

Technical parameters

Model	Indoor unit	8kW;8kW(heating 3/9kW)
	Outdoor unit	8kW
Air-to-water heat pump	yes	
Water-to-water heat pump	no	
Brine-to-water heat pump	no	
Low-temperature heat pump	no	
Equipped with a supplementary heater	no;yes	
Heat pump combination heater	no	
Parameters shall be declared for	Low temperature application	
Parameters shall be declared for	Average climate condition	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	Prated	7.1	kW
Tj = + 2°C	Pdh	4.4	kW
Tj = + 7°C	Pdh	2.9	kW
Tj = + 12°C	Pdh	2.3	kW
Tj = bivalent temperature	Pdh	7.1	kW
Tj = operation limit temperature	Pdh	7.6	kW
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	Pdh	N/A	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcych	N/A	kW
Degradation co-efficient (**)	Cdh	0.9	kW
Power consumption in modes other than active mode			
Off mode	P _{OFF}	0.015	kW
Thermostat-off mode	P _{TO}	0.015	kW
Standby mode	P _{SB}	0.015	kW
Crankcase heater mode	P _{CK}	0.015	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	192.7	%
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature Tj			
Tj = − 7°C	COPd	3.07	-
Tj = + 2°C	COPd	4.62	-
Tj = + 7°C	COPd	6.70	-
Tj = + 12°C	COPd	8.97	-
Tj = bivalent temperature	COPd	3.07	-
Tj = operation limit temperature	COPd	2.73	-
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	COPd	N/A	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COP _{cyc}	N/A	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output (**)			
Supplementary heater	P _{sup}	0.4	kW
Type of energy input	Electric		

Other items							
Capacity control	fixed/variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4500	m³/h
Sound power level, indoors/ outdoors	L _{WA}	41/60	dB				
Annual energy consumption	Q _{HE}	3404	kWh				
For heat pump combination heater:							
Declared load profile	N/A			Water heating energy efficiency	η _{wh}	N/A	%
Daily electricity consumption	Q _{elec}	N/A	kWh				
Annual electricity consumption	AEC	N/A	kWh				
Contact details	See the back cover of the manual						

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

Technical parameters

Model	Indoor unit	8kW;8kW(heating 3/9kW)
	Outdoor unit	8kW
Air-to-water heat pump	yes	
Water-to-water heat pump	no	
Brine-to-water heat pump	no	
Low-temperature heat pump	no	
Equipped with a supplementary heater	no;yes	
Heat pump combination heater	no	
Parameters shall be declared for	Low temperature application	
Parameters shall be declared for	Colder climate condition	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	Prated	4.3	kW
Tj = + 2°C	Pdh	2.7	kW
Tj = + 7°C	Pdh	2.0	kW
Tj = + 12°C	Pdh	2.4	kW
Tj = bivalent temperature	Pdh	5.7	kW
Tj = operation limit temperature	Pdh	3.4	kW
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	Pdh	N/A	kW
Bivalent temperature	Tbiv	-15	°C
Cycling interval capacity for heating	Pcych	N/A	kW
Degradation co-efficient (**)	Cdh	0.9	kW
Power consumption in modes other than active mode			
Off mode	P _{OFF}	0.015	kW
Thermostat-off mode	P _{TO}	0.015	kW
Standby mode	P _{SB}	0.015	kW
Crankcase heater mode	P _{CK}	0.015	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	158.7	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	COPd	3.58	-
Tj = + 2°C	COPd	4.88	-
Tj = + 7°C	COPd	5.61	-
Tj = + 12°C	COPd	6.82	-
Tj = bivalent temperature	COPd	2.68	-
Tj = operation limit temperature	COPd	1.65	-
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	COPd	N/A	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COP _{cyc}	N/A	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output (**)			
Supplementary heater	Psup	3.6	kW
Type of energy input	Electric		

