

# SPHERA EVO 2.0 EASYHYBRID BOX

SQKN-YEE 1 BH + MiSAN-YEE 1 S 2.1÷8.1

Wall-mounted air-to-water Refrigerant-split hybrid heat pump for heating, cooling and domestic hot water production

## ENERGY SAVING



Solar integration  
(optional - DHW tank)



Cascade



€-Switch

## COMFORT



Hot  
Cold



DHW



Silent

## CONVENIENCE



Weekly Timer



Contemporaneity



Instant DHW

## MANAGEMENT AND CONNECTIVITY



Input ON/OFF



Port  
Modbus



Control  
via App



management  
Control4 NRG



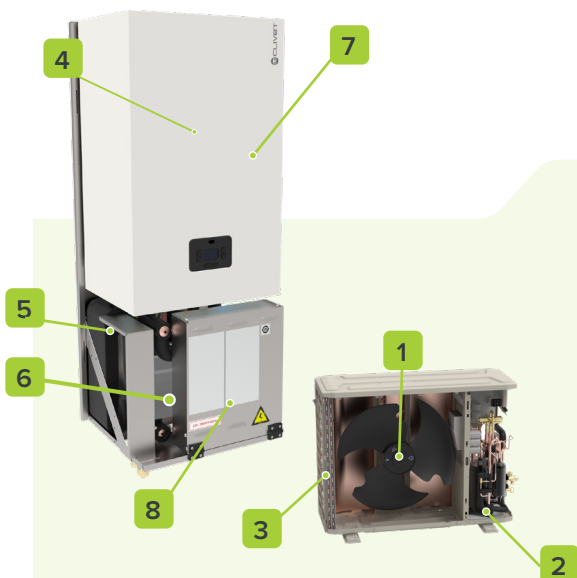
Clivet Eye  
monitoring



- ✓ Ideal for replacing old systems while keeping existing radiators
- ✓ Perfect for replacing a boiler: designed with similar overall dimensions
- ✓ 24 or 34 kW boiler to fulfil all requirements, with instant DHW production
- ✓ Simultaneous heating and cooling operation and DHW supply
- ✓ Connectivity and APP to keep the system under control

## The €/Switch function

SPHERA EVO 2.0 EASYHybrid Box has a function that can be selected directly from the interface, which makes it possible to calculate the resource (heat pump and/or boiler) that is able to fulfil the heat demand with the lowest economic cost in every operating condition. To use the €-Switch function, simply enter the cost per kWh of electricity and the cost per m<sup>3</sup> of methane gas from the energy provider's supply contract, and define the main type of terminals in the building (radiant panel, fan coil, radiator).



1. Inverter DC fan
2. Inverter DC twin-rotary compressor
3. Air-gas finned exchanger (blue fin treatment)
4. Instantaneous condensing boiler
5. Gas/water plate exchanger
6. Inverter DC high efficiency pump
7. 8- or 10-litre system expansion tank
8. Electrical control panel

## configurations

OUTDOOR UNIT POWER SUPPLY (SIZES 6.1 TO 8.1):








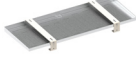












220M Power supply 230/1/20 (standard)  
400TN Power supply 400/3/50+N

INTEGRATED CONDENSING BOILER:

HYFE24 24 kW instantaneous boiler  
HYFE34 34 kW instantaneous boiler

*Note: boiler to be selected separately*

## accessories

	ACS200X	200 liter DHW tank		CCOAX	90° coaxial curve for suction and flue gas discharge, 360° adjustable (d. 60/100 mm)		
	ACS300X	300 liter DHW tank			TCOAX	1 m coaxial pipe with terminal (d. 60/100 mm)	
	ACS500X	500 liter DHW tank				VDACSX	Thermostated diverter valve for DHW
	SRICX	Additional PCB for 2-zone management				3DHWX	3-way deviating valve for system/ DHW 1" connections
	KCSX	Kit for secondary circuit (1 liter circuit breaker + circulation pump + management PCB)				DTX	Drain pan with antifreeze electrical heater
	SCS08X	Solar coil for ACS200X/ACS300X DHW tank				APAVX	Kit of antivibration mounts for floor installation
SCS12X	Solar coil for ACS500X DHW tank		KIRE2HLX			Two-zone distribution kit management PCB: direct + mixed	
	KIRE2HX		Two-zone distribution kit management PCB: direct + direct		KSIPX	Kit with wall fixing brackets	
			DI50-2X		50 liter hydraulic separator		HTC2WX
	ACI40X	40 liter system inertial storage tank					SWCX
	KSDFX	Splitter for suction and flue gas discharge (d. 80/80 mm)					
	KCSAFX	Vertical coaxial fitting for smoke intake and discharge (d. 60/100 mm)					

