

JIADELE[®]



**ZHEJIANG
JIADELE
TECHNOLOGY CO., LTD.**

ALL DC INVERTER HEAT PUMPS

NOT ONLY FOR WARMING, BUT ALSO FOR A BETTER LIFE
Thanks to the all DC inverter technology, JIADELE heat pumps can be used for HEATING, COOLING & HOT WATER application. It also has MOBIL ECONTROL APP as optional.

CONCENTRATE ON ADVANCED HEAT PUMP TECHNOLOGY



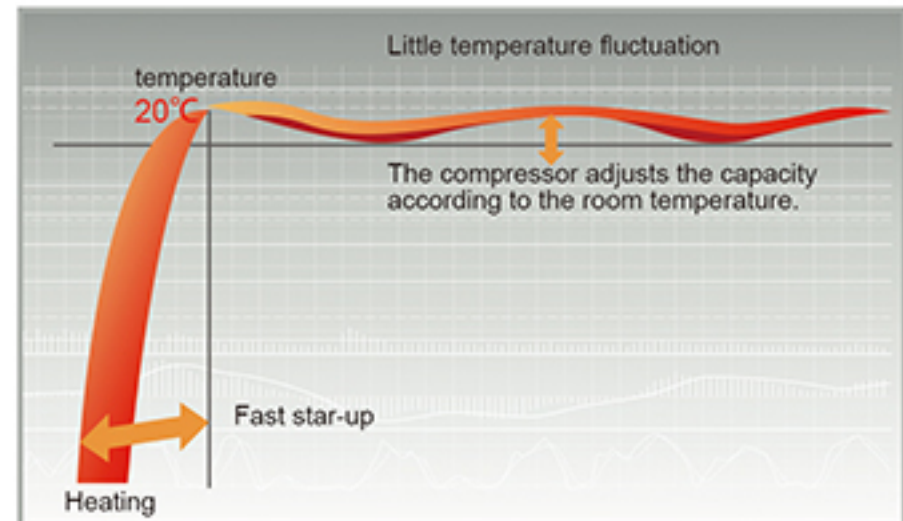
DC INVERTER Technology

With the use of inverter compressors, brushless DC fan motors and PFC control method, the units can regulate the running capacity at any time when they need to save energy. With no frequent start-ups and stop runnings, the units work in stable condition with high efficiency. The energy consumption is 30% less than that of common heat pump units.



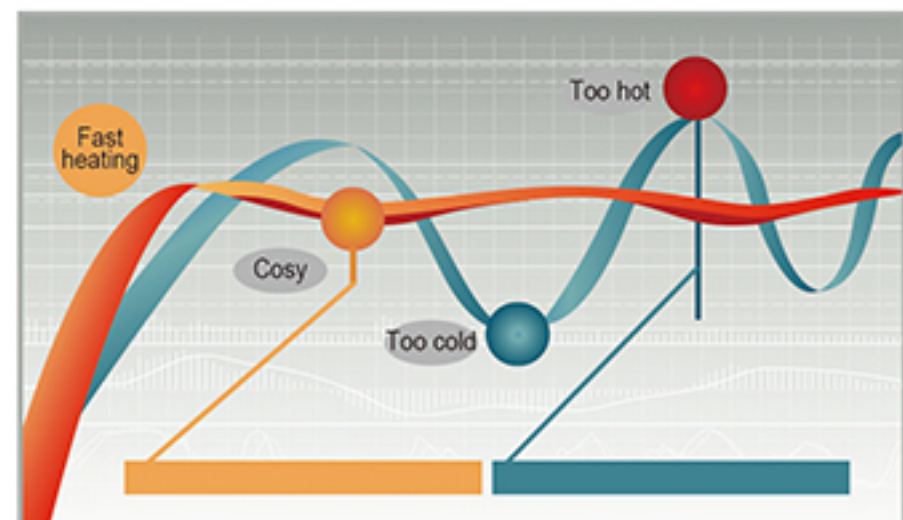
HIGH ACCURACY of Temperature Control

The units can change the operating frequency of the compressors automatically according to the room heating/ cooling demand. When the target room temperature is going to be reached, the units run at a lower frequency, and the temperature control accuracy can be 0.5°C.



