

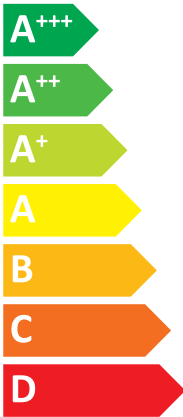


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Indoor unit E*ST30D-****D
Outdoor unit PUD-SHWM100YAA(-BS)



A++



A



41 dB
59 dB



- 10 kW
- 10 kW
- 10 kW

2019

811/2013

BH79V003K24



Mitsubishi Electric Erp Directive Related Product Information: erp.mitsubishielectric.eu/erp

Model	For medium-temperature application													For low-temperature application																																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Outdoor unit	Indoor unit													Indoor unit																																								
	Medium-temperature application													Low-temperature application																																								
	Seasonal space heating energy efficiency class													Seasonal space heating energy efficiency class																																								
	Water heating energy efficiency class													Water heating energy efficiency class																																								
	Declared load profile													Declared load profile																																								
	Rated heat output under average climate conditions													Rated heat output under average climate conditions																																								
	For space heating, annual energy consumption under average climate conditions													For space heating, annual energy consumption under average climate conditions																																								
	For water heating, annual energy consumption under average climate conditions													For water heating, annual energy consumption under average climate conditions																																								
	Seasonal space heating energy efficiency under average climate conditions													Seasonal space heating energy efficiency under average climate conditions																																								
	Water heating energy efficiency under average climate conditions													Water heating energy efficiency under average climate conditions																																								
	Sound power level L _{WA} , indoor													Sound power level L _{WA} , indoor																																								
	Work only during off-peak hours													Work only during off-peak hours																																								
	Rated heat output under colder climate conditions													Rated heat output under colder climate conditions																																								
	Rated heat output under warmer climate conditions													Rated heat output under warmer climate conditions																																								
	For space heating, annual energy consumption under colder climate conditions													For space heating, annual energy consumption under colder climate conditions																																								
	For space heating, annual energy consumption under warmer climate conditions													For space heating, annual energy consumption under warmer climate conditions																																								
	Seasonal space heating energy efficiency under colder climate conditions													Seasonal space heating energy efficiency under colder climate conditions																																								
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	Water heating energy efficiency under colder climate conditions													Water heating energy efficiency under colder climate conditions																																								
	Water heating energy efficiency under warmer climate conditions													Water heating energy efficiency under warmer climate conditions																																								
	Sound power level L _{WA} , outdoor													Sound power level L _{WA} , outdoor																																								
PUD-SHWM100VA(A)(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-SHWM120VA(A)(BS)	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									
	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										
PUD-SHWM140VA(A)(BS)	EHST17D-****	✓	A++	A+	L	10.0	6040	736	131	148	41	-	10.0	10.0	8290	3390	900	675	109	152	120	162	59	✓	A+++	A+	L	10.0	4441	736	178	148	41	-	10.0	10.0	6181	2334	900	675	146	221	120	162	59									
	ERST17D-****	✓	A++	A+	L	10.0	6040	736	131	148	41	-	10.0	10.0	8290	3390	900	675	109	152	120	162	59	✓	A+++	A+	L	10.0	4441	736	178	148	41	-	10.0	10.0	6181	2334	900	675	146	221	120	162	59									
	EHST20D-****	✓	A++	A+	L	10.0	6040	736	131	148	41	-	10.0	10.0	8290	3390	900	675	109	152	120	162	59	✓	A+++	A+	L	10.0	4441	736	178	148	41	-	10.0	10.0	6181	2334	900	675	146	221	120	162	59									
	ERST20D-****	✓	A++	A+	L	10.0	6040	736	131	148	41	-	10.0	10.0	8290	3390	900	675	109	152	120	162	59	✓	A+++	A+	L	10.0	4441	736	178	148	41	-	10.0	10.0	6181	2334	900	675	146	221	120	162	59									
	EHST30D-****	✓	A++	A	XL	10.0	6040	1431	131	121	41	-	10.0	10.0	8290	3390	1700	1203	109	152	102	145	59	✓	A+++	A	XL	10.0	4441	1431	178	121	41	-	10.0	10.0	6181	2334	1700	1203	146	221	102	145	59									
ERST30D-****	✓	A++	A	XL	10.0	6040	1431	131	121	41	-	10.0	10.0	8290	3390	1700	1203	109	152	102	145	59	✓	A+++	A	XL	10.0	4441	1431	178	121	41	-	10.0	10.0	6181	2334	1700	1203	146	221	102	145	59										
PUD-SHWM160VA(A)(BS)	EHST17D-****	✓	A++	A+	L	12.0	7377	736	129	148	41	-	12.0	12.0	9994	4128	900	675	109	150	120	162	60	✓	A+++	A+	L	12.0	5371	736	177	148	41	-	12.0	12.0	7717	2864	900	675	140	217	120	162	60									
	ERST17D-****	✓	A++	A+	L	12.0	7377	736	129	148	41	-	12.0	12.0	9994	4128	900	675	109	150	120	162	60	✓	A+++	A+	L	12.0	5371	736	177	148	41	-	12.0	12.0	7717	2864	900	675	140	217	120	162	60									
	EHST20D-****	✓	A++	A+	L	12.0	7377	736	129	148	41	-	12.0	12.0	9994	4128	900	675	109	150	120	162	60	✓	A+++	A+	L	12.0	5371	736	177	148	41	-	12.0	12.0	7717	2864	900	675	140	217	120	162	60									
	ERST20D-****	✓	A++	A+	L	12.0	7377	736	129	148	41	-	12.0	12.0	9994	4128	900	675	109	150	120	162	60	✓	A+++	A+	L	12.0	5371	736	177	148	41	-	12.0	12.0	7717	2864	900	675	140	217	120	162	60									
	EHST30D-****	✓	A++	A	XL	12.0	7377	1431	129	121	41	-	12.0	12.0	9994	4128	1700	1203	109	150	102	145	60	✓	A+++	A	XL	12.0	5371	1431	177	121	41	-	12.0	12.0	7717	2864	1700	1203	140	217	102	145	60									
ERST30D-****	✓	A++	A	XL	12.0	7377	1431	129	121	41	-	12.0	12.0	9994	4128	1700	1203	109	150	102	145	60	✓	A+++	A	XL	12.0	5371	1431	177	121	41	-	12.0	12.0	7717	2864	1700	1203	140	217	102	145	60										

