

MIXA[®]
HEATING & COOLING

LIVE
DIFFERENT

Calido **R290**

Heat pump water heater and Wall-hung heat pump water heater with R290 refrigerant



Calido

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The Calido range includes heat pump water heaters designed to guarantee efficient, sustainable and easy-to-manage domestic hot water. Reliable and proven solutions that combine low consumption, respect for the environment and intelligent comfort, adapting flexibly to different types of installation and use.

Calido provides a concrete response to daily domestic hot water production needs thanks to its different capacities: 105 litres for

compact installations, up to 190–250 litres for more structured systems.

The range uses the natural refrigerant R290, an environmentally responsible choice characterised by very low GWP and excellent thermodynamic properties. R290 delivers high performance and low consumption, contributing to reduced emissions and ensuring reliable operation even over a wide range of outdoor temperatures.

Build quality and long-term reliability

The range shares construction solutions geared towards durability and efficiency:

- vitrified steel boiler with thick polyurethane insulation
- external microchannel condenser, not immersed in water, to reduce scaling and contamination
- high-efficiency compressors, designed for quiet operation
- integrated electric resistance as support in the most demanding conditions
- hot gas defrosting systems and dedicated safety devices



Wi-Fi connectivity

Calido 105, 190 and 250 are equipped with integrated Wi-Fi connectivity, allowing complete remote management of the device via smartphone using the Smart Life app.

At any time, you can:

- adjust the water temperature
- set timers and time slots
- monitor operation
- activate safety and hygiene functions, such as the anti-legionella cycle

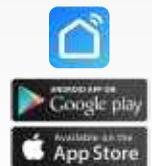
Calido 190/250

Heat pump water heater with eco-friendly R290 refrigerant

190–250 litres

System that exploits the high efficiency of the air-to-water heat pump with eco-friendly R290 refrigerant, a sustainable choice that reduces environmental impact while ensuring maximum energy efficiency. The installation flexibility allows it to be placed both in technical rooms and in secondary areas of the home such as garages or laundry rooms; thanks to its refined, elegant design, it also blends seamlessly into living spaces. The Calido-S version allows integration with solar thermal panels, further expanding the possible applications in terms of energy savings and sustainability.

Available from March 2026



Construction Features

- Remote device management via Wi-Fi.
- High-efficiency compressor with R290 refrigerant.
- Carbon steel tank with double-layer enameling.
- Anti-corrosion magnesium anode to ensure tank durability.
- Microchannel condenser wound externally around the boiler, free from scaling and gas-water contamination.
- High-thickness thermal insulation in expanded polyurethane (PU).
- Outer cladding in grey plastic material.
- Acoustically insulated upper plastic cover.
- Gas low-pressure safety devices.
- Defrost function easily managed via hot-gas bypass.
- Electric heater available in the unit as back-up (with integrated safety thermostat set to 85°C), ensuring hot water at a constant temperature even under extreme winter conditions.
- ON-OFF contact for starting the unit from an external switch
- Weekly disinfection cycle.
- Possibility to manage domestic hot water recirculation or solar integration (presence of a dedicated temperature probe, flow switch input, and control for an external pump).
- Electronic expansion valve for precise control.

Advantages:

- The effective setpoint of the heat pump is controlled by a climatic curve to prevent high-pressure alarms from occurring when warm outdoor air is drawn in (above 25°C with water at 65°C, above 35°C with water at 55°C).

Accessories

Provided separately

- **ONE-SAS** - Solar/DHW T6 temperature sensor. If there is the option to recirculate solar integration water or domestic hot water, the optional T6 probe must be connected to the

- The electric heater automatically integrates the tank temperature to the desired setpoint if the actual setpoint is being controlled by the climatic compensation curve.
- Provision for integration with photovoltaic system. When enabled by the photovoltaic inverter, the temperature setpoint is raised to the highest possible value (compatible with weather-compensated control).

