



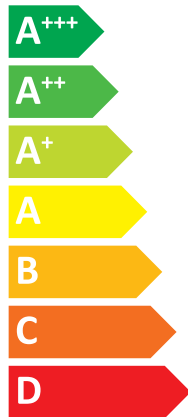
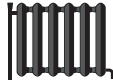
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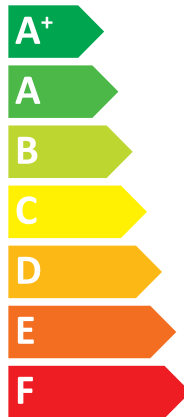


Indoor unit  
Outdoor unit

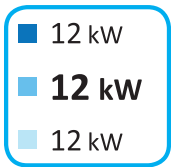
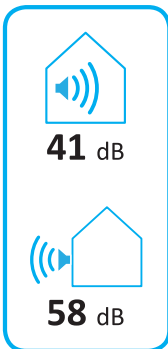
E\*ST20D-\*\*\*\*D  
PUZ-SWM120VAA



**A++**



**A+**



2019

811/2013

DG79V341H06



PRODUCT FICHE

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

DG79A02MH01

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

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



**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

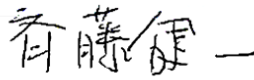
Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	131	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	10.7	kW	Tj = - 7 ° C	COPd	1.87	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.33	-
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 7 ° C	COPd	4.65	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.20	-
Tj = + 7 ° C	Pdh	5.0	kW	Tj = bivalent temperature	COPd	1.87	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.55	-
Tj = +12 ° C	Pdh	3.8	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.7	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.7	kW	Rated heat output (*)	Psup	1.4	kW
Bivalent temperature	Tbiv	-7	° 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			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	7450	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	134	%	
Daily electricity consumption	Q <sub>elec</sub>	4.080	kWh				
Annual electricity consumption	AEC	898	kWh				

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

The identification and signature of the person empowered to bind the supplier:  
  
 Kenichi SAITO  
 Manager, Quality Assurance Department  
 TURKEY

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  - Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.
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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-SWM120VAA
	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	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	177	%
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	10.7	kW	Tj = - 7 ° C	COPd	2.75	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	4.50	-
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 7 ° C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.00	-
Tj = + 7 ° C	Pdh	5.2	kW	Tj = bivalent temperature	COPd	2.75	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.40	-
Tj = +12 ° C	Pdh	4.0	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.97	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.7	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.7	kW	Rated heat output (*)	Psup	1.4	kW
Bivalent temperature	Tbiv	-7	° 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			
Capacity control	variable		
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA
Annual energy consumption	Q <sub>HE</sub>	5566	kWh
Rated air flow rate, outdoors			
-			
2640			
m <sup>3</sup> /h			

For heat pump combination heater:			
Declared load profile	L		
Daily electricity consumption	Q <sub>elec</sub>	4.080	kWh
Annual electricity consumption	AEC	898	kWh
Water heating energy efficiency			
$\eta_{wh}$			
134			
%			

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

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Model(s):	Outdoor unit:	PUZ-SWM120VAA
	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	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	109	%
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	7.3	kW	Tj = - 7 ° C	COPd	2.50	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.40	-
Tj = + 2 ° C	Pdh	4.4	kW	Tj = + 7 ° C	COPd	4.60	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.80	-
Tj = + 7 ° C	Pdh	3.8	kW	Tj = bivalent temperature	COPd	1.45	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.30	-
Tj = +12 ° C	Pdh	4.4	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	1.40	-
Degradation co-efficient (**)	Cdh	0.98	-	Operation limit temperature	TOL	-25	° C
Tj = bivalent temperature	Pdh	9.2	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	7.8	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	8.9	kW	Rated heat output (*)	Psup	4.3	kW
Bivalent temperature	Tbiv	-13	° 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			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	10673	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	109	%
Daily electricity consumption	Q <sub>elec</sub>	4.750	kWh				
Annual electricity consumption	AEC	1044	kWh				

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

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	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	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	141	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	7.3	kW	Tj = - 7 ° C	COPd	3.50	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.00	-
Tj = + 2 ° C	Pdh	4.5	kW	Tj = + 7 ° C	COPd	5.20	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.50	-
Tj = + 7 ° C	Pdh	3.9	kW	Tj = bivalent temperature	COPd	1.95	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.50	-
Tj = +12 ° C	Pdh	5.5	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	2.00	-
Degradation co-efficient (**)	Cdh	0.98	-	Operation limit temperature	TOL	-25	° C
Tj = bivalent temperature	Pdh	10.2	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	8.0	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	9.9	kW	Rated heat output (*)	Psup	4.1	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			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	8290	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	109	%	
Daily electricity consumption	Q <sub>elec</sub>	4.750	kWh				
Annual electricity consumption	AEC	1044	kWh				

