

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SHWM60VAA(-BS)
	Indoor unit:	EHST17D-****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:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	134	%
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	5.3	kW	Tj = - 7 °C	COPd	2.14	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.3	kW	Tj = + 2 °C	COPd	3.23	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.3	kW	Tj = + 7 °C	COPd	4.91	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	6.89	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	2.02	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	2.02	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable		Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA			
Annual energy consumption	Q _{HE}	3631	kWh			

For heat pump combination heater:

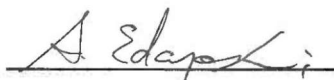
Declared load profile	L		Water heating energy efficiency	η_{wh}	136	%
Daily electricity consumption	Qelec	3.630	kWh			
Annual electricity consumption	AEC	798	kWh			

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.

Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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.

* 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(Tj).

(**) 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.

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Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	178	%
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	5.3	kW	Tj = - 7 °C	COPd	3.29	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.7	kW	Tj = + 2 °C	COPd	4.45	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.1	kW	Tj = + 7 °C	COPd	5.67	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.2	kW	Tj = +12 °C	COPd	7.80	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	3.21	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	3.21	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	2743	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	136	%
Daily electricity consumption	Qelec	3.630	kWh				
Annual electricity consumption	AEC	798	kWh				

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Model(s):	Outdoor unit:	PUD-SHWM60VAA(-BS)
	Indoor unit:	EHST17D-****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:		yes
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	113	%
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	3.6	kW	Tj = - 7 °C	COPd	2.62	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.5	kW	Tj = + 2 °C	COPd	3.40	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.3	kW	Tj = + 7 °C	COPd	5.05	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.00	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	5.1	kW	Tj = bivalent temperature	COPd	1.44	-
Tj = operation limit temperature (***)	Pdh	4.8	kW	Tj = operation limit temperature (***)	COPd	1.43	-
Tj = − 15 °C (if TOL < − 20 °C)	Pdh	5.2	kW	Tj = − 15 °C (if TOL < − 20 °C)	COPd	1.44	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	1.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	5100	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	112	%
Daily electricity consumption	Qelec	4.400	kWh				
Annual electricity consumption	AEC	968	kWh				

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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.

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	Indoor unit:	EHST17D-****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:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	138	%
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	3.6	kW	Tj = - 7 °C	COPd	3.21	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 °C	COPd	3.93	-
Tj = + 2 °C	Pdh	3.8	kW	Tj = + 7 °C	COPd	5.42	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 °C	COPd	7.56	-
Tj = + 7 °C	Pdh	4.5	kW	Tj = bivalent temperature	COPd	2.22	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.82	-
Tj = +12 °C	Pdh	3.1	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	2.29	-
Degradation co-efficient (**)	Cdh	0.96	-	Operation limit temperature	TOL	-28	°C
Tj = bivalent temperature	Pdh	5.1	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = operation limit temperature (***)	Pdh	4.8	kW				
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	5.2	kW				
Bivalent temperature	Tbiv	-16	°C				
Reference design conditions for space heating	Tdesignh	-22	°C				
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	1.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	4197	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	112	%
Daily electricity consumption	Qelec	4.400	kWh				
Annual electricity consumption	AEC	968	kWh				

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(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

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Model(s):	Outdoor unit:	PUD-SHWM60VAA(-BS)
	Indoor unit:	EHST17D-****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:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	159	%
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	Pdh	6.0	kW	Tj = + 2 °C	COPd	1.91	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	3.9	kW	Tj = + 7 °C	COPd	3.36	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.5	kW	Tj = +12 °C	COPd	6.16	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	1.91	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	1.91	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	1975	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	154	%
Daily electricity consumption	Qelec	3.220	kWh				
Annual electricity consumption	AEC	709	kWh				

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Model(s):	Outdoor unit:	PUD-SHWM60VAA(-BS)
	Indoor unit:	EHST17D-****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:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	220	%
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	Pdh	6.0	kW	Tj = + 2 °C	COPd	3.80	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	5.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.7	kW	Tj = +12 °C	COPd	7.58	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	3.80	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	3.80	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	1439	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	154	%
Daily electricity consumption	Qelec	3.220	kWh				
Annual electricity consumption	AEC	709	kWh				

