

# PRODUCT CATALOG

# Gassero

technology for your comfort



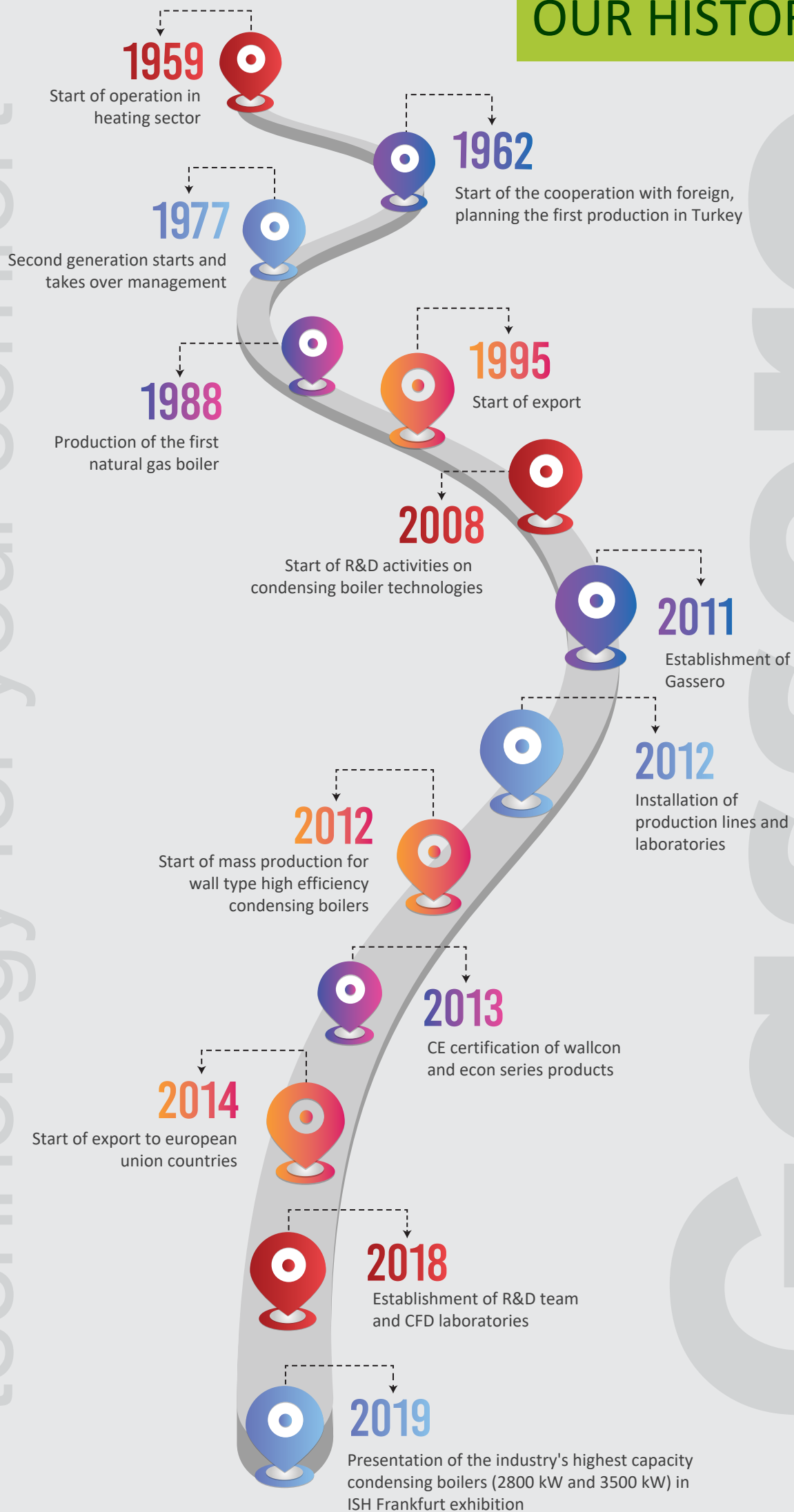
ECO FRIENDLY

## HEAT PUMP

[www.gassero.com](http://www.gassero.com)



# OUR HISTORY



technology for your comfort



## Dear Stakeholders,

60 years ago we started heating you with our oil-fired boilers. Today, we continue to heat you with the new generation of condensing boilers of the new company GASSERO.

The philosophy of the family, which started 60 years ago with DCD and continued with GASSERO, has not changed today.

We design and produce products that no one else makes, which include high added-value, technology and innovation. In addition to 60 years of experience, we are also prepared for the concept of industry 4.0 of the digital age, mentioned in artificial intelligence. We work to ensure that our products connect and share information and adapt to systems that can form a smart network. As mentioned in our product catalog, we produce premix burner condensing boilers with stainless steel heat exchangers and cast iron heat exchangers. We have a wide range of products starting from 42 kW to 3500 kW.

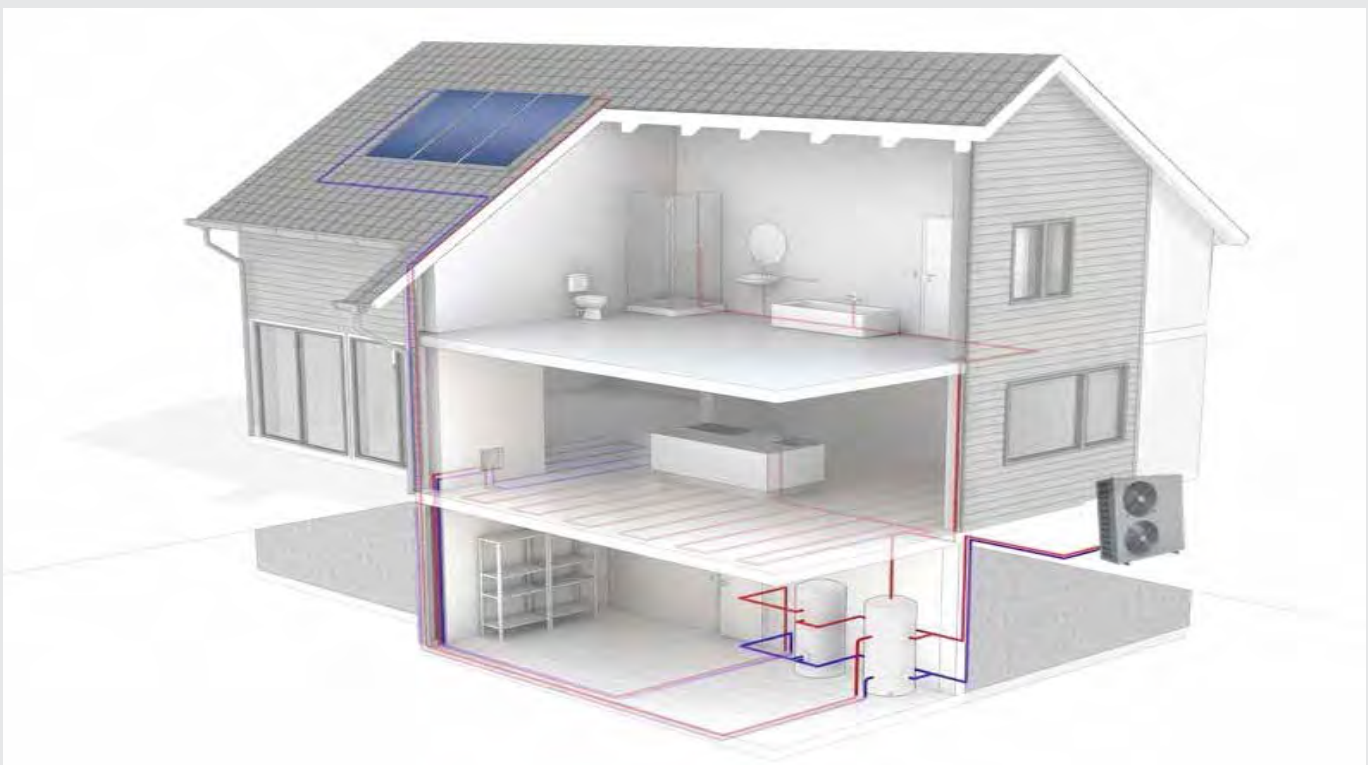
Considering the possibilities of up to 64 cascades of our 60 different power and type boilers, we are the indisputable solution partner of all spaces, whether horizontal or vertical.

