



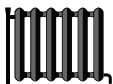
# ENERG

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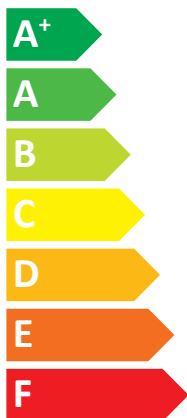
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Indoor unit E\*ST30C-\*\*D  
Outdoor unit PUHZ-SHW112YAA(-BS)



A++



A



40 dB



60 dB



- 11 kW
- 13 kW**
- 11 kW

2019

811/2013

BH79V003K15

1. SPACE HEATER

1	2	For medium-temperature application											For low-temperature application																
		3	6	8	11	9	13	15	16	21	22	17	18	25	4	6	8	11	9	13	15	16	21	22	17	18	25		
Outdoor unit	Indoor unit	Medium-temperature application		Medium-temperature application											Low-temperature application		Low-temperature application												
		Rated heat output under average climate conditions	Seasonal space heating energy efficiency class	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions		
		kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%
PUHZ-SW75VAA (BS)	EHSC****C	✓	A++	7	129	4435	40	6	7	107	155	5378	2408	58	✓	A++	7	162	3607	40	6	7	129	219	4472	1731	58		
	ERSC****C	✓	A++	7	132	4352	40	6	7	109	158	5274	2352	58	✓	A++	7	166	3525	40	6	7	132	226	4382	1678	58		
	EHSD****C	✓	A++	7	129	4435	40	6	7	107	155	5378	2408	58	✓	A++	7	162	3607	40	6	7	129	219	4472	1731	58		
	ERSD****C	✓	A++	7	132	4352	40	6	7	109	158	5274	2352	58	✓	A++	7	166	3525	40	6	7	132	226	4382	1678	58		
	EHSD****D	✓	A++	7	129	4435	41	6	7	107	155	5378	2408	58	✓	A++	7	162	3607	41	6	7	129	219	4472	1731	58		

2. COMBINATION HEATER

1	2	For medium-temperature application													For low-temperature application																																										
		3	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25												
Outdoor unit	Indoor unit	Medium-temperature application		Medium-temperature application											Low-temperature application		Low-temperature application																																								
		Rated heat output under average climate conditions	Seasonal space heating energy efficiency class	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions														
		kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%	kW	%
PUHZ-SW75VAA (BS)	EHST20D****C2	✓	L	A++	7	4435	751	129	145	40	-	6	7	5378	2408	880	682	107	155	123	161	58	✓	L	A++	A+	7	3607	751	162	145	40	-	6	7	4472	1731	880	682	129	219	123	161	58													
	ERST20D****C2	✓	L	A++	7	4352	751	132	145	40	-	6	7	5274	2352	880	682	109	158	123	161	58	✓	L	A++	A+	7	3525	751	166	145	40	-	6	7	4382	1678	880	682	132	226	123	161	58													
	EHST20C****C(W)	✓	L	A++	7	4435	1040	129	104	40	-	6	7	5378	2408	1288	947	107	155	83	114	58	✓	L	A++	A	7	3607	1040	162	104	40	-	6	7	4472	1731	1288	947	129	219	83	114	58													
	ERST20C****C(W)	✓	L	A++	7	4352	1040	132	104	40	-	6	7	5274	2352	1288	947	109	158	83	114	58	✓	L	A++	A	7	3525	1040	166	104	40	-	6	7	4382	1678	1288	947	132	226	83	114	58													
	EHST20D****D	✓	L	A++	7	4435	1040	129	104	40	-	6	7	5378	2408	1288	947	107	155	83	114	58	✓	L	A++	A	7	3607	1040	162	104	40	-	6	7	4472	1731	1288	947	129	219	83	114	58													



