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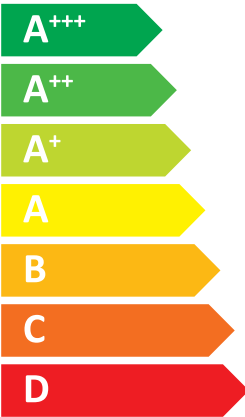


Indoor unit E*SD-****D
Outdoor unit PUD-SWM120YAA(-BS)



55 °C

35 °C



A++

A+++

41 dB

60 dB

■ 12	■ 12
■ 12	■ 12
■ 12	■ 12
kW	kW

2019

811/2013

BH79V004H11

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	EHSD-****D
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 for		medium-temperature application.
Parameters for		average climate conditions.


Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	128	%
Declared capacity for heating for part load at indoor 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	10.6	kW	Tj = - 7 °C	COPd	1.94	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 °C	COPd	3.10	-
Tj = + 2 °C	Pdh	6.5	kW	Tj = + 7 °C	COPd	4.73	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	6.94	-
Tj = + 7 °C	Pdh	5.3	kW	Tj = bivalent temperature	COPd	1.94	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.88	-
Tj = +12 °C	Pdh	4.3	kW	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.96	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	10.6	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.2	kW	Rated heat output (*)	Psup	1.8	kW
Bivalent temperature	Tbiv	-7	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	°C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	7555	kWh				

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

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

The identification and signature of the person empowered to bind the supplier:



Atsushi EDAYOSHI
 Manager, Quality Assurance Department
 UNITED KINGDOM

· Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.
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 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	EHSD-****D
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 for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	176	%
Declared capacity for heating for part load at indoor 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	10.6	kW	Tj = - 7 °C	COPd	2.85	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 °C	COPd	4.45	-
Tj = + 2 °C	Pdh	6.5	kW	Tj = + 7 °C	COPd	5.83	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	7.86	-
Tj = + 7 °C	Pdh	5.6	kW	Tj = bivalent temperature	COPd	2.85	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.64	-
Tj = +12 °C	Pdh	4.4	kW	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.96	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	10.6	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.2	kW	Rated heat output (*)	Psup	1.8	kW
Bivalent temperature	Tbiv	-7	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	°C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	5548	kWh				

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

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 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	EHSD-****D
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 for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	108	%
Declared capacity for heating for part load at indoor 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	7.3	kW	Tj = - 7 °C	COPd	2.60	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 °C	COPd	3.20	-
Tj = + 2 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	4.65	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 °C	COPd	6.90	-
Tj = + 7 °C	Pdh	3.8	kW	Tj = bivalent temperature	COPd	1.45	-
Degradation co-efficient (**)	Cdh	0.97	-	Tj = operation limit temperature (***)	COPd	1.70	-
Tj = +12 °C	Pdh	4.4	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	1.40	-
Degradation co-efficient (**)	Cdh	0.97	-	Operation limit temperature	TOL	-25	°C
Tj = bivalent temperature	Pdh	9.2	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = operation limit temperature (***)	Pdh	8.2	kW	Supplementary heater			
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	8.7	kW	Rated heat output (*)	Psup	3.8	kW
Bivalent temperature	Tbiv	-13	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	°C	Power consumption in modes other than active mode			
Power consumption in modes other than active mode				Off mode			
Off mode	P _{OFF}	0.022	kW	Thermostat-off mode	P _{TO}	0.022	kW
Thermostat-off mode	P _{TO}	0.022	kW	Standby mode	P _{SB}	0.022	kW
Standby mode	P _{SB}	0.022	kW	Crankcase heater mode	P _{CK}	0.000	kW
Crankcase heater mode	P _{CK}	0.000	kW	Other items			

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	10646	kWh				

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

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

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	EHSD-****D
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 for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	139	%
Declared capacity for heating for part load at indoor 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	7.3	kW	Tj = - 7 °C	COPd	3.50	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 °C	COPd	3.88	-
Tj = + 2 °C	Pdh	4.5	kW	Tj = + 7 °C	COPd	5.13	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 °C	COPd	7.24	-
Tj = + 7 °C	Pdh	3.9	kW	Tj = bivalent temperature	COPd	1.98	-
Degradation co-efficient (**)	Cdh	0.97	-	Tj = operation limit temperature (***)	COPd	1.71	-
Tj = +12 °C	Pdh	5.5	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	2.03	-
Degradation co-efficient (**)	Cdh	0.97	-	Operation limit temperature	TOL	-25	°C
Tj = bivalent temperature	Pdh	10.1	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = operation limit temperature (***)	Pdh	8.7	kW	Supplementary heater			
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	10.3	kW	Rated heat output (*)	Psup	3.3	kW
Bivalent temperature	Tbiv	-16	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	°C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Other items				Rated air flow rate, outdoors	-	2640	m ³ /h
Capacity control	variable						
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	8316	kWh				