Being a wanted brand for our stakeholders, providing comfort for our users, respecting nature, providing ease of installation for our installers and standing behind our products after sale are our reasons for existence.

Our goal is not to witness the developing technology and the era of digitalization, but as a partner to offer you smart, eco-friendly and highly efficient products with new generation designs.

In line with this goal, nature-friendly, high-efficiency Heat Pump products in 3 different models have been added to the GASSERO product range.

With our respect.





# Monoblock DC Inverter Heat Pump

GASSERO Air to Water DC Inverter Heat Pump is air conditioning system designed to supply heating/cooling and hot water requirements of the building. All models suitable for all mounting types and can be used with underfloor heating, radiators or fan coil systems. Also you can save space by small compact Monoblock design.

This series have more efficient and nature friendly design with a new generation R32 gas than old generation R410 series. While same system and capacity, although R410 needs 100 unit gas, R32 needs 71 unit gas.

	R410a	R32	Explanation
Global warming potential	2100	675	Equal to 1/ 3
Gas amount in same system	%100	%71	Less gas amount in same capacity



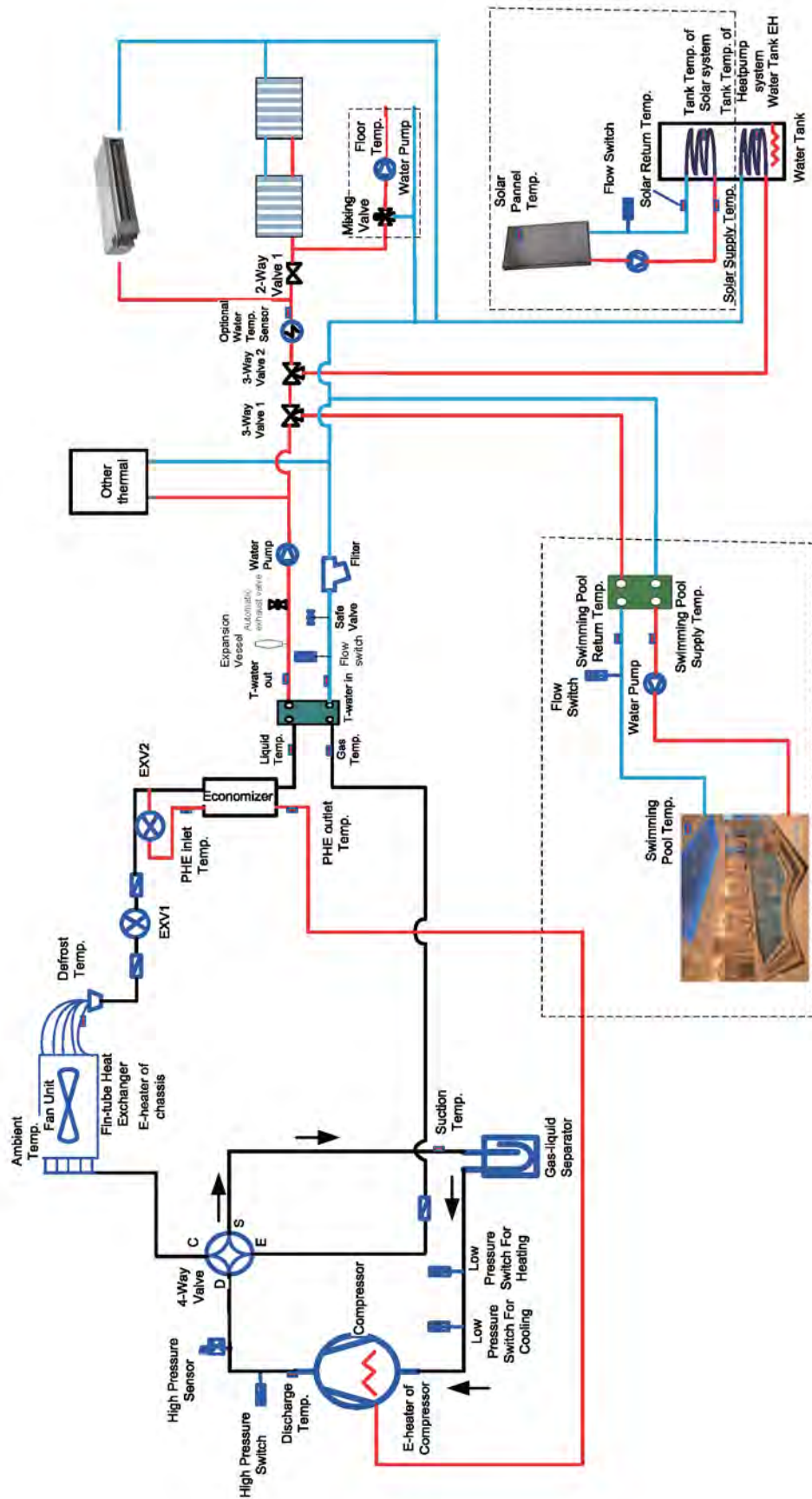
## Gassero Heat Pump Working Principle

Working principle of the Gassero DC Inverter Heat Pump is based on the transferring the heat energy from one environment to another environment with an electric power.

The heat pump circuit starts with the liquid in evaporator turning to vapour form while passing with absorbing the heat of the environment, then R32 gas vapour is sent to system via compressor. The high temperature R32 vapour turn to liquid form with transferring the heat energy to water by condenser. R32 liquid that comes out the condender depressurize with expansion valve and heat pump circuit is end.



# Monoblock DC Inverter Heat Pump

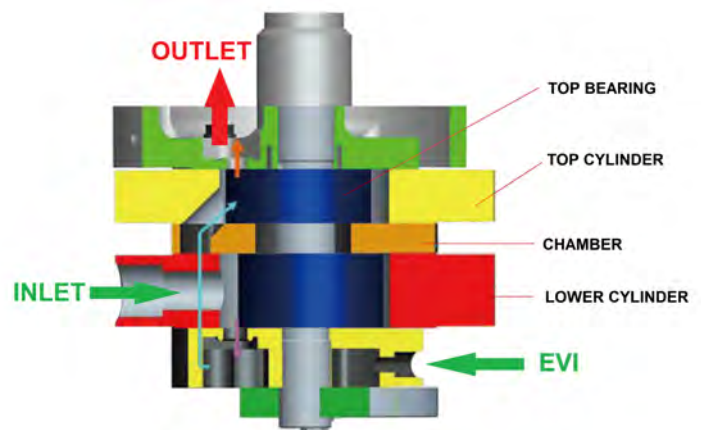




# Monoblock DC Inverter Heat Pump Features

## Unique Low Temperature-High Heat Double Stage Compressor

- › Double stage Low Temperature - High Heat Compressor is make less loss of capacity and gain more energy efficiency than the conventional compressor in low temperature conditions
- › With the new high technology in low temperature conditions backlash, high discharge temperature and other problems are not experienced and the compressor continues to operate safely
- › The outlet water temperature becomes higher and more precisely controlled with two-stage compression and double-stage throttling,



## High Quality Components

### › ErP Inverter Pump

A Class high efficient inverter water pump suitable for European ErP regulation can control working frequency according to the heat pump load. High precision water temperature control is provided with this features.