FAST Heating/Cooling

When there is large difference between the actual room temperature and the unit setting temperature, the unit can run at higher frequency to make fast heating/cooling to increase/decrease the room temperature rapidly.





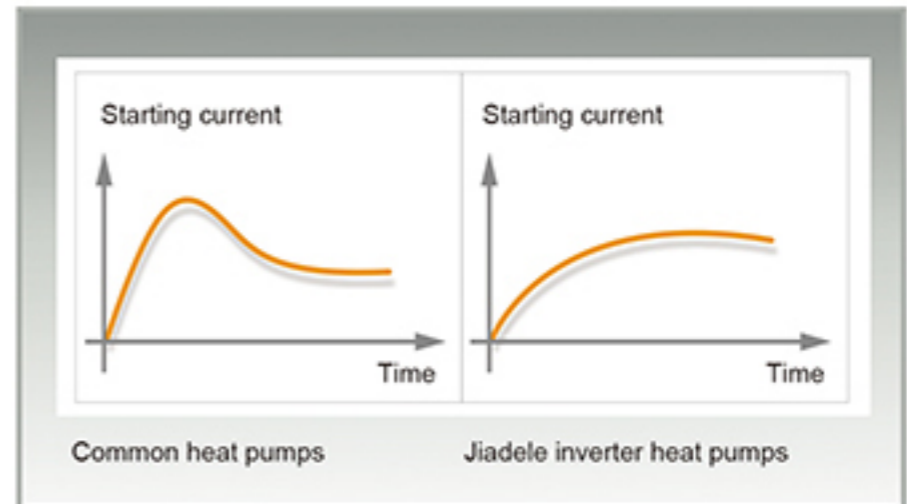
03 LOWER Noise

Because there will be no frequent start-ups and stop runnings, and the units work in stable condition, the noise from the units can be reduced significantly.



04 ELECTRIC UTILITIES Benefits

Because of the DC inverter high efficiency design, the units can reduce the load on electric utilities while running.



05 ROOM Thermostat

By installing the room thermostat in your room, you can control both heat pump units and terminals together. A fast heating mode is available in winter, which starts fan coils and floor heating together to heat up rooms. (room thermostat specification: 230V, RS485 interface)



FOCUS ON DETAILS



PANASONIC COMPRESSOR

DC inverter scroll compressor, with 20% higher energy efficiency than that of traditional fixed frequency one, works quietly (with minimum 45dB(A) noise level, in 5m distance).



WILO WATER PUMP

WILO pump, power consumption is 30% less than that of traditional water pump, ensuring trouble-free running all year round.



INVERTER DRIVE

Using digital signal processing chips and PMSM sinusoidal wave control method, the power factor reaches 95%, working voltage range is larger and the units realize 1Hz control accuracy.



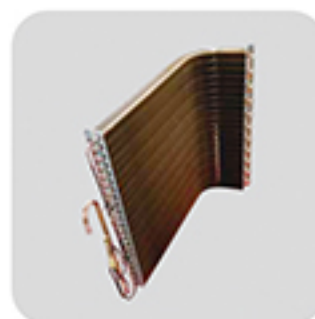
BRUSHLESS DC FAN MOTOR

The brushless DC fan motor could realize stepless speed running under system pressure, realizing more than 30% energy saving.



PATENT HEAT EXCHANGER

With strong countercurrent design, the JIADELE patent heat exchangers are conducive to improving the efficiency and reliability of heat pump.



FIN TYPE HEAT EXCHANGER

Golden anti-corrosion aluminum fins specialized for heat pump, it is not easy to frost but easy to clean up, with durable lifespan of more than 10 years.