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

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	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	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	154	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	-	kW	Tj = - 7 ° C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-	Tj = + 2 ° C	COPd	1.95	-
Tj = + 2 ° C	Pdh	12.1	kW	Tj = + 7 ° C	COPd	3.30	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	5.40	-
Tj = + 7 ° C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	1.95	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.95	-
Tj = +12 ° C	Pdh	5.2	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	12.1	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.1	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			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	4115	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	139	%	
Daily electricity consumption	Q <sub>elec</sub>	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

Contact details

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



**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	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	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	221	%
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	3.10	-
Tj = + 2 ° C	Pdh	12.1	kW	Tj = + 7 ° C	COPd	5.10	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	7.10	-
Tj = + 7 ° C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	3.10	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.10	-
Tj = +12 ° C	Pdh	4.4	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	12.1	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.1	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			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	2882	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	139	%	
Daily electricity consumption	Q <sub>elec</sub>	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

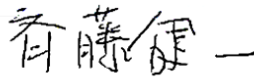
Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	ERST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.1	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	10.7	kW	Tj = - 7 ° C	COPd	1.87	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.33	-
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 7 ° C	COPd	4.65	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.20	-
Tj = + 7 ° C	Pdh	5.0	kW	Tj = bivalent temperature	COPd	1.87	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.55	-
Tj = +12 ° C	Pdh	3.8	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.7	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.7	kW	Rated heat output (*)	Psup	1.4	kW
Bivalent temperature	Tbiv	-7	° 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			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	7395	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	134	%	
Daily electricity consumption	Q <sub>elec</sub>	4.080	kWh				
Annual electricity consumption	AEC	898	kWh				

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

The identification and signature of the person empowered to bind the supplier:  
  
 Kenichi SAITO  
 Manager, Quality Assurance Department  
 TURKEY

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 · Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.  
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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-SWM120VAA
	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	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	178	%
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	10.7	kW	Tj = - 7 ° C	COPd	2.75	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	4.50	-
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 7 ° C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.00	-
Tj = + 7 ° C	Pdh	5.2	kW	Tj = bivalent temperature	COPd	2.75	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.40	-
Tj = +12 ° C	Pdh	4.0	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.97	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.7	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.7	kW	Rated heat output (*)	Psup	1.4	kW
Bivalent temperature	Tbiv	-7	° 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			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58		dBA			
Annual energy consumption	Q <sub>HE</sub>	5511		kWh			

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	134	%	
Daily electricity consumption	Q <sub>elec</sub>	4.080	kWh				
Annual electricity consumption	AEC	898	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-SWM120VAA
	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	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	109	%
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	7.3	kW	Tj = - 7 ° C	COPd	2.50	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.40	-
Tj = + 2 ° C	Pdh	4.4	kW	Tj = + 7 ° C	COPd	4.60	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.80	-
Tj = + 7 ° C	Pdh	3.8	kW	Tj = bivalent temperature	COPd	1.45	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.30	-
Tj = +12 ° C	Pdh	4.4	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	1.40	-
Degradation co-efficient (**)	Cdh	0.98	-	Operation limit temperature	TOL	-25	° C
Tj = bivalent temperature	Pdh	9.2	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	7.8	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	8.9	kW	Rated heat output (*)	Psup	4.3	kW
Bivalent temperature	Tbiv	-13	° 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			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	10640	kWh				

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	109	%
Daily electricity consumption	Q <sub>elec</sub>	4.750	kWh				
Annual electricity consumption	AEC	1044	kWh				

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

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	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	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	141	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	7.3	kW	Tj = - 7 ° C	COPd	3.50	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.00	-
Tj = + 2 ° C	Pdh	4.5	kW	Tj = + 7 ° C	COPd	5.20	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.50	-
Tj = + 7 ° C	Pdh	3.9	kW	Tj = bivalent temperature	COPd	1.95	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.50	-
Tj = +12 ° C	Pdh	5.5	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	2.00	-
Degradation co-efficient (**)	Cdh	0.98	-	Operation limit temperature	TOL	-25	° C
Tj = bivalent temperature	Pdh	10.2	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	8.0	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	9.9	kW	Rated heat output (*)	Psup	4.1	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			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	8257	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	109	%	
Daily electricity consumption	Q <sub>elec</sub>	4.750	kWh				
Annual electricity consumption	AEC	1044	kWh				

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

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	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	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	157	%
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	1.95	-
Tj = + 2 ° C	Pdh	12.1	kW	Tj = + 7 ° C	COPd	3.30	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	5.40	-
Tj = + 7 ° C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	1.95	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.95	-
Tj = +12 ° C	Pdh	5.2	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	12.1	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.1	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			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	4049	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	139	%	
Daily electricity consumption	Q <sub>elec</sub>	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

Contact details

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

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	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	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	227	%
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	3.10	-
Tj = + 2 ° C	Pdh	12.1	kW	Tj = + 7 ° C	COPd	5.10	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	7.10	-
Tj = + 7 ° C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	3.10	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.10	-
Tj = +12 ° C	Pdh	4.4	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	12.1	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.1	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			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	2816	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	139	%	
Daily electricity consumption	Q <sub>elec</sub>	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