### › Inverter Fan Motor Structure

DC Inverter fan can control the air volume high precisely, with this technology more energy saving and efficiency can be gain.



### › Plate Heat Exchanger Special Structure

High efficient plate heat exchanger can transfer more heat energy with special louver fin structure then the normal flat fin heat exchanger, also it can makes more heat transfer with special copper form inside of pipe and this increases the heat pump efficiency.





# Monoblock DC Inverter Heat Pump Features

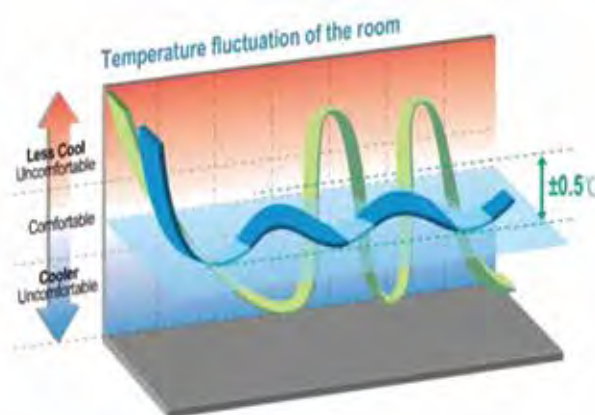
## Control Panel Features

- › Touch Screen
- › WiFi access and BMS integration option,
- › Stylish look with a white body and elegant design after wall mounted



## Special Design, Precise Control, Maximum Comfort

- › Gassero heat pump can work systems as radiator, floor heating, fan coil and domestic hot water heating. Also can supply request of different users with integrating option to solar collector, extra heat source and etc systems.
- › Monobloc compact design increase the safety of system and minimize setup cost, refrigerant liquid leaking risk.



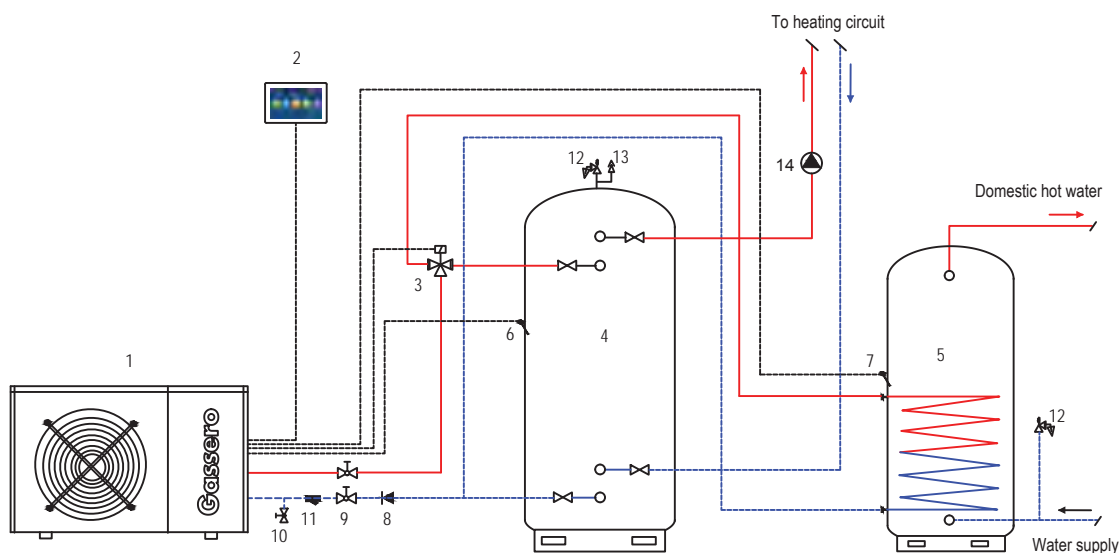


# Monoblock DC Inverter Heat Pump

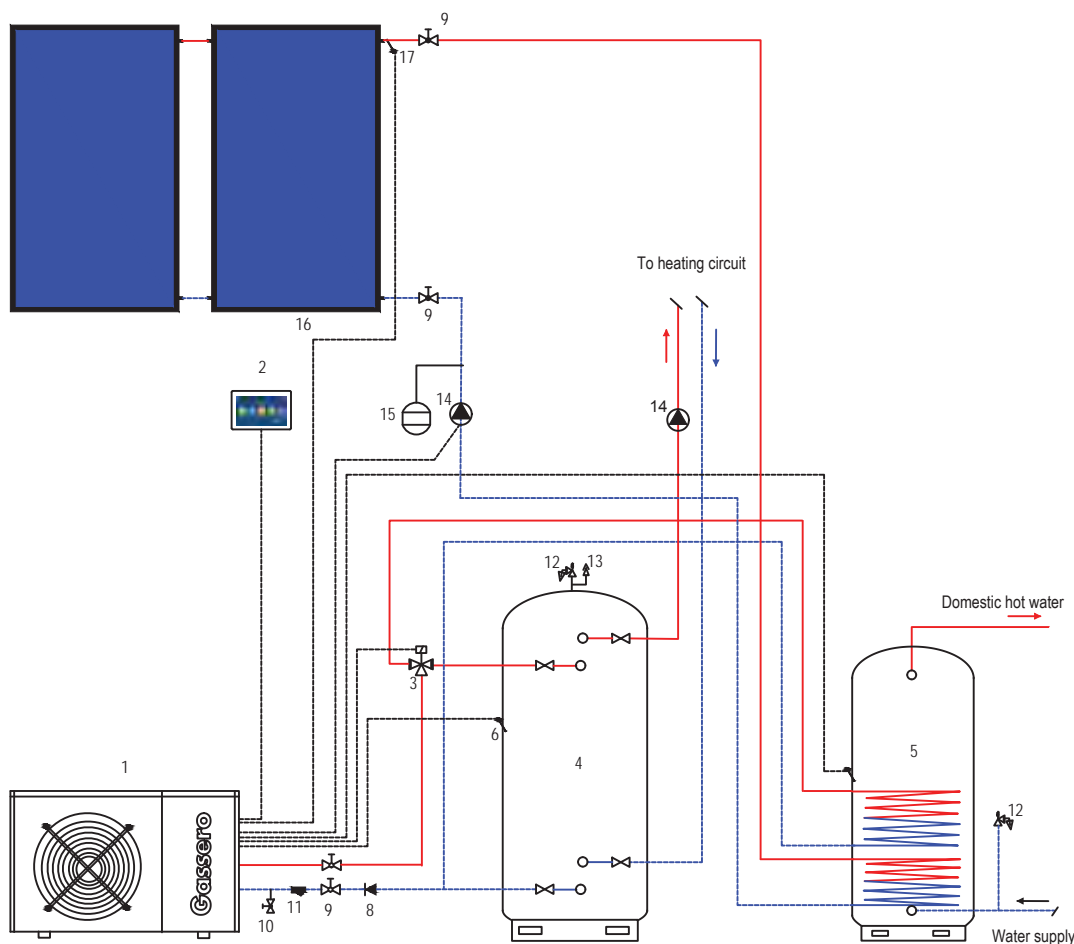
## Installation Schemes

- |                      |                                    |                    |                                      |
|----------------------|------------------------------------|--------------------|--------------------------------------|
| 1- Gassero Heat Pump | 5 - DHW Tank                       | 9 - Shut-off valve | 13 - Air Release Valve               |
| 2- Controller        | 6 - Buffer Tank Temperature Sensor | 10 - Drain Valve   | 14 - Pump                            |
| 3- 3-Way Valve       | 7 - DHW Tank Temperature Sensor    | 11 - Filter        | 15 - Expansion Tank                  |
| 4- Buffer Tank       | 8 - Non-return valve               | 12 - Safety Valve  | 16 - Solar Panel                     |
|                      |                                    |                    | 17 - Solar System Temperature Sensor |