Other items								
Capacity control	fixed/variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4500	m³/h	
Sound power level, indoors/ outdoors	L _{WA}	41/60	dB		For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	N/A	m³/h
Annual energy consumption	Q _{HE}	4328	kWh					
For heat pump combination heater:								
Declared load profile	N/A			Water heating energy efficiency	η _{wh}	N/A	%	
Daily electricity consumption	Q _{elec}	N/A	kWh		Daily fuel consumption	Q _{fuel}	N/A	kWh
Annual electricity consumption	AEC	N/A	kWh		Annual fuel consumption	AFC	N/A	GJ
Contact details	See the back cover of the manual							

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

Technical parameters

Model	Indoor unit	8kW;8kW(heating 3/9kW)
	Outdoor unit	8kW
Air-to-water heat pump	yes	
Water-to-water heat pump	no	
Brine-to-water heat pump	no	
Low-temperature heat pump	no	
Equipped with a supplementary heater	no;yes	
Heat pump combination heater	no	
Parameters shall be declared for	Low temperature application	
Parameters shall be declared for	Warmer climate condition	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	Prated	N/A	kW
Tj = + 2°C	Pdh	7.9	kW
Tj = + 7°C	Pdh	5.1	kW
Tj = + 12°C	Pdh	2.4	kW
Tj = bivalent temperature	Pdh	7.9	kW
Tj = operation limit temperature	Pdh	7.9	kW
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	Pdh	N/A	kW
Bivalent temperature	Tbiv	2	°C
Cycling interval capacity for heating	Pcych	N/A	kW
Degradation co-efficient (**)	Cdh	0.9	kW
Power consumption in modes other than active mode			
Off mode	POFF	0.015	kW
Thermostat-off mode	PTo	0.015	kW
Standby mode	PSB	0.015	kW
Crankcase heater mode	PCK	0.015	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	253.2	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	COPd	N/A	-
Tj = + 2°C	COPd	3.68	-
Tj = + 7°C	COPd	5.86	-
Tj = + 12°C	COPd	7.71	-
Tj = bivalent temperature	COPd	3.68	-
Tj = operation limit temperature	COPd	3.68	-
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	COPd	N/A	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COPcyc	N/A	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output (**)			
Supplementary heater	Psup	0.1	kW
Type of energy input	Electric		

Other items							
Capacity control	fixed/variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4500	m³/h
Sound power level, indoors/ outdoors	L _{WA}	41/60	dB				
Annual energy consumption	Q _{HE}	1658	kWh				
For heat pump combination heater:							
Declared load profile	N/A			Water heating energy efficiency	η _{wh}	N/A	%
Daily electricity consumption	Q _{elec}	N/A	kWh				
Annual electricity consumption	AEC	N/A	kWh				
Contact details	See the back cover of the manual						

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

Technical parameters

Model	Indoor unit	8kW;8kW(heating 3/9kW)
	Outdoor unit	8kW
Air-to-water heat pump	yes	
Water-to-water heat pump	no	
Brine-to-water heat pump	no	
Low-temperature heat pump	no	
Equipped with a supplementary heater	no;yes	
Heat pump combination heater	no	
Parameters shall be declared for	Medium temperature application	
Parameters shall be declared for	Average climate condition	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η_s	134.6	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = − 7°C	Prated	6.1	kW	T _j = − 7°C	COP _d	2.07	-
T _j = + 2°C	P _{dh}	3.8	kW	T _j = + 2°C	COP _d	3.33	-
T _j = + 7°C	P _{dh}	2.5	kW	T _j = + 7°C	COP _d	4.53	-
T _j = + 12°C	P _{dh}	2.3	kW	T _j = + 12°C	COP _d	6.85	-
T _j = bivalent temperature	P _{dh}	6.1	kW	T _j = bivalent temperature	COP _d	2.07	-
T _j = operation limit temperature	P _{dh}	6.1	kW	T _j = operation limit temperature	COP _d	1.85	-
For air-to-water heat pumps: T _j = − 15°C (if TOL < − 20°C)	P _{dh}	N/A	kW	For air-to-water heat pumps: T _j = − 15°C (if TOL < − 20°C)	COP _d	N/A	-
Bivalent temperature	T _{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P _{cyh}	N/A	kW	Cycling interval efficiency	COP _{cyh}	N/A	-
Degradation co-efficient (**)	C _{dh}	0.9	kW	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (**)			
Thermostat-off mode	P _{TO}	0.015	kW	Supplementary heater	P _{sup}	0.9	kW
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electric		
Crankcase heater mode	P _{CK}	0.015	kW				

