BOILERS AND HYBRID SOLUTIONS

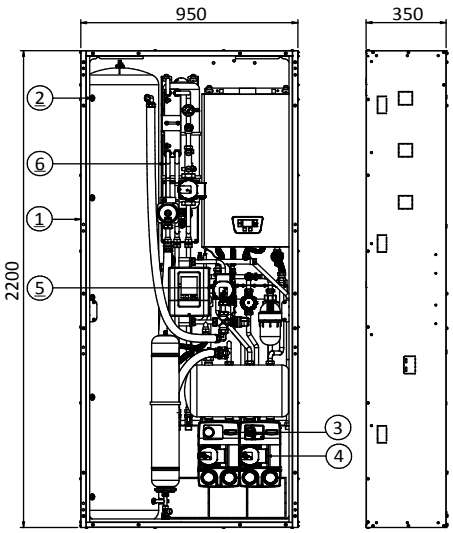
HYBRID SYSTEM FOR IN WALL INSTALLATION

SILE IN WALL HYBRID

Hybrid system for in wall installation

SILE IN WALL HYBRID

Sile IN-WALL HYBRID is a compact and efficient system for heating and domestic hot water production. The system provides the integrated operation of a condensing boiler with output of 25 and 30 kW, a heat pump with output of 5, 8, 11, 16 kW and a solar plant.
It represents a complete central heating plant inside a compact box with small dimensions, 35 cm deep, 220 cm high and 95 cm length.



System composition

Sile IN-WALL HYBRID is composed of:
1 Built-in box dimensions 950x350x2200
2 Heat pump air to water 5, 8, 11, 16 kW
3 Condensing gas boiler model CONDENSA MG 25 and 30 kW with domestic hot water production
4 Water storage 150 liters for domestic hot water production
5 Hydronic kit for heating cooling and hot water production management
6 Solar kit for solar plant management (optional)
Recirculation kit to guarantee best comfort in hot water production
Zone kit for one or more plant zone management also with different temperature

Technical features

Mod.	HEATING										COOLING						OPERATIONAL LIMITS						
	LWT 35°C-OAT 7° C			LWT 55°C-OAT 7° C					Energy efficiency class		LWT 18°C-OAT 35°C			LWT 7°C-OAT 35°C			External temperature		Water temperature range		Water flow	Min. water content
	Output	Input	COP	Output	Input	COP	SCOP	ηs	Output at		Output	Input	EER	Output	Input	EER	Heat.	Cool.	Heat.	Cool.		
	kw	kw		kw	kw			%	35°C	55°C	kw	kw		kw	kw		°C	°C	°C	°C	l/min	l
HP5 A-W	5,00	0,99	5,05	5,00	1,64	3,05	4,59	180	A+++	A+++	5,00	1,00	5,00	5,00	1,56	3,20	-25 -35	10-46	25-60	5-20	14,3	30
HP8 A-W	7,80	1,77	4,40	7,10	2,76	2,54	3,87	152	A++	A+	7,00	1,89	3,70	5,50	2,34	2,35	-25 -35	10-46	25-55	5-20	23,0	40
HP11 A-W	11,00	2,61	4,22	9,99	4,40	2,27	4,35	171	A++	A++	13,50	2,94	4,60	11,50	3,83	3,00	-25 -35	10-46	25-55	5-20	31,5	55
HP16 A-W	16,00	3,86	4,15	14,01	5,63	2,49	4,00	157	A++	A+	16,00	3,64	4,40	14,50	4,92	2,95	-25 -35	10-46	25-55	5-20	45,8	80

Technical features

Mod.	Output max. 50/30°C	Output min. 50/30°C	Sanitary output	Efficiency		Instanta-neous heat exchanger	Domestic hot water production	Dimensions	Weight empty	Energy efficiency class		NOx class
	kW	kW	kW	80/60°C %	50/30°C %	inox AISI 316	Δt 30°C l/min	HxLxP mm	kg	Heating (*)	DHW	
25	21,2	2,7	25,0	96,2	105,9	•	11,1	705 x 400 x 245	29	A	A	6
30	26,5	2,7	30,0	96,3	106,2	•	13,2	705 x 400 x 245	29	A	A	6

(*) Remote control and external temperature probe installation increases energy efficiency class to A+.