## Heating/Cooling + Domestic Hot Water



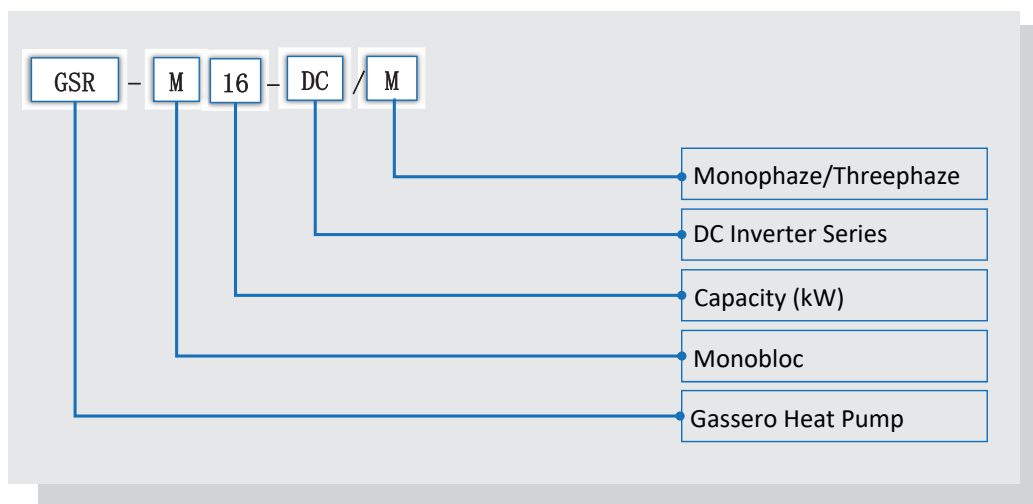
## Solar System Integrated Heating/Cooling + Domestic Hot Water





# Monoblock DC Inverter Heat Pump

## Monoblock DC Inverter Series Model Explanation



## Technical Information

Monobloc DC Inverter Heat Pump					
CAPACITY AND OPERATING SPECIFICATIONS	Unit	GSR-M8-DC/M	GSR-M12-DC/M	GSR-M16-DC/M	GSR-M16-DC/T
Heating Capacity	kW	8,0	12,0	15,5	15,5
Heating Input Power	kW	1,63	2,64	3,60	3,60
Seasonal Heating Energy Efficiency Classes		A+++	A+++	A+++	A+++
COP		4,60	4,55	4,30	4,30
Cooling Capacity	kW	6,80	11,00	14,50	14,50
Cooling Input Power	kW	1,55	2,56	3,82	3,82
EER		4,40	4,30	3,80	3,80
Maximum Operating Current (Heating)	A	10	18	18	12
Maximum Input Power (Heating)	kW	2,30	5,80	5,80	4,80
Maximum Operating Pressure	mpa	4,30	4,30	4,30	4,30
Outlet Water Temp. (Heating)	°C	25~60	25~60	25~60	25~60
Outlet Water Temp. (Cooling)	°C	7~25	7~25	7~25	7~25
Outlet Water Temp. (DHW)	°C	40~80	40~80	40~80	40~80
Operating Temperature Range (Heating/Cooling)	°C	-25~35/10~48	-25~35/10~48	-25~35/10~48	-25~35/10~48
Refrigerant		R32	R32	R32	R32
Refrigerant Gas Amount	kg	0,87	2,20	2,20	2,20
Water Flow	m³/h	1,40	2,70	2,70	2,70
COMPONENT SPECIFICATION					
Hydraulic Pressure Loss	kpa	50	50	50	50
Controller Type		Touchscreen	Touchscreen	Touchscreen	Touchscreen
CONNECTION SPECIFICATIONS					
Water Inlet/Outlet Dimension	inch	1	1	1	1
Power Supply	V/Ph/Hz	220~240/1/50	220~240/1/50	220~240/1/50	380~415/3/50
DEVICE SPECIFICATION					
Sound Pressure Level (Heating/Cooling)	dB(A)	54/52	61/58	61/58	61/58
Dimension Gross (LxWxH)	mm	1250x480x765	1245x545x885	1245x545x885	1245x545x885
Dimension Net (LxWxH)	mm	1150x390x756	1200x460x878	1200x460x878	1200x460x878
Weight (Net/Gross)	Kg	96/109	147/160	147/160	151/166

Measurement Conditions;

Underfloor Heating and Cooling (Heating: 7°C DB/6°C WB, Operating Regym: 35/30 °C), (Cooling: 35°C DB/- WB, Operating Regym: 18/23 °C)

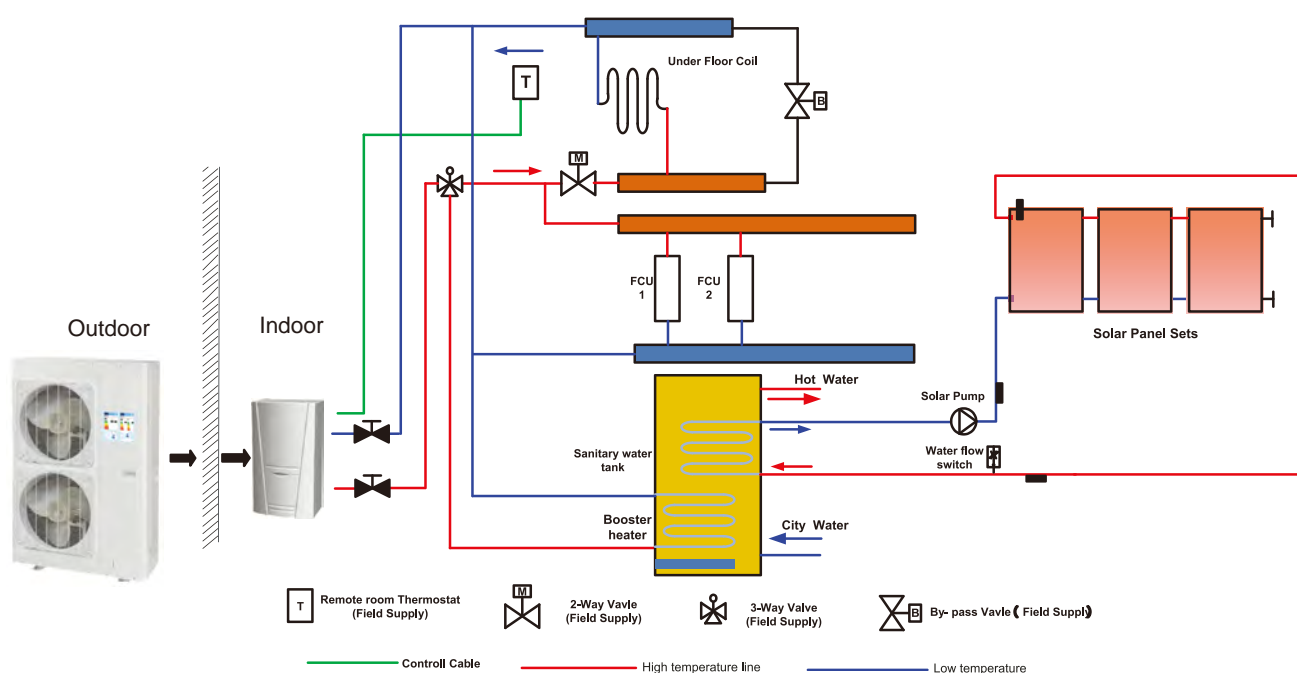


# SPLIT DC Inverter Heat Pump

Gassero Air to Water DC Inverter Split Heat Pump is an air conditioning system designed to provide building heating/cooling and domestic hot water requirements. Also split structure gives more flexible installation advantage.



