

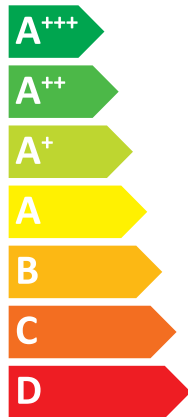
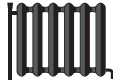


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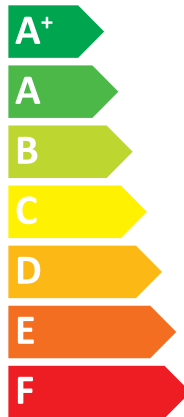
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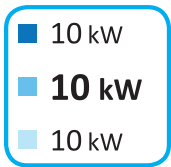
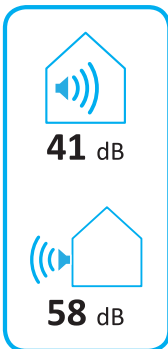
Indoor unit E*ST20D-****D
Outdoor unit PUZ-SHWM100YAA



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A+



2019

811/2013

DG79V341H14



PRODUCT FICHE

Mitsubishi Electric Erp Directive Related Product Information: erp.mitsubishielectric.eu/erp
Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.
This information is based on EU regulation No 811/2013 and No 813/2013.

DG79A02MH01

Table with 25 columns for model variants and 2 rows for outdoor and indoor units. It lists technical specifications for various space heater models under medium and low temperature applications.

Large table with 25 columns for model variants and 2 rows for outdoor and indoor units. It provides detailed technical specifications for combination heaters, including energy efficiency, power, and sound power level data.

