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Indoor unit E*ST20D-****D
Outdoor unit PUD-SWM100VAA(-BS)



A+++

A++

A+

A

B

C

D

A++

A+

A

B

C

D

E

F

A+



41 dB



59 dB



10 kW
10 kW
10 kW

2019

811/2013

BH79V003H03

Mitsubishi Electric Erp Directive Related Product Information: erp.mitsubishielectric.eu/erp																																														
For medium-temperature application.																																														
Outdoor unit	Indoor unit	Medium-temperature application	Seasonal space heating energy efficiency class	Water heating energy efficiency class	Declared load profile	For medium-temperature application																For low-temperature application																								
						Rated heat output under average climate conditions	For space heating, annual energy consumption under average climate conditions	For water heating, annual electricity consumption under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Water heating energy efficiency under average climate conditions	Sound power level L _{WA} , indoor	Work only during off-peak hours	Rated heat output under colder climate conditions	For space heating, annual energy consumption under warmer climate conditions	For space heating, annual energy consumption under colder climate conditions	For space heating, annual energy consumption under warmer climate conditions	For water heating, annual energy consumption under colder climate conditions	Seasonal space heating energy efficiency under warmer climate conditions	Water heating energy efficiency under warmer climate conditions	Sound power level L _{WA} , outdoor	Low-temperature application	Seasonal space heating energy efficiency class	Water heating energy efficiency class	Declared load profile	Rated heat output under average climate conditions	For space heating, annual energy consumption under average climate conditions	For water heating, annual electricity consumption under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Water heating energy efficiency under average climate conditions	Sound power level L _{WA} , indoor	Work only during off-peak hours	Rated heat output under colder climate conditions	For space heating, annual energy consumption under warmer climate conditions	For space heating, annual energy consumption under colder climate conditions	For water heating, annual electricity consumption under average climate conditions	Seasonal space heating energy efficiency under warmer climate conditions	Water heating energy efficiency under warmer climate conditions	Sound power level L _{WA} , outdoor								
						kW	kWh	kWh	%	%	dB		kW	kWh	kWh	%	%	dB		kW	kWh	kWh	%	%	dB		kW	kWh	kWh	%	%	dB		kW	kWh	kWh	%	%	dB		kW	kWh	kWh	%	%	dB
PUD-SHWM00VAA(BS)	EHST17D-****	✓	A++	A+	L	6.0	3618	798	130	136	41	-	6.0	6.0	4923	2065	968	709	109	148	112	154	55	✓	A+++	A+	L	6.0	2672	798	175	136	41	-	6.0	6.0	4012	1489	968	709	133	205	112	154	55	
	ERST17D-****	✓	A++	A+	L	6.0	3618	798	130	136	41	-	6.0	6.0	4923	2065	968	709	109	148	112	154	55	✓	A+++	A+	L	6.0	2672	798	175	136	41	-	6.0	6.0	4012	1489	968	709	133	205	112	154	55	
	EHST20D-****	✓	A++	A+	L	6.0	3618	736	130	148	41	-	6.0	6.0	4923	2065	900	675	109	148	120	162	55	✓	A+++	A+	L	6.0	2672	736	175	148	41	-	6.0	6.0	4012	1489	900	675	133	205	120	162	55	
