

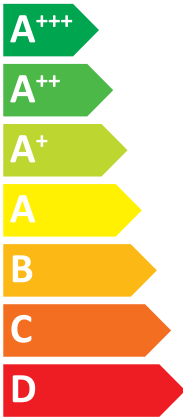
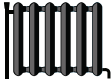


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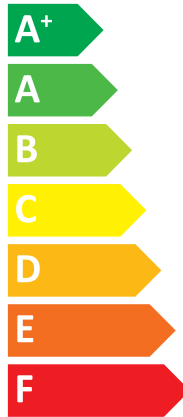
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Indoor unit E*ST17/20D-****D
Outdoor unit PUD-SHWM80VAA(-BS)



A++



A+



41 dB

56 dB



- 08 kW
- 08 kW
- 08 kW

2019

811/2013

BH79V003H06



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

Table with columns for Outdoor unit, Indoor unit, and various energy efficiency metrics (SEER, SCOP, etc.) for different models. The table is divided into 'For medium-temperature application' and 'For low-temperature application' sections.

English	Deutsch	Franciais	Italiano	Ελληνικά
Nederlands	Svenska	Polski	Português	ΕΛΛΗΝΙΚΑ
suomi	Čeština	Български	Polski	Ελληνικά
Outdoor unit	Außengerät	unit extérieure	unità esterna	υποθήκη εξωτερικού
1 built-in unit	Unterstützter Vorkontroll-Jednikeit	Unités enclavées	unità esterne	εξωτερικά ενσωματωμένα
Indoor unit	Innengerät	Unité intérieure	unità interne	υποθήκη εσωτερικού
2 built-in unit	Innen/unterstützt	Inclavés enclavés	unità interne	εσωτερικά ενσωματωμένα
Säsongtemperaturapplikation	Mittelsaisonanwendung mittelsaisonanwendung	Applications à moyenne température	aplicazioni a media temperatura	επιχειρησιακή εφαρμογή μεσαίας θερμοκρασίας
3 keystoneapplication	mittelsaisonanwendung	Application de température moyenne	aplicación a media temperatura	επιχειρησιακή εφαρμογή μεσαίας θερμοκρασίας
Low-temperature application	Niedertemperaturanwendung	Applications à basse température	aplicaciones a bassa temperatura	επιχειρησιακή εφαρμογή χαμηλής θερμοκρασίας
4 laagtemperatuuraanpassing	Niedertemperaturanwendung	Applications à basse température	aplicaciones a bassa temperatura	επιχειρησιακή εφαρμογή χαμηλής θερμοκρασίας
5 de seizsozeizoenen energie-efficiëntieklassen voor ruimteverwarming	die Klasse für die jahreszeitbedingte Raumheizungs-Energieeffizienz	Classes de efficacité énergétique saisonnière, pour le chauffage des locaux	A classe de efficienza energética stagionale del riscaldamento d'ambiente	κατηγορίες ενεργειακής αποδοτικότητας για κλιματισμό με εποχιακή διαμόρφωση
6 de seizsozeizoenen energie-efficiëntieklassen voor waterverwarming	die Klasse für die jahreszeitbedingte Raumheizungs-Energieeffizienz	Classes de efficacité énergétique saisonnière, pour le chauffage des locaux	A classe de efficienza energética stagionale del riscaldamento d'ambiente	κατηγορίες ενεργειακής αποδοτικότητας για κλιματισμό με εποχιακή διαμόρφωση
7 de omvante verwarmingscondities klimaatomstandigheden	Die entsprechende Klimaarten	Conditions climatiques correspondantes	Condizioni climatiche corrispondenti	επιχειρησιακές συνθήκες κλιματισμού με εποχιακή διαμόρφωση
8 voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	For space heating, annual energy consumption under average climate conditions	pour le chauffage des locaux, la consommation annuelle d'électricité (dans les conditions climatiques moyennes)	per il riscaldamento d'ambiente, o consumo annuo di energia (in condizioni climatiche medie)	ετήσιο κατανάλωμα ηλεκτρικής ενέργειας (με μέση κατάσταση κλιματισμού)
9 voor waterverwarming, het jaarlijkse elektriciteitsverbruik(onder gemiddelde klimaatomstandigheden)	For water heating, annual electricity consumption under average climate conditions	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques moyennes)	per il riscaldamento dell'acqua, il consumo annuo di energia (in condizioni climatiche medie)	ετήσια κατανάλωση ηλεκτρικής ενέργειας (με μέση κατάσταση κλιματισμού)
10 de seizsozeizoenen energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	die Jahreszeitbedingte Raumheizungs-Energieeffizienz bei durchschnittlichen Klimaverhältnissen	efficacité énergétique saisonnière pour le chauffage des locaux (dans les conditions climatiques moyennes)	efficienza energetica stagionale di riscaldamento d'ambiente (in condizioni climatiche medie)	επιχειρησιακή αποδοτικότητα με εποχιακή διαμόρφωση
11 de energie-efficiëntie van waterverwarming(onder gemiddelde klimaatomstandigheden)	die Warmwassereffizienz bei durchschnittlichen Klimaverhältnissen	efficacité énergétique pour le chauffage de l'eau, dans les conditions climatiques moyennes)	efficiencia energética di riscaldamento dell'acqua in condizioni climatiche medie)	επιχειρησιακή αποδοτικότητα για κλιματισμό με εποχιακή διαμόρφωση
12 het geïntegreerde systeem LHM binnen	die integrierte LHM-Systeme	Appareils intégrés LHM à l'intérieur	apparecchi integrati LHM in interni	ένσωματωμένο σύστημα LHM εσωτερικού
