapped around outside of the enamel tank.
- Easy for installation and maintenance.
- Easy to operation and easy to control



High efficiency



Split type-refrigerant cycle

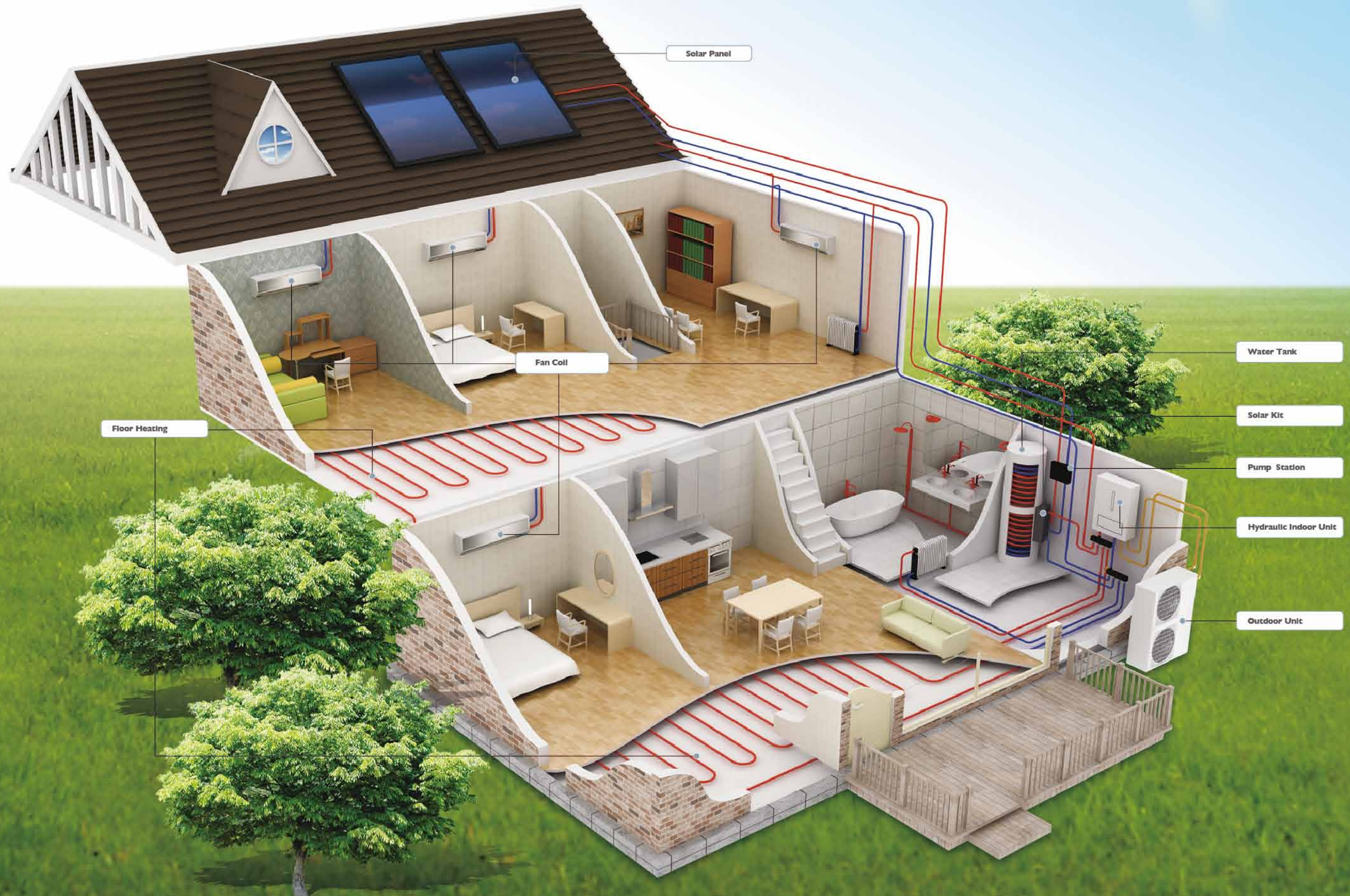
Model			RSJF-32/R		RSJF-50/R	
Power supply			Ph-V-Hz	1-220~240-50	1-220~240-50	
Ambient temp.			°C	-7~43	-7~43	
Output water Temp.			°C	Default 50°C, 40°C~55°C		
Storage size of optional			Ltr	150/200	200/260	
tank	Capacity	kW	3.15		5	
Water heating	Input	kW	0.84		1.32	
	Cop	kW/kW	3.75		3.79	
	Max. current	A	5.6		8.2	
Outdoor unit	Dimension (W×H×D)	mm	700×534×234		790×552×225	
	Packing (W×H×D)	mm	825×583×375		915×590×365	
	Net/gross weight	kg	27.5/32		38.5/44	
Outdoor noise level			dB(A)	49	55	
Refrigerant type/quantity			kg	R22/0.87	R22/1.85	
Refrigerant design pressure			MPa	3.3/1.8	3.3/1.8	
Tank design pressure			MPa	0.15~0.7		
Compressor	Type		ROTARY		ROTARY	
	Brand		Toshiba		Toshiba	
	Capacity	kW	2.6		4.1	
	Input	kW	0.83		1.28	
Fan motor	Input	w	62		80	
	Speed	r/min	860/470		775/510	
Water pipeline	Water inlet pipe	mm	DN15		DN15	
	Water outlet pipe	mm	DN15		DN15	
Hot water yield			m³/h	0.068	0.107	
Loading Quantity	20'/40'/40H	Pcs	168/344/344		102/207/276	
Model (water tank)			PLSX-150(32)XP/C	PLSX-200(32)XP/C	PLSX-200(50)XP/B	PLSX-260(50)XP/B
Packing (W×H×D)			mm	510×1,640×515	580×1,675×585	580×1,675×585 625×1,710×635
Net/gross weight			kg	32/37	43/49	47/53 52/60
Loading Quantity	20'/40'/40H	Pcs	56/120/155	52/108/108	52/108/108	30/63/84

Remark:
1. The test conditions: outdoor temp. 20/15°C(DB/WB), inlet water temp. 15°C, outlet water temp.55°C.
2. The specification may be changed for product improvement, please refer to the nameplate.



M-Thermal

GREEN SOLUTION FOR SPACE HEATING AND SANITARY HOT WATER



M-Thermal

Ambient: -15°C~43°C

LRSJF-V60/N1-310
LRSJF-V80/N1-310
LRSJF-V100/N1-610
LRSJF-V120/N1-610

LSX-150XP/D30B11
LSX-200XP/D30B11
LSX-300XP/D30B11

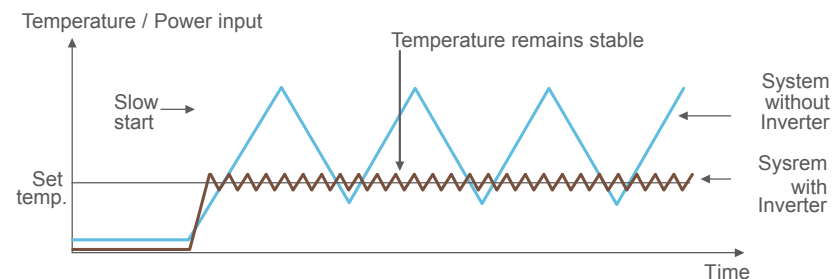
SMK-80/CD30GN1
SMK-100/CD30GN1
SMK-120/CD30GN1

TMK-01

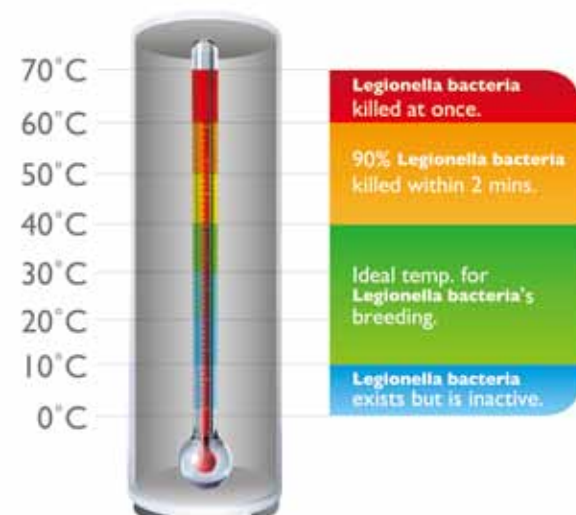
Features

- R410a gas, environmental friendly.
- DC Inverter Technology.

The advancement of the inverter technology creates more quiet, economical and powerful air conditioning systems.



- Automatic weekly anti-legionella function



- Compatible to solar thermal and boilers
- Total Heating Solution

When floor heating is conducted in a new house, warm air spreads gently across the house, making it comfortable and enabling the use of broad space without necessitating radiators or FCU.

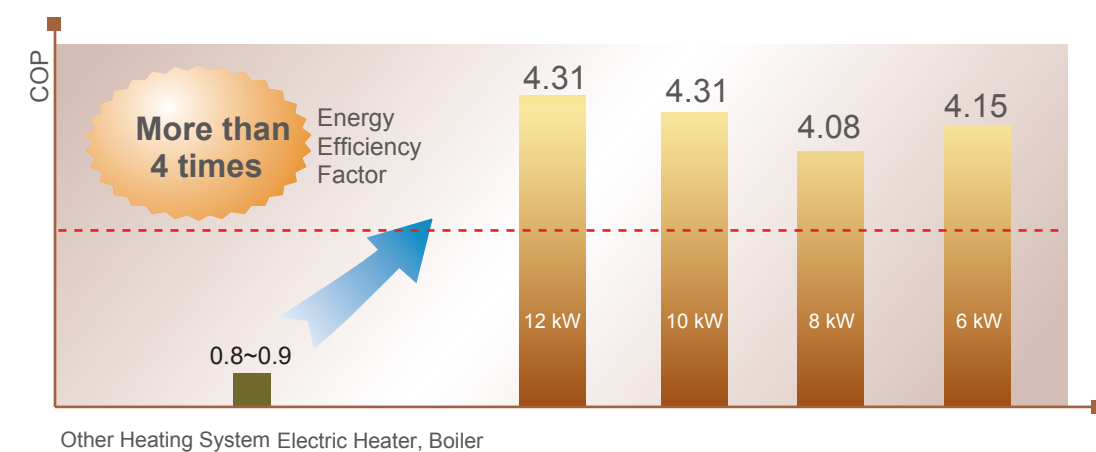
- Low Running Costs

When you use a gas or oil boiler, or an electric radiator, you can get exactly the same effect based on your input. The price of electricity is stable relative to those of oil or gas, thus cutting more costs as the time passes.

- Best Heating Efficiency

M-thermal, with the application of the same amount of energy, emits more than four energy items, which can be used. This is the strength of the Air to Water Heat pump to which inverter technology is applied.

Energy Efficiency Comparison



- Convenient and Reliable System

1. M-thermal uses the Easy Controller to check detailed operational information and a change in temperature of the whole system.
2. Easy to handle and install.
3. Reliable Performance at lower temperature.

- Comfort System

1. When floor heating is applied, warm air spreads gently across the house, making it comfortable. The system can help blood circulation and metabolism, further boosting our health.
2. The System can be four season used because it provides a heating solution in general and at the same time it also provides a cooling solution in summer.
3. The installation of M-Thermal will eliminate oil or gas tank, making the household surrounding neat and safe, enabling the use of more space, and avoiding refueling.

