

ELENSIO 200, 250 200H AND 250H

THERMODYNAMIC WATER HEATER OPERATING ON AMBIENT OR OUTDOOR AIR



ELENSIO 200



ELENSIO 200H



ELENSIO 250



ELENSIO 250H



Made in France

• ELENSIO 200 AND 250:

Thermodynamic water heater on ambient air or on outside air with electrical resistance. A range of thermodynamic water heaters operating on extracted air with electrical backup

• ELENSIO 200H AND 250H:

Thermodynamic water heater on ambient air or on outside air with heat exchanger for connecting to a boiler or solar, and electrical resistance



Domestic hot water



Air-to-water thermodynamic module



Electricity (energy supplied to the compressor)



Free, natural renewable energy
An ideal solution for low energy buildings



Refrigerant R290

OPERATING CONDITIONS

max. operating temperature: 90 °C

max. operating pressure: 10 bar

Air temperature for thermodynamic module operation: - 5 to + 35 °C

Floor-standing thermodynamic water heaters with storage:

- 200 and 250 models with 1.8 kW backup electric heater
- 250H and 250H models with exchanger for connection to a solar hydraulic backup or via boiler and 1.8 kW backup electric heater
- A range of thermodynamic water heaters operating on extracted air with electrical backup
- Maximum volume of hot water at 40 °C from 260l for the 200 model up to 338l for the 250 model
- DHW reheating up to 65 °C by the heat pump
- Enamelled tank, protection via impressed current titanium anode
- New very high-performance exchanger
- Controller for a DHW application integrating programming, various operating modes, backup management, anti-legionella function, frost protection mode, automatic defrosting, energy metering estimates, night backup management, optimised or hybrid function.



De Dietrich
SUSTAINABLE COMFORT®

2	AVAILABLE MODELS	8	OPTIONS
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AVAILABLE MODELS

MODELS

FLOOR-STANDING THERMODYNAMIC WATER HEATERS WITH STORAGE		MODEL	REFERENCE	PACKAGE	CAPACITY (L)	MAXIMUM VOLUME OF MIXED HOT WATER AT 40 °C (L)
	<p>ELENSIO 200 ELENSIO 250</p> <p>EL_Q0004_DD/EL_Q0005_DD</p> <p>For domestic hot water. With 1.8 kW monophase backup electric heater.</p>	ELENSIO 200	7785383	HK407	196	260
		ELENSIO 250	7785277	HK406	251	337
	<p>ELENSIO 200H ELENSIO 250H</p> <p>EL_EXPORT_Q000V_EL_Q0006_DD</p> <p>For domestic hot water. With hydraulic backup exchanger for connection to a solar system or via boiler and 1.8 kW monophase backup electric heater.</p>	ELENSIO 200 H	7785382	HK404	188	258
		ELENSIO 250 H	7784992	HK405	243	320

ECO-SOLUTIONS DE DIETRICH

ENERGY LABELLING

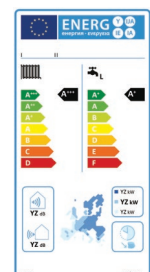
Each boiler is delivered with an energy label displaying a range of information, including energy efficiency, annual energy consumption, manufacturer name and noise level. By combining your boiler with, for example, a solar system, DHW storage tank, control system or even another generator, you can improve the performance of your installation and generate a corresponding "system" label. Visit our site "ecosolutions.dedietrich-heating.com"



De Dietrich ECO-SOLUTIONS give you the latest generation of multi-energy products and systems: simpler, more efficient and more economical to guarantee your comfort and protect the environment.

The energy label associated with the ECO-SOLUTIONS label indicates the product performance.

www.ecodesign.dedietrich-heating.com





ADVANTAGES

COMPACT

- With a height of 1528 mm for the 200 model, it integrates very easily under sloping or low ceilings.

DOMESTIC COMFORT

- With a 40°C hot water volume of 260 to 338l, the ELENSIO range can meet the needs of a family of six.

BOOST MODE

- For permanent DHW comfort.

RELIABILITY

- Equipped with reinforced titanium anode.



INSTALLATION

- It can be easily moved and installed thanks to its compactness and integrated handles.

QUIET OPERATION

- It can be installed in any living room thanks to its reduced sound level (see specifications table).

ECO-FRIENDLY

- COP up to 3.48.
- R290 refrigerant (propane).
- Recyclable cardboard packaging.

ELENSIO 200, 250, 200H AND 250H

40 °C HOT WATER
VOLUME OF
260 TO 338 L



QUIET

MEETS
THE NEEDS OF A
FAMILY OF SIX



DOMESTIC
HOT WATER
UP TO 65 °C

TITANIUM ANODE:
REINFORCED
PROTECTION

EASY
TO INSTALL

COP
UP TO 3.48

TECHNICAL SPECIFICATIONS

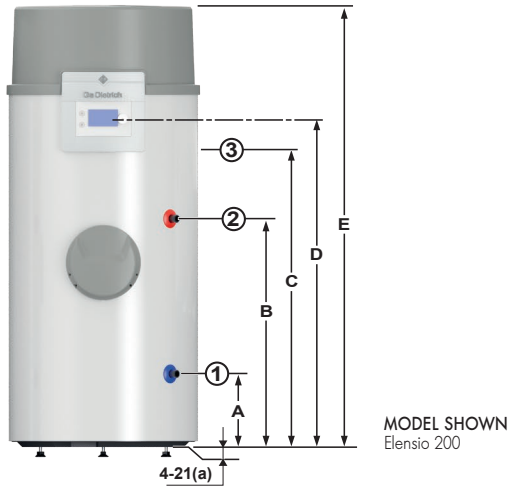
ELENSIO 200-200H-250-250H



MAIN DIMENSIONS (mm and inches)

