

Modell	SPH-W0500-T1Q00-022H (R-513A)		
Air-to-water heat pump:	No		
Water-to-water heat pump:	Yes		
Brine-to-water heat pump:	No		
Low-temperature heat pump:	No		
Equipped with a supplementary heater:	No		
Heat pump combination heater:	No		

Parameters are declared for applications with:	medium-temperature (55°C)
	average climate

Item	Symbol	Value	Unit
Rated heat output	P _{rated}	419,34	kW
Declared capacity for heating for part load at indoor temperature 20 °	C and outd	oor temperatur	e Tj
Tj = -7°C	P_{dh}	371	kW
Tj = +2°C	P_{dh}	225	kW
Tj = +7°C	P _{dh}	154	kW
Tj = +12°C	P _{dh}	128	kW
Tj = -10°C (bivalent temperature)	P _{dh}	419	kW
Tj = -10°C (operation limit temperature)	P _{dh}	419	kW
Bivalent temperature	T _{biv}	-10	°C
Degradation coefficient*	C _{dh}	0,90	-
Power consumption in modes other than active mode			
Off mode	P _{off}	-	kW
Thermostat-off mode	P _{TO}	4,75	kW
Standby mode	P _{SB}	0,24	kW
Crankcase heater mode	P _{CK}	-	kW
Sonstige Elemente			
Capacity control		varia	ıble
Sound power level	L _{WA}	94	dB(A)
Annual energy consumption	QHe	175.082	kWh
Rated brine or water flow rate, evaporator		91,8	m³/h
Contact details			
ENGIE Refrigeration GmbH Josephine-Hirner-Strasse 1&3 88131 Lindau			

^{*} If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

The harmonized standards EN14511 and EN14825 have been used for testing and calculation

Water/Brine pumps are fictive and not included in the delivery. Pump power is according to EN14511-3, Annex G

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	189,90	%
Declared coefficient of performance or primary energy ratio for part load a	t indoor temperature 20 °C and outdoo	or temperature	Tj
Tj = -7°C	COP _d	4,35	-
Tj = +2°C	COP _d	5,01	-
$Tj = +7^{\circ}C$	COP _d	5,23	-
Tj = +12°C	COP _d	5,94	-
Tj = -10°C (bivalent temperature)	COP _d	4,09	-
Tj = -10°C (operation limit temperature)	COP _d	4,09	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output	Psup	0	W
Type of energy input		-	



Modell	SPH-W1000-T3Q00-044H (R-513		
Air-to-water heat pump:	No		
Water-to-water heat pump:	Yes		
Brine-to-water heat pump:	No		
Low-temperature heat pump:	No		
Equipped with a supplementary heater:	No		
Heat pump combination heater:	No		

Parameters are declared for applications with:	medium-temperature (55°C)
	average climate

Item	Symbol	Value	Unit
Rated heat output	P _{rated}	828,48	kW
Declared capacity for heating for part load at indoor temperature 20	0 °C and outde	oor temperatur	e Tj
Tj = -7°C	P_{dh}	732	kW
Tj = +2°C	P_{dh}	445	kW
Tj = +7°C	P_{dh}	287	kW
Tj = +12°C	P_{dh}	129	kW
Tj = -10°C (bivalent temperature)	P _{dh}	828	kW
Tj = -10°C (operation limit temperature)	P _{dh}	828	kW
Bivalent temperature	T _{biv}	-10	°C
Degradation coefficient*	C _{dh}	0,90	-
Power consumption in modes other than active mode			
Off mode	P _{off}	-	kW
Thermostat-off mode	P _{TO}	8,39	kW
Standby mode	P _{SB}	0,24	kW
Crankcase heater mode	P _{CK}	-	kW
Sonstige Elemente			
Capacity control		varia	ıble
Sound power level	L _{WA}	97	dB(A)
Annual energy consumption	QHe	337.305	kWh
Rated brine or water flow rate, evaporator		181,5	m³/h
Contact details			
ENGIE Refrigeration GmbH Josephine-Hirner-Strasse 1&3 88131 Linda	ıu		

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Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	194,94	%
Declared coefficient of performance or primary energy ratio for part load at	t indoor temperature 20 °C and outdoo	or temperature	Tj
Tj = -7°C	COP _d	4,37	-
Tj = +2°C	COP _d	5,04	-
$Tj = +7^{\circ}C$	COP _d	5,73	-
Tj = +12°C	COP _d	5,17	-
Tj = -10°C (bivalent temperature)	COP _d	4,12	-
Tj = -10°C (operation limit temperature)	COP _d	4,12	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output	Psup	0	W
Type of energy input		-	



