

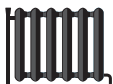


ENERG
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Indoor unit
Outdoor unit

E*ST17/20D-****D
PUZ-SHWM80YAA



A⁺⁺⁺

A⁺⁺

A⁺

A

B

C

D

A⁺⁺



A⁺

A

B

C

D

E

F

A⁺



41 dB



54 dB



08 kW
08 kW
08 kW

2019

811/2013

DG79V341H12

	1	2	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	Seasonal space heating energy efficiency class	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	For space heating, annual energy consumption under average climate conditions	Sound power level L _{WA} , indoor	Rated heat output under colder climate conditions	Rated heat output under warmer climate conditions	Seasonal space heating energy efficiency under warmer climate conditions	Seasonal space heating energy efficiency under colder climate conditions	For space heating, annual energy consumption under warmer climate conditions	Sound power level L _{WA} , outdoor	Low-temperature application	Seasonal space heating energy efficiency class	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	For space heating, annual energy consumption under average climate conditions	Sound power level L _{WA} , indoor	Rated heat output under colder climate conditions	Rated heat output under warmer climate conditions	Seasonal space heating energy efficiency under warmer climate conditions	Seasonal space heating energy efficiency under colder climate conditions	For space heating, annual energy consumption under warmer climate conditions	Sound power level L _{WA} , outdoor		
				kW	%	kWh	dB	kW	kW	%	%	%	kWh	dB		kW	%	kWh	dB	kW	kW	%	%	%	kWh	dB		
	PUZ-SWM60VAA	EHS-D-***** ERS-D-*****	✓ ✓	A++ A++	6 128	3834 3779	41 41	6 6	6 112	155 5147	2093 2027	54 54	✓ ✓	A+++ A+++	6 181	2701 2646	41 6	6 136	218 4251	4284 1453	54 54	6 6	135 208	208 4284	1519 54	54		
	PUZ-SWM80VAA	EHS-D-***** ERS-D-*****	✓ ✓	A++ A++	8 129	5016 4961	41 41	6 8	8 112	167 6857	2517 547	54 54	✓ ✓	A+++ A+++	8 181	3599 3543	41 8	8 142	219 5427	5460 1862	54 54	8 8	141 227	219 5427	5460 1862	54		
	PUZ-SWM80YAA	EHS-D-***** ERS-D-*****	✓ ✓	A++ A++	8 128	5053 4972	41 41	8 8	8 112	160 6875	2629 547	54 54	✓ ✓	A+++ A+++	8 179	3636 3555	41 8	8 142	214 5444	5493 1876	54 54	8 8	141 225	214 5444	5493 1876	54		
	PUZ-SWM100VAA	EHS-D-***** ERS-D-*****	✓ ✓	A++ A++	10 132	6106 6101	41 41	10 10	10 109	156 8780	3362 3295	58 58	✓ ✓	A+++ A+++	10 180	4564 4509	41 10	10 147	225 6555	2411 2302	58 58	10 10	142 229	225 6555	2411 2302	58		
	PUZ-SWM100YAA	EHS-D-***** ERS-D-*****	✓ ✓	A++ A++	10 132	6141 6061	41 41	10 10	10 109	154 8791	3406 3308	58 58	✓ ✓	A+++ A+++	10 180	4600 4519	41 10	10 147	229 6565	2411 2314	58 58	10 10	146 228	229 6565	2411 2314	58		
	PUZ-SWM120VAA	EHS-D-***** ERS-D-*****	✓ ✓	A++ A++	12 131	7450 7395	41 41	12 12	12 109	154 10640	4157 4049	58 58	✓ ✓	A+++ A+++	12 178	5566 5511	41 12	12 141	221 8257	2882 2816	58 58	12 12	141 227	221 8257	2882 2816	58		
	PUZ-SWM120YAA	EHS-D-***** ERS-D-*****	✓ ✓	A++ A++	12 132	7404 7404	41 41	12 12	12 109	156 10649	4060 4060	58 58	✓ ✓	A+++ A+++	12 178	5520 5481	41 12	12 141	226 8267	2825 2825	58 58	12 12	141 226	226 8267	2825 2825	58		
	PUZ-SWM140VAA	EHS-D-***** ERS-D-*****	✓ ✓	A++ A++	14 134	8438 8383	41 41	14 14	14 105	154 12843	4893 4826	58 58	✓ ✓	A+++ A+++	14 175	6483 6428	41 14	14 132	219 10250	3367 3301	58 58	14 14	132 224	219 10217	3367 3301	58		
	PUZ-SWM140YAA	EHS-D-***** ERS-D-*****	✓ ✓	A++ A++	14 134	8473 8392	41 41	14 14	14 105	149 12819	4937 4837	58 58	✓ ✓	A+++ A+++	14 175	6517 6437	41 14	14 132	223 10226	3430 3310	58 58	14 14	131 223	223 10226	3430 3310	58		
	PUZ-SHMV60VAA	EHS-D-***** ERS-D-*****	✓ ✓	A++ A++	6 129	3761 3706	41 41	6 6	6 115	159 165	4993 4960	1980 1914	54 54	✓ ✓	A+++ A+++	6 184	2655 2600	41 6	6 138	220 231	4202 4168	54 54	6 6	138 231	220 4168	4202 4174	54	
	PUZ-SHMV80VAA	EHS-D-***** ERS-D-*****	✓ ✓	A++ A++	8 132	4904 4849	41 41	8 8	8 115	1																		

