

PLUS EVO MONOBLOCCO HYBRID

High efficiency factory made hybrid system with monobloc hydronic heat pump for production domestic hot water, heating and air conditioning for medium users with or without solar thermal integration



Technical and construction characteristics

PLUS EVO MONOBLOCCO HYBRID is a factory made hybrid system for summer and winter air conditioning and for the production of domestic hot water composed of:

- Monobloc air/water heat pump outdoor unit with integrated external technical inertial storage tank (75 liter ATC model) equipped with motorized sanitary priority diverter valve. These units are equipped with double DC rotary inverter compressors, axial fans with brushless DC motors, source exchanger with finned coil with copper tubes and aluminum fins, user exchanger with brazed plates in AISI 304 stainless steel;
- Inertial accumulation of 315 liters of technical water, with inside a 4.54 m² finned copper rapid DHW exchanger;
- Back up modulating condensing boiler with dirt separator self-cleaning magnetic;
- DHW thermostatic mixing valve;
- High efficiency inverter electronic circulator to power the hydronic heating circuit;
- Microprocessor command and control panel for the system management with integrated Wi-Fi;
- 2.0 kW back-up electrical resistance, which can be activated in mode emergency or in integration mode;
- No. 2 expansion vessels (puffers) of 8 liters each;
- Manual filling group consisting of pressure gauge, tap and non-return valve;
- Safety valve calibrated at 3 bar;
- Automatic air vent jolly valve;
- External unit self-cleaning magnetic dirt separator;
- Hydraulic separator for the system circulators;
- Wheel kit to facilitate movement of the internal unit.



HEATING
UP TO 80°C



CONDITIONING
UP TO 5°C



DHW WITHOUT
LEGIONELLA



COMBINATION
SOLAR THERMAL



WI - FI
STANDARD



HANDLING
FACILITATED



INSTALLATION
PLUG AND PLAY



COMPRESSOR
DC INVERTER



CIRCULATOR
DC INVERTER



PdC
CALDAIA
HYBRID
SYSTEM



POWER
RENEWABLE



COMBINATION
PHOTOVOLTAIC



R32
GAS
ECOLOGICAL

PLUS EVO MONOBLOCCO HYBRID, thanks to the use of a puffer equipped with a rapid finned copper DHW exchanger, it is able to deliver large quantities of domestic hot water without the need to carry out anti-legionella thermal shock cycles, in fact this innovative system uses the first in method - firsts out which guarantees maximum hygiene of the sanitary circuit, definitively eliminating the problem of limescale deposits.

This product can be combined with a forced circulation solar thermal system (optional) which acts as an integration for the production of DHW and for winter air conditioning.

The system can be equipped with a second inverter electronic circulator (optional) factory installed inside the storage unit to power a second air conditioning circuit. PLUS EVO HYBRID MONOBLOCK, is equipped with all the hydraulic components necessary for the correct functioning of the system, all installed and tested in the factory.

Model of internal technical inertial storage units (puffer) U.I.	Code	€
Indoor unit PLUS EVO MONOBLOCCO HYBRID 315 LT / 20	37308080	6.980,00
Indoor unit PLUS EVO MONOBLOCCO HYBRID 315 LT / 24	37308081	7.080,00
Indoor unit PLUS EVO MONOBLOCCO HYBRID 315 LT / 32	37308082	7.180,00
Indoor unit PLUS EVO MONOBLOCCO HYBRID 315 LT / 34	37308083	7.300,00








Model of monobloc HP outdoor units U.E. with ATC technical inertial storage and standard diverter valve	Thermal Power kW	Refrigeration power kW	Code	€
HPE EVO 5 + ATC	6,50	6,50	37961000	6.500,00
HPE EVO 7 + ATC	8,40	8,30	37961001	7.316,00
HPE EVO 9 + ATC	10,00	10,00	37961002	7.536,00
HPE EVO 12 + ATC	12,20	12,20	37961003	10.618,00
HPE EVO 14 + ATC	14,10	13,90	37961004	10.676,00
HPE EVO 16 + ATC	16,00	15,40	37961005	11.008,00
HPE EVO 12T + ATC	12,20	12,20	37961006	10.916,00
HPE EVO 14T + ATC	14,10	13,90	37961007	11.002,00
HPE EVO 16T + ATC	16,00	15,40	37961008	11.280,00

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Solar thermal kit PLUS EVO MONOBLOCCO HYBRID	Code	€
KIT SOLAR HR 1 x 2.0 pitched roof	37308030	2.686,00
KIT SOLAR HR 1 x 2.0 flat roof	37318030	2.646,00
KIT SOLAR HR 1 x 2.5 pitched roof	37308031	2.836,00
KIT SOLAR HR 1 x 2.5 flat roof	37318031	2.824,00
KIT SOLAR HR 2 x 2.0 pitched roof	37308032	3.710,00
KIT SOLAR HR 2 x 2.0 flat roof	37318032	3.602,00
KIT SOLAR HR 2 x 2.5 pitched roof	37308033	4.064,00
KIT SOLAR HR 2 x 2.5 flat roof	37318033	3.968,00
KIT SOLAR HR 3 x 2.0 pitched roof	37308034	4.830,00
KIT SOLAR HR 3 x 2.0 flat roof	37318034	4.734,00
KIT SOLAR HR 3 x 2.5 pitched roof	37308035	5.404,00
KIT SOLAR HR 3 x 2.5 flat roof	37318035	5.308,00