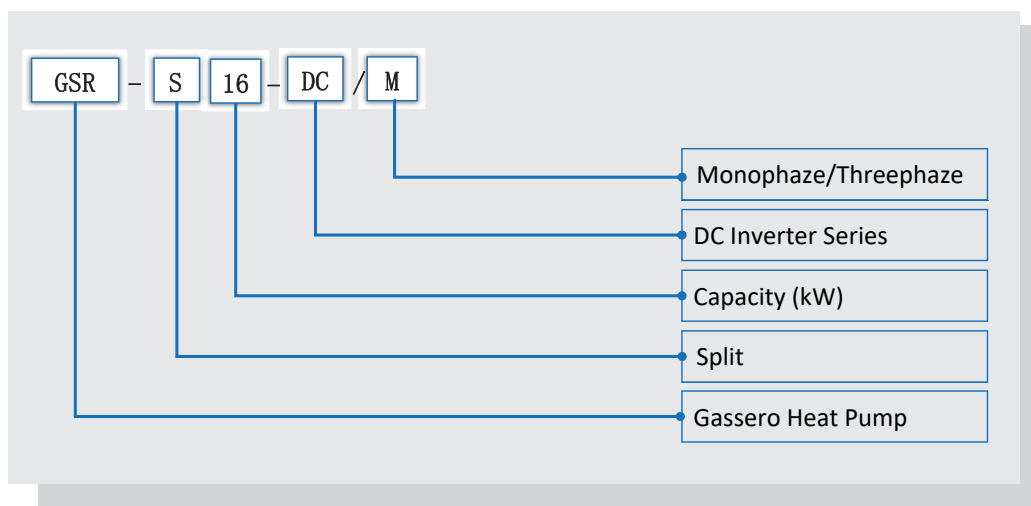
## Installation Scheme





# SPLIT DC Inverter Heat Pump

## Split DC Inverter Series Model Explanation



## Technical Information

### SPLIT DC INVERTER HEAT PUMP

CAPACITY AND OPERATING SPECIFICATIONS	Unit	GSR-S8-DC/M	GSR-S12-DC/M	GSR-S16-DC/M	GSR-S16-DC/T
Heating Capacity	kW	8.00	12.0	15.5	15.5
Heating Input Power	kW	1.78	2.80	3.75	3.85
COP		4.40	4.30	4.10	4.05
Cooling Capacity	kW	7.80	12.50	14.50	15.00
Cooling Input Power	kW	1.95	3.00	3.80	4.20
EER		3.90	4.20	3.80	3.60
Outlet Water Temp. (Heating)	°C	25~55	25~55	25~55	25~55
Outlet Water Temp. (Cooling)	°C	7~25	7~25	7~25	7~25
Outlet Water Temp. (DHW)	°C	40~80	40~80	40~80	40~80
Operating Temperature Range (Heating/Cooling)	°C	-20~35/10~48	-20~35/10~48	-20~35/10~48	-20~35/10~48
Refrigerant		R410a	R410a	R410a	R410a
Refrigerant Gas Amount	kg	2.30	3.60	3.60	3.60
Controller Type		Digital	Digital	Digital	Digital
CONNECTION SPECIFICATIONS					
Water Inlet/Outlet Dimension	inch	1	1	1	1
Gas Inlet/Outlet Dimension (Indoor Unit)	inch	5/8-3/8	5/8-3/8	5/8-3/8	5/8-3/8
Gas Inlet/Outlet Dimension (Outdoor Unit)	inch	5/8-3/8	5/8-3/8	5/8-3/8	5/8-3/8
Power Supply	V/Ph/Hz	220~240/1/50	220~240/1/50	220~240/1/50	380~415/3/50
DEVICE SPECIFICATION					
Sound Pressure Level (Heating/Cooling)	dB(A)	56/54	56/54	56/54	57/55
Dimension Outdoor Unit (LxWxH)	mm	1097×862×477	1097×862×477	1097×862×477	1097×862×477
Dimension Indoor Unit (LxWxH)	mm	980×427×788	980×427×788	980×427×788	980×427×788
Weight Outdoor Unit (Net/Gross)		80/89	107/117	114/124	114/124
Sound Pressure Level Indoor Unit (Heating/Cooling)	dB(A)	31/31	31/31	31/31	31/31
Dimension Indoor Unit - Gross (LxWxH)	mm	1043×395×608	1043×395×608	1043×395×608	1043×395×608
Dimension Indoor Unit - Net (LxWxH)	mm	981×324×500	981×324×500	981×324×500	981×324×500
Weight Indoor Unit (Net/Gross)	Kg	56/65	56/65	56/65	58/67

Measurement Conditions;

Underfloor Heating and Cooling (Heating: 7°C DB/6°C WB, Operating Regym: 35/30 °C), (Cooling: 35°C DB/- WB, Operating Regym: 18/23 °C)



## GASSERO COMMERCIAL HEAT PUMP (Heating/Cooling)

Hot/Cold water demand could be very much and costly for big facility such as hospitals, militaries, prisons, sports facility and this heating/cooling cost can effect up to %40.of the total expense. Gassero Commercial Heating Pump offers the best cost-effective solution for this places that require high capacity hot/cold water.



### Gassero Commercial Heat Pump (Heating/Cooling) Device Specification

#### ► Reliable, Long-lasting Devices

Gasero Heat Pump components are supplied by the most reliable and high tech company brand in all over the world.



World famous compressor brand



High efficient tube-shell condenser structure.  
(Working pressure up to 50Bar)



Axial fan with external motor  
(Aluminium Propeller)



# GASSERO COMMERCIAL HEAT PUMP (Heating/Cooling)

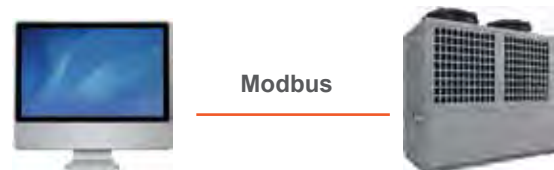
## ► Cascade Control Possibility

Control options up to 16 device with a colourful LCD touchpad control screen and through that provide solution for your all project.



## ► Modbus Protocol

Gassero Commercial Heat Pump (Heating/Cooling) is designed to be compatible with modbus protocol and also can be controlled via BMS system when necessary.



## ► Smart WiFi Control (Optional)

With a remote control possibility you can control your Commercial Heat Pump (Heating/Cooling) everywhere and everytime via your mobile phone. You could enjoy a warm bath after a long journey return with your remote control WiFi Features.



## ► High Energy Saving

Gassero commercial water heating pump is specifically suitable for place that requires high volume hot/cold water. It contributes to reducing your energy bill cost with using the ambient air efficiently than the regional heating systems such as electrical boiler, oil fired boiler and natural gas boiler.