**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST30C-****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.

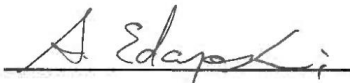
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.7	kW	Seasonal space heating energy efficiency	$\eta_s$	135	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	11.2	kW	Tj = - 7 °C	COPd	2.12	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 °C	COPd	3.31	-
Tj = + 2 °C	Pdh	6.8	kW	Tj = + 7 °C	COPd	4.79	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	6.12	-
Tj = + 7 °C	Pdh	4.7	kW	Tj = bivalent temperature	COPd	2.12	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.03	-
Tj = +12 °C	Pdh	5.3	kW	Operation limit temperature	TOL	-28	°C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	11.2	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.9	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 <sub>OFF</sub>			
Thermostat-off mode				P <sub>TO</sub>			
Standby mode				P <sub>SB</sub>			
Crankcase heater mode				P <sub>CK</sub>			

Capacity control	variable			Rated air flow rate, outdoors	-	2700	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	40 / 60	dBA				
Annual energy consumption	Q <sub>HE</sub>	7621	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	120	%	
Daily electricity consumption	Q <sub>elec</sub>	6.580	kWh				
Annual electricity consumption	AEC	1448	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.

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST30C-****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	13.9	kW	Seasonal space heating energy efficiency	$\eta_s$	169	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	12.3	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.15	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	4.06	-
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	7.5	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.56	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.45	-
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	3.15	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-	T <sub>j</sub> = operation limit temperature (***)	COP <sub>d</sub>	2.90	-
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	5.6	kW	Operation limit temperature	TOL	-28	°C
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-	Heating water operating limit temperature	WTOL	60	°C
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	12.3	kW	Supplementary heater			
T <sub>j</sub> = operation limit temperature (***)	P <sub>dh</sub>	11.8	kW	Rated heat output (*)	P <sub>sup</sub>	2.1	kW
Bivalent temperature	T <sub>biv</sub>	-7	°C	Type of energy input	Electrical		
Reference design conditions for space heating	T <sub>designh</sub>	-10	°C	Power consumption in modes other than active mode			
Off mode				P <sub>OFF</sub>			
Thermostat-off mode				P <sub>TO</sub>			
Standby mode				P <sub>SB</sub>			
Crankcase heater mode				P <sub>CK</sub>			

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2700	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	40 / 60	dBA				
Annual energy consumption	Q <sub>HE</sub>	6667	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	120	%	
Daily electricity consumption	Q <sub>elec</sub>	6.580	kWh				
Annual electricity consumption	AEC	1448	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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Manager, Quality Assurance Department

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 P<sub>designh</sub>, and the rated heat output of a supplementary heater P<sub>sup</sub> is equal to the supplementary capacity for heating sup(T<sub>j</sub>).

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

(\*\*\*) If the declared TOL is lower than the T<sub>designh</sub> of the considered climate then the outdoor dry bulb temperature T<sub>j</sub> is equal to T<sub>designh</sub>.

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST30C-****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	10.7	kW	Seasonal space heating energy efficiency	$\eta_s$	122	%
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	6.5	kW	Tj = - 7 °C	COPd	3.00	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 °C	COPd	3.35	-
Tj = + 2 °C	Pdh	3.9	kW	Tj = + 7 °C	COPd	4.50	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 °C	COPd	6.28	-
Tj = + 7 °C	Pdh	3.5	kW	Tj = bivalent temperature	COPd	1.86	-
Degradation co-efficient (**)	Cdh	0.97	-	Tj = operation limit temperature (***)	COPd	1.63	-
Tj = +12 °C	Pdh	4.2	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	1.98	-
Degradation co-efficient (**)	Cdh	0.97	-	Operation limit temperature	TOL	-28	°C
Tj = bivalent temperature	Pdh	9.0	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = operation limit temperature (***)	Pdh	9.0	kW	Supplementary heater			
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	8.7	kW	Rated heat output (*)	Psup	1.7	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 <sub>OFF</sub>			
Thermostat-off mode				P <sub>TO</sub>			
Standby mode				P <sub>SB</sub>			
Crankcase heater mode				P <sub>CK</sub>			