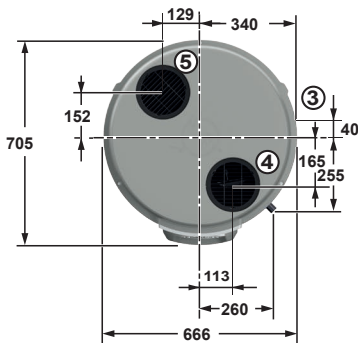
• ELENSIO 200/250

Front view



MODEL SHOWN
Elensio 200

Top view

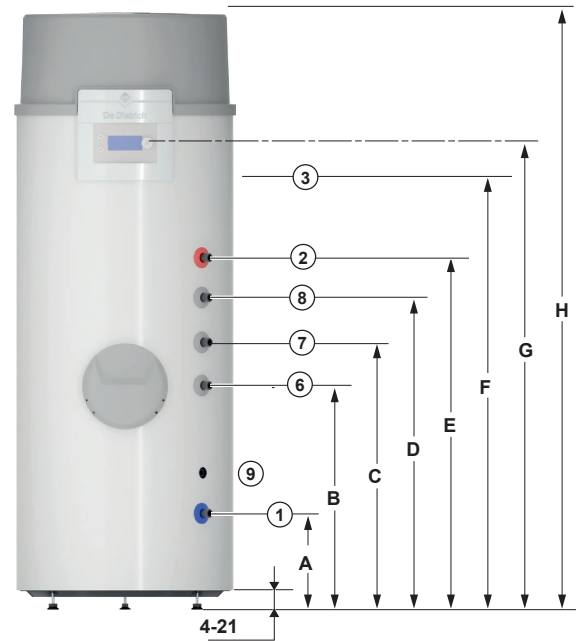


KEY

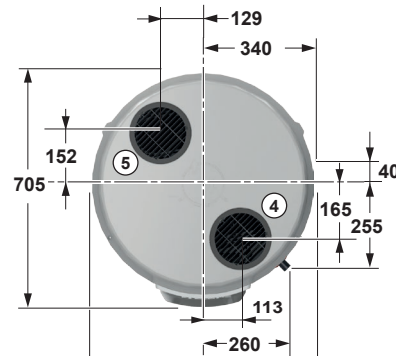
- ① Domestic cold water inlet, G 3/4" connection
- ② Domestic hot water outlet, G 3/4" connection
- ③ Condensate discharge tube
- ④ Ø 160 mm air inlet
- ⑤ Ø 160 mm air outlet
- l(a) Feet adjustable from 4 to 21mm

• ELENSIO 200H/250H

Front view



Top view



KEY

- ① Domestic cold water inlet, G 3/4" connection
- ② Domestic hot water outlet, G 3/4" connection
- ③ Condensate discharge tube
- ④ Ø 160 mm air inlet
- ⑤ Ø 160 mm air outlet
- ⑥ Hydraulic exchanger inlet, G 3/4 connection (H version only)
- ⑦ Hydraulic exchanger outlet, G 3/4 connection (H version only)
- ⑧ Connection for DHW recirculation (H version only)
- ⑨ Hydraulic backup sensor tube (H version only)
- l(a) Feet adjustable from 4 to 21mm

EL_10020

EL_10022

ELENSIO

	200	250	200 H	250 H
A (mm)	254	253	254	253
B (mm)	789	1 018	369	636
C (mm)	1 028	1 257	670	763
D (mm)	1 134	1 257	769	902
E (mm)	1 528	1 760	789	1 018
F (mm)	-	-	1 028	1 257
G (mm)	-	-	1 134	1 363
H (mm)	-	-	1 528	1 760

PACKAGE AND REFERENCES

ELENSIO

	200	200 H	250	250 H
Package	HK407	HK406	HK404	HK405
Ref.	7785383	7785277	7785382	7784992