1	2	3	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	Dedicated load profile	Seasonal space heating energy efficiency class	Water heating energy efficiency class	Rated heat output under average climate conditions					For space heating, annual energy consumption under average climate conditions					For water heating, annual energy consumption under average climate conditions					Water heating energy efficiency under average climate conditions																								
						kW		kWh		kWh		%		kW		kWh		kWh		%		kW		kWh		kWh		%																	
						kW	kWh	kWh	%	kWh	%	kWh	%	kWh	%	kWh	%	kWh	%	kWh	%	kWh	%	kWh	%	kWh	%	kWh	%																
PUZ-SWM60VAA	EHST17D-****	✓	L	A++	A+	6	3834	880	126	134	41	-	6	6	5181	2093	1060	846	111	150	105	135	54	✓	L	A+++	A+	6	2701	880	181	134	41	-	6	6	4284	1519	1060	846	135	208	105	135	54
	ERST17D-****	✓	L	A++	A+	6	3779	880	128	134	41	-	6	6	5147	2027	1060	846	112	155	105	135	54	✓	L	A+++	A+	6	2646	880	184	134	41	-	6	6	4251	1453	1060	846	136	218	105	135	54
	ERST17D-****BD	✓	L	A++	A+	6	3779	880	128	134	41	-	6	6	5147	2027	1060	846	112	155	105	135	54	✓	L	A+++	A+	6	2646	880	184	134	41	-	6	6	4251	1453	1060	846	136	218	105	135	54
	EHST20D-****	✓	L	A++	A+	6	3834	898	126	134	41	-	6	6	5181	2093	1044	841	111	150	109	139	54	✓	L	A+++	A+	6	2701	898	181	134	41	-	6	6	4284	1519	1044	841	135	208	109	139	54
	ERST20D-****	✓	L	A++	A+	6	3779	898	128	134	41	-	6	6	5147	2027	1044	841	112	155	109	139	54	✓	L	A+++	A+	6	2646	898	184	134	41	-	6	6	4251	1453	1044	841	136	218	109	139	54
PUZ-SWM80VAA	EHST30D-****	✓	XL	A++	A+	6	3834	1417	126	123	41	-	6	6	5181	2093	1759	1176	111	150	98	149	54	✓	XL	A+++	A+	6	2701	1417	181	123	41	-	6	6	4284	1519	1759	1176	135	208	98	149	54
	ERST30D-****	✓	XL	A++	A+	6	3779	1417	128	123	41	-	6	6	5147	2027	1759	1176	112	155	98	149	54	✓	XL	A+++	A+	6	2646	1417	184	123	41	-	6	6	4251	1453	1759	1176	136	218	98	149	54
	EHST17D-****	✓	L	A++	A+	8	5016	880	129	134	41	-	8	8	6890	2584	1060	846	111	162	105	135	54	✓	L	A+++	A+	8	3599	880	181	134	41	-	8	8	5460	1928	1060	846	141	219	105	135	54
	ERST17D-****	✓	L	A++	A+	8	4961	880	130	134	41	-	8	8	6857	2517	1060	846	112	167	105	135	54	✓	L	A+++	A+	8	3543	880	184	134	41	-	8	8	5427	1862	1060	846	142	227	105	135	54
	ERST17D-****BD	✓	L	A++	A+	8	4961	880	130	134	41	-	8	8	6857	2517	1060	846	112	167	105	135	54	✓	L	A+++	A+	8	3543	880	184	134	41	-	8	8	5427	1862	1060	846	142	227	105	135	54
PUZ-SWM80YAA	EHST20D-****	✓	L	A++	A+	8	5016	898	129	134	41	-	8	8	6890	2584	1044	841																											