## technical data

Size				2.1		3.1		4.1		5.1		6.1		7.1		8.1		
				HYFE boiler		24	34	24	34	24	34	24	34	34	34	34	34	
Heating	Capacity	Water 35/30 °C	Nominal / Maximum	kW	4,32 / 6,26	6,18 / 7,41	8,30 / 9,11	10,1 / 10,3	12,1 / 14,6	14,5 / 15,5	16,0 / 16,8							
	COP	Outdoor air 7 °C	Nominal	-	5,42	5,21	5,31	5,01	5,00	4,70	4,55							
	Capacity	Water 35/30 °C	Nominal / Maximum	kW	4,17 / 6,25	6,05 / 6,97	7,33 / 8,35	8,20 / 9,30	10,5 / 13,9	12,2 / 14,1	13,4 / 14,3							
	COP	Outdoor air -7 °C	Nominal	-	3,16	3	3,23	3,07	3,13	2,82	2,74							
Heat pump	Capacity	Water 45/40 °C	Nominal / Maximum	kW	4,16 / 5,96	6,03 / 7,13	8,22 / 8,98	10,0 / 10,3	12,3 / 14,5	14,0 / 15,7	16,0 / 16,6							
	COP	Outdoor air 7 °C	Nominal	-	3,93	3,83	3,95	3,86	3,80	3,65	3,60							
Heating Heat pump	Nominal Heating capacity (LHV)	Water 80/60 °C	Nominal	kW	<b>24,0 34,0</b>	<b>24,0 34,0</b>	<b>24,0 34,0</b>	<b>24,0 34,0</b>	<b>34,0 34,0</b>	<b>34,0 34,0</b>	<b>34,0 34,0</b>							
	Efficiency		Nominal	%	97,8 97,7	97,8 97,7	97,8 97,7	97,8 97,7	97,7	97,7	97,7							
Cooling	Capacity	Water 18/23 °C	Nominal / Maximum	kW	<b>4,55 / 6,88</b>	<b>6,44 / 7,65</b>	<b>8,10 / 11,1</b>	<b>10,0 / 12,0</b>	<b>12,1 / 15,0</b>	<b>13,8 / 15,3</b>	<b>14,8 / 16,4</b>							
	EER	Outdoor air 35 °C	Nominal	-	6,08	5,24	5,12	4,77	4,02	3,70	3,65							
	Capacity	Water 7/12 °C	Nominal / Maximum	kW	4,26 / 6,14	6,25 / 6,39	7,46 / 7,94	9,10 / 9,10	11,8 / 11,8	12,9 / 12,9	14,2 / 14,2							
	EER	Outdoor air 35 °C	Nominal	-	3,50	3,09	3,33	3,09	2,75	2,55	2,45							
ACS Boiler	Capacity		Maximum	kW	24,0 34,0	24,0 34,0	24,0 34,0	24,0 34,0	34,0	34,0	34,0	34,0	34,0	34,0	34,0	34,0	34,0	
	Specific flow rate	Water with ΔT=30 °C in 10 minutes		l/min	13,5 16,0	13,5 16,0	13,5 16,0	13,5 16,0	16,0	16,0	16,0	16,0	16,0	16,0	16,0	16,0	16,0	
Electrical power for meter sizing				kW	2,20	2,60	3,30	3,60	5,40	5,70	6,10							
Seasonal efficiency	Heating			Energy class	-	<b>A++</b>	<b>A++</b>	<b>A++</b>	<b>A++</b>	<b>A++</b>	<b>A++</b>	<b>A++</b>	<b>A++</b>	<b>A++</b>	<b>A++</b>	<b>A++</b>	<b>A++</b>	
	Water 55 °C			Annual energy consumption	kWh/year	2.542	3.283	3.824	4.749	6.793	7.380	7.915						
				SCOP	-	3,32	3,54	3,72	3,73	3,56	3,52	3,48						
				ηs (seasonal output)	%	130	138	146	146	139	138	136						
	Medium climate			Energy class	-	<b>A+++</b>	<b>A+++</b>	<b>A+++</b>	<b>A+++</b>	<b>A+++</b>	<b>A+++</b>	<b>A+++</b>	<b>A+++</b>	<b>A+++</b>	<b>A+++</b>	<b>A+++</b>	<b>A+++</b>	<b>A+++</b>
	Water 35 °C			Annual energy consumption	kWh/year	2.161	2.502	3.141	3.747	4.994	5.868	6.602						
DHW Boiler				SCOP	-	5,13	5,15	5,32	5,27	5,00	4,91	4,89						
				ηs (seasonal output)	%	202	203	210	208	196	193	193						
				Energy class	-	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	<b>A</b>	
				Withdrawal profile	-	XL	XXL	XL	XXL	XL	XXL	XXL	XXL	XXL	XXL	XXL	XXL	
<b>Size - Indoor unit</b>						<b>A</b>				<b>B</b>		<b>C</b>		<b>D</b>				
Power supply	Voltage/Frequency/Phases			V/Hz/n°					230/50/1									
Water flow-rate	Water 35/30 °C	Nominal	l/s	0,21	0,30	0,41	0,49	0,57	0,67	0,75								
Pump available pressure	Outdoor air 7 °C	Nominal	kPa	31,2	36,5	33,1	31,0	25,7	31,7	22,6								
Minimum system water content				l					40									
Expansion tank capacity				l					8 (HYFE24) / 10 (HYFE34)									
Sound power	Operation:	Nominal		dB(A)	41 / 46	41 / 46	41 / 46	41 / 46	41 / 46	41 / 46	41 / 46	41 / 46	41 / 46	41 / 46	41 / 46	41 / 46		
Sound pressure @1m	heat pump only / heat pump + boiler	Nominal		dB(A)	28 / 33	28 / 33	28 / 33	28 / 33	28 / 33	28 / 33	28 / 33	28 / 33	28 / 33	28 / 33	28 / 33	28 / 33		
<b>HYFE boiler</b>						<b>24</b>	<b>24</b>	<b>24</b>	<b>24</b>	<b>34</b>	<b>34</b>	<b>34</b>	<b>34</b>	<b>34</b>	<b>34</b>	<b>34</b>	<b>34</b>	
Power supply	Voltage/Frequency/Phases			V/Hz/n°					230/50/1									
Power input	Water content			W	82	99												
<b>Size - Outdoor unit</b>						<b>2.1</b>	<b>3.1</b>	<b>4.1</b>	<b>5.1</b>	<b>6.1</b>	<b>7.1</b>	<b>8.1</b>						
Power supply	Voltage/Frequency/Phases			V/Hz/n°					230/50/1									
Sound power	Minimum / Nominal			dB(A)	50 / 55	51 / 57	52 / 58	52 / 60	54 / 63	54 / 64	54 / 66							
Sound pressure @1m	Minimum / Nominal			dB(A)	37 / 42	38 / 44	39 / 45	39 / 47	41 / 50	41 / 51	41 / 53							
<b>Operating range</b>																		
Water supply temperature	Heating / DHW	Full electric	Minimum / Maximum	°C	25 / 65	25 / 65	25 / 65	25 / 65	25 / 65	25 / 65	25 / 65	25 / 65	25 / 65	25 / 65	25 / 65	25 / 65		
		Hybrid	Minimum / Maximum	°C	25 / 80	25 / 80	25 / 80	25 / 80	25 / 80	25 / 80	25 / 80	25 / 80	25 / 80	25 / 80	25 / 80	25 / 80		
Operating range (Outdoor air)	Cooling	-	Minimum / Maximum	°C	5 / 25	5 / 25	5 / 25	5 / 25	5 / 25	5 / 25	5 / 25	5 / 25	5 / 25	5 / 25	5 / 25	5 / 25		
		-	Minimum / Maximum	°C	-25 / 35	-25 / 35	-25 / 35	-25 / 35	-25 / 35	-25 / 35	-25 / 35	-25 / 35	-25 / 35	-25 / 35	-25 / 35			
Operating range (Outdoor air)	DHW	-	Minimum / Maximum	°C	-25 / 43	-25 / 43	-25 / 43	-25 / 43	-25 / 43	-25 / 43	-25 / 43	-25 / 43	-25 / 43	-25 / 43	-25 / 43	-25 / 43		
		-	Minimum / Maximum	°C	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43	-5 / 43			

Data according to EN 14511:2018 and EN 14825:2016  
The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281).