English	German	French	Italian	Spanish
Nederlands	Svenska	Dansk	Portuguesa	Espanol
suomi	Cestina	Български	Polski	Ελληνικά
Outdoor unit	Außengerät	unité extérieure	unità esterna	unidad exterior
1	Utomhusenhet	Udenlands enhed	unidad exterior	Εξωτερική μονάδα
Ulkokeskus	Vonkomsjehet	Внешний блок	repositio zewnętrzną	unidad interior
2	Indoor unit	Interiör	unità interna	Interior
Sisäyksykki	Innhusenhet	Interiören	unidad interior	Εσωτερική μονάδα
3	Medium-temperatuur applicatie	Middeltemperatuurtoepassing	repositio wężowa	repositio de media temperatura
keskialueellinen sovellus	Mediitemperatuurtoepassing	średnio-temperaturowe przytoczenie	repositio w średnich temperaturach	repositio de temperatura estacional de calefacción
4	Low-temperature application	Nedertemperatuurtoepassing	repositio w niskiej temperaturze	repositio de baja temperatura
alatalampierokäyttösovellus	Nedertemperatuurtoepassing	paralokowanie w niskiej temperaturze	repositio w niskiej temperaturze	repositio de media temperatura
5	Overdekt laad profile	Auðgerðar laddarprofíll	repositio de alta temperatura	repositio de alta temperatura
Säkringad kabelsystem	Auðgerðar laddarprofíll	Профил де соуджиде дедарде	repositio de medio ambiente	repositio de medio ambiente
6	Seasonal space heating energy efficiency class	De klassen för de järsvekselbedingde Rumhettelaggs-Energieeffizienz	repositio de ambiente	repositio de ambiente
de seizoenruimteverwarming energie-efficiëntieklasse voor ruimteverwarming	De klassen för de järsvekselbedingde Rumhettelaggs-Energieeffizienz	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
7	Water heating energy efficiency class	De klassen för de järsvekselbedingde Rumhettelaggs-Energieeffizienz	repositio de ambiente	repositio de ambiente
de energie-efficiëntieklasse voor waterverwarming	De klassen för de järsvekselbedingde Rumhettelaggs-Energieeffizienz	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
8	Raised heat output under average climate conditions	Die Wärmeleistung bei durchschnittlichen Klimaverhältnissen	repositio de ambiente	repositio de ambiente
de nominale warmteafgifte (onder gemiddelde klimaatomstandigheden)	Die Wärmeleistung bei durchschnittlichen Klimaverhältnissen	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
9	For space heating, annual energy consumption under average climate conditions	Für die Raumheizung, der jährliche Energieverbrauch bei mittleren Klimaverhältnissen	repositio de ambiente	repositio de ambiente
de energie-efficiëntie voor waterverwarming (onder gemiddelde klimaatomstandigheden)	Für die Raumheizung, der jährliche Energieverbrauch bei mittleren Klimaverhältnissen	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
10	For water heating, annual electricity consumption under average climate conditions	Für die Warmwasserbereitung, den jährlichen Stromverbrauch bei durchschnittlichen Klimaverhältnissen	repositio de ambiente	repositio de ambiente
voor waterverwarming, het jaarlijkse elektriciteitsverbruik (onder gemiddelde klimaatomstandigheden)	Für die Warmwasserbereitung, den jährlichen Stromverbrauch bei durchschnittlichen Klimaverhältnissen	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
11	Seasonal space heating energy efficiency under average climate conditions	Die Jahreszeitspezifische Raumhettelaggs-Energieeffizienz bei durchschnittlichen Klimaverhältnissen	repositio de ambiente	repositio de ambiente
de seizoenruimteverwarming energie-efficiëntie voor ruimteverwarming (onder gemiddelde klimaatomstandigheden)	Die Jahreszeitspezifische Raumhettelaggs-Energieeffizienz bei durchschnittlichen Klimaverhältnissen	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
12	Water heating energy efficiency under average climate conditions	Die Warmwasserbereitungs-Energieeffizienz bei durchschnittlichen Klimaverhältnissen	repositio de ambiente	repositio de ambiente
de energie-efficiëntie voor waterverwarming (onder gemiddelde klimaatomstandigheden)	Die Warmwasserbereitungs-Energieeffizienz bei durchschnittlichen Klimaverhältnissen	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
13	Sound power level L _{WA, indoor}	der Schalleistungspegel L _{WA, in Gebäuden}	repositio de ambiente	repositio de ambiente
het geluidswaardeniveau L _{WA, binnen}	der Schalleistungspegel L _{WA, in Gebäuden}	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
14	Wetken uitgesteld in de dalen	hidradna akustičkičko ukošona L _{WA, ve vlnitých prostoraх}	repositio de ambiente	repositio de ambiente
Wetken uitgesteld in de dalen	hidradna akustičkičko ukošona L _{WA, ve vlnitých prostoraх}	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
15	Rated heat output under colder climate conditions	Die Wärmeleistung bei kaltem Klimaverhältnissen	repositio de ambiente	repositio de ambiente
de nominale warmteafgifte onder kouder klimaatomstandigheden	Die Wärmeleistung bei kaltem Klimaverhältnissen	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
16	Rated heat output under warmer climate conditions	Die Wärmeleistung bei wärmeren Klimaverhältnissen	repositio de ambiente	repositio de ambiente
de nominale warmteafgifte onder warmere klimaatomstandigheden	Die Wärmeleistung bei wärmeren Klimaverhältnissen	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
17	For space heating, annual energy consumption under colder climate conditions	Für die Raumheizung, der jährliche Energieverbrauch bei kaltem Klimaverhältnissen	repositio de ambiente	repositio de ambiente
voor ruimteverwarming, het jaarlijkse energieverbruik onder koudere klimaatomstandigheden	Für die Raumheizung, der jährliche Energieverbrauch bei kaltem Klimaverhältnissen	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
18	For space heating, annual energy consumption under warmer climate conditions	Für die Raumheizung, der jährliche Energieverbrauch bei wärmeren Klimaverhältnissen	repositio de ambiente	repositio de ambiente
voor ruimteverwarming, het jaarlijkse energieverbruik onder warmere klimaatomstandigheden	Für die Raumheizung, der jährliche Energieverbrauch bei wärmeren Klimaverhältnissen	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
19	For water heating, annual energy consumption under colder climate conditions	Für die Warmwasserbereitung, den jährlichen Stromverbrauch bei kaltem Klimaverhältnissen	repositio de ambiente	repositio de ambiente
voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder koudere klimaatomstandigheden	Für die Warmwasserbereitung, den jährlichen Stromverbrauch bei kaltem Klimaverhältnissen	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
20	For water heating, annual energy consumption under warmer climate conditions	Für die Warmwasserbereitung, den jährlichen Stromverbrauch bei wärmeren Klimaverhältnissen	repositio de ambiente	repositio de ambiente
voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder warmere klimaatomstandigheden	Für die Warmwasserbereitung, den jährlichen Stromverbrauch bei wärmeren Klimaverhältnissen	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
21	Seasonal space heating energy efficiency under colder climate conditions	Die Jahreszeitspezifische Raumhettelaggs-Energieeffizienz bei kaltem Klimaverhältnissen	repositio de ambiente	repositio de ambiente
de seizoenruimteverwarming energie-efficiëntie voor ruimteverwarming (onder koudere klimaatomstandigheden)	Die Jahreszeitspezifische Raumhettelaggs-Energieeffizienz bei kaltem Klimaverhältnissen	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
22	Seasonal space heating energy efficiency under warmer climate conditions	Die Jahreszeitspezifische Raumhettelaggs-Energieeffizienz bei wärmeren Klimaverhältnissen	repositio de ambiente	repositio de ambiente
de seizoenruimteverwarming energie-efficiëntie voor ruimteverwarming (onder warmere klimaatomstandigheden)	Die Jahreszeitspezifische Raumhettelaggs-Energieeffizienz bei wärmeren Klimaverhältnissen	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
23	Water heating energy efficiency under colder climate conditions	Die Warmwasserbereitungs-Energieeffizienz bei kaltem Klimaverhältnissen	repositio de ambiente	repositio de ambiente
de energie-efficiëntie voor waterverwarming (onder kouder klimaatomstandigheden)	Die Warmwasserbereitungs-Energieeffizienz bei kaltem Klimaverhältnissen	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
24	Water heating energy efficiency under warmer climate conditions	Die Warmwasserbereitungs-Energieeffizienz bei wärmeren Klimaverhältnissen	repositio de ambiente	repositio de ambiente
de energie-efficiëntie voor waterverwarming (onder warmere klimaatomstandigheden)	Die Warmwasserbereitungs-Energieeffizienz bei wärmeren Klimaverhältnissen	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente
25	Sound power level L _{WA, outdoor}	der Schalleistungspegel L _{WA, im Freien}	repositio de ambiente	repositio de ambiente
het geluidswaardeniveau L _{WA, buiten}	der Schalleistungspegel L _{WA, im Freien}	Профил де соуджиде дедарде	repositio de ambiente	repositio de ambiente