Modell	SPH-W1500-T3Q00-055H (R-513)		
Air-to-water heat pump:	No		
Water-to-water heat pump:	Yes		
Brine-to-water heat pump:	No		
Low-temperature heat pump:	No		
Equipped with a supplementary heater:	No		
Heat pump combination heater:	No		

arameters are declared for applications with:	medium-temperature (55°C)
	average climate

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Item	Symbol	Value	Unit
Rated heat output	P _{rated}	1425,59	kW
Declared capacity for heating for part load at indoor temperature 20 °	°C and outde	oor temperatur	e Tj
$Tj = -7^{\circ}C$	P_{dh}	1262	kW
Tj = +2°C	P_{dh}	768	kW
Tj = +7°C	P_{dh}	492	kW
Tj = +12°C	P_{dh}	220	kW
Tj = -10°C (bivalent temperature)	P _{dh}	1426	kW
Tj = -10°C (operation limit temperature)	P_{dh}	1426	kW
Bivalent temperature	T _{biv}	-10	°C
Degradation coefficient*	C_{dh}	0,90	-
Power consumption in modes other than active mode			
Off mode	P _{off}	-	kW
Thermostat-off mode	P _{TO}	12,80	kW
Standby mode	P _{SB}	0,24	kW
Crankcase heater mode	P _{CK}	-	kW
Sonstige Elemente			
Capacity control		variable	
Sound power level	L_{WA}	99	dB(A)
Annual energy consumption	QHe	556.647	kWh
Rated brine or water flow rate, evaporator		309,6	m³/h
Contact details			
ENGIE Refrigeration GmbH Josephine-Hirner-Strasse 1&3 88131 Lindau			

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The harmonized standards EN14511 and EN14825 have been used for testing and calculation

Water/Brine pumps are fictive and not included in the delivery. Pump power is according to EN14511-3, Annex G

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	203,60	%
Declared coefficient of performance or primary energy ratio for part load a	at indoor temperature 20 °C and outdoo	or temperature	Tj
Tj = -7°C	COP _d	4,31	-
Tj = +2°C	COP _d	5,31	-
$Tj = +7^{\circ}C$	COP _d	5,95	-
Tj = +12°C	COP _d	5,75	-
Tj = -10°C (bivalent temperature)	COP _d	4,02	-
Tj = -10°C (operation limit temperature)	COP _d	4,02	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output	Psup	0	W
Type of energy input		-	



Modell	SPH-W2000-T4Q00-076H (R-513A		
Air-to-water heat pump:	No		
Water-to-water heat pump:	Yes		
Brine-to-water heat pump:	No		
Low-temperature heat pump:	No		
Equipped with a supplementary heater:	No		
Heat pump combination heater:	No		

Parameters are declared for applications with:	medium-temperature (55°C)
	average climate

Item	Symbol	Value	Unit
Rated heat output	P _{rated}	1686,55	kW
Declared capacity for heating for part load at indoor temperature 20 °C	C and outdo	oor temperatur	e Tj
Tj = -7°C	P_{dh}	1492	kW
Tj = +2°C	P_{dh}	908	kW
Tj = +7°C	P_{dh}	585	kW
Tj = +12°C	P_{dh}	261	kW
Tj = -10°C (bivalent temperature)	P _{dh}	1687	kW
Tj = -10°C (operation limit temperature)	P_{dh}	1687	kW
Bivalent temperature	T _{biv}	-10	°C
Degradation coefficient*	C _{dh}	0,90	-
Power consumption in modes other than active mode			
Off mode	P _{off}	-	kW
Thermostat-off mode	P _{TO}	14,54	kW
Standby mode	P _{SB}	0,24	kW
Crankcase heater mode	P _{CK}	-	kW
Sonstige Elemente			
Capacity control		varia	ıble
Sound power level	L_{WA}	100	dB(A)
Annual energy consumption	QHe	656.658	kWh
Rated brine or water flow rate, evaporator		369,3	m³/h
Contact details			
ENGIE Refrigeration GmbH Josephine-Hirner-Strasse 1&3 88131 Lindau			

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The harmonized standards EN14511 and EN14825 have been used for testing and calculation

Water/Brine pumps are fictive and not included in the delivery. Pump power is according to EN14511-3, Annex G

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	204,21	%
Declared coefficient of performance or primary energy ratio for part load a	indoor temperature 20 °C and outdoo	or temperature	Tj
Tj = -7°C	COP _d	4,41	-
Tj = +2°C	COP _d	5,36	-
$Tj = +7^{\circ}C$	COP _d	5,84	-
Tj = +12°C	COP _d	5,69	-
Tj = -10°C (bivalent temperature)	COP _d	4,13	-
Tj = -10°C (operation limit temperature)	COP _d	4,13	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output	Psup	0	W
Type of energy input		-	