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	131	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.1	kW	Tj = - 7 °C	COPd	2.31	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.4	kW	Tj = + 2 °C	COPd	3.21	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	2.8	kW	Tj = +12 °C	COPd	6.09	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	1.83	-
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	1.83	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	4941	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Q _{elec}	4.000	kWh				
Annual electricity consumption	AEC	880	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY Manisa OSB 4.Kisim Keciikoyosb Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusemre – Manisa, Turkey

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



Kenichi SAITO
Manager, Quality Assurance Department
TURKEY

* 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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	ηs	182	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.1	kW	Tj = - 7 °C	COPd	3.22	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.4	kW	Tj = + 2 °C	COPd	4.75	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	5.0	kW	Tj = + 7 °C	COPd	5.90	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	3.0	kW	Tj = +12 °C	COPd	6.52	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	2.65	-
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	2.65	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable		Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB			
Annual energy consumption	Q _{HE}	3568	kWh			

For heat pump combination heater:

Declared load profile	L		Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Q _{elec}	4.000	kWh			
Annual electricity consumption	AEC	880	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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	114	%
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	4.9	kW	Tj = - 7 °C	COPd	2.65	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.0	kW	Tj = + 2 °C	COPd	3.45	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.3	kW	Tj = + 7 °C	COPd	4.78	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	6.74	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	6.7	kW	Tj = bivalent temperature	COPd	1.51	-
Tj = operation limit temperature (***)	Pdh	5.3	kW	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	6.5	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.51	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	2.7	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	6737	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	105	%
Daily electricity consumption	Q _{elec}	4.820	kWh				
Annual electricity consumption	AEC	1060	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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	145	%
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	4.8	kW	Tj = - 7 °C	COPd	3.53	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 2 °C	Pdh	4.0	kW	Tj = + 2 °C	COPd	4.30	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.5	kW	Tj = + 7 °C	COPd	5.56	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.56	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	6.7	kW	Tj = bivalent temperature	COPd	2.05	-
Tj = operation limit temperature (***)	Pdh	5.4	kW	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	6.5	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.05	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	2.6	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	5332	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	105	%
Daily electricity consumption	Q _{elec}	4.820	kWh				
Annual electricity consumption	AEC	1060	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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	η_s	164	%
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}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	8.0	kW	T _j = + 2 °C	COP _d	2.05	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	5.2	kW	T _j = + 7 °C	COP _d	3.60	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	4.5	kW	T _j = +12 °C	COP _d	6.02	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = bivalent temperature	P _{dh}	8.0	kW	T _j = bivalent temperature	COP _d	2.05	-
T _j = operation limit temperature (***)	P _{dh}	8.0	kW	T _j = operation limit temperature (***)	COP _d	2.05	-
Bivalent temperature	T _{biv}	2	°C	Operation limit temperature	TOL	-30	°C
Reference design conditions for space heating	T _{designh}	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input		Electrical	
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	2566	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	135	%
Daily electricity consumption	Q _{elec}	3.850	kWh				
Annual electricity consumption	AEC	846	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY Manisa OSB 4.Kisim Keciikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre – Manisa, Turkey

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Kenichi SAITO

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Manager, Quality Assurance Department

TURKEY

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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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	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	8.0	kW	Tj = + 2 °C	COPd	3.75	-	
Degradation co-efficient (**)	Cdh	0.99	-					
Tj = + 7 °C	Pdh	5.1	kW	Tj = + 7 °C	COPd	5.20	-	
Degradation co-efficient (**)	Cdh	0.98	-					
Tj = +12 °C	Pdh	4.7	kW	Tj = +12 °C	COPd	7.34	-	
Degradation co-efficient (**)	Cdh	0.97	-					
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	3.75	-	
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	3.75	-	
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW	
Thermostat-off mode	P _{TO}	0.022	kW					
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical			
Crankcase heater mode	P _{CK}	0.000	kW					