TECHNICAL SPECIFICATIONS

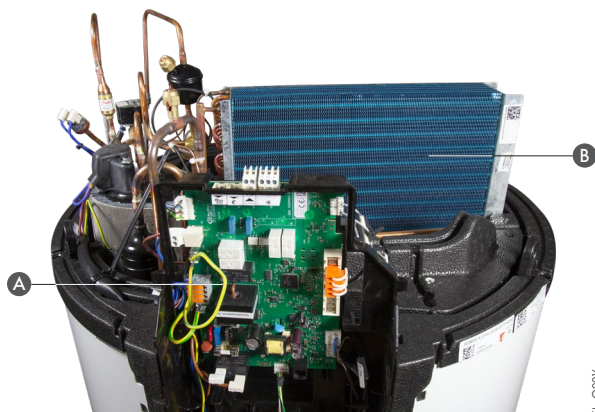
ELENSIO 200-200H-250-250H



COMPONENTS

ELENSIO 200/250 ET 200H/250H

Front view

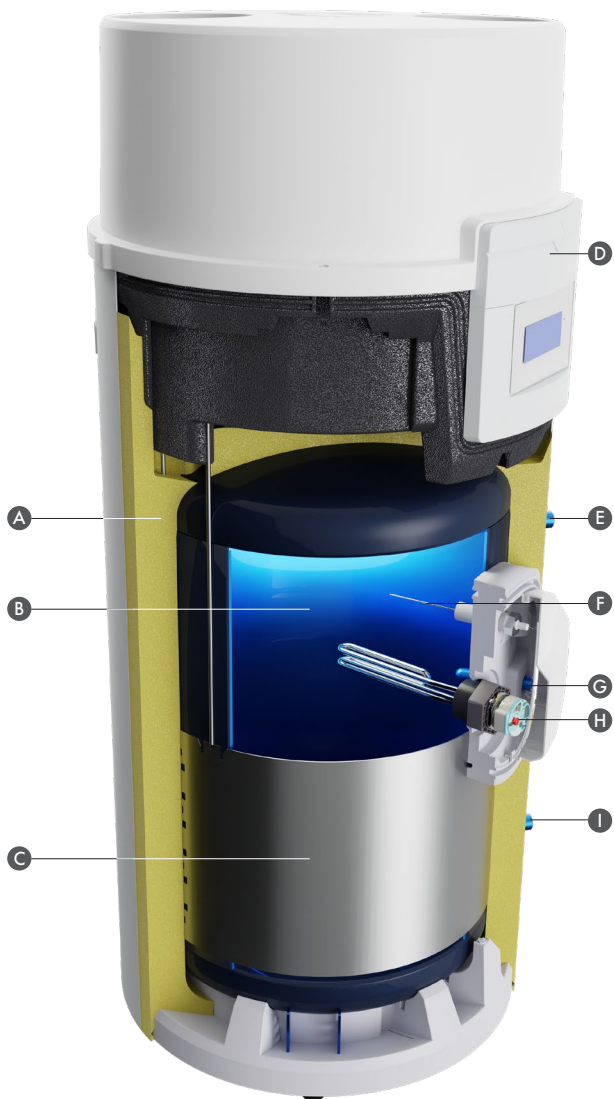


EL_Q0016

KEY

- ① Control electronic circuit board
- ② Evaporator

• ELENSIO 200/250

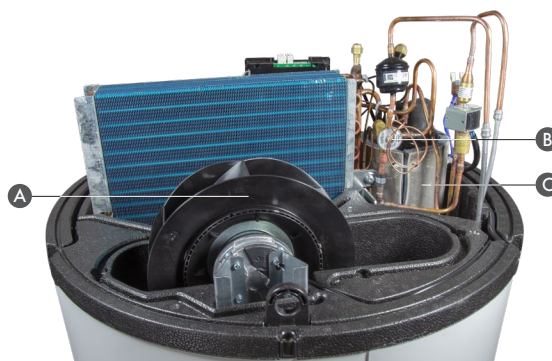


EL_Q0050

KEY

- A Tank insulation
- B Enamelled tank
- C Aluminium condenser
- D Cover: controller location
- E Domestic hot water outlet
- F Impressed current anode
- G Sensor tube
- H Shielded immersion heater
- I Cold water inlet

Rear view

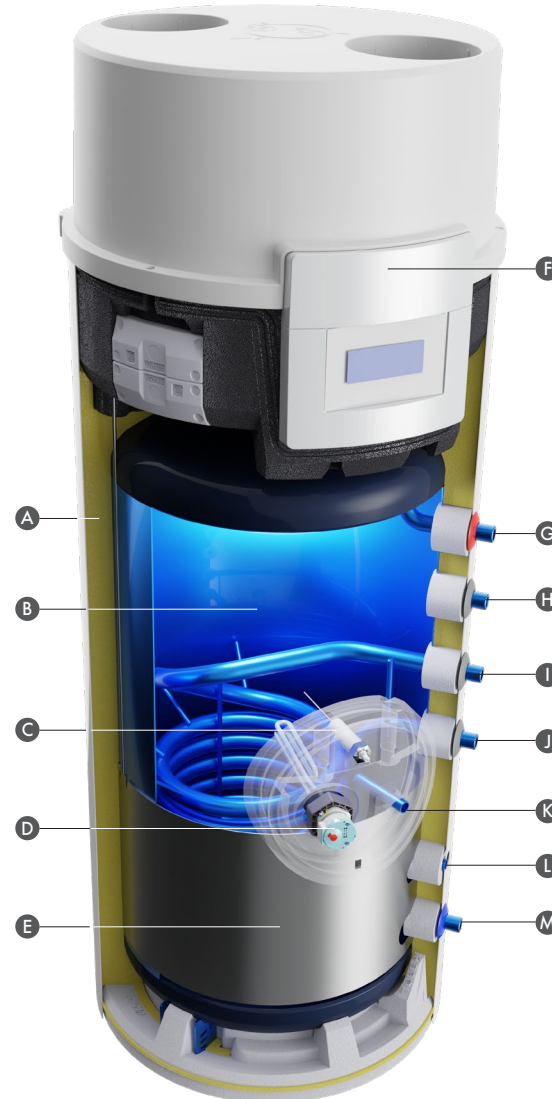


EL_Q0018

KEY

- A Fan
- B Thermostatic expansion valve
- C Compressor

• ELENSIO 200H/250H



EL_Q0050

KEY

- A Tank insulation
- B Enamelled tank
- C Impressed current anode
- D Shielded immersion heater
- E Aluminium condenser
- F Cover: controller location
- G Domestic hot water outlet
- H DHW recirculation
- I Exchanger outlet
- J Exchanger inlet
- K Sensor tube
- L Sensor tube of hydraulic complement
- M Cold water inlet



TECHNICAL SPECIFICATIONS AND PERFORMANCES

Max. operating temperature:

- tank: 90 °C
- exchanger: 90 °C

Max. operating pressure:

- tank: 10 bar
- exchanger: 10 bar

Air temperature for heat pump operation:

-5 to +35°C

MODEL	ELENSIO	200		200 H		250		250 H	
Capacity	l	196		188		251		243	
Heat pump output	W	2480		2480		2480		2480	
Electrical power absorbed by the heat pump (min-max)	We	440-680		440-680		440-680		440-680	
Draw-off cycle as per EN16147		M	L	M	L	L	XL	L	XL
COP at +7 °C (outdoor air) (1)		2.56	3.09	2.63	3.15	3.15	3.48	3.00	3.28
Heating time (l)	h	6h36	6h33	6h32	6h29	8h53	8h56	8h34	8h37
COP at temperature air inlet +15°C		-	3.25	-	3.33	-	3.63	-	3.54
Maximum volume of mixed hot water at 40 °C - V40 (l)	l	260	255	258	249	337	338	320	318
Power absorbed at stabilised rate (Pes) (l) (2)	W	23	23	21	22	25	25	30	30
Energy efficiency for DHW Eta_wh	%	109	128	111	130	131	143	125	135
Exchanger surface area	m ²	-		0.93		-		0.93	
Maximum air flow rate	m ³ /h	380		380		380		380	
Available air pressure	Pa	50		50		50		50	
Max. length of Ø 160 mm air connector	m	20		20		20		20	
Immersion heater output	W	1800		1800		1800		1800	
Power supply voltage/circuit breaker	V/A	1/N/PE~230V		1/N/PE~230V		1/N/PE~230V		1/N/PE~230V	
Sound power level (int.) (3)	dB[A]	49		49		49		49	
Sound power level in silent mode (3)	dB[A]	476		476		476		476	
Sound pressure level *	dB[A]	35		35		35		35	
Refrigerant/Load	kg	R290/0.150		R290/0.150		R290/0.150		R290/0.150	
Weight (empty)	kg	88		102		99		113	

(1) Value obtained with an outdoor air temperature of +7 °C and a water inlet temperature of 10 °C as per ICIE 103-15/C:2018 specifications based on standard NF EN 16147.

