

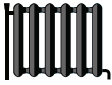


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Indoor unit E\*ST30D-\*\*\*\*D  
Outdoor unit PUD-SHWM140YAA(-BS)



A++



A



41 dB

62 dB



- 14 kW
- 14 kW
- 14 kW

2019

811/2013

BH79V003K26







Model(s):	Outdoor unit:	PUD-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	134	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	12.4	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.15	-
Degradation co-efficient (**)	C <sub>dh</sub>	1.00	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	7.5	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.15	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	6.3	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.96	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.0	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.90	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	14.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.80	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	9.6	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.55	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	-	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	-	-
Bivalent temperature	T <sub>biv</sub>	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T <sub>designh</sub>	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items				Rated air flow rate, outdoors			
Capacity control		variable		-	3000	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	8315	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile		XL		$\eta_{wh}$	121	%	
Daily electricity consumption	Q <sub>elec</sub>	6.560	kWh				
Annual electricity consumption	AEC	1443	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-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	177	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	12.4	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.76	-
Degradation co-efficient (**)	C <sub>dh</sub>	1.00	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	7.6	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	4.34	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	6.27	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	5.4	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	9.00	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	14.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.69	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	9.6	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.55	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	-	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	-	-
Bivalent temperature	T <sub>biv</sub>	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T <sub>designh</sub>	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW	Type of energy input	Electrical		
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
Other items							
Capacity control		variable		Rated air flow rate, outdoors	-	3000	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	6265	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile		XL		$\eta_{wh}$	121	%	
Daily electricity consumption	Q <sub>elec</sub>	6.560	kWh				
Annual electricity consumption	AEC	1443	kWh				

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(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Model(s):	Outdoor unit:	PUD-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	112	%
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	8.5	kW	Tj = - 7 °C	COPd	2.51	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	5.2	kW	Tj = + 2 °C	COPd	3.17	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	4.31	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	5.0	kW	Tj = +12 °C	COPd	6.41	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	11.8	kW	Tj = bivalent temperature	COPd	1.51	-
Tj = operation limit temperature	Pdh	9.6	kW	Tj = operation limit temperature	COPd	1.55	-
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	12.0	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	1.51	-
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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	3.3	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)
Annual energy consumption	Q <sub>HE</sub>	11287	kWh
Rated air flow rate, outdoors			
-			
3000			
m <sup>3</sup> /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q <sub>elec</sub>	7.750	kWh
Annual electricity consumption	AEC	1706	kWh
Water heating energy efficiency			
$\eta_{wh}$			
102			
%			

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(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.



Model(s):	Outdoor unit:	PUD-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	144	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	8.3	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.59	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.91	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	4.6	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.05	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	5.1	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.39	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	11.8	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.03	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	9.6	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.55	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	12.0	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	2.07	-
Bivalent temperature	T <sub>biv</sub>	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T <sub>designh</sub>	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	3.3	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items							
Capacity control		variable		Rated air flow rate, outdoors	-	3000	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	8726	kWh				

For heat pump combination heater:							
Declared load profile		XL		Water heating energy efficiency	$\eta_{wh}$	102	%
Daily electricity consumption	Q <sub>elec</sub>	7.750	kWh				
Annual electricity consumption	AEC	1706	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 P<sub>designh</sub>, and the rated heat output of a supplementary heater P<sub>sup</sub> is equal to the supplementary capacity for heating sup(T<sub>j</sub>).  
(\*\*) If C<sub>dh</sub> is not determined by measurement then the default degradation coefficient is C<sub>dh</sub> = 0,9.

Model(s):	Outdoor unit:	PUD-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	155	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	-	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	-	-
Degradation co-efficient (**)	C <sub>dh</sub>	-	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	14.0	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	1.95	-
Degradation co-efficient (**)	C <sub>dh</sub>	1.00	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	8.8	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	3.24	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	5.5	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	5.50	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	14.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.95	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	9.6	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.55	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	-	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	-	-
Bivalent temperature	T <sub>biv</sub>	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T <sub>designh</sub>	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)
Annual energy consumption	Q <sub>HE</sub>	4667	kWh
Rated air flow rate, outdoors			
-			
3000			
m <sup>3</sup> /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q <sub>elec</sub>	5.700	kWh
Annual electricity consumption	AEC	1255	kWh
Water heating energy efficiency			
$\eta_{wh}$			
139			
%			

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(\*\*) If C<sub>dh</sub> is not determined by measurement then the default degradation coefficient is C<sub>dh</sub> = 0,9.