13 de opmerkelijke efficiëntie van de afzuigen	die bemerkenswerte Effizienz der Abluftabfuhr	efficacité remarquable d'évacuation	efficienza notevole di smaltimento rifiuti	εξαιρετική αποδοτικότητα στην απομάκρυνση αερίων
14 de normale verwarmings- en afzuigcondities	die normalen Heizungs- und Abluftbedingungen	Conditions climatiques normales de chauffage et d'évacuation	condizioni climatiche normali di riscaldamento e di smaltimento rifiuti	επιχειρησιακές συνθήκες κλιματισμού με εποχιακή διαμόρφωση
15 de normale verwarmings- en afzuigcondities	die normalen Heizungs- und Abluftbedingungen	Conditions climatiques normales de chauffage et d'évacuation	condizioni climatiche normali di riscaldamento e di smaltimento rifiuti	επιχειρησιακές συνθήκες κλιματισμού με εποχιακή διαμόρφωση
16 voor ruimteverwarming, het jaarlijkse energieverbruik(onder koude klimaatomstandigheden)	For space heating, annual energy consumption under cold climate conditions	pour le chauffage des locaux, la consommation annuelle d'énergie, dans les conditions climatiques froides	per il riscaldamento d'ambiente, o consumo annuo di energia in condizioni climatiche fredde e di	ετήσια κατανάλωμα ηλεκτρικής ενέργειας (με κλιματισμό με εποχιακή διαμόρφωση)
17 voor waterverwarming, het jaarlijkse elektriciteitsverbruik(onder koude klimaatomstandigheden)	For water heating, annual electricity consumption under cold climate conditions	pour le chauffage de l'eau, la consommation annuelle d'électricité, dans les conditions climatiques froides	per il riscaldamento dell'acqua, il consumo annuo di energia in condizioni climatiche fredde e di	ετήσια κατανάλωση ηλεκτρικής ενέργειας (με κλιματισμό με εποχιακή διαμόρφωση)
18 voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder koude klimaatomstandigheden	For water heating, annual electricity consumption under cold climate conditions	pour le chauffage de l'eau, la consommation annuelle d'électricité, dans les conditions climatiques froides	per il riscaldamento dell'acqua, il consumo annuo di energia in condizioni climatiche fredde e di	ετήσια κατανάλωση ηλεκτρικής ενέργειας (με κλιματισμό με εποχιακή διαμόρφωση)
19 voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder warme klimaatomstandigheden	For water heating, annual electricity consumption under warm climate conditions	pour le chauffage de l'eau, la consommation annuelle d'électricité, dans les conditions climatiques chaudes	per il riscaldamento dell'acqua, il consumo annuo di energia in condizioni climatiche calde e di	ετήσια κατανάλωση ηλεκτρικής ενέργειας (με κλιματισμό με εποχιακή διαμόρφωση)
20 de seizsozeizoenen energie-efficiëntie voor ruimteverwarming(onder koude klimaatomstandigheden)	die Jahreszeitbedingte Raumheizungs-Energieeffizienz bei kalten Klimaverhältnissen	efficacité énergétique saisonnière pour le chauffage des locaux, dans les conditions climatiques froides	efficienza energetica stagionale di riscaldamento d'ambiente in condizioni climatiche fredde	επιχειρησιακή αποδοτικότητα με εποχιακή διαμόρφωση (με κλιματισμό με εποχιακή διαμόρφωση)
21 de seizsozeizoenen energie-efficiëntie voor waterverwarming(onder warme klimaatomstandigheden)	die Jahreszeitbedingte Raumheizungs-Energieeffizienz bei warmen Klimaverhältnissen	efficacité énergétique saisonnière pour le chauffage de l'eau, dans les conditions climatiques chaudes	efficienza energetica stagionale di riscaldamento d'ambiente in condizioni climatiche calde	επιχειρησιακή αποδοτικότητα με εποχιακή διαμόρφωση (με κλιματισμό με εποχιακή διαμόρφωση)
22 de energie-efficiëntie van waterverwarming(onder koude klimaatomstandigheden)	die Warmwassereffizienz bei kalten Klimaverhältnissen	efficacité énergétique pour le chauffage de l'eau, dans les conditions climatiques froides	efficiencia energética di riscaldamento dell'acqua in condizioni climatiche fredde	επιχειρησιακή αποδοτικότητα για κλιματισμό με εποχιακή διαμόρφωση
23 de energie-efficiëntie van waterverwarming(onder warme klimaatomstandigheden)	die Warmwassereffizienz bei warmen Klimaverhältnissen	efficacité énergétique pour le chauffage de l'eau, dans les conditions climatiques chaudes	efficiencia energética di riscaldamento dell'acqua in condizioni climatiche calde	επιχειρησιακή αποδοτικότητα για κλιματισμό με εποχιακή διαμόρφωση
24 de geïntegreerde systeem LHM buiten	die integrierte LHM-Systeme	Appareils intégrés LHM à l'extérieur	apparecchi integrati LHM in esterni	ένσωματωμένο σύστημα LHM εσωτερικού