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

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 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	EHSD-****D
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 for	medium-temperature application.	
Parameters for	warmer climate conditions.	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	149	%
Declared capacity for heating for part load at indoor 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	COPd	1.85	-
Tj = + 2 °C	Pdh	12.0	kW	Tj = + 7 °C	COPd	3.23	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 °C	COPd	5.31	-
Tj = + 7 °C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	1.85	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.85	-
Tj = +12 °C	Pdh	5.2	kW	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	12.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	°C	Power consumption in modes other than active mode			
Power consumption in modes other than active mode				Off mode			
Off mode	P _{OFF}	0.022	kW	Thermostat-off mode	P _{TO}	0.022	kW
Thermostat-off mode	P _{TO}	0.022	kW	Standby mode	P _{SB}	0.022	kW
Standby mode	P _{SB}	0.022	kW	Crankcase heater mode	P _{CK}	0.000	kW
Crankcase heater mode	P _{CK}	0.000	kW	Other items			

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	4213	kWh				

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

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 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	EHSD-****D
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 for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	215	%
Declared capacity for heating for part load at indoor 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	COPd	3.24	-
Tj = + 2 °C	Pdh	12.0	kW	Tj = + 7 °C	COPd	5.03	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	6.88	-
Tj = + 7 °C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	3.24	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.24	-
Tj = +12 °C	Pdh	4.4	kW	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.97	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	12.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	°C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	2948	kWh				

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

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 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	EHSD-MED
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:		no
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	128	%
Declared capacity for heating for part load at indoor 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	10.6	kW	Tj = - 7 °C	COPd	1.94	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 °C	COPd	3.10	-
Tj = + 2 °C	Pdh	6.5	kW	Tj = + 7 °C	COPd	4.73	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	6.94	-
Tj = + 7 °C	Pdh	5.3	kW	Tj = bivalent temperature	COPd	1.94	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.88	-
Tj = +12 °C	Pdh	4.3	kW	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.96	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	10.6	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.2	kW	Rated heat output (*)	Psup	1.8	kW
Bivalent temperature	Tbiv	-7	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	°C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	7555	kWh				

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

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 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	EHSD-MED
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:		no
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	176	%
Declared capacity for heating for part load at indoor 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	10.6	kW	Tj = - 7 °C	COPd	2.85	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 °C	COPd	4.45	-
Tj = + 2 °C	Pdh	6.5	kW	Tj = + 7 °C	COPd	5.83	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	7.86	-
Tj = + 7 °C	Pdh	5.6	kW	Tj = bivalent temperature	COPd	2.85	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.64	-
Tj = +12 °C	Pdh	4.4	kW	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.96	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	10.6	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.2	kW	Rated heat output (*)	Psup	1.8	kW
Bivalent temperature	Tbiv	-7	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	°C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	5548	kWh				

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

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

The identification and signature of the person empowered to bind the supplier;
 Atsushi EDAYOSHI
 The signature is signed in the average climate / medium-temperature section.
 Manager, Quality Assurance Department
 UNITED KINGDOM

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 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	EHSD-MED
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:		no
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	108	%
Declared capacity for heating for part load at indoor 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	7.3	kW	Tj = - 7 °C	COPd	2.60	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 °C	COPd	3.20	-
Tj = + 2 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	4.65	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 °C	COPd	6.90	-
Tj = + 7 °C	Pdh	3.8	kW	Tj = bivalent temperature	COPd	1.45	-
Degradation co-efficient (**)	Cdh	0.97	-	Tj = operation limit temperature (***)	COPd	1.70	-
Tj = +12 °C	Pdh	4.4	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	1.40	-
Degradation co-efficient (**)	Cdh	0.97	-	Operation limit temperature	TOL	-25	°C
Tj = bivalent temperature	Pdh	9.2	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = operation limit temperature (***)	Pdh	8.2	kW	Supplementary heater			
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	8.7	kW	Rated heat output (*)	Psup	3.8	kW
Bivalent temperature	Tbiv	-13	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	°C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	10646	kWh				

