Loria

Split air-to-water heat pump
Energy-efficient solution for new build projects

BENEFITS

- **Space-saving indoor hydraulic module with plate heat exchanger**
- **One or two heating zone(s) management**
- **Compact solution for new build projects**

NEW MODULATING CONTROLLER NAVILINK 105

- **Modern design**
- **Simplified programming through integrated assistance**

DESCRIPTION

- Energy-efficient solution for new build projects
- 4 models: 4 to 10 kW
- Single-phase models
- Navistem 100H control system
- Integrated electric back-up heater
- Inverter regulation

AVAILABLE OPTIONS

- Magnetic mud filter
- 2 zones kit (plug-and-play kit)
- Cooling kit*
- Separate hot water tank
- Room controller

Practical trainings

that will help you save time and be more efficient.

On-site trainings

- **PAC 6-03-4**: Heat pumps air to water - **1 day**
- **PAC 6-05-4:** Commissioning maintenance and service - **1 day**

Online trainings

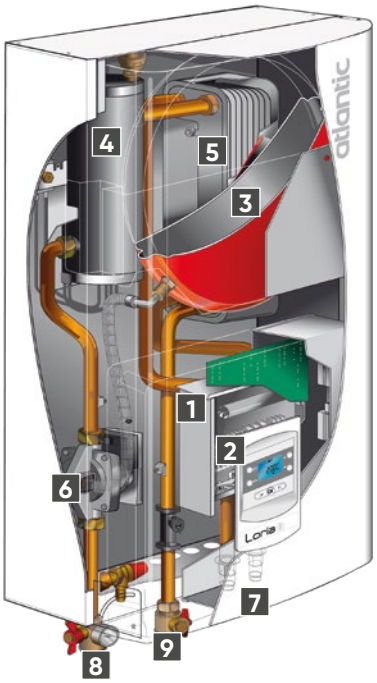
- **PAC 6-13-2**: Heat pump installation commissioning - **½ day**
- **PAC 6-15-4**: Heat pump installation commissioning - **½ day**

*Models without electric back-up available

Up to

35°C 55°C

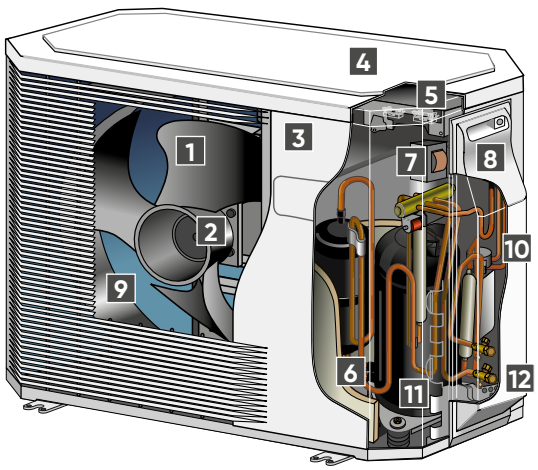
INDOOR HYDRAULIC MODULE



1. Electric board
2. User interface/regulator
3. Expansion vessel
4. Electric back-up
5. Plate heat exchanger
6. Low-consumption circulation pump
7. Refrigerant connections
8. Heating flow
9. Heating return

OUTDOOR INVERTER UNIT

1. Low-noise, high-output ventilator
2. Electric variable speed motor
3. "Inverter" control module
4. Control lights and buttons
5. Connector terminal blocks (power supply and interconnection)
6. Refrigerant accumulator bottle
7. Cycle reversing valve
8. Anti-corrosion treated metal cover
9. High-performance exchange surface evaporator; anti-corrosion treated hydrophilic aluminium fins and grooved copper tubes
10. Electronic expansion valve
11. Noise and temperature insulated "Inverter" compressor
12. Refrigerating connection valves (flared connectors) with protective cover



