

SPHERA EVO 2.0 Invisible Hybrid

SQKN-YEE 1 IC + MiSAN-YEE 1 S +
CCGIX 2.1÷5.1

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

ENERGY SAVING



Solar integration
(optional)



Smart Grid
ready



€-Switch

COMFORT



Heating
Cooling



DHW



Silent



High temperature

RELIABILITY



Eurovent



Keymark

HEALTH



Eco-friendly
refrigerant

CONVENIENCE



Weekly schedule



Integrated
DHW tank

MANAGEMENT AND CONNECTIVITY



Potential-free
contact



Modbus
port



Wi-fi
Control



ELFOControl
management



Clivet Eye
monitoring



User interface/
thermostat

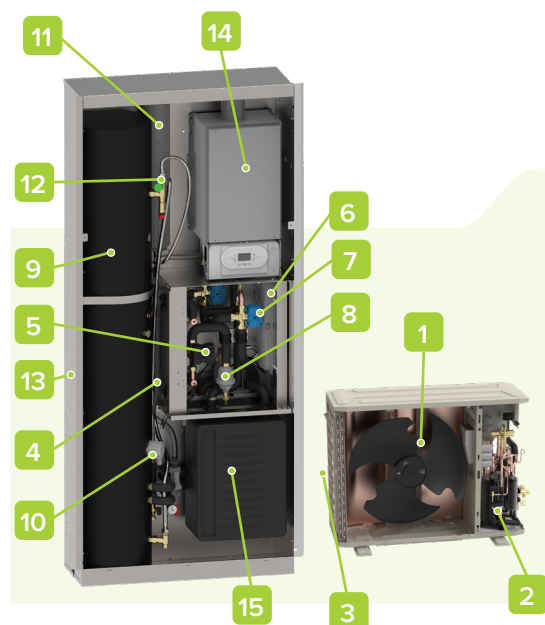


- ✓ Space-saving: completely outdoor installation with uncased wall-mounted unit only 36 cm deep
- ✓ It adapts to every need: solar kit / inertial storage kit / additional storage tank / configurable booster kits
- ✓ Components and uncased cabinet with telescopic frame can be supplied separately
- ✓ 24 kW boiler fuelled by methane or LPG, with coaxial or split smoke discharge
- ✓ Advanced connectivity: management via the dedicated MSmartLife App or via the Modbus port with ELFOControl³ EVO included as standard

Using the space well

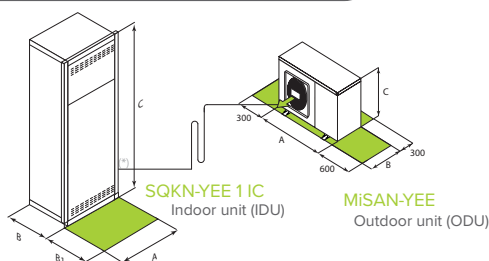
SPHERA EVO 2.0 Invisible Hybrid is the ideal choice for all homes that do not have a technical room and which need to make the unit invisible by embedding it in the wall.

The cabinet has an adjustable telescopic frame and can be painted to make the unit disappear completely.



1. Inverter DC fan
2. Inverter DC twin-rotary compressor
3. Air-gas finned exchanger (blue fin treatment)
4. Gas/water plate exchanger
5. Inverter DC high efficiency pump
6. 8L system expansion tank
7. 3-way valve
8. Magnetic dirt separator filter
9. 150L DHW tank with coil
10. 2kW DHW safety heater
11. 8L DHW expansion tank
12. Anti-scalding valve
13. Cabinet with adjustable telescopic frame
14. Boiler
15. kit for managing 2 areas (optional)

dimensions and connections



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

(*) Water and gas connections

Size				2.1	3.1	4.1	5.1
Dimensions	Indoor unit	Length(A) x Height(C) x Depth(B)	mm	950x2.250x360			
	Outdoor unit	Length(A) x Height(C) x Depth(B)	mm	1.008x712x426		1.118x865x523	
	Boiler	Length(A) x Height(C) x Depth(B)	mm	410x642x307 (23.2)			
Weight	Indoor unit		kg	325			
	Outdoor unit		kg	58		67	
	Boiler		kg	35 (23.2)			
Max / min equivalent length		L	m	30 / 2			
Max difference in level ODU / IDU		H	m	25			
Refrigerant precharge ¹			type/GWP	R-32 / 675			
			kg / m	1,50 / 15		1,65 / 15	
			CO ₂ tons	1,05		1,11	
Additional refrigerant charge			g/m	20		38	
External diameters	Refrigerant pipe	Liquid	inch	1/4"			
		Gas	inch	5/8"			
	Indoor unit	Water (system)	inch	1"			
		Water (DHW)	inch	3/4"			