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

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

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	EHSD-MED
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:		no
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	139	%
Declared capacity for heating for part load at indoor 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 _{d,h}	7.3	kW	T _j = - 7 °C	COP _d	3.50	-
Degradation co-efficient (**)	C _{d,h}	0.99	-	T _j = + 2 °C	COP _d	3.88	-
T _j = + 2 °C	P _{d,h}	4.5	kW	T _j = + 7 °C	COP _d	5.13	-
Degradation co-efficient (**)	C _{d,h}	0.98	-	T _j = +12 °C	COP _d	7.24	-
T _j = + 7 °C	P _{d,h}	3.9	kW	T _j = bivalent temperature	COP _d	1.98	-
Degradation co-efficient (**)	C _{d,h}	0.97	-	T _j = operation limit temperature (***)	COP _d	1.71	-
T _j = +12 °C	P _{d,h}	5.5	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	2.03	-
Degradation co-efficient (**)	C _{d,h}	0.97	-	Operation limit temperature	TOL	-25	°C
T _j = bivalent temperature	P _{d,h}	10.1	kW	Heating water operating limit temperature	WTOL	60	°C
T _j = operation limit temperature (***)	P _{d,h}	8.7	kW	Supplementary heater			
T _j = - 15 °C (if TOL < - 20 °C)	P _{d,h}	10.3	kW	Rated heat output (*)	P _{sup}	3.3	kW
Bivalent temperature	T _{biv}	-16	°C	Type of energy input	Electrical		
Reference design conditions for space heating	T _{designh}	-22	°C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	8316	kWh				

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

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(**) If C_{d,h} is not determined by measurement then the default degradation coefficient is C_{d,h} = 0,9.

(***) If the declared TOL is lower than the T_{designh} of the considered climate then the outdoor dry bulb temperature T_j is equal to T_{designh}.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	EHSD-MED
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:		no
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	149	%
Declared capacity for heating for part load at indoor 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	COPd	1.85	-
Tj = + 2 °C	Pdh	12.0	kW	Tj = + 7 °C	COPd	3.23	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 °C	COPd	5.31	-
Tj = + 7 °C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	1.85	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.85	-
Tj = +12 °C	Pdh	5.2	kW	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	12.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	°C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	4213	kWh				

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

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 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	EHSD-MED
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:		no
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	215	%
Declared capacity for heating for part load at indoor 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	COPd	3.24	-
Tj = + 2 °C	Pdh	12.0	kW	Tj = + 7 °C	COPd	5.03	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	6.88	-
Tj = + 7 °C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	3.24	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.24	-
Tj = +12 °C	Pdh	4.4	kW	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.97	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	12.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	°C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	2948	kWh				

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

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 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	ERSD-****D
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 for		medium-temperature application.
Parameters for		average climate conditions.


Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	128	%
Declared capacity for heating for part load at indoor 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	10.6	kW	Tj = - 7 °C	COPd	1.94	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 °C	COPd	3.10	-
Tj = + 2 °C	Pdh	6.5	kW	Tj = + 7 °C	COPd	4.73	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	6.94	-
Tj = + 7 °C	Pdh	5.3	kW	Tj = bivalent temperature	COPd	1.94	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.88	-
Tj = +12 °C	Pdh	4.3	kW	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.96	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	10.6	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.2	kW	Rated heat output (*)	Psup	1.8	kW
Bivalent temperature	Tbiv	-7	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	°C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	7555	kWh				

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

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Atsushi EDAYOSHI
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 UNITED KINGDOM

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 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	ERSD-****D
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 for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	176	%
Declared capacity for heating for part load at indoor 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	10.6	kW	Tj = - 7 °C	COPd	2.85	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 °C	COPd	4.45	-
Tj = + 2 °C	Pdh	6.5	kW	Tj = + 7 °C	COPd	5.83	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	7.86	-
Tj = + 7 °C	Pdh	5.6	kW	Tj = bivalent temperature	COPd	2.85	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.64	-
Tj = +12 °C	Pdh	4.4	kW	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.96	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	10.6	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.2	kW	Rated heat output (*)	Psup	1.8	kW
Bivalent temperature	Tbiv	-7	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	°C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	5548	kWh				

