

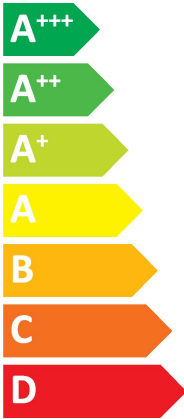
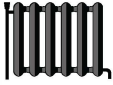


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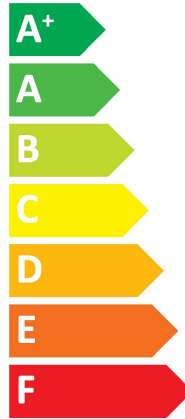
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Indoor unit E\*ST20D-\*\*\*\*D  
Outdoor unit PUD-SHWM100YAA(-BS)



A++



A+



41 dB

59 dB



- 10 kW
- 10 kW
- 10 kW

2019

811/2013

BH79V003H10



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

1	2	For medium-temperature application.														For low-temperature application.																																									
		Outdoor unit		Indoor unit		Medium-temperature application							Seasonal space heating energy efficiency class							Water heating energy efficiency class		Water heating energy efficiency class		Low-temperature application							Seasonal space heating energy efficiency class							Water heating energy efficiency class		Water heating energy efficiency class																	
		EHST17D-****	ERST17D-****	EHST20D-****	ERST20D-****	EHST20D-****	ERST20D-****	EHST30D-****	ERST30D-****	EHSD-****	ERSD-****	EHST17D-****	ERST17D-****	EHST20D-****	ERST20D-****	EHST30D-****	ERST30D-****	EHSD-****	ERSD-****	EHST17D-****	ERST17D-****	EHST20D-****	ERST20D-****	EHST30D-****	ERST30D-****	EHSD-****	ERSD-****	EHST17D-****	ERST17D-****	EHST20D-****	ERST20D-****	EHST30D-****	ERST30D-****	EHSD-****	ERSD-****	EHST17D-****	ERST17D-****	EHST20D-****	ERST20D-****	EHST30D-****	ERST30D-****	EHSD-****	ERSD-****	EHST17D-****	ERST17D-****	EHST20D-****	ERST20D-****	EHST30D-****	ERST30D-****	EHSD-****	ERSD-****						
EHST17D-****	ERST17D-****	EHST20D-****	ERST20D-****	EHST20D-****	ERST20D-****	EHST30D-****	ERST30D-****	EHSD-****	ERSD-****	EHST17D-****	ERST17D-****	EHST20D-****	ERST20D-****	EHST30D-****	ERST30D-****	EHSD-****	ERSD-****	EHST17D-****	ERST17D-****	EHST20D-****	ERST20D-****	EHST30D-****	ERST30D-****	EHSD-****	ERSD-****	EHST17D-****	ERST17D-****	EHST20D-****	ERST20D-****	EHST30D-****	ERST30D-****	EHSD-****	ERSD-****	EHST17D-****	ERST17D-****	EHST20D-****	ERST20D-****	EHST30D-****	ERST30D-****	EHSD-****	ERSD-****	EHST17D-****	ERST17D-****	EHST20D-****	ERST20D-****	EHST30D-****	ERST30D-****	EHSD-****	ERSD-****	EHST17D-****	ERST17D-****	EHST20D-****	ERST20D-****	EHST30D-****	ERST30D-****	EHSD-****	ERSD-****

