

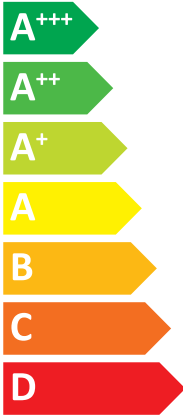
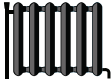


ENERG  
енергия · ενεργεια

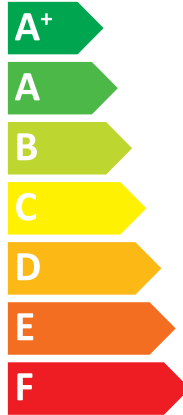
Y IJA  
IE IA



Indoor unit E\*ST17/20D-\*\*\*\*D  
Outdoor unit PUD-SWM80YAA(-BS)



A++



A+



41 dB

56 dB



- 08 kW
- 08 kW
- 08 kW

2019

811/2013

BH79V003H09





English	Deutsch	Français	Italiano	Espanol
Nederlands	Svenska	Polski	Português	Ελληνικά
suomi	Čeština	Български	Polski	Ελληνικά
Outdoor unit	Außengerät	unit extérieure	unità esterna	unidad exterior
1 built-in unit	Übersetzeneinheit	Unité externe	unità esteriore	Εξωτερική μονάδα
Ulkokotkko	Yhtäkuulijednokka	Выходящее	jednostka zewnętrzna	μονάδα εξωτερική
Indoor unit	Innengerät	unité intérieure	unità interna	unidad interior
2 binnenunit	Innenbaueinheit	Indoor unit	unità interiore	Εσωτερική μονάδα
Sisäyksyksikö	Yhdistetty yksikkö	Вътрешно тяло	jednostka wewnętrzna	-
3 Medium-temperature application	Mitteltemperaturanwendung	l'applications à moyenne température	la aplicación a media temperatura	η εφαρμογή με μέτρια θερμοκρασία
3 middle-temperature-cooling	mitteltemperaturabkühlung	middle-temperature-cooling	a aplicação a média temperatura	η εφαρμογή με μέτρια θερμοκρασία
Keskilämpötilan sovellus	Keskilämpötilan sovellus	среднетемпературного применения	zasłozosowanie w warunkach temperatury średniej	-
4 Low-temperature application	Niedertemperaturanwendung	l'applications à basse température	la aplicación a bassa temperatura	η εφαρμογή με χαμηλή θερμοκρασία
4 low-temperature-cooling	tieftemperaturabkühlung	l'applications à basse température	a aplicação a baixa temperatura	η εφαρμογή με χαμηλή θερμοκρασία
5 de seizoensoverbronden energie-efficiëntieklassen voor ruimteverwarming	de seizoensoverbronden energie-efficiëntieklassen voor ruimteverwarming	la classe de efficacité énergétique saisonnière, pour le chauffage des locaux	la classe de efficacité énergétique saisonnière de riscaldamento d'ambiente	la classe de eficiencia energética estacional de calefacción
5 de seizoensoverbronden energie-efficiëntieklassen voor ruimteverwarming	de seizoensoverbronden energie-efficiëntieklassen voor ruimteverwarming	Klassen für de verschillende energieefficiëntieclassen voor verwarming	Klassen für die verschiedenen Energieeffizienzklassen für Heizung	η τάξη ενεργειακής απόδοσης, της εποχικής θέρμανσης χώρου
6 de energie-efficiëntieklassen voor waterverwarming	de energie-efficiëntieklassen voor waterverwarming	la classe de efficacité énergétique, pour le chauffage de l'eau	la classe de efficacité énergétique de riscaldamento dell'acqua	la classe de eficiencia energética del calentamiento del agua
6 de energie-efficiëntieklassen voor waterverwarming	de energie-efficiëntieklassen voor waterverwarming	Klassen für die verschiedenen Energieeffizienzklassen für Wassererwärmung	Klassen für die verschiedenen Energieeffizienzklassen für Wassererwärmung	η τάξη ενεργειακής απόδοσης, της εποχικής θέρμανσης νερού
7 de optimale werkbelastingen onder gemiddelde klimaatomstandigheden	de optimale werkbelastingen onder gemiddelde klimaatomstandigheden	les puissances nominales optimales dans les conditions climatiques moyennes	la potencia nominal(les) optimales (en condiciones climáticas medias)	η ονομαστική θερμική ισχύς(ισχύς) υπό μέτριας κλιματικής συνθήκης
7 de optimale werkbelastingen onder gemiddelde klimaatomstandigheden	de optimale werkbelastingen onder gemiddelde klimaatomstandigheden	la puissance nominale optimale dans les conditions climatiques moyennes	la potencia nominal(les) optimales (en condiciones climáticas medias)	η ονομαστική θερμική ισχύς(ισχύς) υπό μέτριας κλιματικής συνθήκης
8 voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	for programming of the air conditioning under normal climate conditions	per il riscaldamento d'ambiente, il consumo annuo di energia(in condizioni climatiche medie)	para calefacción estacional, el consumo anual de energía(en condiciones climáticas medias)
8 voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)	za otopenie, podzimního spotřeby energie za průměrných klimatických podmínek	w odniesieniu do ogrzewania pomieszczeń, roczne zużycie energii w warunkach klimatu umiarkowanego	para calefacción estacional, el consumo anual de energía(en condiciones climáticas medias)
