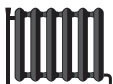




ENERG  
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Indoor unit E\*ST20D-\*\*\*\*D  
Outdoor unit PUZ-SHWM140YAA



A+++

A++

A+

A

B

C

D

A++



A+

A

B

C

D

E

F

A+



41 dB



58 dB



- 14 kW
- 14 kW
- 14 kW

2019

811/2013

DG79V341H18

[illegible]





**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM140VAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	141	%
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	12.4	kW	Tj = - 7 °C	COPd	2.18	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	7.5	kW	Tj = + 2 °C	COPd	3.49	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	6.3	kW	Tj = + 7 °C	COPd	4.85	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	3.9	kW	Tj = +12 °C	COPd	6.61	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	14.0	kW	Tj = bivalent temperature	COPd	1.92	-
Tj = operation limit temperature (***)	Pdh	14.0	kW	Tj = operation limit temperature (***)	COPd	1.92	-
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 <sub>OFF</sub>	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	8021	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	123	%
Daily electricity consumption	Q <sub>elec</sub>	4.380	kWh				
Annual electricity consumption	AEC	965	kWh				

**Contact details**

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY

Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari 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.

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM140VAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	183	%			
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	12.4	kW	Tj = - 7 ° C	COPd	3.00	-			
Degradation co-efficient (**)	Cdh	1.00	-							
Tj = + 2 ° C	Pdh	7.5	kW	Tj = + 2 ° C	COPd	4.59	-			
Degradation co-efficient (**)	Cdh	0.99	-							
Tj = + 7 ° C	Pdh	6.4	kW	Tj = + 7 ° C	COPd	6.00	-			
Degradation co-efficient (**)	Cdh	0.99	-							
Tj = +12 ° C	Pdh	4.1	kW	Tj = +12 ° C	COPd	7.19	-			
Degradation co-efficient (**)	Cdh	0.97	-							
Tj = bivalent temperature	Pdh	14.0	kW	Tj = bivalent temperature	COPd	2.55	-			
Tj = operation limit temperature (***)	Pdh	14.0	kW	Tj = operation limit temperature (***)	COPd	2.55	-			
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 <sub>OFF</sub>	0.015	kW	Rated heat output (*)	Psup	0.0	kW			
Thermostat-off mode	P <sub>TO</sub>	0.015	kW							
Standby mode	P <sub>SB</sub>	0.015	kW							
Crankcase heater mode	P <sub>CK</sub>	0.000	kW							
Other items				Type of energy input						
Capacity control	variable			Electrical						
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA	Rated air flow rate, outdoors						
Annual energy consumption	Q <sub>HE</sub>	6227	kWh	-		2640	m <sup>3</sup> /h			

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	123	%
Daily electricity consumption	Q <sub>elec</sub>	4.380	kWh				
Annual electricity consumption	AEC	965	kWh				

**Contact details**

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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.

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM140VAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	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	8.5	kW	Tj = - 7 °C	COPd	2.63	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 °C	COPd	3.49	-
Tj = + 2 °C	Pdh	5.2	kW	Tj = + 7 °C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	6.92	-
Tj = + 7 °C	Pdh	4.2	kW	Tj = bivalent temperature	COPd	1.53	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.55	-
Tj = +12 °C	Pdh	4.2	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	1.52	-
Degradation co-efficient (**)	Cdh	0.98	-	Operation limit temperature	TOL	-30	°C
Tj = bivalent temperature	Pdh	11.8	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = operation limit temperature (***)	Pdh	10.7	kW				
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	11.4	kW				
Bivalent temperature	Tbiv	-16	°C				
Reference design conditions for space heating	Tdesignh	-22	°C				
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.015	kW	Rated heat output (*)	Psup	3.3	kW
Thermostat-off mode	P <sub>TO</sub>	0.015	kW	Type of energy input	Electrical		
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

**Other items**

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	11650	kWh				

**For heat pump combination heater:**

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	105	%
Daily electricity consumption	Qelec	4.860	kWh				
Annual electricity consumption	AEC	1070	kWh				

