



# ENERG

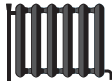
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Y IJA  
IE IA



Indoor unit  
Outdoor unit

E\*SD-\*\*\*\*D  
PUZ-SHWM80VAA



55 °C

35 °C



A++

A+++

**41** dB

**54** dB

■ 08  
■ **08**  
■ 08  
kW

■ 08  
■ **08**  
■ 08  
kW

2019

811/2013

DG79V342H11



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 1: SPACE HEATER. Columns: Outdoor unit, Indoor unit, Medium-temperature application (3-25), For low-temperature application (4-25). Rows: PUZ-SWM60VAA, PUZ-SWM80VAA, PUZ-SWM80YAA, PUZ-SWM100VAA, PUZ-SWM100YAA, PUZ-SWM120VAA, PUZ-SWM120YAA, PUZ-SWM140VAA, PUZ-SWM140YAA, PUZ-SWM80VAA, PUZ-SWM80YAA, PUZ-SWM100VAA, PUZ-SWM100YAA, PUZ-SWM120VAA, PUZ-SWM120YAA, PUZ-SWM140VAA, PUZ-SWM140YAA.

Table 2: COMBINATION HEATER. Columns: Outdoor unit, Indoor unit, Medium-temperature application (3-25), For low-temperature application (4-25). Rows: PUZ-SWM60VAA, PUZ-SWM80VAA, PUZ-SWM80YAA, PUZ-SWM100VAA, PUZ-SWM100YAA, PUZ-SWM120VAA, PUZ-SWM120YAA, PUZ-SWM140VAA, PUZ-SWM140YAA, PUZ-SWM80VAA, PUZ-SWM80YAA, PUZ-SWM100VAA, PUZ-SWM100YAA, PUZ-SWM120VAA, PUZ-SWM120YAA, PUZ-SWM140VAA, PUZ-SWM140YAA.



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	Utomhusenhet	Внешний блок	república zewnątrzlokalna	unidad interior
2	Indoor unit	Indoor enhed	unità interna	unidad interior
3	Sisäyksykki	Indoor enhed	interior interior	Εσωτερική μονάδα
4	Medium-temperature application	Медийтемпературная	републіка внутрішнього	unidad interior
5	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
6	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
7	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
8	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
9	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
10	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
11	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
12	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
13	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
14	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
15	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
16	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
17	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
18	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
19	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
20	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
21	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
22	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
23	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
24	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα
25	Medium-temperature application	Медийтемпературная	републіка внутрішнього	Εσωτερική μονάδα

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM80VAA
	Indoor unit:	EHSD-****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:		no
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	132	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	7.1	kW	Tj = - 7 ° C	COPd	2.31	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.21	-
Tj = + 2 ° C	Pdh	4.4	kW	Tj = + 7 ° C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.09	-
Tj = + 7 ° C	Pdh	4.4	kW	Tj = bivalent temperature	COPd	1.83	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.83	-
Tj = +12 ° C	Pdh	2.8	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	8.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	8.0	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 <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA				
Annual energy consumption	Q <sub>HE</sub>	4904	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			$\eta_{wh}$	-	%	
Daily electricity consumption	Q <sub>elec</sub>	-	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

· 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-SHWM80VAA
	Indoor unit:	EHSD-****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:		no
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	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	7.1	kW	Tj = - 7 ° C	COPd	3.22	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.75	-
Tj = + 2 ° C	Pdh	4.4	kW	Tj = + 7 ° C	COPd	5.90	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	6.52	-
Tj = + 7 ° C	Pdh	5.0	kW	Tj = bivalent temperature	COPd	2.65	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.65	-
Tj = +12 ° C	Pdh	3.0	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	8.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	8.0	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 <sub>OFF</sub>			
Thermostat-off mode				P <sub>TO</sub>			
Standby mode				P <sub>SB</sub>			
Crankcase heater mode				P <sub>CK</sub>			

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54		dBA			
Annual energy consumption	Q <sub>HE</sub>	3530		kWh			

