

# inventor

*Upgrade your heating experience!*



Heating



Cooling



Domestic Hot Water (DHW)

# Tomorrow's technology in heating

Inventor heat pumps are the ideal energy saving solution, as they are developed to meet the new trends and demands in heating, cooling and domestic hot water (DHW). Combining comfort with energy efficiency, they cover both the needs of your household while operating efficiently, even in extreme outdoor temperatures!



The absolute solution for heating/cooling and domestic hot water production



Environmentally friendly solution



The most economical heating system\* with low maintenance costs and rapid amortization compared to other heating systems



Energy savings, with 66%-80% renewable source produced heat



Flexibility and cost savings, as there is no need for pre-purchase of fuel (oil, pellets, wood), while there is immediate availability of hot water all year long



Easy residence energy upgrade through connection to an existing hydraulic system or by replacing an already installed boiler



High efficiency even in extreme environmental temperatures, both in Heating and Cooling



**European Keymark certification** from the **CEN** and **CENELEC** organizations, ensuring that the products have been tested and comply with European quality standards

\*according to a study by the National Technical University of Athens (2023)

# Energy Saving Solution

Inventor heat pumps have plenty of features to reduce power consumption, saving energy and money.



## A+++ Energy Class

The technological superiority of Inventor heat pumps guarantees impeccable performance with the smallest functional cost. Benefit from the highest energy class of A+++ (heating – warm zone) and save energy, creating the atmosphere you desire.



## Compensation function

By activating one of 32 different seasonal operating curves, the heat pump automatically adjusts the ideal water temperature according to the outside temperature, offering comfort and energy-saving solutions.



## ECO mode

Activate ECO Mode easily from the controller of the unit and reduce power consumption saving energy and money.



## All DC Inverter

With All DC Inverter technology, Inventor heat pumps operate under ideal conditions based on the specific energy demand, maintaining a low noise level while simultaneously saving energy.



## Control 2 zones

Ensure energy savings, comfort and flexibility. The heat pumps have the possibility of controlling 2 heating zones, for example application with radiators and underfloor heating.



## Modbus RTU

Connect up to 16 heat pumps with your building management system through Modbus RTU protocol to fully incorporate to your smart house/building and achieve complete control of the environment of your space.



## Smart Grid Ready

Designed as environmental friendly, Inventor heat pumps can connect with a Smart City's Smart Grid. Through their connection with the Smart Grid, the heat pumps can automatically alter their operation to activate the DHW production when there is excess energy available or to restrict their operation when the electricity grid is overtaxed, saving energy and helping protect the environment.



## Compressor and Chassis Heating Belt

The heat pump units are designed with pre-installed heating belts located on the chassis and the compressor to ensure their protected operation even at extreme weather conditions, a longer operation life, and provide high efficiency and stellar heating conditions quickly and effectively.

# Absolute Control & Flexibility

Inventor heat pumps feature all the functions necessary for incredible comfort, with absolute adaptation to your needs easily and quickly.



## Fast Domestic Hot Water Function

You can select the Fast DHW Function for the unit to produce DHW when there is a need for immediate hot water production.



## 2 Stage Silent Mode

Reduce the heat pump noise levels even further by selecting between the two different levels of silent operation.



## Ultimate Central Control

The heat pumps are equipped with a touch wired controller for an even easier usage of your appliance, offering access to an important number of functions.



## Weekly Scheduling and Timer

Adjust the heat pump to operate according to your personal weekly schedule and enjoy ideal conditions in your space, as well as hot water whenever you need it. Save energy and money every day.



## Backup Heating Source Control

Ability to control a secondary external heating source (existing oil boiler, electric resistance, etc.) for parallel operation with the heat pump.



## Wi-Fi Standard

Through the smart Wi-Fi management, you get to create the environment you desire, from anywhere. Free download the Comfort Home app from Google Play or App Store and save energy operating your appliance through your smartphone or tablet.



## Disinfection Function 65~70°C

Maintain pristine quality of the water tank's DHW and eliminate germs and bacteria by increasing the temperature of the water in it up to 70°C.