TECHNICAL CHARACTERISTICS AND PERFORMANCES

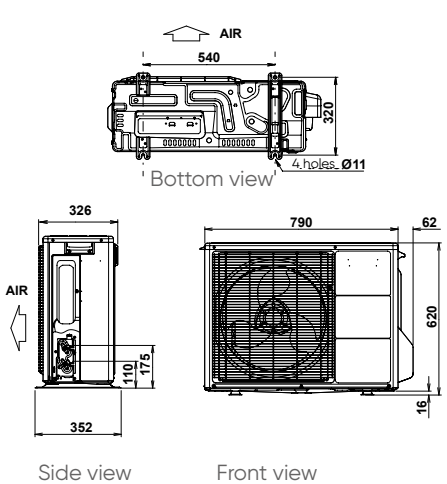
ErP

	UNIT	LORIA 6004	LORIA 6006	LORIA 6008	LORIA 6010
REFRIGERANT		R410A	R410A	R410A	R410A
ENERGY EFFICIENCY CHARACTERISTICS					
Energy class - Heating (35°C/55°C)		**A+++ / A++**	**A+++ / A++**	**A+++**	**A++ / A++**
Rated heat output (35°C/55°C)	kW	4 / 4	6 / 5	7 / 6	9/7
Annual energy consumption - Heating (35°C/55°C)	kWh	1884 / 2708	2588 / 2933	3147 / 4132	4481 / 5256
Seasonal energy efficiency - Heating (35°C/55°C)	**%**	**181 / 127**	**186 / 128**	**176 / 129**	**154 / 116**
Seasonal energy efficiency - Heating (35°C/55°C) with outdoor sensor	%	183 / 129	188 / 130	178 / 131	156 / 118
Sound power level (indoor/outdoor)[1]	dB(A)	44 / 62	44 / 62	44 / 69	44 / 68
MAIN CHARACTERISTICS					
SCOP 35 °C / 55 °C	-	4.6 / 3.25	4.72 / 3.27	4.46 / 3.30	4.22 / 3.20
Heating capacity +7°C/+35°C – Underfloor Heating	kW	4.00	6.00	7.50	10.42
COP +7°C/+35°C - Underfloor Heating		4.80	4.45	4.15	4.40
Heating capacity -7°C/+35°C – Underfloor Heating	kW	4.10	5.00	5.90	7.94
Power consumption -7°C/+35°C - Underfloor Heating	kW	1.46	1.79	2.46	3.11
COP -7°C/+35°C - Underfloor Heating		2.80	2.80	2.40	2.55
Heating capacity +7°C/+45°C – Low T°radiators	kW	4.00	5.10	6.20	8.51
COP +7°C/+45°C – Low T°radiators		3.50	3.50	3.35	3.54
Heating capacity -7°C/+45°C – Low T°radiators	kW	4.10	4.50	5.15	7.38
COP -7°C/+45°C – Low T°radiator		2.30	2.26	2.10	2.11
Heating capacity +7°C/+55°C – Low T°radiators	kW	3.68	4.27	5.53	6.98
COP +7°C/+55°C – Low T°radiators		2.65	2.67	2.68	2.65
Heating capacity -7°C/+55°C – Low T°radiators	kW	3.72	3.88	5.03	6.47
COP -7°C/+55°C – Low T°radiators		1.90	1.92	1.70	1.78
Electric back-up heater	kW	3	3	3	3
INDOOR HYDRAULIC MODULE					
Noise level[2]	dB(A)	36	36	36	36
Net weight/filled weight	kg	37.5 / 41.5	37.5 / 41.5	37.5 / 41.5	37.5 / 41.5
Min./Max. outdoor temperature for heating	°C	-20 / +35	-20 / +35	-20 / +35	-20 / +35
Power supply	V / Hz	230 / 50	230 / 50	230 / 50	230 / 50
OUTDOOR UNIT					
Noise level[3]	dB(A)	42	42	47	47
Operating weight	kg	41	41	42	60
REFRIGERANT CHARACTERISTICS					
Min./max. length	m	5 / 30	5 / 30	5 / 30	5 / 30
Max. difference in height	m	20	20	20	20
R410A factory load	g	1100	1100	1400	1800
Quantity of refrigerant in tons of CO_2 equivalent	t	2	2	3	4

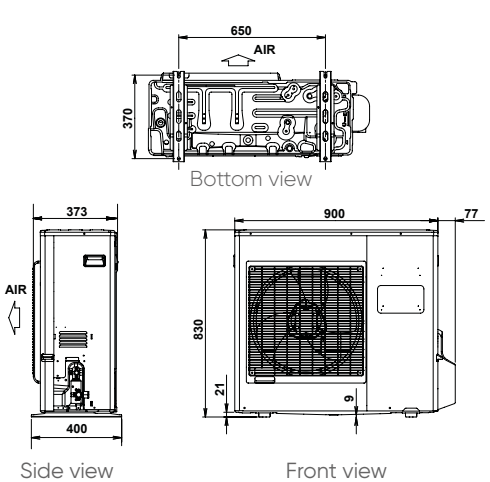
(1) Sound power level is a laboratory measurement of the sound power emitted by the product, but it does not correspond to the sound perceived. Used by acoustics specialists, it allows to measure the sound pressure level of the product in its working environment.
(2) Acoustic pressure at 1m from HP, 1.5 m height, open field, directivity 2.
(3) Acoustic pressure at 5m from HP, 1.5 m height, open field, directivity 2.