	ERST20D-****	✓	A++	A+	L	6.0	3618	736	130	148	41	-	6.0	6.0	4923	2065	900	675	109	148	120	162	55	✓	A+++	A+	L	6.0	2672	736	175	148	41	-	6.0	6.0	4012	1489	900	675	133	205	120	162	55	
	EHST30D-****	✓	A++	A	XL	6.0	3618	1431	130	121	41	-	6.0	6.0	4923	2065	1700	1203	109	148	102	145	55	✓	A+++	A	XL	6.0	2672	1431	175	121	41	-	6.0	6.0	4012	1489	1700	1203	133	205	102	145	55	
	ERST30D-****	✓	A++	A	XL	6.0	3618	1431	130	121	41	-	6.0	6.0	4923	2065	1700	1203	109	148	102	145	55	✓	A+++	A	XL	6.0	2672	1431	175	121	41	-	6.0	6.0	4012	1489	1700	1203	133	205	102	145	55	
PUD-SHWM00VAA(BS)	EHSD-****D	✓	A++	-	-	6.0	3618	-	130	-	41	-	6.0	6.0	4923	2065	-	-	109	148	-	-	55	✓	A+++	-	-	6.0	2672	-	175	-	41	-	6.0	6.0	4012	1489	-	-	133	205	-	-	55	
	ERSD-****D	✓	A++	-	-	6.0	3618	-	130	-	41	-	6.0	6.0	4923	2065	-	-	109	148	-	-	55	✓	A+++	-	-	6.0	2672	-	175	-	41	-	6.0	6.0	4012	1489	-	-	133	205	-	-	55	
	EHST17D-****	✓	A++	A+	L	8.0	4814	798	131	136	41	-	8.0	8.0	6507	2554	968	709	110	161	112	154	56	✓	A+++	A+	L	8.0	3529	798	178	136	41	-	8.0	8.0	5083	1879	968	709	139	218	112	154	56	
	ERST17D-****	✓	A++	A+	L	8.0	4814	798	131	136	41	-	8.0	8.0	6507	2554	968	709	110	161	112	154	56	✓	A+++	A+	L	8.0	3529	798	178	136	41	-	8.0	8.0	5083	1879	968	709	139	218	112	154	56	
	EHST20D-****	✓	A++	A+	L	8.0	4814	736	131	148	41	-	8.0	8.0	6507	2554	900	675	110	161	120	162	56	✓	A+++	A+	L	8.0	3529	736	178	148	41	-	8.0	8.0	5083	1879	900	675	139	218	120	162	56	
	ERST20D-****	✓	A++	A+	L	8.0	4814	736	131	148	41	-	8.0	8.0	6507	2554	900	675	110	161	120	162	56	✓	A+++	A+	L	8.0	3529	736	178	148	41	-	8.0	8.0	5083	1879	900	675	139	218	120	162	56	
PUD-SHWM100VAA(BS)	EHST30D-****	✓	A++	A	XL	8.0	4814	1431	131	121	41	-	8.0	8.0	6507	2554	1700	1203	110	161	102	145	56	✓	A+++	A	XL	8.0	3529	1431	178	121	41	-	8.0	8.0	5083	1879	1700	1203	139	218	102	145	56	
	ERST30D-****	✓	A++	A	XL	8.0	4814	1431	131	121	41	-	8.0	8.0	6507	2554	1700	1203	110	161	102	145	56	✓	A+++	A	XL	8.0	3529	1431	178	121	41	-	8.0	8.0	5083	1879	1700	1203	139	218	102	145	56	
	EHSD-****D	✓	A++	-	-	8.0	4814	-	131	-	41	-	8.0	8.0	6507	2554	-	-	110	161	-	-	56	✓	A+++	-	-	8.0	3529	-	178	-	41	-	8.0	8.0	5083	1879	-	-	139	218	-	-	56	
	ERSD-****D	✓	A++	-	-	8.0	4814	-	131	-	41	-	8.0	8.0	6507	2554	-	-	110	161	-	-	56	✓	A+++	-	-	8.0	3529	-	178	-	41	-	8.0	8.0	5083	1879	-	-	139	218	-	-	56	
	EHST17D-****	✓	A++	A+	L	8.0	4814	798	130	136	41	-	8.0	8.0	6507	2554	968	709	109	159	112	154	56	✓	A+++	A+	L	8.0	3529	798	176	136	41	-	8.0	8.0	5083	1879	968	709	138	215	112	154	56	
	ERST17D-****	✓	A++	A+	L	8.0	4814	798	130	136	41	-	8.0	8.0	6507	2554	968	709	109	159	112	154	56	✓	A+++	A+	L	8.0	3529	798	176	136	41	-	8.0	8.0	5083	1879	968	709	138	215	112	154	56	
PUD-SHWM00VAA(BS)	EHST20D-****	✓	A++	A+	L	8.0	4814	736	130	148	41	-	8.0	8.0	6507	2554	900	675	109	159	120	162	56	✓	A+++	A+	L	8.0	3529	736	176	148	41	-	8.0	8.0	5083	1879	900	675	138	215	120	162	56	
	ERST20D-****	✓	A++	A+	L	8.0	4814	736	130	148	41	-	8.0	8.0	6507	2554	900	675	109	159	120	162	56	✓	A+++	A+	L	8.0	3529	736	176	148	41	-	8.0	8.0	5083	1879	900	675	138	215	120	162	56	
	EHST30D-****	✓	A++	A	XL	8.0	4814	1431	130	121	41	-	8.0	8.0	6507	2554	1700	1203	109	159	102	145	56	✓	A+++	A	XL	8.0	3529	1431	176	121	41	-	8.0	8.0	5083	1879	1700	1203	138	215	102	145	56	
	ERST30D-****	✓	A++	A	XL	8.0	4814	1431	130	121	41	-	8.0	8.0	6507	2554	1700	1203	109	159	102	145	56	✓	A+++																					

