

Product data sheet (in accordance with EU regulation no. 811/2013, 812/2013, 813/2013 and 814/2013) .

Technical parameters for heat pump space heaters and heat pump combination heaters and temperature control packages		208706 208709 208711 208714	208707 208710 208712 208715	208708 208713		
Model	Conditions	Sigrin 9 400V Sigrin 9 230V Sigrin 9 Duo 400V Sigrin 9 Duo 230V	Sigrin 13 400V Sigrin 13 230V Sigrin 13 Duo 400V Sigrin 13 Duo 230V	Sigrin 19 400V Sigrin 19 Duo 400V	Symbol	Unit
harmonised standard	EN 14825, EN 16147, EN 12102					
Air to water heat pump		NO	NO	NO		
Water-to-water heat pump		YES	YES	YES		
Brine-to water heat pump		YES	YES	YES		
Low Temperature Heat pump		NO	NO	NO		
Equipped with supplementary heater		YES	YES	YES		
Heat pump combination heater		YES	YES	YES		
Built in temperature control class		II	II	II		
Built in temperature control contribution to energy efficiency		2,0	2,0	2,0		%
Rated heat output	(average climate conditions)	8	12	17	Prated	kW
Rated heat output	(colder climate conditions)	8	12	17	Prated	kW
Rated heat output	(warmer climate conditions)	8	12	17	Prated	kW
Rated heat output	(low temperature applications average climate conditions)	8	13	19	Prated	kW
Rated heat output	(low temperature applications colder climate conditions)	8	13	19	Prated	kW
Rated heat output	(low temperature applications warmer climate conditions)	8	13	19	Prated	kW
SCOP	(average climate conditions)	4,03	4,19	4,07		
SCOP	(colder climate conditions)	4,17	4,36	4,19		
SCOP	(warmer climate conditions)	4,01	4,19	4,05		
SCOP	(low temperature applications average climate conditions)	5,15	5,28	5,19		
SCOP	(low temperature applications colder climate conditions)	5,35	5,48	5,39		
SCOP	(low temperature applications warmer climate conditions)	5,14	5,26	5,14		
Seasonal space heating Energy efficiency	(average climate conditions)	153	160	155	ηs	%
Seasonal space heating Energy efficiency Built in temperature control package	(average climate conditions)	155	162	157	ηs	%
Seasonal space heating Energy efficiency	(colder climate conditions)	159	166	160	ηs	%
Seasonal space heating Energy efficiency Built in temperature control package	(colder climate conditions)	161	168	162	ηs	%
Seasonal space heating Energy efficiency	(warmer climate conditions)	152	160	154	ηs	%
Seasonal space heating Energy efficiency Built in temperature control package	(warmer climate conditions)	154	162	156	ηs	%
Seasonal space heating Energy efficiency	(low temperature applications average climate conditions)	198	203	200	ηs	%
Seasonal space heating Energy efficiency Built in temperature control package	(low temperature applications average climate conditions)	200	205	202	ηs	%
Seasonal space heating Energy efficiency	(low temperature applications colder climate conditions)	206	211	208	ηs	%
Seasonal space heating Energy efficiency Built in temperature control package	(low temperature applications colder climate conditions)	208	213	210	ηs	%
Seasonal space heating Energy efficiency	(low temperature applications warmer climate conditions)	198	203	197	ηs	%
Seasonal space heating Energy efficiency Built in temperature control package	(low temperature applications warmer climate conditions)	200	205	199	ηs	%
Energy efficiency class		A+++	A+++	A+++		
Energy efficiency class built in temperature control package		A+++	A+++	A+++		
Energy efficiency class	(low temperature applications)	A+++	A+++	A+++		
Energy efficiency class built in temperature control package	(low temperature applications)	A+++	A+++	A+++		
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj						
Tj = -7 °C	(average climate conditions)	7,0	10,9	14,7	Pdh	kW
Tj = -7 °C	(colder climate conditions)	4,8	7,4	10,1	Pdh	kW
Tj = -7 °C	(warmer climate conditions)	NA	NA	NA	Pdh	kW
Tj = -7 °C	(low temperature applications average climate conditions)	7,5	11,4	17,0	Pdh	kW