9 voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder gemiddelde klimaatomstandigheden	voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder gemiddelde klimaatomstandigheden	for waterheating, annual electricity consumption under average climate conditions	per il riscaldamento dell'acqua, il consumo annuo di energia(in condizioni climatiche medie)	para calefacción de agua, el consumo anual de electricidad(en condiciones climáticas medias)
9 voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder gemiddelde klimaatomstandigheden	voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder gemiddelde klimaatomstandigheden	pro often vohy – roční spotřeba elektrické energie za průměrných klimatických podmínek	w odniesieniu do podgrzewania wody, roczne zużycie energii elektrycznej w warunkach klimatu umiarkowanego	para el calentamiento del agua, el consumo anual de electricidad(en condiciones climáticas medias)
10 de seizoensoverbronden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	de seizoensoverbronden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	la efficacité énergétique saisonnière pour le chauffage des locaux(dans les conditions climatiques moyennes)	la eficiencia energética de riscaldamento dell'acqua(in condizioni climatiche medie)	η ενεργειακή απόδοση θέρμανσης νερού(υπό μέτριας κλιματικής συνθήκης)
10 de seizoensoverbronden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	de seizoensoverbronden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)	la efficacité énergétique saisonnière pour le chauffage des locaux(dans les conditions climatiques moyennes)	la eficiencia energética de riscaldamento dell'acqua(in condizioni climatiche medie)	η ενεργειακή απόδοση θέρμανσης νερού(υπό μέτριας κλιματικής συνθήκης)
11 de energie-efficiëntie voor waterverwarming(onder gemiddelde klimaatomstandigheden)	de energie-efficiëntie voor waterverwarming(onder gemiddelde klimaatomstandigheden)	la efficacité énergétique pour le chauffage de l'eau, dans les conditions climatiques moyennes	la eficiencia energética de calentamiento del agua(en condiciones climáticas medias)	η ενεργειακή απόδοση θέρμανσης νερού(υπό μέτριας κλιματικής συνθήκης)
11 de energie-efficiëntie voor waterverwarming(onder gemiddelde klimaatomstandigheden)	de energie-efficiëntie voor waterverwarming(onder gemiddelde klimaatomstandigheden)	la efficacité énergétique pour le chauffage de l'eau, dans les conditions climatiques moyennes	la eficiencia energética de calentamiento del agua(en condiciones climáticas medias)	η ενεργειακή απόδοση θέρμανσης νερού(υπό μέτριας κλιματικής συνθήκης)
12 het gebruiksvolume van binnen	gebruiksvolume van binnen	le volume de puissance associée L <sub>vol</sub> , à l'intérieur	O nivel de putere asociată L <sub>vol</sub> în interior	η ετήσια ονομαστική θερμική ισχύς(ισχύς) υπό μέτριας κλιματικής συνθήκης
12 het gebruiksvolume van binnen	gebruiksvolume van binnen	le volume de puissance associée L <sub>vol</sub> , à l'intérieur	O nivel de putere asociată L <sub>vol</sub> în interior	η ετήσια ονομαστική θερμική ισχύς(ισχύς) υπό μέτριας κλιματικής συνθήκης
13 de maximale werkbelasting, onder koude klimaatomstandigheden	de maximale werkbelasting, onder koude klimaatomstandigheden	la puissance nominale maximale, dans les conditions climatiques plus froides	la potencia nominal(les) máxima, en condiciones climáticas más frías	η ονομαστική θερμική ισχύς(ισχύς) υπό ψυχρότερης κλιματικής συνθήκης
13 de maximale werkbelasting, onder koude klimaatomstandigheden	de maximale werkbelasting, onder koude klimaatomstandigheden	la puissance nominale maximale, dans les conditions climatiques plus froides	la potencia nominal(les) máxima, en condiciones climáticas más frías	η ονομαστική θερμική ισχύς(ισχύς) υπό ψυχρότερης κλιματικής συνθήκης
14 de nominale werkbelasting, onder koude klimaatomstandigheden	de nominale werkbelasting, onder koude klimaatomstandigheden	la puissance nominale optimale, dans les conditions climatiques plus froides	la potencia nominal(les) optima, en condiciones climáticas más frías	η ονομαστική θερμική ισχύς(ισχύς) υπό ψυχρότερης κλιματικής συνθήκης
