

# Innovation and Efficiency

for your comfort!

## FILSION LINE

R290 Heat Pump Water Heater

AR80L-PC AR100L-PC













A heat pump water heater offers several technical and operational advantages over a conventional electric water heater. Firstly, energy efficiency is significantly higher due to operating principle extracting heat from the ambient air and using compressors to heat water. This results in a higher COP (Coefficient of Performance), reducing energy consumption by up to 70% compared to conventional electric models. Furthermore, due to the advanced nature of the technology employed, operating costs are reduced, leading to considerable savings on utility bills in the long term. Heat pump water heaters also contribute to lower environmental impact, as they reduce CO2 emissions, making them a more sustainable choice for domestic water heating.

## **Incentives for Heat Pump Water Heaters**

Heat pump water heaters can benefit from various incentives offered by the government and local authorities, aimed at promoting energy efficiency and environmental sustainability. Due to their efficiency, it is possible to benefit from tax deductions that can cover up to 65% of the costs, making the investment more affordable.

Furthermore, in some cases, additional regional subsidies or local incentives are available that support the adoption of energy-efficient technologies. These incentives not only make initial investment more affordable, but also increase the economic attractiveness of heat pumps in the long run, stimulating a transition to cleaner energy solutions for water heating.





## ENVIRONMENTALLY FRIENDLY REFRIGERANT GAS R290

Compared to conventional refrigerants, R290 has a significantly lower global warming potential (GWP), helping to mitigate the effects of climate change. In addition, its high energy performance coefficient facilitates better heat transfer, improving operating efficiency of the water heater. Fusion utilises these characteristics of the R290, ensuring not only environmentally responsible operation, but also a decrease in greenhouse gas emissions. adopting the R290 refrigerant gas, the consumer can benefit from a system that combines high performance with an environmentally responsible approach.

## **1.2Kw RESISTANCE**

Equipped with a powerful 1.2KW heating element, Fusion provides fast and efficient heating while maintaining maximum comfort.

The 1.2KW electrical resistance in the Fusion is designed to intervene only when strictly necessary, thereby optimising the unit's overall energy efficiency. This means that the resistor kicks in automatically and exclusively during periods of maximum load or when environmental conditions do not allow the heat pump to operate at capacity, for example during particularly cold days or low humidity.

This functionality ensures a constant supply of hot water without compromising on efficiency, as use of the heating element is limited to cases where the primary heating system alone is not sufficient to meet demand. In this way, the system keeps operating costs low, using the heating element only as a temporary support in situations that require it.