Model(s):	Outdoor unit:	PUD-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	223	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	-	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	-	-
Degradation co-efficient (**)	C <sub>dh</sub>	-	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	14.0	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.05	-
Degradation co-efficient (**)	C <sub>dh</sub>	1.00	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	9.0	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.08	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	5.1	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.18	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	14.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	3.05	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	9.6	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.55	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	-	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	-	-
Bivalent temperature	T <sub>biv</sub>	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T <sub>designh</sub>	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items							
Capacity control		variable		Rated air flow rate, outdoors	-	3000	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	3236	kWh				

For heat pump combination heater:							
Declared load profile		XL		Water heating energy efficiency	$\eta_{wh}$	139	%
Daily electricity consumption	Q <sub>elec</sub>	5.700	kWh				
Annual electricity consumption	AEC	1255	kWh				

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(\*\*) If C<sub>dh</sub> is not determined by measurement then the default degradation coefficient is C<sub>dh</sub> = 0,9.

Model(s):	Outdoor unit:	PUD-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	134	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	12.4	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.15	-
Degradation co-efficient (**)	C <sub>dh</sub>	1.00	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	7.5	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.15	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	6.3	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.96	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.0	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.90	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	14.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.80	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	9.6	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.55	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	-	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	-	-
Bivalent temperature	T <sub>biv</sub>	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T <sub>designh</sub>	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items				Rated air flow rate, outdoors	-	3000	m <sup>3</sup> /h
Capacity control	variable						
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	8315	kWh				

For heat pump combination heater:				Water heating energy efficiency	$\eta_{wh}$	121	%
Declared load profile	XL						
Daily electricity consumption	Q <sub>elec</sub>	6.560	kWh				
Annual electricity consumption	AEC	1443	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-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	177	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	12.4	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.76	-
Degradation co-efficient (**)	C <sub>dh</sub>	1.00	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	7.6	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	4.34	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	6.27	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	5.4	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	9.00	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	14.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.69	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	9.6	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.55	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	-	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	-	-
Bivalent temperature	T <sub>biv</sub>	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T <sub>designh</sub>	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items				Rated air flow rate, outdoors	-	3000	m <sup>3</sup> /h
Capacity control	variable						
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	6265	kWh				

For heat pump combination heater:				Water heating energy efficiency	$\eta_{wh}$	121	%
Declared load profile	XL						
Daily electricity consumption	Q <sub>elec</sub>	6.560	kWh				
Annual electricity consumption	AEC	1443	kWh				

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(\*\*) If C<sub>dh</sub> is not determined by measurement then the default degradation coefficient is C<sub>dh</sub> = 0,9.

Model(s):	Outdoor unit:	PUD-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	112	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	8.5	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.51	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.17	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	4.4	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.31	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	5.0	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.41	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	11.8	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.51	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	9.6	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.55	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	12.0	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	1.51	-
Bivalent temperature	T <sub>biv</sub>	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T <sub>designh</sub>	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	3.3	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)
Annual energy consumption	Q <sub>HE</sub>	11287	kWh
Rated air flow rate, outdoors			
-			
3000			
m <sup>3</sup> /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q <sub>elec</sub>	7.750	kWh
Annual electricity consumption	AEC	1706	kWh
Water heating energy efficiency			
$\eta_{wh}$			
102			
%			

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(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Model(s):	Outdoor unit:	PUD-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	144	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	8.3	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.59	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.91	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	4.6	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.05	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	5.1	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.39	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	11.8	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.03	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	9.6	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.55	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	12.0	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	2.07	-
Bivalent temperature	T <sub>biv</sub>	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T <sub>designh</sub>	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	3.3	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items				Rated air flow rate, outdoors			
Capacity control		variable		-	3000	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	8726	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile		XL		$\eta_{wh}$	102	%	
Daily electricity consumption	Q <sub>elec</sub>	7.750	kWh				
Annual electricity consumption	AEC	1706	kWh				

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(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Model(s):	Outdoor unit:	PUD-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	155	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	-	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	-	-
Degradation co-efficient (**)	C <sub>dh</sub>	-	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	14.0	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	1.95	-
Degradation co-efficient (**)	C <sub>dh</sub>	1.00	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	8.8	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	3.24	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	5.5	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	5.50	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	14.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.95	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	9.6	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.55	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	-	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	-	-
Bivalent temperature	T <sub>biv</sub>	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T <sub>designh</sub>	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)
Annual energy consumption	Q <sub>HE</sub>	4667	kWh
Rated air flow rate, outdoors			
-			
3000			
m <sup>3</sup> /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q <sub>elec</sub>	5.700	kWh
Annual electricity consumption	AEC	1255	kWh
Water heating energy efficiency			
$\eta_{wh}$			
139			
%			

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(\*\*) If C<sub>dh</sub> is not determined by measurement then the default degradation coefficient is C<sub>dh</sub> = 0,9.