*\* The unit has the ability to control the electrical resistance of the container.*

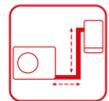


## Holiday Mode

Reduce energy consumption while saving money even when away from home with the Holiday Away mode. You can additionally program the heat pump with different operation settings through the Holiday Home mode, to activate quick and easy when your home activity changes from your typical daily schedule.

# Easy Installation

Inventor heat pumps include everything the installer needs for easy installation without stress and hassle.



## Flexible installation

Inventor Integrated Split Type Heat Pumps (All in One) are the ideal choice for easy and stress-free installation. Thanks to the all-in-one design and the built-in water tank, there is no need of connection of the unit to an external water tank device. The installation becomes even easier, as the height difference between the indoor and outdoor unit can be up to 20 meters and the total piping length up to 30 meters.



## Single Fan Design

The special design of units up to 16kW allows for more efficient operation with only one fan, making sure in this way, to offer excellent conditions on site and particularly low noise levels.



## Underfloor drying operation

Protect your home's floor thanks to the underfloor drying function, which can gradually increase the underfloor heating temperature to avoid damage to the floor and for a smoother transition to heating mode. The Floor Drying Up function is an additional solution for the installer, as it helps to remove any residual moisture that may occur when installing new underfloor heating circuits, thus protecting the new installation and ensuring better and more efficient use of the heat pump.



## R32 ECO Refrigerant

The R32 ECO Refrigerant with 68% lower global warming potential, is here to significantly enhance your air conditioner performance and to drastically contribute to global warming protection. It does not adversely affect the ozone layer, contributes in reducing global warming effect by entrapping smaller amounts of heat (GWP = 675) and can be easily reused and recycled.



## Built-in Area Sensor

Ensure ideal conditions in your space. The wired controller can be used as a thermostat thanks to the built-in sensor, providing you with precise information about temperature levels in the room at any time.