Details and precautions on installation, maintenance and assembly can be found in the installation and/or operation manuals. This information is based on COMMISSION DELEGATED REGULATION (EU) No 813/2013.

Model(s):	Outdoor unit:	PUD-SHWM100YAA(-BS)
	Indoor unit:	EHST30D-****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	η_s	135	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	8.9	kW	T _j = - 7 °C	COP _d	2.18	-
Degradation co-efficient (**)	C _{dh}	1.00	-				
T _j = + 2 °C	P _{dh}	5.4	kW	T _j = + 2 °C	COP _d	3.29	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	5.2	kW	T _j = + 7 °C	COP _d	4.81	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.6	kW	T _j = +12 °C	COP _d	7.06	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	10.0	kW	T _j = bivalent temperature	COP _d	1.91	-
T _j = operation limit temperature	P _{dh}	7.7	kW	T _j = operation limit temperature	COP _d	1.57	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T _{designh}	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items				Rated air flow rate, outdoors			
Capacity control		variable		-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dB(A)				
Annual energy consumption	Q _{HE}	5836	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile		XL		η_{wh}	121	%	
Daily electricity consumption	Q _{elec}	6.500	kWh				
Annual electricity consumption	AEC	1431	kWh				

Contact details
MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD. Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

(*) 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-SHWM100YAA(-BS)
	Indoor unit:	EHST30D-****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	η_s	178	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	8.9	kW	T _j = - 7 °C	COP _d	3.16	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	5.7	kW	T _j = + 2 °C	COP _d	4.52	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	5.4	kW	T _j = + 7 °C	COP _d	5.63	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	4.5	kW	T _j = +12 °C	COP _d	7.89	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	10.0	kW	T _j = bivalent temperature	COP _d	2.92	-
T _j = operation limit temperature	P _{dh}	7.7	kW	T _j = operation limit temperature	COP _d	1.57	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T _{designh}	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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}	4430	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q _{elec}	6.500	kWh
Annual electricity consumption	AEC	1431	kWh
Water heating energy efficiency			
η_{wh}			
121			
%			

