



SYNEA DUO

SPLIT R32

GENERAL PRESENTATION

INDOOR UNIT

WALL MOUNTED DUO COMPACT
FRENCH PRODUCTION &
CONCEPTION



PRESENTATION OF THE RANGE



1 INDOOR UNIT

- ♦ DUO (WITH DHW TANK)
- ♦ WALL MOUNTED MODEL



55°C

SYNEA DUO

Single-phase OUTDOOR UNIT



3

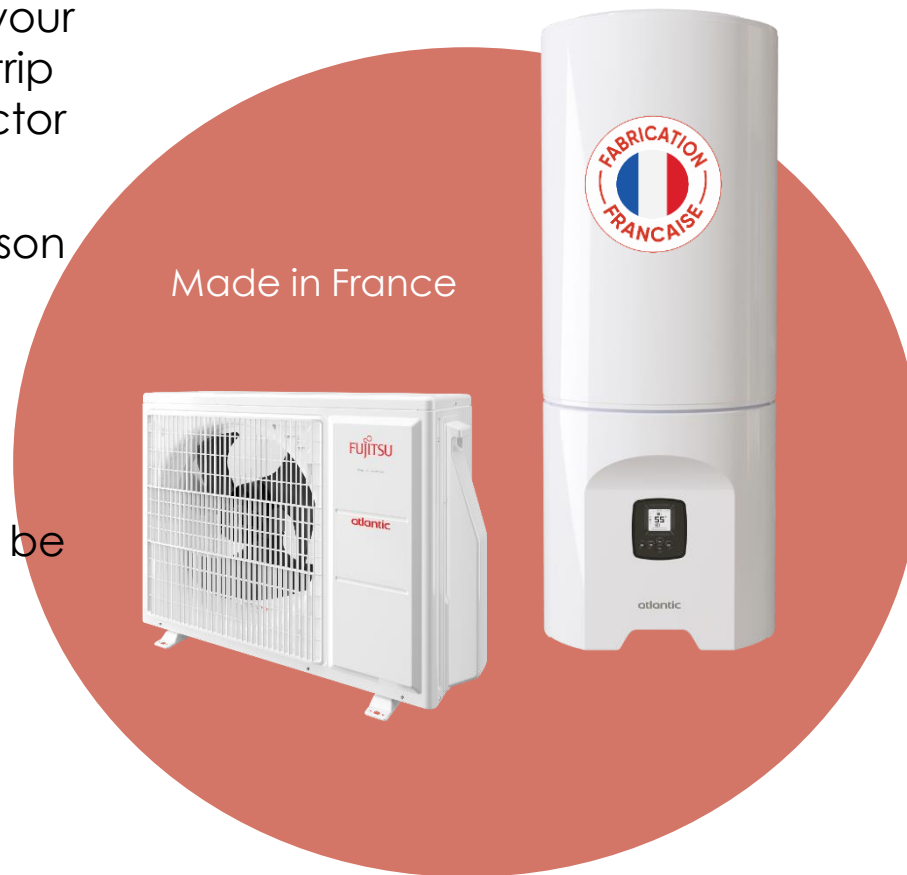
4

6

THE MOST COMPACT HEAT PUMP ON THE MARKET AND THE ONLY ONE WITHOUT FOOTPRINT ON THE FLOOR

- ❖ **Backrest** (mandatory) of your choice, pre-connection strip and integrated disconnecter
- ❖ Integrable by a single person
- ❖ **Easy Start** Commissioning Wizard
- ❖ zero additional volume to be expected
- ❖ **Optimal** DHW comfort
- ❖ Ideal for families up to 5 people
- ❖ **150 L** DHW tank

atlantic



- **Ultra-quiet** => 35 dB(A) only*

❖ **More compact**

- ❖ Ideal for small housing (~ 80m²)
Indoor unit without footprint
- ❖ **Free space** under the 90 cm OU
ideal for household appliances
- ❖ Fluid heat pump **R32** COP
heating = 5.07 and COP
DHW = 3.3
- ❖ **Cozytouch** via Navilink
without bridge

* Sound pressure level at 5 m, 1.5 m from the ground, free directional field 2.

NEW HYDRAULIC UNIT

THE MOST COMPACT ON THE MARKET

- ✓ Duo hydraulic system
- ✓ The most compact on the market, Wall mounted system.
- ✓ Simplified installation and access, thanks to 3 hydraulic elements of 30kg each)
- ✓ Optimization of the accessibility of components