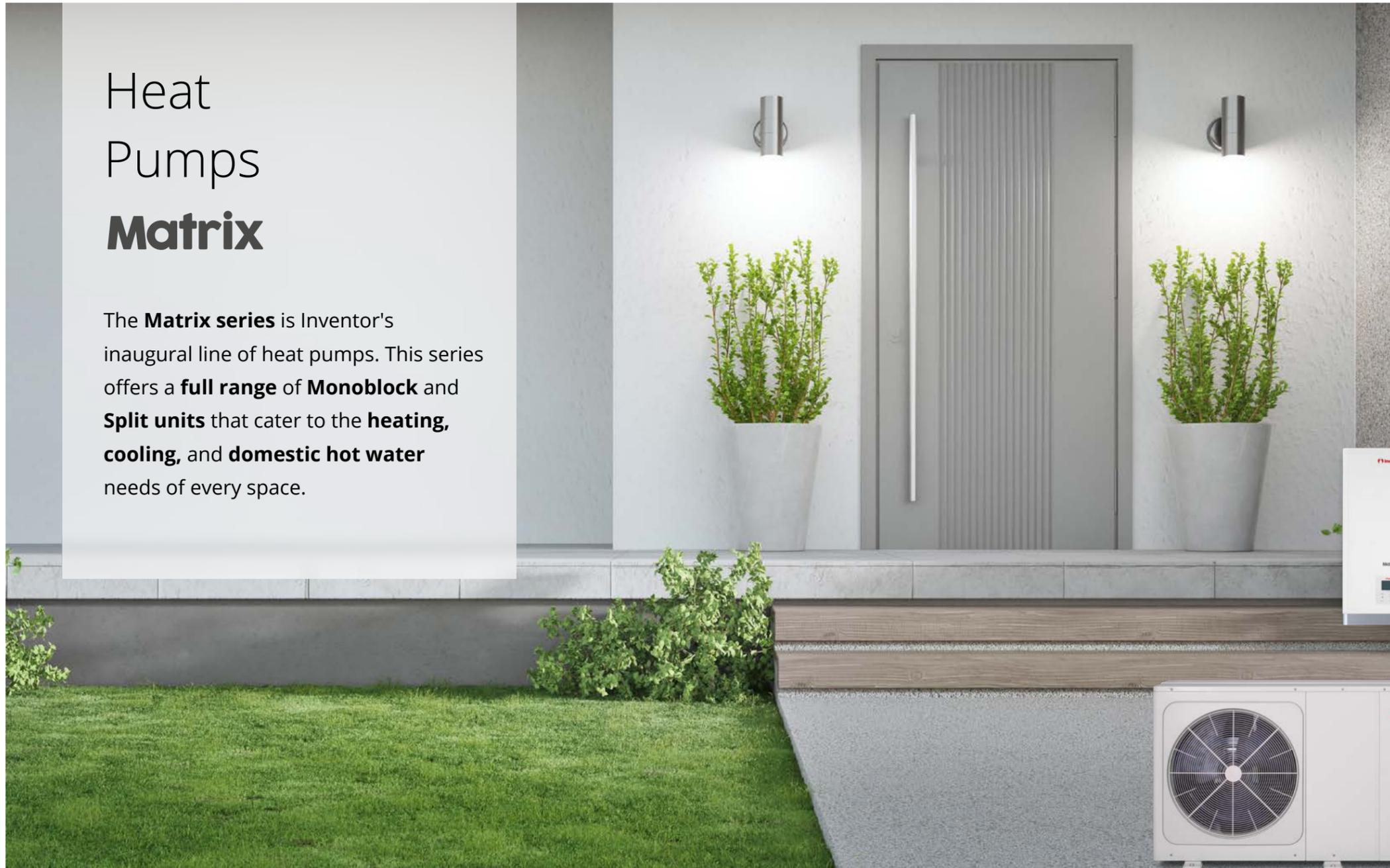
## Built-in Hydraulic Components

The unit is fully equipped with all hydraulic parts offering ease of installation.

# Heat Pumps Matrix

The **Matrix series** is Inventor's inaugural line of heat pumps. This series offers a **full range** of **Monoblock** and **Split units** that cater to the **heating, cooling, and domestic hot water** needs of every space.

The latest addition to the **Matrix series** is the **split-type** heat pumps featuring an **integrated water tank of 190 or 240 liters**, providing a complete solution for added **convenience in installation** and **guaranteed results**.



## Modular Connection of up to 6 Unit in the same Water Circuit

Inventor monoblock type heat pumps are equipped with modular technology allowing to connect up to 6 units to the same water circuit to be operated from a single wired controller, while the unit settings can be achieved easy and faster due to the easy addressing technology.

*\*Maximum system output 180kW for connection 30kW units.*



## Wide range

The Matrix series is available in two versions, a single-unit (monoblock) or split-type with an internal wall or floor unit featuring an integrated water tank. Choose the one that suits your needs.

Matrix		Indoor Units							
		HU060S3	HU100S3	HU160S3	HU160T9	HU100WT190S3	HU100WT240S3	HU160WT240S3	HU160WT240T9
Outdoor Units	Split Type								
	ATS04S	•				•	•		
	ATS06S	•				•	•		
	ATS08S		•			•	•		
	ATS10S		•			•	•		
	ATS12S			•				•	
	ATS14S			•				•	
	ATS16S			•				•	
	ATS12T				•				•
	ATS14T				•				•
ATS16T				•				•	