**Contact details**

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

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

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM140VAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	153	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	8.3	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.65	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	4.59	-
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.15	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	8.80	-
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	4.6	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.03	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-	T <sub>j</sub> = operation limit temperature (***)	COP <sub>d</sub>	1.79	-
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.3	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	2.05	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.97	-	Operation limit temperature	TOL	-30	°C
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	11.8	kW	Heating water operating limit temperature	WTOL	60	°C
T <sub>j</sub> = operation limit temperature (***)	P <sub>dh</sub>	10.7	kW				
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	11.4	kW				
Bivalent temperature	T <sub>biv</sub>	-16	°C				
Reference design conditions for space heating	T <sub>designh</sub>	-22	°C				
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.015	kW	Rated heat output (*)	P <sub>sup</sub>	3.3	kW
Thermostat-off mode	P <sub>TO</sub>	0.015	kW	Type of energy input	Electrical		
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

**Other items**

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	8841	kWh				

**For heat pump combination heater:**

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	105	%
Daily electricity consumption	Q <sub>elec</sub>	4.860	kWh				
Annual electricity consumption	AEC	1070	kWh				

**Contact details**

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY	Manisa OSB 4.Kisim Kecilikoyosb 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.



**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM140VAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	156	%			
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	14.0	kW	Tj = + 2 ° C	COPd	2.00	—			
Degradation co-efficient (**)	Cdh	1.00	—							
Tj = + 7 ° C	Pdh	8.8	kW	Tj = + 7 ° C	COPd	3.27	—			
Degradation co-efficient (**)	Cdh	0.99	—							
Tj = +12 ° C	Pdh	5.5	kW	Tj = +12 ° C	COPd	5.50	—			
Degradation co-efficient (**)	Cdh	0.99	—							
Tj = bivalent temperature	Pdh	14.0	kW	Tj = bivalent temperature	COPd	2.00	—			
Tj = operation limit temperature (***)	Pdh	14.0	kW	Tj = operation limit temperature (***)	COPd	2.00	—			
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 <sub>OFF</sub>	0.015	kW	Rated heat output (*)	Psup	0.0	kW			
Thermostat-off mode	P <sub>TO</sub>	0.015	kW							
Standby mode	P <sub>SB</sub>	0.015	kW							
Crankcase heater mode	P <sub>CK</sub>	0.000	kW							
Other items				Type of energy input						
Capacity control	variable			Electrical						
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA	Rated air flow rate, outdoors						
Annual energy consumption	Q <sub>HE</sub>	4715	kWh	—		2640	m <sup>3</sup> /h			

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	130	%
Daily electricity consumption	Qelec	4.030	kWh				
Annual electricity consumption	AEC	888	kWh				

**Contact details**

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

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



**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM140VAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	225	%			
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	14.0	kW	Tj = + 2 °C	COPd	3.24	-			
Degradation co-efficient (**)	Cdh	1.00	-							
Tj = + 7 °C	Pdh	9.0	kW	Tj = + 7 °C	COPd	5.15	-			
Degradation co-efficient (**)	Cdh	0.99	-							
Tj = +12 °C	Pdh	5.1	kW	Tj = +12 °C	COPd	7.18	-			
Degradation co-efficient (**)	Cdh	0.98	-							
Tj = bivalent temperature	Pdh	14.0	kW	Tj = bivalent temperature	COPd	3.24	-			
Tj = operation limit temperature (***)	Pdh	14.0	kW	Tj = operation limit temperature (***)	COPd	3.24	-			
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 <sub>OFF</sub>	0.015	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW			
Thermostat-off mode	P <sub>TO</sub>	0.015	kW							
Standby mode	P <sub>SB</sub>	0.015	kW							
Crankcase heater mode	P <sub>CK</sub>	0.000	kW							
Other items				Type of energy input						
Capacity control	variable			Electrical						
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA	Rated air flow rate, outdoors						
Annual energy consumption	Q <sub>HE</sub>	3279	kWh	-	2640	m <sup>3</sup> /h				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	130	%
Daily electricity consumption	Qelec	4.030	kWh				
Annual electricity consumption	AEC	888	kWh				