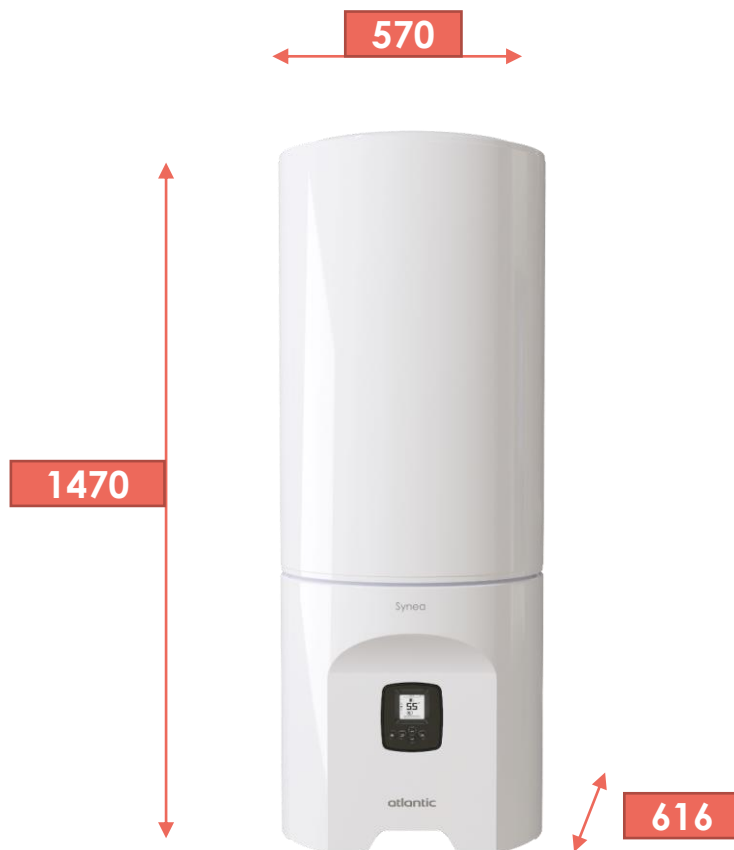
atlantic

Home solutions 

SIZE / WEIGHT



101kg Empty
253kg Full of water

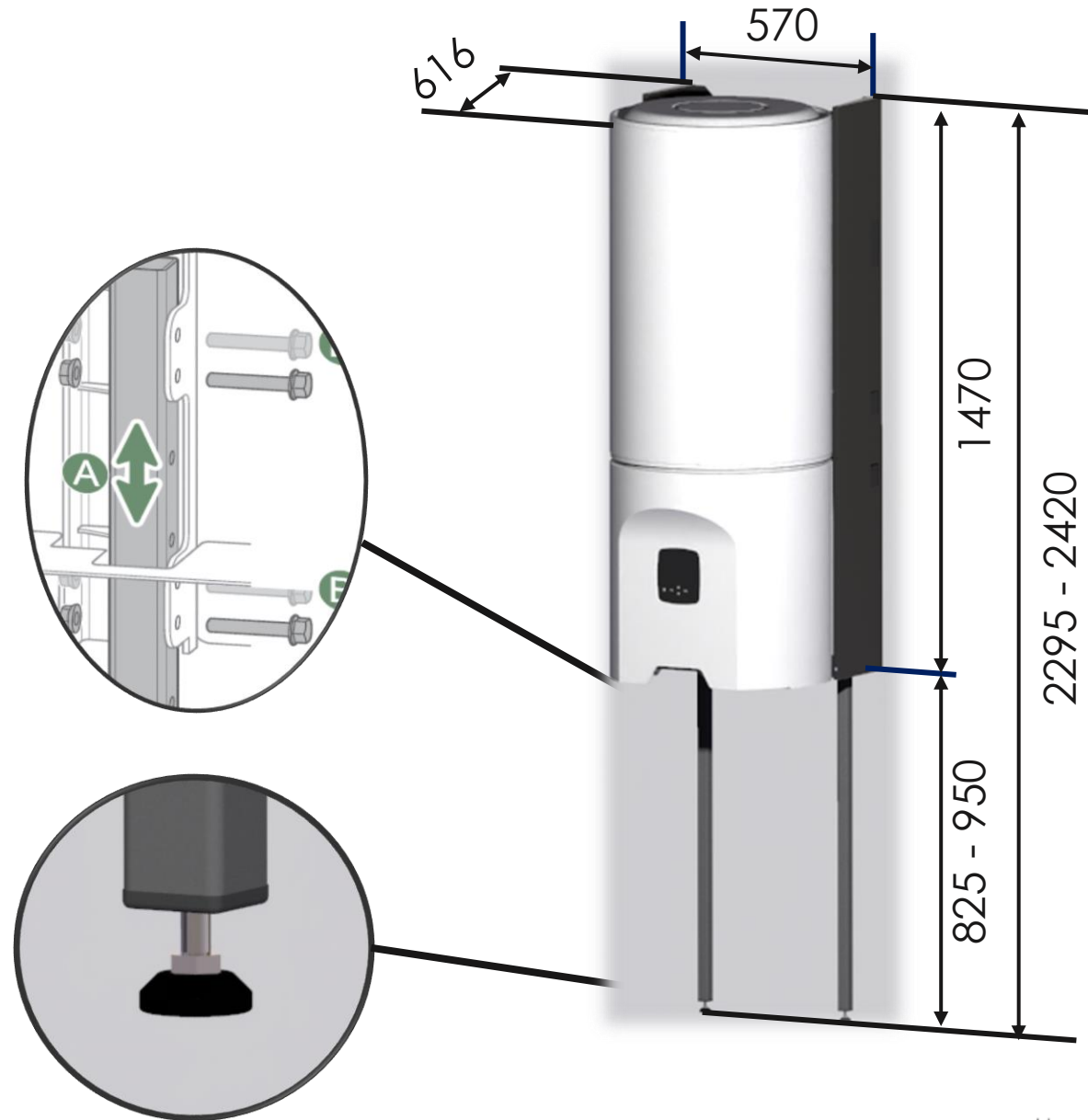


**MORE
COMPACT AND
LIGHTWEIGHT
MODULES**

**MORE
ACCESSIBLE HMI**

DIMENSIONAL CHARACTERISTICS

- ADJUSTABLE HEIGHT 825MM - 950MM
- INTEGRABLE IN CUPBOARD WIDTH 600MM



DESCRIPTION OF THE MAIN COMPONENTS