Matrix Split Type Heat Pump Combinations Table



# Monoblock Type Heat Pumps

Without integrated electrical heater



Model				ATM08S	ATM10S	ATM12S	ATM14S	ATM16S	ATM12T	ATM14T	ATM16T	ATM22T	ATM30T		
Space Heating (Average Climate)	Water temperature 35°C	Capacity	kW	8.40	10.0	12.1	14.5	15.9	12.1	14.5	15.9	22.0	30.1		
		Rated input	kW	1.63	2.02	2.44	3.15	3.53	2.44	3.15	3.53	5.00	7.70		
		COP		5.15	4.95	4.95	4.60	4.50	4.95	4.60	4.50	4.40	3.91		
	Water temperature 55°C	Capacity	kW	7.50	9.50	11.9	13.8	16.0	11.9	13.8	16.0	22.0	30.0		
		Rated input	kW	2.36	3.06	3.90	4.68	5.61	3.90	4.68	5.61	8.30	13.04		
		COP		3.18	3.10	3.05	2.95	2.85	3.05	2.95	2.85	2.65	2.30		
Space Cooling	Water temperature 18°C	Capacity	kW	8.30	9.90	12.00	13.50	14.90	12.00	13.50	14.90	23.00	31.00		
		Rated input	kW	1.64	2.18	3.04	3.75	4.38	3.04	3.75	4.38	5.00	7.75		
		EER		5.05	4.55	3.95	3.60	3.40	3.95	3.60	3.40	4.60	4.00		
	Water temperature 7°C	Capacity	kW	7.45	8.20	11.5	12.4	14.0	11.5	12.4	14.0	21.00	29.50		
		Rated input	kW	2.22	2.52	4.18	4.96	5.60	4.18	4.96	5.60	7.12	11.57		
		EER		3.35	3.25	2.75	2.50	2.50	2.75	2.50	2.50	2.95	2.55		
Seasonal space heating energy efficiency class (Average)	Water outlet at 35°C	ηs (%)		205	204	189	185	181.7	189	185	181.6	178.1	164.5		
		class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A++	
	Water outlet at 55°C	ηs (%)		131	136	135	135	133.3	135	135	133	125.8	122.5		
SCOP (Average)	Water outlet at 35°C			5.21	5.19	4.81	4.72	4.62	4.81	4.72	4.62	4.53	4.19		
	Water outlet at 55°C			3.36	3.49	3.45	3.47	3.41	3.45	3.47	3.41	3.22	3.14		
SEER	Water outlet at 7°C			5.83	5.98	4.89	4.86	4.69	4.86	4.83	4.67	4.70	4.49		
	Water outlet at 18°C			8.95	8.78	7.1	6.9	6.75	7.04	6.85	6.71	5.67	5.71		
Power supply	V/Hz/Ph	220-240/50/1				220-240/50/1				380-415/50/3					
Auxiliary Electric Heater	kW/Ph	-													
MOP/MCA	A	19/16	19/17	30/25	30/26	30/27	14/10	14/11	14/12	21/24.5	28/28.5				
Compressor	Type	Twin rotary Mitsubishi						Twin rotary Mitsubishi							
Refrigerant	Type / Charged volume	kg	R32/1.40			R32/1.75			R32/1.75			R32/5.00			
Water side heat exchanger		Plate type						Plate type							
Water side connection (inner dimension)	inch	R 1-1/4"						R 1-1/4"							
Power Supply Wire	No. x mm <sup>2</sup> / No. x A	3x4.0 / 2x20 [bipolar fuse (type K)]			3x6.0 / 2x25 [bipolar fuse (type K)]		3x10.0 / 2x32 [bipolar fuse (type K)]		3x10.0 / 2x32 [bipolar fuse (type K)]			5x2.5 / 4x16 [quadripolar fuse (type K)]		5x6.0 / 4x25 [quadripolar fuse (type K)]	5x10 / 4x32 [quadripolar fuse (type K)]
Sound (power/pressure/pressure silent 2)	dB(A)	59/48.5/41	60/50.5/41	65/53/43	65/53.5/43	69/57.5/43	65/53.5/43	65/54/43	69/58/43	73/59.8/54	77/63.5/57				
Unit dimension (W×H×D)	mm	1.385x865x526						1.385x865x526				1.129x1.558x440			
Net weight	kg	105			129			129			144		177		
Outdoor air temperature range	Cooling	°C	-5~43						-5~43				-5~46		
	Heating	°C	-25~35						-25~35				-25~35		
	ZNX	°C	-25~43						-25~43				-25~43		
Water outlet temperature range	Cooling	°C	5~30						5~30				5~25		
	Heating	°C	12~65						12~65				25~60		
	ZNX (tank)	°C	10~60						10~60				30~60		

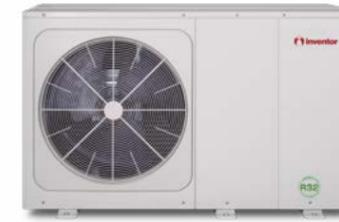
According to EU standards and legislations: EN14511:2013; EN14825:2013; EN50564:2011; EN12102:2011; (EU) No 811/2013; (EU) No 813/2013; OJ 2014/C 207/02.

Wiring specifications for air-to-water heat pumps must always comply with local regulations and requirements.



