Thermia Sigrin



Easy to install, wonderful to use

The Sigrin is a ground source heat pump with inverter technology. Ground source heat pumps are a good choice for the future as they use renewable energy instead of energy from fossil fuels. The Sigrin heat pump meets the latest EU regulation and does not require any built-in safety solution, which has a significant benefit because no extra space or extra pipes through outer walls are needed during installation.

The inverter-controlled compressor adjusts the heat load constantly according to the current heat demand. This means you never use more energy than is needed, which obviously reduces your energy bills and provides exceptional comfort all year round.

The heat pump has a high seasonal coefficient of performance (SCOP 5,48* - which is a measure of how much electricity the heat pump consumes in relation to the heat it extracts). It runs very quietly and is available in three power sizes: 9 kW, 13 kW and 19 kW. For larger requirements, it is possible to connect multiple units together.

Hot water delivery is excellent, thanks to Thermia's TWS technology** and the variable hot water charging function, which adapts the output to demand. This means that the Sigrin provides plenty of hot water and quickly heats new water when demand is high. The Sigrin is also available in a Duo variant with a dedicated the MBH G hot water tank in two sizes: 200 and 300 litres.

With its inverter technology, the Sigrin is an excellent choice for new builds and provides the opportunity to meet additional energy needs, such as a swimming pool or future extensions to the house. It is also ideal for retrofitting projects, where the with its Energy Source Control function can be precisely adjusted to the specific heat demand and available energy source.

The Sigrin control system is easy to navigate via its highly intuitive and modern display. The heat pump has both integrated Wi-Fi and 4G connectivity and remote control via an app is included. With 4G, there is no need for Wi-Fi via a router or a cable.*** You can also access additional services, such as Smart Price for spot price control.

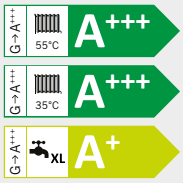
* SCOP 5,48 refers to the Sigrin 13's seasonal coefficient of performance according to the measurement standard EN 14825, based on underfloor heating in a cold climate. The SCOP figure according to the standard EN 14825, for underfloor heating in an average climate is 5,28.

** TWS = Tap Water Stratification.

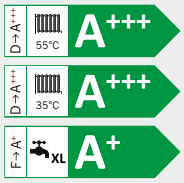
***The 4G connection is free of charge until 30 April 2028.



System:



Product:



Read more about the energy class in footnotes 5–6 on the next page

RETAILER:

Technical data Sigrin

Connections Sigrin

The brine lines can be connected on either the left or right-hand sides of the heat pump.

1 Brine return line (Brine in), Ø28 mm
2 Brine supply line (Brine ut), Ø28 mm
3 Heating system supply line, Ø28 mm
4 Heating system return line, Ø28 mm
5 Manual air purging valve, Ø28 mm
6 Hot water, Ø22 mm
7 Cold water, Ø22 mm
8 Lead-in for incoming power supply, sensors and communication cable

Connections Sigrin Duo

The brine lines can be connected on either the left or right-hand sides of the heat pump.

1 Brine return line (Brine in), Ø28 mm
2 Brine supply line (Brine ut), Ø28 mm
3 Heating system supply line, Ø28 mm
4 Heating system return line, Ø28 mm
5 Hot water supply line, Ø28 mm
6 Return line hot water tank, Ø28 mm
7 Lead-in for incoming power supply, sensors and communication cable



W: 598 mm
D: 703 mm
H: 1863 mm

▸ SIGRIN

*Additional pipes needed for this type of connection



W: 598 mm
D: 703 mm
H: 1450 mm

▸ SIGRIN DUO

A lower model without a built-in hot water tank.