INTEGRATED ACCESSORIES



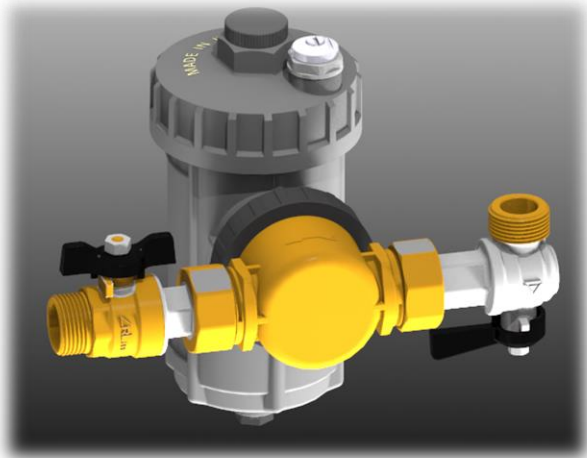
Flow & return temperature sensor



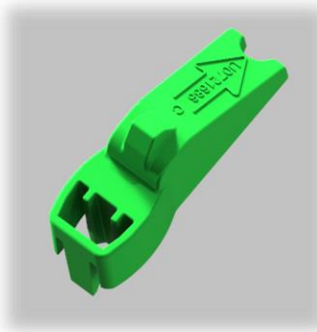
Flowmeter



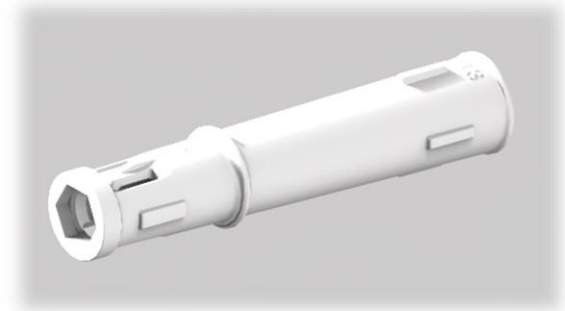
Pre connection kit with disconnect



Magnetic filter 300µm



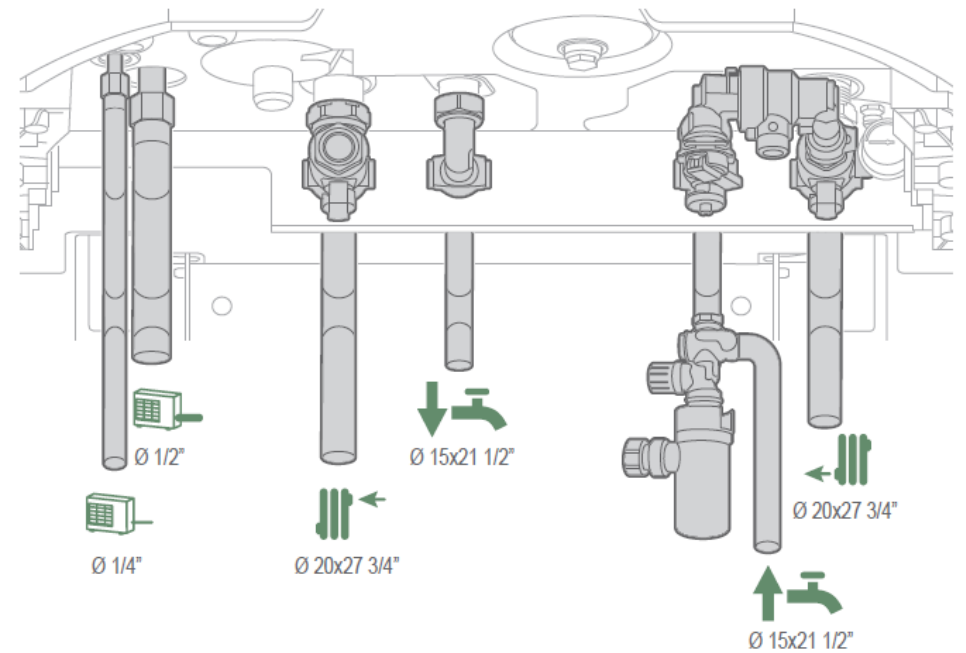
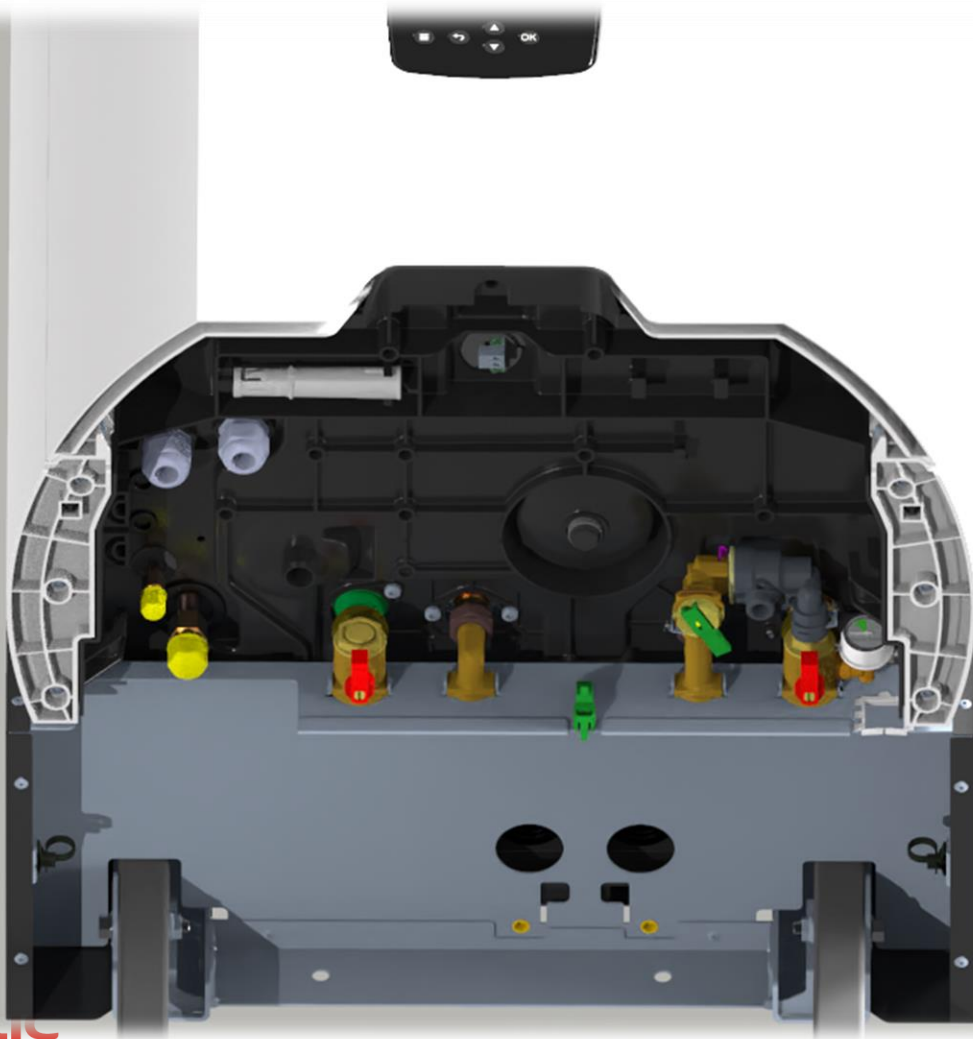
Disconnecter latch