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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-SHWM100YAA(-BS)
	Indoor unit:	EHST30D-****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	η_s	114	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	6.1	kW	T _j = - 7 °C	COP _d	2.60	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	3.7	kW	T _j = + 2 °C	COP _d	3.19	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	3.8	kW	T _j = + 7 °C	COP _d	4.58	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = +12 °C	P _{dh}	4.4	kW	T _j = +12 °C	COP _d	6.88	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = bivalent temperature	P _{dh}	8.4	kW	T _j = bivalent temperature	COP _d	1.56	-
T _j = operation limit temperature	P _{dh}	7.7	kW	T _j = operation limit temperature	COP _d	1.57	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	8.5	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	1.56	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T _{designh}	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items				Rated air flow rate, outdoors	-	2640	m ³ /h
Capacity control	variable						
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dB(A)				
Annual energy consumption	Q _{HE}	7924	kWh				

For heat pump combination heater:				Water heating energy efficiency	η_{wh}	102	%
Declared load profile	XL						
Daily electricity consumption	Q _{elec}	7.730	kWh				
Annual electricity consumption	AEC	1700	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-SHWM100YAA(-BS)
	Indoor unit:	EHST30D-****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	η_s	148	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	6.2	kW	T _j = - 7 °C	COP _d	3.71	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	3.9	kW	T _j = + 2 °C	COP _d	4.02	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	3.9	kW	T _j = + 7 °C	COP _d	5.34	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = +12 °C	P _{dh}	4.5	kW	T _j = +12 °C	COP _d	7.50	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	8.4	kW	T _j = bivalent temperature	COP _d	2.15	-
T _j = operation limit temperature	P _{dh}	7.7	kW	T _j = operation limit temperature	COP _d	1.57	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	8.5	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	2.20	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T _{designh}	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
				Type of energy input	Electrical		

Other items				Rated air flow rate, outdoors	-	2640	m ³ /h
Capacity control	variable						
Sound power level, indoors/outdoors	L _{WA}	41 / 59	dB(A)				
Annual energy consumption	Q _{HE}	6106	kWh				

For heat pump combination heater:				Water heating energy efficiency	η_{wh}	102	%
Declared load profile	XL						
Daily electricity consumption	Q _{elec}	7.730	kWh				
Annual electricity consumption	AEC	1700	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-SHWM100YAA(-BS)
	Indoor unit:	EHST30D-****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	η_s	161	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	10.0	kW	T _j = + 2 °C	COP _d	2.05	-
Degradation co-efficient (**)	C _{dh}	1.00	-				
T _j = + 7 °C	P _{dh}	6.4	kW	T _j = + 7 °C	COP _d	3.48	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	4.2	kW	T _j = +12 °C	COP _d	5.68	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = bivalent temperature	P _{dh}	10.0	kW	T _j = bivalent temperature	COP _d	2.05	-
T _j = operation limit temperature	P _{dh}	7.7	kW	T _j = operation limit temperature	COP _d	1.57	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T _{designh}	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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}	3169	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q _{elec}	5.470	kWh
Annual electricity consumption	AEC	1203	kWh
Water heating energy efficiency			
η_{wh}			
145			
%			

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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(T_j).

(**) If C_{dh} is not determined by measurement then the default degradation coefficient is C_{dh} = 0,9.

Model(s):	Outdoor unit:	PUD-SHWM100YAA(-BS)
	Indoor unit:	EHST30D-****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	η_s	232	%
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	3.45	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	6.4	kW	Tj = + 7 °C	COPd	5.42	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.4	kW	Tj = +12 °C	COPd	7.46	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	10.0	kW	Tj = bivalent temperature	COPd	3.45	-
Tj = operation limit temperature	Pdh	7.7	kW	Tj = operation limit temperature	COPd	1.57	-
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	-28	°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}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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}	2191	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q _{elec}	5.470	kWh
Annual electricity consumption	AEC	1203	kWh
Water heating energy efficiency			
η_{wh}			
145			
%			

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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-SHWM100YAA(-BS)
	Indoor unit:	EHST30D-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	η_s	135	%
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	2.18	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	5.4	kW	Tj = + 2 °C	COPd	3.29	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.2	kW	Tj = + 7 °C	COPd	4.81	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.6	kW	Tj = +12 °C	COPd	7.06	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	10.0	kW	Tj = bivalent temperature	COPd	1.91	-
Tj = operation limit temperature	Pdh	7.7	kW	Tj = operation limit temperature	COPd	1.57	-
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-28	°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}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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}	5836	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q _{elec}	6.500	kWh
Annual electricity consumption	AEC	1431	kWh
Water heating energy efficiency			
η_{wh}			
121			
%			