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

accessories

	ADIX	Recessed storage unit with jigs for fittings		ADI50X	Recessed storage unit for external inertial accumulation
	ACS150X	150-litre domestic hot water storage tank		CCGIX	Integration condensing boiler
	ADIAX	Recessed storage unit for additional DHW accumulation		KSDFX	Splitter for boiler smoke discharge
	ACSA150X	Additional 150-litre domestic hot water storage		KAS80X	Smoke intake and discharge fittings, 80 mm diameter
	ACSA50X	Additional 50-litre domestic hot water storage		KTCGPLX	Kit to convert boiler from methane to LPG
	SHWT	150L domestic hot water storage tank with solar coil		DTX	Auxiliary condensate collection tray
	KCVEX	Circulation kit: circulation group, control unit, expansion tank		APAVX	Kit of antivibration mounts for floor installation
	KPRSX	DHW recirculation pump kit		ASTFX	Kit of antivibration mounts for wall bracket installation
	KCSX	Secondary circuit kit (1-litre circuit breaker + pump)		KSIPX	Kit with wall fixing brackets
	KIRE2HLX	2 zones: high temperature + low temperature (mixed)		HID-TCBX	Black soft touch chronothermostat, with temperature control and management via App / Voice control
	KIRE2HX	2 zones: both at high temperature		HID-TCNX	White soft touch chronothermostat, with temperature control and management via App / Voice control
	AC50X	50-litre inertial storage tank for indoor installation		SWCX	SwitchConnect radio receiver
	ACE50X	50-litre inertial storage tank for outdoor installation			

configurations

PUMP:

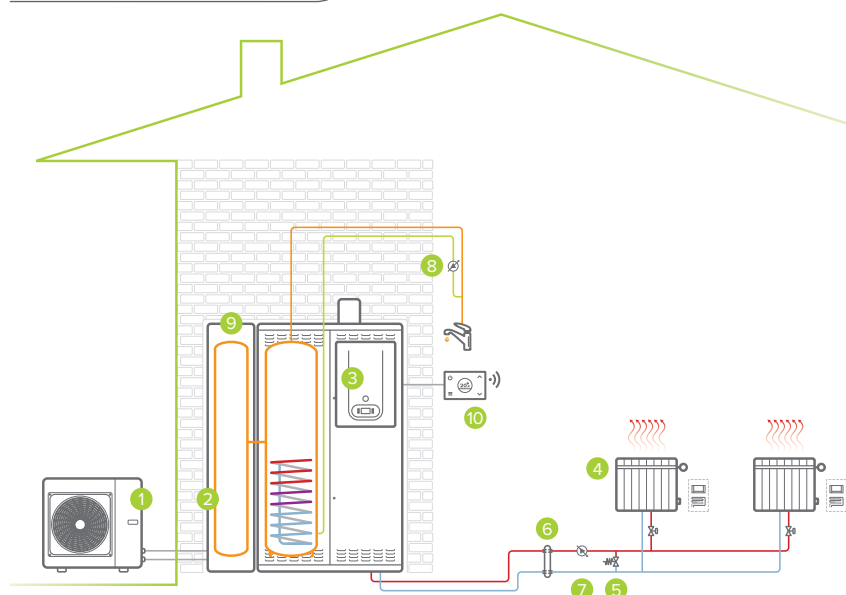
- Standard pump
- 1PUM** Single pump with larger available head