**Contact details**

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

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	142	%
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	12.4	kW	Tj = - 7 ° C	COPd	2.18	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 ° C	Pdh	7.5	kW	Tj = + 2 ° C	COPd	3.49	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 ° C	Pdh	6.3	kW	Tj = + 7 ° C	COPd	4.85	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 ° C	Pdh	3.9	kW	Tj = +12 ° C	COPd	6.61	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	14.0	kW	Tj = bivalent temperature	COPd	1.92	-
Tj = operation limit temperature (***)	Pdh	14.0	kW	Tj = operation limit temperature (***)	COPd	1.92	-
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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P <sub>T0</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

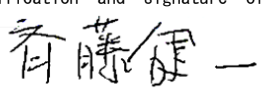
**Other items**

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	7974	kWh				

**For heat pump combination heater:**

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	123	%
Daily electricity consumption	Q <sub>elec</sub>	4.380	kWh				
Annual electricity consumption	AEC	965	kWh				

**Contact details**

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY				Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari 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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• Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

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

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

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	184	%			
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	12.4	kW	Tj = - 7 ° C	COPd	3.00	-			
Degradation co-efficient (**)	Cdh	1.00	-							
Tj = + 2 ° C	Pdh	7.5	kW	Tj = + 2 ° C	COPd	4.59	-			
Degradation co-efficient (**)	Cdh	0.99	-							
Tj = + 7 ° C	Pdh	6.4	kW	Tj = + 7 ° C	COPd	6.00	-			
Degradation co-efficient (**)	Cdh	0.98	-							
Tj = +12 ° C	Pdh	4.1	kW	Tj = +12 ° C	COPd	7.19	-			
Degradation co-efficient (**)	Cdh	0.96	-							
Tj = bivalent temperature	Pdh	14.0	kW	Tj = bivalent temperature	COPd	2.55	-			
Tj = operation limit temperature (***)	Pdh	14.0	kW	Tj = operation limit temperature (***)	COPd	2.55	-			
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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	Psup	0.0	kW			
Thermostat-off mode	P <sub>TO</sub>	0.022	kW							
Standby mode	P <sub>SB</sub>	0.022	kW							
Crankcase heater mode	P <sub>CK</sub>	0.000	kW							
Other items				Type of energy input						
Capacity control	variable			Electrical						
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA	Rated air flow rate, outdoors						
Annual energy consumption	Q <sub>HE</sub>	6181	kWh	-		2640	m <sup>3</sup> /h			

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	123	%
Daily electricity consumption	Q <sub>elec</sub>	4.380	kWh				
Annual electricity consumption	AEC	965	kWh				

**Contact details**

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	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.

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	116	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	8.5	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.63	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.49	-
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.40	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.92	-
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	4.2	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.53	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-	T <sub>j</sub> = operation limit temperature (***)	COP <sub>d</sub>	1.55	-
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.2	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	1.52	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-	Operation limit temperature	TOL	-30	°C
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	11.8	kW	Heating water operating limit temperature	WTOL	60	°C
T <sub>j</sub> = operation limit temperature (***)	P <sub>dh</sub>	10.7	kW				
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	11.4	kW				
Bivalent temperature	T <sub>biv</sub>	-16	°C				
Reference design conditions for space heating	T <sub>designh</sub>	-22	°C				
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	3.3	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW	Type of energy input	Electrical		
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	11625	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	105	%
Daily electricity consumption	Q <sub>elec</sub>	4.860	kWh				
Annual electricity consumption	AEC	1070	kWh				

**Contact details**

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The signature is signed in the average climate / medium-temperature section.	Manager, Quality Assurance Department
	TURKEY

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(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating P<sub>designh</sub>, and the rated heat output of a supplementary heater P<sub>sup</sub> is equal to the supplementary capacity for heating sup(T<sub>j</sub>).