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	1920	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	135	%
Daily electricity consumption	Q _{elec}	3.850	kWh				
Annual electricity consumption	AEC	846	kWh				

Contact details

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	131	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.1	kW	Tj = - 7 °C	COPd	2.31	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.4	kW	Tj = + 2 °C	COPd	3.21	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	2.8	kW	Tj = +12 °C	COPd	6.09	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	1.83	-
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	1.83	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	4941	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Q _{elec}	4.080	kWh				
Annual electricity consumption	AEC	898	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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	182	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.1	kW	Tj = - 7 °C	COPd	3.22	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.4	kW	Tj = + 2 °C	COPd	4.75	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	5.0	kW	Tj = + 7 °C	COPd	5.90	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	3.0	kW	Tj = +12 °C	COPd	6.52	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	2.65	-
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	2.65	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input		Electrical	
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable		Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB			
Annual energy consumption	Q _{HE}	3568	kWh			

For heat pump combination heater:

Declared load profile	L		Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Q _{elec}	4.080	kWh			
Annual electricity consumption	AEC	898	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.

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	114	%
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	4.9	kW	Tj = - 7 °C	COPd	2.65	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.0	kW	Tj = + 2 °C	COPd	3.45	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.3	kW	Tj = + 7 °C	COPd	4.78	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	6.74	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	6.7	kW	Tj = bivalent temperature	COPd	1.51	-
Tj = operation limit temperature (***)	Pdh	5.3	kW	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	6.5	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.51	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	P _{sup}	2.7	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	6737	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	109	%
Daily electricity consumption	Q _{elec}	4.750	kWh				
Annual electricity consumption	AEC	1044	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.

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	145	%
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	4.8	kW	Tj = - 7 °C	COPd	3.53	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 2 °C	Pdh	4.0	kW	Tj = + 2 °C	COPd	4.30	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.5	kW	Tj = + 7 °C	COPd	5.56	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.56	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	6.7	kW	Tj = bivalent temperature	COPd	2.05	-
Tj = operation limit temperature (***)	Pdh	5.4	kW	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	6.5	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.05	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	2.6	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	5332	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	109	%
Daily electricity consumption	Q _{elec}	4.750	kWh				
Annual electricity consumption	AEC	1044	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:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	η_s	164	%
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}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	8.0	kW	T _j = + 2 °C	COP _d	2.05	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	5.2	kW	T _j = + 7 °C	COP _d	3.60	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	4.5	kW	T _j = +12 °C	COP _d	6.02	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = bivalent temperature	P _{dh}	8.0	kW	T _j = bivalent temperature	COP _d	2.05	-
T _j = operation limit temperature (***)	P _{dh}	8.0	kW	T _j = operation limit temperature (***)	COP _d	2.05	-
Bivalent temperature	T _{biv}	2	°C	Operation limit temperature	TOL	-30	°C
Reference design conditions for space heating	T _{designh}	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input		Electrical	
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	2566	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	139	%
Daily electricity consumption	Q _{elec}	3.820	kWh				
Annual electricity consumption	AEC	841	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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	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	8.0	kW	Tj = + 2 °C	COPd	3.75	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.1	kW	Tj = + 7 °C	COPd	5.20	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.7	kW	Tj = +12 °C	COPd	7.34	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	3.75	-
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	3.75	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	1920	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	139	%
Daily electricity consumption	Q _{elec}	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY Manisa OSB 4.Kisim Keciikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre – Manisa, Turkey

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

Kenichi SAITO

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

Manager, Quality Assurance Department

TURKEY

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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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	131	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.1	kW	Tj = - 7 °C	COPd	2.31	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.4	kW	Tj = + 2 °C	COPd	3.21	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	2.8	kW	Tj = +12 °C	COPd	6.09	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	1.83	-
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	1.83	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	4941	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Q _{elec}	4.080	kWh				
Annual electricity consumption	AEC	898	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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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	182	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.1	kW	Tj = - 7 °C	COPd	3.22	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.4	kW	Tj = + 2 °C	COPd	4.75	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	5.0	kW	Tj = + 7 °C	COPd	5.90	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	3.0	kW	Tj = +12 °C	COPd	6.52	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	2.65	-
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	2.65	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input		Electrical	
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable		Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB			
Annual energy consumption	Q _{HE}	3568	kWh			