(2) Electrical power consumed without using hot water. * measured at 2 m.

(3) Value obtained at an average air temperature of 20 °C with heating from 10 to 55 °C.

Values provided for information only: refer to the certifying body's website

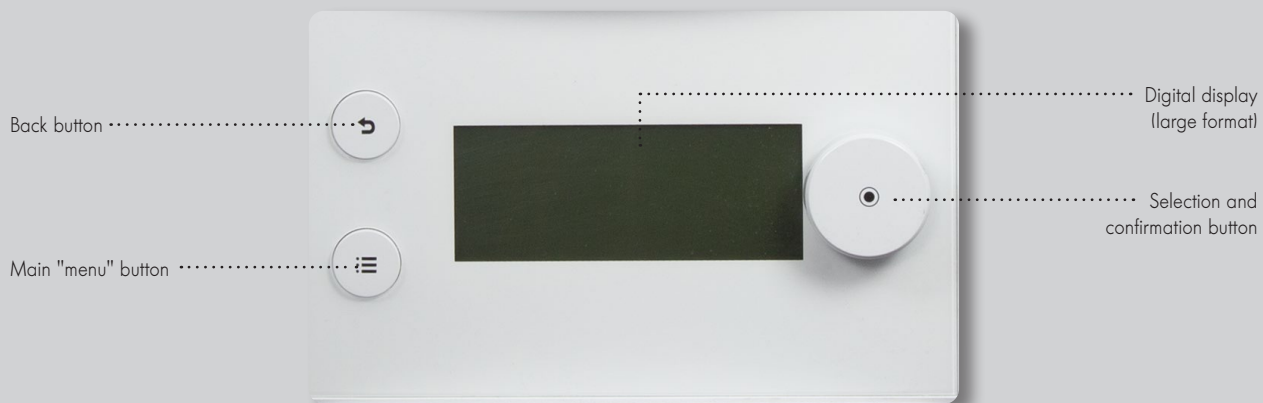
CONTROL PANEL

ELENSIO 200-250-200H-250H



CONTROL PANEL PRESENTATION

The Elensio thermodynamic water heater is delivered with a simple and intuitive user programmable control system. It can be used to select various operating modes (Automatic, Eco, Boost and Holiday). The control system also allows the required domestic hot water volume to be set by managing (screen display) the buffer tank heating mode via the heat pump module, the immersion heater or the various combined modes. It also includes an energy metering estimation function and other functions such as frost protection, anti-legionella function, etc.



ELQ002_DD

HYDRAULIC ACCESSORIES



TVH_Q0041

SAFETY UNIT CONNECTION KIT - PACKAGE ER208

FLUE SYSTEMS ACCESSORIES



PAC_Q0030

90° ELBOW Ø 160 mm - PACKAGE EH77



TVH_Q0018

INSULATED FLEXIBLE DUCT Ø 160MM, LENGTH 3 m - PACKAGE EH206



TVH_Q0056

SET OF FIXING CLAMPS Ø 160 mm - PACKAGE EH207



TVH_Q0022A

2 X PPE DUCTS, Ø 160 mm, 1 m (DELIVERED WITH 2 SLEEVES) - PACKAGE EH272



TVH_Q0021A

2 X PPE ELBOWS, Ø 160 mm (DELIVERED WITH 2 SLEEVES) - PACKAGE EH273



TVH_Q0020A

2 X PPE SLEEVES, Ø 160 mm - PACKAGE EH274



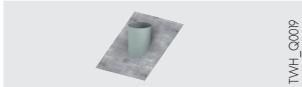
TVH_Q0024A

VERTICAL TERMINAL (BLACK) Ø 160 mm - PACKAGE EH275



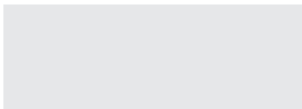
TVH_Q0023

WATER HIGHTNESS BED PLATE (Ø 160 mm) FOR FLAT ROOF - PACKAGE EH276

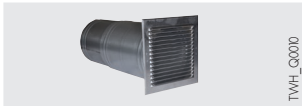


TVH_Q0019

WATERPROOF BASE FOR PITCHED ROOFS (25° TO 45°, Ø 160 mm) - PACKAGE EH277

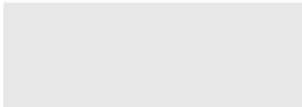


WATERPROOF KIT FOR GALVANISED ELBOW - PACKAGE HK437



TVH_Q0010

WALL-MOUNTED GRID + FEEDTHROUGH - PACKAGE HK506



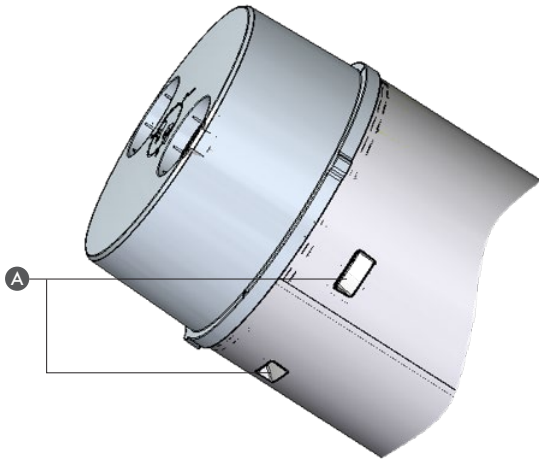
COMPLETE OUTDOOR AIR CONNECTION KIT Ø 160 mm - PACKAGE HK438