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	η_s	135	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	8.9	kW	Tj = - 7 ° C	COPd	2.19	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.38	-
Tj = + 2 ° C	Pdh	5.4	kW	Tj = + 7 ° C	COPd	4.62	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.30	-
Tj = + 7 ° C	Pdh	4.8	kW	Tj = bivalent temperature	COPd	1.69	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.69	-
Tj = +12 ° C	Pdh	2.9	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.95	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	-10	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	5972	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			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
 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-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	η_s	181	%
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	8.9	kW	Tj = - 7 ° C	COPd	3.10	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.62	-
Tj = + 2 ° C	Pdh	5.4	kW	Tj = + 7 ° C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	6.96	-
Tj = + 7 ° C	Pdh	5.2	kW	Tj = bivalent temperature	COPd	2.49	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.49	-
Tj = +12 ° C	Pdh	3.2	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.95	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	-10	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	° C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			
Other items				Rated air flow rate, outdoors			
Capacity control	variable			-			
Sound power level, indoors/outdoors	L _{WA}	41 / 58		2640			
Annual energy consumption	Q _{HE}	4480		m ³ /h			

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 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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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-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	η_s	116	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	6.1	kW	Tj = - 7 ° C	COPd	2.62	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	3.50	-
Tj = + 2 ° C	Pdh	4.0	kW	Tj = + 7 ° C	COPd	4.59	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	6.88	-
Tj = + 7 ° C	Pdh	3.8	kW	Tj = bivalent temperature	COPd	1.57	-
Degradation co-efficient (**)	Cdh	0.97	-	Tj = operation limit temperature (***)	COPd	1.59	-
Tj = +12 ° C	Pdh	4.4	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	1.57	-
Degradation co-efficient (**)	Cdh	0.97	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	8.4	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	8.0	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	8.2	kW	Rated heat output (*)	Psup	2.0	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	8298	kWh				

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

Contact details

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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-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	η_s	149	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	6.2	kW	Tj = - 7 ° C	COPd	3.71	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.35	-
Tj = + 2 ° C	Pdh	4.1	kW	Tj = + 7 ° C	COPd	5.34	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	7.50	-
Tj = + 7 ° C	Pdh	3.9	kW	Tj = bivalent temperature	COPd	2.00	-
Degradation co-efficient (**)	Cdh	0.97	-	Tj = operation limit temperature (***)	COPd	1.57	-
Tj = +12 ° C	Pdh	4.5	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	2.00	-
Degradation co-efficient (**)	Cdh	0.96	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	8.4	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	7.7	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	8.2	kW	Rated heat output (*)	Psup	2.3	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	6508	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	109	%	
Daily electricity consumption	Q _{elec}	4.750	kWh				
Annual electricity consumption	AEC	1044	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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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-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	η_s	162	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	-	kW	Tj = - 7 ° C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-	Tj = + 2 ° C	COPd	2.10	-
Tj = + 2 ° C	Pdh	10.0	kW	Tj = + 7 ° C	COPd	3.53	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	5.75	-
Tj = + 7 ° C	Pdh	6.4	kW	Tj = bivalent temperature	COPd	2.10	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	2.10	-
Tj = +12 ° C	Pdh	4.2	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.97	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	3246	kWh				

