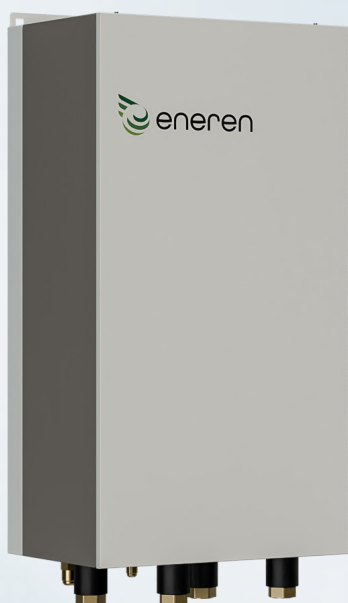


# SHI



SHI units are Aerothermal heat pumps split with integrated hydronic module

**INVERTER**

R-410A

Refr. Fluid

R-454B

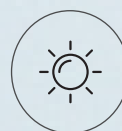
Ozone friendly



Aerothermal



Cooling



Heating



Hot Water

# SHI

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## Characteristics

### **SHI IS AN INNOVATIVE HEAT PUMP THAT CONTAINS ALL THE FEATURES TO BE CLASSIFIED AS THE BEST IN ITS CATEGORY**

It is reliable, efficient and sustainable. The high quality materials are built to make it long-lasting over time and guarantee a high performance. In addition, the heat recovery mode and the use of low GWP refrigerant allow significant energy savings and less CO<sub>2</sub> emissions in the air.

It is split into two sections and it is able to completely satisfy the needs for heating, cooling and the production of domestic hot water. The SHI heat pump works in total heat recovery mode, even in case of extreme temperatures and can be installed in many contexts such as apartments, villas, offices and commercial building.

The internal module is wall-mounted, compact, and suitable for installation even in environments with little space available. It is connected to the outdoor unit via refrigeration pipes and manages the hydraulic distribution to the systems through the high-efficiency electronic circulating pumps it is equipped with.

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## Main construction features

- ⊗ Very high efficient **inverter digital scroll BLDC compressors**
- ⊗ Electronically controlled **double expansion valve** that optimizes operation regardless of the length of the refrigerant line
- ⊗ **Total heat recovery** system
- ⊗ **Internal circulating pumps**
- ⊗ **EC electronic fans**
- ⊗ Electronic **flow meters** for the control of hydronic and energy flows
- ⊗ **Maximum soundproofing** guaranteed by exclusive sound-absorbing materials
- ⊗ **Finned coils with hydrophilic treatment** and **increased fin pitch**, built with an innovative technology that allows to reduce the amount of refrigerant required for defrosting

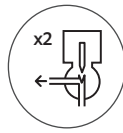
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## Main technical characteristics

- ⊗ Enlarged working range for external air temperatures **down to -20 ° C**
- ⊗ Production of hot water **up to 65 ° C**
- ⊗ Smart Grid Ready system for managing electricity self-consumption, integrated with **"My economy"** device
- ⊗ Energy class **A +++**
- ⊗ Connection for **remote control**
- ⊗ **Compact** and **easy to install** structure
- ⊗ COP greater than **5**

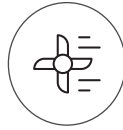
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## Advantages



### Double electronic expansion valve

Two electronic expansion valves, positioned in the indoor and outdoor unit, guarantee a better performance in both cooling and heating conditions and greater stability of the heat pump even with extended refrigeration lines.



### Fans with EC motors

The inverter fan with electronically commutated motor makes SHI a heat pump with a very high energy performance and low noise levels, with the possibility of adjusting the air flow according to individual needs.



### The highest energy efficiency in the category

The use of electronically controlled inverter electric motors, brazed heat exchangers with larger surfaces and finned coils with 2.5mm pitch make SHI the most energy efficient heat pump in its category.



### Maximum soundproofing

The compressor is mounted on the antivibrating rubber dampers that reduce vibrations to minimum level, and it is enclosed in a hi-box covered with a special sound-absorbing and soundproofing material. These construction details, combined with the adoption of EC fans, make SHI a very silent heat pump.



### Total heat recovery

By using a dedicated heat exchanger, SHI recovers 100% of the generated heat which was produced during the cooling phase. The recovered heat can be reused to heat the water for sanitary use or for the operation of 4-pipe systems. This solution increases the overall efficiency of the unit and prevents temperature fluctuations in low thermal inertia systems.