Tj = -7 °C	(low temperature applications colder climate conditions)	5,1	7,8	11,6	Pdh	kW
Tj = -7 °C	(low temperature applications warmer climate conditions)	NA	NA	NA	Pdh	kW
Tj = +2 °C	(average climate conditions)	4,3	6,6	9,0	Pdh	kW
Tj = +2 °C	(colder climate conditions)	2,9	4,5	7,3	Pdh	kW
Tj = +2 °C	(warmer climate conditions)	8,0	12,3	16,6	Pdh	kW
Tj = +2 °C	(low temperature applications average climate conditions)	4,6	7,0	10,3	Pdh	kW
Tj = +2 °C	(low temperature applications colder climate conditions)	3,1	4,8	7,1	Pdh	kW
Tj = +2 °C	(low temperature applications warmer climate conditions)	8,5	12,9	19,2	Pdh	kW
Tj = +7 °C	(average climate conditions)	2,8	4,8	7,4	Pdh	kW
Tj = +7 °C	(colder climate conditions)	3,0	4,7	7,4	Pdh	kW
Tj = +7 °C	(warmer climate conditions)	5,1	7,9	10,7	Pdh	kW

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T _j = +7 °C	(low temperature applications average climate conditions)	2,9	4,5	7,7	Pdh	kW
T _j = +7 °C	(low temperature applications colder climate conditions)	3,2	4,9	7,7	Pdh	kW
T _j = +7 °C	(low temperature applications warmer climate conditions)	5,5	8,3	12,3	Pdh	kW
T _j = +12 °C	(average climate conditions)	3,0	4,8	7,5	Pdh	kW
T _j = +12 °C	(colder climate conditions)	3,0	4,7	7,5	Pdh	kW
T _j = +12 °C	(warmer climate conditions)	3,0	4,7	7,4	Pdh	kW
T _j = +12 °C	(low temperature applications average climate conditions)	3,1	4,9	7,7	Pdh	kW
T _j = +12 °C	(low temperature applications colder climate conditions)	3,1	4,8	7,7	Pdh	kW
T _j = +12 °C	(low temperature applications warmer climate conditions)	3,1	4,9	7,7	Pdh	kW
T _j = bivalent temperature	(average climate conditions)	8,0	12,3	16,6	Pdh	kW
T _j = bivalent temperature	(colder climate conditions)	8,0	12,3	16,6	Pdh	kW
T _j = bivalent temperature	(warmer climate conditions)	8,0	12,3	16,6	Pdh	kW
T _j = bivalent temperature	(low temperature applications average climate conditions)	8,5	12,9	19,2	Pdh	kW
T _j = bivalent temperature	(low temperature applications colder climate conditions)	8,5	12,9	19,2	Pdh	kW
T _j = bivalent temperature	(low temperature applications warmer climate conditions)	8,5	12,9	19,2	Pdh	kW
T _j = operation limit temperature	(average climate conditions)	8,0	12,3	16,6	Pdh	kW
T _j = operation limit temperature	(colder climate conditions)	8,0	12,3	16,6	Pdh	kW
T _j = operation limit temperature	(warmer climate conditions)	8,0	12,3	16,6	Pdh	kW
T _j = operation limit temperature	(low temperature applications average climate conditions)	8,5	12,9	19,2	Pdh	kW
T _j = operation limit temperature	(low temperature applications colder climate conditions)	8,5	12,9	19,2	Pdh	kW
T _j = operation limit temperature	(low temperature applications warmer climate conditions)	8,5	12,9	19,2	Pdh	kW
Bivalent temperature	(average climate conditions)	-10	-10	-10	Tbiv	°C
Bivalent temperature	(colder climate conditions)	-22	-22	-22	Tbiv	°C
Bivalent temperature	(warmer climate conditions)	2	2	2	Tbiv	°C
Bivalent temperature	(low temperature applications average climate conditions)	-10	-10	-10	Tbiv	°C
Bivalent temperature	(low temperature applications colder climate conditions)	-22	-22	-22	Tbiv	°C
Bivalent temperature	(low temperature applications warmer climate conditions)	2	2	2	Tbiv	°C
Degradation coefficient T _j = -7 °C	(average climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = -7 °C	(colder climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = -7 °C	(warmer climate conditions)	NA	NA	NA	Cdh	
Degradation coefficient T _j = -7 °C	(low temperature applications average climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = -7 °C	(low temperature applications colder climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = -7 °C	(low temperature applications warmer climate conditions)	NA	NA	NA	Cdh	
Degradation coefficient T _j = +2 °C	(average climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = +2 °C	(colder climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = +2 °C	(warmer climate conditions)	NA	NA	NA	Cdh	