INSTALLATION DIMENSIONS (mm)

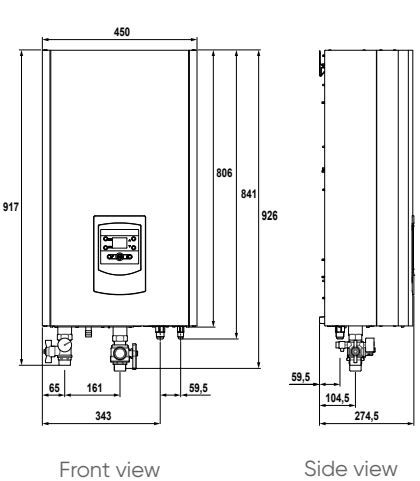
Loria 4,6 and 8kW Ourdoor Inverter unit



Loria 10kW Ourdoor Inverter unit



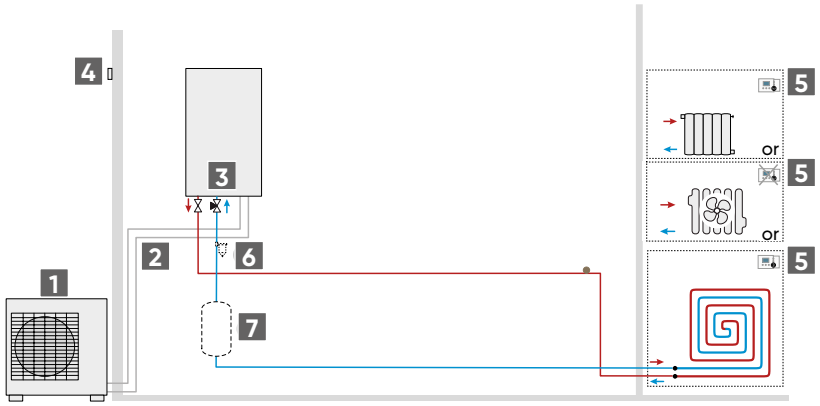
Indoor hydraulic module



INSTALLATION SCHEMATICS

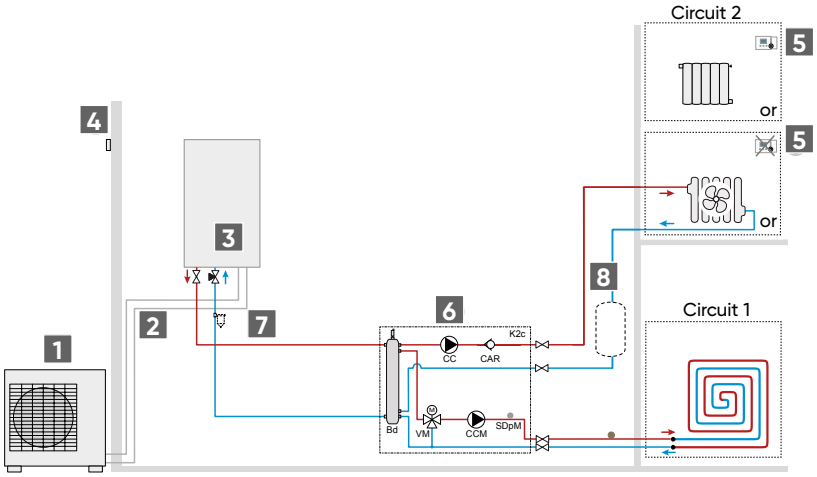
LORIA: 1 HEATING ZONE

1 Outdoor unit and ground support*
2 Refrigerant connections*
3 Hydraulic module
4 Outdoor sensor
5 Room controller*
6 Magnetic mud filter*
7 Buffer tank**



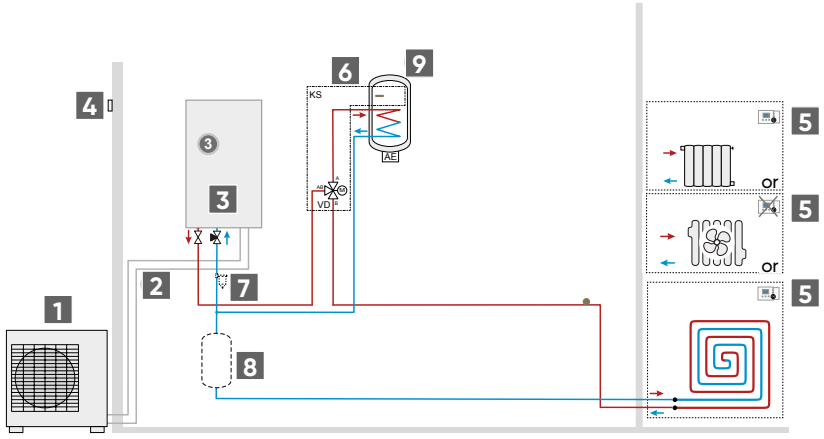
LORIA: 2 HEATING ZONES

1 Outdoor unit and ground support*
2 Refrigerant connections*
3 Hydraulic module
4 Outdoor sensor
5 Room controller*
6 2 zones kit*
7 Magnetic mud filter*
8 Buffer tank**



LORIA: 1 HEATING ZONE + DHW PRODUCTION

1 Outdoor unit and ground support*
2 Refrigerant connections*
3 Hydraulic module
4 Outdoor sensor
5 Room controller*
6 DHW kit*
7 Magnetic mud filter*
8 Buffer tank**
9 DHW tank*



*Optional - **Depending on type of collectors and volume of water in heating curcuit, it may be necessary to install a buffer tank