Flexibility and benefits:

- Heat recovery: the unit can be installed near the kitchen, in the utility room or in the garage. Practically in any room with a considerable amount of waste heat, so that it achieves high energy efficiency even at very low outdoor temperatures.
- Domestic hot water, cooling and dehumidification: the unit can be installed in a laundry room, garage, gym or basement. While producing domestic hot water, it cools and dehumidifies the room.
- Compatible with solar thermal: the unit can operate with a second energy source such as solar panels.
- The sole function for which the unit has been designed is that of a heat pump for the production of domestic hot water. Any other secondary effect (cooling, dehumidification, recovery of waste heat) must be regarded as an ancillary benefit. Performance data are therefore provided only with reference to the water heating function.

electrical box together with the flow switch and correctly positioned on the hydraulic system.

Versions

- CALIDO: standard that includes a heat pump and an electric heater.
- CALIDO-S: with auxiliary coil for use in combination with solar panels.

		CALIDO 190	CALIDO 250	CALIDO 190-S	CALIDO 250-S
Energy class		A+			
Power supply	V/Ph/Hz	220-240/1Ph+N+PE/50			
Actual tank capacity	L	196	256	190	250
Heating capacity	W	1500* (+1200**)			
Power input	W	365* (+1200**)			
Rated current	A	1.69* (+5.2**)			
COP DHW***	W/W	3.2	3.4	3.2	3.4
COP DHW****	W/W	3.85	4.19	3.85	4.19
Maximum absorption	W	700* (+1200**)			
Maximum current	A	9.6* (+5.2**)			
Heating time with cold tank (*)	h:min	7:56	10:56	7:56	10:56
Maximum water outlet temperature (without using the heater)	°C	65			
Maximum water temperature	°C	70**			
Minimum water start-up temperature	°C	10			
Working ambient temperature	°C	-10 ~ +43			
Maximum refrigerant discharge pressure	bar	32			
Maximum refrigerant suction pressure	bar	12			
Refrigerant type		R290			
Charge refrigerant	g	150			
Compressor	Type	Rotary			
	Oil	PAG or equivalent			
Fan motor	Type	DC			
	W	45			
	RPM	900			
Nominal flow rate	m³/h	290			
Available static pressure	Pa	60			
Duct diameter	mm	160			
Maximum allowable tank pressure	bar	10			
Internal tank surface material		S235JR with double-layer vitrification			
Tank transmittance (kboll) *****	W/K	1.73	2	1.73	2
Auxiliary electric heater	Kw	1.2			
Electronic expansion valve		yes			
Magnesium anode		yes			
Heat pump heat exchanger material (condenser)		aluminum alloy			
Solar heat exchanger coil surface	m²	/		0.8	
Solar heat exchanger coil flow rate (1)	m³/h	/		1.2	1.2
Maximum heat exchanger coil pressure	bar	/		6	
Coil heat exchange material		S235JR			
Cold water inlet	inch	G 1" female			
Hot water outlet	inch	G 1" female			
Solar integration input/output	inch	/		G 1" female	
Condensate water outlet		Plastic flexible hose 0.3 m φ22 mm			
Condensate drain	inch	For external installation			
IP protection class		IPX1			
Net size	mm	φ655x1504	φ655x1713	φ655x1504	φ655x1713
Packing dimensions	mm	690x690x1844			
Net weight	Kg	106	114.5	114	122.5
Weight with water-filled tank	Kg	302	371	310	379
Gross weight	Kg	112	89	120	128
Sound power (2)	dB (A)	49			
Sound pressure (3)	dB (A)	33.5			

* Heating capacity and power input measured under the following conditions: room temperature 20°C, water temperature from 15°C to 55°C (data obtained from internal laboratory tests on uniform reheating of the storage tank temperature).

** In relation to the auxiliary heater. During the disinfection cycle, the temperature is raised to 70°C by the auxiliary heater

*** Domestic hot water heating energy efficiency based on ErP regulation (EN 16147), profile L (190 L) and XL (250 L), ambient temperature 7°C / 6°C, water temperature from 10°C to 55°C (SCOP DHW).

**** Water heating energy efficiency based on ERP regulation (EN 16147), L profile (190 L) and XL

profile (250 L), ambient temperature 14°C / 12°C, water temperature from 10°C to 55°C.