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUD-SHWM60VAA(-BS)
	Indoor unit:	EHST20D-****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:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	134	%
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	5.3	kW	Tj = - 7 °C	COPd	2.14	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.3	kW	Tj = + 2 °C	COPd	3.23	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.3	kW	Tj = + 7 °C	COPd	4.91	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	6.89	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	2.02	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	2.02	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable		Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA			
Annual energy consumption	Q _{HE}	3631	kWh			

For heat pump combination heater:

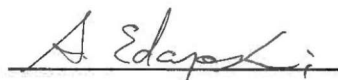
Declared load profile	L		Water heating energy efficiency	η_{wh}	148	%
Daily electricity consumption	Qelec	3.340	kWh			
Annual electricity consumption	AEC	736	kWh			

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Model(s):	Outdoor unit:	PUD-SHWM60VAA(-BS)
	Indoor unit:	EHST20D-****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:		yes
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	ηs	178	%
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	5.3	kW	Tj = - 7 °C	COPd	3.29	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.7	kW	Tj = + 2 °C	COPd	4.45	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.1	kW	Tj = + 7 °C	COPd	5.67	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.2	kW	Tj = +12 °C	COPd	7.80	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	3.21	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	3.21	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW		Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	2743	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	148	%
Daily electricity consumption	Qelec	3.340	kWh				
Annual electricity consumption	AEC	736	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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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.

(***) 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-SHWM60VAA(-BS)
	Indoor unit:	EHST20D-****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:		yes
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	113	%
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	3.6	kW	Tj = - 7 °C	COPd	2.62	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.5	kW	Tj = + 2 °C	COPd	3.40	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.3	kW	Tj = + 7 °C	COPd	5.05	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.00	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	5.1	kW	Tj = bivalent temperature	COPd	1.44	-
Tj = operation limit temperature (***)	Pdh	4.8	kW	Tj = operation limit temperature (***)	COPd	1.43	-
Tj = − 15 °C (if TOL < − 20 °C)	Pdh	5.2	kW	Tj = − 15 °C (if TOL < − 20 °C)	COPd	1.44	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	1.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	5100	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	120	%
Daily electricity consumption	Qelec	4.090	kWh				
Annual electricity consumption	AEC	900	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-SHWM60VAA(-BS)
	Indoor unit:	EHST20D-****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:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	ηs	138	%
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	3.6	kW	Tj = - 7 °C	COPd	3.21	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.8	kW	Tj = + 2 °C	COPd	3.93	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.5	kW	Tj = + 7 °C	COPd	5.42	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.56	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	5.1	kW	Tj = bivalent temperature	COPd	2.22	-
Tj = operation limit temperature (***)	Pdh	4.8	kW	Tj = operation limit temperature (***)	COPd	1.82	-
Tj = − 15 °C (if TOL < − 20 °C)	Pdh	5.2	kW	Tj = − 15 °C (if TOL < − 20 °C)	COPd	2.29	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	1.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	4197	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	120	%
Daily electricity consumption	Q _{elec}	4.090	kWh				
Annual electricity consumption	AEC	900	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-SHWM60VAA(-BS)
	Indoor unit:	EHST20D-****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:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	159	%
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	Pdh	6.0	kW	Tj = + 2 °C	COPd	1.91	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	3.9	kW	Tj = + 7 °C	COPd	3.36	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.5	kW	Tj = +12 °C	COPd	6.16	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	1.91	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	1.91	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	1975	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	162	%
Daily electricity consumption	Qelec	3.070	kWh				
Annual electricity consumption	AEC	675	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-SHWM60VAA(-BS)
	Indoor unit:	EHST20D-****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:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	220	%
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	Pdh	6.0	kW	Tj = + 2 °C	COPd	3.80	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	5.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.7	kW	Tj = +12 °C	COPd	7.58	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	3.80	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	3.80	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	1439	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	162	%
Daily electricity consumption	Qelec	3.070	kWh				
Annual electricity consumption	AEC	675	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-SHWM60VAA(-BS)
	Indoor unit:	EHST20D-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:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	134	%
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	5.3	kW	Tj = - 7 °C	COPd	2.14	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.3	kW	Tj = + 2 °C	COPd	3.23	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.3	kW	Tj = + 7 °C	COPd	4.91	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	6.89	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	2.02	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	2.02	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	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 / 55	dBA				
Annual energy consumption	Q _{HE}	3631	kWh				