Operation temperature range

- Use the system in the following temperature for safe and effective operation. The max operation temperature for the heat pump. (Cooling/Heating)

Model	Outdoor temperature	Water temperature
Cooling operation	15°C~43°C	7°C ~ 22°C
Heating operating	-15°C~43°C	15°C~55°C

■ Total solution for space heating & sanitary

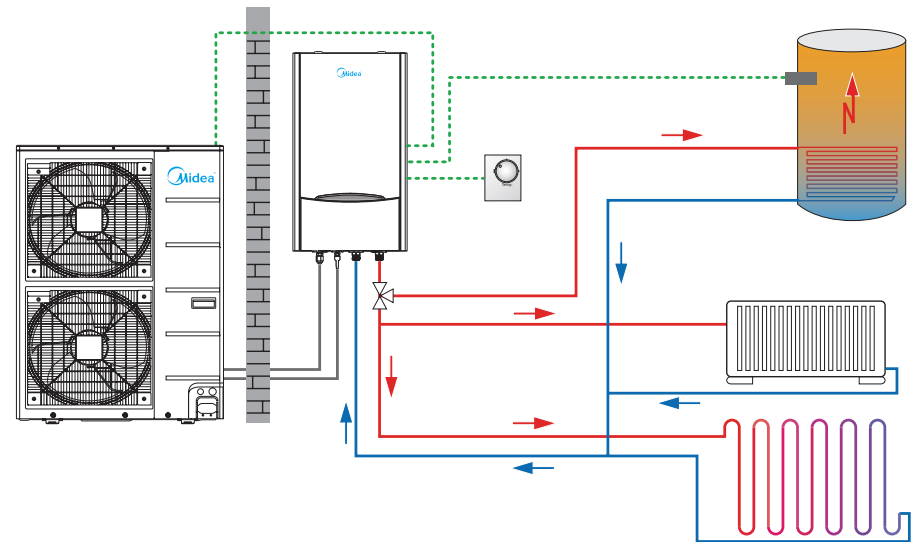
Hydraulic indoor unit			SMK-120/CD30GN1	CE-SMK-100/CD30GN1	SMK-80/CD30GN1	SMK-60/CD30GN1
Power supply		Ph-V-Hz	1-220~240-50	1-220~240-50	1-220~240-50	1-220~240-50
Function	Types		Heating&Cooling	Heating&Cooling	Heating&Cooling	Heating&Cooling
	Space Heating	°C	15~55	15~55	15~55	15~55
	Space Cooling	°C	7~22	7~22	7~22	7~22
	Sanitary Hot Water	°C	35~60	35~60	35~60	35~60
Max. current		A	27	27	27	27
Noise level		dB(A)	32	32	32	32
Unit	Dimension (W×H×D)	mm	900×500×375	900×500×375	900×500×375	900×500×375
	Packing (W×H×D)	mm	1,110×610×510	1,110×610×510	1,110×610×510	1,110×610×510
	Net/gross weight	kg	63/75	63/75	63/75	60/72
Element	Size	kW	1.5	1.5	1.5	1.5
	Quantity		2	2	2	2
Water pipeline	Water inlet pipe	mm	DN32	DN32	DN32	DN32
	Water outlet pipe	mm	DN32	DN32	DN32	DN32
Loading Quantity	20'/40'/40H	Pcs	66/138/184	66/138/184	66/138/184	66/138/184
DC Inverter outdoor unit			LRSJF-V120/N1-610	CE-LRSJF-V100/N1-610	LRSJF-V80/N1-310	LRSJF-V60/N1-310
Power supply		Ph-V-Hz	1-220~240-50	1-220~240-50	1-220~240-50	1-220~240-50
Max. current		A	23	22	15	14
Heating	Capacity	kW	12	10	8	6
	COP	kW/kW	4.31	4.30	4.08	4.15
	Ambient Temp.	°C	-15~43	-15~43	-15~43	-15~43
Cooling	Capacity	kW	9.3	8.5	6.3	6.3
	COP	kW/kW	2.45	2.45	2.23	2.45
	Ambient Temp.	°C	15~43	15~43	15~43	15~43
Unit	Dimension (W×H×D)	mm	900×1,327×320	900×1,327×320	895×862×313	895×862×313
	Packing (W×H×D)	mm	1,016×1456×435	1,016×1456×435	1,025×910×410	1,025×910×410
	Net/gross weight	kg	89/101	89/101	66/70	66/70
Noise level		dB(A)	58	58	58	58
Refrigerant	type/quantity	kg	R410a/2.7kg	R410a/2.7kg	R410a/2.4kg	R410a/2.4kg
	system pressure	MPa	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6
Compressor	Type		Rotary	Rotary	Rotary	Rotary
	Brand		mitsubishi	mitsubishi	mitsubishi	mitsubishi
	Capacity	kW	9.8	9.8	7.1	7.1
Fan motor	Input	w	100×2	100×2	168	168
	Speed		800	800	877/749	877/749
Loading Quantity	20'/40'/40H	Pcs	28/58/58	28/58/58	60/126/126	60/126/126
Sanitary hot water tank			LSX-300XP/D30B11	LSX-200XP/D30B11	LSX-150XP/D30B7	LSX-150XP/D30B7
Power supply		Ph-V-Hz	1-220~240-50	1-220~240-50	1-220~240-50	1-220~240-50
Storage size		Ltr	300 (Optional 150/200)	200 (Optional 150/300)	150 (Optional 300/200)	150 (Optional 300/200)
Max. water output temp.		°C	60	60	60	60
Dimension (D×H)		mm	Φ580×1800	Φ580×1,320	Φ580×1050	Φ580×1050
Packing (W×H×D)		mm	670×1,885×670	670×1,400×670	670×1,135×670	670×1,135×670
Net/Gross weight		kg	75/84	60/68	49/55	49/55
Element		kW	3.0	3.0	3.0	3.0
Tank material			SUS304	SUS304	SUS304	SUS304
Water pipeline	Water inlet pipe	mm	DN20	DN20	DN20	DN20
	Water outlet pipe	mm	DN20	DN20	DN20	DN20
	PT valve joint	MPa	DN20	DN20	DN20	DN20
Loading Quantity	20'/40'/40H	Pcs	27/57/76	27/57/76	27/57/76	27/57/76
Solar kit			TMK-01	TMK-01	TMK-01	TMK-01
Power supply		Ph-V-Hz	1-220~240-50	1-220~240-50	1-220~240-50	1-220~240-50
Dimension (W×H×D)		mm	810×310×295	810×310×295	810×310×295	810×310×295
Packing (W×H×D)		mm	830×340×315	830×340×315	830×340×315	830×340×315
Net weight		kg	8/10	8/10	8/10	8/10
solar coils	OD+T	mm×mm	ϕ 22×0.8	ϕ 22×0.8	ϕ 22×0.8	ϕ 22×0.8
	length	m	11	11	11	11
	material		SUS316L	SUS316L	SUS316L	SUS316L
	inlet pipe	mm	DN20	DN20	DN20	DN20
outlet pipe		mm	DN20	DN20	DN20	DN20
Loading Quantity	20'/40'/40H	Pcs	300/624/728	300/624/728	300/624/728	300/624/728

The testing Condition:
1. Heating: Outdoor temp. 7/6°C(DB/WB), inlet water temp. 30°C, outlet water temp. 35°C.
2. Cooling: Outdoor temp. 35/24°C(DB/WB), inlet water temp. 12°C, outlet water temp. 7°C.

Installation Diagram

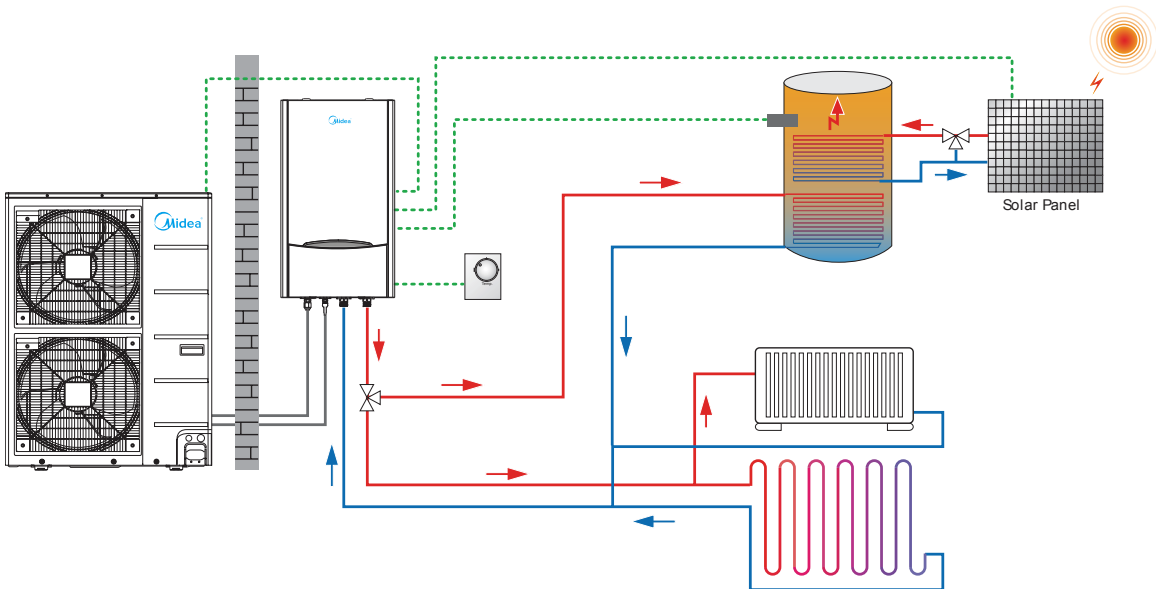
■ M-thermal+ Radiator + Underfloor Heating + Sanitary Tank The system can be combined with:

- 1. Under floor heating.
- 2. Fan coil units.
- 3. Low temperature radiators, to provide your customers the comfort they require.
- 4. A sanitary hot water tank to supply hot water needs.



■ M-thermal + Radiator + Underfloor Heating + Sanitary Tank + Solar Panel The system can be combined with:

- 1. Under floor heating.
- 2. Fan coil units.
- 3. Low temperature radiators, to provide your customers the comfort they require.
- 4. A sanitary hot water tank to supply hot water needs.
- 5. Solar collectors, with optional solar kit, to compliment the production of hot water.



Wire controller (KJRH-120A/BT-E)



Features

- Turning the unit ON/OFF.
- Operation mode change-over:
 - Space heating
 - Space cooling
 - Sanitary water heating
 - Space heating & Sanitary water heating
 - Space cooling & Sanitary water heating
- Selection of features:
 - Silent mode
 - Run test function
 - Air purge function
- Temperature set point adjustment.
- The clock functions are:
 - 24 hour real time clock
 - Day of the week indicator
- Schedule timer function.

NAME AND FUNCTION OF BUTTONS



Button	Name	Function
	Cooling/Heating ON/OFF button.	Starts or stops the heating or cooling function of the unit.
	Weekly schedule timer button.	Enable /disable the schedule time and use to program the controller.
	Silent mode button.	Enable or disable silent mode.
	Clock setting button.	Enable or disenable clock setting.
	Sanitary water heating button.	Enable or disable heating of the sanitary water.
	Sanitary hot water temperature setting button.	enable or disable sanitary water temperature setting.
	Space cooling/Space heating button.	This button allows manual switching between cooling or heating mode.
	Space cooling/Space heating temperature setting button.	Enable or disable space cooling/space heating temperature setting.
	Menu button.	Enable and disable menu setting function of the controller.
	Check button.	Enables and disenable the checking function of the controller.
	Page up button.	This button is used for page up function.
	Page down button.	This button is used for page down function.
	Increasing button.	This button is used for increasing the current value.
	Decreasing button.	This button is used for decreasing the current value.
	Confirm button.	Press this button to confirm the change.
	Lock button.	Press this button for locking all other buttons.
	Reset button.	Reset the wire controller and return to factory default settings.