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

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 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	ERSD-****D
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 for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	108	%
Declared capacity for heating for part load at indoor 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 _{d,h}	7.3	kW	T _j = - 7 °C	COP _d	2.60	-
Degradation co-efficient (**)	C _{d,h}	0.99	-	T _j = + 2 °C	COP _d	3.20	-
T _j = + 2 °C	P _{d,h}	4.4	kW	T _j = + 7 °C	COP _d	4.65	-
Degradation co-efficient (**)	C _{d,h}	0.98	-	T _j = +12 °C	COP _d	6.90	-
T _j = + 7 °C	P _{d,h}	3.8	kW	T _j = bivalent temperature	COP _d	1.45	-
Degradation co-efficient (**)	C _{d,h}	0.97	-	T _j = operation limit temperature (***)	COP _d	1.70	-
T _j = +12 °C	P _{d,h}	4.4	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	1.40	-
Degradation co-efficient (**)	C _{d,h}	0.97	-	Operation limit temperature	TOL	-25	°C
T _j = bivalent temperature	P _{d,h}	9.2	kW	Heating water operating limit temperature	WTOL	60	°C
T _j = operation limit temperature (***)	P _{d,h}	8.2	kW	Supplementary heater			
T _j = - 15 °C (if TOL < - 20 °C)	P _{d,h}	8.7	kW	Rated heat output (*)	P _{sup}	3.8	kW
Bivalent temperature	T _{biv}	-13	°C	Type of energy input	Electrical		
Reference design conditions for space heating	T _{designh}	-22	°C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			
Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	10646	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-	%	
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

Contact details			
MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.		Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.	
The identification and signature of the person empowered to bind the supplier;			
Atsushi EDAYOSHI		Manager, Quality Assurance Department	
The signature is signed in the average climate / medium-temperature section.			
UNITED KINGDOM			

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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(T_j).

(**) If C_{d,h} is not determined by measurement then the default degradation coefficient is C_{d,h} = 0,9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature T_j is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	ERSD-****D
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 for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	139	%
Declared capacity for heating for part load at indoor 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 _{d,h}	7.3	kW	T _j = - 7 °C	COP _d	3.50	-
Degradation co-efficient (**)	C _{d,h}	0.99	-	T _j = + 2 °C	COP _d	3.88	-
T _j = + 2 °C	P _{d,h}	4.5	kW	T _j = + 7 °C	COP _d	5.13	-
Degradation co-efficient (**)	C _{d,h}	0.98	-	T _j = +12 °C	COP _d	7.24	-
T _j = + 7 °C	P _{d,h}	3.9	kW	T _j = bivalent temperature	COP _d	1.98	-
Degradation co-efficient (**)	C _{d,h}	0.97	-	T _j = operation limit temperature (***)	COP _d	1.71	-
T _j = +12 °C	P _{d,h}	5.5	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	2.03	-
Degradation co-efficient (**)	C _{d,h}	0.97	-	Operation limit temperature	TOL	-25	°C
T _j = bivalent temperature	P _{d,h}	10.1	kW	Heating water operating limit temperature	WTOL	60	°C
T _j = operation limit temperature (***)	P _{d,h}	8.7	kW	Supplementary heater			
T _j = - 15 °C (if TOL < - 20 °C)	P _{d,h}	10.3	kW	Rated heat output (*)	P _{sup}	3.3	kW
Bivalent temperature	T _{biv}	-16	°C	Type of energy input	Electrical		
Reference design conditions for space heating	T _{designh}	-22	°C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	8316	kWh				

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

Contact details	MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.	Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.
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(**) If C_{d,h} is not determined by measurement then the default degradation coefficient is C_{d,h} = 0,9.

(***) If the declared TOL is lower than the T_{designh} of the considered climate then the outdoor dry bulb temperature T_j is equal to T_{designh}.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	ERSD-****D
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 for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	149	%
Declared capacity for heating for part load at indoor 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	COPd	1.85	-
Tj = + 2 °C	Pdh	12.0	kW	Tj = + 7 °C	COPd	3.23	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 °C	COPd	5.31	-
Tj = + 7 °C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	1.85	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.85	-
Tj = +12 °C	Pdh	5.2	kW	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	12.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	°C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	4213	kWh				

