

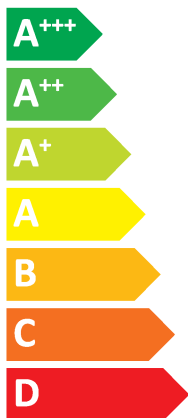


# ENERG

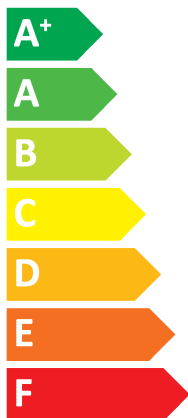
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Indoor unit ERST30F-YM9EE  
Outdoor unit PUZ-SHWM100YAA



**A<sup>++</sup>**



**A<sup>+</sup>**

Two icons showing sound waves from a house. The top icon is labeled **41 dB** and the bottom icon is labeled **58 dB**.



Legend for power levels: a dark blue square for 10 kW, a medium blue square for **10 kW**, and a light blue square for 10 kW.

1. SPACE HEATER

		1	Outdoor unit	PUZ-SHWM100YAA
		2	Indoor unit	ERST30F-YM9EE
For medium-temperature application	3	Medium-temperature application		✓
	6	Seasonal space heating energy efficiency class		A++
	8	Rated heat output under average climate conditions	kW	10
	11	Seasonal space heating energy efficiency under average climate conditions	%	138
	9	For space heating, annual energy consumption under average climate conditions	kWh	5868
	13	Sound power level L <sub>WA</sub> indoor	dB	41
	15	Rated heat output under colder climate conditions	kW	10
	16	Rated heat output under warmer climate conditions	kW	10
	21	Seasonal space heating energy efficiency under colder climate conditions	%	117
	22	Seasonal space heating energy efficiency under warmer climate conditions	%	168
	17	For space heating, annual energy consumption under colder climate conditions	kWh	8214
	18	For space heating, annual energy consumption under warmer climate conditions	kWh	3132
	25	Sound power level L <sub>WA</sub> outdoor	dB	58
For low-temperature application	4	Low-temperature application		✓
	6	Seasonal space heating energy efficiency class		A+++
	8	Rated heat output under average climate conditions	kW	10
	11	Seasonal space heating energy efficiency under average climate conditions	%	186
	9	For space heating, annual energy consumption under average climate conditions	kWh	4380
	13	Sound power level L <sub>WA</sub> indoor	dB	41
	15	Rated heat output under colder climate conditions	kW	10
	16	Rated heat output under warmer climate conditions	kW	10
	21	Seasonal space heating energy efficiency under colder climate conditions	%	150
	22	Seasonal space heating energy efficiency under warmer climate conditions	%	243
	17	For space heating, annual energy consumption under colder climate conditions	kWh	6438
	18	For space heating, annual energy consumption under warmer climate conditions	kWh	2171
	25	Sound power level L <sub>WA</sub> outdoor	dB	58