Other items								
Capacity control	fixed/variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4500	m³/h	
Sound power level, indoors/ outdoors	L _{WA}	41/60	dB		For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	N/A	m³/h
Annual energy consumption	Q _{HE}	4205	kWh					
For heat pump combination heater:								
Declared load profile	N/A			Water heating energy efficiency	η _{wh}	N/A	%	
Daily electricity consumption	Q _{elec}	N/A	kWh		Daily fuel consumption	Q _{fuel}	N/A	kWh
Annual electricity consumption	AEC	N/A	kWh		Annual fuel consumption	AFC	N/A	GJ
Contact details	See the back cover of the manual							

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

Technical parameters

Model	Indoor unit	8kW;8kW(heating 3/9kW)
	Outdoor unit	8kW
Air-to-water heat pump	yes	
Water-to-water heat pump	no	
Brine-to-water heat pump	no	
Low-temperature heat pump	no	
Equipped with a supplementary heater	no;yes	
Heat pump combination heater	no	
Parameters shall be declared for	Medium temperature application	
Parameters shall be declared for	Colder climate condition	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	Prated	3.8	kW
Tj = + 2°C	Pdh	2.2	kW
Tj = + 7°C	Pdh	1.9	kW
Tj = + 12°C	Pdh	2.3	kW
Tj = bivalent temperature	Pdh	4.8	kW
Tj = operation limit temperature	Pdh	2.7	kW
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	Pdh	N/A	kW
Bivalent temperature	Tbiv	-15	°C
Cycling interval capacity for heating	Pcych	N/A	kW
Degradation co-efficient (**)	Cdh	0.9	kW
Power consumption in modes other than active mode			
Off mode	P _{OFF}	0.015	kW
Thermostat-off mode	P _{TO}	0.015	kW
Standby mode	P _{SB}	0.015	kW
Crankcase heater mode	P _{CK}	0.015	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	110.8	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	COPd	2.39	-
Tj = + 2°C	COPd	3.42	-
Tj = + 7°C	COPd	4.22	-
Tj = + 12°C	COPd	6.18	-
Tj = bivalent temperature	COPd	1.84	-
Tj = operation limit temperature	COPd	1.18	-
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	COPd	N/A	-
For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval efficiency	COP _{cyc}	N/A	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output (**)			
Supplementary heater	Psup	3.3	kW
Type of energy input	Electric		

Other items								
Capacity control	fixed/variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4500	m³/h	
Sound power level, indoors/ outdoors	L _{WA}	41/60	dB		For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	N/A	m³/h
Annual energy consumption	Q _{HE}	5197	kWh					
For heat pump combination heater:								
Declared load profile	N/A			Water heating energy efficiency	η _{wh}	N/A	%	
Daily electricity consumption	Q _{elec}	N/A	kWh		Daily fuel consumption	Q _{fuel}	N/A	kWh
Annual electricity consumption	AEC	N/A	kWh		Annual fuel consumption	AFC	N/A	GJ
Contact details	See the back cover of the manual							