Name And Function Of Icons

Icon	Function
	This icon indicates the current operation mode is space cooling.
	This icon indicates the current operation mode is space heating.
	This icon indicates the current operation mode is sanitary water heating.
	This icon indicates that the circulation pump is running.
	This icon indicates that the compressor in the outdoor unit is active.
	This icon indicates the current operation mode is silent mode.
	This icon indicates that the disinfection mode is active.
	This icon indicates that the defrost mode is active.
	This icon indicates that the anti-freezing mode is active.
	These icons indicate the operation and the date of the weekly schedule timer.
	This icon indicates that the electric heater of the sanitary water tank is active.
	This icon indicates that the first stage auxiliary heater of the indoor unit is operating when there is a high demand for heating capacity.
	This icon indicates that the second stage auxiliary heater of the indoor unit is operating when there is a high demand for heating capacity.
	The display shows the current set temperature of the installation.
	The display also used to shows the water outlet temperature of indoor unit when there is no button press operation.
	These icons indicate that external heat source(s) is (are) installed.
	This icon indicates that an external room thermostat with higher priority is controlling your installation.
	The clock display shows the current time.
	The first code and the second represent the first level and the second level menu from the field set list. The last two numbers indicate the value of the first and the second code.
	The operation lamp lights in each one mode.
	This icon indicates the checking parameter is the inlet temperature of floor heating.
	These two icons indicate the current operation mode are space cooling and sanitary water heating.
	These two icons indicate the current operation mode are space heating and sanitary water heating.
	This icon indicates all the operations of the schedule timer are inactive.
	This icon indicates all the buttons of the controller are locked except button.
	This icon is displayed whenever non-installed option is addressed or a function is not available.

Error Code

Error code	Meaning	Error code	Meaning
E0	Flow switch error(continuous for 3 times, and should be reset by switch off the power supply)	P1	T2B low temperature protection
E1	T2 error	P2	TW_out high temperature protection
E2	UI communication error	P3	TW_out low temperature protection
E3	Outdoor unit communication error	P4	TW_in high temperature protection
E4	T12 Berror	P5	T1 high temperature protection
E5	T5 error	P6	T1B high temperature protection
E6	T1 error	P7	Outdoor unit protection
E7	T1B error	P8	Sanitary hot water tank electric heater protection
E8	Flow switch(one time)	P9	Auxiliary heater protection
E9	TW_in error	Pb	Anti-freezing protection
EA	TW_out error	Pc	Temperature controller error(result from the conflict between cool mode and heat mode)
Eb	T4 error	t0~t7	Run test
Ed	Phase protection	dF	Defrost
EE	Eeprom error	d0	Oil return function
P0	T2 high temperature protection		

ACCESSORIES

■ Outdoor unit				
INSTALLATION FITTINGS	Name	Shape	Quantity	
	Outdoor unit installation manual		1	
	Outdoor unit owner's manual		1	
	Outflow connecting tube		1	
	Waterproof rubber cap		1	
■ Hydraulic Indoor unit				
Accessory name		Shape	Qty	
Owner's & Installation Manual		This manual	1	
Mounting bracket			1	
Two-way valve			3	
M4 screws M4 screws		—	2	
Water tank temperature sensor		—	1	
Y-style filter			1	
Floor heating inlet temperature sensor, T1B		—	1	
Drain pan kit			1	
Owner's		—	1	
M8 expansion screws		—	5	
■ Solar kit				
Accessory name		Shape	Qty.	Purpose
Installation & Owner's Manual			1	This manual
adapter			2	Connection the solar kit and the sanitary hot water tank
Sealing			6	Pipe connection seal
Screws			2	Fixed left and right epp casing
Washer			2	Fixed left and right epp casing

Pool dedicated series➔



Domestic Pool/Spa

CE-LRSJ-60/NYN1
CE-LRSJ-80/NYN1
CE-LRSJ-120/NYN1
CE-LRSJ-140/NYN1

Ambient: -7°C~43°C



Features

- Water temperature: 10°C~35°C.
- Titanium Heat exchanger.
- LCD display and timer control.
- 15 m wire controller lunk.
- Automatic defrosting function.
- Heating and cooling.

Operation temperature range

Water cooling	Outdoor temperature	15°C~43°C
Water heating	Outdoor temperature	-7°C~38°C

Unit selection

capacity(kW)	6	8	12	14
Applicable range(m³)	40	50	60-85	75-100

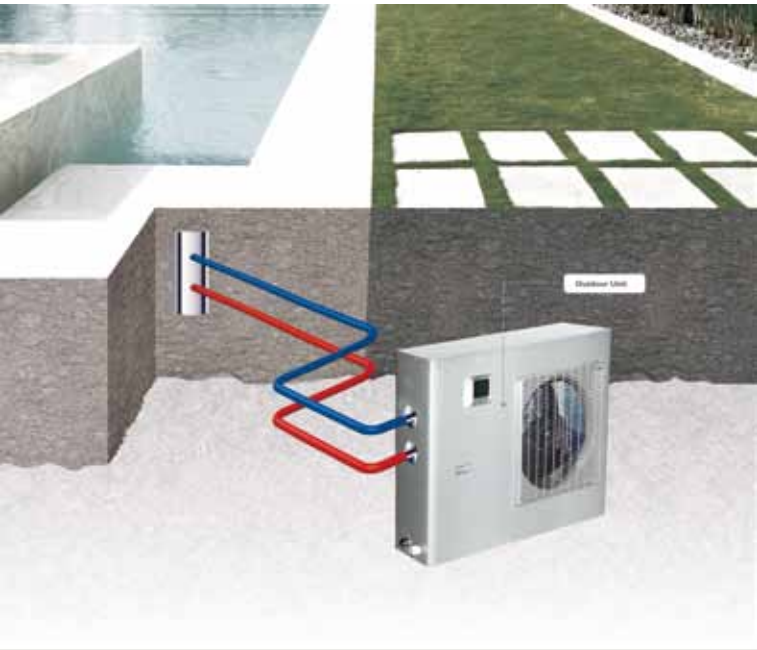
Titanium heat exchanger



Domestic pool HPWH

Model			LRSJ-60/NYN1	LRSJ-80/NYN1	LRSJ-120/NYN1	LRSJ-140/NYN1
Power supply		Ph-V-hz	1-230-50	1-230-50	1-230-50	1-230-50
Heating mode		water outlet Temp	°C Default 28°C, 20°C~35°C			
Cooling mode		water outlet Temp	°C Default 28°C, 10°C~30°C			
Max. current		A	6.3	8.0	13.7	16.0
Heating	Capacity	kW	6	8	12.0	14.0
	Input	kW	1.15	1.52	2.40	2.55
	Outdoor ambient temp	°C	-7°C~38	-7°C~38	-7°C~38	-7°C~38
	COP	kW/kW	5.22	5.27	5.00	5.49
Cooling	Capacity	kW	4.0	5.8	8.4	10.4
	Input	kW	1.3	1.5	2.4	2.9
	Outdoor ambient temp	°C	15°C~43	15°C~43	15°C~43	15°C~43
	COP	kW/kW	3.2	3.9	3.5	3.6
Outdoor unit	Dimension (W×H×D)	mm	1,015×705×385	1,015×705×386	1,050×855×315	1,050×855×315
	Packing (W×H×D)	mm	1,095×840×445	1,095×840×445	1,160×980×410	1,160×980×410
	Net/Gross weight	kg	64/73	66/75	75/85	75/85
Max power		kW	1.7	2.0	3.3	3.75
Outdoor noise level		dB(A)	58	58	58	58
Refrigerant type/Quantity		Kg	R410A/1.0	R410A/1.25	R410A/1.6	R410A/1.85
Water side	Heat exchanger material		Titanium-tube			
	Water inlet pipe	mm	DN50	DN50	DN50	DN50
	Water outlet pipe	mm	DN50	DN50	DN50	DN50
	Drain pipe diameter	mm	DN25	DN25	DN25	DN25
	Max. pressure	MPa	0.4	0.4	0.4	0.4
Water contented capacity (m³)			40.0	50.0	60~85	75~100
Wire controller			KJRH-90B/E	KJRH-90B/E	KJRH-90B/E	KJRH-90B/E
Hot Water Yield		m³/h	2.6	3.4	5.2	6.0
Loading Quantity		Pcs	52/108/162	52/108/162	56/116/116	56/116/116

Remark:
1. The test conditions:
Water Heating: outdoor temp. 24/19°C(DB/WB), inlet water temp. 27°C,outlet water temp. 29°C
Water Cooling: outdoor temp. 35/24°C(DB/WB), inlet water temp. 27°C
2. The specification may be changed for product improvement, please refer to the nam eplate



Commercial Pool/Spa

LRSJ-450/SY
LRSJ-900/SY

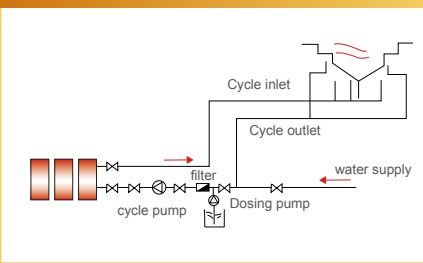
Ambient: -7°C~43°C



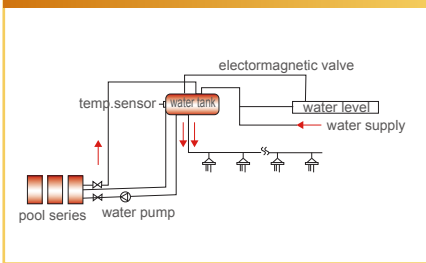
Features

- Excellent Efficiency.
High efficiency scroll compressor .
Titanium tube heat exchanger .
- Water temperature: 7~43°C.
- Wire controller use for easy setting and operation.
LCD display and time clock.
- Cooling heating and hot water, total solution for water demand.

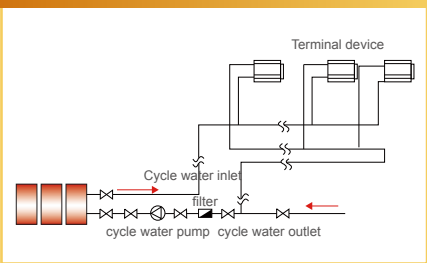
Swimming pool heating and constant temperature system



Central hot water supply system



Refrigeration/heating system



- Automatic defrosting function.
- Automatic water pipe anti-frozen.
- Easy to install and simple for maintenance.

Operation temperature range

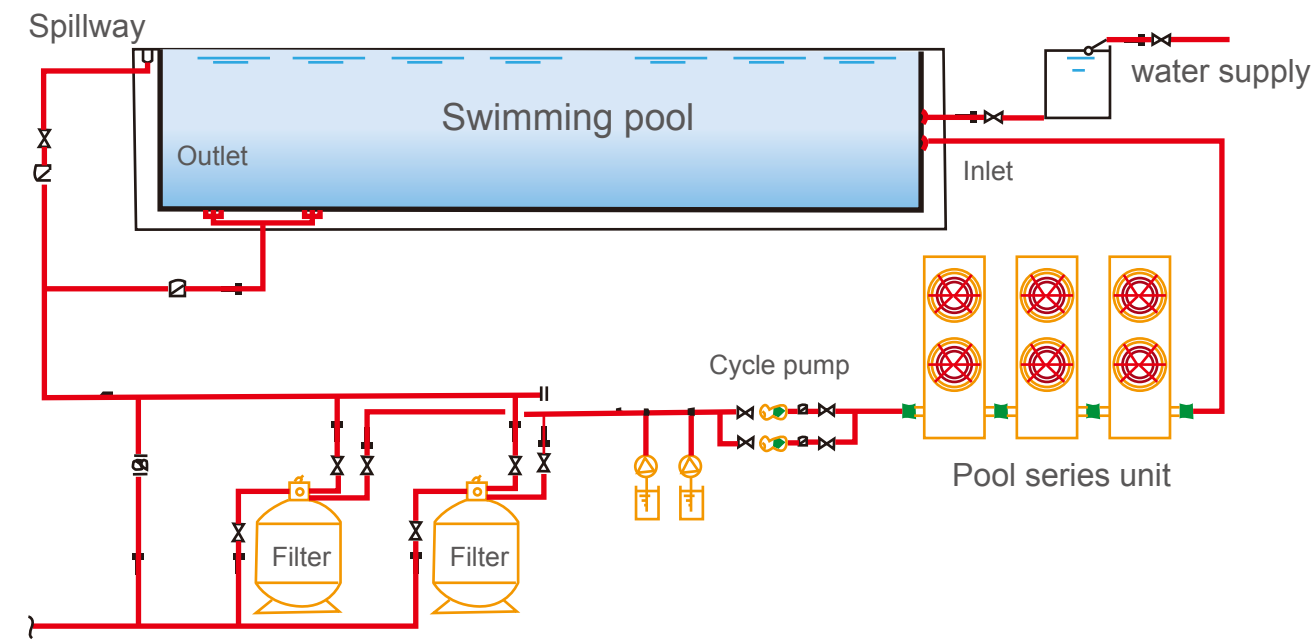
cooling	Outdoor temp.	21°C~43°C
	Indoor temp.	≥17°C
heating	Outdoor temp.	7~43°C
	Water inlet temp.	0~40°C