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2700	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	40 / 60	dBA				
Annual energy consumption	Q <sub>HE</sub>	8427	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	93	%	
Daily electricity consumption	Q <sub>elec</sub>	8.430	kWh				
Annual electricity consumption	AEC	1855	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:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST30C-****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	13.9	kW	Seasonal space heating energy efficiency	$\eta_s$	163	%
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	8.4	kW	Tj = - 7 °C	COPd	4.22	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 °C	COPd	4.38	-
Tj = + 2 °C	Pdh	5.1	kW	Tj = + 7 °C	COPd	5.38	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 °C	COPd	7.00	-
Tj = + 7 °C	Pdh	3.6	kW	Tj = bivalent temperature	COPd	2.62	-
Degradation co-efficient (**)	Cdh	0.97	-	Tj = operation limit temperature (***)	COPd	2.01	-
Tj = +12 °C	Pdh	4.3	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	2.80	-
Degradation co-efficient (**)	Cdh	0.96	-	Operation limit temperature	TOL	-28	°C
Tj = bivalent temperature	Pdh	11.7	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = operation limit temperature (***)	Pdh	10.4	kW	Supplementary heater			
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	11.3	kW	Rated heat output (*)	Psup	3.5	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 <sub>OFF</sub>			
Thermostat-off mode				P <sub>TO</sub>			
Standby mode				P <sub>SB</sub>			
Crankcase heater mode				P <sub>CK</sub>			

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2700	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	40 / 60	dBA				
Annual energy consumption	Q <sub>HE</sub>	8244	kWh				

For heat pump combination heater:							
Declared load profile				XL			
Daily electricity consumption	Qelec	8.430	kWh	Water heating energy efficiency			
Annual electricity consumption	AEC	1855	kWh	$\eta_{wh}$	93	%	

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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:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST30C-****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	11.2	kW	Seasonal space heating energy efficiency	$\eta_s$	157	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>d,h</sub>	-	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	-	-
Degradation co-efficient (**)	C <sub>d,h</sub>	-	-	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	2.29	-
T <sub>j</sub> = + 2 °C	P <sub>d,h</sub>	11.2	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	3.46	-
Degradation co-efficient (**)	C <sub>d,h</sub>	1.00	-	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	5.32	-
T <sub>j</sub> = + 7 °C	P <sub>d,h</sub>	7.2	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.29	-
Degradation co-efficient (**)	C <sub>d,h</sub>	0.99	-	T <sub>j</sub> = operation limit temperature (***)	COP <sub>d</sub>	2.29	-
T <sub>j</sub> = +12 °C	P <sub>d,h</sub>	4.1	kW	Operation limit temperature	TOL	-28	°C
Degradation co-efficient (**)	C <sub>d,h</sub>	0.97	-	Heating water operating limit temperature	WTOL	60	°C
T <sub>j</sub> = bivalent temperature	P <sub>d,h</sub>	11.2	kW	Supplementary heater			
T <sub>j</sub> = operation limit temperature (***)	P <sub>d,h</sub>	11.2	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW
Bivalent temperature	T <sub>biv</sub>	2	°C	Type of energy input	Electrical		
Reference design conditions for space heating	T <sub>designh</sub>	2	°C	Power consumption in modes other than active mode			
Power consumption in modes other than active mode				Off mode			
Off mode	P <sub>OFF</sub>	0.022	kW	Thermostat-off mode	P <sub>TO</sub>	0.022	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW	Standby mode	P <sub>SB</sub>	0.022	kW
Standby mode	P <sub>SB</sub>	0.022	kW	Crankcase heater mode	P <sub>CK</sub>	0.000	kW
Crankcase heater mode	P <sub>CK</sub>	0.000	kW	Other items			

Capacity control	variable			Rated air flow rate, outdoors	-	2700	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	40 / 60	dBA				
Annual energy consumption	Q <sub>HE</sub>	3745	kWh				

For heat pump combination heater:				Water heating energy efficiency	$\eta_{wh}$	127	%
Declared load profile	XL						
Daily electricity consumption	Q <sub>elec</sub>	6.220	kWh				
Annual electricity consumption	AEC	1368	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

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

(\*\*\*) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature T<sub>j</sub> is equal to T designh.