2. COMBINATION HEATER

		1	Outdoor unit	PUZ-SHWM100YAA	
		2	Indoor unit	ERST30F-YM9EE	
For medium-temperature application	3	Medium-temperature application		✓	
	5	Declared load profile		XL	
	6	Seasonal space heating energy efficiency class		A++	
	7	Water heating energy efficiency class		A+	
	8	Rated heat output under average climate conditions	kW	10	
	9	For space heating, annual energy consumption under average climate conditions	kWh	5868	
	10	For water heating, annual electricity consumption under average climate conditions	kWh	1345	
	11	Seasonal space heating energy efficiency under average climate conditions	%	138	
	12	Water heating energy efficiency under average climate conditions	%	130	
	13	Sound power level L <sub>WA</sub> indoor	dB	41	
	14	Work only during off-peak hours		-	
	15	Rated heat output under colder climate conditions	kW	10	
	16	Rated heat output under warmer climate conditions	kW	10	
	17	For space heating, annual energy consumption under colder climate conditions	kWh	8214	
	18	For space heating, annual energy consumption under warmer climate conditions	kWh	3132	
	19	For water heating, annual energy consumption under colder climate conditions	kWh	1741	
	20	For water heating, annual energy consumption under warmer climate conditions	kWh	1195	
	21	Seasonal space heating energy efficiency under colder climate conditions	%	117	
	22	Seasonal space heating energy efficiency under warmer climate conditions	%	168	
	23	Water heating energy efficiency under colder climate conditions	%	100	
	24	Water heating energy efficiency under warmer climate conditions	%	147	
	25	Sound power level L <sub>WA</sub> outdoor	dB	58	
	For low-temperature application	4	Low-temperature application		✓
		5	Declared load profile		XL
		6	Seasonal space heating energy efficiency class		A+++
7		Water heating energy efficiency class		A+	
8		Rated heat output under average climate conditions	kW	10	
9		For space heating, annual energy consumption under average climate conditions	kWh	4380	
10		For water heating, annual electricity consumption under average climate conditions	kWh	1345	
11		Seasonal space heating energy efficiency under average climate conditions	%	186	
12		Water heating energy efficiency under average climate conditions	%	130	
13		Sound power level L <sub>WA</sub> indoor	dB	41	
14		Work only during off-peak hours		-	
15		Rated heat output under colder climate conditions	kW	10	
16		Rated heat output under warmer climate conditions	kW	10	
17		For space heating, annual energy consumption under colder climate conditions	kWh	6438	
18		For space heating, annual energy consumption under warmer climate conditions	kWh	2171	
19		For water heating, annual energy consumption under colder climate conditions	kWh	1741	
20		For water heating, annual energy consumption under warmer climate conditions	kWh	1195	
21		Seasonal space heating energy efficiency under colder climate conditions	%	150	
22		Seasonal space heating energy efficiency under warmer climate conditions	%	243	
23		Water heating energy efficiency under colder climate conditions	%	100	
24		Water heating energy efficiency under warmer climate conditions	%	147	
25		Sound power level L <sub>WA</sub> outdoor	dB	58	



# PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM100YAA
	Indoor unit:	ERST30F-YM9EE
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
Rated heat output (*)	Prated	10.0	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	P <sub>dh</sub>	8.8	kW
Degradation co-efficient(**)	C <sub>dh</sub>	1.00	
T <sub>j</sub> = +2°C	P <sub>dh</sub>	5.4	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.99	
T <sub>j</sub> = +7°C	P <sub>dh</sub>	4.8	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.98	
T <sub>j</sub> = +12°C	P <sub>dh</sub>	2.9	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.95	
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	10.0	kW
T <sub>j</sub> = operation limit temperature(***)	P <sub>dh</sub>	10.0	kW
Bivalent temperature	T <sub>biv</sub>	-10	°C
Reference design conditions for space heating	T <sub>designh</sub>	-10	°C
Power consumption in modes other than active mode			
Off mode	P <sub>OFF</sub>	0.022	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW
Standby mode	P <sub>SB</sub>	0.022	kW
Crankcase heater mode	P <sub>CK</sub>	0.000	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η <sub>s</sub>	138	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	COP <sub>d</sub>	2.20	
T <sub>j</sub> = +2°C	COP <sub>d</sub>	3.40	
T <sub>j</sub> = +7°C	COP <sub>d</sub>	4.62	
T <sub>j</sub> = +12°C	COP <sub>d</sub>	6.30	
T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.70	
T <sub>j</sub> = operation limit temperature(***)	COP <sub>d</sub>	1.70	
Operation limit temperature	TOL	-30	°C
Heating water operating limit temperature	WTOL	70	°C
Supplementary heater			
Rated heat output(*)	P <sub>sup</sub>	0.0	kW
Type of energy input		Electrical	

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dB
Annual energy consumption	Q <sub>HE</sub>	5868	kWh

Rated air flow rate, outdoors		2640	m <sup>3</sup> /h
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For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q <sub>elec</sub>	6.110	kWh
Annual electricity consumption	AEC	1345	kWh

Water heating energy efficiency	η <sub>wh</sub>	130	%
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Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY INC. SÖĞÜTÖKÜYÜ, YOSB Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusre - Manisa

