

1	Outdoor unit	10.1	TBH: Back-up heater for the domestic hot water tank (field supply)
2	User interface	10.2	Coil 1: heat pump heat exchanger
3	3-way valve (field supply)	10.3	Coil 2: solar system heat exchanger
4	Buffer tank (field supply)	11	Filter (additional equipment)
4.1	Automatic air relief valve	12	Check valve (field supply)
4.2	Drain valve	13	Shut-off valve (field supply)
5	External circulation pump (field supply)	14	Filling valve (field supply)
6	Solar pump (field supply)	15	Drain valve (field supply)
6.1	Solar collector temperature sensor (field supply)	16	Pipe supplying water from the mains (field supply)
6.2	Solar collectors (field supply)	17	Hot water tap (field supply)
7	DHW pump (field supply)	18	Distributor/collector (field supply)
8	DHW tank temperature sensor (additional equipment)	19	Bypass valve (field supply)
9	Expansion vessel (field supply)	FHL...11	Floor heating (field supply)
10	DHW tank (field supply)	AHS	Auxiliary heat source (field supply)

Note: This diagram illustrates the general principle of circuit operation. It should not be considered as a design.

## SPECIFICATION

DC Inverter air to water heat pump for Heating & Cooling & Hot Water(Monoblock type)			
Model		DCI02PS-H2P	
Power supply	V / Hz	220-240V/50Hz 1N	
Heating: Dry/Wet bulb: 7/6°C; Water inlet/outlet:30/35°C			
Heating capacity	kW	3.50-8.70	
Input power	kW	0.60-2.20	
Cooling: Dry/Wet bulb:35/24°C; Water inlet/outlet:12/7°C			
Cooling capacity	kW	1.3-5.80	
Input power	kW	0.60-2.50	
Hot water heating : Air 20°C, Water 15°Cto 55°C			
Cooling capacity	kW	3.90-10.70	
Input power	kW	0.80-2.50	
Seasonal Heating Energy	LWT at 35°C	A+++	
Efficiency Rating	LWT at 55°C	A++	
Max. Hot Water Temperature	°C	75.00	
Operating ambient temp	°C	-25~43	
Max. Power	KW	3.00	
Max. Current	A	13.60	
Water flow	m³/h	1.38	
Water side pressure loss	kPa	≤50	
Permissible refrigerant suction pressure	Mpa	0.80	
Permissible refrigerant discharge pressure	Mpa	3.00	
Compressor	Type	Full DC inverter	
	Quantity	1	
Refrigerant	Type	R290	
	Quantity	kg	0.50
GWP value		3.00	
Equivalent CO2	Ton	0.00150	
Fan motor	Type	DC Brushless	
	Quantity	1.00	
Noise (Sound pressure level)	dB(A)	43.00	
Noise (Sound power level)	dB(A)	56.00	
Waterproof level		IPX4	
Anti electric shock protection category		Class I	
Water pipe connection	Inlet	mm	φ25
	Outlet	mm	φ25
Unit dimensions	mm	1160×430×775	
Package dimensions	mm	1275×455×1060	
Net/Gross Weight	kg	85 /90	
Loading Qty.(20GP/40GP)	Pcs	44/96	

# K-thermal + Series

Dc Inverter Air to Water Heat Pump  
 Monoblock Type



## About Us



Zhejiang CEN New Energy Stock Co., Ltd., founded in 2001, is located in the beautiful coastal city of Haiyan, near to the north bank of Hangzhou Bay Cross Sea Bridge. It covers an area of 1.6 hectares and has a construction area of over 30,000 square meters. It is a strong energy enterprise with comprehensive strength that integrates technology research and development, production and manufacturing, market sales, and after-sales service.

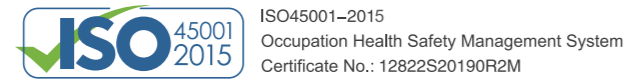
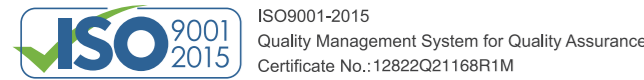
On August 30, 2017, the completion of the shareholding system reform was officially listed in the national small and medium-sized enterprise share transfer system, commonly referred to as KONNEN stock, with stock code (871885).

## CERTIFICATIONS & PATENTS

In each of its operation service, KONNEN's top priority is to ensure the reliability and quality of its products and meet the technical & professional certifications of overseas markets.

As an international brand, KONNEN holds several international certifications, including CE, ErP and so on.

Meanwhile KONNEN has acquired more than 50 national patents in the field of heat pump applications and heat pump technologies in China. Patent number: 1843823, 2590991, 4062762, 4064364 etc.



# KONNEN



**R290 FULL DC INVERTER HYBRID HEAT PUMP**  
( heating / cooling + hot water )



### FULL DC INVERTER AIR TO WATER HEAT PUMP

The R290 Hybrid Heat Pump has a speed stepless variable frequency silent compressor and DC brushless fan motor, less attenuation in low temperature technology etc.. Ensure the units operating well with wide range between -25 ~ 43 degree condition.

☀ HEATING ❄ COOLING 💧 HOT WATER

3 FUNCTIONS, 5 MODES \* Single Hot Water \* Single Heating \* Single Cooling \* Hot Water + Cooling \* Hot Water + Heating



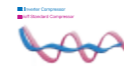
The R290 Hybrid Heat Pump has a speed stepless variable frequency silent compressor and DC brushless fan motor, less attenuation in low temperature technology etc.. Ensure the units operating well with wide range between -25 ~ 43 degree condition.



Stable running at -25°C ambient temperature.



The max outlet water temperature can be up to 75°C.



Inverter heat pump Vs. Non-Inverter heat pump



Smart Touch Display  
KONNEN endeavors to provide users with an easy and smart control experience.



Wifi function for our heat pumps, control your heat pump from our special designed App.



Intelligent defrosting



Low noise



Heating energy efficiency level A+++ at water temperature 35 deg C.  
Heating energy efficiency level A++ at water temperature 55 deg C.



### HIGHLY FULL DC INVERTER COMPRESSOR

Realizing speed stepless adjustment, lower noise but higher efficiency, running more stable.



### DC BRUSHLESS FAN MOTOR

Intelligent control, according to the ambient temperature of the motor to realize the turns with speed stepless adjustment, aluminum material of shell, improving heating dissipation and waterproof performance, long and durable service life.



Use **SWEP** high-quality plate heat exchanger to provide higher efficiency and more suitable for the use of anti-icing fluid.



High precision electronic expansion valve: use **Electronic expansion valve** for controlling, reach 500 steps adjustment, adjust super heat degrees accurately, achieve high efficiency operation system.



SHIMGE PUMP  
BUILT-IN DC INVERTER PUMP