Model(s):	Outdoor unit:	PUD-SHWM80VAA
	Indoor unit:	EHST17D-****
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 shall be declared for		medium-temperature application.
Parameters shall be declared for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	135	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	7.1	kW	T _j = - 7 °C	COP _d	2.14	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	4.3	kW	T _j = + 2 °C	COP _d	3.26	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	5.3	kW	T _j = + 7 °C	COP _d	4.91	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.1	kW	T _j = +12 °C	COP _d	7.05	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	8.0	kW	T _j = bivalent temperature	COP _d	1.97	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
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
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	4695	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	η_{wh}	136	%
Daily electricity consumption	Q _{elec}	3.600	kWh				
Annual electricity consumption	AEC	798	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-SHWM80VAA
	Indoor unit:	EHST17D-****
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 shall be declared for		low-temperature application.
Parameters shall be declared for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	181	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	7.1	kW	T _j = - 7 °C	COP _d	3.11	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	4.7	kW	T _j = + 2 °C	COP _d	4.52	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	5.1	kW	T _j = + 7 °C	COP _d	6.00	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.2	kW	T _j = +12 °C	COP _d	8.21	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	8.0	kW	T _j = bivalent temperature	COP _d	3.09	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
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
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	3500	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	η_{wh}	136	%
Daily electricity consumption	Q _{elec}	3.600	kWh				
Annual electricity consumption	AEC	798	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-SHWM80VAA
	Indoor unit:	EHST17D-****
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 shall be declared for		medium-temperature application.
Parameters shall be declared for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	114	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	4.9	kW	T _j = - 7 °C	COP _d	2.59	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	3.5	kW	T _j = + 2 °C	COP _d	3.18	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	4.3	kW	T _j = + 7 °C	COP _d	4.78	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.1	kW	T _j = +12 °C	COP _d	6.74	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	6.7	kW	T _j = bivalent temperature	COP _d	1.51	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	6.8	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	1.52	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	6335	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	η_{wh}	154	%
Daily electricity consumption	Q _{elec}	3.200	kW/h				
Annual electricity consumption	AEC	709	kW/h				

