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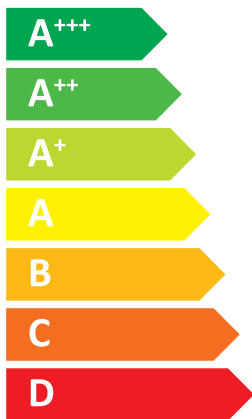


Indoor unit E*SD-****D
Outdoor unit PUD-SHWM80VAA(-BS)



55 °C

35 °C



A++

A+++



41 dB



56 dB

08
08
08
kW

08
08
08
kW



2019

811/2013

BH79V004H06

English	Deutsch	Français	Italiano	Español
English Dutch	Deutsch	Français	Italiano	Español
Nederlands suomi	Svenska Cešna	Polonais Български	Português Polski	Eλληνικά
Outdoor unit	Außengerät	Unité extérieure	Unità esterna	Unidad exterior
1 Outdoor unit	Utlufts/enhet	Utlufts enhet	Unitate exterieor	Εξωτερική μονάδα
Ulkokäyttö	Utlufts/ enhet	Внешнее тепло	jednotka zevnitřní	
Indoor unit	Innengerät	Unité intérieure	Unità interna	Unidad interior
2 Indoor unit	Innenset/gerät	Indoors enhet	Unitate interioar	Εσωτερική μονάδα
3 Indoor unit	Indoors enhet	Внутреннее тепло	jednotka vnitřní	
Medium-temperature application	Mitteltemperaturanwendung	Applications à moyenne température	Aplicazioni a media temperatura	la aplicación de media temperatura
3 Medium-temperature application	mitteltemperaturanwendung	middletemperature applications	a aplicacões a media temperatura	η εφαρμογή σε μέση θερμοκρασία
Kestämäärittämällä sovellus	Kestämäärittämällä sovellus	среднетемпературного назначения	zaستoसmavalı ıv vnitřnich teplotních	
4 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a baixa temperatura	
5 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	a aplicacões a baixa temperatura	
6 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
7 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
8 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
9 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
10 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
11 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
12 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
13 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
14 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
15 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
16 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
17 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
18 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
19 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
20 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
21 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
22 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
23 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	
24 Kestämäärittämällä sovellus	lagertemperaturanvändning	lagertemperaturanvändning	la aplicacões a alta temperatura	

Model(s):	Outdoor unit:	PUD-SHWM80VAA
	Indoor unit:	EHSD-****
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:		no
Parameters shall be declared for		medium-temperature application.
Parameters shall be declared for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	135	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	7.1	kW	T _j = - 7 °C	COP _d	2.14	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	4.3	kW	T _j = + 2 °C	COP _d	3.26	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	5.3	kW	T _j = + 7 °C	COP _d	4.91	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.1	kW	T _j = +12 °C	COP _d	7.05	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	8.0	kW	T _j = bivalent temperature	COP _d	1.97	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-10	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

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

For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q _{elec}	-	kW/h				
Annual electricity consumption	AEC	-	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-SHWM80VAA
	Indoor unit:	EHSD-****
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:		no
Parameters shall be declared for		low-temperature application.
Parameters shall be declared for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	181	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.1	kW	Tj = - 7 °C	COPd	3.11	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.7	kW	Tj = + 2 °C	COPd	4.52	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	5.1	kW	Tj = + 7 °C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.2	kW	Tj = +12 °C	COPd	8.21	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	3.09	-
Tj = operation limit temperature	Pdh	5.3	kW	Tj = operation limit temperature	COPd	1.41	-
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

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

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

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

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

Model(s):	Outdoor unit:	PUD-SHWM80VAA
	Indoor unit:	EHSD-****
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:		no
Parameters shall be declared for		medium-temperature application.
Parameters shall be declared for		colder climate conditions.

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

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

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

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

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

Model(s):	Outdoor unit:	PUD-SHWM80VAA
	Indoor unit:	EHSD-****
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:		no
Parameters shall be declared for		low-temperature application.
Parameters shall be declared for		colder climate conditions.

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

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

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

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

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

Model(s):	Outdoor unit:	PUD-SHWM80VAA
	Indoor unit:	EHSD-****
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:		no
Parameters shall be declared for		medium-temperature application.
Parameters shall be declared for		warmer climate conditions.

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

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

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

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

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

Model(s):	Outdoor unit:	PUD-SHWM80VAA
	Indoor unit:	EHSD-****
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:		no
Parameters shall be declared for		low-temperature application.
Parameters shall be declared for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	225	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	8	kW	T _j = + 2 °C	COP _d	3.74	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	5.1	kW	T _j = + 7 °C	COP _d	5.05	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	4.7	kW	T _j = +12 °C	COP _d	7.34	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = bivalent temperature	P _{dh}	1.0	kW	T _j = bivalent temperature	COP _d	1.00	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	1.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

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

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

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

Model(s):	Outdoor unit:	PUD-SHWM80VAA
	Indoor unit:	ERSD-****
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:		no
Parameters shall be declared for		medium-temperature application.
Parameters shall be declared for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	135	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	7.1	kW	T _j = - 7 °C	COP _d	2.14	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	4.3	kW	T _j = + 2 °C	COP _d	3.26	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	5.3	kW	T _j = + 7 °C	COP _d	4.91	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.1	kW	T _j = +12 °C	COP _d	7.05	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	8.0	kW	T _j = bivalent temperature	COP _d	1.97	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-10	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

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

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

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

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

Model(s):	Outdoor unit:	PUD-SHWM80VAA
	Indoor unit:	ERSD-****
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:		no
Parameters shall be declared for		low-temperature application.
Parameters shall be declared for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	181	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	7.1	kW	T _j = - 7 °C	COP _d	3.11	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	4.7	kW	T _j = + 2 °C	COP _d	4.52	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	5.1	kW	T _j = + 7 °C	COP _d	6.00	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	3.2	kW	T _j = +12 °C	COP _d	8.21	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
T _j = bivalent temperature	P _{dh}	8.0	kW	T _j = bivalent temperature	COP _d	3.09	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-10	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

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

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

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

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

Model(s):	Outdoor unit:	PUD-SHWM80VAA
	Indoor unit:	ERSD-****
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:		no
Parameters shall be declared for		medium-temperature application.
Parameters shall be declared for		colder climate conditions.

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

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

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

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

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

Model(s):	Outdoor unit:	PUD-SHWM80VAA
	Indoor unit:	ERSD-****
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:		no
Parameters shall be declared for		low-temperature application.
Parameters shall be declared for		colder climate conditions.

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

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

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

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

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

Model(s):	Outdoor unit:	PUD-SHWM80VAA
	Indoor unit:	ERSD-****
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:		no
Parameters shall be declared for		medium-temperature application.
Parameters shall be declared for		warmer climate conditions.

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

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

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

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

Model(s):	Outdoor unit:	PUD-SHWM80VAA
	Indoor unit:	ERSD-****
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:		no
Parameters shall be declared for		low-temperature application.
Parameters shall be declared for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	η_s	225	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	8	kW	T _j = + 2 °C	COP _d	3.74	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	5.1	kW	T _j = + 7 °C	COP _d	5.05	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	4.7	kW	T _j = +12 °C	COP _d	7.34	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = bivalent temperature	P _{dh}	1.0	kW	T _j = bivalent temperature	COP _d	1.00	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	1.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

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

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

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