### **MANAGEMENT APP AND INTEGRATED WIFI**

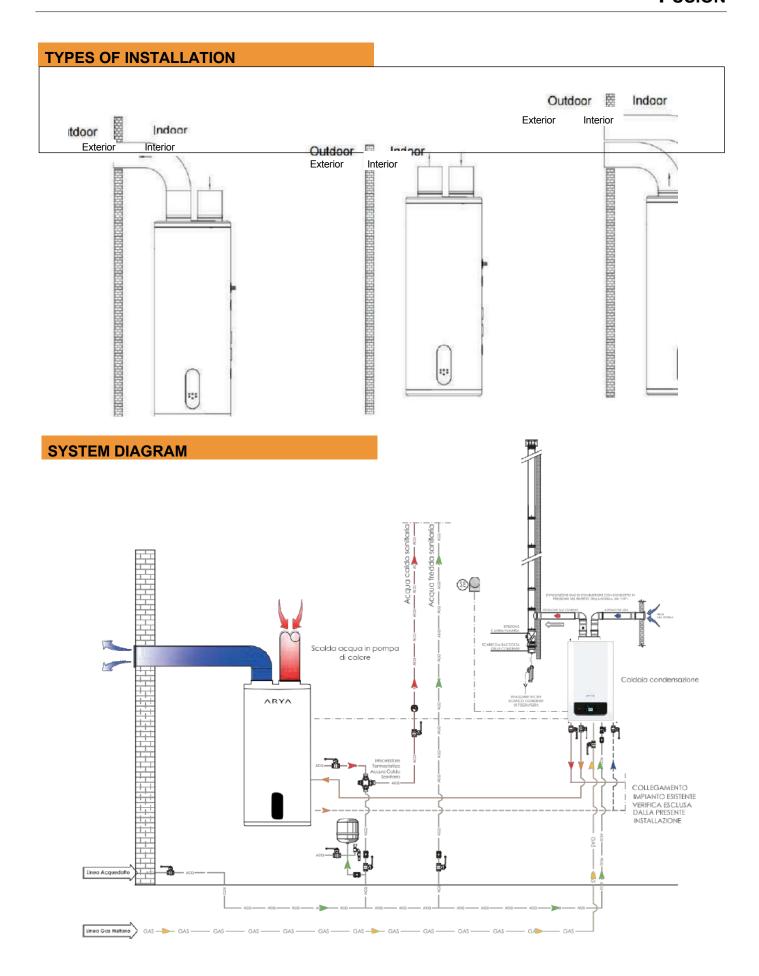
The integration of a management app and WiFi connectivity into the Fusion system is a major step forward in terms of control and convenience. Through the app, users can monitor energy consumption in real time, set desired temperatures and schedule heating cycles flexibly and precisely. This functionality not only enables a more efficient use of the system, but also helps to personalise the user experience according to the specific needs of the household. In addition, the WiFi connection enables automatic software updates, ensuring that the system always operates with the latest available functionality. Remote control through the app also facilitates the resolution of technical problems in a timely manner, improving overall reliability and durability of the product. Thanks to these digital innovations, Fusion is not just a heating device, but a smart element integrated into your home.

#### TOUCH INTERFACE WITH LCD DISPLAY

The Fusion's touch interface with LCD display provides intuitive and immediate control, making it easy to manage the various settings.











TECHNICAL DATA		AR80L-PC	AR100L-PC	
POWER SUPPLY			220- 240V/1/50Hz	220- 240V/1/50Hz
HEATING CAPACITY		W	950	950
NOMINAL HOT WATER PRODUCTION		L/h	20	20
NOMINAL INPUT POWER		W	220	220
RATED INPUT CURRENT		А	0.98	0.98
COP		W/W	4.32	4.32
ELECTRIC HEATER	RATED POWER INPUT	W	1200	1200
	RATED CURRENT INPUT	А	5.45	5.45
MAX. POWER CONSUMPTION		W	1500	1500
MAX. INPUT CURRENT		А	6.81	6.81
REFRIGERANT / CHARGE / GWP			R290/0.15kg/3	R290/0.15kg/3
C02 EQUIVALENT			0.00045t	0.00045t
WORKING ENVIRONMENT TEMPERATURE		°C	-7~43	-7~43
ELECTRICAL ENERGY EFFICIENCY		%	118.3	118.3
COP (DHW) EN16147 20-15°			2.787	2.787
ENERGY EFFICIENCY CLASS			A+	A+
MAXIMUM VOLUME OF MIXED WATER		L	87	87
OPERATING PRESSURE (LOW SIDE)		MPa	0.8	1
OPERATING PRESSURE (HIGH SIDE)		MPa	3	3
MAXIMUM PERMISSIBLE PRESSURE		MPa	3	3
ELECTRIC SHOCKPROOF			I	I
IP CLASS			IPX1	IPX1
WATER TANK CAPACITY		L	80	100
WATER PIPE CONNECTIONS			DN18	DN18
NOMINAL WORKING PRESSURE OF THE TANK		MPa	0.8	0.8
NOMINAL AIR FLOW		m3/h	450	450
UNIT DIMENSIONS		mm	φ468*1222	φ468*1442
NOISE		dB(A)	48	48
NET WEIGHT		Kg	48	56