Standard power supply: G20 (100% natural gas). Power supply with optional kit: G30 / G31 (LPG gas)

## dimensions and connections

Size				2.1		3.1		4.1		5.1		6.1		7.1		8.1	
Dimensions	Indoor unit	AxCxB	mm	450x1.086x410	450x1.086x410	450x1.086x410	450x1.086x410	450x1.086x410	450x1.086x410	450x1.086x410	450x1.086x410	450x1.086x410	450x1.086x410	450x1.086x410	450x1.086x410	450x1.086x410	
	Outdoor unit	AxCxB	mm	920x712x400	920x712x400	1.042x866x444	1.042x866x444	1.042x866x444	1.042x866x444	1.042x866x444	1.042x866x444	1.042x866x444	1.042x866x444	1.042x866x444	1.042x866x444		
Weight	Indoor unit		kg	39	39	39	39	41	41	41							
	Boiler - 24 kW		kg	31	31	31	31	-	-	-							
	Boiler - 34 kW		kg	34	34	34	34										
	Outdoor unit		kg	58	58	77	77	112	112	112							
Max / min equivalent length	L	m	30 / 2	30 / 2	30 / 2	30 / 2	30 / 2	30 / 2	30 / 2	30 / 2	30 / 2	30 / 2	30 / 2	30 / 2	30 / 2	30 / 2	
Max difference in level ODU / IDU	H	m	25	25	25	25	25	25	25	25	25	25	25	25	25	25	
Refrigerant precharge	type / GWP			R-32 / 675	R-32 / 675	R-32 / 675	R-32 / 675	R-32 / 675	R-32 / 675	R-32 / 675	R-32 / 675	R-32 / 675	R-32 / 675	R-32 / 675	R-32 / 675	R-32 / 675	
	kg			1,50	1,50	1,65	1,65	1,84	1,84	1,84	1,84	1,84	1,84	1,84	1,84	1,84	
CO <sup>2</sup> tons			1,05	1,05	1,10	1,10	1,24	1,24	1,24	1,24	1,24	1,24	1,24	1,24	1,24	1,24	
Equivalent pipe length with pre-charging only				m	15	15	15	15	15	15	15	15	15	15	15	15	
External diameters	Refrigerant piping	Liquid	inch	1/4"	1/4"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	
		Gas	inch	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	
	Indoor unit	Water (System)	inch	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	
		Water (DHW)	inch	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	
Boiler	Intake air	mm	80	80	80	80	80	80	80	80	80	80	80	80	80		
	Exhaust gas	mm	80	80	80	80	80	80	80	80	80	80	80	80	80		

Check in the manual if the indoor unit requires a minimum installation surface

**Size - Set (400TN version)**

				<b>6.1</b>	<b>7.1</b>	<b>8.1</b>	
				<b>HYFE boiler</b>	<b>34</b>	<b>34</b>	<b>34</b>
Heating Heat pump	Capacity	Water 35/30 °C	Nominal / Maximum	kW	<b>12,1 / 14,6</b>	<b>14,5 / 15,5</b>	<b>16,0 / 16,8</b>
	COP	Outdoor air 7 °C	Nominal	-	5,00	4,70	4,55
	Capacity	Water 35/30 °C	Nominal / Maximum	kW	10,5 / 13,9	12,2 / 14,1	13,4 / 14,3
	COP	Outdoor air -7 °C	Nominal	-	3,13	2,82	2,74
Heating Heat pump	Capacity	Water 45/40 °C	Nominal / Maximum	kW	12,3 / 14,5	14,0 / 15,7	16,0 / 16,6
	COP	Outdoor air 7 °C	Nominal	-	3,80	3,65	3,60
	Nominal Heating capacity (LHV)	Water 80/60 °C	Nominal	kW	34,0	34,0	34,0
	Efficiency		Nominal	%	97,7	97,7	97,7
Cooling	Capacity	Water 18/23 °C	Nominal / Maximum	kW	<b>12,1 / 15,0</b>	<b>13,8 / 15,3</b>	<b>14,8 / 16,4</b>
	EER	Outdoor air 35 °C	Nominal	-	4,02	3,70	3,65
	Capacity	Water 7/12 °C	Nominal / Maximum	kW	11,8 / 11,8	12,9 / 12,9	14,2 / 14,2
	EER	Outdoor air 35 °C	Nominal	-	2,75	2,45	2,45
ACS Boiler	Capacity		Maximum	kW	34,0	34,0	34,0
Electrical power for meter sizing	Specific flow rate	Water with $\Delta T=30$ °C in 10 minutes		l/min	16,0	16,0	16,0
				kW	5,40	5,70	6,10
Seasonal efficiency Medium climate	Energy class			-	<b>A++</b>	<b>A++</b>	<b>A++</b>
	Heating Water 55 °C	Annual energy consumption		kWh/year	6.793	7.380	7.915
		SCOP		-	3,56	3,52	3,48
		$\eta_s$ (seasonal output)		%	139	138	136
	Energy class			-	<b>A+++</b>	<b>A+++</b>	<b>A+++</b>
	Heating Water 35 °C	Annual energy consumption		kWh/year	4.994	5.868	6.602
		SCOP		-	5,00	4,91	4,89
		$\eta_s$ (seasonal output)		%	196	193	193
	DHW Boiler	Energy class		-	<b>A</b>	<b>A</b>	<b>A</b>
		Withdrawal profile		-	XXL	XXL	XXL

**Size - Indoor unit**

				<b>B</b>	<b>C</b>	<b>D</b>
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1	
Water flow-rate	Water 35/30 °C	Nominal		l/s	0,67	0,75
Pump available pressure	Outdoor air 7 °C	Nominal		kPa	25,7	31,7
Minimum system water content				l	40	40
Expansion tank capacity				l	10	10
Sound power	Operation:	Nominal		dB(A)	41 / 46	41 / 46
Sound pressure @1m	heat pump only / heat pump + boiler	Nominal		dB(A)	28 / 33	28 / 33

**HYFE boiler**

				<b>34</b>	<b>34</b>	<b>34</b>
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1	230/50/1
Power input	Water content			W	99	99

**Size - Outdoor unit**

				<b>6.1</b>	<b>7.1</b>	<b>8.1</b>
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1	230/50/1
Sound power		Minimum / Nominal		dB(A)	54 / 63	54 / 64
Sound pressure @1m		Minimum / Nominal		dB(A)	41 / 50	41 / 51