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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-SHWM80VAA
	Indoor unit:	EHST17D-****
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 shall be declared for		low-temperature application.
Parameters shall be declared for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	145	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	4.8	kW	T _j = - 7 °C	COP _d	3.53	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 2 °C	P _{dh}	3.8	kW	T _j = + 2 °C	COP _d	4.04	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	4.5	kW	T _j = + 7 °C	COP _d	5.56	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.1	kW	T _j = +12 °C	COP _d	7.56	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	6.7	kW	T _j = bivalent temperature	COP _d	2.23	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	6.8	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	2.30	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	4934	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	154	%	
Daily electricity consumption	Q _{elec}	3.200	kW/h				
Annual electricity consumption	AEC	709	kW/h				

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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-SHWM80VAA
	Indoor unit:	EHST17D-****
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 shall be declared for		medium-temperature application.
Parameters shall be declared for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	166	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	8	kW	T _j = + 2 °C	COP _d	1.88	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	5.2	kW	T _j = + 7 °C	COP _d	3.51	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	4.5	kW	T _j = +12 °C	COP _d	6.08	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = bivalent temperature	P _{dh}	1.0	kW	T _j = bivalent temperature	COP _d	0.95	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
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}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	33.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	2479	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	112	%	
Daily electricity consumption	Q _{elec}	4.400	kWh				
Annual electricity consumption	AEC	968	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-SHWM80VAA
	Indoor unit:	EHST17D-****
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 shall be declared for		low-temperature application.
Parameters shall be declared for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	225	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	8	kW	T _j = + 2 °C	COP _d	3.74	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	5.1	kW	T _j = + 7 °C	COP _d	5.05	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	4.7	kW	T _j = +12 °C	COP _d	7.34	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = bivalent temperature	P _{dh}	1.0	kW	T _j = bivalent temperature	COP _d	1.00	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
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}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	33.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	1820	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	112	%	
Daily electricity consumption	Q _{elec}	4.400	kW/h				
Annual electricity consumption	AEC	968	kW/h				

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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-SHWM80VAA
	Indoor unit:	EHST20D-****
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 shall be declared for		medium-temperature application.
Parameters shall be declared for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	135	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	7.1	kW	T _j = - 7 °C	COP _d	2.14	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	4.3	kW	T _j = + 2 °C	COP _d	3.26	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	5.3	kW	T _j = + 7 °C	COP _d	4.91	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.1	kW	T _j = +12 °C	COP _d	7.05	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	8.0	kW	T _j = bivalent temperature	COP _d	1.97	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
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
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	4695	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	148	%	
Daily electricity consumption	Q _{elec}	3.300	kWh				
Annual electricity consumption	AEC	736	kWh				