[illegible]

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	EHST20D-****D
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:	yes	
Heat pump combination heater:	yes	
Parameters for	medium-temperature application.	
Parameters for	average climate conditions.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	131	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	8.9	kW	Tj = - 7 °C	COPd	2.00	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	5.7	kW	Tj = + 2 °C	COPd	3.20	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.2	kW	Tj = + 7 °C	COPd	4.77	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	3.6	kW	Tj = +12 °C	COPd	6.92	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	8.9	kW	Tj = bivalent temperature	COPd	2.00	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	-	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	1.4	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dBa				
Annual energy consumption	Q _{HE}	6040	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	148	%
Daily electricity consumption	Qelec	3.340	kWh				
Annual electricity consumption	AEC	736	kWh				

Contact details							
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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	EHST20D-****D
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:	yes	
Heat pump combination heater:	yes	
Parameters for	low-temperature application.	
Parameters for	average climate conditions.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	178	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	8.9	kW	Tj = - 7 °C	COPd	3.10	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	5.7	kW	Tj = + 2 °C	COPd	4.52	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.4	kW	Tj = + 7 °C	COPd	5.68	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.5	kW	Tj = +12 °C	COPd	7.76	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	8.9	kW	Tj = bivalent temperature	COPd	3.10	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	-	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	1.4	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dBA
Annual energy consumption	Q _{HE}	4441	kWh
Rated air flow rate, outdoors - 2640 m ³ /h			

For heat pump combination heater:			
Declared load profile	L		
Daily electricity consumption	Q _{elec}	3.340	kWh
Annual electricity consumption	AEC	736	kWh
Water heating energy efficiency η_{wh} 148 %			

Contact details

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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	EHST20D-****D
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:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	109	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	6.1	kW	Tj = - 7 °C	COPd	2.47	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.7	kW	Tj = + 2 °C	COPd	3.03	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	3.8	kW	Tj = + 7 °C	COPd	4.42	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.4	kW	Tj = +12 °C	COPd	6.67	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	7.8	kW	Tj = bivalent temperature	COPd	1.32	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	7.9	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.29	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	2.8	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dBA
Annual energy consumption	Q _{HE}	8290	kWh
Rated air flow rate, outdoors - 2640 m ³ /h			

For heat pump combination heater:			
Declared load profile	L		
Daily electricity consumption	Q _{elec}	4.090	kWh
Annual electricity consumption	AEC	900	kWh
Water heating energy efficiency η_{wh} 120 %			

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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	EHST20D-****D
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:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	146	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	6.2	kW	Tj = - 7 °C	COPd	3.83	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.9	kW	Tj = + 2 °C	COPd	3.82	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	3.9	kW	Tj = + 7 °C	COPd	5.20	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.5	kW	Tj = +12 °C	COPd	7.38	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	8.4	kW	Tj = bivalent temperature	COPd	2.02	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	8.6	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.07	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	2.6	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dB(A)
Annual energy consumption	Q _{HE}	6181	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile	L		
Daily electricity consumption	Q _{elec}	4.090	kWh
Annual electricity consumption	AEC	900	kWh
Water heating energy efficiency			
η_{wh}			
120			
%			

Contact details

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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	EHST20D-****D
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:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	152	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	10.1	kW	Tj = + 2 °C	COPd	1.93	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	6.4	kW	Tj = + 7 °C	COPd	3.32	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.2	kW	Tj = +12 °C	COPd	5.19	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	10.1	kW	Tj = bivalent temperature	COPd	1.93	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	-	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dBa
Annual energy consumption	Q _{HE}	3390	kWh
Rated air flow rate, outdoors			
	-	2640	m³/h

For heat pump combination heater:			
Declared load profile	L		
Daily electricity consumption	Qelec	3.070	kWh
Annual electricity consumption	AEC	675	kWh
Water heating energy efficiency			
	ηwh	162	%

Contact details
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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	EHST20D-****D
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:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	221	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	10.0	kW	Tj = + 2 °C	COPd	3.30	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	6.4	kW	Tj = + 7 °C	COPd	5.16	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.4	kW	Tj = +12 °C	COPd	6.88	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	10.0	kW	Tj = bivalent temperature	COPd	3.30	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	-	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dBA
Annual energy consumption	Q _{HE}	2334	kWh
Rated air flow rate, outdoors			
	-	2640	m³/h

For heat pump combination heater:			
Declared load profile	L		
Daily electricity consumption	Qelec	3.070	kWh
Annual electricity consumption	AEC	675	kWh
Water heating energy efficiency			
	ηwh	162	%