Commercial pool HPWH

Model			LRSJ-450/SY-820	LRSJ-900/SY-820
Power supply		Ph-V-hz	3-380-50	3-380-50
Heating mode	water outlet Temp	°C	Default 28°C, 20°C~40°C	
Cooling mode	water outlet Temp	°C	Default 28°C, 7°C~30°C	
Heating	Capacity	kW	45	90
	Input	kW	8.5	16.4
	Outdoor ambient temp	°C	-7°C~43°C	
	COP	kW/kW	5.29	5.49
Cooling	Capacity	kW	40	80
	Input	kW	11.5	20.5
	Outdoor ambient temp	°C	21°C~43°C	
	COP	kW/kW	3.48	3.90
Outdoor noise level		dB(A)	65	65
Refrigerant type/Quantity		Kg	R22/7	R22/14
water side	Heat exchanger material		Titanium-tube	
	Water inlet pipe		DN50	DN100
	Water outlet pipe	mm	DN50	DN100
	Max. pressure	MPa	1	1
Outdoor unit	Dimension (W×H×D)	mm	1,514×1,820×850	2,000×1,970×900
	Packing (W×H×D)	mm	1,620×2,041×1,034	2,110×2,150×1,000
	Net/Gross weight	kg	380/400	580/650
Wire controller			KJR-08B/H	KJR-08B/H
Hot Water Yield		m³/h	15	30
Loading Quantity	20'/40'/40H	Pcs	6/14/14	5/12/12

Remark:
1. The test conditions:
Water Cooling: outdoor temp. 24/19°C(DB/WB), inlet water temp. 27°C,outlet water temp. 29°C
Water Heating: outdoor temp. 35/24°C(DB/WB), inlet water temp. 27°C
2. The specification may be changed for product improvement, please refer to the nameplate.

The Engineering Application Schemes



Commercial heat pump →

Direct & cycle heating (R410a)

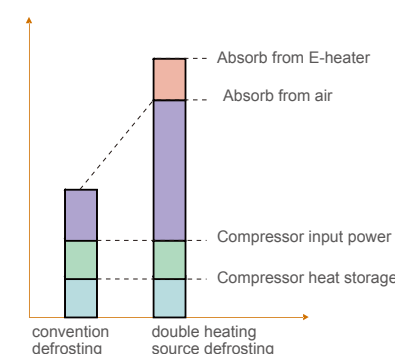
RSJ-100/N1-540V-D
RSJ-200/SN1-540V-D
RSJ-380/SN1-820-D

Ambient: -15°C~43°C

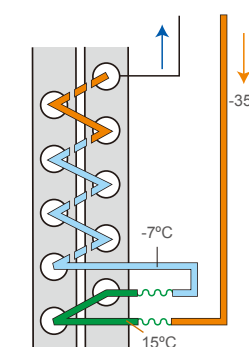


Features

- R410a gas, environmentally friendly.
- Free modular combination.
- The unique defrosting flow path.
Air side reserved special defrosting flow path, when the system is defrosting, the four-way valve is reversing, the system will absorb energy from special defrosting flow path, the defrosting progress will have no impact on water temperature.
- Double heat source for defrosting.
The units use the refrigerant heating technology to increase the total absorption energy.
- Double throttling technology to ensure the temperature of base plate.

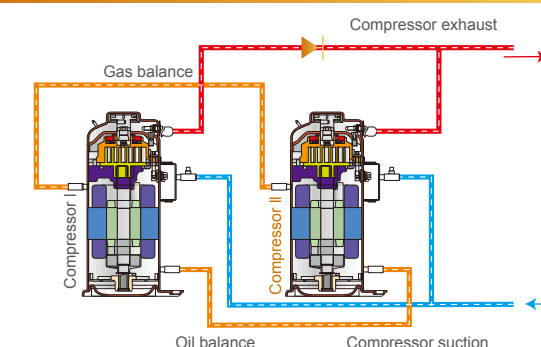


Double throttling technology



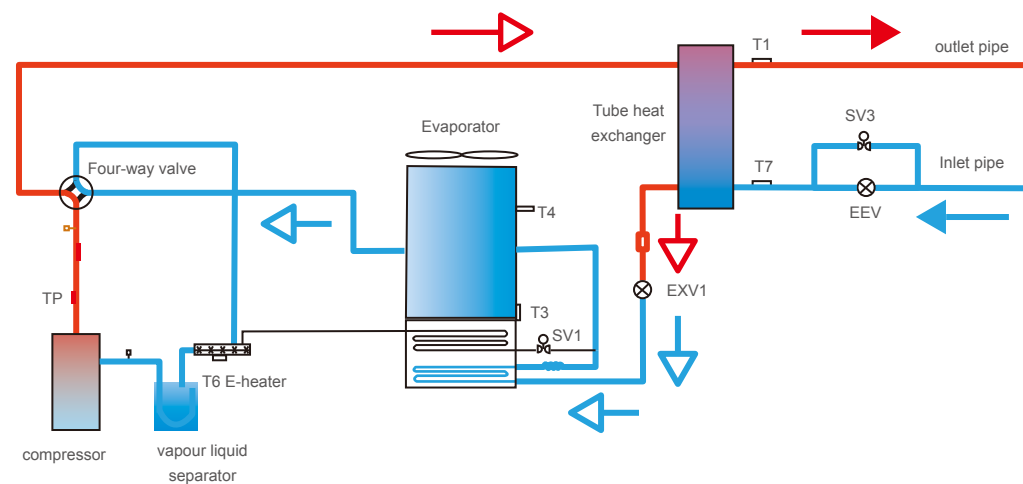
- High efficiency compressor.
Copeland's efficient scroll compressor.
Flexible design, Low temperature reliable operation.
Proprietary gas balance and fluid balance design to ensure the unit reliable operation.
- Hot water valve supplies hot water with stable temperature and expands the life span of compressor.
- CE approval.

Compressor Parallel technology

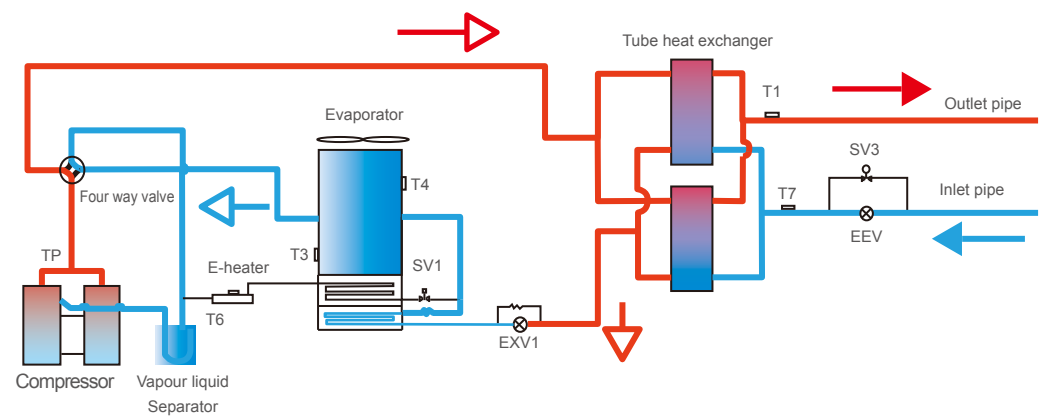


Simple refrigerating system diagram

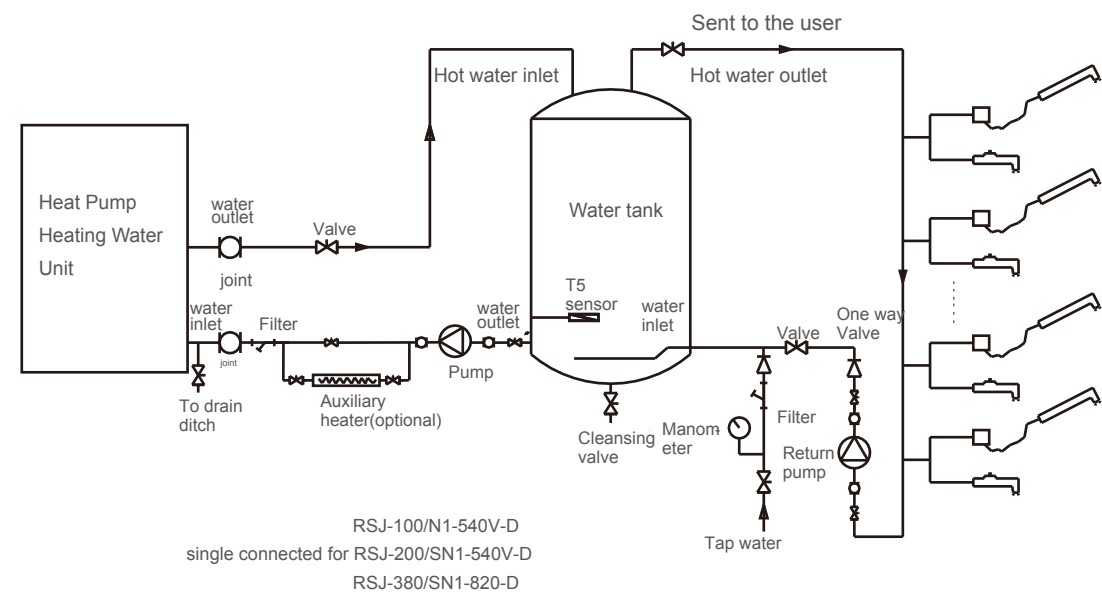
■ 10kw/20kw refrigerating system diagram



■ 38kw refrigerating system diagram

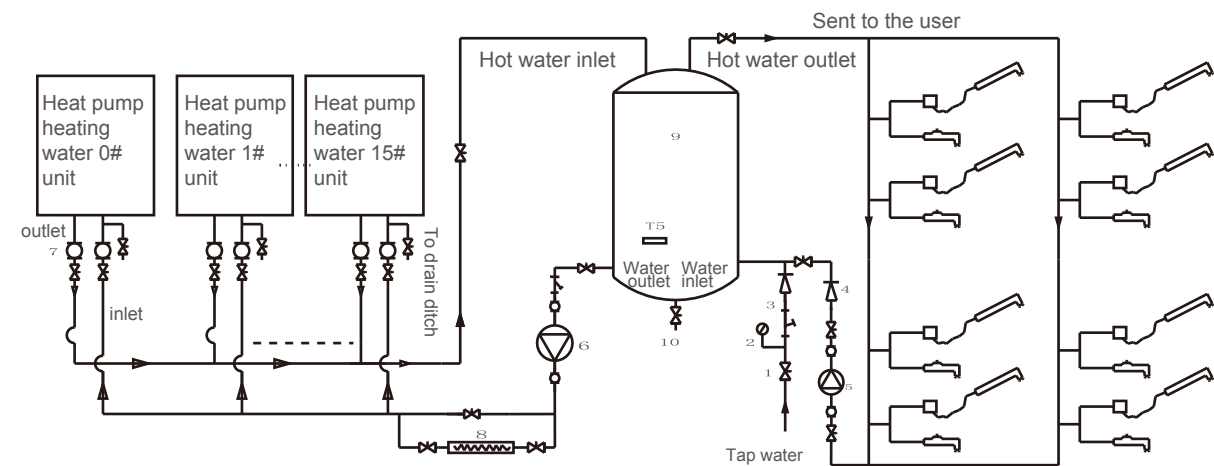


■ Schematic diagram of single connected heat pump system



RSJ-100/N1-540V-D
single connected for RSJ-200/SN1-540V-D
RSJ-380/SN1-820-D

■ Heat pump units schematic diagram



A maximum of 16 heat pump heating water units can be connected in parallel

■ Direct heating & cycle heating(R410a)

