



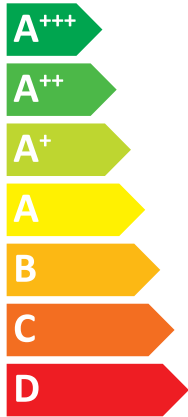
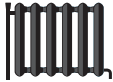
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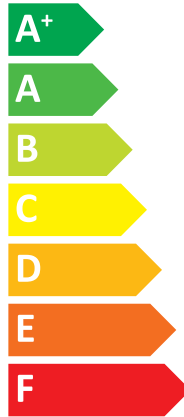
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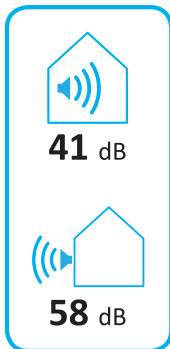
Indoor unit E*ST20D-****D
Outdoor unit PUZ-SHWM140YAA



A++



A+



2019

811/2013

DG79V341H18



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. Columns are grouped into 'For medium-temperature application' and 'For low-temperature application'. Rows include efficiency classes (A+, A++) and various performance metrics like kW, kWh, and dB.

Large table with 25 columns for model variants and 2 rows for outdoor and indoor units. Columns are grouped into 'For medium-temperature application' and 'For low-temperature application'. Rows include efficiency classes (L, A+, A++) and various performance metrics like kW, kWh, and dB.

English	German	French	Italian	Spanish
Nederlands	Svenska	Dansk	Portuguesa	Espanol
suomi	Castina	Български	Polski	Ελληνικά
Outdoor unit	Außengerät	unité extérieure	unità esterna	unidad exterior
1	Utlomsenhet	Utenlands enhed	unidad exterior	Εξωτερική μονάδα
Ulkokeskus	Utlomsenhet	Внешний блок	repositio zeymeriztra	unidad interior
2	Indoor unit	Indoor enhed	unità interna	Interior
3	Sisäyksykki	Indoor enhed	Indoora sisäyksykki	Εσωτερική μονάδα
4	Medium-temperature application	Mitteltemperaturanwendung	Le applicazon a media temperatura	Le applicazon de media temperatura
5	Mediitemperatuuritoedatus	Mediitemperatuurtoedatus	a applicazon a media temperatura	Le applicazon de media temperatura
6	Keskilämpötilan sovellus	Mediitemperatuurtoedatus	a applicazon a media temperatura	Le applicazon de media temperatura
7	Low-temperature application	Nedertemperaturanwendung	Le applicazon a bassa temperatura	Le applicazon de baja temperatura
8	Madetemperatuuritoedatus	Nedertemperaturanwendung	Le applicazon a bassa temperatura	Le applicazon de baja temperatura
9	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming
10	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming
11	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming
12	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming
13	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming
14	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming
15	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming
16	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming
17	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming
18	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming
19	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming
20	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming
21	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming
22	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming
23	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming
24	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming
25	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming	de energief-effiientide voor waterverwarming

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

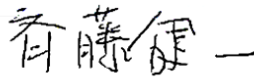
Model(s):	Outdoor unit:	PUZ-SHWM140VAA
	Indoor unit:	EHST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_s	141	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	12.4	kW	Tj = - 7 ° C	COPd	2.18	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.49	-
Tj = + 2 ° C	Pdh	7.5	kW	Tj = + 7 ° C	COPd	4.85	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.61	-
Tj = + 7 ° C	Pdh	6.3	kW	Tj = bivalent temperature	COPd	1.92	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.92	-
Tj = +12 ° C	Pdh	3.9	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	14.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	14.0	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}	0.015	kW				
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	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}	8021	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	123	%	
Daily electricity consumption	Q _{elec}	4.380	kWh				
Annual electricity consumption	AEC	965	kWh				