Drain tool

HYDRAULIC CONNECTIONS

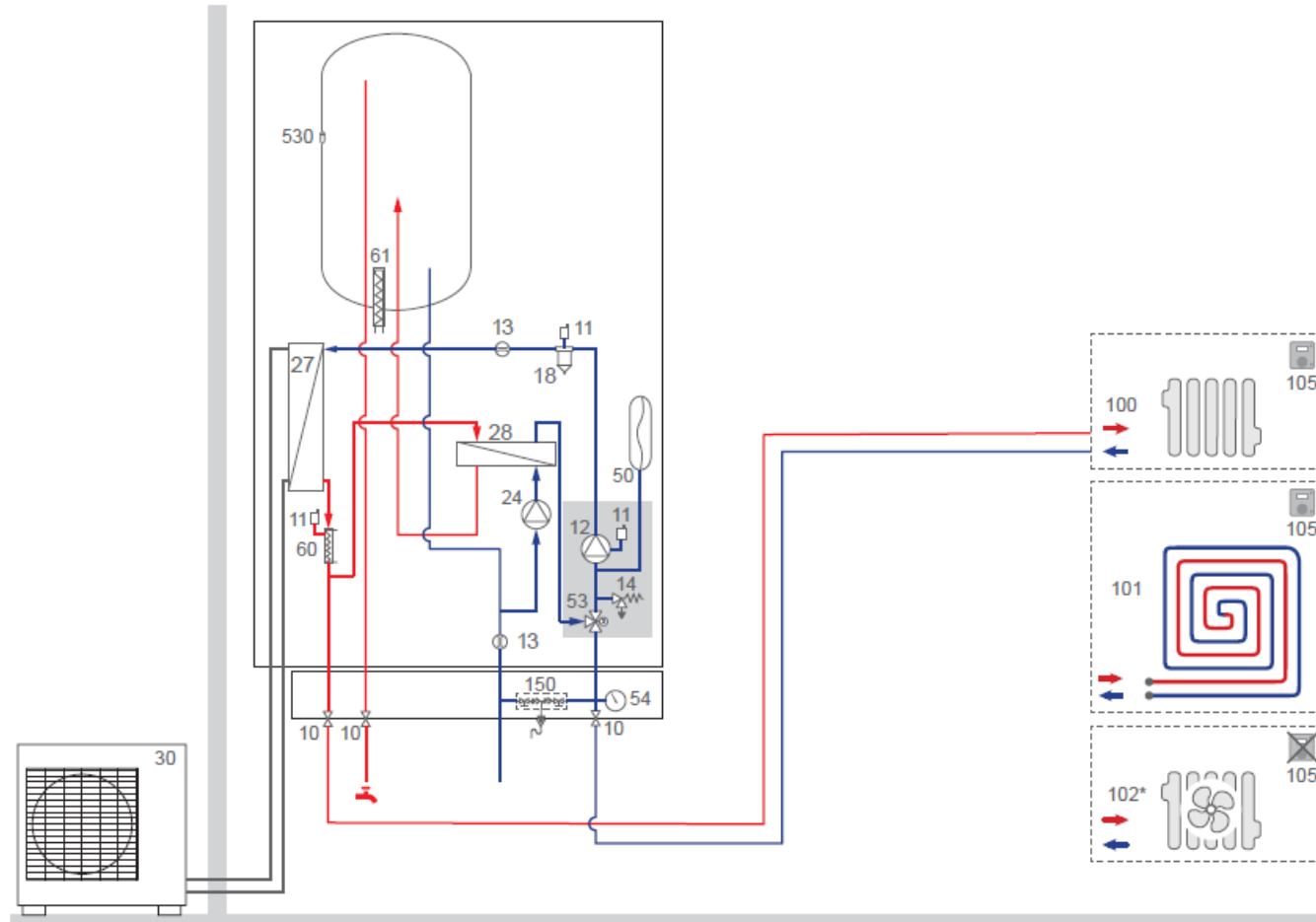
/ ALL HYDRAULIC AND REFRIGERANT CONNECTION ARE UNDER THE HYDRO BLOCK.