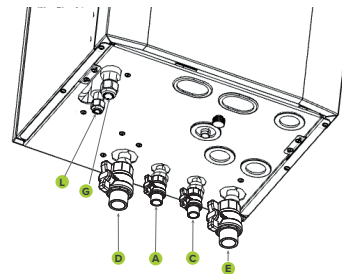
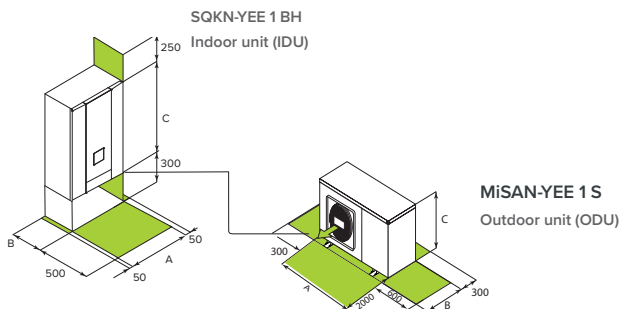
**Operating range**

Water supply temperature	Heating / DHW	Full electric	Minimum / Maximum	°C	25 / 65	25 / 65	25 / 65
		Hybrid	Minimum / Maximum	°C	25 / 80	25 / 80	25 / 80
	Cooling	-	Minimum / Maximum	°C	5 / 25	5 / 25	5 / 25
Operating range (Outdoor air)	Heating	-	Minimum / Maximum	°C	-25 / 35	-25 / 35	-25 / 35
		DHW	-	Minimum / Maximum	°C	-25 / 43	-25 / 43
	Cooling	-	Minimum / Maximum	°C	-5 / 43	-5 / 43	-5 / 43

Data according to EN 14511:2018 and EN 14825:2016

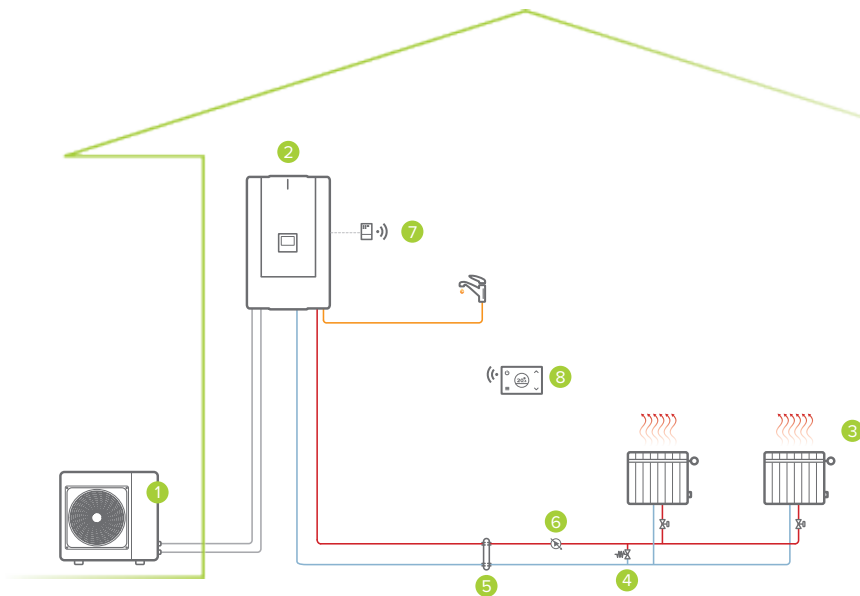
The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281).

Standard power supply: G20 (100% natural gas). Power supply with optional kit: G30 / G31 (LPG gas)



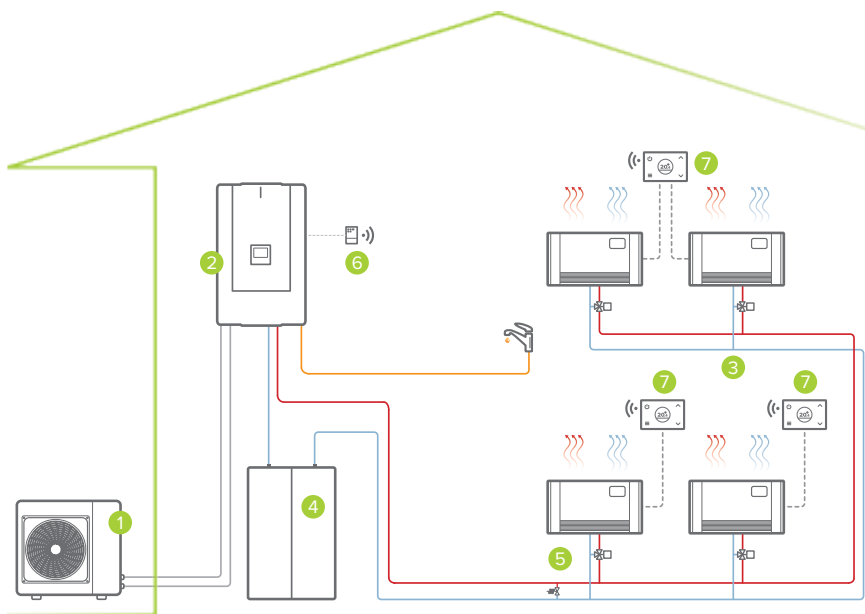
- L.** Refrigerant - liquid pipe
- G.** Refrigerant - gas pipe
- A.** Domestic hot water - supply to external exchanger
- C.** Domestic hot water - return from external exchanger
- D.** System - water return
- E.** System - water supply

For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the green areas.



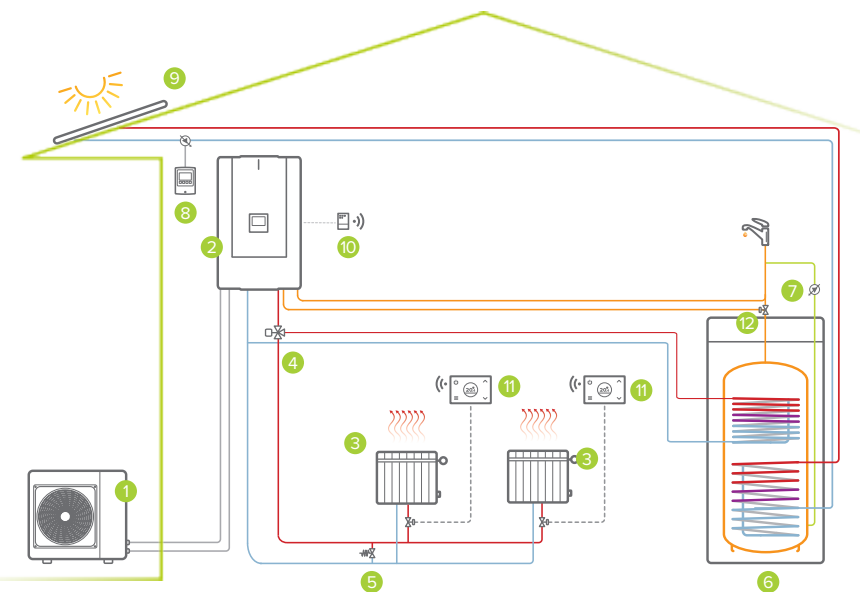
**Hybrid single-zone system:  
Heating / DHW**