Model		RSJ-100/N1-540V-D	RSJ-200/SN1-540V-D	RSJ-380/SN1-820-D
Power supply		Ph-V-hz	1-220~240-50/60	3-380~415-50/60
Running ambient temp		°C	-15~43	
Outwater Temp		°C	Default 56°C, 40°C~60°C	
Water Heating	Capacity	kW	11.2	20.4
	Input	kW	2.85	5.20
	COP	kW/kW	3.93	3.9
	Max. input current	A	18.2	13
Outdoor unit	Dimension (W×H×D)	mm	800×1,080×740	800×1,080×740
	Packing (W×H×D)	mm	810×1,185×770	810×1,185×770
	Net/Gross weight	kg	121 / 129	145 / 152
Outdoor noise level		dB(A)	56	58
Refrigerant type/Quantit		Kg	R410A 1.5	R410A 2.8
Design pressure		MPa	4.4/2.6	4.4/2.6
Compressor	Type		SCROLL	SCROLL
	Brand		COPELAND	COPELAND
	Capacity	Btu	30,000	55,000
	Input	kW	2.94	5.20
outdoor fan motor	Brand		welling	YONGAN/DAYANG
	Input	W	230×1	360×1
	Speed(hi/lo)	r/min	735 / 530	930 / 770
Outdoor air flow		m³/h	4,616	6,874
water pipeline	water inlet pipe	mm	DN25	DN25
	water outlet pipe	mm	DN25	DN32
Wire controller			KJR-16B	KJR-16B
Hot Water Yield		m³/h	0.26	0.52
Loading Quantity		Pcs	21/42/84	21/42/84

Remark:
1. The test conditions: outdoor temp. 20/15°C(DB/WB), inlet water temp. 15°C, outlet water temp. 55°C.
2. The specification may be changed for product improvement, please refer to the nameplate

Direct &cycle heating (R22)

RSJ-100-540V-C
RSJ-200/S-540V-C
RSJ-300/S
RSJ-380/S-820
RSJ-770/S-820

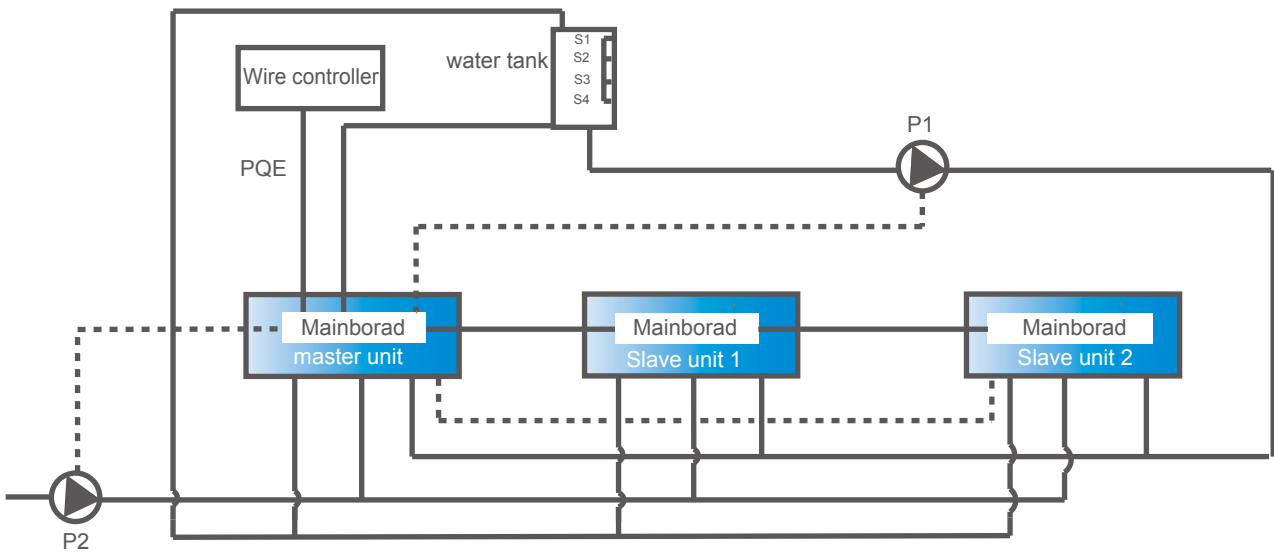
Ambient: -7°C~43°C



Features

- Free modular combination.
- Water outlet temperature set freely: 40~60 C .
- The unique defrosting flow path.
Air side reserved special defrosting flow path, when the system is defrosting, the four-way valve is reversing , the system will absorb energy from special defrosting flow path, the defrosting progress will have no impact on water temperature.
- Double heat source for defrosting.
The units use the refrigerant heating technology to increase the total absorption energy.
- Double throttling technology to ensure the temperature of base plate.
- High efficiency compressor.
Copeland's efficient scroll compressor.
Flexible design, Low temperature reliable operation.
- Hot water valve supplies hot water with stable temperature and expands the life span of compressor.

Heat pump units schematic diagram

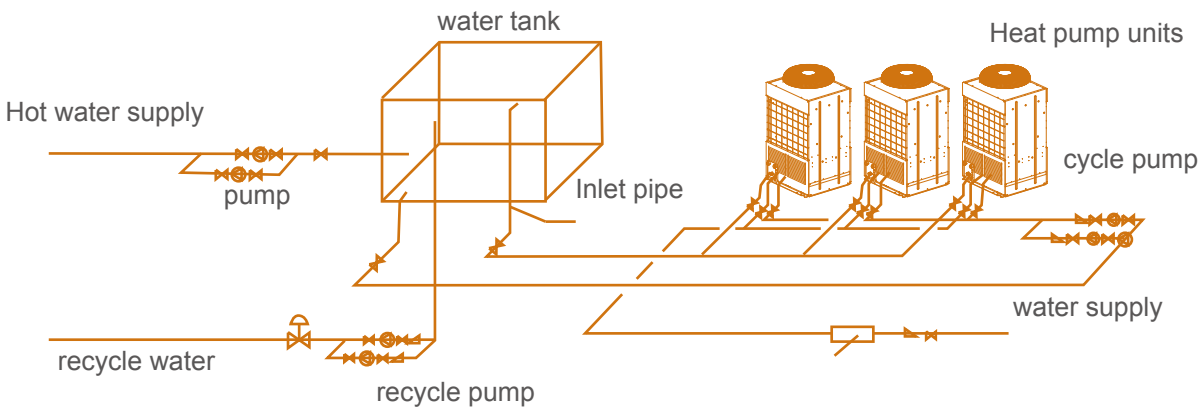


Direct-heating and cycle heating (R22/R407c)

Model		RSJ-100-540V-C	RSJ-200/S-540V-C	RSJ-300/S	RSJ-380/S-820	RSJ-770/S-820
Power supply		Ph-V-hz	1-220~240-50	3-380~415-50	3-380~415-50	3-380~415-50
Running ambient temp		°C	-7~43			
Outwater Temp		°C	Default 56°C, 40°C~60°C			
Water Heating	Capacity	kW	10.3	20.4	26.0	38.5
	Input	kW	2.71	5.20	6.10	8.70
	COP	kW/kW	3.80	3.9	4.3	4.4
	Max. input current	A	13.2	10.0	15.0	19.0
Outdoor unit	Dimension (W×H×D)	mm	800×1,080×740	800×1,080×740	997×1,771×894	997×1,771×894
	Packing (W×H×D)	mm	810×1,185×770	810×1,185×770	1,105×1,965×920	1,105×1,965×920
	Net/Gross weight	kg	121 / 129	145 / 152	250 / 267	290 / 297
Outdoor noise level		dB(A)	56	58	62	62
Refrigrant type/Quantity		Kg	R22 1.6	R22 2.7	R22 3.5	R22 5.7
Design pressure		MPa	3.3/1.65	3.3/1.65	3.3/1.65	3.3/1.65
Compressor	Type		SCROLL	SCROLL	SCROLL	SCROLL
	Brand		COPELAND	COPELAND	COPELAND	COPELAND
	Capacity	Btu	28, 000	49, 700	68,000	106,000
	Input	kW	2.52	4.43	5.8	9.0
outdoor fan motor	Input	W	230×1	360×1	670×1	865×1
	Speed(hi/lo)	r/min	735 / 530	930 / 770	670/550	830 / 710
Outdoor air flow		m³/h	4,616	6,874	10,000	126,84
water pipe	water inlet pipe	mm	DN25	DN25	DN25	DN25
	water outlet pipe	mm	DN25	DN25	DN32	DN32
Wire controller			KJR-16B	KJR-16B	KJR-16B	KJR-16B
Hot Water Yield		m³/h	0.26	0.52	0.7	1.0
Loading Quantity		Pcs	21/42/84	21/42/84	12/26/26	12/26/26

Remark:
1. The test conditions: outdoor temp. 20/15°C(DB/WB), inlet water temp. 15°C, outlet water temp. 55°C.
2. The specification may be changed for product improvement, please refer to the nameplate.

The Engineering Application Schemes



Cycle heating

RSJ-100/M-820
RSJ-200/MS-820
RSJ-380/MS-820

Ambient: -7°C~43°C

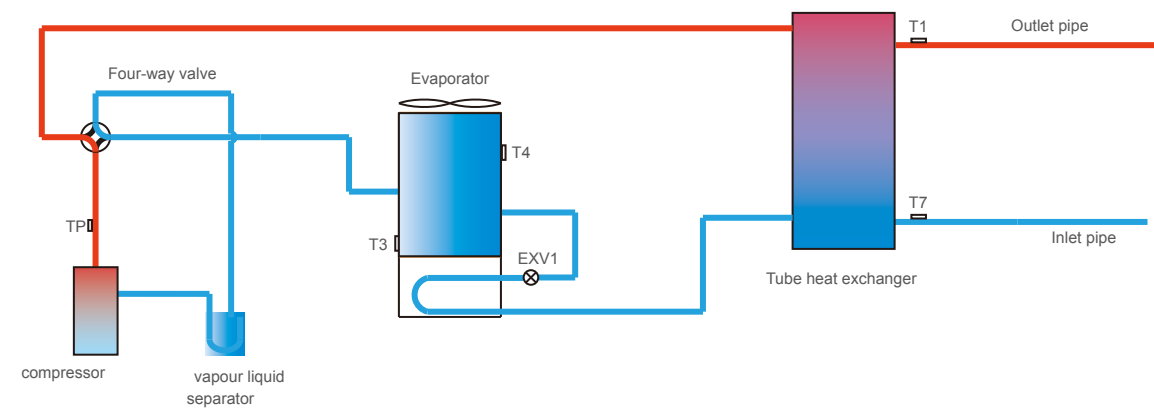


Features

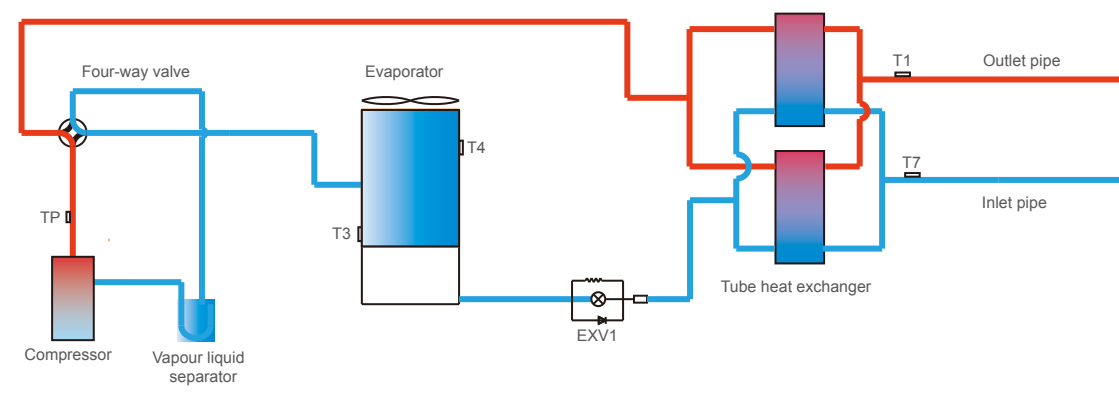
- Free modular combination.
- Water output temperature: 40°C~55°C.
- Two refrigerant types: R407c/R22.
- Auto-restart function.
- Easy control and restart function.