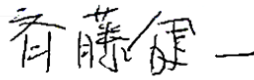
Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHST20D-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	131	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	10.7	kW	Tj = - 7 ° C	COPd	1.87	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.33	-
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 7 ° C	COPd	4.65	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.20	-
Tj = + 7 ° C	Pdh	5.0	kW	Tj = bivalent temperature	COPd	1.87	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.55	-
Tj = +12 ° C	Pdh	3.8	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.7	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.7	kW	Rated heat output (*)	Psup	1.4	kW
Bivalent temperature	Tbiv	-7	° 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			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	7450	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	134	%	
Daily electricity consumption	Q <sub>elec</sub>	4.080	kWh				
Annual electricity consumption	AEC	898	kWh				

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

The identification and signature of the person empowered to bind the supplier:  
  
 Kenichi SAITO  
 Manager, Quality Assurance Department  
 TURKEY

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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-SWM120VAA
	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	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	177	%
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	10.7	kW	Tj = - 7 ° C	COPd	2.75	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	4.50	-
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 7 ° C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.00	-
Tj = + 7 ° C	Pdh	5.2	kW	Tj = bivalent temperature	COPd	2.75	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.40	-
Tj = +12 ° C	Pdh	4.0	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.97	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.7	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.7	kW	Rated heat output (*)	Psup	1.4	kW
Bivalent temperature	Tbiv	-7	° 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			
Capacity control	variable		
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA
Annual energy consumption	Q <sub>HE</sub>	5566	kWh
Rated air flow rate, outdoors			
-			
2640			
m <sup>3</sup> /h			

For heat pump combination heater:			
Declared load profile	L		
Daily electricity consumption	Q <sub>elec</sub>	4.080	kWh
Annual electricity consumption	AEC	898	kWh
Water heating energy efficiency			
$\eta_{wh}$			
134			
%			

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**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	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	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	109	%
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	7.3	kW	Tj = - 7 ° C	COPd	2.50	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 ° C	COPd	3.40	-
Tj = + 2 ° C	Pdh	4.4	kW	Tj = + 7 ° C	COPd	4.60	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.80	-
Tj = + 7 ° C	Pdh	3.8	kW	Tj = bivalent temperature	COPd	1.45	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.30	-
Tj = +12 ° C	Pdh	4.4	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	1.40	-
Degradation co-efficient (**)	Cdh	0.98	-	Operation limit temperature	TOL	-25	° C
Tj = bivalent temperature	Pdh	9.2	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	7.8	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	8.9	kW	Rated heat output (*)	Psup	4.3	kW
Bivalent temperature	Tbiv	-13	° 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			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	10673	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	109	%	
Daily electricity consumption	Q <sub>elec</sub>	4.750	kWh				
Annual electricity consumption	AEC	1044	kWh				

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	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	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	141	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	7.3	kW	Tj = - 7 ° C	COPd	3.50	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 ° C	COPd	4.00	-
Tj = + 2 ° C	Pdh	4.5	kW	Tj = + 7 ° C	COPd	5.20	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.50	-
Tj = + 7 ° C	Pdh	3.9	kW	Tj = bivalent temperature	COPd	1.95	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.50	-
Tj = +12 ° C	Pdh	5.5	kW	Tj = - 15 ° C (if TOL < - 20 ° C)	COPd	2.00	-
Degradation co-efficient (**)	Cdh	0.98	-	Operation limit temperature	TOL	-25	° C
Tj = bivalent temperature	Pdh	10.2	kW	Heating water operating limit temperature	WTOL	60	° C
Tj = operation limit temperature (***)	Pdh	8.0	kW	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	9.9	kW	Rated heat output (*)	Psup	4.1	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			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	8290	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	109	%	
Daily electricity consumption	Q <sub>elec</sub>	4.750	kWh				
Annual electricity consumption	AEC	1044	kWh				

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	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	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	154	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	-	kW	Tj = - 7 ° C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-	Tj = + 2 ° C	COPd	1.95	-
Tj = + 2 ° C	Pdh	12.1	kW	Tj = + 7 ° C	COPd	3.30	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	5.40	-
Tj = + 7 ° C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	1.95	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.95	-
Tj = +12 ° C	Pdh	5.2	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	12.1	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.1	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			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	4115	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			$\eta_{wh}$	139	%	
Daily electricity consumption	Q <sub>elec</sub>	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	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	12.1	kW	Seasonal space heating energy efficiency	$\eta_s$	221	%
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	3.10	-
Tj = + 2 ° C	Pdh	12.1	kW	Tj = + 7 ° C	COPd	5.10	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	7.10	-
Tj = + 7 ° C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	3.10	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.10	-
Tj = +12 ° C	Pdh	4.4	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	12.1	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.1	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	-	2640	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	2882	kWh				

**For heat pump combination heater:**

Declared load profile	L			Water heating energy efficiency	$\eta_{wh}$	139	%
Daily electricity consumption	Q <sub>elec</sub>	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

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

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