Contact details
 MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY
 Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu 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-SHWM140VAA
	Indoor unit:	EHST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_s	183	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	12.4	kW	Tj = - 7 ° C	COPd	3.00	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	4.59	-
Tj = + 2 ° C	Pdh	7.5	kW	Tj = + 7 ° C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.19	-
Tj = + 7 ° C	Pdh	6.4	kW	Tj = bivalent temperature	COPd	2.55	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	2.55	-
Tj = +12 ° C	Pdh	4.1	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	14.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	14.0	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	Other items			
Power consumption in modes other than active mode				Rated air flow rate, outdoors			
Off mode	P _{OFF}	0.015	kW			2640	m ³ /h
Thermostat-off mode	P _{TO}	0.015	kW	Capacity control	variable		
Standby mode	P _{SB}	0.015	kW	Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA
Crankcase heater mode	P _{CK}	0.000	kW	Annual energy consumption	Q _{HE}	6227	kWh

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	123	%	
Daily electricity consumption	Q _{elec}	4.380	kWh				
Annual electricity consumption	AEC	965	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY

Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey

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

Kenichi SAITO

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.

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM140VAA
	Indoor unit:	EHST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_s	115	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	8.5	kW	Tj = - 7 ° C	COPd	2.63	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.49	-
Tj = + 2 ° C	Pdh	5.2	kW	Tj = + 7 ° C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.92	-
Tj = + 7 ° C	Pdh	4.2	kW	Tj = bivalent temperature	COPd	1.53	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.55	-
Tj = +12 ° C	Pdh	4.2	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	1.52	-
Degradation co-efficient (**)	Cdh	0.98	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	11.8	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	10.7	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	11.4	kW	Rated heat output (*)	Psup	3.3	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}	0.015	kW				
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	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}	11650	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	105	%	
Daily electricity consumption	Q _{elec}	4.860	kWh				
Annual electricity consumption	AEC	1070	kWh				

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

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 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.
 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM140VAA
	Indoor unit:	EHST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_s	153	%
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	8.3	kW	Tj = - 7 ° C	COPd	3.65	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.59	-
Tj = + 2 ° C	Pdh	5.2	kW	Tj = + 7 ° C	COPd	5.15	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	8.80	-
Tj = + 7 ° C	Pdh	4.6	kW	Tj = bivalent temperature	COPd	2.03	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.79	-
Tj = +12 ° C	Pdh	4.3	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	2.05	-
Degradation co-efficient (**)	Cdh	0.97	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	11.8	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	10.7	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	11.4	kW	Rated heat output (*)	Psup	3.3	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}	0.015	kW				
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	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}	8841	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	105	%	
Daily electricity consumption	Q _{elec}	4.860	kWh				
Annual electricity consumption	AEC	1070	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu 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-SHWM140VAA
	Indoor unit:	EHST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_s	156	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	-	kW	Tj = - 7 ° C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-	Tj = + 2 ° C	COPd	2.00	-
Tj = + 2 ° C	Pdh	14.0	kW	Tj = + 7 ° C	COPd	3.27	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	5.50	-
Tj = + 7 ° C	Pdh	8.8	kW	Tj = bivalent temperature	COPd	2.00	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	2.00	-
Tj = +12 ° C	Pdh	5.5	kW	Operation limit temperature	TOL	-30	° C
Degradation co-efficient (**)	Cdh	0.99	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	14.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	14.0	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}	0.015	kW				
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	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}	4715	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	130	%	
Daily electricity consumption	Q _{elec}	4.030	kWh				
Annual electricity consumption	AEC	888	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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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

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

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM140VAA
	Indoor unit:	EHST20D-***D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_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	3.24	-
Tj = + 2 ° C	Pdh	14.0	kW	Tj = + 7 ° C	COPd	5.15	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	7.18	-
Tj = + 7 ° C	Pdh	9.0	kW	Tj = bivalent temperature	COPd	3.24	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.24	-
Tj = +12 ° C	Pdh	5.1	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	14.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	14.0	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}	0.015	kW				
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	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}	3279	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	130	%	
Daily electricity consumption	Q _{elec}	4.030	kWh				
Annual electricity consumption	AEC	888	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

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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