MINIMUM AMOUNT OF WATER

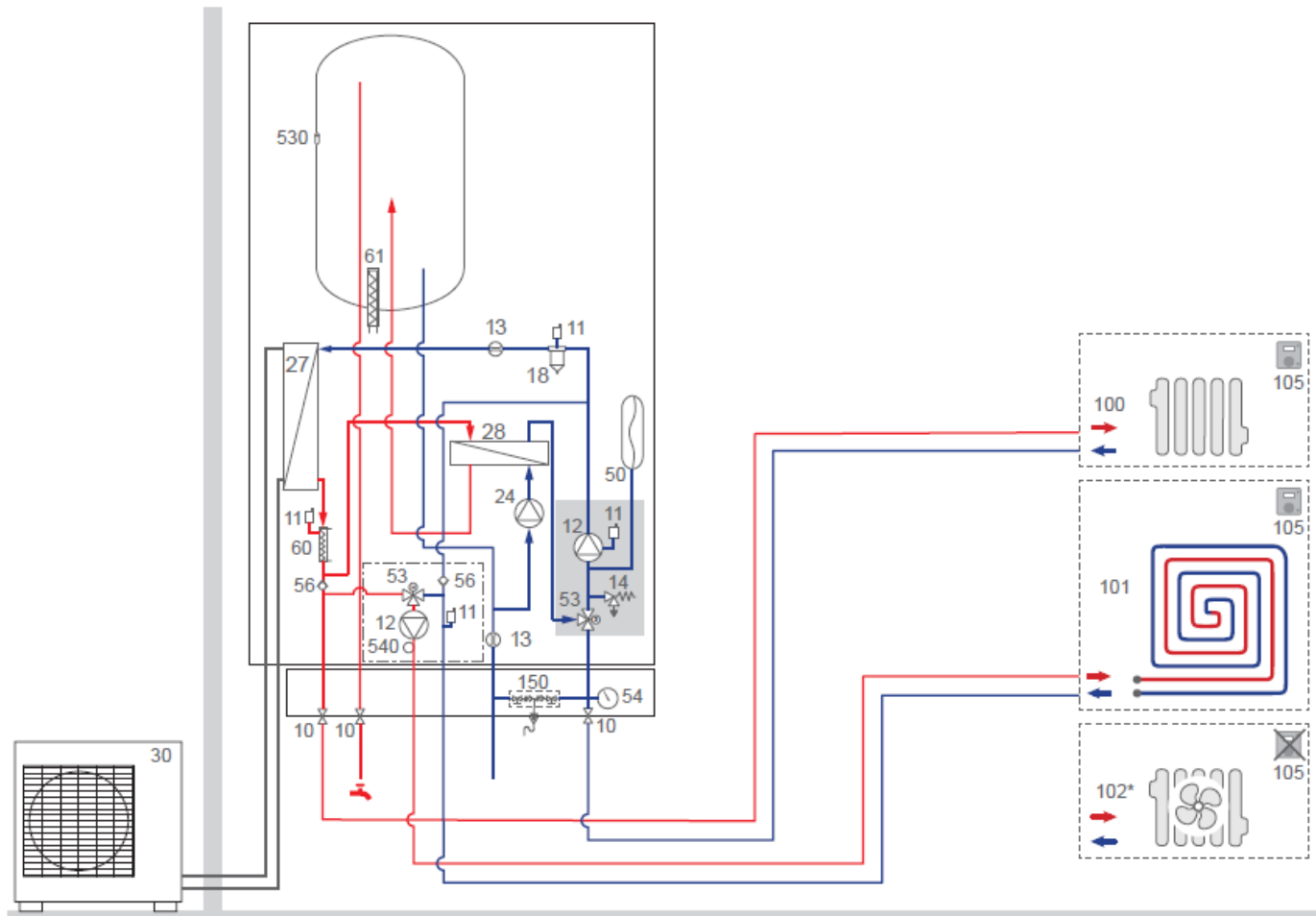
MINIMUM WATER VOLUME REQUIRED	3 kW	4 kW	6 kW
UNDER FLOOR HEATING	10	10	10
RADIATORS	10	10	10
FAN COILS	23	23	23

HYDRAULIC DIAGRAM: HEATING SYSTEM + DHW



- 10** - Valve
- 11** - Bleeder valve
- 12** - Circulating pump
- 13** - Flowmeter
- 14** - Pressure relief valve (PRV)
- 18** - Sediment trap
- 24** - DHW circulating pump 18L/min
- 27** - Heat pump exchanger
- 28** - DHW exchanger
- 30** - Outdoor unit
- 50** - Expansion vessel
- 53** - Directional valve
- 54** - Manometer
- 60** - Heating electrical backup
- 61** - DHW electrical backup
- 100** - Radiator
- 101** - Heating floor
- 102*** - Dynamic radiator (fan-convector)
- 105** - Room thermostat
- 150** - Shut-off
- 530** - DHW temp. sensor

HYDRAULIC DIAGRAM: 2 HEATING CIRCUITS + DHW



- 10** - Valve
- 11** - Bleeder valve
- 12** - Circulating pump
- 13** - Flowmeter
- 14** - Pressure relief valve (PRV)
- 18** - Sediment trap
- 24** - DHW circulating pump
- 27** - Heat pump exchanger
- 28** - DHW exchanger
- 30** - Outdoor unit
- 50** - Expansion vessel
- 53** - Directional valve
- 54** - Manometer
- 56** - Non return valve
- 60** - Heating electrical backup
- 61** - DHW electrical backup
- 100** - Radiator
- 101** - Heating floor
- 102** - Dynamic radiator (fan-convactor)
- 105** - Room thermostat
- 150** - Shut-off
- 530** - DHW temp. sensor
- 540** - Flow temp. sensor (Mixed heating circuit)