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

Contact details

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

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	ERSD-****D
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 for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	215	%
Declared capacity for heating for part load at indoor 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 _d _h	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _d _h	-	-	T _j = + 2 °C	COP _d	3.24	-
T _j = + 2 °C	P _d _h	12.0	kW	T _j = + 7 °C	COP _d	5.03	-
Degradation co-efficient (**)	C _d _h	0.99	-	T _j = +12 °C	COP _d	6.88	-
T _j = + 7 °C	P _d _h	7.7	kW	T _j = bivalent temperature	COP _d	3.24	-
Degradation co-efficient (**)	C _d _h	0.99	-	T _j = operation limit temperature (***)	COP _d	3.24	-
T _j = +12 °C	P _d _h	4.4	kW	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	C _d _h	0.97	-	Heating water operating limit temperature	WTOL	60	°C
T _j = bivalent temperature	P _d _h	12.0	kW	Supplementary heater			
T _j = operation limit temperature (***)	P _d _h	12.0	kW	Rated heat output (*)	P _{sup}	0.0	kW
Bivalent temperature	T _{biv}	2	°C	Type of energy input	Electrical		
Reference design conditions for space heating	T _{designh}	2	°C	Power consumption in modes other than active mode			
Power consumption in modes other than active mode				Off mode			
Off mode	P _{OFF}	0.022	kW	Thermostat-off mode	P _{TO}	0.022	kW
Thermostat-off mode	P _{TO}	0.022	kW	Standby mode	P _{SB}	0.022	kW
Standby mode	P _{SB}	0.022	kW	Crankcase heater mode	P _{CK}	0.000	kW
Crankcase heater mode	P _{CK}	0.000	kW	Other items			
Other items				Capacity control	variable		
Capacity control				Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA	For heat pump combination heater:			
Annual energy consumption	Q _{HE}	2948	kWh	Declared load profile	-		
For heat pump combination heater:				Daily electricity consumption	Q _{elec}	-	kWh
Declared load profile				Annual electricity consumption	AEC	-	kWh
Daily electricity consumption	Q _{elec}	-	kWh	Water heating energy efficiency	η_{wh}	-	%
Annual electricity consumption	AEC	-	kWh	Contact details			

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

 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature T_j is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	ERSD-MED
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:		no
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		average climate conditions.


Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	128	%
Declared capacity for heating for part load at indoor 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	10.6	kW	Tj = - 7 °C	COPd	1.94	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 °C	COPd	3.10	-
Tj = + 2 °C	Pdh	6.5	kW	Tj = + 7 °C	COPd	4.73	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	6.94	-
Tj = + 7 °C	Pdh	5.3	kW	Tj = bivalent temperature	COPd	1.94	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.88	-
Tj = +12 °C	Pdh	4.3	kW	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.96	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	10.6	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.2	kW	Rated heat output (*)	Psup	1.8	kW
Bivalent temperature	Tbiv	-7	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	°C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	7555	kWh				

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

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 Manager, Quality Assurance Department
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 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	ERSD-MED
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:		no
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	176	%
Declared capacity for heating for part load at indoor 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	10.6	kW	Tj = - 7 °C	COPd	2.85	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 °C	COPd	4.45	-
Tj = + 2 °C	Pdh	6.5	kW	Tj = + 7 °C	COPd	5.83	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	7.86	-
Tj = + 7 °C	Pdh	5.6	kW	Tj = bivalent temperature	COPd	2.85	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.64	-
Tj = +12 °C	Pdh	4.4	kW	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.96	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	10.6	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.2	kW	Rated heat output (*)	Psup	1.8	kW
Bivalent temperature	Tbiv	-7	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	°C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Other items	Capacity control	variable	Rated air flow rate, outdoors	-	2640	m ³ /h
	Sound power level, indoors/outdoors	L _{WA}	41 / 60			dBA
	Annual energy consumption	Q _{HE}	5548			kWh

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

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

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	ERSD-MED
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:		no
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	108	%
Declared capacity for heating for part load at indoor 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}	7.3	kW	T _j = - 7 °C	COP _d	2.60	-
Degradation co-efficient (**)	C _{dH}	0.99	-	T _j = + 2 °C	COP _d	3.20	-
T _j = + 2 °C	P _{dH}	4.4	kW	T _j = + 7 °C	COP _d	4.65	-
Degradation co-efficient (**)	C _{dH}	0.98	-	T _j = +12 °C	COP _d	6.90	-
T _j = + 7 °C	P _{dH}	3.8	kW	T _j = bivalent temperature	COP _d	1.45	-
Degradation co-efficient (**)	C _{dH}	0.97	-	T _j = operation limit temperature (***)	COP _d	1.70	-
T _j = +12 °C	P _{dH}	4.4	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	1.40	-
Degradation co-efficient (**)	C _{dH}	0.97	-	Operation limit temperature	TOL	-25	°C
T _j = bivalent temperature	P _{dH}	9.2	kW	Heating water operating limit temperature	WTOL	60	°C
T _j = operation limit temperature (***)	P _{dH}	8.2	kW	Supplementary heater			
T _j = - 15 °C (if TOL < - 20 °C)	P _{dH}	8.7	kW	Rated heat output (*)	P _{sup}	3.8	kW
Bivalent temperature	T _{biv}	-13	°C	Type of energy input	Electrical		
Reference design conditions for space heating	T _{designh}	-22	°C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	10646	kWh				

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

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(**) If C_{dH} is not determined by measurement then the default degradation coefficient is C_{dH} = 0,9.