English	Deutsch	Français	Italiano	Espanol
Nederlands	Svenska	Polski	Português	Ελληνικά
suomi	Čeština	Български	Polski	Ελληνικά
Outdoor unit	Außengerät	Unité extérieure	Unità esterna	Unitat exterior
1 built-in unit	Uitendørs enhed	Unités extérieures	Unitate exterieur	Εξωτερική μονάδα
Ulkokäyttöyksikkö	Vätkomv/ Jernhetta	Външно тяло	jednostka zewnętrzna	-
Indoor unit	Innengerät	Unité intérieure	Unità interna	Unitat interior
2 built-in unit	Innenbaueinheit	Innenhäusliche Einheit	Unitate interior	Εσωτερική μονάδα
Sisäyksikkö	Vahinli/jednotka	Вътрешно тяло	jednostka wewnętrzna	-
Medium-temperature application	Mitteltemperaturanwendung	Applications à moyenne température	la aplicación a media temperatura	la aplicación de media temperatura
3 middle-temperature-cooling	mitteltemperaturabkühlung	middle-temperature cooling	a aplicăcio a media temperatura	η εφαρμογή σε μέτρια θερμοκρασία
Keskilämpötilan sovellus	Niedertemperaturanwendung	среднотемпературного применения	zasposzawania w umiarkowanych temperaturach	-
Low-temperature application	Niedertemperaturanwendung	Applications à basse température	la aplicación a bassa temperatura	la aplicación de baja temperatura
4 laag-temperatuur-cooling	laagtemperatuurafkoeling	Applications à basse température	a aplicăcio a baixa temperatură	η εφαρμογή σε χαμηλή θερμοκρασία
malalämpötilan sovellus	nielköyvärtti/ applicatie	никопониерти/ приложени	zasposzawania w niskich temperaturach	-
5 de seizoensgebonden energie-efficiëntieklassen voor ruimteverwarming	de Klasse für die jahreszeitbedingte Raumheizungs-Energieeffizienz	la classe d'efficacité énergétique saisonnière, pour le chauffage des locaux	la classe di efficienza energetica stagionale del riscaldamento d'ambiente	la clase de eficiencia energética de aquecimiento ambiente sazonal
6 de seizoensgebonden energie-efficiëntieklassen voor ruimteverwarming	de Klasse voor de seizoensgebonden energie-efficiëntieklassen voor ruimteverwarming	Klassen für Aspektingraden ved uopvarmning	Klassen for aspektingraden ved uopvarmning	η τάξη ενεργειακής απόδοσης, της εποχικής θέρμανσης χώρου
7 de seizoensgebonden energie-efficiëntieklassen voor ruimteverwarming	de Klasse voor de seizoensgebonden energie-efficiëntieklassen voor ruimteverwarming	Klassen for aspektingraden ved uopvarmning	Klassen for aspektingraden ved uopvarmning	η τάξη ενεργειακής απόδοσης, της εποχικής θέρμανσης χώρου
8 voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	for uopvarmning, årlig energiforbruk(under gennemsnitlige klimaatforhold)	for uopvarmning del årlige energiforbrug(under gennemsnitlige klimaatforhold)	για τη θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας(υπό μέτριας κλιματικής συνθήκης)
9 voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	for uopvarmning, årlig energiforbruk(under gennemsnitlige klimaatforhold)	for uopvarmning del årlige energiforbrug(under gennemsnitlige klimaatforhold)	για τη θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας(υπό μέτριας κλιματικής συνθήκης)
10 de seizoensgebonden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	de seizoensgebonden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	la puissance électrique nominale dans les conditions climatiques moyennes	la puissance électrique nominale dans les conditions climatiques moyennes	η ονομαστική θερμική ισχύς, υπό συνθήκες κλιματικής συνθήκης μέσης
11 de seizoensgebonden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	de seizoensgebonden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	la puissance électrique nominale dans les conditions climatiques moyennes	la puissance électrique nominale dans les conditions climatiques moyennes	η ονομαστική θερμική ισχύς, υπό συνθήκες κλιματικής συνθήκης μέσης
12 de seizoensgebonden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	de seizoensgebonden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	la puissance électrique nominale dans les conditions climatiques moyennes	la puissance électrique nominale dans les conditions climatiques moyennes	η ονομαστική θερμική ισχύς, υπό συνθήκες κλιματικής συνθήκης μέσης