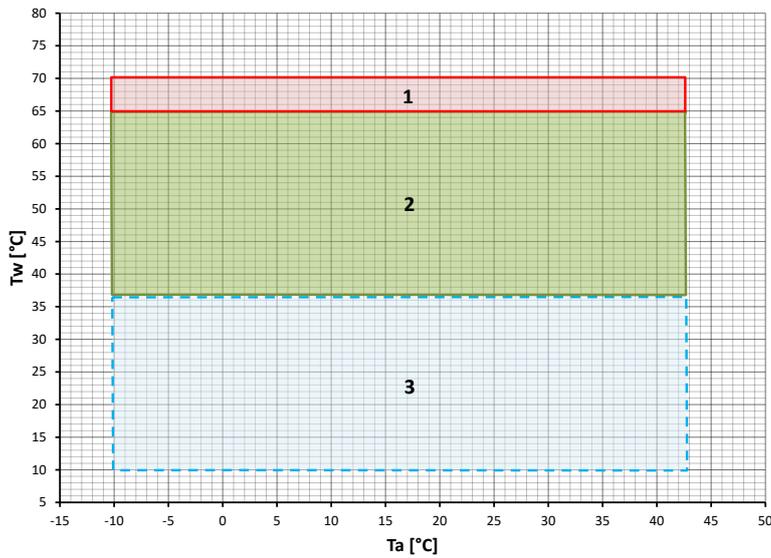
***** Referred to the tank installed at an ambient temperature of 20°C and storage with water at 65°C.

(1) rating data referring to integration with boiler in accordance with DIN 4708 standards (primary 80/60°C, secondary 10/45°C).

(2) measured according to standard EN 12102 under the conditions specified in standard EN 16147.

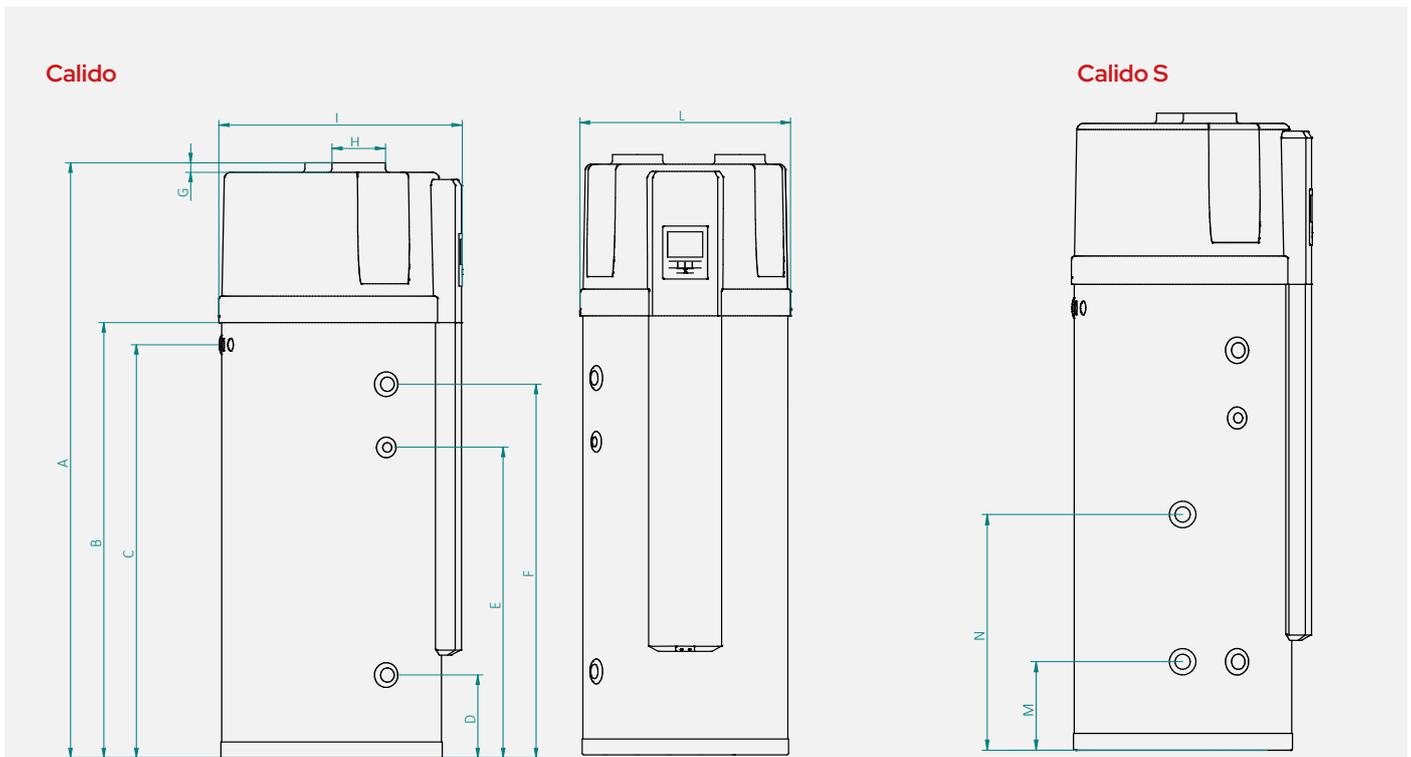
(3) calculated according to ISO 3744:2010 algorithm at 1 m from the unit.