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

Technical parameters

Model	Indoor unit	8kW;8kW(heating 3/9kW)
	Outdoor unit	8kW
Air-to-water heat pump	yes	
Water-to-water heat pump	no	
Brine-to-water heat pump	no	
Low-temperature heat pump	no	
Equipped with a supplementary heater	no;yes	
Heat pump combination heater	no	
Parameters shall be declared for	Medium temperature application	
Parameters shall be declared for	Warmer climate condition	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	Prated	N/A	kW
Tj = + 2°C	Pdh	7.8	kW
Tj = + 7°C	Pdh	5.1	kW
Tj = + 12°C	Pdh	2.2	kW
Tj = bivalent temperature	Pdh	7.8	kW
Tj = operation limit temperature	Pdh	7.8	kW
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	Pdh	N/A	kW
Bivalent temperature	Tbiv	2	°C
Cycling interval capacity for heating	Pcych	N/A	kW
Degradation co-efficient (**)	Cdh	0.9	kW
Power consumption in modes other than active mode			
Off mode	POFF	0.015	kW
Thermostat-off mode	PTo	0.015	kW
Standby mode	PSB	0.015	kW
Crankcase heater mode	PCK	0.015	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	173.9	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	COPd	N/A	-
Tj = + 2°C	COPd	2.30	-
Tj = + 7°C	COPd	3.83	-
Tj = + 12°C	COPd	5.66	-
Tj = bivalent temperature	COPd	2.30	-
Tj = operation limit temperature	COPd	2.30	-
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	COPd	N/A	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COPcyc	N/A	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output (**)			
Supplementary heater	Psup	0.2	kW
Type of energy input	Electric		

Other items								
Capacity control	fixed/variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4500	m³/h	
Sound power level, indoors/ outdoors	L _{WA}	41/60	dB		For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	N/A	m³/h
Annual energy consumption	Q _{HE}	2386	kWh					
For heat pump combination heater:								
Declared load profile	N/A			Water heating energy efficiency	η _{wh}	N/A	%	
Daily electricity consumption	Q _{elec}	N/A	kWh		Daily fuel consumption	Q _{fuel}	N/A	kWh
Annual electricity consumption	AEC	N/A	kWh		Annual fuel consumption	AFC	N/A	GJ
Contact details	See the back cover of the manual							

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

Technical parameters

Model	Indoor unit	10kW;10kW(heating 3/9kW)
	Outdoor unit	10kW
Air-to-water heat pump	yes	
Water-to-water heat pump	no	
Brine-to-water heat pump	no	
Low-temperature heat pump	no	
Equipped with a supplementary heater	no;yes	
Heat pump combination heater	no	
Parameters shall be declared for	Low temperature application	
Parameters shall be declared for	Average climate condition	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	9	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	Prated	7.9	kW
Tj = + 2°C	Pdh	4.7	kW
Tj = + 7°C	Pdh	3.3	kW
Tj = + 12°C	Pdh	2.3	kW
Tj = bivalent temperature	Pdh	7.9	kW
Tj = operation limit temperature	Pdh	7.6	kW
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	Pdh	N/A	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcych	N/A	kW
Degradation co-efficient (**)	Cdh	0.9	kW
Power consumption in modes other than active mode			
Off mode	P _{OFF}	0.015	kW
Thermostat-off mode	P _{TO}	0.015	kW
Standby mode	P _{SB}	0.015	kW
Crankcase heater mode	P _{CK}	0.015	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	191.7	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	COPd	3.02	-
Tj = + 2°C	COPd	4.62	-
Tj = + 7°C	COPd	6.68	-
Tj = + 12°C	COPd	8.97	-
Tj = bivalent temperature	COPd	3.02	-
Tj = operation limit temperature	COPd	2.73	-
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	COPd	N/A	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COP _{cyc}	N/A	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output (**)			
Supplementary heater	P _{sup}	1.4	kW
Type of energy input	Electric		