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

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

Model(s):	Outdoor unit:	PUD-SHWM80VAA
	Indoor unit:	EHST20D-****
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 shall be declared for		low-temperature application.
Parameters shall be declared for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	181	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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	7.1	kW	Tj = - 7 °C	COPd	3.11	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.7	kW	Tj = + 2 °C	COPd	4.52	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	5.1	kW	Tj = + 7 °C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.2	kW	Tj = +12 °C	COPd	8.21	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	3.09	-
Tj = operation limit temperature	Pdh	5.3	kW	Tj = operation limit temperature	COPd	1.41	-
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
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)
Annual energy consumption	Q _{HE}	3500	kWh
Rated air flow rate, outdoors		2220	m ³ /h

For heat pump combination heater:			
Declared load profile		L	
Daily electricity consumption	Q _{elec}	3.300	kWh
Annual electricity consumption	AEC	736	kWh
Water heating energy efficiency	η_{wh}	148	%

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

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

Model(s):	Outdoor unit:	PUD-SHWM80VAA
	Indoor unit:	EHST20D-****
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 shall be declared for		medium-temperature application.
Parameters shall be declared for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	114	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	4.9	kW	T _j = - 7 °C	COP _d	2.59	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	3.5	kW	T _j = + 2 °C	COP _d	3.18	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	4.3	kW	T _j = + 7 °C	COP _d	4.78	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.1	kW	T _j = +12 °C	COP _d	6.74	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	6.7	kW	T _j = bivalent temperature	COP _d	1.51	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	6.8	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	1.52	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	6335	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	η_{wh}	162	%
Daily electricity consumption	Q _{elec}	3.100	kW/h				
Annual electricity consumption	AEC	675	kW/h				

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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-SHWM80VAA
	Indoor unit:	EHST20D-****
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 shall be declared for		low-temperature application.
Parameters shall be declared for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	145	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	4.8	kW	T _j = - 7 °C	COP _d	3.53	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 2 °C	P _{dh}	3.8	kW	T _j = + 2 °C	COP _d	4.04	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	4.5	kW	T _j = + 7 °C	COP _d	5.56	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.1	kW	T _j = +12 °C	COP _d	7.56	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	6.7	kW	T _j = bivalent temperature	COP _d	2.23	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	6.8	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	2.30	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	4934	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	η_{wh}	162	%
Daily electricity consumption	Q _{elec}	3.100	kW/h				
Annual electricity consumption	AEC	675	kW/h				

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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-SHWM80VAA
	Indoor unit:	EHST20D-****
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 shall be declared for		medium-temperature application.
Parameters shall be declared for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	166	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	8	kW	T _j = + 2 °C	COP _d	1.88	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	5.2	kW	T _j = + 7 °C	COP _d	3.51	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	4.5	kW	T _j = +12 °C	COP _d	6.08	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = bivalent temperature	P _{dh}	1.0	kW	T _j = bivalent temperature	COP _d	0.95	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
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}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	1.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	2479	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	120	%	
Daily electricity consumption	Q _{elec}	4.100	kW/h				
Annual electricity consumption	AEC	900	kW/h				

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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-SHWM80VAA
	Indoor unit:	EHST20D-****
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 shall be declared for		low-temperature application.
Parameters shall be declared for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	225	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	8	kW	T _j = + 2 °C	COP _d	3.74	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	5.1	kW	T _j = + 7 °C	COP _d	5.05	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	4.7	kW	T _j = +12 °C	COP _d	7.34	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = bivalent temperature	P _{dh}	1.0	kW	T _j = bivalent temperature	COP _d	1.00	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
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}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	1.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	1820	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	120	%	
Daily electricity consumption	Q _{elec}	4.100	kW/h				
Annual electricity consumption	AEC	900	kW/h				

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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-SHWM80VAA
	Indoor unit:	ERST17D-****
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 shall be declared for		medium-temperature application.
Parameters shall be declared for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	135	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	7.1	kW	T _j = - 7 °C	COP _d	2.14	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	4.3	kW	T _j = + 2 °C	COP _d	3.26	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	5.3	kW	T _j = + 7 °C	COP _d	4.91	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.1	kW	T _j = +12 °C	COP _d	7.05	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	8.0	kW	T _j = bivalent temperature	COP _d	1.97	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
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
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	4695	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	136	%	
Daily electricity consumption	Q _{elec}	3.600	kW/h				
Annual electricity consumption	AEC	798	kW/h				