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			$\eta_{wh}$	-	%	
Daily electricity consumption	Q <sub>elec</sub>	-		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-SHWM80VAA
	Indoor unit:	EHSD-****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:		no
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	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	4.9	kW	Tj = - 7 ° C	COPd	2.65	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	3.45	-
Tj = + 2 ° C	Pdh	4.0	kW	Tj = + 7 ° C	COPd	4.78	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.74	-
Tj = + 7 ° C	Pdh	4.3	kW	Tj = bivalent temperature	COPd	1.51	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = +12 ° C	Pdh	3.1	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	1.51	-
Degradation co-efficient (**)	Cdh	0.97	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	6.7	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	5.3	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	6.5	kW	Rated heat output (*)	Psup	2.7	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA				
Annual energy consumption	Q <sub>HE</sub>	6705	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			$\eta_{wh}$	-	%	
Daily electricity consumption	Q <sub>elec</sub>	-	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-SHWM80VAA
	Indoor unit:	EHSD-****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:		no
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	146	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	4.8	kW	Tj = - 7 ° C	COPd	3.53	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.30	-
Tj = + 2 ° C	Pdh	4.0	kW	Tj = + 7 ° C	COPd	5.56	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	7.56	-
Tj = + 7 ° C	Pdh	4.5	kW	Tj = bivalent temperature	COPd	2.05	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = +12 ° C	Pdh	3.1	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	2.05	-
Degradation co-efficient (**)	Cdh	0.96	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	6.7	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	5.4	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	6.5	kW	Rated heat output (*)	Psup	2.6	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA				
Annual energy consumption	Q <sub>HE</sub>	5299	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			$\eta_{wh}$	-	%	
Daily electricity consumption	Q <sub>elec</sub>	-	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.

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Model(s):	Outdoor unit:	PUZ-SHWM80VAA
	Indoor unit:	EHSD-****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:		no
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	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	2.05	-
Tj = + 2 ° C	Pdh	8.0	kW	Tj = + 7 ° C	COPd	3.60	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	6.02	-
Tj = + 7 ° C	Pdh	5.2	kW	Tj = bivalent temperature	COPd	2.05	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	2.05	-
Tj = +12 ° C	Pdh	4.5	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	8.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	8.0	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 <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA				
Annual energy consumption	Q <sub>HE</sub>	2521	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			$\eta_{wh}$	-	%	
Daily electricity consumption	Q <sub>elec</sub>	-	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-SHWM80VAA
	Indoor unit:	EHSD-****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:		no
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	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	COPd	3.75	-
Tj = + 2 ° C	Pdh	8.0	kW	Tj = + 7 ° C	COPd	5.20	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.34	-
Tj = + 7 ° C	Pdh	5.1	kW	Tj = bivalent temperature	COPd	3.75	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.75	-
Tj = +12 ° C	Pdh	4.7	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	8.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	8.0	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 <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA				
Annual energy consumption	Q <sub>HE</sub>	1874	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			$\eta_{wh}$	-	%	
Daily electricity consumption	Q <sub>elec</sub>	-	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

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-SHWM80VAA
	Indoor unit:	ERSD-****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:		no
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	133	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	7.1	kW	Tj = - 7 ° C	COPd	2.31	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.21	-
Tj = + 2 ° C	Pdh	4.4	kW	Tj = + 7 ° C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.09	-
Tj = + 7 ° C	Pdh	4.4	kW	Tj = bivalent temperature	COPd	1.83	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.83	-
Tj = +12 ° C	Pdh	2.8	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	8.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	8.0	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 <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA				
Annual energy consumption	Q <sub>HE</sub>	4849	kWh				

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

Contact details  
 MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY  
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 Manager, Quality Assurance Department  
 TURKEY

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



**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM80VAA
	Indoor unit:	ERSD-****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:		no
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	187	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	7.1	kW	Tj = - 7 ° C	COPd	3.22	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.75	-
Tj = + 2 ° C	Pdh	4.4	kW	Tj = + 7 ° C	COPd	5.90	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	6.52	-
Tj = + 7 ° C	Pdh	5.0	kW	Tj = bivalent temperature	COPd	2.65	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.65	-
Tj = +12 ° C	Pdh	3.0	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	8.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	8.0	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			
Power consumption in modes other than active mode				Off mode			
Off mode	P <sub>OFF</sub>	0.015	kW	Thermostat-off mode	P <sub>TO</sub>	0.015	kW
Thermostat-off mode	P <sub>TO</sub>	0.015	kW	Standby mode	P <sub>SB</sub>	0.015	kW
Standby mode	P <sub>SB</sub>	0.015	kW	Crankcase heater mode	P <sub>CK</sub>	0.000	kW
Crankcase heater mode	P <sub>CK</sub>	0.000	kW	Other items			
Capacity control				Rated air flow rate, outdoors			
variable				-			
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA	2220			
Annual energy consumption	Q <sub>HE</sub>	3475	kWh	m <sup>3</sup> /h			

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

**Contact details**

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY

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Manager, Quality Assurance Department