INFORMATION REQUIRED FOR INSTALLATION



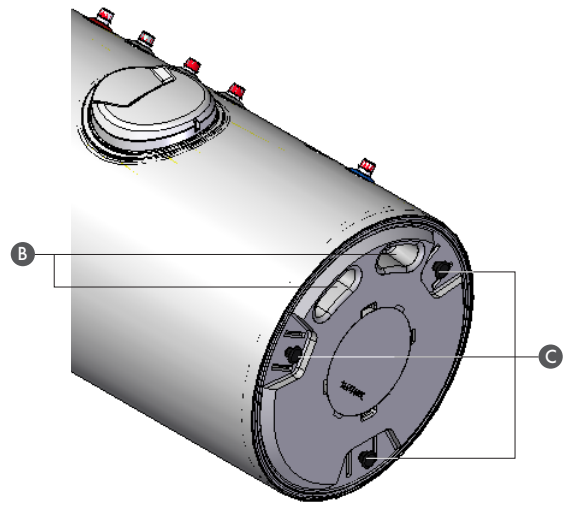
HANDLING

SIDE



manipulation 3

BOTTOM



manipulation 2

KEY

A Top handles

B Bottom handles

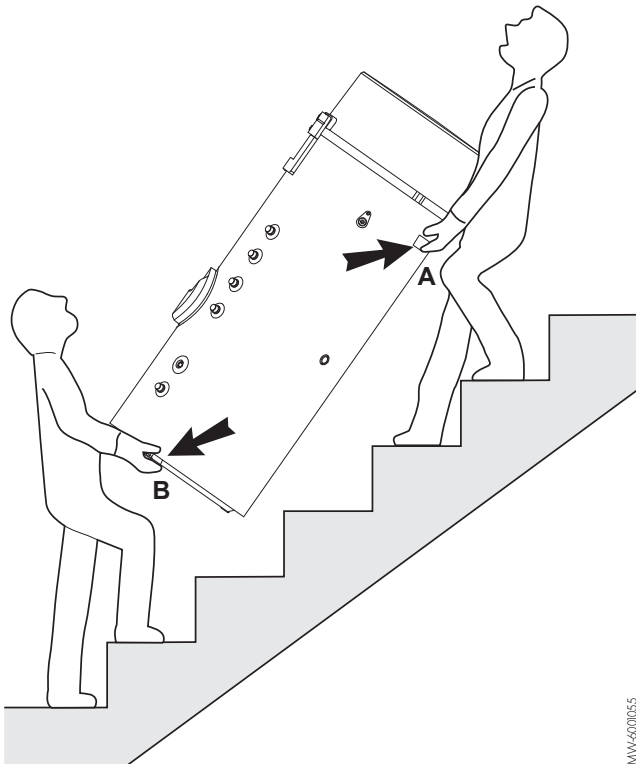
C Adjustable feet



CAUTION

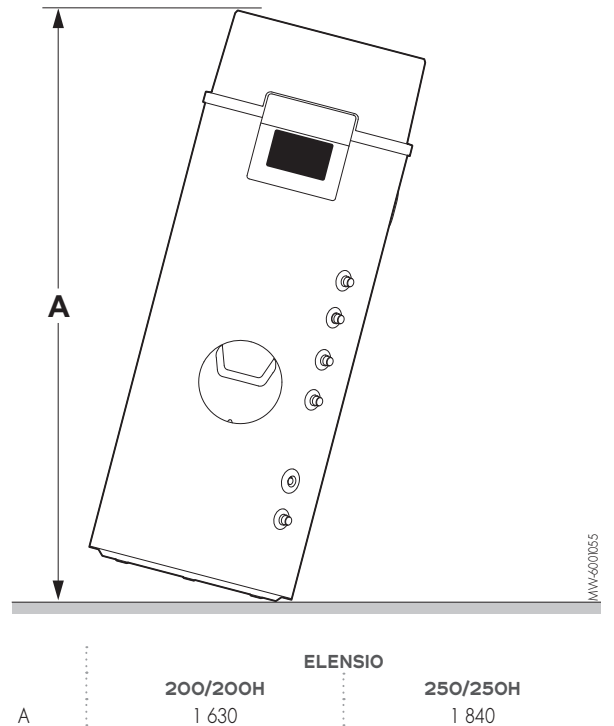
Do not use the top cover for handling.