Contact details
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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	EHST20D-MED
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	
Heat pump combination heater:	yes	
Parameters for	medium-temperature application.	
Parameters for	average climate conditions.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	131	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	8.9	kW	Tj = - 7 °C	COPd	2.00	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	5.7	kW	Tj = + 2 °C	COPd	3.20	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.2	kW	Tj = + 7 °C	COPd	4.77	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	3.6	kW	Tj = +12 °C	COPd	6.92	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	8.9	kW	Tj = bivalent temperature	COPd	2.00	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	-	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	1.4	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dB(A)				
Annual energy consumption	Q _{HE}	6040	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	η_{wh}	148	%
Daily electricity consumption	Q _{elec}	3.340	kWh				
Annual electricity consumption	AEC	736	kWh				

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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	EHST20D-MED
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	
Heat pump combination heater:	yes	
Parameters for	low-temperature application.	
Parameters for	average climate conditions.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	178	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	8.9	kW	Tj = - 7 °C	COPd	3.10	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	5.7	kW	Tj = + 2 °C	COPd	4.52	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.4	kW	Tj = + 7 °C	COPd	5.68	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.5	kW	Tj = +12 °C	COPd	7.76	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	8.9	kW	Tj = bivalent temperature	COPd	3.10	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	-	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	1.4	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dB(A)				
Annual energy consumption	Q _{HE}	4441	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	η_{wh}	148	%
Daily electricity consumption	Q _{elec}	3.340	kWh				
Annual electricity consumption	AEC	736	kWh				

Contact details							
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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	EHST20D-MED
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	
Heat pump combination heater:	yes	
Parameters for	medium-temperature application.	
Parameters for	colder climate conditions.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	109	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	6.1	kW	Tj = - 7 °C	COPd	2.47	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.7	kW	Tj = + 2 °C	COPd	3.03	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	3.8	kW	Tj = + 7 °C	COPd	4.42	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.4	kW	Tj = +12 °C	COPd	6.67	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	7.8	kW	Tj = bivalent temperature	COPd	1.32	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	7.9	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.29	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	2.8	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dB(A)				
Annual energy consumption	Q _{HE}	8290	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	η_{wh}	120	%
Daily electricity consumption	Q _{elec}	4.090	kWh				
Annual electricity consumption	AEC	900	kWh				

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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	EHST20D-MED
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
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	146	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	6.2	kW	Tj = - 7 °C	COPd	3.83	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.9	kW	Tj = + 2 °C	COPd	3.82	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	3.9	kW	Tj = + 7 °C	COPd	5.20	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.5	kW	Tj = +12 °C	COPd	7.38	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	8.4	kW	Tj = bivalent temperature	COPd	2.02	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	8.6	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.07	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	2.6	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dBA
Annual energy consumption	Q _{HE}	6181	kWh
Rated air flow rate, outdoors - 2640 m ³ /h			

For heat pump combination heater:			
Declared load profile	L		
Daily electricity consumption	Q _{elec}	4.090	kWh
Annual electricity consumption	AEC	900	kWh
Water heating energy efficiency η_{wh} 120 %			

Contact details

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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	EHST20D-MED
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
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	152	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	10.1	kW	Tj = + 2 °C	COPd	1.93	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	6.4	kW	Tj = + 7 °C	COPd	3.32	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.2	kW	Tj = +12 °C	COPd	5.19	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	10.1	kW	Tj = bivalent temperature	COPd	1.93	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	-	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dBA
Annual energy consumption	Q _{HE}	3390	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile	L		
Daily electricity consumption	Q _{elec}	3.070	kWh
Annual electricity consumption	AEC	675	kWh
Water heating energy efficiency			
η_{wh}			
162			
%			

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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	EHST20D-MED
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
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	221	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	10.0	kW	Tj = + 2 °C	COPd	3.30	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	6.4	kW	Tj = + 7 °C	COPd	5.16	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.4	kW	Tj = +12 °C	COPd	6.88	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	10.0	kW	Tj = bivalent temperature	COPd	3.30	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	-	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dBA
Annual energy consumption	Q _{HE}	2334	kWh
Rated air flow rate, outdoors			
	-	2640	m³/h

For heat pump combination heater:			
Declared load profile	L		
Daily electricity consumption	Qelec	3.070	kWh
Annual electricity consumption	AEC	675	kWh
Water heating energy efficiency			
	ηwh	162	%