Model(s):	Outdoor unit:	PUD-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	223	%
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	14.0	kW	Tj = + 2 °C	COPd	3.05	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	9.0	kW	Tj = + 7 °C	COPd	5.08	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	5.1	kW	Tj = +12 °C	COPd	7.18	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	14.0	kW	Tj = bivalent temperature	COPd	3.05	-
Tj = operation limit temperature	Pdh	9.6	kW	Tj = operation limit temperature	COPd	1.55	-
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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)
Annual energy consumption	Q <sub>HE</sub>	3236	kWh
Rated air flow rate, outdoors			
-			
3000			
m <sup>3</sup> /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q <sub>elec</sub>	5.700	kWh
Annual electricity consumption	AEC	1255	kWh
Water heating energy efficiency			
$\eta_{wh}$			
139			
%			

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(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Model(s):	Outdoor unit:	PUD-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	134	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	12.4	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.15	-
Degradation co-efficient (**)	C <sub>dh</sub>	1.00	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	7.5	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.15	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	6.3	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.96	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.0	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.90	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	14.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.80	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	9.6	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.55	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	-	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	-	-
Bivalent temperature	T <sub>biv</sub>	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T <sub>designh</sub>	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items				Rated air flow rate, outdoors			
Capacity control		variable		-	3000	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	8315	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile		XL		$\eta_{wh}$	121	%	
Daily electricity consumption	Q <sub>elec</sub>	6.560	kWh				
Annual electricity consumption	AEC	1443	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-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	177	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	12.4	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.76	-
Degradation co-efficient (**)	C <sub>dh</sub>	1.00	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	7.6	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	4.34	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	6.27	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	5.4	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	9.00	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	14.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.69	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	9.6	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.55	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	-	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	-	-
Bivalent temperature	T <sub>biv</sub>	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	T <sub>designh</sub>	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)
Annual energy consumption	Q <sub>HE</sub>	6265	kWh
Rated air flow rate, outdoors			
-			
3000			
m <sup>3</sup> /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q <sub>elec</sub>	6.560	kWh
Annual electricity consumption	AEC	1443	kWh
Water heating energy efficiency			
$\eta_{wh}$			
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-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	112	%
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	8.5	kW	Tj = - 7 °C	COPd	2.51	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	5.2	kW	Tj = + 2 °C	COPd	3.17	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	4.31	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	5.0	kW	Tj = +12 °C	COPd	6.41	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	11.8	kW	Tj = bivalent temperature	COPd	1.51	-
Tj = operation limit temperature	Pdh	9.6	kW	Tj = operation limit temperature	COPd	1.55	-
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	12.0	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	1.51	-
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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	3.3	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)
Annual energy consumption	Q <sub>HE</sub>	11287	kWh
Rated air flow rate, outdoors			
-			
3000			
m <sup>3</sup> /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q <sub>elec</sub>	7.750	kWh
Annual electricity consumption	AEC	1706	kWh
Water heating energy efficiency			
$\eta_{wh}$			
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-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	144	%
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	8.3	kW	Tj = - 7 °C	COPd	3.59	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	5.2	kW	Tj = + 2 °C	COPd	3.91	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.6	kW	Tj = + 7 °C	COPd	5.05	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	5.1	kW	Tj = +12 °C	COPd	7.39	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	11.8	kW	Tj = bivalent temperature	COPd	2.03	-
Tj = operation limit temperature	Pdh	9.6	kW	Tj = operation limit temperature	COPd	1.55	-
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	12.0	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	2.07	-
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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	3.3	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)
Annual energy consumption	Q <sub>HE</sub>	8726	kWh
Rated air flow rate, outdoors			
-			
3000			
m <sup>3</sup> /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q <sub>elec</sub>	7.750	kWh
Annual electricity consumption	AEC	1706	kWh
Water heating energy efficiency			
$\eta_{wh}$			
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-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	155	%
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	14.0	kW	Tj = + 2 °C	COPd	1.95	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	8.8	kW	Tj = + 7 °C	COPd	3.24	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	5.5	kW	Tj = +12 °C	COPd	5.50	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	14.0	kW	Tj = bivalent temperature	COPd	1.95	-
Tj = operation limit temperature	Pdh	9.6	kW	Tj = operation limit temperature	COPd	1.55	-
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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)
Annual energy consumption	Q <sub>HE</sub>	4667	kWh
Rated air flow rate, outdoors			
-			
3000			
m <sup>3</sup> /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q <sub>elec</sub>	5.700	kWh
Annual electricity consumption	AEC	1255	kWh
Water heating energy efficiency			
$\eta_{wh}$			
139			
%			

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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-SHWM140YAA(-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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	223	%
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	14.0	kW	Tj = + 2 °C	COPd	3.05	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	9.0	kW	Tj = + 7 °C	COPd	5.08	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	5.1	kW	Tj = +12 °C	COPd	7.18	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	14.0	kW	Tj = bivalent temperature	COPd	3.05	-
Tj = operation limit temperature	Pdh	9.6	kW	Tj = operation limit temperature	COPd	1.55	-
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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
				Type of energy input	Electrical		

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 62	dB(A)
Annual energy consumption	Q <sub>HE</sub>	3236	kWh
Rated air flow rate, outdoors			
-			
3000			
m <sup>3</sup> /h			

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q <sub>elec</sub>	5.700	kWh
Annual electricity consumption	AEC	1255	kWh
Water heating energy efficiency			
$\eta_{wh}$			
139			
%			

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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.