CONTROLLER

The controllers with intelligent control and detection make the units more user-friendly.



SANHUA ELECTRONIC EXPANSION VALVE

Smartly adjust the refrigerant flow volume, the units always work with high efficiency and reduce energy consumption.



WATER CYCLE

All water cycle circuits are in copper instead of PPR pipe, which make the unit with a longer service life.



DEFROSTING

The use of pressure control defrosting logic makes a smarter defrosting process.



WATER SPRAY

When it's very hot outside in summer, water spray makes a strong cooling effect with less energy consumption.



+



or



ALL DC INVERTER HP

This all DC inverter heat pump with A++ energy level is ErP met for EU market. It's in monobloc design and uses eco-friendly refrigerant R32

FLOOR HEATING

It gives you the freedom to design your rooms without radiators. It's efficient and compatible with renewable energy sources.

FAN COIL or RADIATOR

common radiators, reaching 55°C outlet water temperature.



INTELLIGENT CONTROL SYSTEM MAKES YOUR HOME SMARTER



MOBILE APP CONTROL

You could remotely monitor & control your heat pump system by using your smart phone anywhere at anytime.



SATISFY DIFFERENT DEMANDS

With the function of individual thermostat controlling, you could control 32(maximum) rooms temperature at the same time.



TIMER SETTING

There are multiple timer settings for your choice, thus the system could lead you to a more energy-saving life.



ONE TOUCH FUNCTION

You could turn ON/OFF the whole system with one simple touch, and the main unit and terminal units could start up automatically.



WEATHER FORECAST

The weather forecast data downloaded from Internet could be a reference for your room temperature setting.



ENERGY CONSUMPTION

You could easily get to know the energy consumption by hours, days or months through our customized app.

Data parameters



AIR SOURCE HEAT PUMP(WATER CHILLING) PACKAGES

Outdoor unit model name		8kW		10kW		12kW		14kW		16kW		20kW		22kW		26kW		
		JHL-030X/ C2E1R3-A		JHL-040X/ C2E1R3-A		JHL-050X/ C2E1R3-A		JHL-050X/ C2E1R3-B		JHL-080X/ C2E1R3-A		JHL-080X/ C2E1R3-B		JHL-050X/ C2E2R3-A		JHL-050X/ C2E2R3-B		
Power supply	V/PH/Hz	220-240/1/50										380-415/3/50						
heating A7W35	Capacity	kw	8.4	9.8	12.1	14.5	15.9	19.5	12.1	14.5	15.9	19.5	22.5	26.5				
	Rated input	kw	1.69	2.15	2.44	3.15	3.53	4.35	2.44	3.15	3.53	4.35	4.89	5.89				
	COP		4.97	4.55	4.95	4.6	4.5	4.48	4.95	4.6	4.5	4.48	4.6	4.5				
heating A7W45	Capacity	kw	8.1	10	12.3	14.1	16	19.4	12.3	14.1	16	19.4	21.8	26				
	Rated input	kw	2.1	2.67	3.32	3.92	4.57	5.5	3.32	3.92	4.57	5.5	6.14	7.43				
	COP		3.85	3.75	3.7	3.6	3.5	3.53	3.7	3.6	3.5	3.53	3.55	3.5				
heating A7W55	Capacity	kw	7.5	9.5	11.9	13.8	16	19.3	11.9	13.8	16	19.3	21.2	25.5				
	Rated input	kw	2.36	3.06	3.9	4.68	5.61	6.89	3.9	4.68	5.61	6.89	7.26	8.94				
	COP		3.18	3.1	3.05	2.95	2.85	2.8	3.05	2.95	2.85	2.8	2.92	2.85				
cooling A35W18	Capacity	kw	8.3	9.9	12	13.5	14.9	19.1	12	13.5	14.9	18.1	20.2	22.2				
	Rated input	kw	2.24	2.73	3.28	3.75	4.2	5.46	3.28	3.75	4.2	5.17	5.77	6.53				
	COP		3.75	3.65	3.65	3.6	3.55	3.5	3.65	3.6	3.55	3.5	3.5	3.4				
cooling A35W7	Capacity	kw	7.4	8.2	11.5	12.4	14	16	11.5	12.4	14	16	18	20				
	Rated input	kw	2.6	2.9	4.2	4.77	5.5	6.37	4.2	4.77	5.5	6.37	7.1	8				
	COP		2.84	2.83	2.73	2.6	2.55	2.51	2.73	2.6	2.55	2.51	2.54	2.5				
SCOP	Water outlet at 35 °C											A+++						
	Water outlet at 55 °C											A++						
Sound power Level	dB	59	60	64	65	67	69	64	65	67	69	70	70					
Compressor	Type	Panasonic:9RD220ZAA21					Panasonic:9VD420XAB21					Panasonic:9VD420XAB21			Panasonic:9VD550XAA21			
outdoor fan	Motor type											DC fan						
Refrigerant	Number of fans	1	1	1	1	1	1	1	1	1	1	1	2	2				
Unit dimension(W*H*D)	mm											1200*450*930				1200*450*1557		
Packing dimension (W*H*D)	mm											1265*550*1080				1265*550*1720		
Net/Gross weight	kg	100/115								125/130				170/190				
Outdoor air temperature range	Cooling											-5~43						
	Heating											-25~35						
	DHW											-25~43						
Water side heat exchanger												Plate type						
Water outlet temperature range	Cooling											5~30						
	Heating											12~55						
	DHW											10~55						