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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-SHWM80VAA
	Indoor unit:	ERSD-****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:		no
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	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	4.9	kW	Tj = - 7 ° C	COPd	2.65	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	3.45	-
Tj = + 2 ° C	Pdh	4.0	kW	Tj = + 7 ° C	COPd	4.78	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.74	-
Tj = + 7 ° C	Pdh	4.3	kW	Tj = bivalent temperature	COPd	1.51	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = +12 ° C	Pdh	3.1	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	1.51	-
Degradation co-efficient (**)	Cdh	0.97	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	6.7	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	5.3	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	6.5	kW	Rated heat output (*)	Psup	2.7	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA				
Annual energy consumption	Q <sub>HE</sub>	6672	kWh				

For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	$\eta_{wh}$	-	%
Daily electricity consumption	Q <sub>elec</sub>	-	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			
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Kenichi SAITO							
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Manager, Quality Assurance Department							
TURKEY							

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

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM80VAA
	Indoor unit:	ERSD-****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:		no
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	147	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	4.8	kW	Tj = - 7 ° C	COPd	3.53	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.30	-
Tj = + 2 ° C	Pdh	4.0	kW	Tj = + 7 ° C	COPd	5.56	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	7.56	-
Tj = + 7 ° C	Pdh	4.5	kW	Tj = bivalent temperature	COPd	2.05	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = +12 ° C	Pdh	3.1	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	2.05	-
Degradation co-efficient (**)	Cdh	0.96	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	6.7	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	5.4	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	6.5	kW	Rated heat output (*)	Psup	2.6	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA				
Annual energy consumption	Q <sub>HE</sub>	5266	kWh				

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

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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-SHWM80VAA
	Indoor unit:	ERSD-****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:		no
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	171	%
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	2.05	-
Tj = +2 °C	Pdh	8.0	kW	Tj = +7 °C	COPd	3.60	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 °C	COPd	6.02	-
Tj = +7 °C	Pdh	5.2	kW	Tj = bivalent temperature	COPd	2.05	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	2.05	-
Tj = +12 °C	Pdh	4.5	kW	Operation limit temperature	TOL	-30	°C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	°C
Tj = bivalent temperature	Pdh	8.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	8.0	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 <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54		dBA			
Annual energy consumption	Q <sub>HE</sub>	2454		kWh			

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			$\eta_{wh}$	-	%	
Daily electricity consumption	Q <sub>elec</sub>	-		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-SHWM80VAA
	Indoor unit:	ERSD-****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:		no
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	233	%
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	3.75	-
Tj = + 2 ° C	Pdh	8.0	kW	Tj = + 7 ° C	COPd	5.20	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.34	-
Tj = + 7 ° C	Pdh	5.1	kW	Tj = bivalent temperature	COPd	3.75	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.75	-
Tj = +12 ° C	Pdh	4.7	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	8.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	8.0	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 <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA				
Annual energy consumption	Q <sub>HE</sub>	1808	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			$\eta_{wh}$	-	%	
Daily electricity consumption	Q <sub>elec</sub>	-	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 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			

· 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-SHWM80VAA
	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	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	132	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	7.1	kW	Tj = - 7 ° C	COPd	2.31	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.21	-
Tj = + 2 ° C	Pdh	4.4	kW	Tj = + 7 ° C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.09	-
Tj = + 7 ° C	Pdh	4.4	kW	Tj = bivalent temperature	COPd	1.83	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.83	-
Tj = +12 ° C	Pdh	2.8	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	8.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	8.0	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 <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA				
Annual energy consumption	Q <sub>HE</sub>	4904	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			$\eta_{wh}$	-	%	
Daily electricity consumption	Q <sub>elec</sub>	-	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-SHWM80VAA
	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	8.0	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	7.1	kW	Tj = - 7 ° C	COPd	3.22	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.75	-
Tj = + 2 ° C	Pdh	4.4	kW	Tj = + 7 ° C	COPd	5.90	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	6.52	-
Tj = + 7 ° C	Pdh	5.0	kW	Tj = bivalent temperature	COPd	2.65	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.65	-
Tj = +12 ° C	Pdh	3.0	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	8.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	8.0	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			
Power consumption in modes other than active mode				Off mode			
Off mode	P <sub>OFF</sub>	0.015	kW	Thermostat-off mode	P <sub>TO</sub>	0.015	kW
Thermostat-off mode	P <sub>TO</sub>	0.015	kW	Standby mode	P <sub>SB</sub>	0.015	kW
Standby mode	P <sub>SB</sub>	0.015	kW	Crankcase heater mode	P <sub>CK</sub>	0.000	kW
Crankcase heater mode	P <sub>CK</sub>	0.000	kW	Other items			