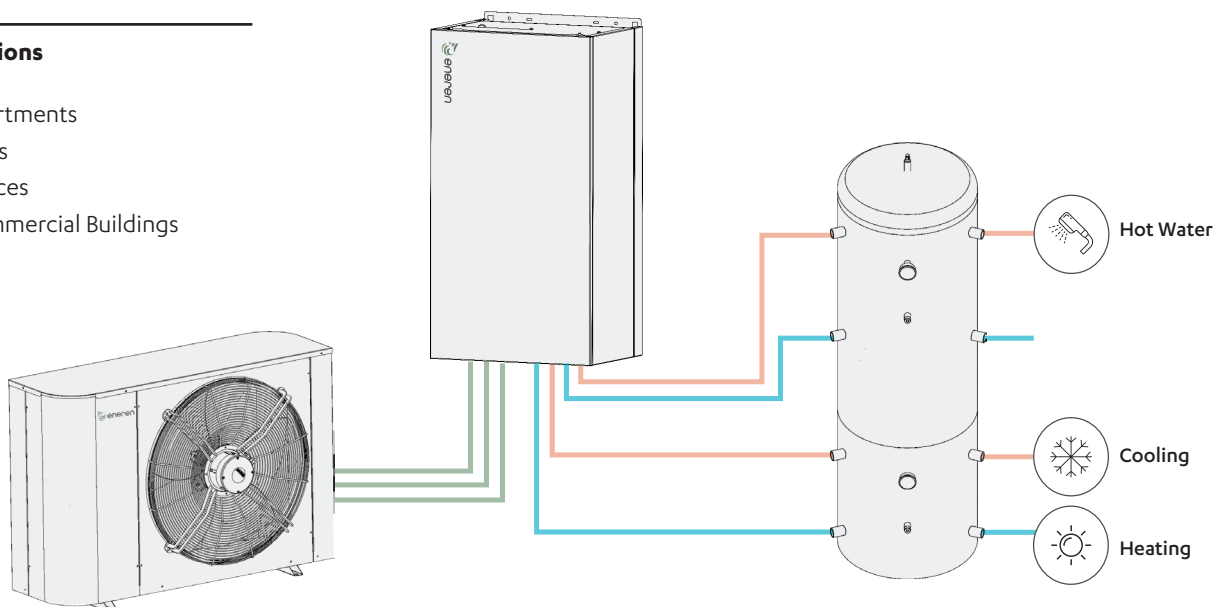
### Enerweb Supervision and remote control

Enerweb is the innovative control system of the air conditioning and air treatment system which interfaces with any web device and allows you to view and monitor the main parameters, including operating temperatures and the fresh airflow.

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## Applications

- Apartments
- Villas
- Offices
- Commercial Buildings



		SHI006	SHI009	SHI012	SHI015	SHI017
<b>COOLING A35 W18</b>						
Cooling power	kW	8,6	13,0	15,2	19,6	22,8
Absorbed power with pumps on board	kW	1,7	2,8	3,3	4,4	5,3
EER	-	5,09	4,59	4,64	4,50	4,33
<b>COOLING + DOMESTIC HOT WATER W18 W55 (MULTIFUNCTIONAL VERSION ONLY)</b>						
Heating Power	kW	9,5	14,7	16,7	21,4	25,0
Cooling power	kW	7,6	11,6	13,3	16,7	19,5
Absorbed power with pumps on board	kW	2,2	3,5	3,7	5,1	6,1
COP	-	7,84	7,58	8,01	7,40	7,36
<b>HEATING A7/W35</b>						
Heating Power	kW	7,6	11,5	13,3	17,7	20,3
Absorbed power with pumps on board	kW	1,4	2,4	3,0	3,6	4,2
COP	-	5,3	4,86	4,48	4,91	4,81
<b>HEATING A7/W45</b>						
Heating Power	kW	7,2	11,2	12,9	16,8	19,4
Absorbed power with pumps on board	kW	1,8	2,9	3,4	4,3	5,0
COP	-	4,12	3,92	3,77	3,9	3,88
<b>DOMESTIC HOT WATER A7/W55</b>						
Heating Power	kW	7,0	10,9	12,5	15,7	18,3
Absorbed power with pumps on board	kW	2,1	3,4	3,9	5,1	5,9
COP	-	3,24	3,17	3,18	3,06	3,09
<b>DOMESTIC HOT WATER A-5/W60</b>						
Heating Power DHW	kW	5,0	7,8	9,1	11,1	12,9
Absorbed power with pumps on board	kW	2,2	3,5	3,9	5,3	6,0
COP	-	2,25	2,22	2,36	2,12	2,15
<b>SEASONAL EFFICIENCY</b>						
ESEER / SCOP High Temperature	-	4,91 / 5,11	4,91 / 5,00	4,67 / 4,15	4,33 / 4,45	4,40 / 4,45
High temperature ERP efficiency class	-	A+++	A+++	A++	A+++	A+++
DHW Energy Class / declared profile	-	A++/M	A++/M	A+/L	A+/L	A+/L
Lw Sound Power Level	dBa	62	65	68	66	67
<b>COMPRESSOR</b>						
Compressor type		Scroll BLDC Inverter				
Electrical power supply		230/1/50	230/1/50	230/1/50	400/3/50	400/3/50
<b>DIMENSIONS</b>						
Outdoor Unit (L x W x H)	mm	1270 x 380 x 880h			1374 x 566 x 1180h	
Indoor Unit (L x W x H)	mm	900 x 740 x 1875h				

Data calculated with reference to the standards of UNI EN 14511 and EN 14825 for seasonal efficiencies



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