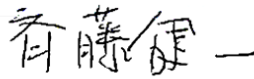
Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	Indoor unit:	ERST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_s	142	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	12.4	kW	Tj = - 7 ° C	COPd	2.18	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.49	-
Tj = + 2 ° C	Pdh	7.5	kW	Tj = + 7 ° C	COPd	4.85	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.61	-
Tj = + 7 ° C	Pdh	6.3	kW	Tj = bivalent temperature	COPd	1.92	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.92	-
Tj = +12 ° C	Pdh	3.9	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	14.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	14.0	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}	7974	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	123	%	
Daily electricity consumption	Q _{elec}	4.380	kWh				
Annual electricity consumption	AEC	965	kWh				

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	Indoor unit:	ERST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_s	184	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	12.4	kW	Tj = - 7 ° C	COPd	3.00	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	4.59	-
Tj = + 2 ° C	Pdh	7.5	kW	Tj = + 7 ° C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.19	-
Tj = + 7 ° C	Pdh	6.4	kW	Tj = bivalent temperature	COPd	2.55	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.55	-
Tj = +12 ° C	Pdh	4.1	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	14.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	14.0	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}	6181	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	η_{wh}	123	%
Daily electricity consumption	Q _{elec}	4.380	kWh				
Annual electricity consumption	AEC	965	kWh				

Contact details

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

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	Indoor unit:	ERST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	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	8.5	kW	Tj = - 7 ° C	COPd	2.63	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	3.49	-
Tj = + 2 ° C	Pdh	5.2	kW	Tj = + 7 ° C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.92	-
Tj = + 7 ° C	Pdh	4.2	kW	Tj = bivalent temperature	COPd	1.53	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.55	-
Tj = +12 ° C	Pdh	4.2	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	1.52	-
Degradation co-efficient (**)	Cdh	0.96	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	11.8	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	10.7	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	11.4	kW	Rated heat output (*)	Psup	3.3	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}	11625	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	105	%	
Daily electricity consumption	Q _{elec}	4.860	kWh				
Annual electricity consumption	AEC	1070	kWh				

Contact details

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

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	Indoor unit:	ERST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_s	154	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	8.3	kW	Tj = - 7 ° C	COPd	3.65	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.59	-
Tj = + 2 ° C	Pdh	5.2	kW	Tj = + 7 ° C	COPd	5.15	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	8.80	-
Tj = + 7 ° C	Pdh	4.6	kW	Tj = bivalent temperature	COPd	2.03	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.79	-
Tj = +12 ° C	Pdh	4.3	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	11.8	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	10.7	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	11.4	kW	Rated heat output (*)	Psup	3.3	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}	8816	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	105	%
Daily electricity consumption	Q _{elec}	4.860	kWh				
Annual electricity consumption	AEC	1070	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.

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	Indoor unit:	ERST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_s	158	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	-	kW	Tj = - 7 ° C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-	Tj = + 2 ° C	COPd	2.00	-
Tj = + 2 ° C	Pdh	14.0	kW	Tj = + 7 ° C	COPd	3.27	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	5.50	-
Tj = + 7 ° C	Pdh	8.8	kW	Tj = bivalent temperature	COPd	2.00	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	2.00	-
Tj = +12 ° C	Pdh	5.5	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	14.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	14.0	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}	4659	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	130	%	
Daily electricity consumption	Q _{elec}	4.030	kWh				
Annual electricity consumption	AEC	888	kWh				

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

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	Indoor unit:	ERST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_s	229	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	-	kW	Tj = - 7 ° C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-	Tj = + 2 ° C	COPd	3.24	-
Tj = + 2 ° C	Pdh	14.0	kW	Tj = + 7 ° C	COPd	5.15	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	7.18	-
Tj = + 7 ° C	Pdh	9.0	kW	Tj = bivalent temperature	COPd	3.24	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.24	-
Tj = +12 ° C	Pdh	5.1	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	14.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	14.0	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}	3222	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	130	%	
Daily electricity consumption	Q _{elec}	4.030	kWh				
Annual electricity consumption	AEC	888	kWh				

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

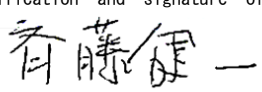
Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	Indoor unit:	EHST20D-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_s	141	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	12.4	kW	Tj = - 7 ° C	COPd	2.18	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.49	-
Tj = + 2 ° C	Pdh	7.5	kW	Tj = + 7 ° C	COPd	4.85	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.61	-
Tj = + 7 ° C	Pdh	6.3	kW	Tj = bivalent temperature	COPd	1.92	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.92	-
Tj = +12 ° C	Pdh	3.9	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	14.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	14.0	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}	8055	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	123	%	
Daily electricity consumption	Q _{elec}	4.380	kWh				
Annual electricity consumption	AEC	965	kWh				