# Monoblock Type Heat Pumps

With integrated electrical heater



Model				ATMH06S3	ATMH08S3	ATMH10S3	ATMH12S3	ATMH14S3	ATMH16S3	ATMH12T9	ATMH14T9	ATMH16T9
Space Heating (Average Climate)	Water temperature 35°C	Capacity	kW	6.35	8.40	10.0	12.1	14.5	15.9	12.1	14.5	15.9
		Rated input	kW	1.28	1.63	2.02	2.44	3.15	3.53	2.44	3.15	3.53
		COP		4.95	5.15	4.95	4.95	4.60	4.50	4.95	4.60	4.50
	Water temperature 55°C	Capacity	kW	6.00	7.50	9.50	11.9	13.8	16.0	11.9	13.8	16.0
		Rated input	kW	2.03	2.36	3.06	3.90	4.68	5.61	3.90	4.68	5.61
		COP		2.95	3.18	3.10	3.05	2.95	2.85	3.05	2.95	2.85
Space Cooling	Water temperature 18°C	Capacity	kW	6.50	8.30	9.90	12.00	13.50	14.90	12.00	13.50	14.90
		Rated input	kW	1.35	1.64	2.18	3.04	3.75	4.38	3.04	3.75	4.38
		EER		4.80	5.05	4.55	3.95	3.60	3.40	3.95	3.60	3.40
	Water temperature 7°C	Capacity	kW	7.00	7.45	8.20	11.5	12.4	14.0	11.5	12.4	14.0
		Rated input	kW	2.33	2.22	2.52	4.18	4.96	5.60	4.18	4.96	5.60
		EER		3.00	3.35	3.25	2.75	2.50	2.50	2.75	2.50	2.50
Seasonal space heating energy efficiency class (Average)	Water outlet at 35°C	ηs (%)		195	205	204	189	185	181.7	189	185	181.6
		class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
	Water outlet at 55°C	ηs (%)		138	131	136	135	135	133.3	135	135	133
		class		A++	A++	A++	A++	A++	A++	A++	A++	A++
SCOP (Average)	Water outlet at 35°C			4.95	5.21	5.19	4.81	4.72	4.62	4.81	4.72	4.62
	Water outlet at 55°C			3.52	3.36	3.49	3.45	3.47	3.41	3.45	3.47	3.41
SEER	Water outlet at 7°C			5.34	5.83	5.98	4.89	4.86	4.69	4.86	4.83	4.67
	Water outlet at 18°C			8.21	8.95	8.78	7.1	6.9	6.75	7.04	6.85	6.71
Power supply		V/Hz/Ph	220-240/50/1				220-240/50/1				380-415/50/3	
Auxiliary Electric Heater		kW/Ph	3 / 1				3 / 1				9 / 3	
MOP/MCA		A	18/14	19/16	19/17	30/25	30/26	30/27		14/10	14/11	14/12
Compressor	Type		Twin rotary Mitsubishi						Twin rotary Mitsubishi			
Refrigerant	Type / Charged volume	kg	R32/1.40				R32/1.75		R32/1.75			
Water side heat exchanger			Plate type									
Water side connection (inner dimension)	inch		R1"	R 1-1/4"				R 1-1/4"				
Power Supply Wire		No. x mm <sup>2</sup> / No. x A	3x10.0 / 2x32 [bipolar fuse (type K)]				3x16.0 / 2x50 [bipolar fuse (type K)]		3x16.0 / 2x50 [bipolar fuse (type K)]		5x6.0 / 4x25 [quadripolar fuse (type K)]	
Sound (power/pressure/pressure silent 2)	dB(A)		58/47.5/40	59/48.5/41	60/50.5/41	65/53/43	65/53.5/43	69/57.5/43	65/53.5/43	65/54/43	69/58/43	
Unit dimension (W×H×D)	mm		1.295x718x429		1.385x865x526			1.385x865x526				
Net weight	kg		91	110		134	134		149			
Outdoor air temperature range	Cooling	°C	-5~43				-5~43					
	Heating	°C	-25~35				-25~35					
	ZNX	°C	-25~43				-25~43					
Water outlet temperature range	Cooling	°C	5~30				5~30					
	Heating	°C	12~65				12~65					
	ZNX (tank)	°C	10~60				10~60					

According to EU standards and legislations: EN14511:2013; EN14825:2013; EN50564:2011; EN12102:2011; (EU) No 811/2013; (EU) No 813/2013; OJ 2014/C 207/02.