*Additional pipes needed for this type of connection

Sigrin			Sigrin 9	Sigrin 13	Sigrin 19
Heating capacity		kW	3–9	5–13	7–19
Refrigerant	Typ		R454C	R454C	R454C
	Amount[1]	kg	0,8	1,15	1,55
	CO_2-equivalent	tCO_2	0,116	0,167	0,226
	Design pressure	Bar(g)	31	31	31
Compressor	Typ		Scroll	Scroll	Scroll
	Oil		POE	POE	POE
Electrical data, 400V 3-N, ~50Hz	Main power supply	V	400	400	400
	Max working power, compressor	kW	3,4	5,0	6,1
	Rated power, circulation pumps	kW	0,1	0,2	0,3
	Auxiliary heater, 6 steps	kW	(0)1,5/3/4,5/6/7,5/9	(0)1,5/3/4,5/6/7,5/9	(0)1,5/3/4,5/6/7,5/9
	Fuse[2b]	A	(10)10/13/20/20/20/20	(10)13/13/20/20/25/25	(13)16/16/25/25/25/25
Electrical data, 230 1-N, ~50Hz	Main power supply	V	230	230	N/A
	Max working power, compressor	kW	3,3	4,1	N/A
	Rated power, circulation pumps	kW	0,1	0,2	N/A
	Auxiliary heater, 6 steps	kW	1/2/3/4/5/6	1/2/3/4/5/6	N/A
	Fuse[2c]	A	20/25/32/40/40/50[2C]	25/32/32/40/50/50[2C]	N/A
Performance	SCOP, floor heating (35°C) [3A]		5,35	5,48	5,39
	P-design (35°C) [3A]	kW	8,48	12,94	19,18
	SCOP, radiator heating (55°C) [3A]		4,17	4,36	4,19
	P-design (55°C) [3A]	kW	7,97	12,28	16,64
	SCOP, floor heating (35°C) [3B]		5,15	5,28	5,19
	P-design (35°C) [3B]	kW	8,48	12,94	19,18
	SCOP, radiator heating (55°C) [3B]		4,03	4,19	4,07
	P-design (55°C) [3B]	kW	7,97	12,28	16,64
	Heating capacity[4]	kW	4,46	7,06	11,02
	Electrical power input[4]	kW	0,97	1,52	2,45
	COP[4]		4,58	4,66	4,50
Energy class - system[5]	Floor heating (35°C)		A+++	A+++	A+++
	Radiator (55°C)		A+++	A+++	A+++
Energy class - product[6]	Floor heating (35°C)		A+++	A+++	A+++
	Radiator (55°C)		A+++	A+++	A+++
	Hot water (Economy)[7]		A	A+	A
Max/min temperature	Cooling circuit	°C	20/–10	20/–10	20/–10
	Heating circuit	°C	65/20	65/20	65/20
Anti-freeze[8]				Ethanol + water solution –17±2°C	
Max/min refrigerant circuit	Low pressure	Bar(g)	0,8	0,8	0,8
	High pressure	Bar(g)	31	31	31
Sound power level	Sigrin	dB(A)	38–46[9] (39)[10]	39–48[9] (40)[10]	38–49[9] (41)[10]
	Sigrin Duo	dB(A)	38–46[9] (39)[10]	38–46[9] (40)[10]	39–49[9] (40)[10]
Hot water performance	Volume 40°C hot water[11]	l	257	277	624
	COP, Hot water[7]		2,74	3,06	2,9
Water volume	Sigrin	l	184	184	184
	Sigrin Duo	l	optional	optional	optional
Weight	Sigrin, Empty	kg	157	172	186
	Sigrin, Filled	kg	341	356	370
	Sigrin Duo	kg	121	129	143
Dimensions (W×D×H)	Sigrin	mm	598×703×1863 ±10	598×703×1863 ±10	598×703×1863 ±10
	Sigrin Duo	mm	598×703×1450 ±10	598×703×1450 ±10	598×703×1450 ±10

1) The refrigerant circuit is hermetically sealed. GWP for R454C according to EU 2024/573 is 146.

2B) The minimum recommended fuse size depends on the limitation of the electrical immersion heater in combination with the compressor. The maximum permissible power for immersion heater can also be set differently with and without compressor for further adjustment at low fuses. Control and circulation pumps are operated with L3. The power supply and the frequency converter for the compressor are powered by L1, L2 and L3. Meets IEC61000-3-12 Ssc at connection point >0,6 MVA for Sigrin 13 400V och >1,0 MVA for 19 400V, without action. Sigrin 9 400V complies with IEC 61000-3-12 without conditional connection

2C) The minimum recommended fuse size depends on the limitation of the electrical immersion heater in combination with the compressor. The maximum permissible power for immersion heater can also be set differently with and without compressor for further adjustment at low fuses. Connection can be done either with one common supply, or with physically separated supplies to heat pump (compressor) and to auxilliary heater to lower the fuse needed. Complies with IEC 61000-3-12 without conditional connection.

3A) SCOP according to EN14825, cold climate (Helsinki).

3B) SCOP according to EN14825, average climate (Strassbourg).

4) At B0/W35, according to EN14511

5) When the heat pump is installed in a heating system that is controlled via the heat pump's control computer. According to EU regulation 811/2013.

6) When the heat pump is not connected to a heating system, and the function of the built-in control computer is not taken into account. According to EU regulation 811/2013.

7) Hot water performance according to EN16147, COP according to XL cycle with the control computer set for Economy mode and built-in hot water tank.

8) Local regulations and regulations must always be checked before antifreeze agents are used.

9) Sound power level measured according to EN12102 and EN 3741 (min / max B0W35).

10) Sound power level according to energy labeling, measured according to EN12102 and EN3741 (B0W55).

11) Hot water performance according to EN16147, V40 according to XL cycle with the control computer set for Comfort mode and built-in hot water tank.

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