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



Kenichi SAITO  
 Manager, Quality Assurance Department  
 TURKEY

· Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.  
 · Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.  
 (\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).  
 (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.  
 (\*\*\*) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

# PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM100YAA
	Indoor unit:	ERST30F-YM9EE
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
Rated heat output (*)	Prated	10.0	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	P <sub>dh</sub>	8.8	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.99	
T <sub>j</sub> = +2°C	P <sub>dh</sub>	5.4	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.98	
T <sub>j</sub> = +7°C	P <sub>dh</sub>	5.2	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.98	
T <sub>j</sub> = +12°C	P <sub>dh</sub>	3.2	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.95	
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	10.0	kW
T <sub>j</sub> = operation limit temperature(***)	P <sub>dh</sub>	10.0	kW
Bivalent temperature	T <sub>biv</sub>	-10	°C
Reference design conditions for space heating	T <sub>designh</sub>	-10	°C
Power consumption in modes other than active mode			
Off mode	P <sub>OFF</sub>	0.022	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW
Standby mode	P <sub>SB</sub>	0.022	kW
Crankcase heater mode	P <sub>CK</sub>	0.000	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η <sub>s</sub>	186	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	COP <sub>d</sub>	3.12	
T <sub>j</sub> = +2°C	COP <sub>d</sub>	4.65	
T <sub>j</sub> = +7°C	COP <sub>d</sub>	6.00	
T <sub>j</sub> = +12°C	COP <sub>d</sub>	6.96	
T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.51	
T <sub>j</sub> = operation limit temperature(***)	COP <sub>d</sub>	2.51	
Operation limit temperature	TOL	-30	°C
Heating water operating limit temperature	WTOL	70	°C
Supplementary heater			
Rated heat output(*)	P <sub>sup</sub>	0.0	kW
Type of energy input		Electrical	

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dB
Annual energy consumption	Q <sub>HE</sub>	4380	kWh
Rated air flow rate, outdoors			
		2640	m <sup>3</sup> /h

For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q <sub>elec</sub>	6.110	kWh
Annual electricity consumption	AEC	1345	kWh
Water heating energy efficiency			
		η <sub>wh</sub>	130 %

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY INC. SÖĞÜTÖRKÜYÜSÜ Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusre - Manisa

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

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

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-SHWM100YAA
	Indoor unit:	ERST30F-YM9EE
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
Rated heat output (*)	Prated	10.0	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7°C	P <sub>dh</sub>	6.0	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.99	
T <sub>j</sub> = + 2°C	P <sub>dh</sub>	4.0	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.98	
T <sub>j</sub> = + 7°C	P <sub>dh</sub>	3.8	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.97	
T <sub>j</sub> = + 12°C	P <sub>dh</sub>	4.4	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.97	
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	8.4	kW
T <sub>j</sub> = operation limit temperature(***)	P <sub>dh</sub>	8.0	kW
T <sub>j</sub> = - 15°C (if TOL < - 20°C)	P <sub>dh</sub>	8.2	kW
Bivalent temperature	T <sub>biv</sub>	-16	°C
Reference design conditions for space heating	T <sub>designh</sub>	-22	°C
Power consumption in modes other than active mode			
Off mode	P <sub>OFF</sub>	0.022	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW
Standby mode	P <sub>SB</sub>	0.022	kW
Crankcase heater mode	P <sub>CK</sub>	0.000	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η <sub>s</sub>	117	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7°C	COP <sub>d</sub>	2.62	
T <sub>j</sub> = + 2°C	COP <sub>d</sub>	3.53	
T <sub>j</sub> = + 7°C	COP <sub>d</sub>	4.59	
T <sub>j</sub> = + 12°C	COP <sub>d</sub>	6.88	
T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	1.58	
T <sub>j</sub> = operation limit temperature(***)	COP <sub>d</sub>	1.59	
T <sub>j</sub> = - 15°C (if TOL < - 20°C)	COP <sub>d</sub>	1.58	
Operation limit temperature	TOL	-30	°C
Heating water operating limit temperature	WTOL	70	°C
Supplementary heater			
Rated heat output(*)	P <sub>sup</sub>	2.0	kW
Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dB
Annual energy consumption	Q <sub>HE</sub>	8214	kWh