Modell	SPH-W2500-T5Q00-087H (R-513)		
Air-to-water heat pump:	No		
Water-to-water heat pump:	Yes		
Brine-to-water heat pump:	No		
Low-temperature heat pump:	No		
Equipped with a supplementary heater:	No		
Heat pump combination heater:	No		

Parameters are declared for applications with:	medium-temperature (55°C)
	average climate

ltem	Symbol	Value	Unit
Rated heat output	P _{rated}	2016,58	kW
Declared capacity for heating for part load at indoor temperature 20 °		oor temperatur	e Tj
Tj = -7°C	P_{dh}	1785	kW
Tj = +2°C	P_{dh}	1084	kW
Tj = +7°C	P _{dh}	696	kW
Tj = +12°C	P_{dh}	312	kW
Tj = -10°C (bivalent temperature)	P _{dh}	2017	kW
Tj = -10°C (operation limit temperature)	P _{dh}	2017	kW
Bivalent temperature	T _{biv}	-10	°C
Degradation coefficient*	C _{dh}	0,90	-
Power consumption in modes other than active mode			
Off mode	P _{off}	-	kW
Thermostat-off mode	P _{TO}	17,12	kW
Standby mode	P _{SB}	0,24	kW
Crankcase heater mode	P _{CK}	-	kW
Sonstige Elemente			
Capacity control		varia	ble
Sound power level	L _{WA}	101	dB(A)
Annual energy consumption	QHe	784.337	kWh
Rated brine or water flow rate, evaporator		441,7	m³/h
Contact details			
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^{*} If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

The harmonized standards EN14511 and EN14825 have been used for testing and calculation

Water/Brine pumps are fictive and not included in the delivery. Pump power is according to EN14511-3, Annex G

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	204,43	%
Declared coefficient of performance or primary energy ratio for part load at i	ndoor temperature 20 °C and outdoo	or temperature	Tj
Tj = -7°C	COP _d	4,39	-
Tj = +2°C	COP _d	5,33	-
$Tj = +7^{\circ}C$	COP _d	5,97	-
Tj = +12°C	COP _d	5,61	-
Tj = -10°C (bivalent temperature)	COP _d	4,14	-
Tj = -10°C (operation limit temperature)	COP _d	4,14	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output	Psup	0	W
Type of energy input		-	



Modell	SPH-W3000-T6Q00-098H (R-513A		
Air-to-water heat pump:	No		
Water-to-water heat pump:	Yes		
Brine-to-water heat pump:	No		
Low-temperature heat pump:	No		
Equipped with a supplementary heater:	No		
Heat pump combination heater:	No		

Parameters are declared for applications with:	medium-temperature (55°C)
	average climate

ltem	Symbol	Value	Unit
Rated heat output	P _{rated}	2565,75	kW
Declared capacity for heating for part load at indoor temperature 20 °	C and outd	oor temperatur	e Tj
Tj = -7°C	P_{dh}	2269	kW
Tj = +2°C	P_{dh}	1380	kW
Tj = +7°C	P _{dh}	883	kW
Tj = +12°C	P_{dh}	391	kW
Tj = -10°C (bivalent temperature)	P _{dh}	2566	kW
Tj = -10°C (operation limit temperature)	P _{dh}	2566	kW
Bivalent temperature	T _{biv}	-10	°C
Degradation coefficient*	C _{dh}	0,90	-
Power consumption in modes other than active mode			
Off mode	P _{off}	-	kW
Thermostat-off mode	P _{TO}	22,01	kW
Standby mode	P _{SB}	0,24	kW
Crankcase heater mode	P _{CK}	-	kW
Sonstige Elemente			
Capacity control		varia	ble
Sound power level	L_{WA}	102	dB(A)
Annual energy consumption	QHe	997.143	kWh
Rated brine or water flow rate, evaporator		560,9	m³/h
Contact details			
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Water/Brine pumps are fictive and not included in the delivery. Pump power is according to EN14511-3, Annex G

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	204,60	%
Declared coefficient of performance or primary energy ratio for part load at ir	door temperature 20 °C and outdo	or temperature	Tj
Tj = -7°C	COP _d	4,38	-
Tj = +2°C	COP _d	5,33	-
Tj = +7°C	COP _d	5,94	-
Tj = +12°C	COP _d	5,81	-
Tj = -10°C (bivalent temperature)	COP _d	4,11	-
Tj = -10°C (operation limit temperature)	COP _d	4,11	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output	Psup	0	W
Type of energy input		-	