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

Contact details
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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-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	η_s	232	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	-	kW	Tj = - 7 ° C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-	Tj = + 2 ° C	COPd	3.50	-
Tj = + 2 ° C	Pdh	10.0	kW	Tj = + 7 ° C	COPd	5.55	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.54	-
Tj = + 7 ° C	Pdh	6.4	kW	Tj = bivalent temperature	COPd	3.50	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	3.50	-
Tj = +12 ° C	Pdh	4.4	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.96	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	2276	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			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.

(***) 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-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	η_s	137	%
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	8.9	kW	Tj = - 7 ° C	COPd	2.19	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.38	-
Tj = + 2 ° C	Pdh	5.4	kW	Tj = + 7 ° C	COPd	4.62	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.30	-
Tj = + 7 ° C	Pdh	4.8	kW	Tj = bivalent temperature	COPd	1.69	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.69	-
Tj = +12 ° C	Pdh	2.9	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.95	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	-10	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	5891	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			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.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	η_s	185	%
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	8.9	kW	Tj = - 7 ° C	COPd	3.10	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.62	-
Tj = + 2 ° C	Pdh	5.4	kW	Tj = + 7 ° C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	6.96	-
Tj = + 7 ° C	Pdh	5.2	kW	Tj = bivalent temperature	COPd	2.49	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.49	-
Tj = +12 ° C	Pdh	3.2	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.95	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	-10	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	° C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58		dBA			
Annual energy consumption	Q _{HE}	4399		kWh			

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			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.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	η_s	117	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	6.1	kW	Tj = - 7 ° C	COPd	2.62	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	3.50	-
Tj = + 2 ° C	Pdh	4.0	kW	Tj = + 7 ° C	COPd	4.59	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	6.88	-
Tj = + 7 ° C	Pdh	3.8	kW	Tj = bivalent temperature	COPd	1.57	-
Degradation co-efficient (**)	Cdh	0.97	-	Tj = operation limit temperature (***)	COPd	1.59	-
Tj = +12 ° C	Pdh	4.4	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	1.57	-
Degradation co-efficient (**)	Cdh	0.97	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	8.4	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	8.0	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	8.2	kW	Rated heat output (*)	Psup	2.0	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	8250	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	109	%	
Daily electricity consumption	Q _{elec}	4.750	kWh				
Annual electricity consumption	AEC	1044	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-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	η_s	150	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	6.2	kW	Tj = - 7 ° C	COPd	3.71	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.35	-
Tj = + 2 ° C	Pdh	4.1	kW	Tj = + 7 ° C	COPd	5.34	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	7.50	-
Tj = + 7 ° C	Pdh	3.9	kW	Tj = bivalent temperature	COPd	2.00	-
Degradation co-efficient (**)	Cdh	0.97	-	Tj = operation limit temperature (***)	COPd	1.57	-
Tj = +12 ° C	Pdh	4.5	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	2.00	-
Degradation co-efficient (**)	Cdh	0.96	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	8.4	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	7.7	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	8.2	kW	Rated heat output (*)	Psup	2.3	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable		Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA			
Annual energy consumption	Q _{HE}	6459	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-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	η_s	167	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	-	kW	Tj = - 7 ° C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-	Tj = + 2 ° C	COPd	2.10	-
Tj = + 2 ° C	Pdh	10.0	kW	Tj = + 7 ° C	COPd	3.53	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	5.75	-
Tj = + 7 ° C	Pdh	6.4	kW	Tj = bivalent temperature	COPd	2.10	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	2.10	-
Tj = +12 ° C	Pdh	4.2	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.97	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	3149	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			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 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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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-SHWM100YAA
	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	10.0	kW	Seasonal space heating energy efficiency	η_s	242	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	-	kW	Tj = - 7 ° C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-	Tj = + 2 ° C	COPd	3.50	-
Tj = + 2 ° C	Pdh	10.0	kW	Tj = + 7 ° C	COPd	5.55	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.54	-
Tj = + 7 ° C	Pdh	6.4	kW	Tj = bivalent temperature	COPd	3.50	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	3.50	-
Tj = +12 ° C	Pdh	4.4	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.96	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	2179	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			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