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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-SHWM100YAA(-BS)
	Indoor unit:	EHST30D-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	η_s	178	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	8.9	kW	T _j = - 7 °C	COP _d	3.16	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	5.7	kW	T _j = + 2 °C	COP _d	4.52	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	5.4	kW	T _j = + 7 °C	COP _d	5.63	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	4.5	kW	T _j = +12 °C	COP _d	7.89	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	10.0	kW	T _j = bivalent temperature	COP _d	2.92	-
T _j = operation limit temperature	P _{dh}	7.7	kW	T _j = operation limit temperature	COP _d	1.57	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T _{designh}	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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}	4430	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q _{elec}	6.500	kWh
Annual electricity consumption	AEC	1431	kWh
Water heating energy efficiency			
η_{wh}			
121			
%			

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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-SHWM100YAA(-BS)
	Indoor unit:	EHST30D-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	η_s	114	%
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	2.60	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.7	kW	Tj = + 2 °C	COPd	3.19	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	3.8	kW	Tj = + 7 °C	COPd	4.58	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	4.4	kW	Tj = +12 °C	COPd	6.88	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	8.4	kW	Tj = bivalent temperature	COPd	1.56	-
Tj = operation limit temperature	Pdh	7.7	kW	Tj = operation limit temperature	COPd	1.57	-
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	8.5	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	1.56	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°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}	0.022	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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}	7924	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q _{elec}	7.730	kWh
Annual electricity consumption	AEC	1700	kWh
Water heating energy efficiency			
η_{wh}			
102			
%			

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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-SHWM100YAA(-BS)
	Indoor unit:	EHST30D-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	η_s	148	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	6.2	kW	T _j = - 7 °C	COP _d	3.71	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	3.9	kW	T _j = + 2 °C	COP _d	4.02	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	3.9	kW	T _j = + 7 °C	COP _d	5.34	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = +12 °C	P _{dh}	4.5	kW	T _j = +12 °C	COP _d	7.50	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	8.4	kW	T _j = bivalent temperature	COP _d	2.15	-
T _j = operation limit temperature	P _{dh}	7.7	kW	T _j = operation limit temperature	COP _d	1.57	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	8.5	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	2.20	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T _{designh}	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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}	6106	kWh				

For heat pump combination heater:							
Declared load profile		XL		Water heating energy efficiency	η_{wh}	102	%
Daily electricity consumption	Q _{elec}	7.730	kWh				
Annual electricity consumption	AEC	1700	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-SHWM100YAA(-BS)
	Indoor unit:	EHST30D-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	η_s	161	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	10.0	kW	T _j = + 2 °C	COP _d	2.05	-
Degradation co-efficient (**)	C _{dh}	1.00	-				
T _j = + 7 °C	P _{dh}	6.4	kW	T _j = + 7 °C	COP _d	3.48	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	4.2	kW	T _j = +12 °C	COP _d	5.68	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = bivalent temperature	P _{dh}	10.0	kW	T _j = bivalent temperature	COP _d	2.05	-
T _j = operation limit temperature	P _{dh}	7.7	kW	T _j = operation limit temperature	COP _d	1.57	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T _{designh}	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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}	3169	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q _{elec}	5.470	kWh
Annual electricity consumption	AEC	1203	kWh
Water heating energy efficiency			
η_{wh}			
145			
%			

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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(T_j).

(**) If C_{dh} is not determined by measurement then the default degradation coefficient is C_{dh} = 0,9.

Model(s):	Outdoor unit:	PUD-SHWM100YAA(-BS)
	Indoor unit:	EHST30D-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	η_s	232	%
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	3.45	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	6.4	kW	Tj = + 7 °C	COPd	5.42	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.4	kW	Tj = +12 °C	COPd	7.46	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	10.0	kW	Tj = bivalent temperature	COPd	3.45	-
Tj = operation limit temperature	Pdh	7.7	kW	Tj = operation limit temperature	COPd	1.57	-
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	-28	°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}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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}	2191	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q _{elec}	5.470	kWh
Annual electricity consumption	AEC	1203	kWh
Water heating energy efficiency			
η_{wh}			
145			
%			