Rated air flow rate, outdoors	2640	m <sup>3</sup> /h
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For heat pump combination heater:			
Declared load profile	XL		
Daily electricity consumption	Q <sub>elec</sub>	7.910	kWh
Annual electricity consumption	AEC	1741	kWh

Water heating energy efficiency	η <sub>wh</sub>	100	%
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Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY INC. SÖĞÜTÖKÜYÜ, YOSB Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusre - Manis

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

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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-SHWM100YAA
	Indoor unit:	ERST30F-YM9EE
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
Rated heat output (*)	Prated	10.0	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	P <sub>dh</sub>	6.2	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.99	
T <sub>j</sub> = +2°C	P <sub>dh</sub>	4.1	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.98	
T <sub>j</sub> = +7°C	P <sub>dh</sub>	3.9	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.97	
T <sub>j</sub> = +12°C	P <sub>dh</sub>	4.5	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.96	
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	8.4	kW
T <sub>j</sub> = operation limit temperature(***)	P <sub>dh</sub>	7.7	kW
T <sub>j</sub> = -15°C (if TOL < -20°C)	P <sub>dh</sub>	8.2	kW
Bivalent temperature	T <sub>biv</sub>	-16	°C
Reference design conditions for space heating	T <sub>designh</sub>	-22	°C
Power consumption in modes other than active mode			
Off mode	P <sub>OFF</sub>	0.022	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW
Standby mode	P <sub>SB</sub>	0.022	kW
Crankcase heater mode	P <sub>CK</sub>	0.000	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η <sub>s</sub>	150	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = -7°C	COP <sub>d</sub>	3.71	
T <sub>j</sub> = +2°C	COP <sub>d</sub>	4.38	
T <sub>j</sub> = +7°C	COP <sub>d</sub>	5.34	
T <sub>j</sub> = +12°C	COP <sub>d</sub>	7.50	
T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.01	
T <sub>j</sub> = operation limit temperature(***)	COP <sub>d</sub>	1.57	
T <sub>j</sub> = -15°C (if TOL < -20°C)	COP <sub>d</sub>	2.01	
Operation limit temperature	TOL	-30	°C
Heating water operating limit temperature	WTOL	70	°C
Supplementary heater			
Rated heat output(*)	P <sub>sup</sub>	2.3	kW
Type of energy input	Electrical		

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dB
Annual energy consumption	Q <sub>HE</sub>	6438	kWh

Rated air flow rate, outdoors	2640	m <sup>3</sup> /h
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For heat pump combination heater:			
Declared load profile	XL		
Daily electricity consumption	Q <sub>elec</sub>	7.910	kWh
Annual electricity consumption	AEC	1741	kWh

Water heating energy efficiency	η <sub>wh</sub>	100	%
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Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY INC. SÖĞÜTÖKÜYÜ, YOSB Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusre - Manisa / Turkey

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

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

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-SHWM100YAA
	Indoor unit:	ERST30F-YM9EE
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
Rated heat output (*)	Prated	10.0	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7°C	P <sub>dh</sub>	-	kW
Degradation co-efficient(**)	C <sub>dh</sub>	-	
T <sub>j</sub> = + 2°C	P <sub>dh</sub>	10.0	kW
Degradation co-efficient(**)	C <sub>dh</sub>	1.00	
T <sub>j</sub> = + 7°C	P <sub>dh</sub>	6.4	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.99	
T <sub>j</sub> = + 12°C	P <sub>dh</sub>	4.2	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.97	
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	10.0	kW
T <sub>j</sub> = operation limit temperature(***)	P <sub>dh</sub>	10.0	kW
Bivalent temperature	T <sub>biv</sub>	2	°C
Reference design conditions for space heating	T <sub>designh</sub>	2	°C
Power consumption in modes other than active mode			
Off mode	P <sub>OFF</sub>	0.022	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW
Standby mode	P <sub>SB</sub>	0.022	kW
Crankcase heater mode	P <sub>CK</sub>	0.000	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η <sub>s</sub>	168	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7°C	COP <sub>d</sub>	-	
T <sub>j</sub> = + 2°C	COP <sub>d</sub>	2.10	
T <sub>j</sub> = + 7°C	COP <sub>d</sub>	3.56	
T <sub>j</sub> = + 12°C	COP <sub>d</sub>	5.77	
T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	2.10	
T <sub>j</sub> = operation limit temperature(***)	COP <sub>d</sub>	2.10	
Operation limit temperature	TOL	-30	°C
Heating water operating limit temperature	WTOL	70	°C
Supplementary heater			
Rated heat output(*)	P <sub>sup</sub>	0.0	kW
Type of energy input		Electrical	