Other items								
Capacity control	fixed/variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4500	m³/h	
Sound power level, indoors/ outdoors	L _{WA}	42/61	dB		For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	N/A	m³/h
Annual energy consumption	Q _{HE}	3791	kWh					
For heat pump combination heater:								
Declared load profile	N/A			Water heating energy efficiency	η _{wh}	N/A	%	
Daily electricity consumption	Q _{elec}	N/A	kWh		Daily fuel consumption	Q _{fuel}	N/A	kWh
Annual electricity consumption	AEC	N/A	kWh		Annual fuel consumption	AFC	N/A	GJ
Contact details	See the back cover of the manual							

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

Technical parameters

Model	Indoor unit	10kW;10kW(heating 3/9kW)
	Outdoor unit	10kW
Air-to-water heat pump	yes	
Water-to-water heat pump	no	
Brine-to-water heat pump	no	
Low-temperature heat pump	no	
Equipped with a supplementary heater	no;yes	
Heat pump combination heater	no	
Parameters shall be declared for	Low temperature application	
Parameters shall be declared for	Colder climate condition	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	Prated	5.2	kW
Tj = + 2°C	Pdh	3.1	kW
Tj = + 7°C	Pdh	2.1	kW
Tj = + 12°C	Pdh	2.4	kW
Tj = bivalent temperature	Pdh	6.4	kW
Tj = operation limit temperature	Pdh	3.9	kW
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	Pdh	N/A	kW
Bivalent temperature	Tbiv	-15	°C
Cycling interval capacity for heating	Pcych	N/A	kW
Degradation co-efficient (**)	Cdh	0.9	kW
Power consumption in modes other than active mode			
Off mode	POFF	0.015	kW
Thermostat-off mode	PTo	0.015	kW
Standby mode	PSB	0.015	kW
Crankcase heater mode	PCK	0.015	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	159.9	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	COPd	3.48	-
Tj = + 2°C	COPd	4.99	-
Tj = + 7°C	COPd	6.19	-
Tj = + 12°C	COPd	7.64	-
Tj = bivalent temperature	COPd	2.57	-
Tj = operation limit temperature	COPd	1.49	-
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	COPd	N/A	-
For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval efficiency	COPcyc	N/A	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output (**)			
Supplementary heater	Psup	4.1	kW
Type of energy input	Electric		

Other items											
Capacity control	fixed/variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4500	m³/h				
Sound power level, indoors/ outdoors	L _{WA}	42/61	dB					For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	N/A	m³/h
Annual energy consumption	Q _{HE}	4748	kWh								
For heat pump combination heater:											
Declared load profile	N/A			Water heating energy efficiency	η _{wh}	N/A	%				
Daily electricity consumption	Q _{elec}	N/A	kWh					Daily fuel consumption	Q _{fuel}	N/A	kWh
Annual electricity consumption	AEC	N/A	kWh					Annual fuel consumption	AFC	N/A	GJ
Contact details	See the back cover of the manual										

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

Technical parameters

Model	Indoor unit	10kW;10kW(heating 3/9kW)
	Outdoor unit	10kW
Air-to-water heat pump	yes	
Water-to-water heat pump	no	
Brine-to-water heat pump	no	
Low-temperature heat pump	no	
Equipped with a supplementary heater	no;yes	
Heat pump combination heater	no	
Parameters shall be declared for	Low temperature application	
Parameters shall be declared for	Warmer climate condition	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy efficiency	η_s	256.0	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = − 7°C	Prated	N/A	kW	T _j = − 7°C	COP _d	N/A	-
T _j = + 2°C	P _{dh}	8.5	kW	T _j = + 2°C	COP _d	3.73	-
T _j = + 7°C	P _{dh}	5.7	kW	T _j = + 7°C	COP _d	5.81	-
T _j = + 12°C	P _{dh}	2.4	kW	T _j = + 12°C	COP _d	7.93	-
T _j = bivalent temperature	P _{dh}	8.5	kW	T _j = bivalent temperature	COP _d	3.73	-
T _j = operation limit temperature	P _{dh}	8.5	kW	T _j = operation limit temperature	COP _d	3.73	-
For air-to-water heat pumps: T _j = − 15°C (if TOL < − 20°C)	P _{dh}	N/A	kW	For air-to-water heat pumps: T _j = − 15°C (if TOL < − 20°C)	COP _d	N/A	-
Bivalent temperature	T _{biv}	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	P _{cyh}	N/A	kW	Cycling interval efficiency	COP _{cyh}	N/A	-
Degradation co-efficient (**)	C _{dh}	0.9	kW	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (**)			
Thermostat-off mode	P _{TO}	0.015	kW	Supplementary heater	P _{sup}	0.5	kW
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electric		
Crankcase heater mode	P _{CK}	0.015	kW				