technical data

Size					2.1	3.1	4.1	5.1	
Heating	Capacity	Water 35/30°C - Outdoor air 7°C	Nominal / Maximum	kW	4,32 / 6,26	6,18 / 7,41	8,30 / 9,11	10,09 / 10,3	
	COP		Nominal	-	5,42	5,21	5,31	5,01	
	Capacity	Water 35/30°C - Outdoor air -7°C	Nominal / Maximum	kW	4,17 / 6,25	6,05 / 6,97	7,33 / 8,35	8,20 / 9,30	
	COP		Nominal	-	3,16	3,00	3,23	3,07	
	Capacity	Water 45/40°C - Outdoor air 7°C	Nominal / Maximum	kW	4,16 / 5,96	6,03 / 7,13	8,22 / 8,98	10,01 / 10,30	
	COP		Nominal	-	3,93	3,83	3,95	3,86	
Cooling	Capacity	Water 18/23°C - Outdoor air 35°C	Nominal / Maximum	kW	4,55 / 6,88	6,44 / 7,65	810 / 11,13	10,00 / 12,03	
	EER		Nominal	-	6,08	5,24	5,12	4,77	
	Capacity	Water 7/12°C - Outdoor air 35°C	Nominal / Maximum	kW	4,26 / 6,14	6,25 / 6,39	7,46 / 7,94	8,67 / 9,10	
	EER		Nominal	-	3,50	3,09	3,33	3,09	
Boiler 23.2	Nominal heat capacity (LHV)	Water 80/60°C	Nominal	kW	22,94				
	Performance		Nominal	%	97,6				
Electrical power for meter sizing				kW	2,20	2,60	3,30	3,60	
Seasonal efficiency	Heating 55°C	Energy class		-	A++	A++	A++	A++	
		Annual energy consumption	kWh/year	2.542	3.283	3.824	4.749		
		SCOP	-	3,32	3,54	3,72	3,73		
		ηs (seasonal output)	%	130	138	146	146		
	Medium climate	Heating 35°C	Energy class		-	A+++	A+++	A+++	A+++
			Annual energy consumption	kWh/year	2.542	3.283	3.824	4.749	
			SCOP	-	5,13	5,15	5,32	5,27	
			ηs (seasonal output)	%	202	203	210	208	
	DHW	Energy class		-	A+	A+	A+	A+	
		DHW profile		-	L	L	L	L	
Indoor unit					A	A	A	A	
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1				
Water flow-rate		Nominal	l/s	0,21	0,30	0,41	0,49		
Pump available pressure		Nominal	kPa	31,2	36,5	33,1	31,0		
Expansion tank capacity			l		8				
Minimum system water content			l		40				
Sound power			dB(A)		41				
Sound pressure @1m			dB(A)		26				
Boiler									
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1				
Power input			W		38				
Sound power			dB(A)		52				
Outdoor unit					2.1	3.1	4.1	5.1	
Power supply	Voltage/Frequency/Phases			V/Hz/n°	230/50/1				
Sound power			dB(A)	55	58	58	60		
Sound pressure @1m			dB(A)	42	44	45	47		
Operating range									
Water supply temperature	Heating	Heat pump	Minimum / Maximum	°C	25 / 65				
		Boiler	Minimum / Maximum	°C	12 / 70				
	Cooling	-	Minimum / Maximum	°C	5 / 25				
		-	Minimum / Maximum	°C	-25 / 43				
Operating range (Outdoor air)	Heating	Heat pump	Minimum / Maximum	°C	-25 / 43				
		Boiler	Minimum / Maximum	°C	-25 / 35				
	Cooling	-	Minimum / Maximum	°C	-5 / 43				
		-	Minimum / Maximum	°C	-25 / 43				
	DHW	Heat pump	Minimum / Maximum	°C	-25 / 43				
		Boiler	Minimum / Maximum	°C	-25 / 43				