Solar thermal kits to combine with PLUS EVO MONOBLOCCO HYBRID

						
collector solar BLUH+	kit anchoring BLUH+	SOLAR STATION UNIT 2 PLUS	control box CONTROL MULTI 06 S	expansion solar tank	kit fittings of string	kit glycol antifreeze
KIT SOLAR HR PLUS 2.0 m² - N. 1 BLUH+ collector 2.0 m ² - BLUH+ 2.0 m ² anchoring kit - 2-way solar station mod. UNIT 2 PLUS - CONTROL MULTI 06 S solar control unit - 12 liter expansion vessel - String fittings kit - Glycol antifreeze (1 3 liter canister)	KIT SOLAR HR PLUS 2.5 m² - N. 1 BLUH+ collector 2.5 m ² - BLUH+ 2.5 m ² anchoring kit - 2-way solar station mod. UNIT 2 PLUS - CONTROL MULTI 06 S solar control unit - 18 liter expansion vessel - String fittings kit - Glycol antifreeze (1 4 liter canister)	KIT SOLAR HR PLUS 2 x 2.0 m² - N. 2 BLUH+ 2.0 m ² collectors - Anchoring kit 2 BLUH+ 2.0 m ² - 2-way solar station mod. UNIT 2 PLUS - CONTROL MULTI 06 S solar control unit - 25 liter expansion vessel - String fittings kit (1 string-2 collectors) - Antifreeze glycol (2 3-litre cans)				
KIT SOLAR HR PLUS 2 x 2.5 m² - N. 2 BLUH+ 2.5 m ² collectors - Anchoring kit 2 BLUH+ 2.5 m ² - 2-way solar station mod. UNIT 2 PLUS - CONTROL MULTI 06 S solar control unit - 25 liter expansion vessel - String fittings kit (1 string-2 collectors) - Antifreeze glycol (2 4 liter cans)	KIT SOLAR HR PLUS 3 x 2.0 m² - N. 3 BLUH+ 2.0 m ² collectors - Anchor kit 3 BLUH+ 2.0 m ² - 2-way solar station mod. UNIT 2 PLUS - CONTROL MULTI 06 S solar control unit - 40 liter expansion vessel - String fittings kit (1 string-3 collectors) - Antifreeze glycol (3 3-litre cans)	KIT SOLAR HR PLUS 3 x 2.5 m² - N. 3 BLUH+ 2.5 m ² collectors - Anchor kit 3 BLUH+ 2.5 m ² - 2-way solar station mod. UNIT 2 PLUS - CONTROL MULTI 06 S solar control unit - 40 liter expansion vessel - String fittings kit (1 string-3 collectors) - Antifreeze glycol (3 4 liter cans)				

PLUS EVO MONOBLOCCO HYBRID

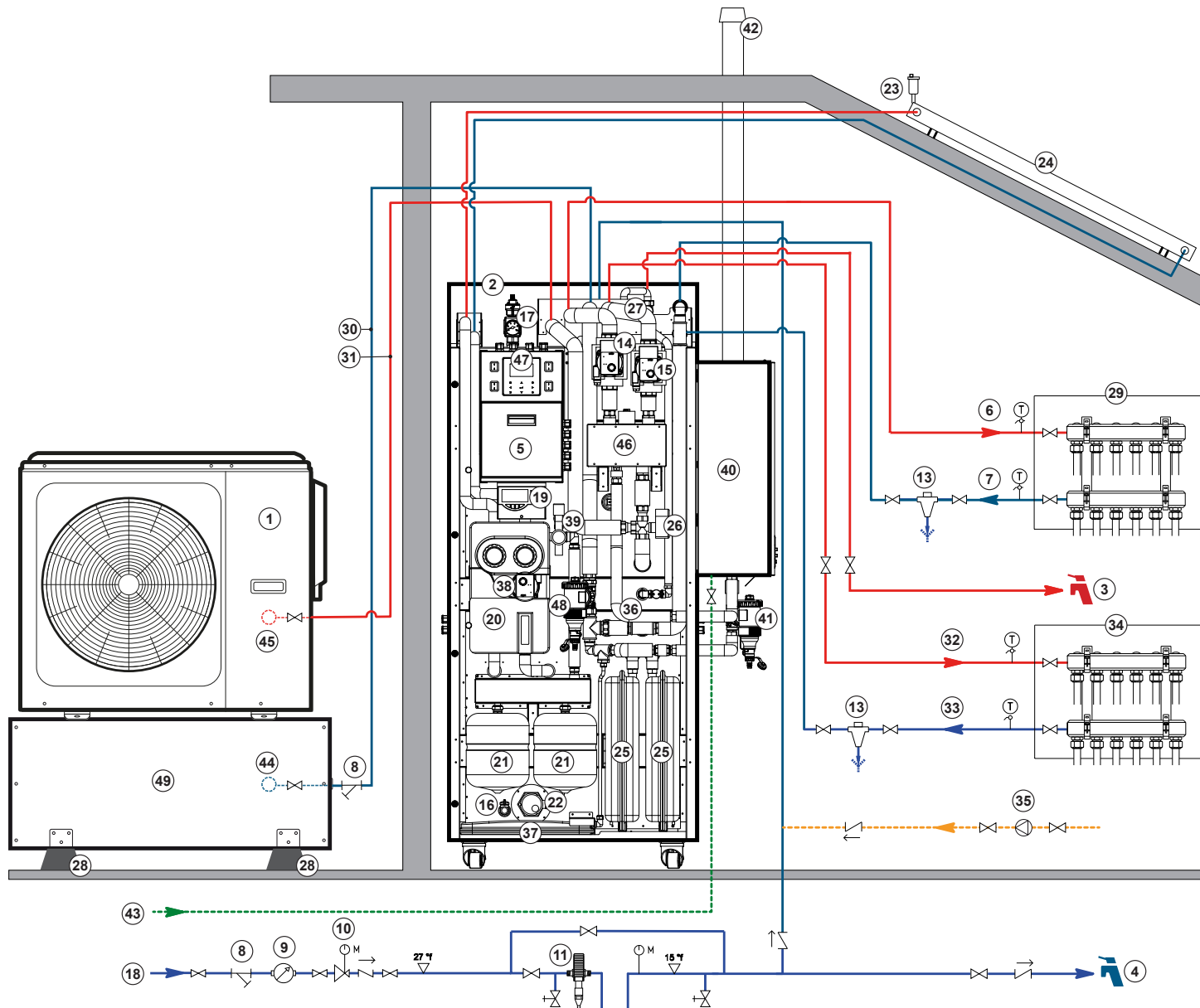
High efficiency factory made hybrid system with monobloc hydronic heat pump for production domestic hot water, heating and air conditioning for medium users with or without solar thermal integration