Simple refrigerating system diagram

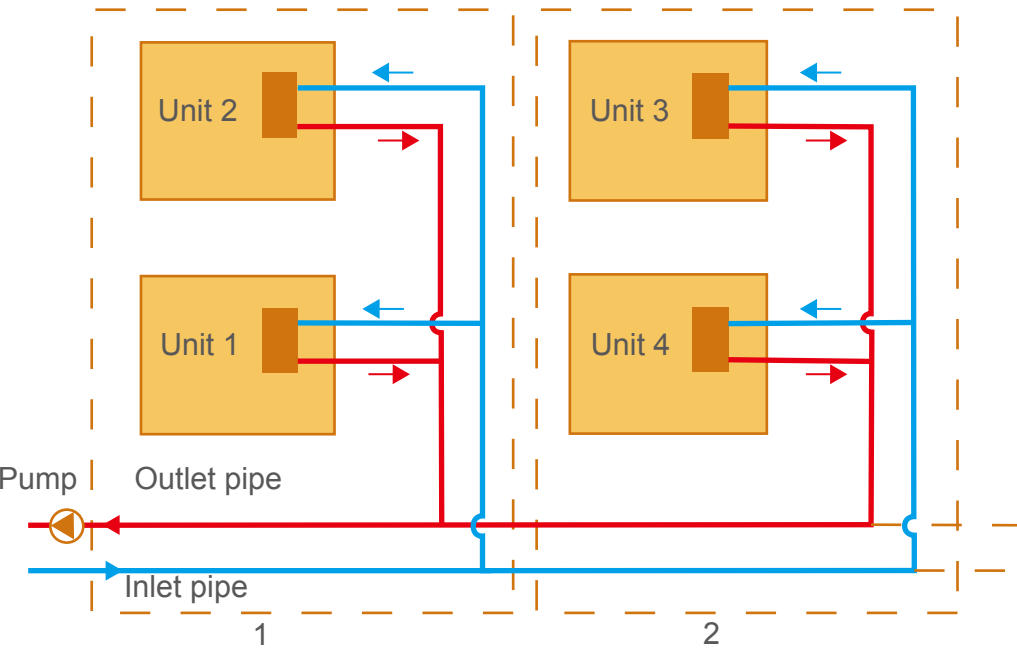
10/20kw refrigerating system diagram



38kw refrigerating system diagram



Unit system connection diagram



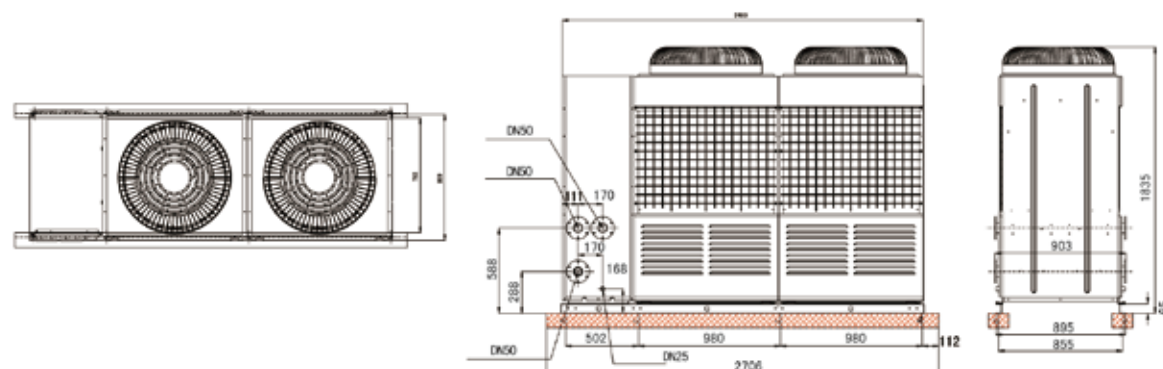
Cycle type(R22/R407c)

Model			RSJ-100/M-540V	RSJ-200/MS-540V	RSJ-380/MS-820
Power supply			Ph-V-hz	1-220-50	3-380-50
Running ambient temp			°C	-7~43	
Outwater Temp			°C	Default 50°C, 30°C~55°C	
Water Heating	Capacity	kW	9.5	19.0	36.8
	Input	kW	2.4	4.2	8.45
	COP	kW/kW	4.04	4.52	4.36
	Max. input current	A	16.0	10.5	22.0
Outdoor unit	Dimension (W×H×D)	mm	780×1,060×740	780×1,060×740	997×1,771×894
	Packing (W×H×D)	mm	810×1,185×770	810×1,185×770	1,105×1,965×920
	Net/Gross weight	kg	119 / 127	145 / 152	285 / 297
Outdoor noise level		dB(A)	56	58	62
Refrigerant type/Quantit		Kg	R22 2.3	R22 3.5	R22 5.7
Design pressure		MPa	3.3/1.65	3.3/1.65	3.3/1.65
Compressor	Type		SCROLL	SCROLL	SCROLL
	Brand		COPELAND	COPELAND	COPELAND
	Capacity	kW	8.2	14.6	31.6
	Input	kW	2.5	4.4	9.00
outdoor fan motor	Input	W	270×1	400×1	600×1
	Speed(hi/lo)	r/min	670/550	670/550	735 / 530
Outdoor air flow		m³/h	3,000	8,000	13,000
water pipeline	water inlet pipe	mm	DN25	DN32	DN32
	water outlet pipe	mm	DN25	DN32	DN32
Wire controller			KJR-08B/D	KJR-08B/D	KJR-08B/D
Hot Water Yield		m³/h	0.26	0.52	1.0
Loading Quantity		Pcs	21/42/84	21/42/84	12/26/26

Remark:
1. The test conditions: outdoor temp. 20/15°C(DB/WB), inlet water temp. 15°C, outlet water temp. 55°C.
2. The specification may be changed for product improvement, please refer to the nameplate

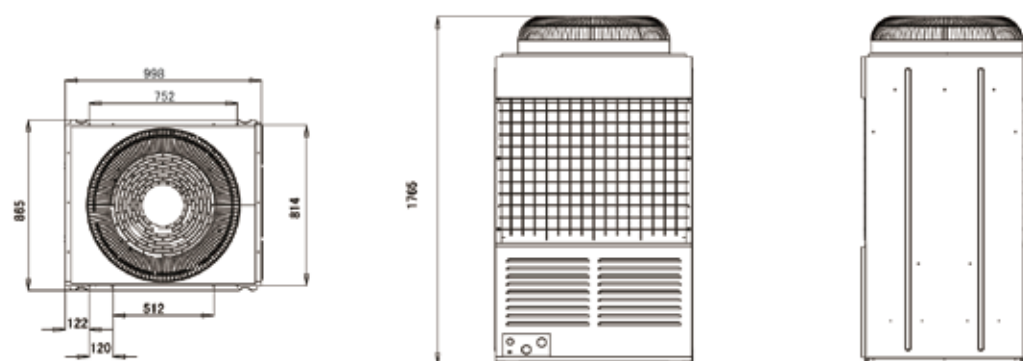
Dimension

RSJ-770/S-820



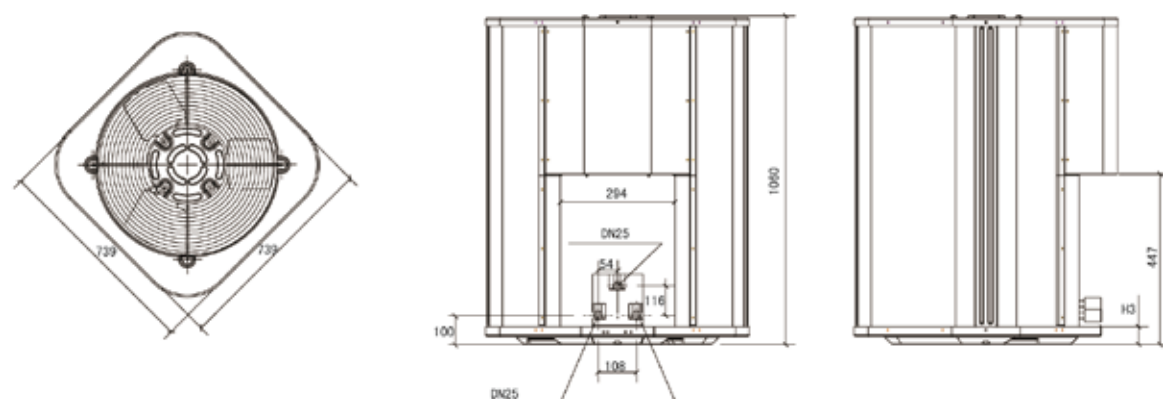
RSJ-380/S-820-C

RSJ-300/S-820-C



RSJ-200/S-540V

RSJ-100-540V



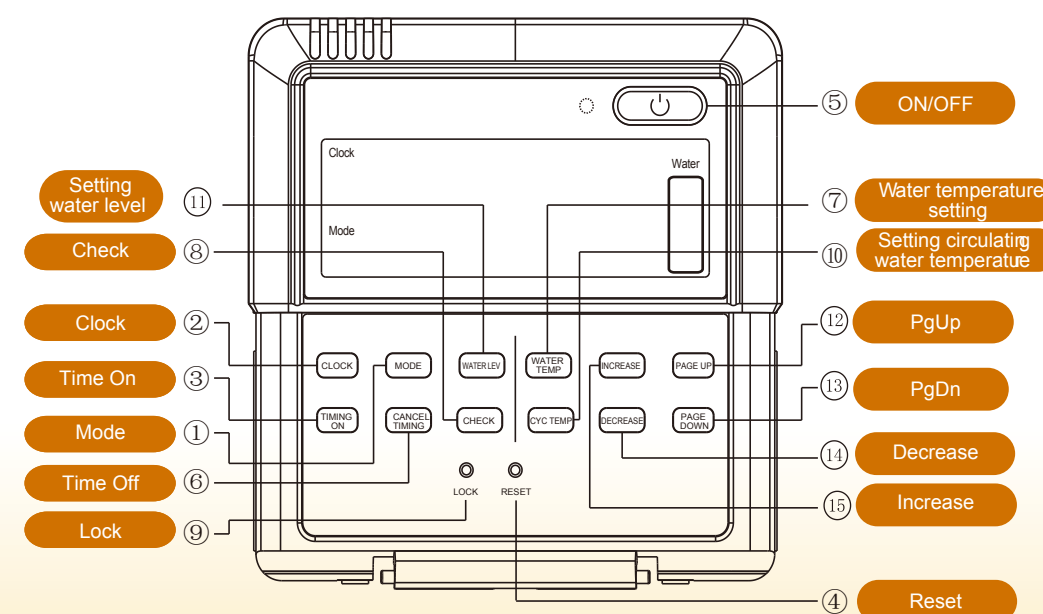
Wire controller (KJR-16B/E)

Features



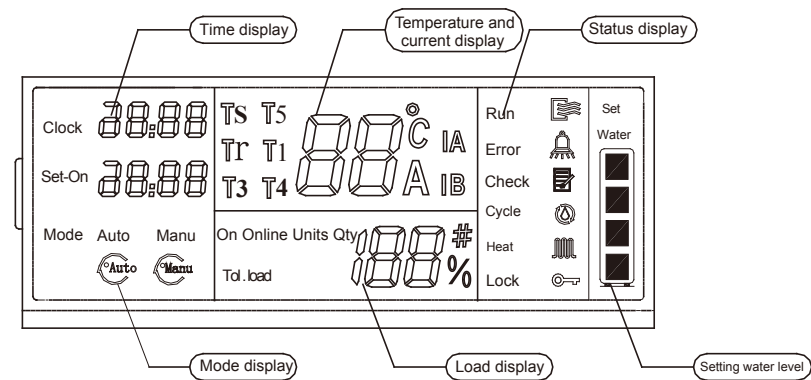
- Easy control.
- Set time on/ off freely.
- Set outlet water temperature from 40°C to 60°C .
- LCD display.
- Select auto mode and manual mode freely.
- Free modular combination.
- Display error code and check operation parameter.