13 de seizoensgebonden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	de seizoensgebonden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	la puissance électrique nominale dans les conditions climatiques moyennes	la puissance électrique nominale dans les conditions climatiques moyennes	η ονομαστική θερμική ισχύς, υπό συνθήκες κλιματικής συνθήκης μέσης
14 de seizoensgebonden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	de seizoensgebonden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	la puissance électrique nominale dans les conditions climatiques moyennes	la puissance électrique nominale dans les conditions climatiques moyennes	η ονομαστική θερμική ισχύς, υπό συνθήκες κλιματικής συνθήκης μέσης
15 de seizoensgebonden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	de seizoensgebonden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	la puissance électrique nominale dans les conditions climatiques moyennes	la puissance électrique nominale dans les conditions climatiques moyennes	η ονομαστική θερμική ισχύς, υπό συνθήκες κλιματικής συνθήκης μέσης
16 voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	for uopvarmning, årlig energiforbruk(under gennemsnitlige klimaatforhold)	for uopvarmning del årlige energiforbrug(under gennemsnitlige klimaatforhold)	για τη θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας(υπό μέτριας κλιματικής συνθήκης)
17 voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	for uopvarmning, årlig energiforbruk(under gennemsnitlige klimaatforhold)	for uopvarmning del årlige energiforbrug(under gennemsnitlige klimaatforhold)	για τη θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας(υπό μέτριας κλιματικής συνθήκης)
18 voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	for uopvarmning, årlig energiforbruk(under gennemsnitlige klimaatforhold)	for uopvarmning del årlige energiforbrug(under gennemsnitlige klimaatforhold)	για τη θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας(υπό μέτριας κλιματικής συνθήκης)
19 voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	for uopvarmning, årlig energiforbruk(under gennemsnitlige klimaatforhold)	for uopvarmning del årlige energiforbrug(under gennemsnitlige klimaatforhold)	για τη θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας(υπό μέτριας κλιματικής συνθήκης)
20 voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	for uopvarmning, årlig energiforbruk(under gennemsnitlige klimaatforhold)	for uopvarmning del årlige energiforbrug(under gennemsnitlige klimaatforhold)	για τη θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας(υπό μέτριας κλιματικής συνθήκης)
21 voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	for uopvarmning, årlig energiforbruk(under gennemsnitlige klimaatforhold)	for uopvarmning del årlige energiforbrug(under gennemsnitlige klimaatforhold)	για τη θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας(υπό μέτριας κλιματικής συνθήκης)
22 voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	for uopvarmning, årlig energiforbruk(under gennemsnitlige klimaatforhold)	for uopvarmning del årlige energiforbrug(under gennemsnitlige klimaatforhold)	για τη θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας(υπό μέτριας κλιματικής συνθήκης)
23 voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	for uopvarmning, årlig energiforbruk(under gennemsnitlige klimaatforhold)	for uopvarmning del årlige energiforbrug(under gennemsnitlige klimaatforhold)	για τη θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας(υπό μέτριας κλιματικής συνθήκης)
24 voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	for uopvarmning, årlig energiforbruk(under gennemsnitlige klimaatforhold)	for uopvarmning del årlige energiforbrug(under gennemsnitlige klimaatforhold)	για τη θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας(υπό μέτριας κλιματικής συνθήκης)