Operating Areas Calido 190/250



Tw: water temperature - Ta: outdoor air temperature
 1. Integration region with electric resistance only
 2. Operating range of heat pump and heater (depending on the selected settings)
 3. Expected water loading temperature in the tank (minimum 10°C)

Dimensional Drawings Calido 190/250



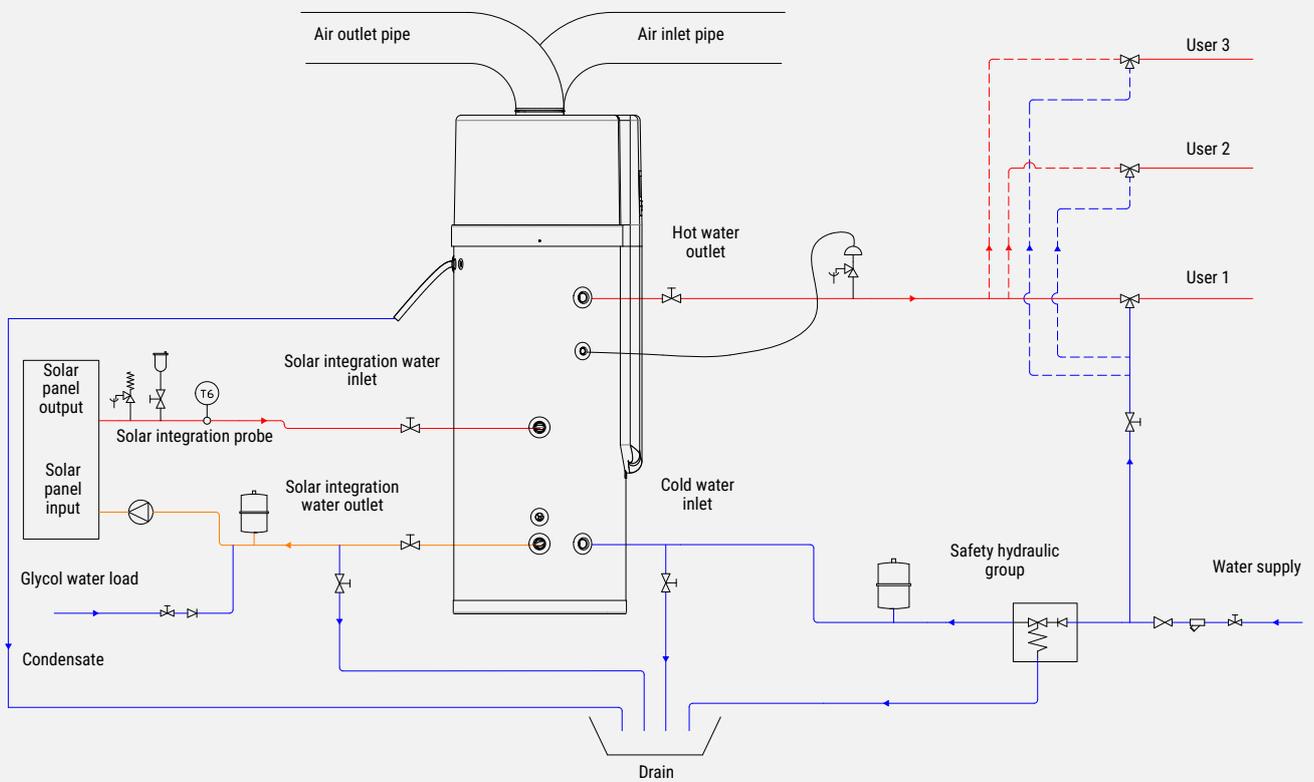
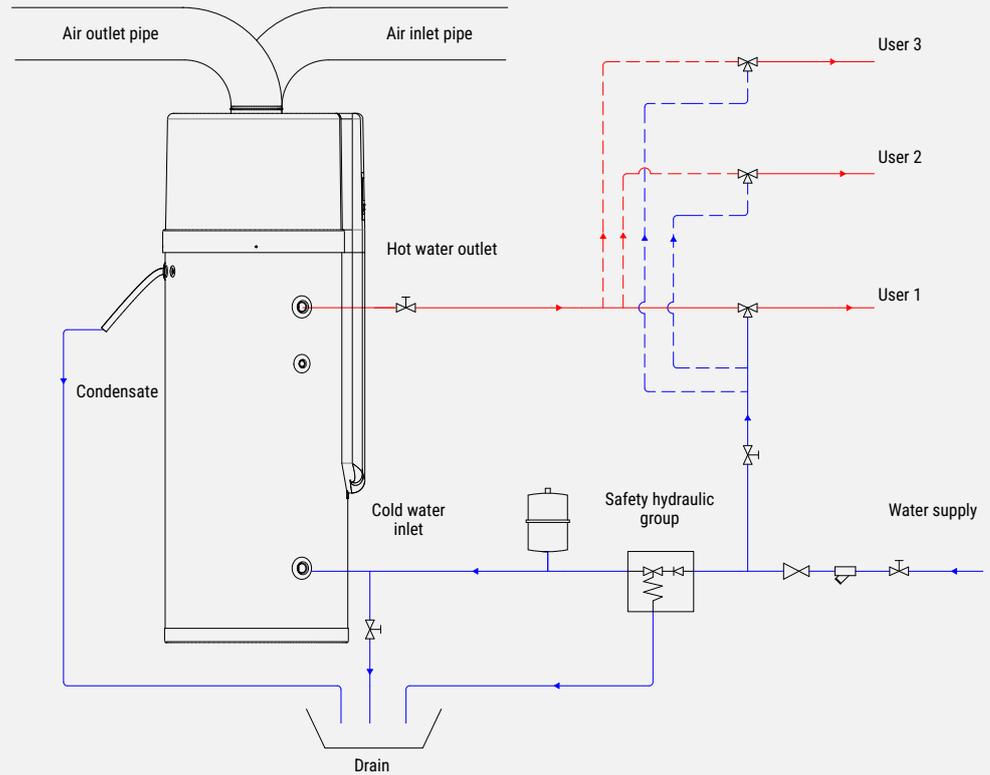
	CALIDO 190	CALIDO 250	CALIDO 190-S	CALIDO 250-S
A	1503	1714	1503	1714
B	988	1198	988	1198
C	1062	1306	1062	1306
D	255	255	255	255
E	540	825	540	825
F	815	1025	815	1025
G	30	30	30	30
H	φ 160	φ 160	φ 160	φ 160
I	706	706	706	706
L	φ 655	φ 655	φ 655	φ 655
M	-	-	255	255
N	-	-	540	540

Dimensions in mm

Installation Diagram

LEGEND

	Mixing valve
	Manual valve
	Non-return valve
	Y-strainer
	Expansion vessel
	Automatic loading unit
	Temperature sensor
	Safety valve (3 bar)
	Ventilation outlet
	Thermal safety valve (85°C)
	Circulator



Installation diagram in case of solar integration water recirculation

Note: the solar integration coil is present on the CALIDO-D and CALIDO-S models for the 200/300 version (R134A refrigerant gas), and only on the CALIDO-S model for the 190/250 version (R290 refrigerant gas).