14 de nominale werkbelasting, onder koude klimaatomstandigheden	de nominale werkbelasting, onder koude klimaatomstandigheden	la puissance nominale optimale, dans les conditions climatiques plus froides	la potencia nominal(les) optima, en condiciones climáticas más frías	η ονομαστική θερμική ισχύς(ισχύς) υπό ψυχρότερης κλιματικής συνθήκης
15 de maximale werkbelasting, onder warme klimaatomstandigheden	de maximale werkbelasting, onder warme klimaatomstandigheden	la puissance nominale maximale, dans les conditions climatiques plus chaudes	la potencia nominal(les) máxima, en condiciones climáticas más calientes	η ονομαστική θερμική ισχύς(ισχύς) υπό θερμότερης κλιματικής συνθήκης
15 de maximale werkbelasting, onder warme klimaatomstandigheden	de maximale werkbelasting, onder warme klimaatomstandigheden	la puissance nominale maximale, dans les conditions climatiques plus chaudes	la potencia nominal(les) máxima, en condiciones climáticas más calientes	η ονομαστική θερμική ισχύς(ισχύς) υπό θερμότερης κλιματικής συνθήκης
16 voor ruimteverwarming, het jaarlijkse energieverbruik onder koude klimaatomstandigheden	voor ruimteverwarming, het jaarlijkse energieverbruik onder koude klimaatomstandigheden	for programming of the air conditioning under cold climate conditions	per il riscaldamento d'ambiente, il consumo annuo di energia, in condizioni climatiche più fredde	para calefacción estacional, el consumo anual de energía(en condiciones climáticas más frías)
16 voor ruimteverwarming, het jaarlijkse energieverbruik onder koude klimaatomstandigheden	voor ruimteverwarming, het jaarlijkse energieverbruik onder koude klimaatomstandigheden	for programming of the air conditioning under cold climate conditions	per il riscaldamento d'ambiente, il consumo annuo di energia, in condizioni climatiche più fredde	para calefacción estacional, el consumo anual de energía(en condiciones climáticas más frías)
17 voor ruimteverwarming, het jaarlijkse energieverbruik onder warme klimaatomstandigheden	voor ruimteverwarming, het jaarlijkse energieverbruik onder warme klimaatomstandigheden	for programming of the air conditioning under warm climate conditions	per il riscaldamento d'ambiente, il consumo annuo di energia, in condizioni climatiche più calde	para calefacción estacional, el consumo anual de energía(en condiciones climáticas más calidas)
17 voor ruimteverwarming, het jaarlijkse energieverbruik onder warme klimaatomstandigheden	voor ruimteverwarming, het jaarlijkse energieverbruik onder warme klimaatomstandigheden	for programming of the air conditioning under warm climate conditions	per il riscaldamento d'ambiente, il consumo annuo di energia, in condizioni climatiche più calde	para calefacción estacional, el consumo anual de energía(en condiciones climáticas más calidas)
18 voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder koude klimaatomstandigheden	voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder koude klimaatomstandigheden	for waterheating, annual electricity consumption under cold climate conditions	w odniesieniu do podgrzewania wody, roczne zużycie energii elektrycznej w warunkach klimatu chłodnego	para calefacción de agua, el consumo anual de electricidad(en condiciones climáticas más frías)
18 voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder koude klimaatomstandigheden	voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder koude klimaatomstandigheden	for waterheating, annual electricity consumption under cold climate conditions	w odniesieniu do podgrzewania wody, roczne zużycie energii elektrycznej w warunkach klimatu chłodnego	para calefacción de agua, el consumo anual de electricidad(en condiciones climáticas más frías)
19 voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder warme klimaatomstandigheden	voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder warme klimaatomstandigheden	for waterheating, annual electricity consumption under warm climate conditions	w odniesieniu do podgrzewania wody, roczne zużycie energii elektrycznej w warunkach klimatu ciepłego	para calefacción de agua, el consumo anual de electricidad(en condiciones climáticas más calidas)
19 voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder warme klimaatomstandigheden	voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder warme klimaatomstandigheden	for waterheating, annual electricity consumption under warm climate conditions	w odniesieniu do podgrzewania wody, roczne zużycie energii elektrycznej w warunkach klimatu ciepłego	para calefacción de agua, el consumo anual de electricidad(en condiciones climáticas más calidas)