Note: 1. Outdoor air temperature 7°C DB ,85% R.H ; EWT 30°C,LWT 35°C; 2. Outdoor air temperature 7°C DB ,85% R.H ; EWT 40°C,LWT 45°C; 3. Outdoor air temperature 7°C DB ,85% R.H ; EWT 47°C,LWT 55°C
4. Outdoor air temperature 35°C DB ,85% R.H ; EWT 23°C,LWT 18°C; 5. Outdoor air temperature 35°C DB ,85% R.H ; EWT 12°C,LWT 7°C; 6. Test standard:EN12102-1

Data parameters

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AIR SOURCE HEAT PUMP

Outdoor unit model name		8kW						10kW						12kW						14kW						16kW						20kW						22kW						26kW					
		JHL-030F/ D2E1R3-A		JHL-040F/ D2E1R3-A		JHL-050F/ D2E1R3-A		JHL-050F/ D2E1R3-B		JHL-060F/ D2E1R3-A		JHL-080F/ D2E1R3-B		JHL-050F/ D2E2R3-A		JHL-050F/ D2E2R3-B		JHL-060F/ D2E2R3-A		JHL-080F/ D2E2R3-B		JHL-080F/ D2E2R3-A		JHL-080F/ D2E2R3-A		JHL-100F/ D2E2R3-A																							
Power supply	V/PH/Hz	220-240/1/50												380-415/3/50																																			
heating A7W35	Capacity	kw	8.4	9.8	12.1	14.5	15.9	19.5	12.1	14.5	15.9	19.5	22.5	26.5																																			
	Rated input	kw	1.69	2.15	2.44	3.15	3.53	4.35	2.44	3.15	3.53	4.35	4.89	5.89																																			
	COP		4.97	4.55	4.95	4.6	4.5	4.48	4.95	4.6	4.5	4.48	4.6	4.5																																			
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	Rated input	kw	2.1	2.67	3.32	3.92	4.57	5.5	3.32	3.92	4.57	5.5	6.14	7.43																																			
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	Rated input	kw	2.36	3.06	3.9	4.68	5.61	6.89	3.9	4.68	5.61	6.89	7.26	8.94																																			
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SCOP	Water outlet at 35 °C		A+++																																														