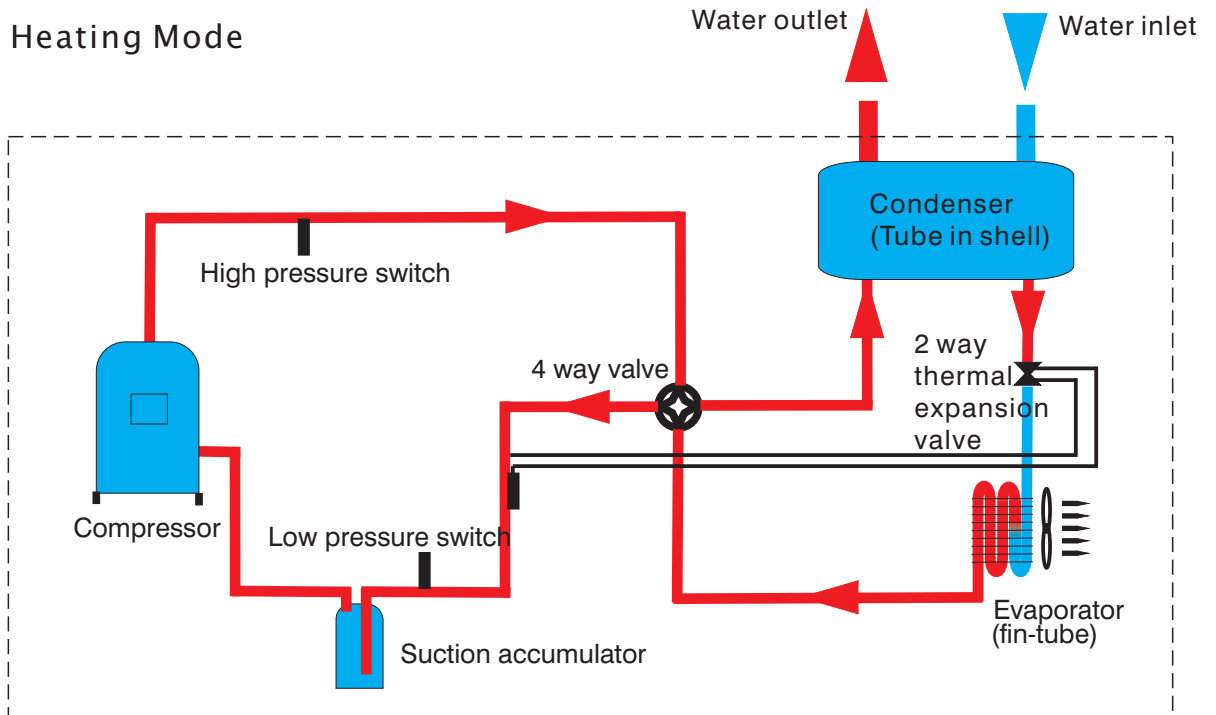




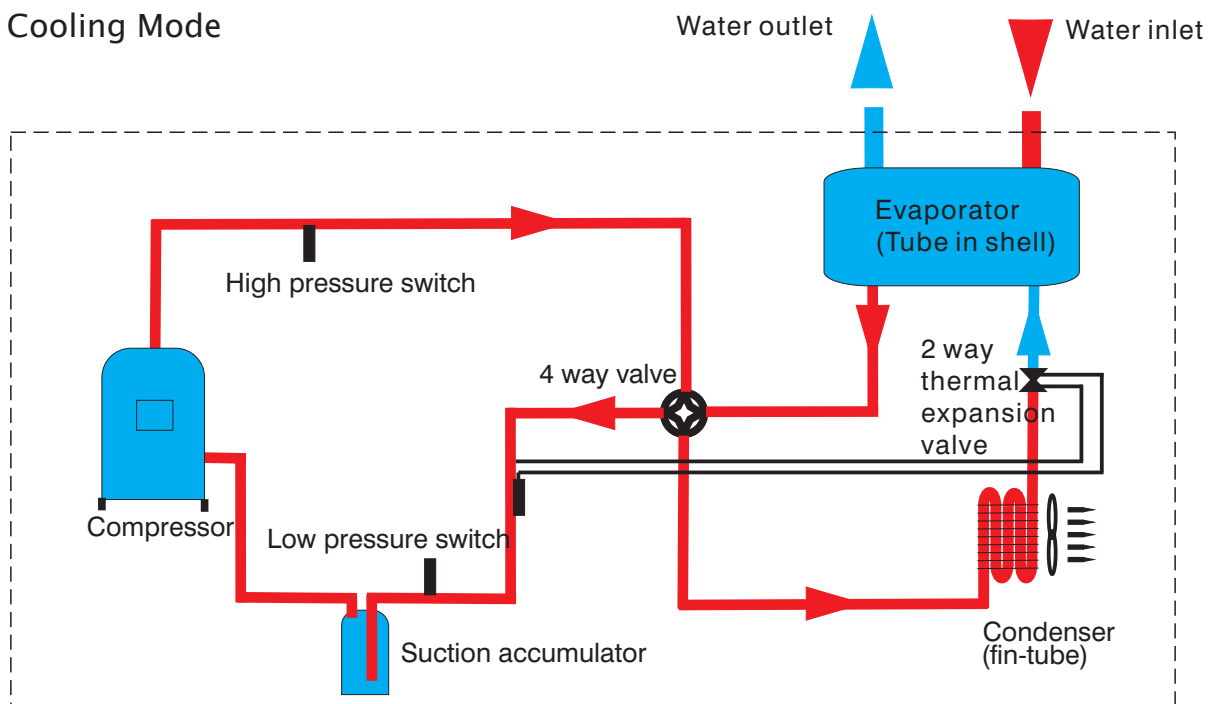
# GASSERO COMMERCIAL HEAT PUMP (Heating/Cooling)