(\*\*) If C<sub>dh</sub> is not determined by measurement then the default degradation coefficient is C<sub>dh</sub> = 0.9.

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	154	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	8.3	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.65	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	4.59	-
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.15	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	8.80	-
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	4.6	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.03	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-	T <sub>j</sub> = operation limit temperature (***)	COP <sub>d</sub>	1.79	-
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.3	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	2.05	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-	Operation limit temperature	TOL	-30	°C
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	11.8	kW	Heating water operating limit temperature	WTOL	60	°C
T <sub>j</sub> = operation limit temperature (***)	P <sub>dh</sub>	10.7	kW				
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	11.4	kW				
Bivalent temperature	T <sub>biv</sub>	-16	°C				
Reference design conditions for space heating	T <sub>designh</sub>	-22	°C				
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	3.3	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW	Type of energy input	Electrical		
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	8816	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	105	%
Daily electricity consumption	Q <sub>elec</sub>	4.860	kWh				
Annual electricity consumption	AEC	1070	kWh				

**Contact details**

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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.



**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	158	%			
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	14.0	kW	Tj = + 2 ° C	COPd	2.00	–			
Degradation co-efficient (**)	Cdh	1.00	–							
Tj = + 7 ° C	Pdh	8.8	kW	Tj = + 7 ° C	COPd	3.27	–			
Degradation co-efficient (**)	Cdh	0.99	–							
Tj = +12 ° C	Pdh	5.5	kW	Tj = +12 ° C	COPd	5.50	–			
Degradation co-efficient (**)	Cdh	0.98	–							
Tj = bivalent temperature	Pdh	14.0	kW	Tj = bivalent temperature	COPd	2.00	–			
Tj = operation limit temperature (***)	Pdh	14.0	kW	Tj = operation limit temperature (***)	COPd	2.00	–			
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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	Psup	0.0	kW			
Thermostat-off mode	P <sub>TO</sub>	0.022	kW							
Standby mode	P <sub>SB</sub>	0.022	kW							
Crankcase heater mode	P <sub>CK</sub>	0.000	kW							
Other items				Type of energy input						
Capacity control	variable			Electrical						
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA	Rated air flow rate, outdoors						
Annual energy consumption	Q <sub>HE</sub>	4659	kWh	–						
				2640						
				m³/h						

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	130	%
Daily electricity consumption	Q <sub>elec</sub>	4.030	kWh				
Annual electricity consumption	AEC	888	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-SHWM140YAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	229	%			
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	14.0	kW	Tj = + 2 ° C	COPd	3.24	-			
Degradation co-efficient (**)	Cdh	1.00	-							
Tj = + 7 ° C	Pdh	9.0	kW	Tj = + 7 ° C	COPd	5.15	-			
Degradation co-efficient (**)	Cdh	0.99	-							
Tj = +12 ° C	Pdh	5.1	kW	Tj = +12 ° C	COPd	7.18	-			
Degradation co-efficient (**)	Cdh	0.97	-							
Tj = bivalent temperature	Pdh	14.0	kW	Tj = bivalent temperature	COPd	3.24	-			
Tj = operation limit temperature (***)	Pdh	14.0	kW	Tj = operation limit temperature (***)	COPd	3.24	-			
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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW			
Thermostat-off mode	P <sub>TO</sub>	0.022	kW							
Standby mode	P <sub>SB</sub>	0.022	kW							
Crankcase heater mode	P <sub>CK</sub>	0.000	kW							
Other items				Type of energy input						
Capacity control	variable			Electrical						
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA	Rated air flow rate, outdoors						
Annual energy consumption	Q <sub>HE</sub>	3222	kWh							