- 1 outdoor unit
- 2 indoor hybrid unit
- 3 heating area
- 4 bypass\*
- 5 hydraulic separator (optional)
- 6 secondary circuit pump\*
- 7 SwitchConnect Wi-Fi receiver (optional)
- 8 HID-TConnect2 Wi-Fi chronothermostat (optional)



**Hybrid single-zone system:  
Heating / Cooling / DHW**

- 1 outdoor unit
- 2 indoor hybrid unit
- 3 heating/cooling zone
- 4 system inertial storage (optional)
- 5 bypass\*
- 6 SwitchConnect Wi-Fi receiver (optional)
- 7 HID-TConnect2 Wi-Fi chronothermostat (optional)



**Hybrid single-area system with thermal solar:  
Heating / Cooling / DHW**

- 1 outdoor unit
- 2 indoor hybrid unit
- 3 heating area
- 4 3-way switching valve (optional)
- 5 bypass\*
- 6 DHW boiler with solar coil (optional)
- 7 DHW recirculation pump\*
- 8 kit di circolazione solare (opzionale)
- 9 ELFOSun³ thermal solar (optional)
- 10 SwitchConnect Wi-Fi receiver (optional)
- 11 HID-TConnect2 Wi-Fi chronothermostat (optional)
- 12 thermostatic switching valve for DHW (optional)

\*from external supply



# SPHERA EVO 2.0 EASYHYBRID TOWER

SQKN-YEE 1 BH + MiSAN-YEE 1 S 2.1 ÷ 8.1

Configurazione TH con armadi accessori

Air-to-water Refrigerant-split hybrid heat pump with DHW tank for heating, cooling and domestic hot water production

## ENERGY SAVING



Integration Heating/DHW



e-Switch

## COMFORT



Hot Cold



DHW



Silent

## CONVENIENCE



Weekly Timer



Integrated DHW tank



Instant DHW

## MANAGEMENT AND CONNECTIVITY



Input ON/OFF



Port Modbus



Control via App



management Control4 NRG



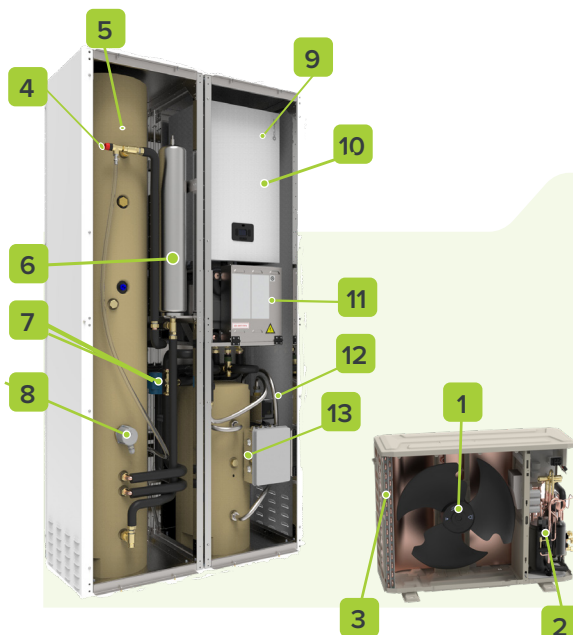
Clivet Eye monitoring



- ✓ Optimised to maximise energy savings without sacrificing comfort
- ✓ Compatible with a radiator system: water temperature up to 80 °C
- ✓ Customisable with numerous kits for a complete, yet discreet, central heating plant
- ✓ Domestic hot water volume can be increased to up to 300 litres
- ✓ Connectivity and the APP to keep the system under control

## Flexible and compact

SPHERA EVO 2.0 EASYHybrid Tower has the indoor Box unit fitted into modular units, so you can create the perfect solution for your system. Each module can be created and customised with all the necessary components for an efficient and reliable system, all inside a compact cabinet with an appearance that blends in with the environment in which it is installed.



1. Inverter DC fan
2. Inverter DC twin-rotary compressor
3. Air-gas finned exchanger (blue fin treatment)
4. DHW pressure relief valve
5. 150 L DHW tank with coil
6. 8-litre DHW expansion tank
7. 3-way valve
8. 2kW DHW safety heater
9. Instantaneous condensing boiler
10. 8- or 10-litre system expansion tank
11. Electrical control panel
12. 1-zone booster kit (optional)
13. System inertial storage kit (optional)

## configurations

OUTDOOR UNIT POWER SUPPLY (SIZES 6.1 TO 8.1):












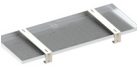











220M Power supply 230/1/20 (standard)  
400TN Power supply 400/3/50+N

INTEGRATED CONDENSING BOILER:

HYFE24 24 kW instantaneous boiler  
HYFE34 34 kW instantaneous boiler

*Note: boiler to be selected separately*

## accessories

	<b>TUNOX</b>	Main aesthetic cabinet for Sphera EVO 2.0 EASYHybrid		<b>ANEDX</b>	Electronic anode to protect DHW boiler
	<b>TDUEX</b>	Additional 150 liter DHW tank with aesthetic cabinet		<b>KSDFX</b>	Smoke intake and exhaust splitter (d. 80/80 mm)
	<b>TDUESX</b>	Additional 150 liter DHW tank with solar coil with aesthetic cabinet			<b>KCSAFX</b>
	<b>KCACSX</b>	Pipe connection kit for TDUEX, TDUESX accessories		<b>CCOAX</b>	90° coaxial curve for suction and flue gas discharge, 360° adjustable (d. 60/100 mm)
	<b>TTREX</b>	Additional aesthetic cabinet for system accessories		<b>TCOAX</b>	1 m coaxial pipe with terminal (d. 60/100 mm)
	<b>TTREAX</b>	Second additional 150 liter DHW tank with aesthetic cabinet			<b>3DHWX</b>
	<b>KC150X</b>	Pipe connection kit for TTREAX accessory		<b>DTX</b>	Drain pan with antifreeze electrical heater
	<b>SRICX</b>	Additional PCB for 2-zone management		<b>APAVX</b>	Kit of antivibration mounts for floor installation
	<b>KCSIX</b>	Kit for secondary circuit for installation inside the unit (1 liter circuit breaker + circulation pump + management PCB)		<b>ASTFX</b>	Antivibration mounts kit for installation on the brackets for wall installation or drain pan
	<b>KIR2HLX</b>	Two-zone distribution kit management PCB: direct + mixed (for installation inside the unit)		<b>KSIPX</b>	Kit with wall fixing brackets
	<b>KIR2HX</b>	Two-zone distribution kit with management PCB: direct + direct (for installation inside the unit)			<b>KCVEX</b>
	<b>AC50X</b>	50 liter system inertial storage tank with connection kit for EASYHybrid (for installation inside the unit)		<b>HTC2WX</b>	White HID-TConnect <sup>2</sup> chronothermostat for temperature control
	<b>KPRSX</b>	DHW recirculation pump kit (for installation inside the unit)		<b>SWCX</b>	Receiver / IoT switch SwitchConnect