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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	ERST20D-****D
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:	yes	
Heat pump combination heater:	yes	
Parameters for	medium-temperature application.	
Parameters for	average climate conditions.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	131	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	8.9	kW	Tj = - 7 °C	COPd	2.00	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	5.7	kW	Tj = + 2 °C	COPd	3.20	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.2	kW	Tj = + 7 °C	COPd	4.77	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	3.6	kW	Tj = +12 °C	COPd	6.92	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	8.9	kW	Tj = bivalent temperature	COPd	2.00	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	-	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	1.4	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dB(A)
Annual energy consumption	Q _{HE}	6040	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile	L		
Daily electricity consumption	Q _{elec}	3.340	kWh
Annual electricity consumption	AEC	736	kWh
Water heating energy efficiency			
η_{wh}			
148			
%			

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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	ERST20D-****D
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:	yes	
Heat pump combination heater:	yes	
Parameters for	low-temperature application.	
Parameters for	average climate conditions.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	178	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	8.9	kW	Tj = - 7 °C	COPd	3.10	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	5.7	kW	Tj = + 2 °C	COPd	4.52	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.4	kW	Tj = + 7 °C	COPd	5.68	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.5	kW	Tj = +12 °C	COPd	7.76	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	8.9	kW	Tj = bivalent temperature	COPd	3.10	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	-	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	1.4	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dBa				
Annual energy consumption	Q _{HE}	4441	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	148	%
Daily electricity consumption	Qelec	3.340	kWh				
Annual electricity consumption	AEC	736	kWh				

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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	ERST20D-****D
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:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	109	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	6.1	kW	Tj = - 7 °C	COPd	2.47	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.7	kW	Tj = + 2 °C	COPd	3.03	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	3.8	kW	Tj = + 7 °C	COPd	4.42	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.4	kW	Tj = +12 °C	COPd	6.67	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	7.8	kW	Tj = bivalent temperature	COPd	1.32	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	7.9	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.29	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	2.8	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dBA
Annual energy consumption	Q _{HE}	8290	kWh
Rated air flow rate, outdoors			
-			
2640			
m³/h			

For heat pump combination heater:			
Declared load profile	L		
Daily electricity consumption	Qelec	4.090	kWh
Annual electricity consumption	AEC	900	kWh
Water heating energy efficiency			
ηwh			
120			
%			

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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	ERST20D-****D
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:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	146	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	6.2	kW	Tj = - 7 °C	COPd	3.83	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.9	kW	Tj = + 2 °C	COPd	3.82	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	3.9	kW	Tj = + 7 °C	COPd	5.20	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.5	kW	Tj = +12 °C	COPd	7.38	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	8.4	kW	Tj = bivalent temperature	COPd	2.02	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	8.6	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.07	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	2.6	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dB(A)
Annual energy consumption	Q _{HE}	6181	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile	L		
Daily electricity consumption	Q _{elec}	4.090	kWh
Annual electricity consumption	AEC	900	kWh
Water heating energy efficiency			
η_{wh}			
120			
%			

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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	ERST20D-****D
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:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	152	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	10.1	kW	Tj = + 2 °C	COPd	1.93	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	6.4	kW	Tj = + 7 °C	COPd	3.32	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.2	kW	Tj = +12 °C	COPd	5.19	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	10.1	kW	Tj = bivalent temperature	COPd	1.93	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	-	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dBa
Annual energy consumption	Q _{HE}	3390	kWh
Rated air flow rate, outdoors			
	-	2640	m³/h

For heat pump combination heater:			
Declared load profile	L		
Daily electricity consumption	Qelec	3.070	kWh
Annual electricity consumption	AEC	675	kWh
Water heating energy efficiency			
	ηwh	162	%

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(*) 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.

Model(s):	Outdoor unit:	PUD-SWM100VAA(-BS)
	Indoor unit:	ERST20D-****D
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:	yes	
Heat pump combination heater:	yes	
Parameters for	low-temperature application.	
Parameters for	warmer climate conditions.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	ηs	221	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	10.0	kW	Tj = + 2 °C	COPd	3.30	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	6.4	kW	Tj = + 7 °C	COPd	5.16	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.4	kW	Tj = +12 °C	COPd	6.88	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	10.0	kW	Tj = bivalent temperature	COPd	3.30	-
Tj = operation limit temperature	Pdh	6.9	kW	Tj = operation limit temperature	COPd	1.60	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	-	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dBA
Annual energy consumption	Q _{HE}	2334	kWh
Rated air flow rate, outdoors			
-			
2640			
m³/h			

For heat pump combination heater:			
Declared load profile	L		
Daily electricity consumption	Qelec	3.070	kWh
Annual electricity consumption	AEC	675	kWh
Water heating energy efficiency			
ηwh			
162			
%			

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(*) 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.