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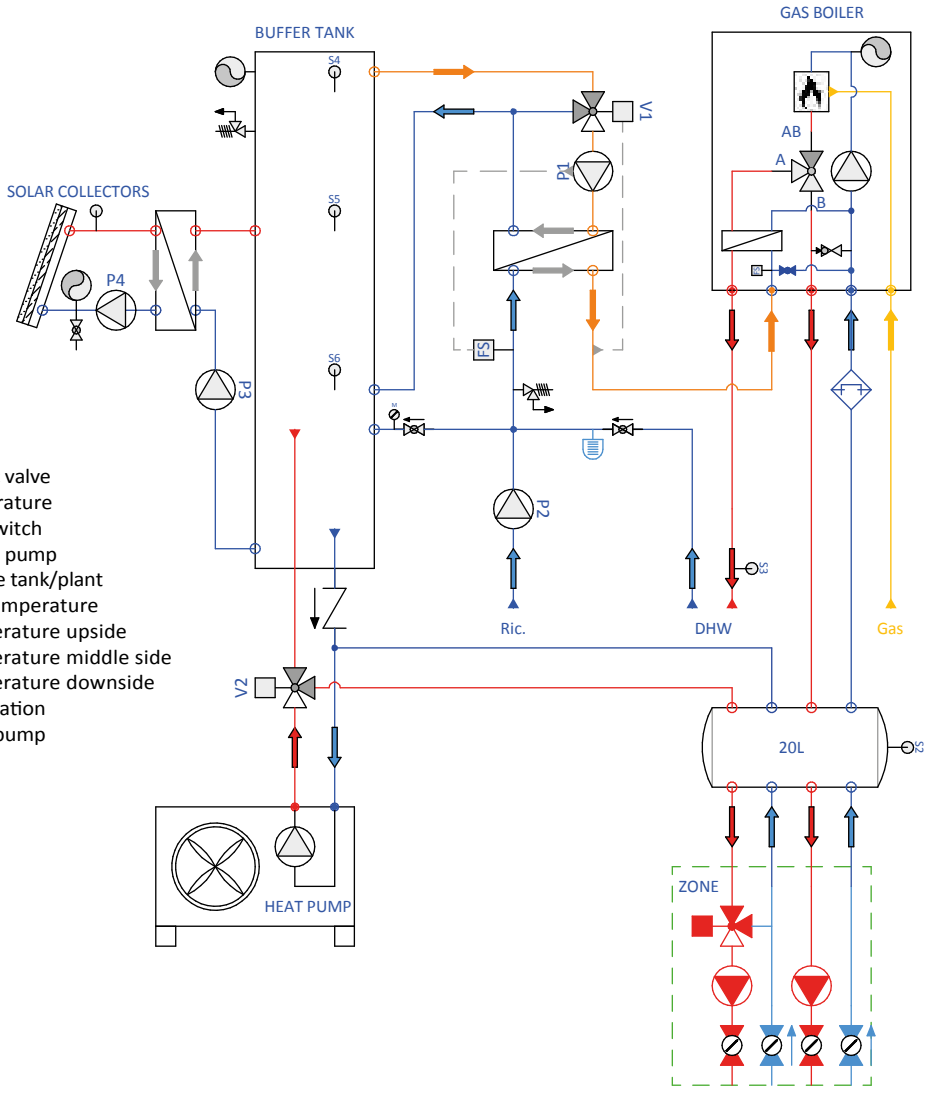
System functioning

Winter mode
During winter time the heat pump is the primary heating source and gas boiler starts only if the heat pump performance is not enough to guarantee the comfort required.

Summer mode
During summer time the heat pump can work in cooling mode both on radiant panels and fan coils if it possible to match a zone valve for that units.

Domestic hot water production mode
Buffer tank for domestic hot water production is filled by heat pump or solar plant. Instantaneous domestic hot water production is made by a T-QUICK module with an heat exchanger. If temperature is not enough, the gas boiler will start and integrate as a booster to reach the domestic hot water set point.

In wall hybrid system
Hydraulic scheme



- P1 DHW pump
- V1 Thermostatic valve
- S3 DHW temperature
- FS DHW Flow switch
- P2 Recirculation pump
- V2 Diverter valve tank/plant
- S2 Inlet plant temperature
- S4 Probe temperature upside
- S5 Probe temperature middle side
- S6 Probe temperature downside
- P3 Solar recirculation
- P4 Solar circuit pump

WENKEL S.R.L

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