## technical data

Size				2.1		3.1		4.1		5.1		6.1		7.1		8.1	
				HYFE boiler													
Heating Heat pump	Capacity	Water 35/30 °C	Nominal / Maximum	kW	4,32 / 6,26	6,18 / 7,41	8,30 / 9,11	10,1 / 10,3	12,1 / 14,6	14,5 / 15,5	16,0 / 16,8						
	COP	Outdoor air 7 °C	Nominal	-	5,42	5,21	5,31	5,01	5,00	4,70	4,55						
	Capacity	Water 35/30 °C	Nominal / Maximum	kW	4,17 / 6,25	6,05 / 6,97	7,33 / 8,35	8,20 / 9,30	10,5 / 13,9	12,2 / 14,1	13,4 / 14,3						
	COP	Outdoor air -7 °C	Nominal	-	3,16	3	3,23	3,07	3,13	2,82	2,74						
Heating Heat pump	Capacity	Water 45/40 °C	Nominal / Maximum	kW	4,16 / 5,96	6,03 / 7,13	8,22 / 8,98	10,0 / 10,3	12,3 / 14,5	14,0 / 15,7	16,0 / 16,6						
	COP	Outdoor air 7 °C	Nominal	-	3,93	3,83	3,95	3,86	3,80	3,65	3,60						
	Nominal Heating capacity ((LHV))	Water 80/60 °C	Nominal	kW	24,0 34,0	24,0 34,0	24,0 34,0	24,0 34,0	34,0 34,0	34,0 34,0	34,0 34,0						
	Efficiency		Nominal	%	97,8 97,7	97,8 97,7	97,8 97,7	97,8 97,7	97,7 97,7	97,7 97,7	97,7 97,7						
Cooling	Capacity	Water 18/23 °C	Nominal / Maximum	kW	4,55 / 6,88	6,44 / 7,65	8,10 / 11,1	10,0 / 12,0	12,1 / 15,0	13,8 / 15,3	14,8 / 16,4						
	EER	Outdoor air 35 °C	Nominal	-	6,08	5,24	5,12	4,77	4,02	3,70	3,65						
	Capacity	Water 7/12 °C	Nominal / Maximum	kW	4,26 / 6,14	6,25 / 6,39	7,46 / 7,94	9,10 / 9,10	11,8 / 11,8	12,9 / 12,9	14,2 / 14,2						
	EER	Outdoor air 35 °C	Nominal	-	3,50	3,09	3,33	3,09	2,75	2,55	2,45						
ACS Boiler	Capacity		Maximum	kW	24,0 34,0	24,0 34,0	24,0 34,0	24,0 34,0	34,0 34,0	34,0 34,0	34,0 34,0						
	Specific flow rate	Water with ΔT=30 °C in 10 minutes		l/min	13,5 16,0	13,5 16,0	13,5 16,0	13,5 16,0	16,0 16,0	16,0 16,0	16,0 16,0						
Electrical power for meter sizing				kW	2,20	2,60	3,30	3,60	5,40	5,70	6,10						
Seasonal efficiency Medium climate	Energy class			-	A++	A++	A++	A++	A++	A++	A++						
	Heating Water 55 °C	Annual energy consumption		kWh/year	2.542	3.283	3.824	4.749	6.793	7.380	7.915						
		SCOP		-	3,32	3,54	3,72	3,73	3,56	3,52	3,48						
	ηs (seasonal output)			%	130	138	146	146	139	138	136						
	Energy class			-	A+++	A+++	A+++	A+++	A+++	A+++	A+++						
	Heating Water 35 °C	Annual energy consumption		kWh/year	2.161	2.502	3.141	3.747	4.994	5.868	6.602						
		SCOP		-	5,13	5,15	5,32	5,27	5,00	4,91	4,89						
	ηs (seasonal output)			%	202	203	210	208	196	193	193						
DHW Boiler	Energy class			-	A A	A A	A A	A A	A A	A A	A A						
	Withdrawal profile			-	XL XXL	XL XXL	XL XXL	XL XXL	XXL	XXL	XXL						
<b>Size - Indoor unit</b>				<b>A B C D</b>													
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1												
Water flow-rate	Water 35/30 °C	Nominal	l/s	0,21	0,30	0,41	0,49	0,57	0,67	0,75							
Pump available pressure	Outdoor air 7 °C	Nominal	kPa	31,2	36,5	33,1	31,0	25,7	31,7	22,6							
Minimum system water content				l	40												
Expansion tank capacity				l	8 (HYFE24) / 10 (HYFE34)												
Sound power	Operation:	Nominal	dB(A)	41 / 46													
Sound pressure @1m	heat pump only / heat pump + boiler	Nominal	dB(A)	28 / 33													
<b>HYFE boiler</b>				<b>24 34</b>													
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1												
Power input	Water content			W	82	99											
<b>Size - Outdoor unit</b>				<b>2.1 3.1 4.1 5.1 6.1 7.1 8.1</b>													
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1												
Sound power	Minimum / Nominal			dB(A)	50 / 55	51 / 57	52 / 58	52 / 60	54 / 63	54 / 64	54 / 66						
Sound pressure @1m	Minimum / Nominal			dB(A)	37 / 42	38 / 44	39 / 45	39 / 47	41 / 50	41 / 51	41 / 53						
<b>Operating range</b>																	
Water supply temperature	Heating / DHW	Full electric	Minimum / Maximum	°C	25 / 65												
		Hybrid	Minimum / Maximum	°C	25 / 80												
Operating range (Outdoor air)	Heating	-	Minimum / Maximum	°C	5 / 25												
		-	Minimum / Maximum	°C	-25 / 35												
	DHW	-	Minimum / Maximum	°C	-25 / 43												
		-	Minimum / Maximum	°C	-5 / 43												

Data according to EN 14511:2018 and EN 14825:2016  
The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281).

