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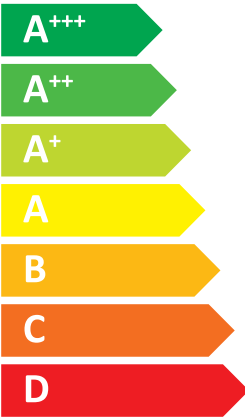


Indoor unit E*SD-****D
Outdoor unit PUD-SHWM80YAA(-BS)



55 °C

35 °C



A++

A+++

41 dB

56 dB

■ 08	■ 08
■ 08	■ 08
■ 08	■ 08
kW	kW

2019

811/2013

BH79V004H12

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

Table with columns for Outdoor unit, Indoor unit, and various performance metrics (Energy efficiency class, Rated heat output, Annual energy consumption, etc.) for different models (EHST, ERST, EHSD, ERSD) under medium and low temperature applications.

Model(s):	Outdoor unit:	PUD-SHWM80YAA
	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	134	%
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}	0.95	-				
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}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

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

For heat pump combination heater:							
Declared load profile	-			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-SHWM80YAA
	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	179	%
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}	0.97	-				
T _j = + 7 °C	P _{dh}	5.1	kW	T _j = + 7 °C	COP _d	6.00	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = +12 °C	P _{dh}	3.2	kW	T _j = +12 °C	COP _d	8.21	-
Degradation co-efficient (**)	C _{dh}	0.94	-				
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}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors	-	2220	m ³ /h
Capacity control	variable						
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	η_{wh}	-	%
Declared load profile	-						
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-SHWM80YAA
	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	113	%
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}	0.98	-				
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}	0.97	-				
T _j = +12 °C	P _{dh}	3.1	kW	T _j = +12 °C	COP _d	6.74	-
Degradation co-efficient (**)	C _{dh}	0.95	-				
T _j = bivalent temperature	P _{dh}	6.7	kW	T _j = bivalent temperature	COP _d	1.51	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	6.8	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	1.52	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input Electrical			
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

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

For heat pump combination heater:							
Declared load profile	-			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-SHWM80YAA
	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	143	%
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	0.97	-				
Tj = + 7 °C	Pdh	4.5	kW	Tj = + 7 °C	COPd	5.56	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.56	-
Degradation co-efficient (**)	Cdh	0.94	-				
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}	0.022	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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}	-	kW/h
Annual electricity consumption	AEC	-	kW/h
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-SHWM80YAA
	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	164	%
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	0.98	-				
Tj = +12 °C	Pdh	4.5	kW	Tj = +12 °C	COPd	6.08	-
Degradation co-efficient (**)	Cdh	0.97	-				
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}	0.022	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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-SHWM80YAA
	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	222	%
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}	0.97	-				
T _j = +12 °C	P _{dh}	4.7	kW	T _j = +12 °C	COP _d	7.34	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
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}	0.022	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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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(*) 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-SHWM80YAA
	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	134	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.1	kW	Tj = - 7 °C	COPd	2.14	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.3	kW	Tj = + 2 °C	COPd	3.26	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	5.3	kW	Tj = + 7 °C	COPd	4.91	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.05	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	1.97	-
Tj = operation limit temperature	Pdh	5.3	kW	Tj = operation limit temperature	COPd	1.41	-
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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-SHWM80YAA
	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	179	%
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}	0.97	-				
T _j = + 7 °C	P _{dh}	5.1	kW	T _j = + 7 °C	COP _d	6.00	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = +12 °C	P _{dh}	3.2	kW	T _j = +12 °C	COP _d	8.21	-
Degradation co-efficient (**)	C _{dh}	0.94	-				
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}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

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

For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	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-SHWM80YAA
	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	113	%
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}	0.98	-				
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}	0.97	-				
T _j = +12 °C	P _{dh}	3.1	kW	T _j = +12 °C	COP _d	6.74	-
Degradation co-efficient (**)	C _{dh}	0.95	-				
T _j = bivalent temperature	P _{dh}	6.7	kW	T _j = bivalent temperature	COP _d	1.51	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	6.8	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	1.52	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

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

For heat pump combination heater:							
Declared load profile	-			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-SHWM80YAA
	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	143	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	4.8	kW	T _j = - 7 °C	COP _d	3.53	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 2 °C	P _{dh}	3.8	kW	T _j = + 2 °C	COP _d	4.04	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = + 7 °C	P _{dh}	4.5	kW	T _j = + 7 °C	COP _d	5.56	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = +12 °C	P _{dh}	3.1	kW	T _j = +12 °C	COP _d	7.56	-
Degradation co-efficient (**)	C _{dh}	0.94	-				
T _j = bivalent temperature	P _{dh}	6.7	kW	T _j = bivalent temperature	COP _d	2.23	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	6.8	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	2.30	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

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

For heat pump combination heater:				Water heating energy efficiency	η_{wh}	-	%
Declared load profile	-						
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-SHWM80YAA
	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	164	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	8	kW	T _j = + 2 °C	COP _d	1.88	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	5.2	kW	T _j = + 7 °C	COP _d	3.51	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	4.5	kW	T _j = +12 °C	COP _d	6.08	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = bivalent temperature	P _{dh}	1.0	kW	T _j = bivalent temperature	COP _d	0.95	-
T _j = operation limit temperature	P _{dh}	5.3	kW	T _j = operation limit temperature	COP _d	1.41	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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-SHWM80YAA
	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	222	%
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}	0.97	-				
T _j = +12 °C	P _{dh}	4.7	kW	T _j = +12 °C	COP _d	7.34	-
Degradation co-efficient (**)	C _{dh}	0.96	-				
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}	0.022	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	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:							
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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(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.