Model(s):	Outdoor unit:	PUD-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	$\eta_s$	135	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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>	8.9	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.18	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	5.4	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.29	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.81	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.6	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.06	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.95	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	10.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.91	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	7.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.57	-
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
				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	Type of energy input	Electrical		
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

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

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	148	%
Daily electricity consumption	Q <sub>elec</sub>	3.300	kW/h				
Annual electricity consumption	AEC	736	kW/h				

Contact details

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

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

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

Model(s):	Outdoor unit:	PUD-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	$\eta_s$	178	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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>	8.9	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.16	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	5.7	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	4.52	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.4	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.63	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.5	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.89	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	10.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.92	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	7.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.57	-
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
				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	Type of energy input	Electrical		
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/59	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	4430	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	148	%
Daily electricity consumption	Q <sub>elec</sub>	3.300	kW/h				
Annual electricity consumption	AEC	736	kW/h				

Contact details

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

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

Model(s):	Outdoor unit:	PUD-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	$\eta_s$	114	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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>	6.1	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.60	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	3.7	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.19	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	3.8	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.58	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.4	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.88	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	8.4	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.56	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	7.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.57	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	8.5	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	1.56	-
Bivalent temperature	T <sub>biv</sub>	-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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	2.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

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

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	162	%
Daily electricity consumption	Q <sub>elec</sub>	3.100	kW/h				
Annual electricity consumption	AEC	675	kW/h				

Contact details

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

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

Model(s):	Outdoor unit:	PUD-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	$\eta_s$	148	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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>	6.2	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.71	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	3.9	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	4.02	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	3.9	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.34	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.5	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.50	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	8.4	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.15	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	7.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.57	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	8.5	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	2.20	-
Bivalent temperature	T <sub>biv</sub>	-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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	2.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

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

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	162	%
Daily electricity consumption	Q <sub>elec</sub>	3.100	kWh				
Annual electricity consumption	AEC	675	kWh				

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

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

Model(s):	Outdoor unit:	PUD-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	$\eta_s$	161	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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>	10	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	2.05	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	6.4	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	3.48	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.2	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	5.68	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	1.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	0.96	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	7.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.57	-
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>	-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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	4.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/59	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	3169	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	120	%	
Daily electricity consumption	Q <sub>elec</sub>	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-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	$\eta_s$	232	%
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	10	kW	Tj = + 2 °C	COPd	3.45	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	6.4	kW	Tj = + 7 °C	COPd	5.42	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.4	kW	Tj = +12 °C	COPd	7.46	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	1.0	kW	Tj = bivalent temperature	COPd	1.00	-
Tj = operation limit temperature	Pdh	7.7	kW	Tj = operation limit temperature	COPd	1.57	-
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	4.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/59	dB(A)
Annual energy consumption	Q <sub>HE</sub>	2191	kWh
Rated air flow rate, outdoors		2640	m <sup>3</sup> /h

For heat pump combination heater:			
Declared load profile		L	
Daily electricity consumption	Q <sub>elec</sub>	4.100	kWh
Annual electricity consumption	AEC	900	kWh
Water heating energy efficiency	$\eta_{wh}$	120	%

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

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

Model(s):	Outdoor unit:	PUD-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	$\eta_s$	135	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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>	8.9	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.18	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	5.4	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.29	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.81	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.6	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.06	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.95	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	10.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.91	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	7.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.57	-
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
				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	Type of energy input	Electrical		
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

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

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	148	%
Daily electricity consumption	Q <sub>elec</sub>	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-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	$\eta_s$	178	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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>	8.9	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.16	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	5.7	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	4.52	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.4	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.63	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.5	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.89	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	10.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.92	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	7.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.57	-
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
				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	Type of energy input	Electrical		
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/59	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	4430	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	148	%	
Daily electricity consumption	Q <sub>elec</sub>	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-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	$\eta_s$	114	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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>	6.1	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.60	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	3.7	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.19	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	3.8	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.58	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.4	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.88	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	8.4	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.56	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	7.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.57	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	8.5	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	1.56	-
Bivalent temperature	T <sub>biv</sub>	-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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	2.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

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

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	162	%
Daily electricity consumption	Q <sub>elec</sub>	3.100	kW/h				
Annual electricity consumption	AEC	675	kW/h				

Contact details

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

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

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

Model(s):	Outdoor unit:	PUD-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	$\eta_s$	148	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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>	6.2	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.71	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	3.9	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	4.02	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	3.9	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.34	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.5	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.50	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	8.4	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.15	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	7.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.57	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	8.5	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	2.20	-
Bivalent temperature	T <sub>biv</sub>	-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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	2.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

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

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	162	%
Daily electricity consumption	Q <sub>elec</sub>	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-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	$\eta_s$	161	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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>	10	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	2.05	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	6.4	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	3.48	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.2	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	5.68	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	1.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	0.96	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	7.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.57	-
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>	-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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	4.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/59	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	3169	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	120	%	
Daily electricity consumption	Q <sub>elec</sub>	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.

Model(s):	Outdoor unit:	PUD-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	$\eta_s$	232	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> 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>	10	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.45	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	6.4	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.42	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.4	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.46	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	1.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.00	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	7.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.57	-
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>	-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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	4.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/59	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	2191	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	120	%	
Daily electricity consumption	Q <sub>elec</sub>	4.100	kW/h				
Annual electricity consumption	AEC	900	kW/h				

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