Wiring specifications for air-to-water heat pumps must always comply with local regulations and requirements.



# Split Type Heat Pumps



Model				ATS04S/HU060S3	ATS06S/HU060S3	ATS08S/HU100S3	ATS10S/HU100S3	ATS12S/HU160S3	ATS14S/HU160S3	ATS16S/HU160S3	ATS12T/HU160T9	ATS14T/HU160T9	ATS16T/HU160T9
Space Heating (Average Climate)	Water temperature 35°C	Capacity	kW	4.25	6.20	8.30	10.0	12.1	14.5	16.0	12.1	14.5	16.0
		Rated input	kW	0.82	1.24	1.60	2.00	2.44	3.09	3.56	2.44	3.09	3.56
		COP		5.20	5.00	5.20	5.00	4.95	4.70	4.50	4.95	4.70	4.50
	Water temperature 55°C	Capacity	kW	4.40	6.00	7.50	9.50	12.0	13.8	16.0	12.0	13.8	16.0
		Rated input	kW	1.49	2.00	2.36	3.06	3.87	4.60	5.52	3.87	4.60	5.52
		COP		2.95	3.00	3.18	3.10	3.10	3.00	2.90	3.10	3.00	2.90
Space Cooling	Water temperature 18°C	Capacity	kW	4.50	6.55	8.40	10.00	12.00	13.50	14.90	12.00	13.50	14.90
		Rated input	kW	0.81	1.34	1.66	2.08	3.00	3.75	4.38	3.00	3.75	4.38
		EER		5.55	4.90	5.05	4.80	4.00	3.60	3.40	4.00	3.60	3.40
	Water temperature 7°C	Capacity	kW	4.70	7.00	7.40	8.20	11.6	12.7	14.0	11.6	12.7	14.0
		Rated input	kW	1.36	2.33	2.19	2.48	4.22	4.98	5.71	4.22	4.98	5.71
		EER		3.45	3.00	3.38	3.30	2.75	2.55	2.45	2.75	2.55	2.45
Seasonal space heating energy efficiency class (Average)	Water outlet at 35°C	ηs (%)	191	195	205	204	189	185	182	189	185	182	
	class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	
Water outlet at 55°C	ηs (%)	129	138	131	136	135	135	133	135	135	135	133	
	class		A++	A++	A++	A++	A++	A++	A++	A++	A++	A++	
SCOP (Average)	Water outlet at 35°C		4.85	4.95	5.21	5.19	4.81	4.72	4.62	4.81	4.72	4.62	
	Water outlet at 55°C		3.31	3.52	3.36	3.49	3.45	3.47	3.41	3.45	3.47	3.41	
SEER	Water outlet at 7°C		4.99	5.34	5.83	5.98	4.89	4.86	4.69	4.86	4.83	4.67	
	Water outlet at 18°C		7.77	8.21	8.95	8.78	7.1	6.9	6.75	7.04	6.85	6.71	
Power supply	V/Hz/Ph		220-240/50/1				220-240/50/1				380-415/50/3		
Auxiliary Electric Heater	kW/Ph		3 / 1				3 / 1				9 / 3		
MOP/MCA	A		18/12	18/14	19/16	19/17	30/25	30/26	30/27	14/10	14/11	14/12	
Compressor	Type		Twin rotary Mitsubishi				Twin rotary Mitsubishi						
Refrigerant	Type / Charged volume	kg	R32/1.50			R32/1.65			R32/1.84				
Water side heat exchanger			Plate type						Plate type				
Water side connection	Liquid   Gas   Water (inner dimension)	inch	1/4"   5/8"   R1"			3/8"   5/8"   R1"			3/8"   5/8"   R1"				
Power Supply Wire Indoor	No. x mm <sup>2</sup> / No. x A		3x4.0 / 2x20 [bipolar fuse (type K)]				3x4.0 / 2x20 [bipolar fuse (type K)]				5x4.0 / 4x20 [quadripolar fuse (type K)]		
Power Supply Wire Outdoor	No. x mm <sup>2</sup> / No. x A		3x4.0 / 2x20 [bipolar fuse (type K)]				3x6.0 / 2x25 [bipolar fuse (type K)]		3x10.0 / 2x32 [bipolar fuse (type K)]		5x2.5 / 4x20 [quadripolar fuse (type K)]		
Power Supply Wire	No. x mm <sup>2</sup> / No. x A		3x1.0 shielded						3x1.0 shielded				
Sound (power/pressure/pressure silent 2)	Cooling	dB(A)	56/44/39	58/45/40	59/46/41	60/49/41	64/50/43	65/51/43	68/54/43	64/50/43	65/51/43	68/55/43	
	Heating		38/28			42/30			43/32				
Unit dimension (W×H×D)	Cooling	mm	1.008x712x426			1.118x865x523			1.118x865x523				
	Heating		420x790x270						420x790x270				
Net weight ODU/IDU	kg		58/37			75/37			97/39			112/45	
Outdoor air temperature range	Cooling	°C	-5~43				-5~43						
	Heating	°C	-25~35				-25~35						
	ZNX	°C	-25~43				-25~43						
Water outlet temperature range	Cooling	°C	5~25			5~30			5~30				
	Heating	°C	25~65			12~65			12~65				
	ZNX (tank)	°C	30~60			10~60			10~60				