For heat pump combination heater:

Declared load profile	L		Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Q _{elec}	4.080	kWh			
Annual electricity consumption	AEC	898	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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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	114	%
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 Tj			
Tj = - 7 °C	Pdh	4.9	kW	Tj = - 7 °C	COPd	2.65	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.0	kW	Tj = + 2 °C	COPd	3.45	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.3	kW	Tj = + 7 °C	COPd	4.78	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	6.74	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	6.7	kW	Tj = bivalent temperature	COPd	1.51	-
Tj = operation limit temperature (***)	Pdh	5.3	kW	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	6.5	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.51	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	2.7	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	6737	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	109	%
Daily electricity consumption	Q _{elec}	4.750	kWh				
Annual electricity consumption	AEC	1044	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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	145	%
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	4.8	kW	Tj = - 7 °C	COPd	3.53	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 2 °C	Pdh	4.0	kW	Tj = + 2 °C	COPd	4.30	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.5	kW	Tj = + 7 °C	COPd	5.56	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.56	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	6.7	kW	Tj = bivalent temperature	COPd	2.05	-
Tj = operation limit temperature (***)	Pdh	5.4	kW	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	6.5	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.05	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	2.6	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	5332	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	109	%
Daily electricity consumption	Q _{elec}	4.750	kWh				
Annual electricity consumption	AEC	1044	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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	164	%	
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	8.0	kW	Tj = + 2 °C	COPd	2.05	-	
Degradation co-efficient (**)	Cdh	0.99	-					
Tj = + 7 °C	Pdh	5.2	kW	Tj = + 7 °C	COPd	3.60	-	
Degradation co-efficient (**)	Cdh	0.99	-					
Tj = +12 °C	Pdh	4.5	kW	Tj = +12 °C	COPd	6.02	-	
Degradation co-efficient (**)	Cdh	0.97	-					
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	2.05	-	
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	2.05	-	
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW	
Thermostat-off mode	P _{TO}	0.022	kW					
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical			
Crankcase heater mode	P _{CK}	0.000	kW					

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	2566	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	139	%
Daily electricity consumption	Q _{elec}	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

Contact details

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	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	8.0	kW	Tj = + 2 °C	COPd	3.75	-	
Degradation co-efficient (**)	Cdh	0.99	-					
Tj = + 7 °C	Pdh	5.1	kW	Tj = + 7 °C	COPd	5.20	-	
Degradation co-efficient (**)	Cdh	0.98	-					
Tj = +12 °C	Pdh	4.7	kW	Tj = +12 °C	COPd	7.34	-	
Degradation co-efficient (**)	Cdh	0.97	-					
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	3.75	-	
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	3.75	-	
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW	
Thermostat-off mode	P _{TO}	0.022	kW					
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical			
Crankcase heater mode	P _{CK}	0.000	kW					
Other items								
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h	
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB					
Annual energy consumption	Q _{HE}	1920	kWh					

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	139	%
Daily electricity consumption	Q _{elec}	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

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

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

(***) 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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	Indoor unit:	ERST17D-***BD
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	8.0	kW	Seasonal space heating energy efficiency	ηs	133	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.1	kW	Tj = - 7 °C	COPd	2.31	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.4	kW	Tj = + 2 °C	COPd	3.21	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	2.8	kW	Tj = +12 °C	COPd	6.09	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	1.83	-
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	1.83	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	4860	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Q _{elec}	4.000	kWh				
Annual electricity consumption	AEC	880	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY Manisa OSB 4.Kisim Keciikoyosb Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusemre – Manisa, Turkey

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



Kenichi SAITO
Manager, Quality Assurance Department
TURKEY

* 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.