Accessories PLUS EVO MONOBLOCCO HYBRID		Code	€
	"Y" mechanical brass filter with removable metal mesh	INCLUDED	
	Magnetic dirt separators for the Monobloc HP and for the back-up condensing boiler, both pre-assembled in the factory in the internal unit and connections	INCLUDED	
	ATC accumulation support Omega in galvanized sheet metal	75100043	80,00
	Anti-vibration floor base in vulcanized rubber (height from the ground 95 mm, length 600 mm)	75100042	120,00
	Second air conditioning system pump kit	75101034	490,00
	Domestic hot water recirculation inverter electronic circulator with brass body max flow rate 0.4 m3/h max head 1.0 m	35006004	260,00
	Forced circulation solar thermal exchanger with 1.50 m2 exchange surface	75101002	644,00
	230 V single-phase integrative electrical resistance, IP 65 protection rating for external ATC puffer	mod. 2000 W mod. 3000 W	75050103 75060300 220,00 240,00
	Automatic antifreeze valve, brass body, opening temperature 3 °C	mod. 1" mod. 1" 1/4	30403144 30403145 184,00 196,00
	Coaxial vertical outlet Ø 60/100 with smoke extraction	30403124	32,00
	Coaxial starting curve Ø 60/100 at 90° with smoke extraction	30403123	38,00
	Separate duct kits Ø 80/80 with smoke extraction	30403022	50,00
	Curve 90° Ø 80 M/F	30403013	8,00
	Curve 45° Ø 80 M/F	30403012	8,00
	Extension Ø 80 M/F = 1000 mm	30403011	10,00
	Curve 90° coaxiale Ø 60/100 M/F	30403004	38,00
	Curve 45° coaxial Ø 60/100 M/F	30403003	30,00
	Coaxial extension Ø 60/100 M/F = 1000 mm	30403002	28,00
	Coaxial fume exhaust kit Ø 60/100	30403000	60,00
	Coaxial roof terminal Ø 60/100	30403014	144,00

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Application example PLUS EVO MONOBLOCCO HYBRID 7/24