According to EU standards and legislations  
EN14511:2013; EN14825:2013; EN50564:2011; EN12102:2011; (EU) No 811/2013; (EU) No 813/2013; OJ 2014/C 207/02.

Wiring specifications for air-to-water heat pumps must always comply with local regulations and requirements.



# Split Type Heat Pumps - Integrated

With integrated water tank



Outdoor Unit Model			ATS04S		ATS06S		ATS08S		ATS10S		ATS12S	ATS14S	ATS16S	ATS12T	ATS14T	ATS16T						
Indoor Unit			HU100WT190S3	HU100WT240S3	HU100WT190S3	HU100WT240S3	HU100WT190S3	HU100WT240S3	HU100WT190S3	HU100WT240S3	HU160WT240S3	HU160WT240S3	HU160WT240S3	HU160WT240T9	HU160WT240T9	HU160WT240T9						
Space Heating (Average Climate)	Water temperature 35°C	Capacity	kW	4.25	4.25	6.20	6.20	8.30	8.30	10.00	10.00	12.10	14.50	16.00	12.10	14.50	16.00					
		Rated input	kW	0.82	0.82	1.24	1.24	1.60	1.60	2.00	2.00	2.44	3.09	3.56	2.44	3.09	3.56					
		COP		5.20	5.20	5.00	5.00	5.20	5.20	5.00	5.00	4.95	4.70	4.50	4.95	4.70	4.50					
	Water temperature 55°C	Capacity	kW	4.40	4.40	6.00	6.00	7.50	7.50	9.50	9.50	11.90	13.80	16.00	11.90	13.80	16.00					
		Rated input	kW	1.49	1.49	2.03	2.03	2.36	2.36	3.06	3.06	3.87	4.60	5.52	3.87	4.60	5.52					
		COP		2.95	2.95	2.95	2.95	3.18	3.18	3.10	3.10	3.05	2.95	2.85	3.05	2.95	2.85					
Space Cooling	Water temperature 18°C	Capacity	kW	4.50	4.50	6.55	6.55	8.40	8.40	10.00	10.00	12.00	13.50	14.20	12.00	13.50	14.20					
		Rated input	kW	0.81	0.81	1.34	1.34	1.66	1.66	2.08	2.08	3.00	3.74	3.94	3.00	3.74	3.94					
		EER		5.55	5.55	4.90	4.90	5.05	5.05	4.80	4.80	4.00	3.61	3.61	4.00	3.61	3.61					
	Water temperature 7°C	Capacity	kW	4.70	4.70	7.00	7.00	7.40	7.40	8.20	8.20	11.60	12.70	14.00	11.60	12.70	14.00					
		Rated input	kW	1.36	1.36	2.33	2.33	2.19	2.19	2.48	2.48	4.22	4.98	5.71	4.22	4.98	5.71					
		EER		3.45	3.45	3.00	3.00	3.38	3.38	3.30	3.30	2.75	2.55	2.45	2.75	2.55	2.45					
Seasonal space heating energy efficiency class (Average)	Water outlet at 35°C	ηs (%)		191	191	195	195	205.60	205.60	204.80	204.80	189.40	185.70	181.70	189.30	185.60	181.60					
		class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++				
	Water outlet at 55°C	ηs (%)		129.50	129.50	137.90	137.90	131.50	131.50	136.60	136.60	135.10	135.60	133.30	135.10	135.60	133.20					
SCOP (Average)	Water outlet at 35°C			4.85	4.85	4.95	4.95	5.22	5.22	5.20	5.20	4.81	4.81	4.72	4.72	4.62	4.62					
	Water outlet at 55°C			3.31	3.31	3.52	3.52	3.36	3.36	3.49	3.49	3.45	3.45	3.47	3.47	3.41	3.41					
SEER	Water outlet at 7°C			4.98	4.98	5.31	5.31	5.83	5.83	5.96	5.96	4.93	4.81	4.60	4.83	4.79	4.58					
	Water outlet at 18°C			7.77	7.77	8.25	8.25	8.95	8.95	8.80	8.80	7.14	6.86	6.67	7.00	6.81	6.63					