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

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This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	Indoor unit:	ERST17D-***BD
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	8.0	kW	Seasonal space heating energy efficiency	ηs	187	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.1	kW	Tj = - 7 °C	COPd	3.22	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.4	kW	Tj = + 2 °C	COPd	4.75	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	5.0	kW	Tj = + 7 °C	COPd	5.90	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	3.0	kW	Tj = +12 °C	COPd	6.52	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	2.65	-
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	2.65	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	3487	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Q _{elec}	4.000	kWh				
Annual electricity consumption	AEC	880	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusemre – Manisa, Turkey

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Kenichi SAITO

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Manager, Quality Assurance Department

TURKEY

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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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	Indoor unit:	ERST17D-***BD
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	8.0	kW	Seasonal space heating energy efficiency	ηs	115	%
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	4.9	kW	Tj = - 7 °C	COPd	2.65	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.0	kW	Tj = + 2 °C	COPd	3.45	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.3	kW	Tj = + 7 °C	COPd	4.78	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	6.74	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	6.7	kW	Tj = bivalent temperature	COPd	1.51	-
Tj = operation limit temperature (***)	Pdh	5.3	kW	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	6.5	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.51	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	2.7	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	6689	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	105	%
Daily electricity consumption	Q _{elec}	4.820	kWh				
Annual electricity consumption	AEC	1060	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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	Indoor unit:	ERST17D-***BD
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	8.0	kW	Seasonal space heating energy efficiency	ηs	146	%
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	4.8	kW	Tj = - 7 °C	COPd	3.53	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 2 °C	Pdh	4.0	kW	Tj = + 2 °C	COPd	4.30	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.5	kW	Tj = + 7 °C	COPd	5.56	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.56	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	6.7	kW	Tj = bivalent temperature	COPd	2.05	-
Tj = operation limit temperature (***)	Pdh	5.4	kW	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	6.5	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.05	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	2.6	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	5284	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	105	%
Daily electricity consumption	Q _{elec}	4.820	kWh				
Annual electricity consumption	AEC	1060	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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	Indoor unit:	ERST17D-***BD
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	8.0	kW	Seasonal space heating energy efficiency	η_s	170	%
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}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	8.0	kW	T _j = + 2 °C	COP _d	2.05	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	5.2	kW	T _j = + 7 °C	COP _d	3.60	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	4.5	kW	T _j = +12 °C	COP _d	6.02	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = bivalent temperature	P _{dh}	8.0	kW	T _j = bivalent temperature	COP _d	2.05	-
T _j = operation limit temperature (***)	P _{dh}	8.0	kW	T _j = operation limit temperature (***)	COP _d	2.05	-
Bivalent temperature	T _{biv}	2	°C	Operation limit temperature	TOL	-30	°C
Reference design conditions for space heating	T _{designh}	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	2469	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	135	%
Daily electricity consumption	Q _{elec}	3.850	kWh				
Annual electricity consumption	AEC	846	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY Manisa OSB 4.Kisim Keciikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre – Manisa, Turkey

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Kenichi SAITO
Manager, Quality Assurance Department
TURKEY

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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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	Indoor unit:	ERST17D-***BD
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	8.0	kW	Seasonal space heating energy efficiency	η_s	232	%
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}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	8.0	kW	T _j = + 2 °C	COP _d	3.75	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	5.1	kW	T _j = + 7 °C	COP _d	5.20	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = +12 °C	P _{dh}	4.7	kW	T _j = +12 °C	COP _d	7.34	-
Degradation co-efficient (**)	C _{dh}	0.97	-				
T _j = bivalent temperature	P _{dh}	8.0	kW	T _j = bivalent temperature	COP _d	3.75	-
T _j = operation limit temperature (***)	P _{dh}	8.0	kW	T _j = operation limit temperature (***)	COP _d	3.75	-
Bivalent temperature	T _{biv}	2	°C	Operation limit temperature	TOL	-30	°C
Reference design conditions for space heating	T _{designh}	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	1823	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	135	%
Daily electricity consumption	Q _{elec}	3.850	kWh				
Annual electricity consumption	AEC	846	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY Manisa OSB 4.Kisim Keciikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre – Manisa, Turkey

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Manager, Quality Assurance Department
TURKEY

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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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	133	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.1	kW	Tj = - 7 °C	COPd	2.31	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.4	kW	Tj = + 2 °C	COPd	3.21	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	2.8	kW	Tj = +12 °C	COPd	6.09	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	1.83	-
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	1.83	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	4860	kWh				