ENERGY & ACOUSTIC PERFORMANCE

		SYNEA DUO 3kW	SYNEA DUO 4kW	SYNEA DUO 6kW
	F	526 181	526 182	526 183
	Int	526 973	526 974	526 975
	UE	WOYA060KLT	WOYA060KLT	WOYA060KLT
	ref UE	700227	700227	700227
	ref UI	24163	24164	24165
Classe énergétique - chauffage (35°C / 55°C) package <i>Energy class - heating (35°/55°)</i>	-	A+++ / A++	A+++ / A++	A+++ / A++
Puissance thermique <i>Rated heat output</i>	kW	4,4 / 4,2	5,4 / 4,8	6,1 / 5,4
SCOP (35°/55°)		4,6 / 3,21	4,61 / 3,29	4,82 / 3,37
Efficacité énergétique saisonnière - chauffage (35° / 55°) avec sonde extérieure <i>Energy seasonal efficiency - heating (35°/55°) with outdoor temperature sensor</i>	%	183 / 127	184 / 130	192 / 134
Efficacité énergétique saisonnière - chauffage (35° / 55°) sans sonde extérieure <i>Energy seasonal efficiency - heating (35°/55°) without outdoor temperature sensor</i>	%	181 / 125	182 / 128	190 / 132
Consommation annuelle d'énergie - chauffage (35°C / 55°C) <i>Annual energy consumption - heating (35°/55°)</i>	kWh	1977 / 2707	2418 / 3018	2614 / 3307
Puissance acoustique (intérieur / extérieur) <i>Acoustic power (indoor / outdoor)</i>	dB(A)	40 / 57	40 / 57	40 / 57
Profil de soutirage - ECS <i>Declared load profile - DHW</i>	-	L	L	L
Classe énergétique - ECS <i>Energy class - DHW</i>	-	A+	A+	A+
Consommation annuelle d'énergie en kWh - ECS <i>Annual energy consumption - DHW</i>	kWh	777	777	777
Efficacité énergétique saisonnière - ECS <i>Efficacité énergétique saisonnière - DHW</i>	%	132	132	132