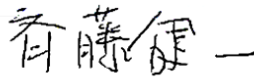
Model(s):	Outdoor unit:	PUZ-SHWM100YAA
	Indoor unit:	EHSD-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	η_s	135	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	8.9	kW	Tj = - 7 ° C	COPd	2.19	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.38	-
Tj = + 2 ° C	Pdh	5.4	kW	Tj = + 7 ° C	COPd	4.62	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.30	-
Tj = + 7 ° C	Pdh	4.8	kW	Tj = bivalent temperature	COPd	1.69	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.69	-
Tj = +12 ° C	Pdh	2.9	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.95	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	-10	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	5972	kWh				

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

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM100YAA
	Indoor unit:	EHSD-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	η_s	181	%
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	8.9	kW	Tj = - 7 ° C	COPd	3.10	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.62	-
Tj = + 2 ° C	Pdh	5.4	kW	Tj = + 7 ° C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	6.96	-
Tj = + 7 ° C	Pdh	5.2	kW	Tj = bivalent temperature	COPd	2.49	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.49	-
Tj = +12 ° C	Pdh	3.2	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.95	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	-10	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	° C	Power consumption in modes other than active mode			
Off mode				P _{OFF}			
Thermostat-off mode				P _{TO}			
Standby mode				P _{SB}			
Crankcase heater mode				P _{CK}			

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58		dBA			
Annual energy consumption	Q _{HE}	4480		kWh			

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

Contact details

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM100YAA
	Indoor unit:	EHSD-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	η_s	116	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	6.1	kW	Tj = - 7 ° C	COPd	2.62	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	3.50	-
Tj = + 2 ° C	Pdh	4.0	kW	Tj = + 7 ° C	COPd	4.59	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	6.88	-
Tj = + 7 ° C	Pdh	3.8	kW	Tj = bivalent temperature	COPd	1.57	-
Degradation co-efficient (**)	Cdh	0.97	-	Tj = operation limit temperature (***)	COPd	1.59	-
Tj = +12 ° C	Pdh	4.4	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	1.57	-
Degradation co-efficient (**)	Cdh	0.97	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	8.4	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	8.0	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	8.2	kW	Rated heat output (*)	Psup	2.0	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	8298	kWh				

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

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

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM100YAA
	Indoor unit:	EHSD-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	η_s	149	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	6.2	kW	Tj = - 7 ° C	COPd	3.71	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.35	-
Tj = + 2 ° C	Pdh	4.1	kW	Tj = + 7 ° C	COPd	5.34	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	7.50	-
Tj = + 7 ° C	Pdh	3.9	kW	Tj = bivalent temperature	COPd	2.00	-
Degradation co-efficient (**)	Cdh	0.97	-	Tj = operation limit temperature (***)	COPd	1.57	-
Tj = +12 ° C	Pdh	4.5	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	2.00	-
Degradation co-efficient (**)	Cdh	0.96	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	8.4	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	7.7	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	8.2	kW	Rated heat output (*)	Psup	2.3	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	6508	kWh				

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

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

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM100YAA
	Indoor unit:	EHSD-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	η_s	162	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	-	kW	Tj = - 7 ° C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-	Tj = + 2 ° C	COPd	2.10	-
Tj = + 2 ° C	Pdh	10.0	kW	Tj = + 7 ° C	COPd	3.53	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	5.75	-
Tj = + 7 ° C	Pdh	6.4	kW	Tj = bivalent temperature	COPd	2.10	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	2.10	-
Tj = +12 ° C	Pdh	4.2	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.97	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	3246	kWh				

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

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM100YAA
	Indoor unit:	EHSD-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.0	kW	Seasonal space heating energy efficiency	η_s	232	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	-	kW	Tj = - 7 ° C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-	Tj = + 2 ° C	COPd	3.50	-
Tj = + 2 ° C	Pdh	10.0	kW	Tj = + 7 ° C	COPd	5.55	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.54	-
Tj = + 7 ° C	Pdh	6.4	kW	Tj = bivalent temperature	COPd	3.50	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	3.50	-
Tj = +12 ° C	Pdh	4.4	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.96	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.0	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.022	kW				
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	2276	kWh				

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

Contact details
 MITSUBISHI ELECTRIC AIR 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
 Manager, Quality Assurance Department
 TURKEY

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

· 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.