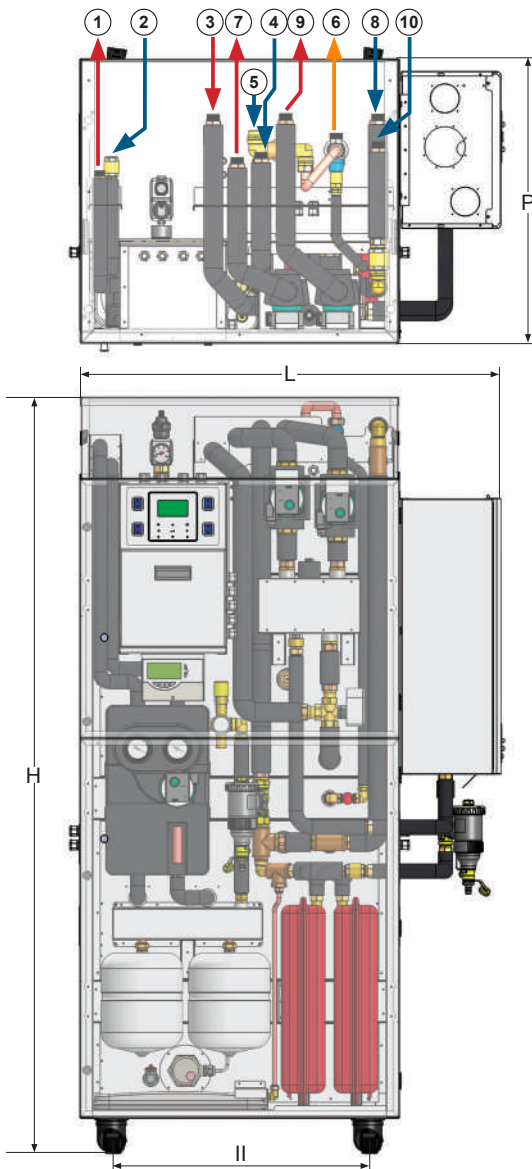
- 1 HPE EVO 7 external unit
- 2 Inertial accumulation of technical water (puffer) of 315 litres equipped with a 4.54 m² finned copper DHW exchanger
- 3 Domestic hot water delivery
- 4 Domestic cold water delivery
- 5 Electrical command and control panel
- 6 Technical water delivery 1st fan coil circuit
- 7 Technical water return to 1st fan coil circuit
- 8 "Y" mechanical filter
- 9 Aqueduct volumetric meter
- 10 Water network pressure reducer
- 11 Water network sand trap filter
- 12 Volumetric softener
- 13 Magnetic dirt separator
- 14 Inverter circulator 1st fan coil circuit
- 15 Inverter circulator 2nd fan coil circuit
- 16 1/2" F accumulation emptying tap
- 17 Safety group consisting of pressure gauge, valve air vent joker and 3 bar system safety valve
- 18 Water mains inlet
- 19 Digital solar control unit 0-10V CONTROL MULTI 06 S
- 20 UNIT 2 PLUS solar station
- 21 8 liter solar expansion tank
- 22 Supplementary electric resistance 2 kW
- 23 Jolly solar thermal air vent valve
- 24 BLUH+ / BLUHX+ solar collector

- 25 8 liter puffer expansion vessel
- 26 Motorized diverter valve to manage priority of domestic hot water production
- 27 Anti-scald DHW mixing valve
- 28 Vulcanized rubber anti-vibration base
- 29 1st fan coil system system manifold
- 30 E.U. return hydronic line 1"
- 31 EU delivery hydronic line. 1"
- 32 Technical water delivery 2nd fan coil circuit
- 33 Technical water return to 2nd fan coil circuit
- 34 2nd fan coil system system manifold
- 35 DHW recirculation pump
- 36 System filling group
- 37 6 liter system expansion tank
- 38 Inverter solar circulator
- 39 Forced circulation solar system safety group
- 40 24 kW modulating condensing boiler
- 41 Boiler self-cleaning magnetic dirt separator (standard)
- 42 Coaxial smoke evacuation duct 60/100 mm
- 43 Gas inlet G20 - G25 - G31
- 44 Return connection 1" F, U.E. HPE EVO 7
- 45 Delivery connection 1" F, U.E. HPE EVO 7
- 46 Hydraulic separator for secondary circulators
- 47 Electronic command and control unit
- 48 Self-cleaning magnetic dirt separator U.E. HPE EVO 7 (standard)
- 49 ATC inertial technical storage (standard)