20 de seizoensoverbronden energie-efficiëntie voor ruimteverwarming onder koude klimaatomstandigheden	de seizoensoverbronden energie-efficiëntie voor ruimteverwarming onder koude klimaatomstandigheden	la efficacité énergétique saisonnière pour le chauffage des locaux, dans les conditions climatiques plus froides	la eficiencia energética de calentamiento del agua, en condiciones climáticas más frías	η ενεργειακή απόδοση θέρμανσης νερού(υπό ψυχρότερης κλιματικής συνθήκης)
20 de seizoensoverbronden energie-efficiëntie voor ruimteverwarming onder koude klimaatomstandigheden	de seizoensoverbronden energie-efficiëntie voor ruimteverwarming onder koude klimaatomstandigheden	la efficacité énergétique saisonnière pour le chauffage des locaux, dans les conditions climatiques plus froides	la eficiencia energética de calentamiento del agua, en condiciones climáticas más frías	η ενεργειακή απόδοση θέρμανσης νερού(υπό ψυχρότερης κλιματικής συνθήκης)
21 de seizoensoverbronden energie-efficiëntie voor ruimteverwarming onder warme klimaatomstandigheden	de seizoensoverbronden energie-efficiëntie voor ruimteverwarming onder warme klimaatomstandigheden	la efficacité énergétique saisonnière pour le chauffage des locaux, dans les conditions climatiques plus chaudes	la eficiencia energética de calentamiento del agua, en condiciones climáticas más calientes	η ενεργειακή απόδοση θέρμανσης νερού(υπό θερμότερης κλιματικής συνθήκης)
21 de seizoensoverbronden energie-efficiëntie voor ruimteverwarming onder warme klimaatomstandigheden	de seizoensoverbronden energie-efficiëntie voor ruimteverwarming onder warme klimaatomstandigheden	la efficacité énergétique saisonnière pour le chauffage des locaux, dans les conditions climatiques plus chaudes	la eficiencia energética de calentamiento del agua, en condiciones climáticas más calientes	η ενεργειακή απόδοση θέρμανσης νερού(υπό θερμότερης κλιματικής συνθήκης)
22 de energie-efficiëntie voor waterverwarming onder koude klimaatomstandigheden	de energie-efficiëntie voor waterverwarming onder koude klimaatomstandigheden	la efficacité énergétique pour le chauffage de l'eau, dans les conditions climatiques plus froides	la eficiencia energética de calentamiento del agua, en condiciones climáticas más frías	η ενεργειακή απόδοση θέρμανσης νερού(υπό ψυχρότερης κλιματικής συνθήκης)
22 de energie-efficiëntie voor waterverwarming onder koude klimaatomstandigheden	de energie-efficiëntie voor waterverwarming onder koude klimaatomstandigheden	la efficacité énergétique pour le chauffage de l'eau, dans les conditions climatiques plus froides	la eficiencia energética de calentamiento del agua, en condiciones climáticas más frías	η ενεργειακή απόδοση θέρμανσης νερού(υπό ψυχρότερης κλιματικής συνθήκης)
23 de energie-efficiëntie voor waterverwarming onder warme klimaatomstandigheden	de energie-efficiëntie voor waterverwarming onder warme klimaatomstandigheden	la efficacité énergétique pour le chauffage de l'eau, dans les conditions climatiques plus chaudes	la eficiencia energética de calentamiento del agua, en condiciones climáticas más calientes	η ενεργειακή απόδοση θέρμανσης νερού(υπό θερμότερης κλιματικής συνθήκης)
23 de energie-efficiëntie voor waterverwarming onder warme klimaatomstandigheden	de energie-efficiëntie voor waterverwarming onder warme klimaatomstandigheden	la efficacité énergétique pour le chauffage de l'eau, dans les conditions climatiques plus chaudes	la eficiencia energética de calentamiento del agua, en condiciones climáticas más calientes	η ενεργειακή απόδοση θέρμανσης νερού(υπό θερμότερης κλιματικής συνθήκης)
24 de gebruiksvolume van binnen	gebruiksvolume van binnen	le volume de puissance associée L <sub>vol</sub> , à l'intérieur	O nivel de putere asociată L <sub>vol</sub> în interior	η ετήσια ονομαστική θερμική ισχύς(ισχύς) υπό μέτριας κλιματικής συνθήκης
24 de gebruiksvolume van binnen	gebruiksvolume van binnen	le volume de puissance associée L <sub>vol</sub> , à l'intérieur	O nivel de putere asociată L <sub>vol</sub> în interior	η ετήσια ονομαστική θερμική ισχύς(ισχύς) υπό μέτριας κλιματικής συνθήκης