	Water outlet at 55 °C		A++																																														
Sound power Level, outdoor unit	dB		59	60	64	65	67	69	64	65	67	69	70	70																																			
Compressor	Type		Panasonic:9RD220ZAA2J						Panasonic:9RD220ZAA2J						Panasonic:9VD420ZAA2J						Panasonic:9VD550XAA21																												
	Motor type		DC fan																																														
outdoor fan	Number of fans		1	1	1	1	1	1	1	1	1	1	1	2	2																																		
Refrigerant			R32 1.4kg	R32 1.4kg	R32 2.0kg	R32 2.0kg	R32 2.0kg	R32 2.0kg	R32 2.0kg	R32 2.0kg	R32 2.0kg	R32 2.0kg	R32 2.0kg	R32 3.2kg	R32 3.2kg																																		
outdoor Unit dimension/outdoor Packing dimension (W*H*D)			1080*450*930mm/1145*550*1080mm												1200*450*1557																																		
indoor Unit dimension/indoor Packing dimension (W*H*D)			482*352*726mm/560*440*790mm												1265*550*1720																																		
outdoor Net/Gross weight— indoor Net/Gross weight			70/85kg—45/60kg						95/115kg—45/60kg						170/190																																		
Outdoor air temperature range	Cooling	°C	-5~43																																														
	Heating	°C	-25~35																																														
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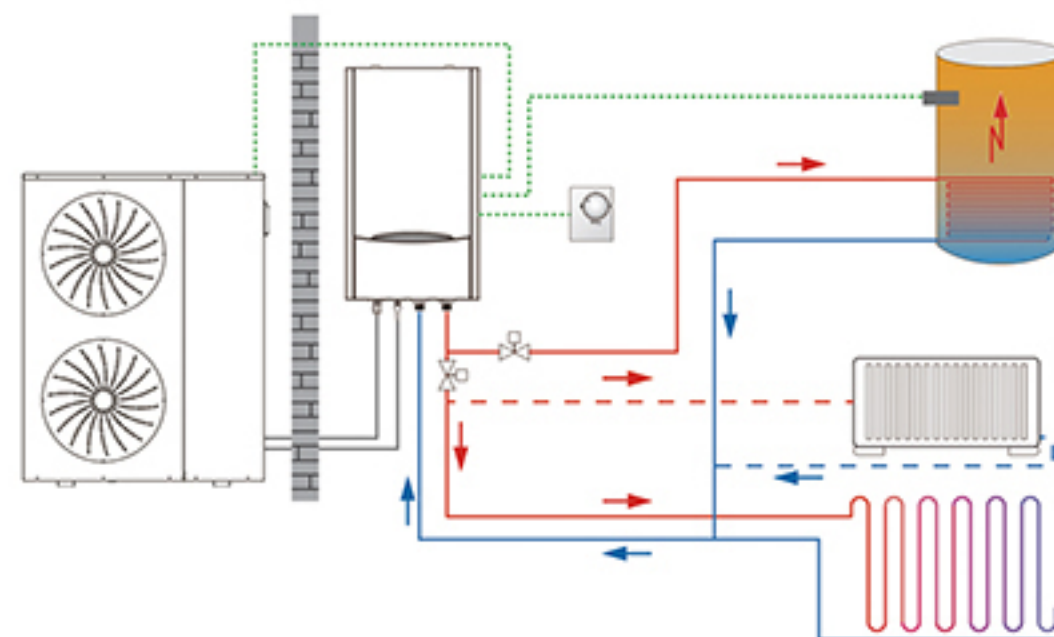
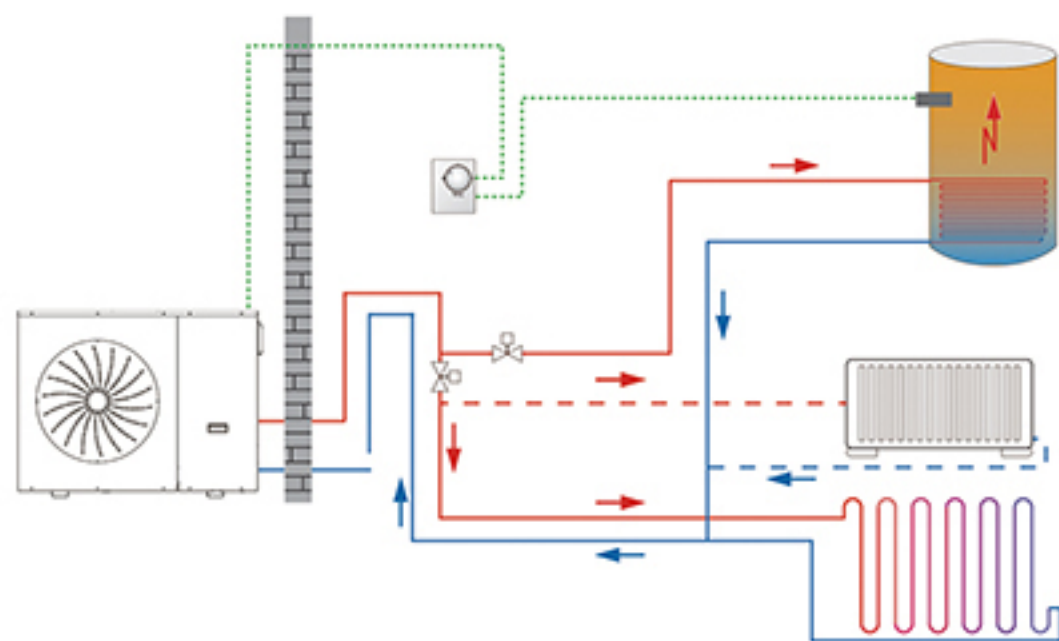
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4. Outdoor air temperature 35°C DB ,85% R.H ; EWT 23°C,LWT 18°C; 5. Outdoor air temperature 35°C DB ,85% R.H ; EWT 12°C,LWT 7°C; 6. Test standard:EN12102-1