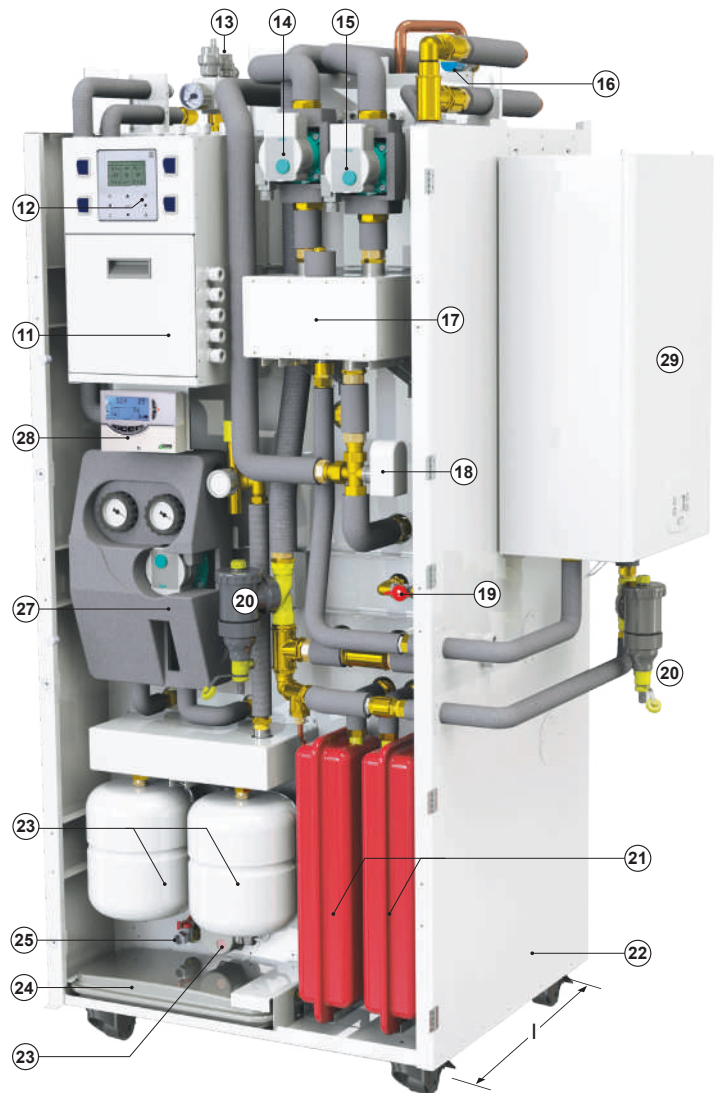
PLUS EVO MONOBLOCCO HYBRID

Patented high efficiency factory made hybrid heat pump system with direct refrigerant/water exchange to produce domestic hot water and heating for medium users with or without solar thermal integration

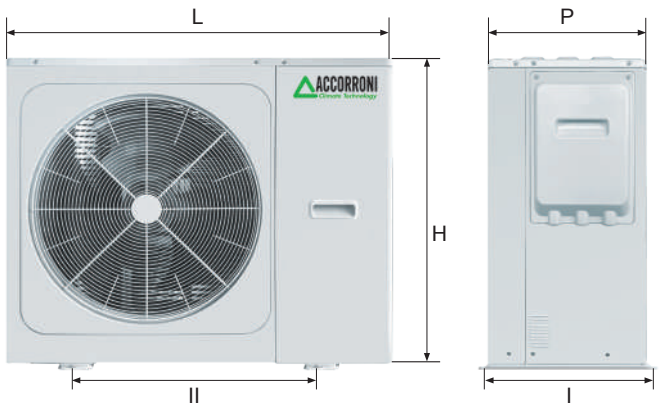
Dimensions U.I. PLUS EVO MONOBLOCCO HYBRID



Axonometric view U.I. PLUS EVO MON. HYBRID



Dimensions outdoor unit HPE EVO



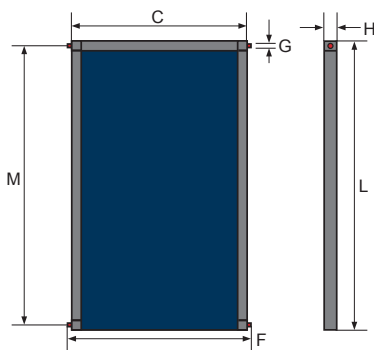
Model	L	H	D	I	II	Weight
	mm	mm	mm	mm	mm	kg
PLUS EVO MONOBLOCCO (U.I.)	964	1834	462	300	645	182
HPE EVO 5÷16T (U.E.)	1068	865	450	458	656	87

- 1-2 Flow and return solar thermal system 3/4" M
- 3 EU delivery hydronic line connection. HPE EVO
- 4 EU return hydronic line connection HPE EVO
- 5 Domestic cold water inlet 1" M
- 6 Mixed domestic hot water delivery 1" M
- 7 1st air conditioning circuit delivery 1" M
- 8 1st air conditioning circuit return 1" M
- 9 2nd air conditioning circuit flow 1" M
- 10 2nd air conditioning circuit return 1" M
- 11 Electrical panel with connection terminal block for U.E.
- 12 Electronic command and control unit
- 13 Safety group consisting of pressure gauge, jolly valve air vent and 3 bar system safety valve
- 14 E.C. circulator for the 1st climate control circuit (standard)
- 15 E.C. circulator for the 2nd climate control circuit (optional)
- 16 Anti-scald DHW mixing valve
- 17 Hydraulic separator for secondary circulators
- 18 Motorized diverter valve for DHW management
- 19 Manual puffer filling group
- 20 Self-cleaning magnetic dirt separator (standard)
- 21 8 liter puffer expansion vessel
- 22 Inertial accumulation of technical water (puffer) of 315 litres equipped with a 4.54 m² finned copper DHW exchanger
- 23 2 kW supplementary electrical resistance
- 24 6 liter system expansion vessel
- 25 Accumulation emptying tap
- 26 8 liter solar expansion vessel
- 27 UNIT 2 PLUS solar station
- 28 Digital solar control unit 0-10V CONTROL MULTI 06 S
- 29 Support modulating condensing boiler

PLUS EVO MONOBLOCCO HYBRID

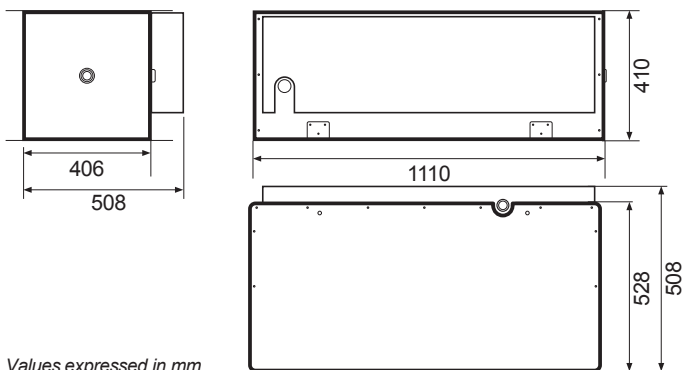
Patented high efficiency factory made hybrid heat pump system with direct refrigerant/water exchange to produce domestic hot water and heating for medium users with or without solar thermal integration **Solar**

collector dimensions and dimensions BLUH+ - BLUHX+ (vertical installation)