Model(s):	Outdoor unit:	PUD-SWM80YAA
	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	$\eta_s$	130	%
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>	7.1	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.03	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	4.3	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>	5.3	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.86	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.1	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.89	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.95	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	6.8	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.04	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
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	-25	°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>	1.6	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	4814	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	136	%	
Daily electricity consumption	Q <sub>elec</sub>	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-SWM80YAA
	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	$\eta_s$	176	%
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>	7.1	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.00	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	4.52	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.1	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	6.00	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.2	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	8.00	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.94	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	7.1	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	3.00	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.8	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.45	-
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	-25	°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>	1.3	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	3529	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	136	%
Daily electricity consumption	Q <sub>elec</sub>	3.600	kW/h				
Annual electricity consumption	AEC	798	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-SWM80YAA
	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	$\eta_s$	109	%
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>	4.9	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.51	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	3.5	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.07	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	4.3	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.73	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.1	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.60	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.95	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	6.7	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.36	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	6.9	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	1.35	-
Bivalent temperature	T <sub>biv</sub>	-16	°C	Operation limit temperature	TOL	-25	°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>	2.6	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	6507	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	154	%	
Daily electricity consumption	Q <sub>elec</sub>	3.200	kWh				
Annual electricity consumption	AEC	709	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-SWM80YAA
	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	$\eta_s$	138	%
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>	4.8	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.40	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	3.8	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.92	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	4.5	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.49	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.1	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.38	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.94	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	6.7	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.09	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	6.9	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	2.16	-
Bivalent temperature	T <sub>biv</sub>	-16	°C	Operation limit temperature	TOL	-25	°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>	2.6	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			Rated air flow rate, outdoors	-	2220	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	5083	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	154	%
Daily electricity consumption	Q <sub>elec</sub>	3.200	kWh				
Annual electricity consumption	AEC	709	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-SWM80YAA
	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	$\eta_s$	159	%
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>	8	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	1.82	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	3.40	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.5	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	5.92	-
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>	0.94	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
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	-25	°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>	37.0	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	2554	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	112	%	
Daily electricity consumption	Q <sub>elec</sub>	4.400	kW/h				
Annual electricity consumption	AEC	968	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-SWM80YAA
	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	$\eta_s$	215	%
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>	8	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.56	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.1	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.90	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.12	-
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>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
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	-25	°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>	37.0	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	1879	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	112	%
Daily electricity consumption	Q <sub>elec</sub>	4.400	kW/h				
Annual electricity consumption	AEC	968	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-SWM80YAA
	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	$\eta_s$	130	%
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>	7.1	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.03	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	4.3	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>	5.3	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.86	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.1	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.89	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.95	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	6.8	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.04	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
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	-25	°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>	1.6	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	4814	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-SWM80YAA
	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	$\eta_s$	176	%
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>	7.1	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.00	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	4.52	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.1	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	6.00	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.2	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	8.00	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.94	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	7.1	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	3.00	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.8	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.45	-
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	-25	°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>	1.3	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	3529	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	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-SWM80YAA
	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	$\eta_s$	109	%
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>	4.9	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.51	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	3.5	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.07	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	4.3	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.73	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.1	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.60	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.95	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	6.7	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.36	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	6.9	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	1.35	-
Bivalent temperature	T <sub>biv</sub>	-16	°C	Operation limit temperature	TOL	-25	°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>	2.6	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	6507	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-SWM80YAA
	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	$\eta_s$	138	%
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>	4.8	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.40	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	3.8	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.92	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	4.5	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.49	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.1	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.38	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.94	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	6.7	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.09	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	6.9	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	2.16	-
Bivalent temperature	T <sub>biv</sub>	-16	°C	Operation limit temperature	TOL	-25	°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>	2.6	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	5083	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-SWM80YAA
	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	$\eta_s$	159	%
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>	8	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	1.82	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	3.40	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.5	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	5.92	-
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>	0.94	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
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	-25	°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>	11.0	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	2554	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				