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	130	%
Daily electricity consumption	Q <sub>elec</sub>	4.030	kWh				
Annual electricity consumption	AEC	888	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-SHWM140YAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	141	%
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	12.4	kW	Tj = - 7 °C	COPd	2.18	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	7.5	kW	Tj = + 2 °C	COPd	3.49	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	6.3	kW	Tj = + 7 °C	COPd	4.85	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	3.9	kW	Tj = +12 °C	COPd	6.61	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	14.0	kW	Tj = bivalent temperature	COPd	1.92	-
Tj = operation limit temperature (***)	Pdh	14.0	kW	Tj = operation limit temperature (***)	COPd	1.92	-
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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW				
Standby mode	P <sub>SB</sub>	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	8055	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	123	%
Daily electricity consumption	Qelec	4.380	kWh				
Annual electricity consumption	AEC	965	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY

Manisa OSB 4.Kisim Kencilikoyosb Mah. Ahmet Nazif Zorlu Bulvari 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.

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	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	12.4	kW	Tj = - 7 ° C	COPd	3.00	-			
Degradation co-efficient (**)	Cdh	1.00	-							
Tj = + 2 ° C	Pdh	7.5	kW	Tj = + 2 ° C	COPd	4.59	-			
Degradation co-efficient (**)	Cdh	0.99	-							
Tj = + 7 ° C	Pdh	6.4	kW	Tj = + 7 ° C	COPd	6.00	-			
Degradation co-efficient (**)	Cdh	0.98	-							
Tj = +12 ° C	Pdh	4.1	kW	Tj = +12 ° C	COPd	7.19	-			
Degradation co-efficient (**)	Cdh	0.96	-							
Tj = bivalent temperature	Pdh	14.0	kW	Tj = bivalent temperature	COPd	2.55	-			
Tj = operation limit temperature (***)	Pdh	14.0	kW	Tj = operation limit temperature (***)	COPd	2.55	-			
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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW			
Thermostat-off mode	P <sub>TO</sub>	0.022	kW							
Standby mode	P <sub>SB</sub>	0.022	kW							
Crankcase heater mode	P <sub>CK</sub>	0.000	kW							
Other items				Type of energy input						
Capacity control	variable			Electrical						
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA	Rated air flow rate, outdoors						
Annual energy consumption	Q <sub>HE</sub>	6262	kWh	-	2640	m <sup>3</sup> /h				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	123	%
Daily electricity consumption	Q <sub>elec</sub>	4.380	kWh				
Annual electricity consumption	AEC	965	kWh				

**Contact details**

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

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	115	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	8.5	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	2.63	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	3.49	-
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	4.40	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	6.92	-
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	4.2	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.53	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-	T <sub>j</sub> = operation limit temperature (***)	COP <sub>d</sub>	1.55	-
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.2	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	1.52	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-	Operation limit temperature	TOL	-30	°C
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	11.8	kW	Heating water operating limit temperature	WTOL	60	°C
T <sub>j</sub> = operation limit temperature (***)	P <sub>dh</sub>	10.7	kW				
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	11.4	kW				
Bivalent temperature	T <sub>biv</sub>	-16	°C				
Reference design conditions for space heating	T <sub>designh</sub>	-22	°C				
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	3.3	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW	Type of energy input	Electrical		
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

**Other items**

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	11674	kWh				

**For heat pump combination heater:**

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	105	%
Daily electricity consumption	Q <sub>elec</sub>	4.860	kWh				
Annual electricity consumption	AEC	1070	kWh				

**Contact details**

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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.