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dB
Annual energy consumption	Q <sub>HE</sub>	3132	kWh

Rated air flow rate, outdoors		2640	m <sup>3</sup> /h
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For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q <sub>elec</sub>	5.430	kWh
Annual electricity consumption	AEC	1195	kWh

Water heating energy efficiency	η <sub>wh</sub>	147	%
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Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY ANONUS HİSİTİM VE İNŞAAT PAZARLAMA VE DAĞITIM ŞİRKETİ  
 Yabancı Satış Ofisi, Kocaeli Yolu, 19. Yunus Emre Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunus Emre - Manisa

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

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

Kenichi SAITO  
 Manager, Quality Assurance Department  
 TURKEY

· Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.  
 · Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.  
 (\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).  
 (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.  
 (\*\*\*) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.



# PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SHWM100YAA
	Indoor unit:	ERST30F-YM9EE
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
Rated heat output (*)	Prated	10.0	kW
Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7°C	P <sub>dh</sub>	-	kW
Degradation co-efficient(**)	C <sub>dh</sub>	-	
T <sub>j</sub> = + 2°C	P <sub>dh</sub>	10.0	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.99	
T <sub>j</sub> = + 7°C	P <sub>dh</sub>	6.4	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.98	
T <sub>j</sub> = + 12°C	P <sub>dh</sub>	4.4	kW
Degradation co-efficient(**)	C <sub>dh</sub>	0.96	
T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	10.0	kW
T <sub>j</sub> = operation limit temperature(***)	P <sub>dh</sub>	10.0	kW
Bivalent temperature	T <sub>biv</sub>	2	°C
Reference design conditions for space heating	T <sub>designh</sub>	2	°C
Power consumption in modes other than active mode			
Off mode	P <sub>OFF</sub>	0.022	kW
Thermostat-off mode	P <sub>TO</sub>	0.022	kW
Standby mode	P <sub>SB</sub>	0.022	kW
Crankcase heater mode	P <sub>CK</sub>	0.000	kW

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η <sub>s</sub>	243	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature T <sub>j</sub>			
T <sub>j</sub> = - 7°C	COP <sub>d</sub>	-	
T <sub>j</sub> = + 2°C	COP <sub>d</sub>	3.50	
T <sub>j</sub> = + 7°C	COP <sub>d</sub>	5.58	
T <sub>j</sub> = + 12°C	COP <sub>d</sub>	7.56	
T <sub>j</sub> = bivalent temperature	COP <sub>d</sub>	3.50	
T <sub>j</sub> = operation limit temperature(***)	COP <sub>d</sub>	3.50	
Operation limit temperature	TOL	-30	°C
Heating water operating limit temperature	WTOL	70	°C
Supplementary heater			
Rated heat output(*)	P <sub>sup</sub>	0.0	kW
Type of energy input		Electrical	

Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L <sub>WA</sub>	41 / 58	dB
Annual energy consumption	Q <sub>HE</sub>	2171	kWh

Rated air flow rate, outdoors		2640	m <sup>3</sup> /h
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For heat pump combination heater:			
Declared load profile		XL	
Daily electricity consumption	Q <sub>elec</sub>	5.430	kWh
Annual electricity consumption	AEC	1195	kWh

Water heating energy efficiency	η <sub>wh</sub>	147	%
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Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY INC. SÖĞÜTÖKÜYÜSÜ Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusre - Manisa

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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.