Name of keys on the wire controller



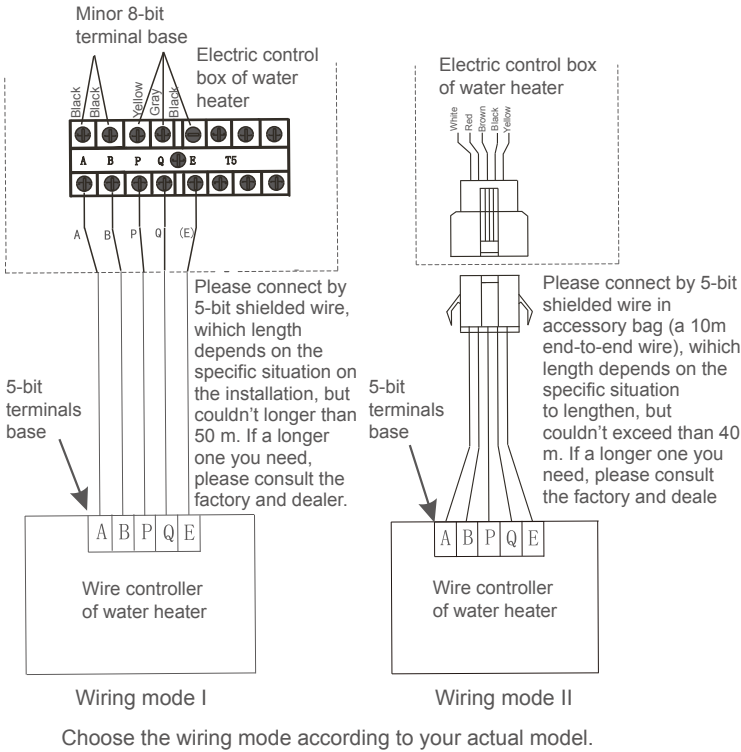
Number	Name	Function
1	Mode	Press the proper key to select the "Auto Mode" or "Manual Mode".
2	Clock	At each power-on,the clock is initialized to 00:00.The time can remain unchanged and can be adjusted through the "Increase"and "Decrease"key.
3	Time On	Every time when you press the "Time On" key, the HOUR and MINUTE of timing startup blink at a frequency of 1Hz.
4	Reset	Press this button,the current setting will be cancelled and the wire controller enters the reset status.
5	ON/OFF	In the power-off status, press this key once to startup the unit;In the startup status, press this key once to shutdown the unit
6	Time Off	This key can set the time of turning off the outdoor unit
7	Water temperature setting	Press this key to enter the procedure of setting water temperature signals.
8	Check:	Press this key to query the status information of outdoor units 0~15 (outdoor unit 0 by default).
9	Lock button	Press this button to lock the current setting.Press this button again to unlock.
10	Setting the circulating water temperature	This key is used to set the inlet temperature of the circulating heating water.
11	Setting the water level	This key is used to set the outdoor water level.

Name and function description of LCD screen



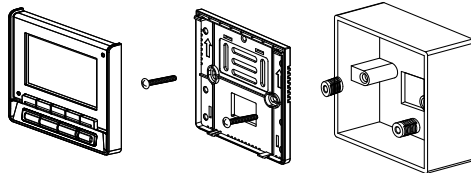
Installation Procedure

The wiring procedure and principles are shown in the figure:



The whole wire controller installation

The wired controller allows to be installed into the wall by fixing the bottom directly or fixing the device to a mounting cabinet.



Fault code list:

E 0	Inlet water pressure detection fault(Only main equipment)
E 1	Power supply wire phase fault
E 2	Communication fault
E 3	Fault of outlet water temperature
E 5	Fault of the pipe of condenser temperature
E 6	Fault of a outdoor ambient temperature
E 7	Fault of a electric heater temperature
E 8	Fault of detecting circulating water pressure
E 9	Fault of power failure memory (The wire controller can display without power failure memory function, but the startup and shutdown are normal)
P 0	System low pressure protection
P 1	System high pressure protection
P 2	System2 current protection
P 3	System1 current protection
P 8	Over high outlet water temperature protection

ACCESSORIES

Standard accessories

Fig.1(1*)

Unit	Installation& Operation Manual	Wire controller assembly	Water Tank Temperature sensor	Y-shaped filter
Qty.	1	1	1	1
Shape				
Purpose	—	Control units and display units status	Water tank temperature inspection	For pipeline connection

Fig.2 (2*)

Unit	Installation& Operation Manual	Service guide	Water Tank Temperature sensor	Y-shaped filter
Qty.	1	1	1	1
Shape				
Purpose	—	—	Water tank temperature inspection	For pipeline connection

Optional Accessories

Fig.3 (3*)

Unit	One-station level switch	Four-station level switch	Wire controller	Wire controller lunk
Qty.	1	1	1	1
Shape				
Purpose	—	—	Control units and display units status	Connect wire controller to the unit

Note:

(1*) Application model :	CE-RSJ-100/N1-540V-D	CE-RSJ-200/SN1-540V-D	CE-RSJ-380/SN1-820-D	
(2*) (3*) Application model :	RSJ-100-532V	RSJ-200/S-532V	RSJ-100-540V-C	RSJ-200/S-540V-C
	RSJ-380/S-820-E	RSJ-770/S-820-C	RSJ-770/S-820-E	RSJ-380/S-820-C

Heat recovery →

Heat Recovery

KRSJF-26(35)/C
KRSJF-35(50)/C
KRSJF-50(72)/C

Ambient: -7°C~43°C



Features

- Max. water output temperature: 55°C.
- Heat recovery, energy saving.
- Comprehensive COP can reach 6.0.
- One-stop solution for AC space cooling/heating + sanitary hot water.
- Built-in water pump.
- Easy installation and maintenance.

Solution for AC space cooling/heating + sanitary hot water



Unitary heat recovery system

Model(outdoor unit)			KRSJF-25(35)/C	KRSJF-35(50)/C	KRSJF-50(72)/C
Power supply			Ph-V-Hz	1-220-50	1-220-50
Running ambient temp			°C	-7~43	-7~43
Outwater Temp			°C	Default 50°C, 40°C~55°C	
Water tank size			Ltr	260/300/350/400/500	
Cooling	Capacity	kW	2.5	3.5	5
	rated Input	kW	0.92	1.23	1.87
	Cop	kW/kW	2.72	2.85	2.67
Heating	Capacity	kW	2.8	3.8	5.8
	rated Input	kW	0.92	1.23	1.87
	Cop	kW/kW	3.04	3.09	3.10
Water heating	Capacity	kW	3.5	5	7.2
	rated Input	kW	0.92	1.23	1.87
	Cop	kW/kW	3.80	4.07	3.85
Max. input current			A	6.50	12.50
Unit	Dimension (W×H×D)	mm	790×736×260	790×736×260	840×904×314
	Packing (W×H×D)	mm	905×810×355	905×810×355	965×1,010×395
	Net/gross weight	kg	54/57	60/63	81/84
Noise level			dB(A)	52	52
Refrigerant type/quantity			kg	R22/1.03	R22/1.33
Refrigerant design pressure			MPa	3.3/1.65	3.3/1.65
Air flow			m³/h	1,300	1,700
Compressor	Type			Rotary	Rotary
	Brand			Toshiba	Toshiba
	Capacity	kW	3.02	3.87	5.86
	Input	kW	0.97	1.23	1.89
Fan motor	Input	w	50	50	125
	Speed	r/min	750/360	775/510	830/450
Water pipeline	Water inlet pipe	mm	DN20	DN20	DN20
	Water outlet pipe	mm	DN20	DN20	DN20
	Max. pressure	MPa	1.0	1.0	1.0
Hot water yield			m³/h	0.075	0.11
Water pump, lift head			m	5.5	5.5
Loading Quantity			Pcs	76/160/240	64/134/134

Remark:
1. The test conditions: outdoor temp. 20/15°C(DB/WB), inlet water temp. 15°C, outlet water temp. 55°C.
2. The specification may be changed for product improvement, please refer to the nameplate.



Heat Recovery (Digital VRF)

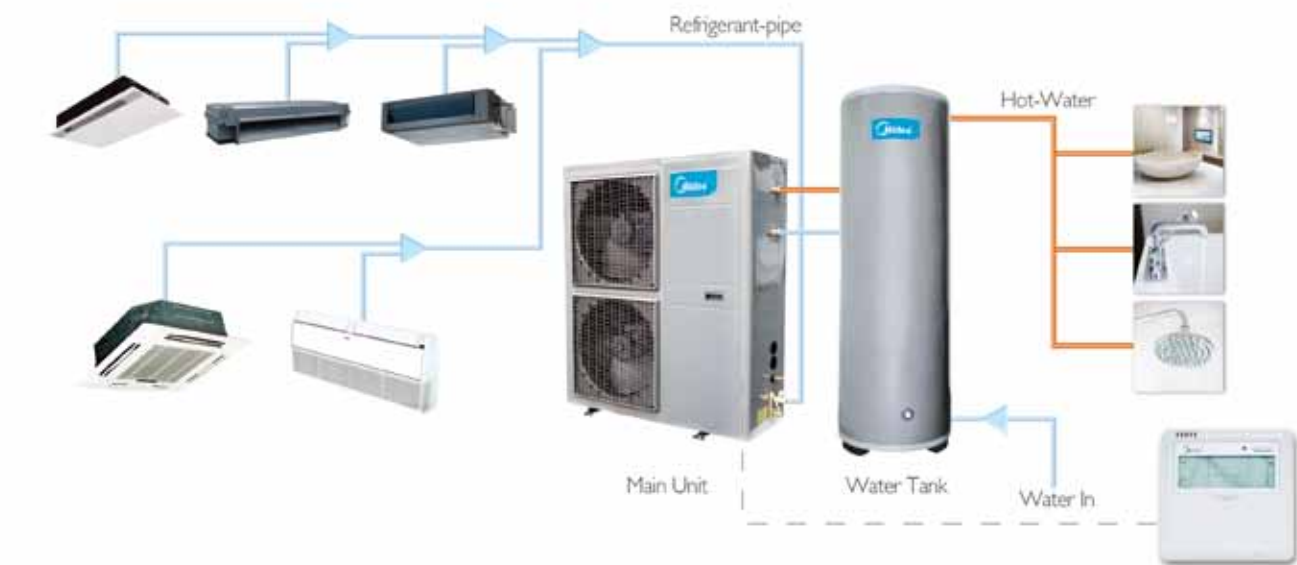
KRSJ-D120(160)/SC-580
KRSJ-D120(160)/C-580
KRSJ-D140(180)/SC-580
KRSJ-D140(180)/C-580
KRSJ-D160(200)/SC-580
CE-KRSJ-D160(200)/SCN2-580

Ambient: -7°C~43°C

Features

- Max. water output temperature: 55°C.
- Optional: 12Kw (1/3 phase), 14Kw (1/3 phase)
- Comprehensive COP can reach 6.55.
- Heat recovery, energy saving.
- VRF indoor units free-match (maximum 6 sets).
- Compact design, tube heat exchanger.
- One-stop solution for VRF AC cooling/heating + sanitary hot water.
- Built-in water pump.