Capacity control	variable		Rated air flow rate, outdoors	-	2220	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA			
Annual energy consumption	Q <sub>HE</sub>	3530	kWh			

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

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**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SHWM80VAA
	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	8.0	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	4.9	kW	Tj = - 7 ° C	COPd	2.65	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	3.45	-
Tj = + 2 ° C	Pdh	4.0	kW	Tj = + 7 ° C	COPd	4.78	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.74	-
Tj = + 7 ° C	Pdh	4.3	kW	Tj = bivalent temperature	COPd	1.51	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = +12 ° C	Pdh	3.1	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	1.51	-
Degradation co-efficient (**)	Cdh	0.97	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	6.7	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	5.3	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	6.5	kW	Rated heat output (*)	Psup	2.7	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA				
Annual energy consumption	Q <sub>HE</sub>	6705	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			$\eta_{wh}$	-	%	
Daily electricity consumption	Q <sub>elec</sub>	-	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-SHWM80VAA
	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	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	146	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	4.8	kW	Tj = - 7 ° C	COPd	3.53	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.30	-
Tj = + 2 ° C	Pdh	4.0	kW	Tj = + 7 ° C	COPd	5.56	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	7.56	-
Tj = + 7 ° C	Pdh	4.5	kW	Tj = bivalent temperature	COPd	2.05	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = +12 ° C	Pdh	3.1	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	2.05	-
Degradation co-efficient (**)	Cdh	0.96	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	6.7	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	5.4	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	6.5	kW	Rated heat output (*)	Psup	2.6	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54		dBA			
Annual energy consumption	Q <sub>HE</sub>	5299		kWh			

For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	$\eta_{wh}$	-	%
Daily electricity consumption	Q <sub>elec</sub>	-		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-SHWM80VAA
	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	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	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	2.05	-
Tj = + 2 ° C	Pdh	8.0	kW	Tj = + 7 ° C	COPd	3.60	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	6.02	-
Tj = + 7 ° C	Pdh	5.2	kW	Tj = bivalent temperature	COPd	2.05	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	2.05	-
Tj = +12 ° C	Pdh	4.5	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	8.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	8.0	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 <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54		dBA			
Annual energy consumption	Q <sub>HE</sub>	2521		kWh			

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			$\eta_{wh}$	-	%	
Daily electricity consumption	Q <sub>elec</sub>	-	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-SHWM80VAA
	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	8.0	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	COPd	3.75	-
Tj = + 2 ° C	Pdh	8.0	kW	Tj = + 7 ° C	COPd	5.20	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.34	-
Tj = + 7 ° C	Pdh	5.1	kW	Tj = bivalent temperature	COPd	3.75	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.75	-
Tj = +12 ° C	Pdh	4.7	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	8.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	8.0	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 <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54		dBA			
Annual energy consumption	Q <sub>HE</sub>	1874		kWh			

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

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**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

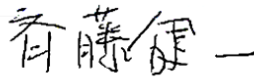
Model(s):	Outdoor unit:	PUZ-SHWM80VAA
	Indoor unit:	ERSD-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	133	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	7.1	kW	Tj = - 7 ° C	COPd	2.31	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.21	-
Tj = + 2 ° C	Pdh	4.4	kW	Tj = + 7 ° C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.09	-
Tj = + 7 ° C	Pdh	4.4	kW	Tj = bivalent temperature	COPd	1.83	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.83	-
Tj = +12 ° C	Pdh	2.8	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	8.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	8.0	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 <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA				
Annual energy consumption	Q <sub>HE</sub>	4849	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			$\eta_{wh}$	-	%	
Daily electricity consumption	Q <sub>elec</sub>	-	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

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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-SHWM80VAA
	Indoor unit:	ERSD-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	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	187	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	7.1	kW	Tj = - 7 ° C	COPd	3.22	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.75	-
Tj = + 2 ° C	Pdh	4.4	kW	Tj = + 7 ° C	COPd	5.90	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	6.52	-
Tj = + 7 ° C	Pdh	5.0	kW	Tj = bivalent temperature	COPd	2.65	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.65	-
Tj = +12 ° C	Pdh	3.0	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	8.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	8.0	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			
Power consumption in modes other than active mode				Off mode			
Off mode	P <sub>OFF</sub>	0.015	kW	Thermostat-off mode	P <sub>TO</sub>	0.015	kW
Thermostat-off mode	P <sub>TO</sub>	0.015	kW	Standby mode	P <sub>SB</sub>	0.015	kW
Standby mode	P <sub>SB</sub>	0.015	kW	Crankcase heater mode	P <sub>CK</sub>	0.000	kW
Crankcase heater mode	P <sub>CK</sub>	0.000	kW	Other items			
Capacity control				Rated air flow rate, outdoors			
variable				-			
Sound power level, indoors/outdoors				2220			
L <sub>WA</sub>				m <sup>3</sup> /h			
41 / 54							
Annual energy consumption							
Q <sub>HE</sub>							
3475							
kWh							
For heat pump combination heater:							
Declared load profile				Water heating energy efficiency			
-				$\eta_{wh}$			
Daily electricity consumption				-			
Q <sub>elec</sub>							
-							
Annual electricity consumption							
AEC							
-							
kWh							