For heat pump combination heater:

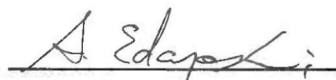
Declared load profile	L			Water heating energy efficiency	η_{wh}	148	%
Daily electricity consumption	Qelec	3.340	kWh				
Annual electricity consumption	AEC	736	kWh				

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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-SHWM60VAA(-BS)
	Indoor unit:	EHST20D-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:		yes
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	178	%
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	5.3	kW	Tj = - 7 °C	COPd	3.29	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.7	kW	Tj = + 2 °C	COPd	4.45	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.1	kW	Tj = + 7 °C	COPd	5.67	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.2	kW	Tj = +12 °C	COPd	7.80	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	3.21	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	3.21	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	2743	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	148	%
Daily electricity consumption	Qelec	3.340	kWh				
Annual electricity consumption	AEC	736	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-SHWM60VAA(-BS)
	Indoor unit:	EHST20D-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:		yes
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	113	%
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	3.6	kW	Tj = - 7 °C	COPd	2.62	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.5	kW	Tj = + 2 °C	COPd	3.40	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.3	kW	Tj = + 7 °C	COPd	5.05	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.00	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	5.1	kW	Tj = bivalent temperature	COPd	1.44	-
Tj = operation limit temperature (***)	Pdh	4.8	kW	Tj = operation limit temperature (***)	COPd	1.43	-
Tj = − 15 °C (if TOL < − 20 °C)	Pdh	5.2	kW	Tj = − 15 °C (if TOL < − 20 °C)	COPd	1.44	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	1.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	5100	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	120	%
Daily electricity consumption	Qelec	4.090	kWh				
Annual electricity consumption	AEC	900	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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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.

(***) 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-SHWM60VAA(-BS)
	Indoor unit:	EHST20D-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:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	138	%
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	3.6	kW	Tj = - 7 °C	COPd	3.21	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.8	kW	Tj = + 2 °C	COPd	3.93	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.5	kW	Tj = + 7 °C	COPd	5.42	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.56	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	5.1	kW	Tj = bivalent temperature	COPd	2.22	-
Tj = operation limit temperature (***)	Pdh	4.8	kW	Tj = operation limit temperature (***)	COPd	1.82	-
Tj = − 15 °C (if TOL < − 20 °C)	Pdh	5.2	kW	Tj = − 15 °C (if TOL < − 20 °C)	COPd	2.29	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	1.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	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 / 55	dBA				
Annual energy consumption	Q _{HE}	4197	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	120	%
Daily electricity consumption	Qelec	4.090	kWh				
Annual electricity consumption	AEC	900	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-SHWM60VAA(-BS)
	Indoor unit:	EHST20D-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:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	159	%
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	Pdh	6.0	kW	Tj = + 2 °C	COPd	1.91	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	3.9	kW	Tj = + 7 °C	COPd	3.36	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.5	kW	Tj = +12 °C	COPd	6.16	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	1.91	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	1.91	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	1975	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	η_{wh}	162	%
Daily electricity consumption	Qelec	3.070	kWh				
Annual electricity consumption	AEC	675	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-SHWM60VAA(-BS)
	Indoor unit:	EHST20D-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:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	220	%
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	Pdh	6.0	kW	Tj = + 2 °C	COPd	3.80	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	5.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.7	kW	Tj = +12 °C	COPd	7.58	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	3.80	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	3.80	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	1439	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	162	%
Daily electricity consumption	Qelec	3.070	kWh				
Annual electricity consumption	AEC	675	kWh				

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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.