**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST30C-****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	11.2	kW	Seasonal space heating energy efficiency	$\eta_s$	216	%
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	3.22	-
Tj = + 2 °C	Pdh	11.2	kW	Tj = + 7 °C	COPd	5.27	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	6.75	-
Tj = + 7 °C	Pdh	7.2	kW	Tj = bivalent temperature	COPd	3.22	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	3.22	-
Tj = +12 °C	Pdh	4.3	kW	Operation limit temperature	TOL	-28	°C
Degradation co-efficient (**)	Cdh	0.97	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	11.2	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	11.2	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 <sub>OFF</sub>			
Thermostat-off mode				P <sub>TO</sub>			
Standby mode				P <sub>SB</sub>			
Crankcase heater mode				P <sub>CK</sub>			

Other items				Rated air flow rate, outdoors	-	2700	m <sup>3</sup> /h
Capacity control	variable						
Sound power level, indoors/outdoors	L <sub>WA</sub>	40 / 60	dBA				
Annual energy consumption	Q <sub>HE</sub>	2732	kWh				

For heat pump combination heater:				Water heating energy efficiency	$\eta_{wh}$	127	%
Declared load profile	XL						
Daily electricity consumption	Q <sub>elec</sub>	6.220	kWh				
Annual electricity consumption	AEC	1368	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:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST30C-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.

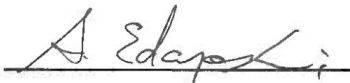
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.7	kW	Seasonal space heating energy efficiency	$\eta_s$	135	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	11.2	kW	Tj = - 7 °C	COPd	2.12	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 °C	COPd	3.31	-
Tj = + 2 °C	Pdh	6.8	kW	Tj = + 7 °C	COPd	4.79	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	6.12	-
Tj = + 7 °C	Pdh	4.7	kW	Tj = bivalent temperature	COPd	2.12	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.03	-
Tj = +12 °C	Pdh	5.3	kW	Operation limit temperature	TOL	-28	°C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	11.2	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.9	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 <sub>OFF</sub>			
Thermostat-off mode				P <sub>TO</sub>			
Standby mode				P <sub>SB</sub>			
Crankcase heater mode				P <sub>CK</sub>			

Capacity control	variable			Rated air flow rate, outdoors	-	2700	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	40 / 60	dBA				
Annual energy consumption	Q <sub>HE</sub>	7621	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	120	%	
Daily electricity consumption	Q <sub>elec</sub>	6.580	kWh				
Annual electricity consumption	AEC	1448	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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Atsushi EDAYOSHI  
 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:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST30C-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	13.9	kW	Seasonal space heating energy efficiency	$\eta_s$	169	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	12.3	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.15	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	4.06	-
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	7.5	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.56	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	7.45	-
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	5.0	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	3.15	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-	T <sub>j</sub> = operation limit temperature (***)	COP <sub>d</sub>	2.90	-
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	5.6	kW	Operation limit temperature	TOL	-28	°C
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-	Heating water operating limit temperature	WTOL	60	°C
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	12.3	kW	Supplementary heater			
T <sub>j</sub> = operation limit temperature (***)	P <sub>dh</sub>	11.8	kW	Rated heat output (*)	P <sub>sup</sub>	2.1	kW
Bivalent temperature	T <sub>biv</sub>	-7	°C	Type of energy input	Electrical		
Reference design conditions for space heating	T <sub>designh</sub>	-10	°C	Power consumption in modes other than active mode			
Off mode				P <sub>OFF</sub>			
Thermostat-off mode				P <sub>TO</sub>			
Standby mode				P <sub>SB</sub>			
Crankcase heater mode				P <sub>CK</sub>			
Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2700	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	40 / 60	dBA				
Annual energy consumption	Q <sub>HE</sub>	6667	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	120	%	
Daily electricity consumption	Q <sub>elec</sub>	6.580	kWh				
Annual electricity consumption	AEC	1448	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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Atsushi EDAYOSHI