Degradation coefficient T _j = +2 °C	(low temperature applications average climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = +2 °C	(low temperature applications colder climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = +2 °C	(low temperature applications warmer climate conditions)	NA	NA	NA	Cdh	
Degradation coefficient T _j = +7 °C	(average climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = +7 °C	(colder climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = +7 °C	(warmer climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = +7 °C	(low temperature applications average climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = +7 °C	(low temperature applications colder climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = +7 °C	(low temperature applications warmer climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = +12 °C	(average climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = +12 °C	(colder climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = +12 °C	(warmer climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = +12 °C	(low temperature applications average climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = +12 °C	(low temperature applications colder climate conditions)	1,0	1,0	1,0	Cdh	
Degradation coefficient T _j = +12 °C	(low temperature applications warmer climate conditions)	1,0	1,0	1,0	Cdh	
Declared coefficient of performance for part load at indoor temperature 20 °C and outdoor temperature T _j						
T _j = -7 °C	(average climate conditions)	3,10	3,13	3,09	COPd	
T _j = -7 °C	(colder climate conditions)	3,87	3,95	3,87	COPd	

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T _j = -7 °C	(warmer climate conditions)	NA	NA	NA	COPd	
T _j = -7 °C	(low temperature applications average climate conditions)	4,19	4,19	4,08	COPd	
T _j = -7 °C	(low temperature applications colder climate conditions)	5,14	5,20	5,09	COPd	
T _j = -7 °C	(low temperature applications warmer climate conditions)	NA	NA	NA	COPd	
T _j = +2 °C	(average climate conditions)	4,07	4,20	4,13	COPd	
T _j = +2 °C	(colder climate conditions)	4,57	4,85	4,56	COPd	
T _j = +2 °C	(warmer climate conditions)	2,75	2,91	2,81	COPd	
T _j = +2 °C	(low temperature applications average climate conditions)	5,25	5,35	5,24	COPd	
T _j = +2 °C	(low temperature applications colder climate conditions)	5,79	5,96	5,91	COPd	
T _j = +2 °C	(low temperature applications warmer climate conditions)	3,77	3,89	3,64	COPd	
T _j = +7 °C	(average climate conditions)	4,68	4,88	4,63	COPd	
T _j = +7 °C	(colder climate conditions)	4,81	5,03	4,87	COPd	
T _j = +7 °C	(warmer climate conditions)	3,71	3,79	3,67	COPd	
T _j = +7 °C	(low temperature applications average climate conditions)	5,79	5,94	5,91	COPd	
T _j = +7 °C	(low temperature applications colder climate conditions)	5,85	5,99	5,90	COPd	
T _j = +7 °C	(low temperature applications warmer climate conditions)	4,97	4,99	4,79	COPd	
T _j = +12 °C	(average climate conditions)	4,84	5,16	4,94	COPd	
T _j = +12 °C	(colder climate conditions)	5,02	5,17	5,09	COPd	
T _j = +12 °C	(warmer climate conditions)	4,69	4,94	4,73	COPd	
T _j = +12 °C	(low temperature applications average climate conditions)	5,83	5,99	5,90	COPd	
T _j = +12 °C	(low temperature applications colder climate conditions)	5,69	5,84	5,80	COPd	
T _j = +12 °C	(low temperature applications warmer climate conditions)	5,78	5,93	5,84	COPd	
T _j = bivalent temperature	(average climate conditions)	2,75	2,84	2,81	COPd	
T _j = bivalent temperature	(colder climate conditions)	2,75	2,91	2,81	COPd	
T _j = bivalent temperature	(warmer climate conditions)	2,75	2,91	2,81	COPd	
T _j = bivalent temperature	(low temperature applications average climate conditions)	3,77	3,82	3,64	COPd	