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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-SHWM80VAA
	Indoor unit:	ERST17D-****
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 shall be declared for		low-temperature application.
Parameters shall be declared for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	181	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	7.1	kW	T _j = - 7 °C	COP _d	3.11	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	4.7	kW	T _j = + 2 °C	COP _d	4.52	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	5.1	kW	T _j = + 7 °C	COP _d	6.00	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.2	kW	T _j = +12 °C	COP _d	8.21	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	8.0	kW	T _j = bivalent temperature	COP _d	3.09	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
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
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	3500	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	136	%	
Daily electricity consumption	Q _{elec}	3.600	kWh				
Annual electricity consumption	AEC	798	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-SHWM80VAA
	Indoor unit:	ERST17D-****
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 shall be declared for		medium-temperature application.
Parameters shall be declared for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	114	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	4.9	kW	T _j = - 7 °C	COP _d	2.59	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	3.5	kW	T _j = + 2 °C	COP _d	3.18	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	4.3	kW	T _j = + 7 °C	COP _d	4.78	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.1	kW	T _j = +12 °C	COP _d	6.74	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	6.7	kW	T _j = bivalent temperature	COP _d	1.51	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	6.8	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	1.52	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	6335	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	η_{wh}	154	%
Daily electricity consumption	Q _{elec}	3.200	kWh				
Annual electricity consumption	AEC	709	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-SHWM80VAA
	Indoor unit:	ERST17D-****
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 shall be declared for		low-temperature application.
Parameters shall be declared for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	145	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	4.8	kW	T _j = - 7 °C	COP _d	3.53	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 2 °C	P _{dh}	3.8	kW	T _j = + 2 °C	COP _d	4.04	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	4.5	kW	T _j = + 7 °C	COP _d	5.56	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.1	kW	T _j = +12 °C	COP _d	7.56	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	6.7	kW	T _j = bivalent temperature	COP _d	2.23	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	6.8	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	2.30	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	4934	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	154	%	
Daily electricity consumption	Q _{elec}	3.200	kWh				
Annual electricity consumption	AEC	709	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-SHWM80VAA
	Indoor unit:	ERST17D-****
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 shall be declared for		medium-temperature application.
Parameters shall be declared for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	166	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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	8	kW	Tj = + 2 °C	COPd	1.88	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.2	kW	Tj = + 7 °C	COPd	3.51	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.5	kW	Tj = +12 °C	COPd	6.08	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	1.0	kW	Tj = bivalent temperature	COPd	0.95	-
Tj = operation limit temperature	Pdh	5.3	kW	Tj = operation limit temperature	COPd	1.41	-
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	33.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	2479	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	112	%	
Daily electricity consumption	Q _{elec}	4.400	kW/h				
Annual electricity consumption	AEC	968	kW/h				

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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-SHWM80VAA
	Indoor unit:	ERST17D-****
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 shall be declared for		low-temperature application.
Parameters shall be declared for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	225	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	8	kW	T _j = + 2 °C	COP _d	3.74	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	5.1	kW	T _j = + 7 °C	COP _d	5.05	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	4.7	kW	T _j = +12 °C	COP _d	7.34	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = bivalent temperature	P _{dh}	1.0	kW	T _j = bivalent temperature	COP _d	1.00	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
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}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	33.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	1820	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	112	%	
Daily electricity consumption	Q _{elec}	4.400	kW/h				
Annual electricity consumption	AEC	968	kW/h				

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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-SHWM80VAA
	Indoor unit:	ERST20D-****
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 shall be declared for		medium-temperature application.
Parameters shall be declared for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	135	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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	7.1	kW	Tj = - 7 °C	COPd	2.14	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.3	kW	Tj = + 2 °C	COPd	3.26	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	5.3	kW	Tj = + 7 °C	COPd	4.91	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.05	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	1.97	-
Tj = operation limit temperature	Pdh	5.3	kW	Tj = operation limit temperature	COPd	1.41	-
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
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	4695	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	η_{wh}	148	%
Daily electricity consumption	Q _{elec}	3.300	kW/h				
Annual electricity consumption	AEC	736	kW/h				