Installation Diagram

M-thermal+ Underfloor Heating(Radiator) + Sanitary Tank

The system can be combined with:

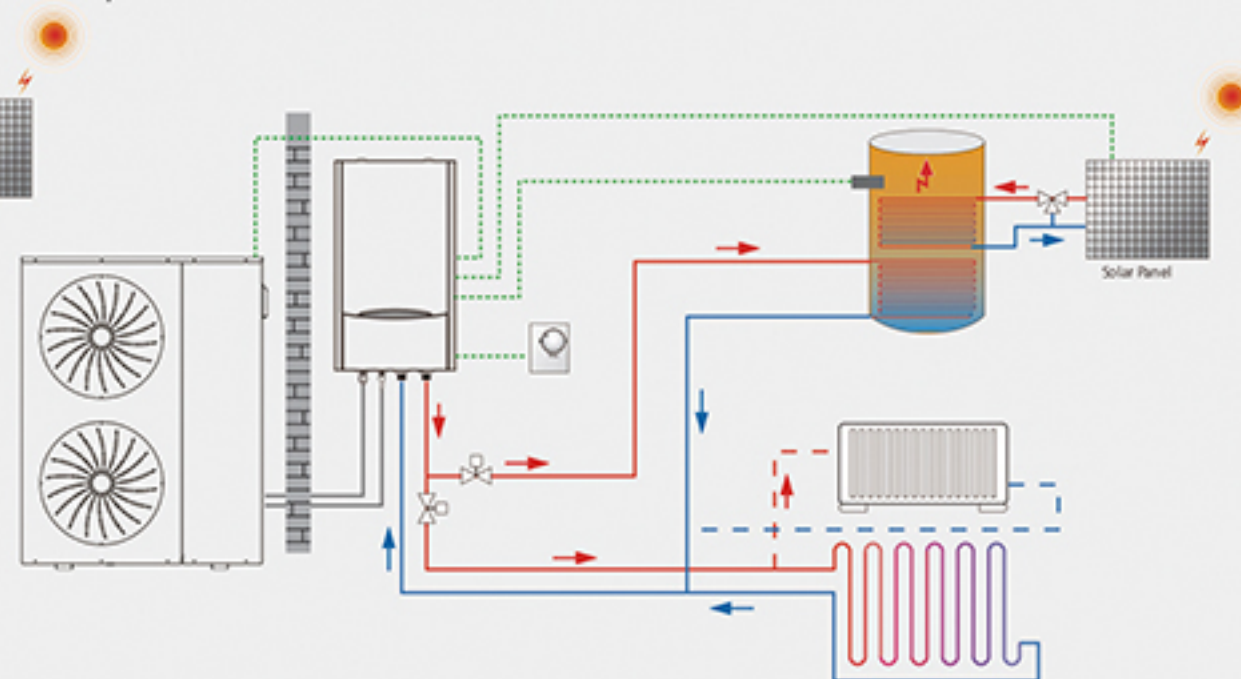
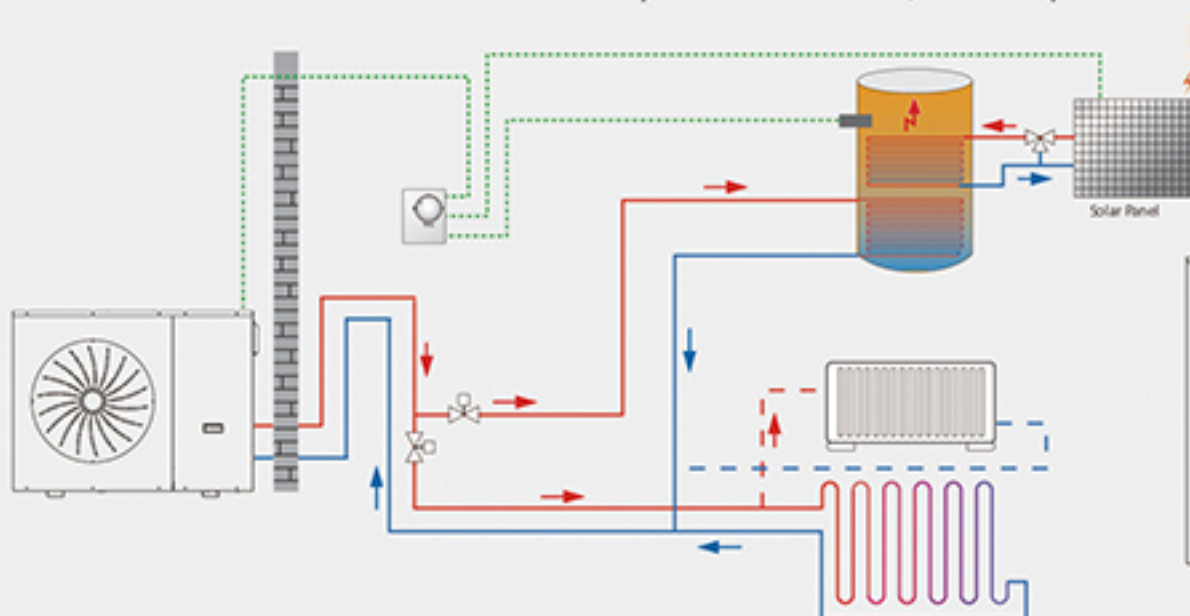
1. Underfloor Heating or Radiator
2. Low temperature radiators to provide the maximized comfort for users.
3. A sanitary hot water tank to supply hot water needs.



M-thermal + Underfloor Heating(Radiator) + Sanitary Tank + Solar Panel

The system can be combined with:

1. Underfloor Heating or Radiator
2. Low temperature radiators to provide the maximized comfort for users.
3. A sanitary hot water tank to supply hot water needs.
4. Solar collectors with optional solar kit, to complement the production of hot water.



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ISO9001:2015

ISO14001:2015

ISO45001:2018

CE CB RoHS