Other items								
Capacity control	fixed/variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4500	m³/h	
Sound power level, indoors/ outdoors	L _{WA}	42/61	dB		For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	N/A	m³/h
Annual energy consumption	Q _{HE}	1756	kWh					
For heat pump combination heater:								
Declared load profile	N/A			Water heating energy efficiency	η _{wh}	N/A	%	
Daily electricity consumption	Q _{elec}	N/A	kWh		Daily fuel consumption	Q _{fuel}	N/A	kWh
Annual electricity consumption	AEC	N/A	kWh		Annual fuel consumption	AFC	N/A	GJ
Contact details	See the back cover of the manual							

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

Technical parameters

Model	Indoor unit	10kW;10kW(heating 3/9kW)
	Outdoor unit	10kW
Air-to-water heat pump	yes	
Water-to-water heat pump	no	
Brine-to-water heat pump	no	
Low-temperature heat pump	no	
Equipped with a supplementary heater	no;yes	
Heat pump combination heater	no	
Parameters shall be declared for	Medium temperature application	
Parameters shall be declared for	Average climate condition	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	Prated	7.1	kW
Tj = + 2°C	Pdh	4.2	kW
Tj = + 7°C	Pdh	2.7	kW
Tj = + 12°C	Pdh	2.3	kW
Tj = bivalent temperature	Pdh	7.1	kW
Tj = operation limit temperature	Pdh	6.1	kW
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	Pdh	N/A	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcych	N/A	kW
Degradation co-efficient (**)	Cdh	0.9	kW
Power consumption in modes other than active mode			
Off mode	POFF	0.015	kW
Thermostat-off mode	PTo	0.015	kW
Standby mode	PSB	0.015	kW
Crankcase heater mode	PCK	0.015	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	133.4	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	COPd	2.12	-
Tj = + 2°C	COPd	3.22	-
Tj = + 7°C	COPd	4.64	-
Tj = + 12°C	COPd	6.86	-
Tj = bivalent temperature	COPd	2.12	-
Tj = operation limit temperature	COPd	1.85	-
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	COPd	N/A	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPcyc	N/A	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output (**)			
Supplementary heater	Psup	1.9	kW
Type of energy input	Electric		

Other items							
Capacity control	fixed/variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4500	m³/h
Sound power level, indoors/ outdoors	L _{WA}	42/61	dB				
Annual energy consumption	Q _{HE}	4895	kWh				
For heat pump combination heater:							
Declared load profile	N/A			Water heating energy efficiency	η _{wh}	N/A	%
Daily electricity consumption	Q _{elec}	N/A	kWh				
Annual electricity consumption	AEC	N/A	kWh				
Contact details	See the back cover of the manual						