HANDLING



MW-600055

TILT DIMENSIONS



MW-600055

INFORMATION REQUIRED

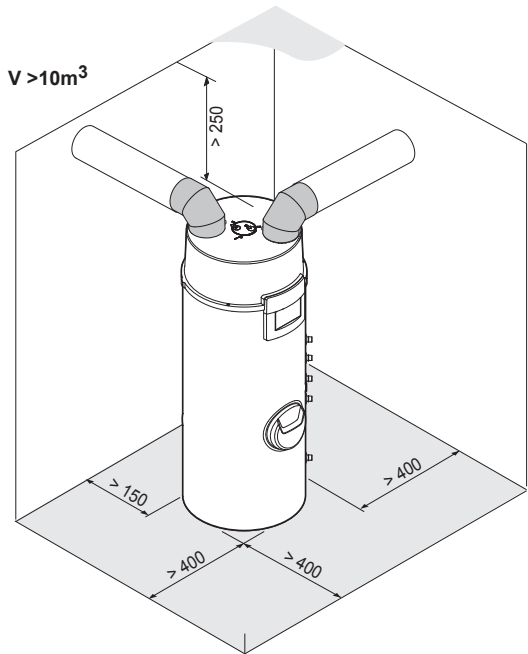
FOR INSTALLATION



INSTALLING THE ELENSIO WATER HEATER

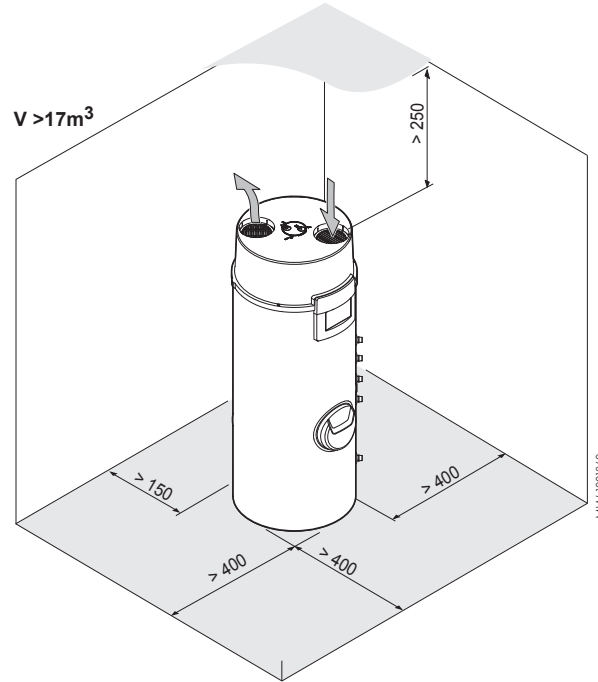
The appliance must be installed in a frost-free location and at an ambient temperature between +7 and +35 °C. Caution: the installation of a thermodynamic water heater is incompatible with certain types of heating: open fires, stack effect products). Installing in the heated space reduces the standby consumption. Where possible, it should be positioned away from bedrooms (to prevent noise transmission) and close to draw-off points while minimising the length of the air ducting. Leave sufficient space around the water heater to facilitate access and maintenance.

• WITH Ø 160 MM DUCTS



MW-1001860

• ON AMBIENT AIR



MW-1001860



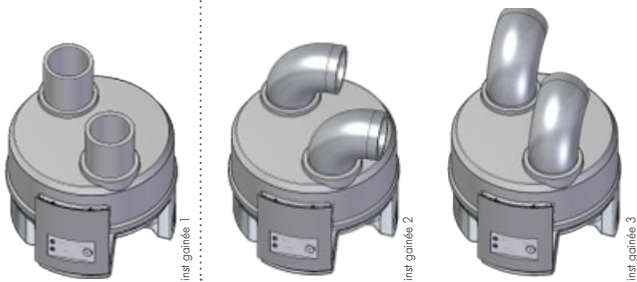
IMPORTANT

The appliance must be affixed to the floor or a wall.

OPERATION

• WITH Ø 160 MM DUCTS

- without elbows
- with adjustable elbows

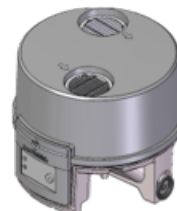


MAXIMUM AIR CONNECTION LENGTH (IN M)

Ø 160 mm

26

• ON AMBIENT AIR



inst air ambient



CAUTION

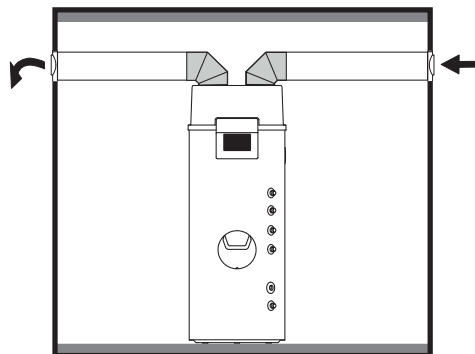
Do not use accessories that could generate significant pressure drops (extraction grid with mosquito screen, partially slack flexible ducting). If the pressure drops are greater, the appliance's performance will be compromised and the charging times increased.

EXAMPLES OF INSTALLATIONS OF THE ELENSIO WATER HEATER

• WITH Ø 160 MM DUCTS

• OUTSIDE AIR/OUTSIDE

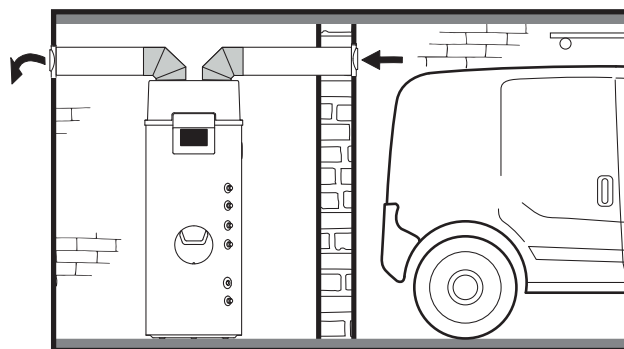
The appliance draws in and discharges outdoor air.
An outdoor air connection can lead to overconsumption of electricity if the outdoor air temperature is outside the operating range.



MW-607002

• INDOOR AIR/OUTSIDE

The appliance draws in room air and discharges it outdoors. Used to recover free calories released by your vehicle's engine when parked after use or by household appliances in operation.

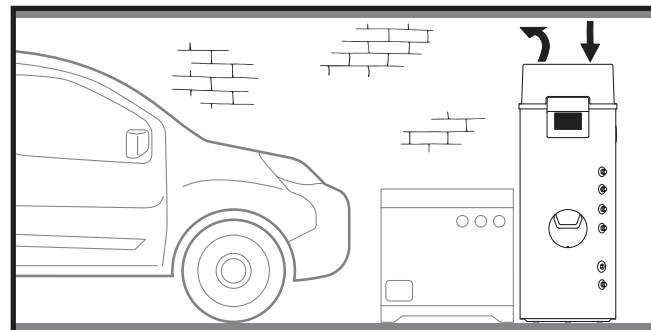


MW-607003

• ON AMBIENT AIR

• GARAGE

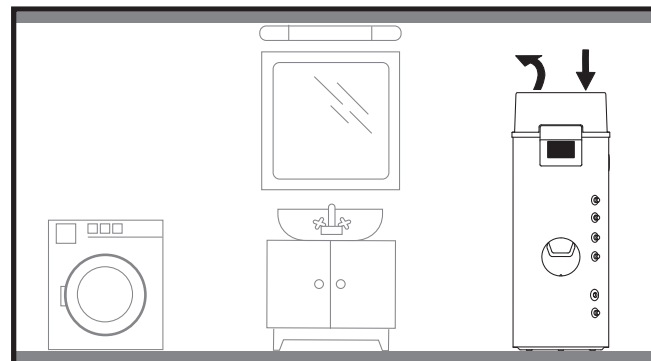
The appliance draws in and discharges room air. Used to recover free calories released by your vehicle's engine when parked after use or by household appliances in operation.