Standard power supply: G20 (100% natural gas). Power supply with optional kit: G30 / G31 (LPG gas)

## dimensions and connections

Size				2.1		3.1		4.1		5.1		6.1		7.1		8.1	
Dimensions	Indoor unit	AxCxB	mm	1100x2.100x530 (TUNOX + TDUEX)													
	Outdoor unit	AxCxB	mm	920x712x400						1.042x866x444							
Operating weight	Indoor unit		kg	325													
	Boiler - 24 kW		kg	31													
	Boiler - 34 kW		kg							34							
	Outdoor unit		kg	58				77				112					
Max / min equivalent length	L		m	30 / 2													
Max difference in level ODU / IDU	H		m	25													
Refrigerant precharge	type / GWP			R-32 / 675													
				kg	1,50				1,65				1,84				
			CO <sub>2</sub> tons	1,05				1,10				1,24					
Equivalent pipe length with pre-charging only				m	15												
External diameters	Refrigerant piping	Liquid	inch	1/4"													
		Gas	inch							5/8"							
	Indoor unit	Water (System)	inch	1"													
		Water (DHW)	inch	3/4"													
	Boiler	Gas	inch	3/4"													
		Intake air	mm	80													
Exhaust gas			mm	80													

Check in the manual if the indoor unit requires a minimum installation surface

**Size - Set (400TN version)**

				<b>6.1</b>	<b>7.1</b>	<b>8.1</b>	
				<b>HYFE boiler</b>	<b>34</b>	<b>34</b>	<b>34</b>
Heating Heat pump	Capacity	Water 35/30 °C	Nominal / Maximum	kW	<b>12,1 / 14,6</b>	<b>14,5 / 15,5</b>	<b>16,0 / 16,8</b>
	COP	Outdoor air 7 °C	Nominal	-	5,00	4,70	4,55
	Capacity	Water 35/30 °C	Nominal / Maximum	kW	10,5 / 13,9	12,2 / 14,1	13,4 / 14,3
	COP	Outdoor air -7 °C	Nominal	-	3,13	2,82	2,74
Heating Heat pump	Capacity	Water 45/40 °C	Nominal / Maximum	kW	12,3 / 14,5	14,0 / 15,7	16,0 / 16,6
	COP	Outdoor air 7 °C	Nominal	-	3,80	3,65	3,60
	Nominal Heating capacity ((LHV)	Water 80/60 °C	Nominal	kW	34,0	34,0	34,0
	Efficiency		Nominal	%	97,7	97,7	97,7
Cooling	Capacity	Water 18/23 °C	Nominal / Maximum	kW	<b>12,1 / 15,0</b>	<b>13,8 / 15,3</b>	<b>14,8 / 16,4</b>
	EER	Outdoor air 35 °C	Nominal	-	4,02	3,70	3,65
	Capacity	Water 7/12 °C	Nominal / Maximum	kW	11,8 / 11,8	12,9 / 12,9	14,2 / 14,2
	EER	Outdoor air 35 °C	Nominal	-	2,75	2,55	2,45
ACS Boiler	Capacity		Maximum	kW	34,0	34,0	34,0
	Specific flow rate	Water with $\Delta T=30$ °C in 10 minutes		l/min	16,0	16,0	16,0
Electrical power for meter sizing				kW	5,40	5,70	6,10
Seasonal efficiency Medium climate	Energy class			-	<b>A++</b>	<b>A++</b>	<b>A++</b>
	Heating Water 55 °C	Annual energy consumption		kWh/year	6.793	7.380	7.915
		SCOP		-	3,56	3,52	3,48
		$\eta_s$ (seasonal output)		%	139	138	136
	Energy class			-	<b>A+++</b>	<b>A+++</b>	<b>A+++</b>
	Heating Water 35 °C	Annual energy consumption		kWh/year	4.994	5.868	6.602
		SCOP		-	5,00	4,91	4,89
		$\eta_s$ (seasonal output)		%	196	193	193
DHW Boiler	Energy class		-	<b>A</b>	<b>A</b>	<b>A</b>	
	Withdrawal profile		-	XXL	XXL	XXL	

**Size - Indoor unit**

				<b>B</b>	<b>C</b>	<b>D</b>
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1	
Water flow-rate	Water 35/30 °C	Nominal		l/s	0,67	0,75
Pump available pressure	Outdoor air 7 °C	Nominal		kPa	25,7	31,7
Minimum system water content				l	40	
Expansion tank capacity				l	10	
Sound power	Operation:	Nominal		dB(A)	41 / 46	
Sound pressure @1m	heat pump only / heat pump + boiler	Nominal		dB(A)	28 / 33	

**HYFE boiler**

				<b>34</b>	
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1
Power input	Water content			W	99

**Size - Outdoor unit**

				<b>6.1</b>	<b>7.1</b>	<b>8.1</b>
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1	
Sound power	Minimum / Nominal			dB(A)	54 / 63	54 / 66
Sound pressure @1m	Minimum / Nominal			dB(A)	41 / 50	41 / 53

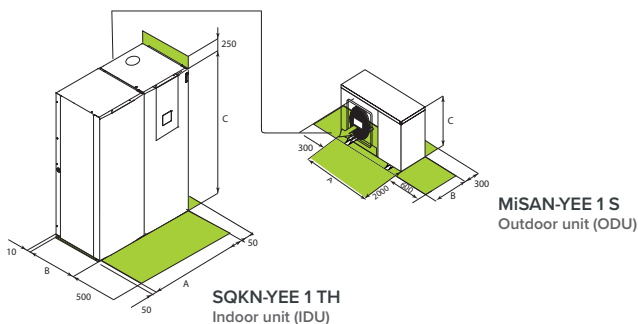
**Operating range**

Water supply temperature	Heating / DHW	Full electric	Minimum / Maximum	°C	25 / 65
		Hybrid	Minimum / Maximum	°C	25 / 80
	Cooling	-	Minimum / Maximum	°C	5 / 25
Operating range (Outdoor air)	Heating	-	Minimum / Maximum	°C	-25 / 35
		DHW	-	Minimum / Maximum	°C
	Cooling	-	Minimum / Maximum	°C	-5 / 43