Contact details
 MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY
 Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu 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-SHWM140YAA
	Indoor unit:	EHST20D-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_s	182	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	12.4	kW	Tj = - 7 ° C	COPd	3.00	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	4.59	-
Tj = + 2 ° C	Pdh	7.5	kW	Tj = + 7 ° C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.19	-
Tj = + 7 ° C	Pdh	6.4	kW	Tj = bivalent temperature	COPd	2.55	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.55	-
Tj = +12 ° C	Pdh	4.1	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	14.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	14.0	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			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA
Annual energy consumption	Q _{HE}	6262	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

For heat pump combination heater:			
Declared load profile	L		
Daily electricity consumption	Q _{elec}	4.380	kWh
Annual electricity consumption	AEC	965	kWh
Water heating energy efficiency			
η_{wh}			
123			
%			

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	Indoor unit:	EHST20D-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_s	115	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	8.5	kW	Tj = - 7 ° C	COPd	2.63	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	3.49	-
Tj = + 2 ° C	Pdh	5.2	kW	Tj = + 7 ° C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.92	-
Tj = + 7 ° C	Pdh	4.2	kW	Tj = bivalent temperature	COPd	1.53	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.55	-
Tj = +12 ° C	Pdh	4.2	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	1.52	-
Degradation co-efficient (**)	Cdh	0.96	-	Operation limit temperature	TOL	-30	° C
Tj = bivalent temperature	Pdh	11.8	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	10.7	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	11.4	kW	Rated heat output (*)	Psup	3.3	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}	11674	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	105	%	
Daily electricity consumption	Q _{elec}	4.860	kWh				
Annual electricity consumption	AEC	1070	kWh				

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

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	Indoor unit:	EHST20D-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_s	153	%
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	8.3	kW	Tj = - 7 ° C	COPd	3.65	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.59	-
Tj = + 2 ° C	Pdh	5.2	kW	Tj = + 7 ° C	COPd	5.15	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = +12 ° C	COPd	8.80	-
Tj = + 7 ° C	Pdh	4.6	kW	Tj = bivalent temperature	COPd	2.03	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.79	-
Tj = +12 ° C	Pdh	4.3	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	11.8	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	10.7	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	11.4	kW	Rated heat output (*)	Psup	3.3	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}	8865	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	105	%	
Daily electricity consumption	Q _{elec}	4.860	kWh				
Annual electricity consumption	AEC	1070	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-SHWM140YAA
	Indoor unit:	EHST20D-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_s	154	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	-	kW	Tj = - 7 ° C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-	Tj = + 2 ° C	COPd	2.00	-
Tj = + 2 ° C	Pdh	14.0	kW	Tj = + 7 ° C	COPd	3.27	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	5.50	-
Tj = + 7 ° C	Pdh	8.8	kW	Tj = bivalent temperature	COPd	2.00	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	2.00	-
Tj = +12 ° C	Pdh	5.5	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	14.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	14.0	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}	4757	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	130	%	
Daily electricity consumption	Q _{elec}	4.030	kWh				
Annual electricity consumption	AEC	888	kWh				

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

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM140YAA
	Indoor unit:	EHST20D-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.0	kW	Seasonal space heating energy efficiency	η_s	222	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	-	kW	Tj = - 7 ° C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-	Tj = + 2 ° C	COPd	3.24	-
Tj = + 2 ° C	Pdh	14.0	kW	Tj = + 7 ° C	COPd	5.15	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	7.18	-
Tj = + 7 ° C	Pdh	9.0	kW	Tj = bivalent temperature	COPd	3.24	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.24	-
Tj = +12 ° C	Pdh	5.1	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	14.0	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	14.0	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}	3319	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			η_{wh}	130	%	
Daily electricity consumption	Q _{elec}	4.030	kWh				
Annual electricity consumption	AEC	888	kWh				

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