Mod.	U.M.	BLUH+	BLUHX+
L	mm	1987	1987
C	mm	984	1270
H	mm	100	100
M	mm	1876	1876
G	mm	22	22
F	mm	1050	1340
Weight	Kg	32	42

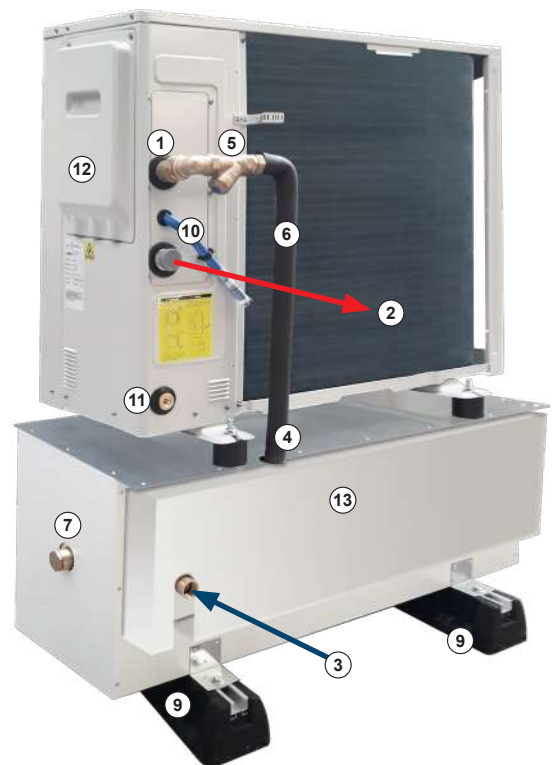
ATC 75 liter technical inertial storage for hot and chilled technical water (included)



Values expressed in mm

Model	U.M.	ATC
Useful capacity	l	75
Insulation thickness	mm	50
Thermal conductivity coefficient	W/mK	0,033
Max operating temp	°C	60
Max working pressure	bar	3
Max testing pressure	bar	6
Empty weight	kg	65
Operating weight	kg	140

Hydraulic connection instructions for ATC 75 liter technical inertial storage tank (included)



- 1 By-pass input
- 2 I.U. delivery PLUS EVO MONOBLOCK HYBRID
- 3 Return U.I. PLUS EVO MONOBLOCK HYBRID
- 4 By-pass output
- 5 "Y" filter 1"/1"1/4 (standard)
- 6 By-pass pipe 1" (HPE EVO 5/7/9) 1"1/4 (HPE EVO 12/14/16) 7 Additional connection for electric resistance (1" 1/2 F)

- 8 75 liter technical inertial storage (puffer).
- 9 Vulcanized rubber anti-vibration base (optional)
- 10 Safety valve drain
- 11 Condensate drain
- 12 Electrical connection board
- 13 Technical compartment cover box with valve inside motorized diverter for the management of sanitary priority

PLUS EVO MONOBLOCCO HYBRID

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Domestic Hot Water sampling table PLUS EVO 5 MONOBLOCCO HYBRID

DESCRIPTION	DHW available in a single withdrawal (l.)	Recovery time (minutes)
Inlet water 15 °C - external temperature -7 °C	286,6	59
Inlet water 15 °C - external temperature 0 °C	290,1	54
Inlet water 15 °C - external temperature +7 °C	292,6	51
Inlet water 15 °C - external temperature +15 °C	297,9	46

Domestic Hot Water sampling table PLUS EVO 7 MONOBLOCCO HYBRID

DESCRIPTION	DHW available in a single withdrawal (l.)	Recovery time (minutes)
Inlet water 15 °C - external temperature -7 °C	297,3	45
Inlet water 15 °C - external temperature 0 °C	301,8	41
Inlet water 15 °C - external temperature +7 °C	304,3	39
Inlet water 15 °C - external temperature +15 °C	310,8	35

Domestic Hot Water sampling table PLUS EVO 9 MONOBLOCCO HYBRID

DESCRIPTION	DHW available in a single withdrawal (l.)	Recovery time (minutes)
Inlet water 15 °C - external temperature -7 °C	306,2	38
Inlet water 15 °C - external temperature 0 °C	311,6	35
Inlet water 15 °C - external temperature +7 °C	314,7	33
Inlet water 15 °C - external temperature +15 °C	322,4	30

Domestic Hot Water sampling table PLUS EVO 12/12T MONOBLOCCO HYBRID

DESCRIPTION	DHW available in a single withdrawal (l.)	Recovery time (minutes)
Inlet water 15 °C - external temperature -7 °C	318,6	31
Inlet water 15 °C - external temperature 0 °C	325,1	29
Inlet water 15 °C - external temperature +7 °C	328,8	27
Inlet water 15 °C - external temperature +15 °C	338,3	24