Solution for VRF AC space cooling/heating + sanitary hot water



■ Digital scroll VRF heat recovery system R22/R407c

Model(outdoor unit)			CE-KRSJ-D160(200)/SCN2-580	KRSJ-D120(160)/SC-580	KRSJ-D120(160)/C-580	KRSJ-D140(180)/SC-580	KRSJ-D140(180)/C-580	KRSJ-D160(200)/SC-580
Power supply		Ph-V-Hz	3-380-50	3-380-50	1-220-50	3-380-50	1-220-50	3-380-50
Running ambient temp		°C	-7~43					
Outwater Temp		°C	Default 50°C, 40°C~55°C					
Water tank size		Ltr	300	300	300	300	300	300
Cooling	Capacity	kW	16	12	12	14	14	16
	Input	kW	5.8	4.6	4.9	5.2	5.2	5.8
	Cop	kW/kW	2.76	2.61	2.45	2.69	2.69	2.76
Heating	Capacity	kW	16.5	13	13	15	15	16.5
	Input	kW	4.6	3.9	4.1	4	4.2	4.2
	Cop	kW/kW	3.59	3.33	3.17	3.75	3.57	3.93
Water heating	Capacity	kW	20	16	16	18	18	20
	Input	kW	6.6	5.5	4.9	5.8	5.5	6.2
	Cop	kW/kW	3.03	2.91	3.27	3.10	3.27	3.23
Max. input current		A	18	16	35	17	42	18
Unit	Dimension (W×H×D)	mm	1,069×1,259×402	1,069×1,259×402	1,069×1,259×402	1,069×1,259×402	1,069×1,259×402	1,069×1,259×402
	Packing (W×H×D)	mm	1,188×1,385×498	1,205×1,390×500	1,205×1,390×500	1,205×1,390×500	1,205×1,390×500	1,205×1,390×500
	Net/gross weight	kg	179/188	171/180	155/162	176/185	176/185	179/188
Noise level		dB(A)	62	58	58	58	58	58
Refrigerant type/quantity		kg	R407C/5.8	R22/4.5	R22/4.5	R22/5	R22/5	R22/5.8
Refrigerant design pressure		MPa	3.3/1.18	3.3/1.65	3.3/1.65	3.3/1.65	3.3/1.65	3.3/1.65
Air flow		m³/h	4,362/6,044	6,000	6,000	6,000	6,000	6,000
Compressor	Type		Digital scroll	Digital scroll	Digital scroll	Digital scroll	Digital scroll	Digital scroll
	Brand		Copeland	Copeland	Copeland	Copeland	Copeland	Copeland
	Capacity	kW	16.7	14.95	14.9	16.848	16.8	17.6
	Input	kW	5.4	4.55	4.64	4.96	5.15	5.33
Fanmotor	Input	w	185/120	185/120	185/120	185/120	185/120	185/120
	Speed	r/min	860/610	860/610	860/610	860/610	860/610	860/610
Water pipeline	Water inlet pipe	mm	DN25	DN25	DN25	DN25	DN25	DN25
	Water outlet pipe	mm	DN25	DN25	DN25	DN25	DN25	DN25
		m³/h	0.43	0.34	0.34	0.39	0.39	0.43
		m	28	28	28	28	28	28
Loading Quantity		Pcs	21/44/44	21/43/43	21/43/43	21/43/43	21/43/43	21/43/43

Remark:
1. The test conditions: outdoor temp. 20/15°C(DB/WB), inlet water temp. 15°C, outlet water temp. 55°C.
2. The specification may be changed for product improvement, please refer to the nameplate.

Heating recovery(Tri-thermal)



Tri-thermal Features

- R410a gas, environmentally friendly.
- Three new technology.
DC inverter technology.
Air to water heat pump technology.
Heat recovery technology.
- 5 Modes: SH/SC/Sanitary/SH+Sanitary/SC+Sanitary.
- CE approval.
- Provide the one-stop solution for house heating/cooling.
- Compatible with all mini VRF series indoor units.
- Optional floor heating.

Solution for Tri-thermal space cooling/heating + sanitary hot water + floor heating



■ Tri-thermal specification

Model			KRSJF-V120/N1-610	KRSJF-V140/N1-610	KRSJF-V160/N1-610
Power supply		Ph-V-hz	1-220-50	1-220-50	1-220-50
Cooling	Capacity	kW	12	14	15.5
	Input	kw	4.4	5.2	5.9
Heating	Capacity	kW	13.2	15.4	17
	Input	kW	3.9	4.8	5.6
Water Heating	Capacity	kW	16	18	19.5
	Input	kW	4.4	4.9	5.4
Max. input consumption		kW	6.2	6.6	7.1
Max. input current		A	30	32	35
startting current		A	3	3	3
Compressor	Type		Rotary	Rotary	Rotary
	Brand		Mitsubishi	Mitsubishi	Mitsubishi
	Supplier		Mitsubishi	Mitsubishi	Mitsubishi
	Capacity	kW	9.86	9.86	9.86
	Input	kW	3.08	3.08	3.08
	Rated current(RLA)	A	13.5	13.5	13.5
	Locked rotor Amp(LRA)	A	/	/	/
	Thermal protector		/	/	/
	Capacitor	uF	/	/	/
	Refrigerant oil	ml	fv50s 870+630ml	fv50s 870+630ml	fv50s 870+630ml
outdoor fan motor	Input	W	2×85	2×85	2×85
	Capacitor	uF	/	/	/
	Speed(n/lo)	r/min	800	800	800
outdoor coil	a.Number of rows		2	2	2
	b.Tube pitch(a)x row pitch(b)		mm22X19.05	mm22×19.05	mm22×19.05
	Fin spacing	mm	1.6	1.6	1.6
	Fin type		Hydrophillic aluminium	Hydrophillic aluminium	Hydrophillic aluminium
	Tube outer dia.and type	mm	Φ7.94 innergroove tube	Φ7.94 innergroove tube	Φ7.94 innergroove tube
	Coil length x height x width	mm	870×1,276×38.1	870×1,276×38.1	870×1,276×38.1
	Number of circuits		7	7	7
Outdoor air flow		m³/h	6,000	6,000	6,000
Outdoor noise level		dB(A)	58	58	59
Outdoor unit	Dimension (W×H×D)		mm981×1,328×400	mm981×1,328×400	mm981×1,328×400
	Packing (W×H×D)		mm1,082×1,456×435	mm1,082×1,456×435	mm1,082×1,456×435
	Net/Gross weight		kg96/107	kg96/107	kg96/107
Refrigerant type/Quantity		g	R410A/4,000	R410A/4,200	R410A/4,400
Design pressure		MPa	4.4/2.6	4.4/2.6	4.4/2.6
Refrigerant piping	Liquid/ Gas side(To indoor)		mm(inch)9.5/15.9	mm9.5/15.9	mm9.5/15.9
	Max. pipe length	m	220	220	220
	Max. difference in level	m	30	30	30
Water piping	Max. pipe length	m	10	10	10
	Max. difference in level	m	10	10	10
Ambient temp	Air cooling mode		℃-15~48	℃-15~48	℃-15~48
	Air heating mode		℃-15~27	℃-15~27	℃-15~27
	water heating mode		℃-15~43	℃-15~43	℃-15~43
	Air cooling +water heating mode		℃12~43	℃12~43	℃12~43
	Air cooling mode		℃17~30	℃17~30	℃17~30
temperature range	Air heating mode		℃17~30	℃17~30	℃17~30
	water heating mode		℃30-55 (50 default)	℃30-55 (50 default)	℃30-55 (50 default)
	Air cooling +water heating mode		℃30-55 (50 default)	℃30-55 (50 default)	℃30-55 (50 default)
	Air cooling mode		℃17~30	℃17~30	℃17~30
Water pipeline diameter	Circulating Inlet water pipe		mmDN25	mmDN25	mmDN25
	Circulating Outlet water pipe		mmDN25	mmDN25	mmDN25
Hot water yeld		m³/h	0.35	0.4	0.43
Outlet water temperature		℃	50℃(default), 30℃-55℃	50℃(default), 30℃-55℃	50℃(default), 30℃-55℃
Water pump,lift head		m	28	28	28

Model		LSX-300XP/A	LSX-300XP/E	LSX-200XP/E
Diamension		mmΦ560×1905	mmΦ580×1804	mmΦ580×1319
water pressure		MPa<0.7	MPa<0.7	MPa<0.7
Circulating water pipe spec		mmDN25	mmDN25	mmDN25
water inlet pipe spec		mmDN15	mmDN20	mmDN20
E-heater		without E-heater	with E-heater	with E-heater

Remark:
1. The test conditions: outdoor temp. 20/15℃(DB/WB), inlet water temp. 15℃, outlet water temp. 55℃.
2. The operation range:-7℃-43℃.
3. The specification may be changed for product improvement, please refer to the nameplate.

Heat Recovery Indoor Unit Lineup

One-way Cassette



MDV-D XX Q1/N1-C

Model	28	36	45	56	71
Capacity	2.8kW	3.6kW	4.5kW	5.6 kW	7.1 kW

Two-way Cassette



MDV-D XX Q2/N1

Model	22	28	36	45	56	71
Capacity	2.2kW	2.8kW	3.6kW	4.5kW	5.6 kW	7.1kW

Compact Four-way Cassette



MDV-D XX Q4/N1-A3

Model	22	28	36	45
Capacity	2.2kW	2.8kW	3.6kW	4.5kW

Four-way Cassette



MDV-D XX Q4/N1-D

Model	28	36	45	56	71
Capacity	2.8kW	3.6kW	4.5kW	5.6 kW	7.1 kW

Model	80	90	100	112	140
Capacity	8.0 kW	9.0 kW	10.0 kW	11.2 kW	14.0 kW

Low Static Pressure Duct



MDV-D XX T3/N1-B

Model	18	22	28	36	45	56
Capacity	1.8kW	2.2kW	2.8kW	3.6kW	4.5kW	5.6 kW

Concealed Duct Unit (A5 Type)



MDV-D XX T2/N1X-BA5

Model	22	28	36	45	56
Capacity	2.2kW	2.8kW	3.6kW	4.5kW	5.6 kW

Model	71	80	90	112	140
Capacity	7.1kW	8.0 kW	9.0 kW	11.2 kW	14.0 kW

High Static Pressure Duct



MDV-D XX DL/N1-C

Model	71	80	90	112
Capacity	7.1kW	8.0 kW	9.0 kW	11.2 kW

Model	140	200	250	280
Capacity	14.0 kW	20.0 kW	25.0 kW	28.0 kW

Ceiling & Floor



MDV-D XX DL/N1-C

Model	36	45	56	71
Capacity	3.6kW	4.5kW	5.6 kW	7.1kW

Model	80	90	112	140
Capacity	8.0 kW	9.0 kW	11.2 kW	14.0 kW

Wall-mounted Type



MDV-D XX G/N1-S

MDV-D XX G/DN1-S

Model	22	28	36	45	56
Capacity	2.2kW	2.8kW	3.6kW	4.5kW	5.6 kW

MDV-D XX G/N1-YB

MDV-D XX G/DN1-YB

Floor Standing



MDV-D XX Z/N1-F1(F2)B

MDV-D XX Z/N1-F4(F5)B

MDV-D XX Z/N1-F3B

Model	22	28	36	45
Capacity	2.2kW	2.8kW	3.6kW	4.5kW

Model	56	71	80
Capacity	5.6 kW	7.1kW	8.0 kW

Console



MDV-D XX Z/DN1-B

Model	22	28	36	45
Capacity	2.2kW	2.8kW	3.6kW	4.5kW

Fresh Air Processing Unit



MDV-D XX T1/N1-FA

Model	125	140	200	250	280
Capacity	12.5kW	14kW	20.0kW	25.0kW	28.0 kW

6. REFERENCE PROJECTS



Project: Zhongshan University
Model: RSJ-350/S-810x13
Water Yield: 130 Ton/day



Project: Ningbo University of Technology
Model: RSJ-380/S-820x15
Water Yield: 150 Ton/day



Project: Foshan Global International Hotel
Model: RSJ-380/S-820x13
Water Yield: 130 Ton/day





Project: Zhejiang Shipbuilding Co.,Ltd
Model: RSJ-380/S-820x36
Water Yield: 360 Ton/day



Project: Cixi Experiment Senior Middle School
Model: RSJ-380/S-820x12
Water Yield: 120 Ton/day



Project: Shenzhen University
Model: RSJ-380/S-820x10
Water Yield: 90Ton/day



Project: FED International Corporation
Model: RSJ-380/S-820x8
 RSJ-200/S-540Vx2
Water Yield: 90 Ton/day



Project: Jiaxing Nanhu Technology Center
Model: RSJ-380/S-820x2
 RSJ-200/S-540Vx2
Water Yield: 30 Ton/day



Project: Dali Hongyuan Gymnasium
Model: RSJ-450M/A x12
Water Yield: 150 Ton/day



Project: Shunde Polo Swimming Pool
Model: RSJ-450M/A x10
Water Yield: 120 Ton/day



Project: Zhongshan Hawaii Hydropathical Center
Model: RSJ-450M/A x10
Water Yield: 120 Ton/day