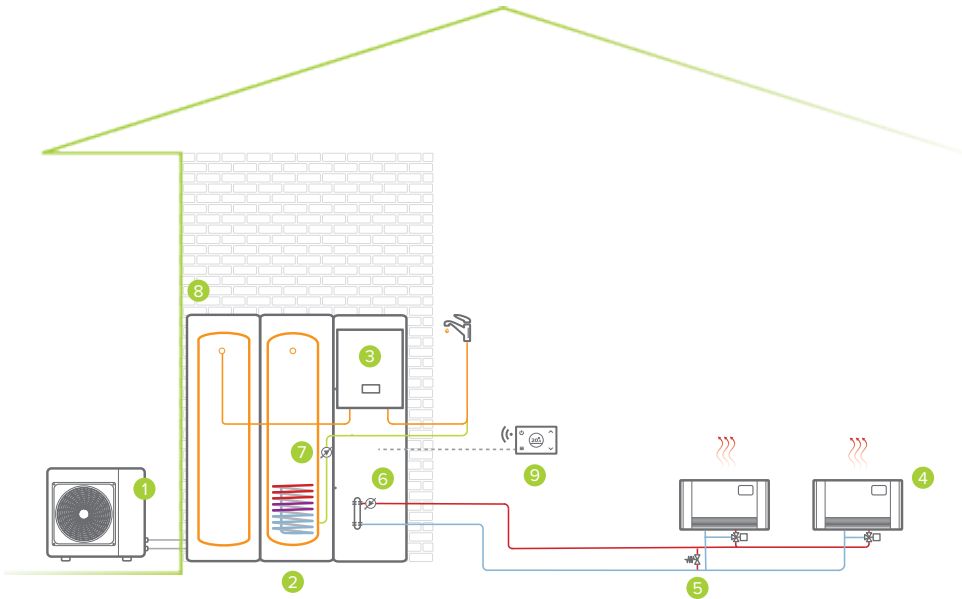
Data according to EN 14511:2018 and EN 14825:2016

The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281).

Standard power supply: G20 (100% natural gas). Power supply with optional kit: G30 / G31 (LPG gas)

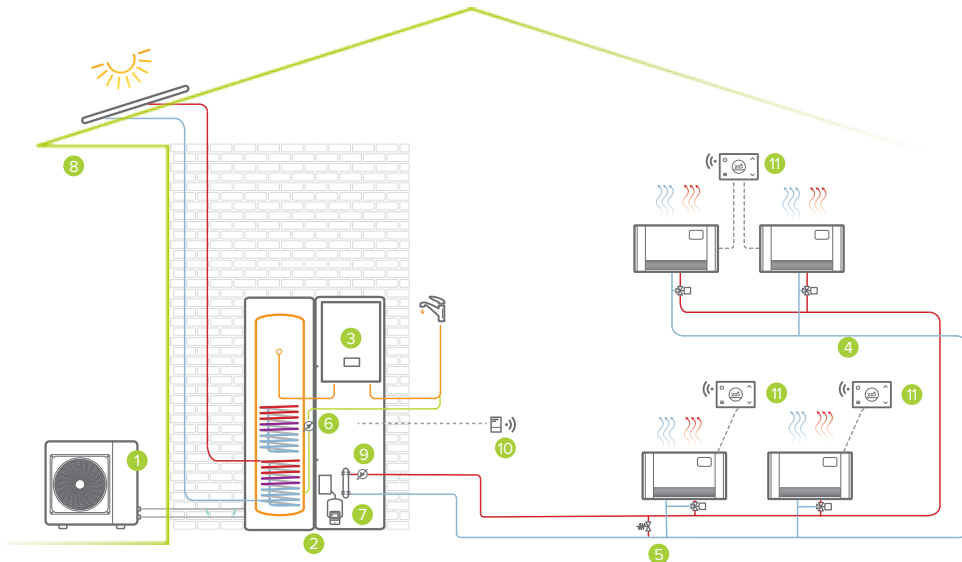


For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the green areas.



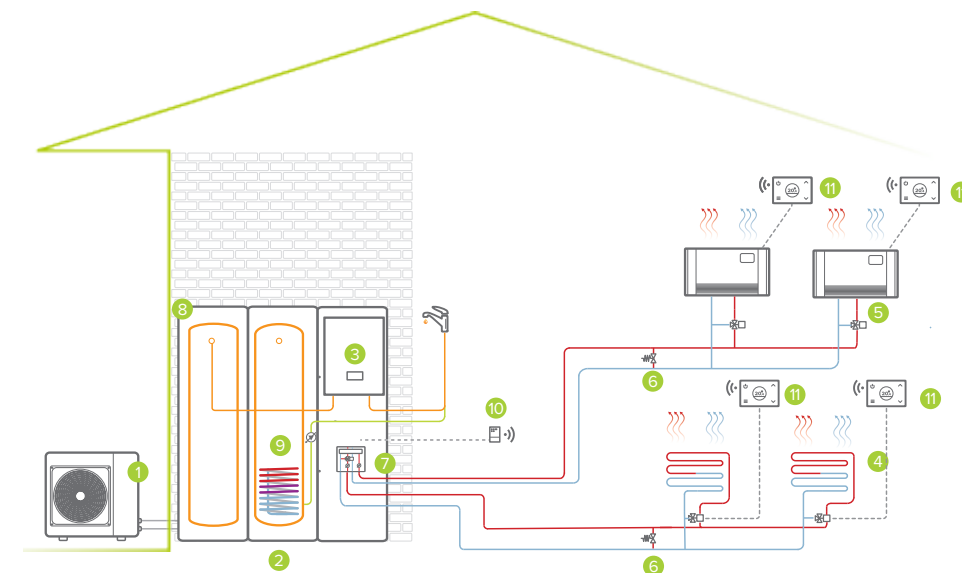
**Hybrid single-zone system:**  
Heating / DHW

- 1 outdoor unit
- 2 indoor unit
- 3 modulo ibrido (pompa di calore / caldaia)
- 4 heating area
- 5 bypass\*
- 6 secondary circuit kit (optional)
- 7 DHW recirculation pump (optional)
- 8 additional DHW boiler (optional)
- 9 HID-TConnect2 Wi-Fi chronothermostat (optional)



**Hybrid single-area system with thermal solar:**  
Heating / Cooling / DHW

- 1 outdoor unit
- 2 indoor unit
- 3 modulo ibrido (pompa di calore / caldaia)
- 4 heating area
- 5 bypass\*
- 6 DHW recirculation pump (optional)
- 7 kit di collegamento solare (opzionale)
- 8 ELFOSun<sup>3</sup> thermal solar (optional)
- 9 secondary circuit kit (optional)
- 10 SwitchConnect Wi-Fi receiver (optional)
- 11 HID-TConnect2 Wi-Fi chronothermostat (optional)



**Hybrid single-zone system with additional DHW boiler:**  
Heating / Cooling / DHW

- 1 outdoor unit
- 2 indoor unit
- 3 modulo ibrido (pompa di calore / caldaia)
- 4 mixed heating/cooling zone
- 5 direct heating/cooling zone
- 6 bypass\*
- 7 kit for managing 2 areas (optional)
- 8 additional DHW tank (optional)
- 9 DHW recirculation pump (optional)
- 10 SwitchConnect Wi-Fi receiver (optional)
- 11 HID-TConnect 2 Wi-Fi chronothermostat (optional)

\*from external supply