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Manager, Quality Assurance Department

UNITED KINGDOM

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

 (\*\*\*) If the declared TOL is lower than the T<sub>designh</sub> of the considered climate then the outdoor dry bulb temperature T<sub>j</sub> is equal to T<sub>designh</sub>.

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST30C-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	10.7	kW	Seasonal space heating energy efficiency	$\eta_s$	122	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>d,h</sub>	6.5	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.00	-
Degradation co-efficient (**)	C <sub>d,h</sub>	0.99	-	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.35	-
T <sub>j</sub> = + 2 °C	P <sub>d,h</sub>	3.9	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.50	-
Degradation co-efficient (**)	C <sub>d,h</sub>	0.98	-	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.28	-
T <sub>j</sub> = + 7 °C	P <sub>d,h</sub>	3.5	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.86	-
Degradation co-efficient (**)	C <sub>d,h</sub>	0.97	-	T <sub>j</sub> = operation limit temperature (***)	COP <sub>d</sub>	1.63	-
T <sub>j</sub> = +12 °C	P <sub>d,h</sub>	4.2	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	1.98	-
Degradation co-efficient (**)	C <sub>d,h</sub>	0.97	-	Operation limit temperature	TOL	-28	°C
T <sub>j</sub> = bivalent temperature	P <sub>d,h</sub>	9.0	kW	Heating water operating limit temperature	WTOL	60	°C
T <sub>j</sub> = operation limit temperature (***)	P <sub>d,h</sub>	9.0	kW	Supplementary heater			
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>d,h</sub>	8.7	kW	Rated heat output (*)	P <sub>sup</sub>	1.7	kW
Bivalent temperature	T <sub>biv</sub>	-16	°C	Type of energy input	Electrical		
Reference design conditions for space heating	T <sub>designh</sub>	-22	°C	Power consumption in modes other than active mode			
Off mode				P <sub>OFF</sub>	0.022	kW	
Thermostat-off mode				P <sub>TO</sub>	0.022	kW	
Standby mode				P <sub>SB</sub>	0.022	kW	
Crankcase heater mode				P <sub>CK</sub>	0.000	kW	

Other items				Rated air flow rate, outdoors	-	2700	m <sup>3</sup> /h
Capacity control	variable						
Sound power level, indoors/outdoors	L <sub>WA</sub>	40 / 60	dBA				
Annual energy consumption	Q <sub>HE</sub>	8427	kWh				

For heat pump combination heater:				Water heating energy efficiency	$\eta_{wh}$	93	%
Declared load profile	XL						
Daily electricity consumption	Q <sub>elec</sub>	8.430	kWh				
Annual electricity consumption	AEC	1855	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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Manager, Quality Assurance Department

UNITED KINGDOM

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

(\*\*\*) If the declared TOL is lower than the T<sub>designh</sub> of the considered climate then the outdoor dry bulb temperature T<sub>j</sub> is equal to T<sub>designh</sub>.