## Gassero Commercial Heating Pump Working Principle

Heating Mode



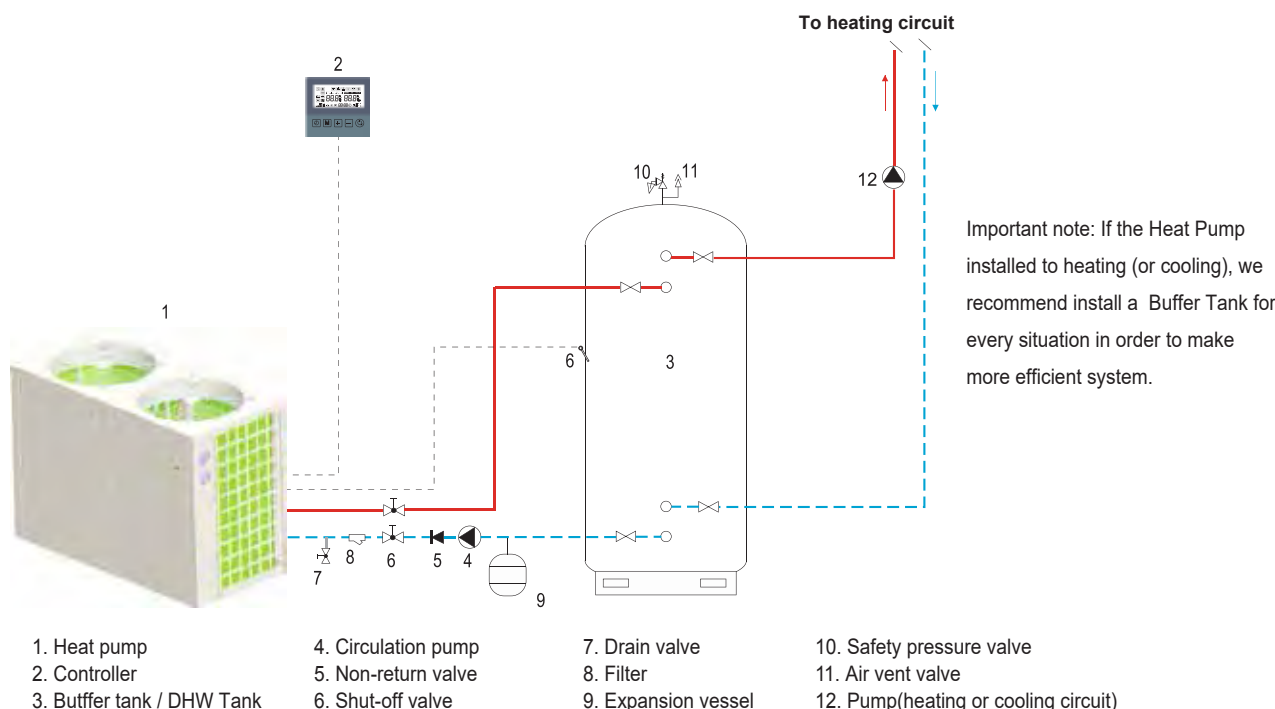
Cooling Mode





# GASSERO COMMERCIAL HEAT PUMP (Heating/Cooling)

## Installation Scheme



## Technical Information

COMMERCIAL HEAT PUMP								
CAPACITY SPECIFICATIONS	Unit	GSR-20-HC	GSR-30-HC	GSR-38-HC	GSR-45-HC	GSR-63-HC	GSR-70-HC EVI	GSR-140-HC EVI
Heating Capacity	kW	19.00	30.0	38.0	45.0	63.0	70.0	140.0
Input Power	kW	4.55	7.20	9.20	10.80	16.00	20.59	41.20
COP		4.18	4.17	4.13	4.17	3.94	3.40	3.40
Operating Current	A	7.83	12.00	15.84	18.60	27.50	35.50	71.00
Max. Input Power	kW	6.37	10.08	12.88	16.20	24.00	30.89	61.80
Max. Operating Current	A	10.97	18.36	22.18	27.89	42.00	53.25	106.50
Outlet Water Temp	°C	7~60	7~60	7~60	7~60	7~60	7~65	7~65
Operating Temperature Range	°C	-15~43	-15~43	-15~43	-15~43	-15~43	-25~43	-25~43
Hot Water Flow	L/h	408	645	817	967	1354	1612	3220
Refrigerant		R410a	R410a	R410a	R410a	R410a	R407C	R407C
DEVICE SPECIFICATION								
Condenser		Copper tube in shell	Copper tube in shell	Copper tube in shell	Copper tube in shell	Copper tube in shell	Copper tube in shell	Copper tube in shell
Compressor Quantity		1	2	2	2	3	2	4
Hydraulic Pressure Loss	kpa	50	55	55	55	55	65	70
Controller Type		LCD	LCD	LCD	LCD	LCD	LCD	LCD
IP Class		I/ IPX4	I/ IPX4	I/ IPX4	I/ IPX4	I/ IPX4	I/ IPX4	I/ IPX4
CONNECTION SPECIFICATIONS								
Water Inlet/Outlet Dimension	DN	25/25	40/40	40/40	40/40	50/50	50/50	65/65
Water Flow	m³/h	4.1	6.4	8.2	9.7	13.5	12.25	22.6
Power Supply	V/Ph/Hz	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
DEVICE SPECIFICATION								
Sound Pressure Level (1m/4m/10m)	dB(A)	57	58	60	61	63	70	72
Dimension - Gross (LxWxH)	mm	840x750x1100	1525x805x1110	1525x805x1220	1525x805x1420	2250x865x1450	2130x1100x2150	2090x2290x2360
Dimension - Net (LxWxH)	mm	816x690x965	1450x730x955	1450x730x1064	1450x730x1266	2150x772x1291	2000x980x1960	2000x2160x2230
Weight (Net/Gross)	Kg	119/137	236/279	249/294	268/316	428/490	530/595	1120/1200

Measurement Conditions;  
Outside temperature : 20°C(DB)/15°C(WB), Water Inlet/Outlet Temperature 15/55°C



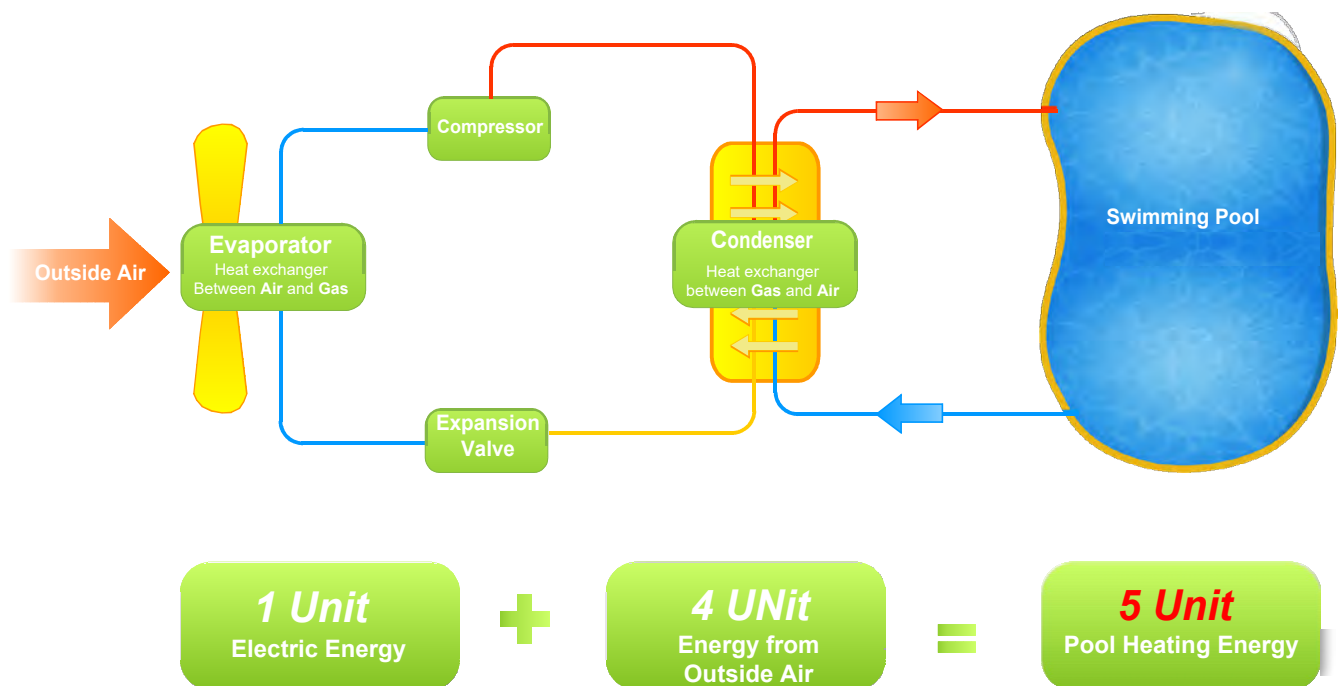
# GASSERO Pool Heat Pump

Gassero Pool Heat Pump changes the pool water temperature with ambient air energy by using too less electric energy.

With innovative technology, Gassero pool heat pump produce 5 times more energy then conventional electric heating device.