(***) 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-SHWM60VAA(-BS)
	Indoor unit:	ERST17D-****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:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	134	%
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	5.3	kW	Tj = - 7 °C	COPd	2.14	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.3	kW	Tj = + 2 °C	COPd	3.23	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.3	kW	Tj = + 7 °C	COPd	4.91	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	6.89	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	2.02	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	2.02	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	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 / 55	dBA				
Annual energy consumption	Q _{HE}	3631	kWh				

For heat pump combination heater:

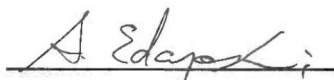
Declared load profile	L			Water heating energy efficiency	η_{wh}	136	%
Daily electricity consumption	Qelec	3.630	kWh				
Annual electricity consumption	AEC	798	kWh				

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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-SHWM60VAA(-BS)
	Indoor unit:	ERST17D-****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:		yes
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	ηs	178	%
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	5.3	kW	Tj = - 7 °C	COPd	3.29	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.7	kW	Tj = + 2 °C	COPd	4.45	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.1	kW	Tj = + 7 °C	COPd	5.67	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.2	kW	Tj = +12 °C	COPd	7.80	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	3.21	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	3.21	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW		Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	2743	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	136	%
Daily electricity consumption	Qelec	3.630	kWh				
Annual electricity consumption	AEC	798	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-SHWM60VAA(-BS)
	Indoor unit:	ERST17D-****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:		yes
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	113	%
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	3.6	kW	Tj = - 7 °C	COPd	2.62	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 °C	COPd	3.40	-
Tj = + 2 °C	Pdh	3.5	kW	Tj = + 7 °C	COPd	5.05	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	7.00	-
Tj = + 7 °C	Pdh	4.3	kW	Tj = bivalent temperature	COPd	1.44	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.43	-
Tj = +12 °C	Pdh	3.1	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	1.44	-
Degradation co-efficient (**)	Cdh	0.97	-	Operation limit temperature	TOL	-28	°C
Tj = bivalent temperature	Pdh	5.1	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = operation limit temperature (***)	Pdh	4.8	kW				
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	5.2	kW				
Bivalent temperature	Tbiv	-16	°C				
Reference design conditions for space heating	Tdesignh	-22	°C				
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	1.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	5100	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	112	%
Daily electricity consumption	Qelec	4.400	kWh				
Annual electricity consumption	AEC	968	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-SHWM60VAA(-BS)
	Indoor unit:	ERST17D-****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:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	ηs	138	%
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	3.6	kW	Tj = - 7 °C	COPd	3.21	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.8	kW	Tj = + 2 °C	COPd	3.93	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.5	kW	Tj = + 7 °C	COPd	5.42	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.56	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	5.1	kW	Tj = bivalent temperature	COPd	2.22	-
Tj = operation limit temperature (***)	Pdh	4.8	kW	Tj = operation limit temperature (***)	COPd	1.82	-
Tj = − 15 °C (if TOL < − 20 °C)	Pdh	5.2	kW	Tj = − 15 °C (if TOL < − 20 °C)	COPd	2.29	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	1.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	4197	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	112	%
Daily electricity consumption	Qelec	4.400	kWh				
Annual electricity consumption	AEC	968	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.

Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

Atsushi EDAYOSHI

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Manager, Quality Assurance Department

UNITED KINGDOM

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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.

(***) 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-SHWM60VAA(-BS)
	Indoor unit:	ERST17D-****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:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	159	%
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	Pdh	6.0	kW	Tj = + 2 °C	COPd	1.91	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	3.9	kW	Tj = + 7 °C	COPd	3.36	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.5	kW	Tj = +12 °C	COPd	6.16	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	1.91	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	1.91	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	1975	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	154	%
Daily electricity consumption	Qelec	3.220	kWh				
Annual electricity consumption	AEC	709	kWh				

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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.

(***) 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-SHWM60VAA(-BS)
	Indoor unit:	ERST17D-****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:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	220	%
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	Pdh	6.0	kW	Tj = + 2 °C	COPd	3.80	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	5.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.7	kW	Tj = +12 °C	COPd	7.58	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	3.80	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	3.80	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	1439	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	154	%
Daily electricity consumption	Qelec	3.220	kWh				
Annual electricity consumption	AEC	709	kWh				

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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.