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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-SHWM100YAA(-BS)
	Indoor unit:	ERST30D-****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	η_s	135	%
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	2.18	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	5.4	kW	Tj = + 2 °C	COPd	3.29	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.2	kW	Tj = + 7 °C	COPd	4.81	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.6	kW	Tj = +12 °C	COPd	7.06	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	10.0	kW	Tj = bivalent temperature	COPd	1.91	-
Tj = operation limit temperature	Pdh	7.7	kW	Tj = operation limit temperature	COPd	1.57	-
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-28	°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}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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}	5836	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q _{elec}	6.500	kWh
Annual electricity consumption	AEC	1431	kWh
Water heating energy efficiency			
η_{wh}			
121			
%			

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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-SHWM100YAA(-BS)
	Indoor unit:	ERST30D-****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	η_s	178	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	8.9	kW	T _j = - 7 °C	COP _d	3.16	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	5.7	kW	T _j = + 2 °C	COP _d	4.52	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	5.4	kW	T _j = + 7 °C	COP _d	5.63	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	4.5	kW	T _j = +12 °C	COP _d	7.89	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	10.0	kW	T _j = bivalent temperature	COP _d	2.92	-
T _j = operation limit temperature	P _{dh}	7.7	kW	T _j = operation limit temperature	COP _d	1.57	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T _{designh}	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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}	4430	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q _{elec}	6.500	kWh
Annual electricity consumption	AEC	1431	kWh
Water heating energy efficiency			
η_{wh}			
121			
%			

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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-SHWM100YAA(-BS)
	Indoor unit:	ERST30D-****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	η_s	114	%
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	2.60	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.7	kW	Tj = + 2 °C	COPd	3.19	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	3.8	kW	Tj = + 7 °C	COPd	4.58	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	4.4	kW	Tj = +12 °C	COPd	6.88	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	8.4	kW	Tj = bivalent temperature	COPd	1.56	-
Tj = operation limit temperature	Pdh	7.7	kW	Tj = operation limit temperature	COPd	1.57	-
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	8.5	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	1.56	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°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}	0.022	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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}	7924	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q _{elec}	7.730	kWh
Annual electricity consumption	AEC	1700	kWh
Water heating energy efficiency			
η_{wh}			
102			
%			

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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-SHWM100YAA(-BS)
	Indoor unit:	ERST30D-****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	η_s	148	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	6.2	kW	T _j = - 7 °C	COP _d	3.71	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	3.9	kW	T _j = + 2 °C	COP _d	4.02	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	3.9	kW	T _j = + 7 °C	COP _d	5.34	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = +12 °C	P _{dh}	4.5	kW	T _j = +12 °C	COP _d	7.50	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	8.4	kW	T _j = bivalent temperature	COP _d	2.15	-
T _j = operation limit temperature	P _{dh}	7.7	kW	T _j = operation limit temperature	COP _d	1.57	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	8.5	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	2.20	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T _{designh}	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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}	6106	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q _{elec}	7.730	kWh
Annual electricity consumption	AEC	1700	kWh
Water heating energy efficiency			
η_{wh}			
102			
%			

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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-SHWM100YAA(-BS)
	Indoor unit:	ERST30D-****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	η_s	161	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	10.0	kW	T _j = + 2 °C	COP _d	2.05	-
Degradation co-efficient (**)	C _{dh}	1.00	-				
T _j = + 7 °C	P _{dh}	6.4	kW	T _j = + 7 °C	COP _d	3.48	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	4.2	kW	T _j = +12 °C	COP _d	5.68	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = bivalent temperature	P _{dh}	10.0	kW	T _j = bivalent temperature	COP _d	2.05	-
T _j = operation limit temperature	P _{dh}	7.7	kW	T _j = operation limit temperature	COP _d	1.57	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T _{designh}	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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}	3169	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q _{elec}	5.470	kWh
Annual electricity consumption	AEC	1203	kWh
Water heating energy efficiency			
η_{wh}			
145			
%			

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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-SHWM100YAA(-BS)
	Indoor unit:	ERST30D-****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	η_s	232	%
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	3.45	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	6.4	kW	Tj = + 7 °C	COPd	5.42	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.4	kW	Tj = +12 °C	COPd	7.46	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	10.0	kW	Tj = bivalent temperature	COPd	3.45	-
Tj = operation limit temperature	Pdh	7.7	kW	Tj = operation limit temperature	COPd	1.57	-
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	-28	°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}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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}	2191	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q _{elec}	5.470	kWh
Annual electricity consumption	AEC	1203	kWh
Water heating energy efficiency			
η_{wh}			
145			
%			

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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.