Domestic Hot Water sampling table PLUS EVO 14/14T MONOBLOCCO HYBRID

DESCRIPTION	DHW available in a single withdrawal (l.)	Recovery time (minutes)
Inlet water 15 °C - external temperature -7 °C	329,2	30
Inlet water 15 °C - external temperature 0 °C	336,8	25
Inlet water 15 °C - external temperature +7 °C	341,1	23
Inlet water 15 °C - external temperature +15 °C	352,0	21

Domestic Hot Water sampling table PLUS EVO 16/16T MONOBLOCCO HYBRID

DESCRIPTION	DHW available in a single withdrawal (l.)	Recovery time (minutes)
Inlet water 15 °C - external temperature -7 °C	339,9	24
Inlet water 15 °C - external temperature 0 °C	348,4	22
Inlet water 15 °C - external temperature +7 °C	353,3	21
Inlet water 15 °C - external temperature +15 °C	365,7	19

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PLUS EVO MONOBLOCCO HYBRID

High efficiency factory made hybrid system with monobloc hydronic heat pump for production domestic hot water, heating and air conditioning for medium users with or without solar thermal integration

Heat pump technical data table PLUS EVO MONOBLOCCO HYBRID

Model	U.M.	5	7	9	12-12T	14-14T	16-16T	
HEATING (1)	Thermal power	kW	6,50	8,40	10,00	12,20	14,10	16,00
	Absorbed power	kW	1,22	1,66	2,12	2,49	3,00	3,55
	COP	W/W	5,30	5,05	4,70	4,90	4,70	4,50
HEATING (2)	Thermal power	kW	6,30	8,20	9,40	12,00	14,00	16,00
	Absorbed power	kW	1,96	2,60	3,03	4,00	4,74	5,61
	COP	W/W	3,20	3,15	3,10	3,00	2,95	2,85
COOLING (3)	Refrigeration power	kW	6,50	8,30	10,00	12,20	13,90	15,40
	Absorbed power	kW	1,27	1,71	2,32	2,65	3,15	3,66
	EER	W/W	5,10	4,85	4,30	4,60	4,40	4,20
COOLING (4)	Refrigeration power	kW	5,50	7,40	9,00	11,60	13,40	14,00
	Absorbed power	kW	1,69	2,34	3,10	3,74	4,57	4,82
	EER	W/W	3,25	3,15	2,90	3,10	2,93	2,90
Seasonal thermal efficiency class in heating (5)	LWT at 35 °C		A+++	A+++	A+++	A+++	A+++	A+++
	LWT at 55 °C		A++	A++	A++	A++	A++	A++
SCOP (5)	LWT at 35 °C		5,12	5,17	5,12	5,08	4,89	4,84
	LWT at 55 °C		3,59	3,67	3,71	3,61	3,62	3,59
SEER (5)	LWT at 7 °C		5,09	5,19	5,08	5,07	5,09	5,11
	LWT at 18 °C		7,81	8,09	8,31	7,79	7,59	7,49
Sound power level (6)	dB(A)	60	63	65	70	72	72	
External fan Air flow	m³/h	3900	4500	4500	5200	5200	5200	
Electrical supply		230V/50/Hz			230V/50/Hz - 400V/3+N/50Hz only for models T (threephase)			
Water pipe connections		1"	1"	1"	1"1/4	1"1/4	1"1/4	
Pressure set in the safety valve	MPa	0,3						
Total volume of water	l	5						
Nominal head circulator	m c.a.	5	5	5	9	9	9	
Operation limits	Cooling	°C	-5 / +43					
	Heating	°C	-25 / +35					
	DHW	°C	-25 / +43					
LWT range	Cooling	°C	+5 / +30					
	Heating	°C	+12 / +65					
	DHW	°C	+10 / +60					
Refrigerant	Type (GWP)		R32 (675)					
	Volume loaded	Kg	1,25					
Expansion valve		Electronic						
Net dimensions (WxHxD)	mm	1040 x 865 x 410						
Dimensions with packaging	mm	1190 x 970 x 560						
(WxHxD) Net / gross weight	Kg	87 / 103						

1) External air temperature 7 °C DB, 85% R.H.; EWT 30°C, LWT 35°C.

2) External air temperature 7 °C DB, 85% R.H.; EWT 47°C, LWT 55°C.

3) External air temperature 35 °C DB; EWT 23°C, LWT 18°C.

4) External air temperature 35 °C DB; EWT 12°C, LWT 7°C.

5) Seasonal energy efficiency for heating (average climate)

6) Maximum sound power level tested in conditions of:

a) Heating with external air temperature 7 °C DB, 6 °C WB; EWT 30°C, LWT 35°C;

b) Heating with external air temperature 7 °C DB, 6 °C WB; EWT 47 °C, LWT 55 °C;

c) Cooling with external air temperature 35 °C DB, 24 °C WB; EWT 12 °C, LWT 7 °C.