(***) 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-SHWM60VAA(-BS)
	Indoor unit:	ERST20D-****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:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	134	%
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	5.3	kW	Tj = - 7 °C	COPd	2.14	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.3	kW	Tj = + 2 °C	COPd	3.23	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.3	kW	Tj = + 7 °C	COPd	4.91	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	6.89	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	2.02	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	2.02	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable		Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA			
Annual energy consumption	Q _{HE}	3631	kWh			

For heat pump combination heater:

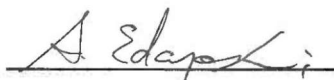
Declared load profile	L		Water heating energy efficiency	η_{wh}	148	%
Daily electricity consumption	Qelec	3.340	kWh			
Annual electricity consumption	AEC	736	kWh			

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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-SHWM60VAA(-BS)
	Indoor unit:	ERST20D-****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:		yes
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	178	%
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	5.3	kW	Tj = - 7 °C	COPd	3.29	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.7	kW	Tj = + 2 °C	COPd	4.45	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.1	kW	Tj = + 7 °C	COPd	5.67	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.2	kW	Tj = +12 °C	COPd	7.80	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	3.21	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	3.21	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	2743	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	148	%
Daily electricity consumption	Qelec	3.340	kWh				
Annual electricity consumption	AEC	736	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-SHWM60VAA(-BS)
	Indoor unit:	ERST20D-****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:		yes
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	113	%
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	3.6	kW	Tj = - 7 °C	COPd	2.62	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.5	kW	Tj = + 2 °C	COPd	3.40	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.3	kW	Tj = + 7 °C	COPd	5.05	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.00	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	5.1	kW	Tj = bivalent temperature	COPd	1.44	-
Tj = operation limit temperature (***)	Pdh	4.8	kW	Tj = operation limit temperature (***)	COPd	1.43	-
Tj = − 15 °C (if TOL < − 20 °C)	Pdh	5.2	kW	Tj = − 15 °C (if TOL < − 20 °C)	COPd	1.44	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	1.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	5100	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	120	%
Daily electricity consumption	Qelec	4.090	kWh				
Annual electricity consumption	AEC	900	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-SHWM60VAA(-BS)
	Indoor unit:	ERST20D-****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:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	138	%
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}	3.6	kW	T _j = - 7 °C	COP _d	3.21	-
Degradation co-efficient (**)	C _{dh}	0.99	-	T _j = + 2 °C	COP _d	3.93	-
T _j = + 2 °C	P _{dh}	3.8	kW	T _j = + 7 °C	COP _d	5.42	-
Degradation co-efficient (**)	C _{dh}	0.98	-	T _j = +12 °C	COP _d	7.56	-
T _j = + 7 °C	P _{dh}	4.5	kW	T _j = bivalent temperature	COP _d	2.22	-
Degradation co-efficient (**)	C _{dh}	0.98	-	T _j = operation limit temperature (***)	COP _d	1.82	-
T _j = +12 °C	P _{dh}	3.1	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	2.29	-
Degradation co-efficient (**)	C _{dh}	0.96	-	Operation limit temperature	TOL	-28	°C
T _j = bivalent temperature	P _{dh}	5.1	kW	Heating water operating limit temperature	WTOL	60	°C
T _j = operation limit temperature (***)	P _{dh}	4.8	kW				
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	5.2	kW				
Bivalent temperature	T _{biv}	-16	°C				
Reference design conditions for space heating	T _{designh}	-22	°C				
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	1.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	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 / 55	dBA				
Annual energy consumption	Q _{HE}	4197	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	120	%
Daily electricity consumption	Q _{elec}	4.090	kWh				
Annual electricity consumption	AEC	900	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-SHWM60VAA(-BS)
	Indoor unit:	ERST20D-****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:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	159	%
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	Pdh	6.0	kW	Tj = + 2 °C	COPd	1.91	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	3.9	kW	Tj = + 7 °C	COPd	3.36	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.5	kW	Tj = +12 °C	COPd	6.16	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	1.91	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	1.91	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	1975	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	162	%
Daily electricity consumption	Qelec	3.070	kWh				
Annual electricity consumption	AEC	675	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

· 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(Tj).

(**) 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-SHWM60VAA(-BS)
	Indoor unit:	ERST20D-****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:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.0	kW	Seasonal space heating energy efficiency	η_s	220	%
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	Pdh	6.0	kW	Tj = + 2 °C	COPd	3.80	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	5.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.7	kW	Tj = +12 °C	COPd	7.58	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	3.80	-
Tj = operation limit temperature (***)	Pdh	6.0	kW	Tj = operation limit temperature (***)	COPd	3.80	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 55	dBA				
Annual energy consumption	Q _{HE}	1439	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	162	%
Daily electricity consumption	Qelec	3.070	kWh				
Annual electricity consumption	AEC	675	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.