MW-607002

• LAUNDRY ROOM

The appliance draws in and discharges room air. Used to dehumidify the room and to recover free calories released by household appliances in operation.



MW-607003



ELENSIO ELECTRICAL CONNECTION

The thermodynamic water heaters are delivered with a 230 V/50 Hz power supply cable. The electrical connection must conform to local standards. The water heater must be powered by an electrical circuit comprising an omnipolar switch with an opening gap distance of more than 3 mm and protected by a 16 A circuit breaker. ELENSIO appliances are equipped with a "Peak rate/Off-peak rate" contact enabling them to be installed in place of an existing electric water heater with no need to modify the installation. Connecting this contact also allows the user to disable operation of the heat pump module and the electrical backup at peak rate times.

	POWER SUPPLY TYPE	CABLE CROSS SECTION (mm ²)	CIRCUIT BREAKER K TYPE	MAXIMUM CURRENT OF TYPE A DIFFERENTIAL
Power supply	230V single-phase	3 x 2.5 (included)	16 A	30 mA
Wiring with hydraulic backup (1) (2)	Backup control.	2 x 0.75	-	-
	Backup pump control	3 x 1.5	-	-
Off-peak rate control (3)	230V single-phase	2 x 1.5	-	-
Photovoltaic equipment wiring	230V single-phase	2 x 1.5	-	-
Photovoltaic control wiring	230V single-phase	2 x 1.5	-	-