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST30C-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	13.9	kW	Seasonal space heating energy efficiency	$\eta_s$	163	%
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	8.4	kW	Tj = - 7 °C	COPd	4.22	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 °C	COPd	4.38	-
Tj = + 2 °C	Pdh	5.1	kW	Tj = + 7 °C	COPd	5.38	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 °C	COPd	7.00	-
Tj = + 7 °C	Pdh	3.6	kW	Tj = bivalent temperature	COPd	2.62	-
Degradation co-efficient (**)	Cdh	0.97	-	Tj = operation limit temperature (***)	COPd	2.01	-
Tj = +12 °C	Pdh	4.3	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	2.80	-
Degradation co-efficient (**)	Cdh	0.96	-	Operation limit temperature	TOL	-28	°C
Tj = bivalent temperature	Pdh	11.7	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = operation limit temperature (***)	Pdh	10.4	kW	Supplementary heater			
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	11.3	kW	Rated heat output (*)	Psup	3.5	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			
Power consumption in modes other than active mode				Off mode			
Off mode	P <sub>OFF</sub>	0.022	kW	Thermostat-off mode	P <sub>TO</sub>	0.022	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW	Standby mode	P <sub>SB</sub>	0.022	kW
Standby mode	P <sub>SB</sub>	0.022	kW	Crankcase heater mode	P <sub>CK</sub>	0.000	kW
Crankcase heater mode	P <sub>CK</sub>	0.000	kW	Other items			

Capacity control	variable			Rated air flow rate, outdoors	-	2700	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	40 / 60	dBA				
Annual energy consumption	Q <sub>HE</sub>	8244	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	93	%	
Daily electricity consumption	Q <sub>elec</sub>	8.430	kWh				
Annual electricity consumption	AEC	1855	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:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST30C-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	11.2	kW	Seasonal space heating energy efficiency	$\eta_s$	157	%
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	2.29	-
Tj = + 2 °C	Pdh	11.2	kW	Tj = + 7 °C	COPd	3.46	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 °C	COPd	5.32	-
Tj = + 7 °C	Pdh	7.2	kW	Tj = bivalent temperature	COPd	2.29	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	2.29	-
Tj = +12 °C	Pdh	4.1	kW	Operation limit temperature	TOL	-28	°C
Degradation co-efficient (**)	Cdh	0.97	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	11.2	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	11.2	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 <sub>OFF</sub>			
Thermostat-off mode				P <sub>TO</sub>			
Standby mode				P <sub>SB</sub>			
Crankcase heater mode				P <sub>CK</sub>			
Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2700	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	40 / 60	dBA				
Annual energy consumption	Q <sub>HE</sub>	3745	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	127	%	
Daily electricity consumption	Qelec	6.220	kWh				
Annual electricity consumption	AEC	1368	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:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST30C-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	11.2	kW	Seasonal space heating energy efficiency	$\eta_s$	216	%
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	3.22	-
Tj = + 2 °C	Pdh	11.2	kW	Tj = + 7 °C	COPd	5.27	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	6.75	-
Tj = + 7 °C	Pdh	7.2	kW	Tj = bivalent temperature	COPd	3.22	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	3.22	-
Tj = +12 °C	Pdh	4.3	kW	Operation limit temperature	TOL	-28	°C
Degradation co-efficient (**)	Cdh	0.97	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	11.2	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	11.2	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 <sub>OFF</sub>	0.022	kW	Thermostat-off mode	P <sub>TO</sub>	0.022	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW	Standby mode	P <sub>SB</sub>	0.022	kW
Standby mode	P <sub>SB</sub>	0.022	kW	Crankcase heater mode	P <sub>CK</sub>	0.000	kW
Crankcase heater mode	P <sub>CK</sub>	0.000	kW	Other items			
Capacity control				Rated air flow rate, outdoors			
variable				-			
Sound power level, indoors/outdoors	L <sub>WA</sub>	40 / 60	dBA	2700			
Annual energy consumption	Q <sub>HE</sub>	2732	kWh	m <sup>3</sup> /h			

For heat pump combination heater:							
Declared load profile	XL			Water heating energy efficiency	$\eta_{wh}$	127	%
Daily electricity consumption	Qelec	6.220	kWh				
Annual electricity consumption	AEC	1368	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 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.