For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Q _{elec}	4.000	kWh				
Annual electricity consumption	AEC	880	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY Manisa OSB 4.Kisim Keciikoyosb Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusemre – Manisa, Turkey

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



Kenichi SAITO
Manager, Quality Assurance Department
TURKEY

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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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	187	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.1	kW	Tj = - 7 °C	COPd	3.22	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.4	kW	Tj = + 2 °C	COPd	4.75	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	5.0	kW	Tj = + 7 °C	COPd	5.90	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	3.0	kW	Tj = +12 °C	COPd	6.52	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	2.65	-
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	2.65	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input		Electrical	
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable		Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB			
Annual energy consumption	Q _{HE}	3487	kWh			

For heat pump combination heater:

Declared load profile	L		Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Q _{elec}	4.000	kWh			
Annual electricity consumption	AEC	880	kWh			

Contact details

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	115	%
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	4.9	kW	Tj = - 7 °C	COPd	2.65	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.0	kW	Tj = + 2 °C	COPd	3.45	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.3	kW	Tj = + 7 °C	COPd	4.78	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	6.74	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	6.7	kW	Tj = bivalent temperature	COPd	1.51	-
Tj = operation limit temperature (***)	Pdh	5.3	kW	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	6.5	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.51	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	2.7	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	6689	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	105	%
Daily electricity consumption	Q _{elec}	4.820	kWh				
Annual electricity consumption	AEC	1060	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.

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	146	%
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	4.8	kW	Tj = - 7 °C	COPd	3.53	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 2 °C	Pdh	4.0	kW	Tj = + 2 °C	COPd	4.30	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.5	kW	Tj = + 7 °C	COPd	5.56	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.56	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	6.7	kW	Tj = bivalent temperature	COPd	2.05	-
Tj = operation limit temperature (***)	Pdh	5.4	kW	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	6.5	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.05	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	2.6	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	5284	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	105	%
Daily electricity consumption	Q _{elec}	4.820	kWh				
Annual electricity consumption	AEC	1060	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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This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	170	%		
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	8.0	kW	Tj = + 2 °C	COPd	2.05	-		
Degradation co-efficient (**)	Cdh	0.99	-						
Tj = + 7 °C	Pdh	5.2	kW	Tj = + 7 °C	COPd	3.60	-		
Degradation co-efficient (**)	Cdh	0.99	-						
Tj = +12 °C	Pdh	4.5	kW	Tj = +12 °C	COPd	6.02	-		
Degradation co-efficient (**)	Cdh	0.97	-						
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	2.05	-		
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	2.05	-		
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW		
Thermostat-off mode	P _{TO}	0.022	kW						
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical				
Crankcase heater mode	P _{CK}	0.000	kW						

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	2469	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	135	%
Daily electricity consumption	Q _{elec}	3.850	kWh				
Annual electricity consumption	AEC	846	kWh				

Contact details

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

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This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	232	%	
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	8.0	kW	Tj = + 2 °C	COPd	3.75	-	
Degradation co-efficient (**)	Cdh	0.99	-					
Tj = + 7 °C	Pdh	5.1	kW	Tj = + 7 °C	COPd	5.20	-	
Degradation co-efficient (**)	Cdh	0.98	-					
Tj = +12 °C	Pdh	4.7	kW	Tj = +12 °C	COPd	7.34	-	
Degradation co-efficient (**)	Cdh	0.97	-					
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	3.75	-	
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	3.75	-	
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW	
Thermostat-off mode	P _{TO}	0.022	kW					
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical			
Crankcase heater mode	P _{CK}	0.000	kW					
Other items								
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h	
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB					
Annual energy consumption	Q _{HE}	1823	kWh					

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	135	%
Daily electricity consumption	Q _{elec}	3.850	kWh				
Annual electricity consumption	AEC	846	kWh				

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	133	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.1	kW	Tj = - 7 °C	COPd	2.31	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.4	kW	Tj = + 2 °C	COPd	3.21	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	2.8	kW	Tj = +12 °C	COPd	6.09	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	1.83	-
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	1.83	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	4860	kWh				