## Gassero Pool Heat Pump Working Principle

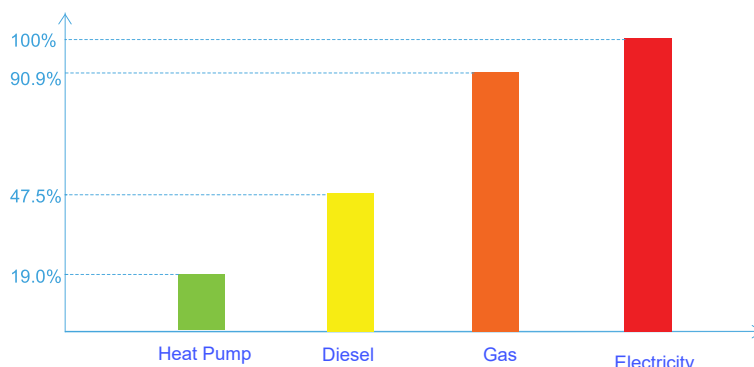




# GASSERO Pool Heat Pump

## How much can you save?

Pool Heat Pump works high efficiently with latest technology and makes greatly reduce on electricity cost..



HEATING DEVICE	HEAT PUMP	GAS	DIESEL	ELECTRICITY
Calorific Value	860kcal/kWh	860kcal/kWh	10200 kcal/kWh	860kcal/kWh
Heating Load	9 kW	9 kW	9 kW	9 kW
Efficiency	500%	85%	85%	95%
Energy consumption per day (24h continuous running)	43,2 kWh	254,1 kWh	21,4 L	227,37 kWh

## GASSERO Pool Heat Pump Device Features

### ► Suitable For Humid Environment With Special Case Material

Pool Heat Pump usually used for high humid environment. With special composit body material pool heat pump body can resist the corrosion.

### ► Titanium Tube-Shell Condenser Structure

Special condenser structure can resist the chlorine of pool water. With that features you can condition pool water with not need any additional equipment and heat exchanger. Titanium pipe and plastic cover of the condenser protects the heat pump and can be use directly to the pool water without any concerns.



### ► Control Panel with Smart WiFi Features

With a remote control possibility you can control your Pool Heat Pump everywhere and everytime via your mobile phone. You could enjoy a warm bath after a long journey return with your remote control WiFi Features.



### ► Modbus Protocol

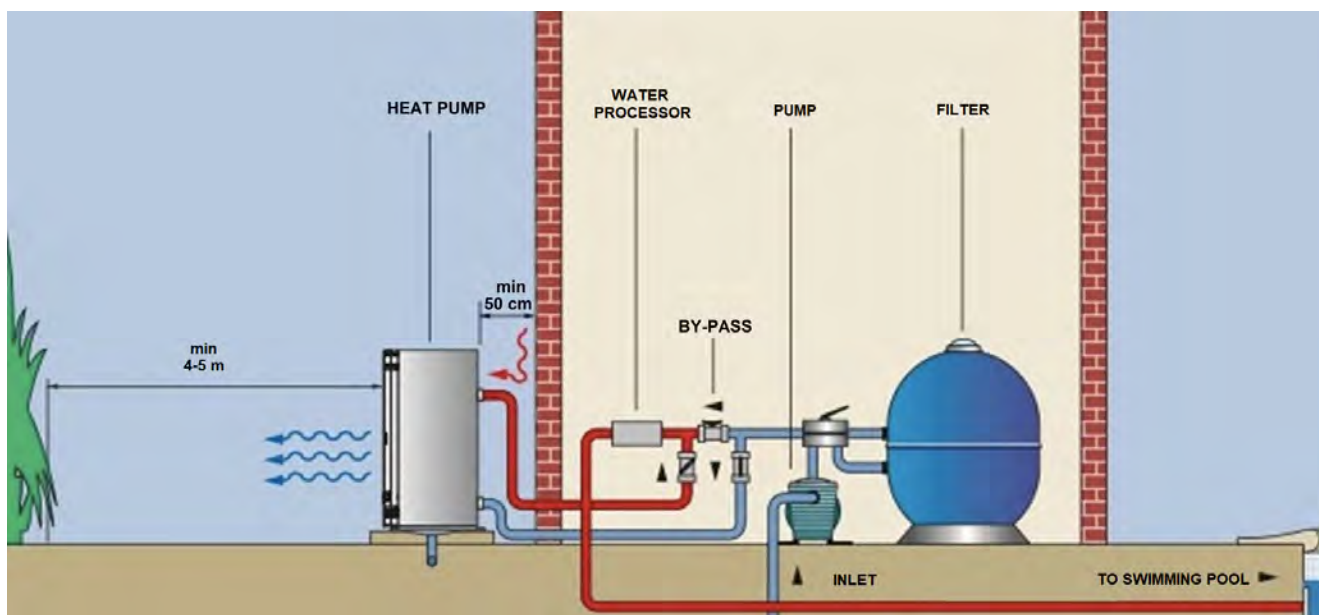
GASSERO Pool Heat Pump is designed to compatible with modbus protocol and also can be controlled via BMS system when necessary.





# GASSERO Pool Heat Pump

## Installation Scheme



## Technical Information

		POOL HEAT PUMP			
CAPACITY AND OPERATING SPECIFICATIONS	Unit	GSR-11-PL	GSR-13-PL	GSR-18-PL	GSR-26-PL
Heating Capacity	kW	11.0	13.5	18.0	26.3
Input Power	kW	1.93	2.18	2.61	4.75
Operating Current	A	9.78	10.43	12.50	8.39
COP		5.10	5.70	5.30	5.47
Max. Current	A	16.00	18.00	24.00	14.00
Setting temp. Range	°C	15~40	15~40	15~40	15~40
Hot Water Range Operating Temp Range	°C	-5~43	-5~43	-5~43	-5~43
Refrigerent		R410a	R410a	R410a	R410a
COMPONENT SPECIFICATION					
Condenser		Titanium	Titanium	Titanium	Titanium
Evaporator		Hydrophilic Aluminum	Hydrophilic Aluminum	Hydrophilic Aluminum	Hydrophilic Aluminum
Fan Motor Speed	RPM	900.00	900.00	850	800
Fan Motor Input Power	W	80.00	80.00	140	320
Controller Type		LCD	LCD	LCD	LCD
CONNECTION SPECIFICATIONS					
Water Inlet/Outlet Dimension		1.50	1.50	1.50	1.5
Hydraulic Connection	mm	PVC 50	PVC 50	PVC 50	PVC 50
Water Flow	m³/h	5.00	5.50	6.00	8
Power Supply	V/Ph/Hz	220~240V/1Ph/50Hz	220~240V/1Ph/50Hz	220~240V/1Ph/50Hz	380~420V/3Ph/50Hz
DEVICE SPECIFICATION					
Sound Pressure Level (1m/4m/10m)	dB(A)	52/40/32	52/40/32	52/40/32	55/44/34
Dimension - Gross (LxWxH)	mm	1135x390x750	1135x390x750	1250x505x825	840x750x1100
Dimension - Net (LxWxH)	mm	1012x306x613	1012x306x613	1116x425x686	752x691x959
Weight (Net/Gross)	Kg	68/78	105/120	115/130	124/146

Measurement Conditions;

Outside temperature : 24°C(DB)/19°C(WB), Water Inlet Temperature °C27



# Certificates

**Gassero**  
technology for your comfort





[www.gassero.com](http://www.gassero.com)

**Gassero**  
technology for your comfort

**Gassero Isı Teknolojileri Gb" @X"**

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