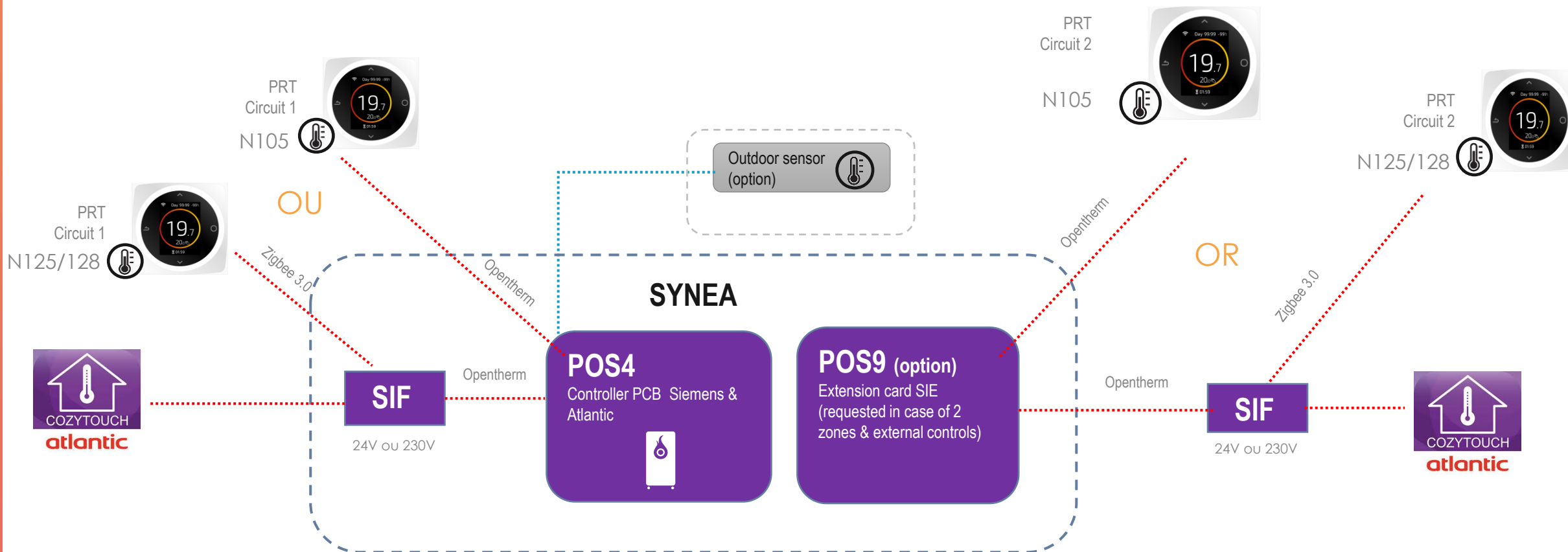
HEATING PERFORMANCE

		SYNEA DUO 3kW	SYNEA DUO 4kW	SYNEA DUO 6kW
	F	526 181	526 182	526 183
	Int	526 973	526 974	526 975
	UE	WOYA060KLT	WOYA060KLT	WOYA060KLT
	ref UE	700227	700227	700227
	ref UI	24163	24164	24165
Capacité calorifique +7°C / +35°C - PCR <i>Heating capacity +7°C / +35°C - heating floor</i>	kW	3,3	4,6	5,6
Puissance absorbée +7°C / +35°C - PCR <i>Input power +7°C / +35°C - heating floor</i>	kW	0,65	0,95	1,16
COP +7°C / 35°C - PCR <i>COP +7°C / 35°C - heating floor</i>		5,07	4,83	4,81
Capacité calorifique +2°C / +35°C - P calo prio <i>Heating capacity +2°C / +35°C</i>	kW	3,4	2,5	2,5
Puissance absorbée +2°C / +35°C - PCR <i>Input power +2°C / +35°C</i>	kW	0,87	0,63	0,63
COP +2°C / 35°C - PCR <i>COP +2°C / 35°C</i>		3,92	3,96	3,96
Capacité calorifique -7°C / +35°C - PCR <i>Heating capacity -7°C / +35°C - heating floor</i>	kW	3,5	4,5	5,3
Puissance absorbée -7°C / +35°C - PCR <i>Input power -7°C / +35°C - heating floor</i>	kW	1,15	1,53	1,94
COP -7°C / 35°C - PCR <i>COP -7°C / 35°C - heating floor</i>		3,03	2,94	2,73
Capacité calorifique 7°C / +55°C - RBT <i>Heating capacity 7°C / +55°C - low temp radiator</i>	kW	3,1	4,5	5,6
Puissance absorbée 7°C / +55°C - RBT <i>Input power 7°C / +55°C - low temp radiator</i>	kW	1,22	1,66	2,02
COP 7°C / 55°C - RBT <i>COP 7°C / 55°C - low temp radiator</i>		2,55	2,72	2,77
Capacité calorifique -7°C / +55°C - RBT <i>Heating capacity -7°C / +55°C - low temp radiator</i>	kW	3,3	3,9	4,25
Puissance absorbée -7°C / +55°C - RBT <i>Input power -7°C / +55°C - low temp radiator</i>	kW	1,86	2,05	2,18
COP -7°C / 55°C - RBT <i>COP -7°C / 55°C - low temp radiator</i>		1,77	1,91	1,95
Puiss. appoint électrique <i>Electrical backup heater heating capacity</i>	kW	3	3	3

DHW PERFORMANCE

		SYNEA DUO 3kW	SYNEA DUO 4kW	SYNEA DUO 6kW
	F	526 181	526 182	526 183
	Int	526 973	526 974	526 975
	UE	WOYA060KLT	WOYA060KLT	WOYA060KLT
	ref UE	700227	700227	700227
	ref UI	24163	24164	24165
Contenance ballon ECS <i>Domestic hot water tank volume</i>	l	150	150	150
Appoint elec ECS secours <i>DHW electrical backup heating capacity</i>	kW	1,2	1,2	1,2
Matériaux Ballon ECS <i>DHW tank raw material</i>		Enamelled	Enamelled	Enamelled
Pression de service Max du ballon ECS <i>Maximum available pressure of DHW tank</i>	b	10	10	10
Période de mise en température selon EN16147 <i>Time period to heat up the DHW tank according EN16147</i>	h/mn	01h30	01h30	01h30
Température de référence selon EN16147 <i>EN16147 reference temperature</i>	°C	54	54	54
COP selon EN 16 147 <i>EN16147 COP</i>	-	3,3	3,3	3,3
Volume Max eau chaude utilisable selon EN 16147 <i>Maximum available hot water volume according EN16147</i>	L	216	216	216
Profil sous tirage selon EN 16 147 <i>EN16147 load profil</i>	-	L	L	L
Puissance réserve Pes selon EN 16147 <i>EN16147 Pes</i>	W	30	30	30