T _j = bivalent temperature	(low temperature applications colder climate conditions)	3,77	3,89	3,64	COPd	
T _j = bivalent temperature	(low temperature applications warmer climate conditions)	3,77	3,89	3,64	COPd	
T _j = operation limit temperature	(average climate conditions)	2,75	2,84	2,81	COPd	
T _j = operation limit temperature	(colder climate conditions)	2,75	2,91	2,81	COPd	
T _j = operation limit temperature	(warmer climate conditions)	2,75	2,91	2,81	COPd	
T _j = operation limit temperature	(low temperature applications average climate conditions)	3,77	3,82	3,64	COPd	
T _j = operation limit temperature	(low temperature applications colder climate conditions)	3,77	3,89	3,64	COPd	
T _j = operation limit temperature	(low temperature applications warmer climate conditions)	3,77	3,89	3,64	COPd	
Heating water operating limit temperature		65	65	65	WTOL	°C
Power consumption in other mode than active						
Off mode		0,010	0,015	0,010	POFF	kW
Thermostat off mode		0,014	0,018	0,014	PTO	kW
Standby mode		0,011	0,015	0,011	PSB	kW
Crankcase heater mode		0,000	0,000	0,000	PCK	kW
Supplementary heater						
Rated heat output	(average climate conditions)	0,0	0,0	0,0	Psup	kW
Rated heat output	(colder climate conditions)	0,0	0,0	0,0	Psup	kW
Rated heat output	(warmer climate conditions)	0,0	0,0	0,0	Psup	kW
Rated heat output	(low temperature applications average climate conditions)	0,0	0,0	0,0	Psup	kW
Rated heat output	(low temperature applications colder climate conditions)	0,0	0,0	0,0	Psup	kW
Rated heat output	(low temperature applications warmer climate conditions)	0,0	0,0	0,0	Psup	kW
Type of energy input		Electrical	Electrical	Electrical		
Other items						
Capacity control		Capacity controlled	Capacity controlled	Capacity controlled		
Sound power levels indoors		39	40	41	LWA	dB
Sound power levels indoors (Duo Version)		39	40	40	LWA	dB
Annual energy consumption	(average climate conditions)	4082	6060	8439	QHE	kWh
Annual energy consumption	(colder climate conditions)	4713	6948	9793	QHE	kWh
Annual energy consumption	(warmer climate conditions)	2656	3916	5491	QHE	kWh

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Annual energy consumption	(low temperature applications average climate conditions)	3405	5062	7634	QHE	kWh
Annual energy consumption	(low temperature applications colder climate conditions)	3912	5826	8764	QHE	kWh
Annual energy consumption	(low temperature applications warmer climate conditions)	2205	3285	4989	QHE	kWh
For brine to water heat pumps: Rated brine flow rate, outdoor heat exchange	(average climate conditions)	2	2	3		m3/h
For brine to water heat pumps: Rated brine flow rate, outdoor heat exchange	(colder climate conditions)	2	2	3		m3/h
For brine to water heat pumps: Rated brine flow rate, outdoor heat exchange	(warmer climate conditions)	2	2	3		m3/h
For brine to water heat pumps: Rated brine flow rate, outdoor heat exchange	(low temperature applications average climate conditions)	2	3	4		m3/h
For brine to water heat pumps: Rated brine flow rate, outdoor heat exchange	(low temperature applications colder climate conditions)	2	3	4		m3/h
For brine to water heat pumps: Rated brine flow rate, outdoor heat exchange	(low temperature applications warmer climate conditions)	2	3	4		m3/h
Possibility to run only during off peak hour:		NO	NO	NO		
For heat pump combination heater						
Declared load profile *		XL	XL	XL		
Daily electricity consumption †		6,972	6,223	6,582	Qelec	kWh
Annual electricity consumption		1489	1327	1405	AEC	kWh/annum
Water heater energy efficiency *		109	123	116	ηwh	%
Energy label water heater		A	A+	A		
*Same figures for Average, Cold and warm climate conditions						
PRECAUTIONS	All specific precautions for assembly, installation and maintenance are described in the operating and installation instructions. Read and follow the operating and installation instructions					