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

Technical parameters

Model	Indoor unit	10kW;10kW(heating 3/9kW)
	Outdoor unit	10kW
Air-to-water heat pump	yes	
Water-to-water heat pump	no	
Brine-to-water heat pump	no	
Low-temperature heat pump	no	
Equipped with a supplementary heater	no;yes	
Heat pump combination heater	no	
Parameters shall be declared for	Medium temperature application	
Parameters shall be declared for	Colder climate condition	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	Prated	4.3	kW
Tj = + 2°C	Pdh	2.6	kW
Tj = + 7°C	Pdh	1.9	kW
Tj = + 12°C	Pdh	2.3	kW
Tj = bivalent temperature	Pdh	5.8	kW
Tj = operation limit temperature	Pdh	2.7	kW
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	Pdh	N/A	kW
Bivalent temperature	Tbiv	-15	°C
Cycling interval capacity for heating	Pcych	N/A	kW
Degradation co-efficient (**)	Cdh	0.9	kW
Power consumption in modes other than active mode			
Off mode	P _{OFF}	0.015	kW
Thermostat-off mode	P _{TO}	0.015	kW
Standby mode	P _{SB}	0.015	kW
Crankcase heater mode	P _{CK}	0.015	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	109.8	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	COPd	2.47	-
Tj = + 2°C	COPd	3.26	-
Tj = + 7°C	COPd	4.18	-
Tj = + 12°C	COPd	5.73	-
Tj = bivalent temperature	COPd	1.84	-
Tj = operation limit temperature	COPd	1.18	-
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	COPd	N/A	-
For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval efficiency	COP _{cyc}	N/A	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output (**)			
Supplementary heater	Psup	4.3	kW
Type of energy input	Electric		

Other items							
Capacity control	fixed/variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4500	m³/h
Sound power level, indoors/ outdoors	L _{WA}	42/61	dB				
Annual energy consumption	Q _{HE}	6270	kWh				
For heat pump combination heater:							
Declared load profile	N/A			Water heating energy efficiency	η _{wh}	N/A	%
Daily electricity consumption	Q _{elec}	N/A	kWh				
Annual electricity consumption	AEC	N/A	kWh				
Contact details	See the back cover of the manual						

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

Technical parameters

Model	Indoor unit	10kW;10kW(heating 3/9kW)
	Outdoor unit	10kW
Air-to-water heat pump	yes	
Water-to-water heat pump	no	
Brine-to-water heat pump	no	
Low-temperature heat pump	no	
Equipped with a supplementary heater	no;yes	
Heat pump combination heater	no	
Parameters shall be declared for	Medium temperature application	
Parameters shall be declared for	Warmer climate condition	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	Prated	N/A	kW
Tj = + 2°C	Pdh	7.8	kW
Tj = + 7°C	Pdh	5.1	kW
Tj = + 12°C	Pdh	2.2	kW
Tj = bivalent temperature	Pdh	7.8	kW
Tj = operation limit temperature	Pdh	7.8	kW
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	Pdh	N/A	kW
Bivalent temperature	Tbiv	2	°C
Cycling interval capacity for heating	Pcych	N/A	kW
Degradation co-efficient (**)	Cdh	0.9	kW
Power consumption in modes other than active mode			
Off mode	P _{OFF}	0.015	kW
Thermostat-off mode	P _{TO}	0.015	kW
Standby mode	P _{SB}	0.015	kW
Crankcase heater mode	P _{CK}	0.015	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	173.9	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = − 7°C	COP _d	N/A	-
Tj = + 2°C	COP _d	2.30	-
Tj = + 7°C	COP _d	3.83	-
Tj = + 12°C	COP _d	5.66	-
Tj = bivalent temperature	COP _d	2.30	-
Tj = operation limit temperature	COP _d	2.30	-
For air-to-water heat pumps: Tj = − 15°C (if TOL < − 20°C)	COP _d	N/A	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COP _{cyc}	N/A	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output (**)			
Supplementary heater	P _{sup}	0.2	kW
Type of energy input	Electric		

Other items							
Capacity control	fixed/variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	4500	m³/h
Sound power level, indoors/ outdoors	L _{WA}	42/61	dB				
Annual energy consumption	Q _{HE}	2386	kWh				
For heat pump combination heater:							
Declared load profile	N/A			Water heating energy efficiency	η _{wh}	N/A	%
Daily electricity consumption	Q _{elec}	N/A	kWh				
Annual electricity consumption	AEC	N/A	kWh				
Contact details	See the back cover of the manual						

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.