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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-SHWM80VAA
	Indoor unit:	ERST20D-****
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 shall be declared for		low-temperature application.
Parameters shall be declared for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	181	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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	7.1	kW	Tj = - 7 °C	COPd	3.11	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.7	kW	Tj = + 2 °C	COPd	4.52	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	5.1	kW	Tj = + 7 °C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.2	kW	Tj = +12 °C	COPd	8.21	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	3.09	-
Tj = operation limit temperature	Pdh	5.3	kW	Tj = operation limit temperature	COPd	1.41	-
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
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)
Annual energy consumption	Q _{HE}	3500	kWh
Rated air flow rate, outdoors		2220	m ³ /h

For heat pump combination heater:			
Declared load profile		L	
Daily electricity consumption	Q _{elec}	3.300	kWh
Annual electricity consumption	AEC	736	kWh
Water heating energy efficiency	η_{wh}	148	%

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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-SHWM80VAA
	Indoor unit:	ERST20D-****
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 shall be declared for		medium-temperature application.
Parameters shall be declared for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	114	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	4.9	kW	T _j = - 7 °C	COP _d	2.59	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	3.5	kW	T _j = + 2 °C	COP _d	3.18	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	4.3	kW	T _j = + 7 °C	COP _d	4.78	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.1	kW	T _j = +12 °C	COP _d	6.74	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	6.7	kW	T _j = bivalent temperature	COP _d	1.51	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	6.8	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	1.52	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	6335	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	η_{wh}	162	%
Daily electricity consumption	Q _{elec}	3.100	kW/h				
Annual electricity consumption	AEC	675	kW/h				

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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-SHWM80VAA
	Indoor unit:	ERST20D-****
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 shall be declared for		low-temperature application.
Parameters shall be declared for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	145	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	4.8	kW	T _j = - 7 °C	COP _d	3.53	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 2 °C	P _{dh}	3.8	kW	T _j = + 2 °C	COP _d	4.04	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	4.5	kW	T _j = + 7 °C	COP _d	5.56	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.1	kW	T _j = +12 °C	COP _d	7.56	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	6.7	kW	T _j = bivalent temperature	COP _d	2.23	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	6.8	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	2.30	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	4934	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	162	%	
Daily electricity consumption	Q _{elec}	3.100	kW/h				
Annual electricity consumption	AEC	675	kW/h				

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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-SHWM80VAA
	Indoor unit:	ERST20D-****
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 shall be declared for		medium-temperature application.
Parameters shall be declared for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	166	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	8	kW	T _j = + 2 °C	COP _d	1.88	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	5.2	kW	T _j = + 7 °C	COP _d	3.51	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	4.5	kW	T _j = +12 °C	COP _d	6.08	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = bivalent temperature	P _{dh}	1.0	kW	T _j = bivalent temperature	COP _d	0.95	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
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}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	1.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	2479	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	120	%	
Daily electricity consumption	Q _{elec}	4.100	kWh				
Annual electricity consumption	AEC	900	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-SHWM80VAA
	Indoor unit:	ERST20D-****
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 shall be declared for		low-temperature application.
Parameters shall be declared for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	225	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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}	8	kW	T _j = + 2 °C	COP _d	3.74	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	5.1	kW	T _j = + 7 °C	COP _d	5.05	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	4.7	kW	T _j = +12 °C	COP _d	7.34	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = bivalent temperature	P _{dh}	1.0	kW	T _j = bivalent temperature	COP _d	1.00	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
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}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	1.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41/56	dB(A)				
Annual energy consumption	Q _{HE}	1820	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	120	%	
Daily electricity consumption	Q _{elec}	4.100	kW/h				
Annual electricity consumption	AEC	900	kW/h				

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