(***) If the declared TOL is lower than the T_{designh} of the considered climate then the outdoor dry bulb temperature T_j is equal to T_{designh}.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	ERSD-MED
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:		no
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	139	%
Declared capacity for heating for part load at indoor 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 _{d,h}	7.3	kW	T _j = - 7 °C	COP _d	3.50	-
Degradation co-efficient (**)	C _{d,h}	0.99	-	T _j = + 2 °C	COP _d	3.88	-
T _j = + 2 °C	P _{d,h}	4.5	kW	T _j = + 7 °C	COP _d	5.13	-
Degradation co-efficient (**)	C _{d,h}	0.98	-	T _j = +12 °C	COP _d	7.24	-
T _j = + 7 °C	P _{d,h}	3.9	kW	T _j = bivalent temperature	COP _d	1.98	-
Degradation co-efficient (**)	C _{d,h}	0.97	-	T _j = operation limit temperature (***)	COP _d	1.71	-
T _j = +12 °C	P _{d,h}	5.5	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	2.03	-
Degradation co-efficient (**)	C _{d,h}	0.97	-	Operation limit temperature	TOL	-25	°C
T _j = bivalent temperature	P _{d,h}	10.1	kW	Heating water operating limit temperature	WTOL	60	°C
T _j = operation limit temperature (***)	P _{d,h}	8.7	kW	Supplementary heater			
T _j = - 15 °C (if TOL < - 20 °C)	P _{d,h}	10.3	kW	Rated heat output (*)	P _{sup}	3.3	kW
Bivalent temperature	T _{biv}	-16	°C	Type of energy input	Electrical		
Reference design conditions for space heating	T _{designh}	-22	°C	Power consumption in modes other than active mode			
Power consumption in modes other than active mode				Off mode			
Off mode	P _{OFF}	0.022	kW	Thermostat-off mode	P _{TO}	0.022	kW
Thermostat-off mode	P _{TO}	0.022	kW	Standby mode	P _{SB}	0.022	kW
Standby mode	P _{SB}	0.022	kW	Crankcase heater mode	P _{CK}	0.000	kW
Crankcase heater mode	P _{CK}	0.000	kW	Other items			

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	8316	kWh				

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

Contact details	MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.	Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.
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The identification and signature of the person empowered to bind the supplier;

Atsushi EDAYOSHI

The signature is signed in the average climate / medium-temperature section.

Manager, Quality Assurance Department

UNITED KINGDOM

· Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

· Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) 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(T_j).

(**) If C_{d,h} is not determined by measurement then the default degradation coefficient is C_{d,h} = 0,9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature T_j is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	ERSD-MED
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:		no
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	149	%
Declared capacity for heating for part load at indoor 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	COPd	1.85	-
Tj = + 2 °C	Pdh	12.0	kW	Tj = + 7 °C	COPd	3.23	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 °C	COPd	5.31	-
Tj = + 7 °C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	1.85	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.85	-
Tj = +12 °C	Pdh	5.2	kW	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	12.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	°C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 60	dBA				
Annual energy consumption	Q _{HE}	4213	kWh				

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

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

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SWM120YAA(-BS)
	Indoor unit:	ERSD-MED
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:		no
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	215	%
Declared capacity for heating for part load at indoor 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	COPd	3.24	-
Tj = + 2 °C	Pdh	12.0	kW	Tj = + 7 °C	COPd	5.03	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	6.88	-
Tj = + 7 °C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	3.24	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.24	-
Tj = +12 °C	Pdh	4.4	kW	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.97	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	12.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	°C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	°C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Other items	Capacity control	variable	Rated air flow rate, outdoors	-	2640	m ³ /h
	Sound power level, indoors/outdoors	L _{WA} 41 / 60				dBA
	Annual energy consumption	Q _{HE} 2948				kWh

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

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 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.