**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	153	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7 °C	P <sub>dh</sub>	8.3	kW	T <sub>j</sub> = - 7 °C	COP <sub>d</sub>	3.65	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.99	-	T <sub>j</sub> = + 2 °C	COP <sub>d</sub>	4.59	-
T <sub>j</sub> = + 2 °C	P <sub>dh</sub>	5.2	kW	T <sub>j</sub> = + 7 °C	COP <sub>d</sub>	5.15	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-	T <sub>j</sub> = +12 °C	COP <sub>d</sub>	8.80	-
T <sub>j</sub> = + 7 °C	P <sub>dh</sub>	4.6	kW	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.03	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.98	-	T <sub>j</sub> = operation limit temperature (***)	COP <sub>d</sub>	1.79	-
T <sub>j</sub> = +12 °C	P <sub>dh</sub>	4.3	kW	T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	COP <sub>d</sub>	2.05	-
Degradation co-efficient (**)	C <sub>dh</sub>	0.96	-	Operation limit temperature	TOL	-30	°C
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	11.8	kW	Heating water operating limit temperature	WTOL	60	°C
T <sub>j</sub> = operation limit temperature (***)	P <sub>dh</sub>	10.7	kW				
T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)	P <sub>dh</sub>	11.4	kW				
Bivalent temperature	T <sub>biv</sub>	-16	°C				
Reference design conditions for space heating	T <sub>designh</sub>	-22	°C				
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	3.3	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW	Type of energy input	Electrical		
Standby mode	P <sub>SB</sub>	0.022	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	8865	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	105	%
Daily electricity consumption	Q <sub>elec</sub>	4.860	kWh				
Annual electricity consumption	AEC	1070	kWh				

**Contact details**

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	TURKEY

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(\*\*) If C<sub>dh</sub> is not determined by measurement then the default degradation coefficient is C<sub>dh</sub> = 0.9.

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	154	%			
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	14.0	kW	Tj = + 2 °C	COPd	2.00	-			
Degradation co-efficient (**)	Cdh	1.00	-							
Tj = + 7 °C	Pdh	8.8	kW	Tj = + 7 °C	COPd	3.27	-			
Degradation co-efficient (**)	Cdh	0.99	-							
Tj = +12 °C	Pdh	5.5	kW	Tj = +12 °C	COPd	5.50	-			
Degradation co-efficient (**)	Cdh	0.98	-							
Tj = bivalent temperature	Pdh	14.0	kW	Tj = bivalent temperature	COPd	2.00	-			
Tj = operation limit temperature (***)	Pdh	14.0	kW	Tj = operation limit temperature (***)	COPd	2.00	-			
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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW			
Thermostat-off mode	P <sub>TO</sub>	0.022	kW							
Standby mode	P <sub>SB</sub>	0.022	kW							
Crankcase heater mode	P <sub>CK</sub>	0.000	kW							
Other items				Type of energy input						
Capacity control	variable			Electrical						
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA	Rated air flow rate, outdoors						
Annual energy consumption	Q <sub>HE</sub>	4757	kWh	-						
				2640						
				m³/h						

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	130	%
Daily electricity consumption	Q <sub>elec</sub>	4.030	kWh				
Annual electricity consumption	AEC	888	kWh				

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	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	14.0	kW	Seasonal space heating energy efficiency	$\eta_s$	222	%			
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	14.0	kW	Tj = + 2 °C	COPd	3.24	-			
Degradation co-efficient (**)	Cdh	1.00	-							
Tj = + 7 °C	Pdh	9.0	kW	Tj = + 7 °C	COPd	5.15	-			
Degradation co-efficient (**)	Cdh	0.99	-							
Tj = +12 °C	Pdh	5.1	kW	Tj = +12 °C	COPd	7.18	-			
Degradation co-efficient (**)	Cdh	0.97	-							
Tj = bivalent temperature	Pdh	14.0	kW	Tj = bivalent temperature	COPd	3.24	-			
Tj = operation limit temperature (***)	Pdh	14.0	kW	Tj = operation limit temperature (***)	COPd	3.24	-			
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 <sub>OFF</sub>	0.022	kW	Rated heat output (*)	P <sub>sup</sub>	0.0	kW			
Thermostat-off mode	P <sub>TO</sub>	0.022	kW							
Standby mode	P <sub>SB</sub>	0.022	kW							
Crankcase heater mode	P <sub>CK</sub>	0.000	kW							
Other items				Type of energy input						
Capacity control	variable			Electrical						
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA	Rated air flow rate, outdoors						
Annual energy consumption	Q <sub>HE</sub>	3319	kWh							

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	130	%
Daily electricity consumption	Q <sub>elec</sub>	4.030	kWh				
Annual electricity consumption	AEC	888	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.