Internal Unit technical data table PLUS EVO MONOBLOCCO HYBRID

DESCRIPTION	U.M.	PLUS EVO MONOBLOCCO HYBRID 315 LT (U.I.)
Internal unit technical water content	l	315
Max flow rate of inverter electronic circulator	m³/h	3,3
Max inverter electronic circulator head	m	6,2
Electrical absorption of inverter electronic circulator	W	3 - 45
Volume of system expansion vessels/puffer	l	6 / 8 + 8
Preload expansion tank	bar	1
Safety valve calibration	bar	3
Insulation type		High density extruded expanded polystyrene
Insulation thickness	cm	5
Cold water inlet and DHW outlet hydraulic connections		1" M
System delivery and return hydraulic connections		1" M (mod. 5-7-9) 1"1/4 (mod. 12-14-16)
Thermal dispersion of internal unit accumulations	kWh/24h	1,82
Transport / operating weight	kg	182 / 497

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Boiler technical data table PLUS EVO MONOBLOCCO HYBRID

DESCRIPTION	U.M.	20	24	32	34
Device category		II2H3P			
Minimum heat output of the boiler in methane gas heating G20	kW	2,8	2,8	3,4	3,4
Maximum heat output of the boiler in methane gas heating G20	kW	20,0	24,0	32,0	34,5
Minimum heat output of the boiler in LPG gas heating	kW	2,8	2,8	3,4	3,4
Maximum heat output of the boiler in LPG gas heating	kW	20,0	24,0	32,0	34,5
Minimum thermal power in heating (80-60 °C) G20 methane gas	kW	2,5	2,5	3,3	3,3
Maximum thermal power in heating (80-60 °C) G20 methane gas	kW	19,2	23,7	31,3	33,3
Minimum thermal power in heating (80-60 °C) LPG gas	kW	2,5	2,5	3,3	3,3
Maximum thermal power in heating (80-60 °C) LPG gas	kW	19,2	23,7	31,3	33,3
Minimum thermal power in heating (50-30 °C) methane gas G20	kW	2,9	2,9	3,5	3,5
Maximum thermal power in heating (50-30 °C) G20 methane gas	kW	20,7	24,9	35,1	36,1
Minimum boiler heat output in heating (50-30 °C) LPG gas	kW	2,9	2,9	3,5	3,5
Maximum boiler heat output in heating (50-30 °C) LPG gas	kW	20,7	24,9	35,1	36,1
Supply pressure for boiler powered by G20 methane gas	mbar	20			
LPG gas boiler supply pressure	mbar	30/37			
Diaphragm diameter of boiler powered by G20 methane gas	mm	5,6	5,6	6,3	6,3
Diaphragm diameter of boiler powered by LPG gas	mm	5,6	5,6	6,3	6,3
Minimum CO2 emission from boiler powered by G20 methane gas		8,5%	9,3%	8,4%	8,5%
Maximum CO2 emission from boiler powered by G20 methane gas		9,5%	9,8%	10,6%	9,5%
Minimum CO2 emission boiler powered by LPG gas		10,0%	10,4%	10,5%	10,0%
Maximum CO2 emission from boiler powered by LPG gas		10,9%	10,7%	10,6%	10,9%
Minimum pressure of the heating circuit	bar	0,5			
Maximum pressure of the heating circuit	bar	3			
Useful thermal efficiency of the boiler at maximum power (60/80 °C)		95,8%	98,8%	97,1%	97,3%
Useful thermal efficiency of the boiler at maximum power (30/50 °C)		103,4%	103,7%	109,8%	104,5%
Useful thermal efficiency of the boiler at minimum power (60/80 °C)		90,0%	90,0%	95,7%	95,7%
Useful thermal efficiency of the boiler at minimum power (30/50 °C)		102,1%	102,1%	103,5%	103,5%
Useful thermal efficiency of the boiler at 30% of the load		109,8%	109,8%	110,7%	110,0%
NOx emission class		6			
NOx emission	mg/kWh	23	23	55	55
Fume temperature at max. power	°C	70,0	70,0	74,5	74,5
Max operating temperature in heating	°C	85,0			
Methane gas consumption at maximum flow rate in heating ⁽¹⁾	m ³ /h	2,08	2,54	3,37	3,55
LPG consumption at maximum flow rate in heating ⁽¹⁾	m ³ /h	0,64	0,75	0,97	1,35
Seasonal space heating boiler energy efficiency	%	92,0			
Useful efficiency at nominal thermal power. (high temperature) ⁽²⁾	%	86,3	86,4	86,7	87,6
Useful efficiency at 30% of the nominal thermal power. (low temperature) ⁽³⁾	%	96,4			
Heat loss in boiler stand-by	kW	0,069	0,069	0,071	0,069
Boiler annual energy consumption	GJ	11,0	42,2	62,7	103,4
Boiler seasonal energy efficiency class		A			
Expansion vessel volume	l	6	9		
Puffer delivery/return connections		3/4"			
G20/LPG methane gas inlet connection		3/4"			
Boiler condensate drain hose diameter	mm	22			
Coaxial smoke extraction duct diameter	mm	60/100			
Diameter of double rope evacuation ducts	mm	80			
Power supply		230V/1/50Hz			

⁽¹⁾ Value referred to the temperature of 15 °C external and 1013 mbar

⁽²⁾ High temperature regime with 60 °C return and 80 °C delivery

⁽³⁾ Low temperature regime 30 °C (return temperature at the boiler inlet)