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-SWM80YAA
	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	$\eta_s$	215	%
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>	8	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.56	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.1	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.90	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.12	-
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>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
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	-25	°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>	11.0	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	1879	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				

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-SWM80YAA
	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	$\eta_s$	130	%
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>	7.1	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.03	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	4.3	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>	5.3	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.86	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.1	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.89	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.95	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	6.8	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.04	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
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	-25	°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>	1.6	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	4814	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	136	%	
Daily electricity consumption	Q <sub>elec</sub>	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-SWM80YAA
	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	$\eta_s$	176	%
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>	7.1	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.00	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	4.52	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.1	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	6.00	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.2	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	8.00	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.94	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	7.1	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	3.00	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.8	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.45	-
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	-25	°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>	1.3	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	3529	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	136	%
Daily electricity consumption	Q <sub>elec</sub>	3.600	kW/h				
Annual electricity consumption	AEC	798	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-SWM80YAA
	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	$\eta_s$	109	%
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>	4.9	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.51	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	3.5	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.07	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	4.3	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.73	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.1	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.60	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.95	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	6.7	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.36	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	6.9	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	1.35	-
Bivalent temperature	T <sub>biv</sub>	-16	°C	Operation limit temperature	TOL	-25	°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>	2.6	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			Rated air flow rate, outdoors	-	2220	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	6507	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	154	%
Daily electricity consumption	Q <sub>elec</sub>	3.200	kWh				
Annual electricity consumption	AEC	709	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-SWM80YAA
	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	$\eta_s$	138	%
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>	4.8	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.40	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	3.8	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.92	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	4.5	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.49	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.1	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.38	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.94	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	6.7	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.09	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	6.9	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	2.16	-
Bivalent temperature	T <sub>biv</sub>	-16	°C	Operation limit temperature	TOL	-25	°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>	2.6	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW	Type of energy input Electrical			
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	5083	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	154	%
Daily electricity consumption	Q <sub>elec</sub>	3.200	kWh				
Annual electricity consumption	AEC	709	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-SWM80YAA
	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	$\eta_s$	159	%
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>	8	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	1.82	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	3.40	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.5	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	5.92	-
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>	0.94	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
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	-25	°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>	37.0	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	2554	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	112	%	
Daily electricity consumption	Q <sub>elec</sub>	4.400	kWh				
Annual electricity consumption	AEC	968	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-SWM80YAA
	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	$\eta_s$	215	%
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>	8	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.56	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.1	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.90	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.12	-
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>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
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	-25	°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>	37.0	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	1879	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	112	%	
Daily electricity consumption	Q <sub>elec</sub>	4.400	kW/h				
Annual electricity consumption	AEC	968	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-SWM80YAA
	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	$\eta_s$	130	%
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>	7.1	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.03	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	4.3	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>	5.3	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.86	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.1	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.89	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.95	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	6.8	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.04	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
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	-25	°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>	1.6	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	4814	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-SWM80YAA
	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	$\eta_s$	176	%
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>	7.1	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.00	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	4.52	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.1	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	6.00	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.2	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	8.00	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.94	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	7.1	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	3.00	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.8	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.45	-
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	-25	°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>	1.3	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	3529	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	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 P<sub>designh</sub>, and the rated heat output of a supplementary heater P<sub>sup</sub> is equal to the supplementary capacity for heating sup(T<sub>j</sub>).