CONNECTIVITY



OUTDOOR UNIT INTRODUCTION

SYNEA DUO R32

OUTDOOR UNIT



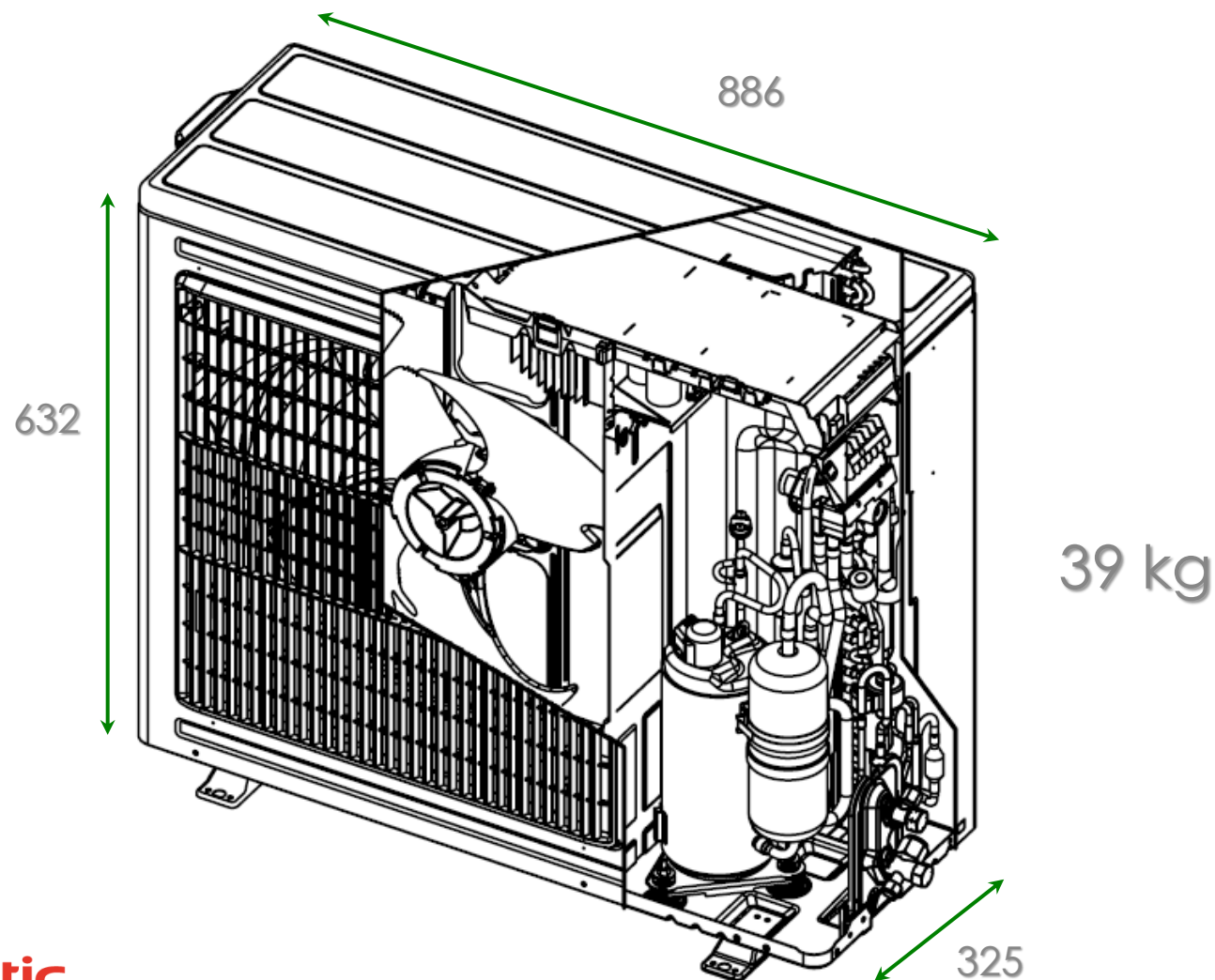
OUTDOOR UNIT R32

- / SYNEA DUO 3KW
 - / SYNEA DUO 4KW
 - / SYNEA DUO 6KW
- } WOYA 060 KLT



SYNEA DUO R32

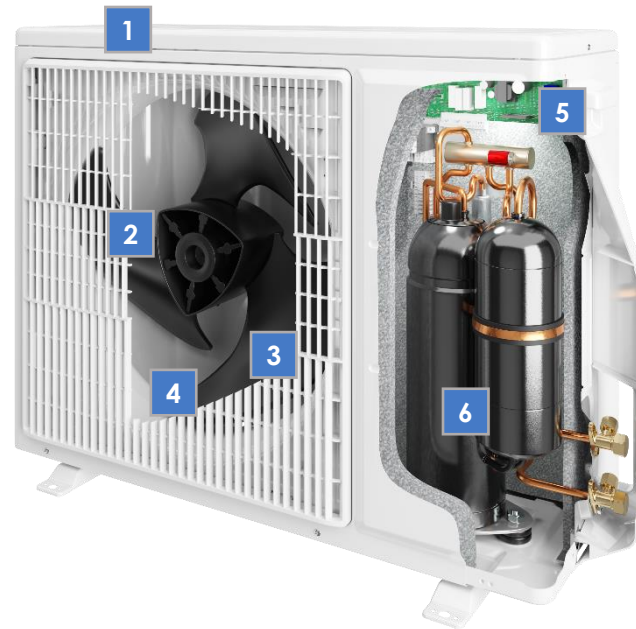
3, 5 & 6 KW OUTDOOR UNIT DIMENSIONS



Model	SYNEA DUO R32 3kW
Heat output	3,3 kW at 7°C/35°C
COP	5,07
Model	SYNEA DUO R32 4kW
Heat output	4,6 kW at 7°C/35°C
COP	4,83
Model	SYNEA DUO R32 6kW
Heat output	5,6 kW at 7°C/35°C
COP	4,81
Noise level at 5m	35 db
Sound power	57 db
Charge of refrigerant	970 g

SYNEA DUO R32

- 1 Anti-corrosion treated bodywork
- 2 High efficiency, low noise propeller
- 3 Variable speed “inverter” electric motor



- 4 Evaporator with high-performance exchange surfaces, anti-corrosion and hydrophilic treated aluminum fins, grooved copper tubes
- 5 “Inverter” control module
- 6 Inverter compressor with sound and thermal insulation

ACCESSORIES

TO BETTER MEET YOUR
EXPECTATIONS



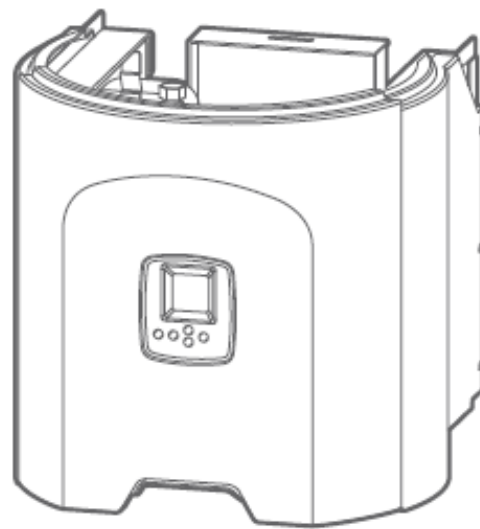
BACKREST

Hydraulic connection Kit
option

IU

DHW tank

OU



ROOM CONTROLLER OPTIONS

NAVILINK 105

Ref : **074501**



Room controller wired for
communication and
power supply
No connectivity

Navilink 125 connect

Ref : **074502**



New room controller
with wired power
supply / radio
communication for
connectivity

Navilink 128 radio connect

Ref : **074503**



New wireless room
controller / radio
communication for
connectivity

BUFFER TANK OPTIONS

25 / 50L Buffer tank

Ref : **700436/700437**



100L Buffer tank

Ref : **700432**



atlantic

On est bien chez vous.