Power supply	V/Ph/Hz		220-240/50/1						220-240/50/1						380-415/50/3							
Auxiliary Electric Heater	kW/Ph		3 / 1						3 / 1						9 / 3							
MOP/MCA	A		18/12		18/14		19/16		19/17		30/25		30/26		30/27		14/10		14/11		14/12	
Compressor	Type		Twin rotary Mitsubishi						Twin rotary Mitsubishi													
Refrigerant	Type / Charged volume (up to 15m)	kg	R32/1.50				R32/1.65		R32/1.65		R32/1.84											
Water side heat exchanger			Plate type						Plate type													
Pipe size	Liquid   Gas   Water (inner dimension)	inch	1/4"   5/8"   R1"				3/8"   5/8"   R1"		3/8"   5/8"   R1"													
Power Supply Wire Indoor	No. x mm² / No. x A		3x4.0 / 2x20 [bipolar fuse (type K)]						3x4.0 / 2x20 [bipolar fuse (type K)]						5x2.5 / 4x16 [quadripolar fuse (type K)]							
Power Supply Wire Outdoor	No. x mm² / No. x A		3x4.0 / 2x20 [bipolar fuse (type K)]						3x4.0 / 2x20 [bipolar fuse (type K)]		3x6.0 / 2x25 [bipolar fuse (type K)]		3x10.0 / 2x32 [bipolar fuse (type K)]		5x2.5 / 4x16 [quadripolar fuse (type K)]							
Signal Wires	No. x mm² / No. x A		3x1.0 shielded						3x1.0 shielded													
Sound (power/pressure/pressure silent 2)	Outdoor	dB(A)	56/44/39		58/45/40		59/46/41		60/49/41		64/50/43		65/51/43		68/54/43		64/50/43		65/51/43		68/55/43	
	Indoor		38/22		38/24		40/22		40/22		42/24		44/25		44/24		42/24		44/25		44/24	
Unit dimension (W×H×D)	Outdoor	mm	1.008x712x426				1.118x865x523		1.118x865x523													
	Indoor		600x1.683x600	600x1.943x600	600x1.683x600	600x1.943x600	600x1.683x600	600x1.943x600	600x1.683x600	600x1.943x600	600x1.943x600											
Net weight ODU/IDU	kg	58/140	58/157	58/140	58/157	75/140	75/157	75/140	75/157	97/159		112/159										
Hot container Water	Capacity	L	190	240	190	240	190	240	190	240	240		240									
	Maximum Water Temperature (Decontamination operation)	°C	70						70													
	Maximum Water Pressure	bar	10						10													
	Material		Stainless Steel						Stainless Steel													
Outdoor air temperature range	Cooling	°C	-5~43						-5~43													
	Heating	°C	-25~35						-25~35													
	DHW	°C	-25~43						-25~43													
Water outlet temperature range	Cooling	°C	5~25						5~25													
	Heating	°C	25~65						25~65													
	DHW (tank)	°C	30~60						30~60													

According to EU standards and legislations: EN14511:2013; EN14825:2013; EN50564:2011; EN12102:2011; (EU) No 811/2013; (EU) No 813/2013; OJ 2014/C 207/02.

Wiring specifications for air-to-water heat pumps must always comply with local regulations and requirements.



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