(1) Two connectors for authorising the backup and controlling the backup pump

(2) Connection between the appliance and other equipment

(3) Cable connecting the off-peak rate signal to the appliance

HYDRAULIC CONNECTION

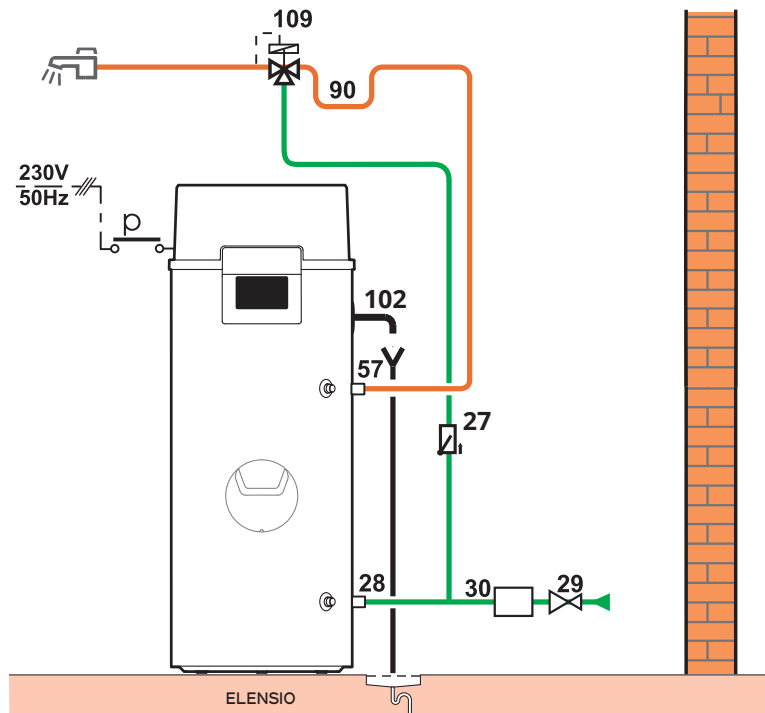


IMPORTANT

Install a safety unit on the cold water inlet that conforms to NF EN 1487

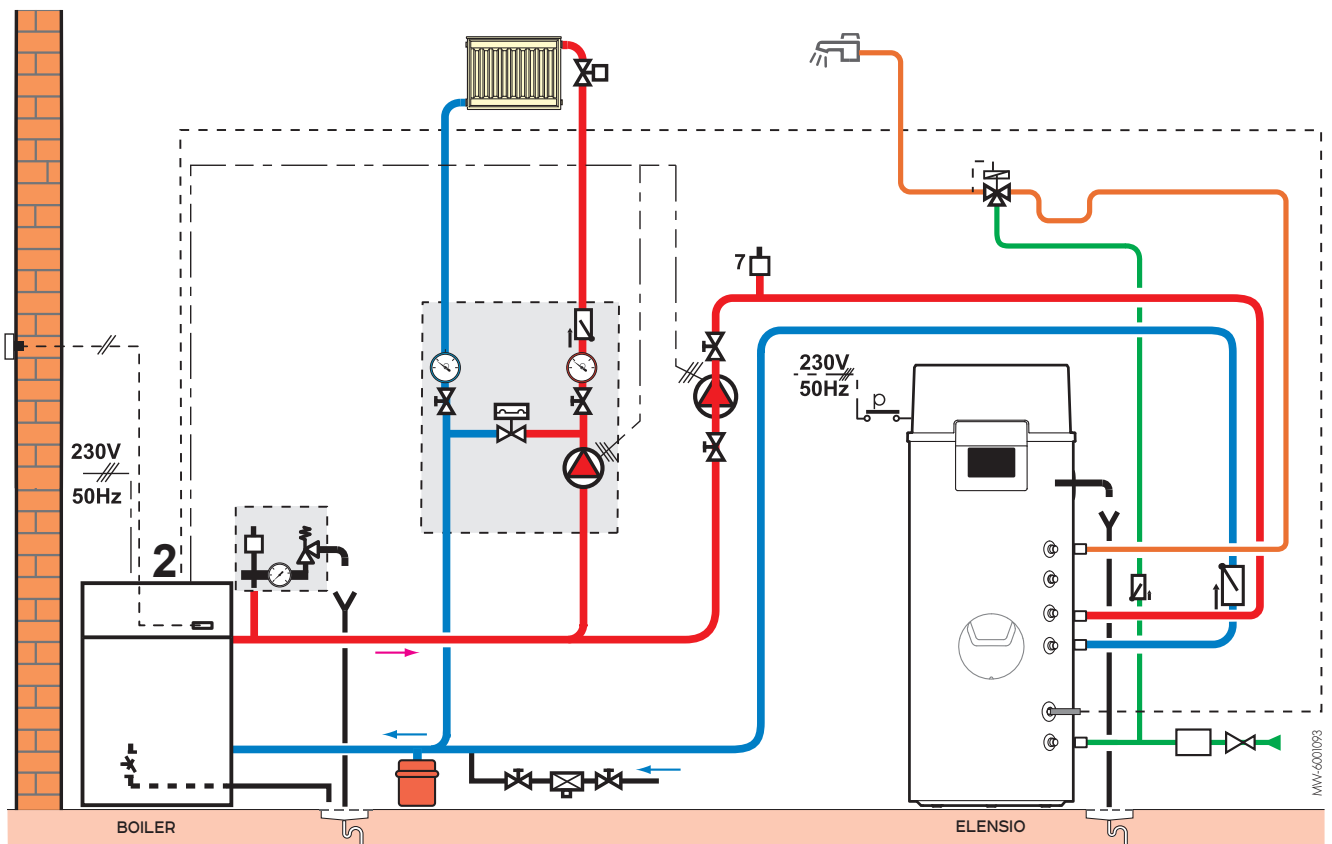
Safety unit not included.

STANDARD INSTALLATION



MW-5001091

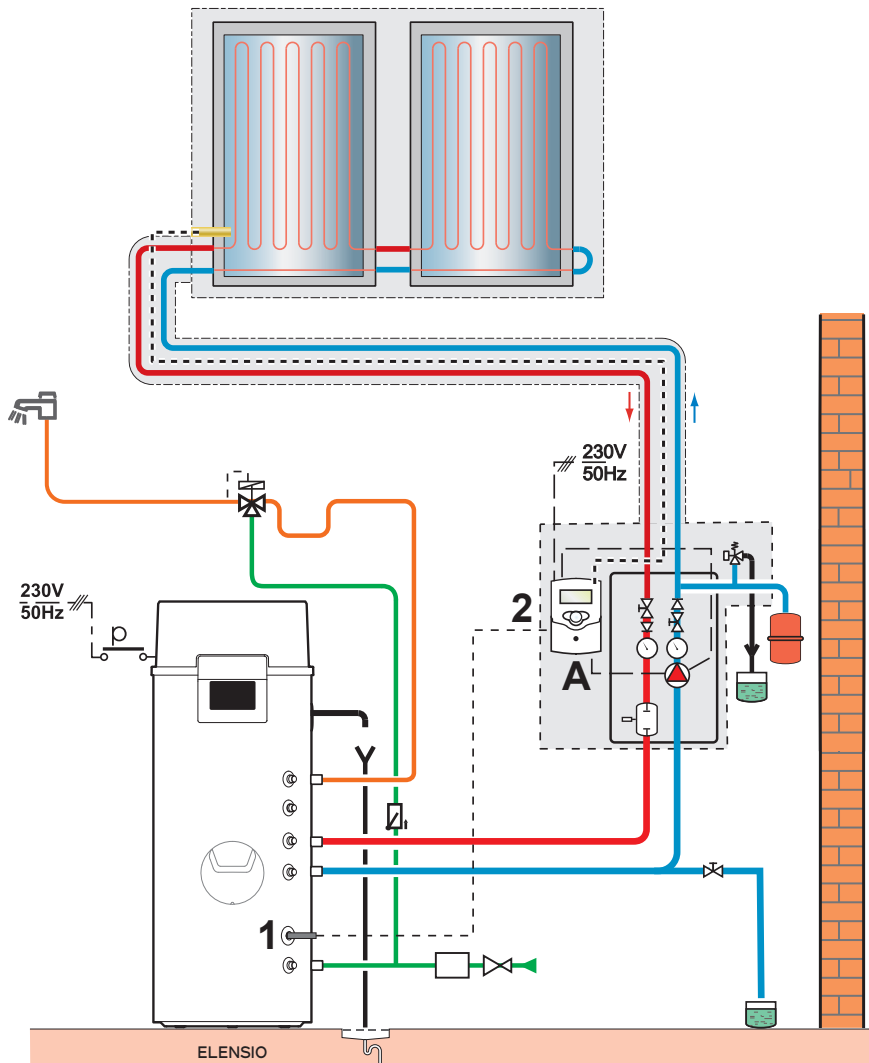
INSTALLATION WITH BOILER HYDRAULIC BACKUP



MW-5001093

KEY: see page 14

INSTALLATION WITH SOLAR PANEL HYDRAULIC BACKUP



- KEY**
- A Solar collector controls
 - 1 Domestic hot water temperature sensor
 - 2 Solar collector control contact

MMW-6001092

- KEY**
- 27 Non-return valve
 - 28 Domestic cold water inlet
 - 29 Pressure reducer
 - 30 Sealed safety device calibrated to 7 bars

- 57 Domestic hot water outlet with dielectric union
- 90 Anti-thermosiphon loop
- 102 Condensate discharge hose
- 109 Thermostatic mixing valve



A large, empty rectangular box with a thin black border, intended for a note or additional information.



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