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

Model(s):	Outdoor unit:	PUD-SWM80YAA
	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	$\eta_s$	109	%
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>	4.9	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.51	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	3.5	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.07	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	4.3	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.73	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.1	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.60	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.95	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	6.7	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.36	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	6.9	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	1.35	-
Bivalent temperature	T <sub>biv</sub>	-16	°C	Operation limit temperature	TOL	-25	°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>	2.6	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	6507	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	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-SWM80YAA
	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	$\eta_s$	138	%
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>	4.8	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.40	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	3.8	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.92	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	4.5	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.49	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	3.1	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.38	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.94	-				
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	6.7	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.09	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	6.9	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	2.16	-
Bivalent temperature	T <sub>biv</sub>	-16	°C	Operation limit temperature	TOL	-25	°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>	2.6	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW	Type of energy input Electrical			
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	5083	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-SWM80YAA
	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	$\eta_s$	159	%
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>	8	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	1.82	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	3.40	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.5	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	5.92	-
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>	0.94	-
T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
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	-25	°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>	11.0	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	2554	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				

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-SWM80YAA
	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	$\eta_s$	215	%
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>	8	kW	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.56	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-				
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.1	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.90	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-				
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.7	kW	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.12	-
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>	4.7	kW	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub>	1.44	-
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	-25	°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>	11.0	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			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41/56	dB(A)				
Annual energy consumption	Q <sub>HE</sub>	1879	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				

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.