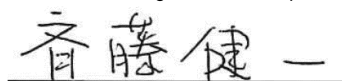
For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Q _{elec}	4.080	kWh				
Annual electricity consumption	AEC	898	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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This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	187	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.1	kW	Tj = - 7 °C	COPd	3.22	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.4	kW	Tj = + 2 °C	COPd	4.75	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	5.0	kW	Tj = + 7 °C	COPd	5.90	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	3.0	kW	Tj = +12 °C	COPd	6.52	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	2.65	-
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	2.65	-
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable		Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB			
Annual energy consumption	Q _{HE}	3487	kWh			

For heat pump combination heater:

Declared load profile	L		Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Q _{elec}	4.080	kWh			
Annual electricity consumption	AEC	898	kWh			

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusemre – Manisa, Turkey

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

Kenichi SAITO

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Manager, Quality Assurance Department

TURKEY

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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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	115	%
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	4.9	kW	Tj = - 7 °C	COPd	2.65	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	4.0	kW	Tj = + 2 °C	COPd	3.45	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.3	kW	Tj = + 7 °C	COPd	4.78	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	6.74	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	6.7	kW	Tj = bivalent temperature	COPd	1.51	-
Tj = operation limit temperature (***)	Pdh	5.3	kW	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	6.5	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.51	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	2.7	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	6689	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	109	%
Daily electricity consumption	Q _{elec}	4.750	kWh				
Annual electricity consumption	AEC	1044	kWh				

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	146	%
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	4.8	kW	Tj = - 7 °C	COPd	3.53	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 2 °C	Pdh	4.0	kW	Tj = + 2 °C	COPd	4.30	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.5	kW	Tj = + 7 °C	COPd	5.56	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	3.1	kW	Tj = +12 °C	COPd	7.56	-
Degradation co-efficient (**)	Cdh	0.95	-				
Tj = bivalent temperature	Pdh	6.7	kW	Tj = bivalent temperature	COPd	2.05	-
Tj = operation limit temperature (***)	Pdh	5.4	kW	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	6.5	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.05	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	2.6	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	5284	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	109	%
Daily electricity consumption	Q _{elec}	4.750	kWh				
Annual electricity consumption	AEC	1044	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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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	170	%	
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	8.0	kW	Tj = + 2 °C	COPd	2.05	-	
Degradation co-efficient (**)	Cdh	0.99	-					
Tj = + 7 °C	Pdh	5.2	kW	Tj = + 7 °C	COPd	3.60	-	
Degradation co-efficient (**)	Cdh	0.99	-					
Tj = +12 °C	Pdh	4.5	kW	Tj = +12 °C	COPd	6.02	-	
Degradation co-efficient (**)	Cdh	0.97	-					
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	2.05	-	
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	2.05	-	
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW	
Thermostat-off mode	P _{TO}	0.022	kW					
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical			
Crankcase heater mode	P _{CK}	0.000	kW					

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2220	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB				
Annual energy consumption	Q _{HE}	2469	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	139	%
Daily electricity consumption	Q _{elec}	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

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Model(s):	Outdoor unit:	PUZ-SHWM80YAA
	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	8.0	kW	Seasonal space heating energy efficiency	ηs	232	%	
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	8.0	kW	Tj = + 2 °C	COPd	3.75	-	
Degradation co-efficient (**)	Cdh	0.99	-					
Tj = + 7 °C	Pdh	5.1	kW	Tj = + 7 °C	COPd	5.20	-	
Degradation co-efficient (**)	Cdh	0.98	-					
Tj = +12 °C	Pdh	4.7	kW	Tj = +12 °C	COPd	7.34	-	
Degradation co-efficient (**)	Cdh	0.97	-					
Tj = bivalent temperature	Pdh	8.0	kW	Tj = bivalent temperature	COPd	3.75	-	
Tj = operation limit temperature (***)	Pdh	8.0	kW	Tj = operation limit temperature (***)	COPd	3.75	-	
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-30	°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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW	
Thermostat-off mode	P _{TO}	0.022	kW					
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical			
Crankcase heater mode	P _{CK}	0.000	kW					
Other items								
Capacity control	variable			Rated air flow rate, outdoors	-	2220	m³/h	
Sound power level, indoors/outdoors	L _{WA}	41 / 54	dB					
Annual energy consumption	Q _{HE}	1823	kWh					

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	139	%
Daily electricity consumption	Q _{elec}	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

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