Other items							
Capacity control				Rated air flow rate, outdoors			
variable				-			
Sound power level, indoors/outdoors				2220			
L <sub>WA</sub>				m <sup>3</sup> /h			
41 / 54							
Annual energy consumption							
Q <sub>HE</sub>							
3475							
kWh							

For heat pump combination heater:							
Declared load profile				Water heating energy efficiency			
-				$\eta_{wh}$			
Daily electricity consumption				-			
Q <sub>elec</sub>							
-							
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 Bulvari 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-SHWM80VAA
	Indoor unit:	ERSD-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	8.0	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	4.9	kW	Tj = - 7 ° C	COPd	2.65	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	3.45	-
Tj = + 2 ° C	Pdh	4.0	kW	Tj = + 7 ° C	COPd	4.78	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.74	-
Tj = + 7 ° C	Pdh	4.3	kW	Tj = bivalent temperature	COPd	1.51	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = +12 ° C	Pdh	3.1	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	1.51	-
Degradation co-efficient (**)	Cdh	0.97	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	6.7	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	5.3	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	6.5	kW	Rated heat output (*)	Psup	2.7	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA				
Annual energy consumption	Q <sub>HE</sub>	6672	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			$\eta_{wh}$	-	%	
Daily electricity consumption	Q <sub>elec</sub>	-	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-SHWM80VAA
	Indoor unit:	ERSD-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	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	147	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	4.8	kW	Tj = - 7 ° C	COPd	3.53	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.30	-
Tj = + 2 ° C	Pdh	4.0	kW	Tj = + 7 ° C	COPd	5.56	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	7.56	-
Tj = + 7 ° C	Pdh	4.5	kW	Tj = bivalent temperature	COPd	2.05	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.41	-
Tj = +12 ° C	Pdh	3.1	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	2.05	-
Degradation co-efficient (**)	Cdh	0.96	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	6.7	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	5.4	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	6.5	kW	Rated heat output (*)	Psup	2.6	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors	-	2220	m <sup>3</sup> /h
Capacity control		variable					
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA				
Annual energy consumption	Q <sub>HE</sub>	5266	kWh				

For heat pump combination heater:				Water heating energy efficiency	$\eta_{wh}$	-	%
Declared load profile		-					
Daily electricity consumption	Q <sub>elec</sub>	-	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-SHWM80VAA
	Indoor unit:	ERSD-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	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	171	%
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	2.05	-
Tj = + 2 ° C	Pdh	8.0	kW	Tj = + 7 ° C	COPd	3.60	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	6.02	-
Tj = + 7 ° C	Pdh	5.2	kW	Tj = bivalent temperature	COPd	2.05	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	2.05	-
Tj = +12 ° C	Pdh	4.5	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	8.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	8.0	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 <sub>OFF</sub>	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2220	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54		dBA			
Annual energy consumption	Q <sub>HE</sub>	2454		kWh			

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			$\eta_{wh}$	-	%	
Daily electricity consumption	Q <sub>elec</sub>	-		kWh			
Annual electricity consumption	AEC	-		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-SHWM80VAA
	Indoor unit:	ERSD-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	8.0	kW	Seasonal space heating energy efficiency	$\eta_s$	233	%
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	3.75	-
Tj = + 2 ° C	Pdh	8.0	kW	Tj = + 7 ° C	COPd	5.20	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.34	-
Tj = + 7 ° C	Pdh	5.1	kW	Tj = bivalent temperature	COPd	3.75	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.75	-
Tj = +12 ° C	Pdh	4.7	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	8.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	8.0	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 <sub>OFF</sub>	0.015	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**

Capacity control	variable		Rated air flow rate, outdoors	-	2220	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 54	dBA			
Annual energy consumption	Q <sub>HE</sub>	1808	kWh			

**For heat pump combination heater:**

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

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