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

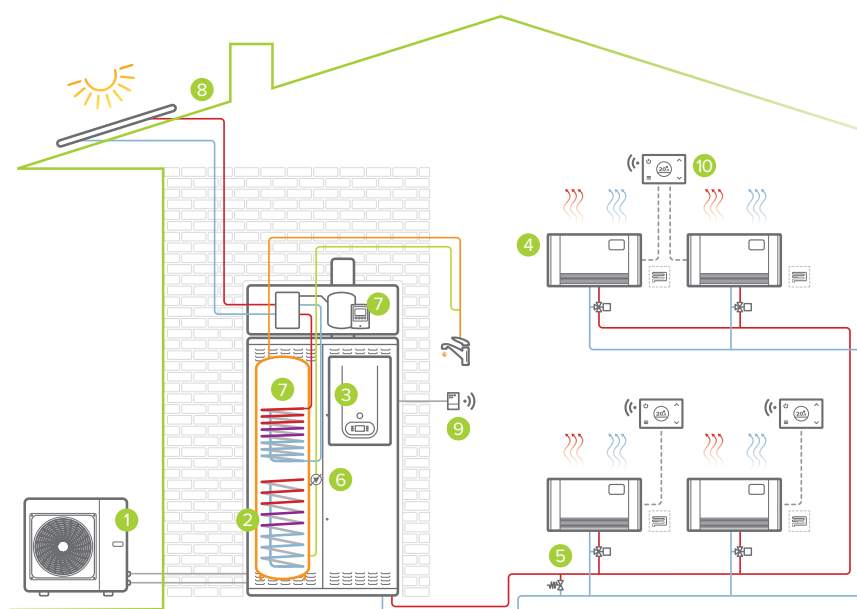
The Product complies with the European ErP Directive (EU Regulations 811/2013 - 813/2013 - 2016/2281). Energy classes with ELFOControl3 EVO system control



Single area system: heating/DHW

- 1 outdoor unit
- 2 indoor unit
- 3 boiler
- 4 heating area (radiator / fan coils / radiant)
- 5 bypass*
- 6 hydraulic separator (optional)
- 7 secondary circuit pump*
- 8 DHW recirculation pump*
- 9 additional DHW tank (optional)
- 10 HID-TConnect Wi-Fi chronothermostat (optional)

*from external supply



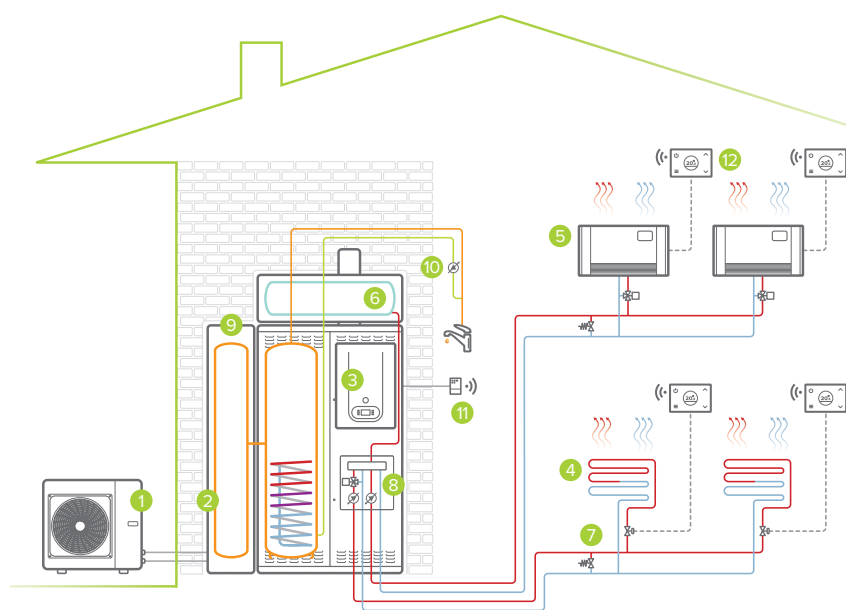
Single area system with solar thermal: heating/cooling/DHW

- 1 outdoor unit
- 2 indoor unit
- 3 boiler
- 4 heating/cooling area (fan coils / radiant)
- 5 bypass*
- 6 DHW recirculation pump* (optional)
- 7 solar connection kit (optional)
- 8 ELFOSun solar thermal (optional)
- 9 SwitchConnect Wi-Fi receiver (optional)
- 10 HID-TConnect Wi-Fi chronothermostat (optional)

Note:

- flue to be fitted on the side or back
- external solar connection kit available on request

*from external supply



Two-area system: heating/cooling/DHW

- 1 outdoor unit
- 2 indoor unit
- 3 boiler
- 4 low temperature heating/cooling area (radiant)
- 5 high temperature heating/cooling area (fan coils)
- 6 system inertial storage (optional)
- 7 bypass*
- 8 kit for managing 2 areas (optional configuration)
- 9 additional DHW tank (optional)
- 10 DHW recirculation pump*
- 11 SwitchConnect Wi-Fi receiver (optional)
- 12 HID-TConnect Wi-Fi chronothermostat (optional)

flue to be fitted on the side or back

*from external supply