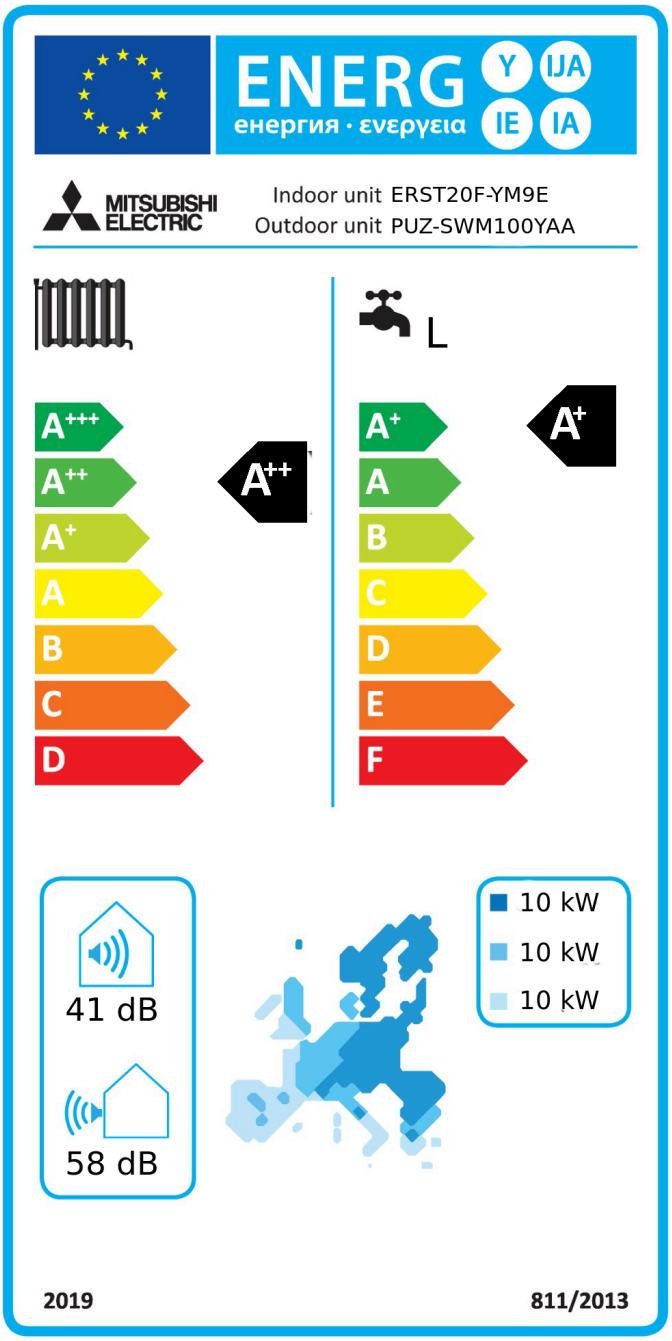
## Heat Pump Package Calculator Results

Outdoor: PUZ-SWM100YAA / Indoor: ERST20F-YM9E

**Energy Label**



## 1. SPACE HEATER

| | | | |
|---|---|---|---|
| 1 | Outdoor unit | | **PUZ-SWM100YAA** |
| 2 | Indoor unit | | **ERST20F-YM9E (Cylinder)** |
| **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 | % | 134 |
| 9 | For space heating, annual energy consumption under average climate conditions | kWh | 6042 |
| 13 | Sound power level $L_{WA}$ 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 | % | 110 |
| 22 | Seasonal space heating energy efficiency under warmer climate conditions | % | 159 |
| 17 | For space heating, annual energy consumption under colder climate conditions | kWh | 8747 |
| 18 | For space heating, annual energy consumption under warmer climate conditions | kWh | 3292 |
| 25 | Sound power level $L_{WA}$ 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 | % | 180 |
| 9 | For space heating, annual energy consumption under average climate conditions | kWh | 4505 |
| 13 | Sound power level $L_{WA}$ 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 | % | 148 |
| 22 | Seasonal space heating energy efficiency under warmer climate conditions | % | 229 |
| 17 | For space heating, annual energy consumption under colder climate conditions | kWh | 6526 |
| 18 | For space heating, annual energy consumption under warmer climate conditions | kWh | 2305 |
| 25 | Sound power level $L_{WA}$ outdoor | dB | 58 |

## 2. COMBINATION HEATER

| | | | |
|---|---|---|---|
| 1 | Outdoor unit | | **PUZ-SWM100YAA** |
| 2 | Indoor unit | | **ERST20F-YM9E (Cylinder)** |
| **For medium-temperature application** | | | |
| 3 | Medium-temperature application | | ✓ |
| 5 | Declared load profile | | **L** |
| 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 | 6042 |
| 10 | For water heating, annual electricity consumption under average climate conditions | kWh | 796 |
| 11 | Seasonal space heating energy efficiency under average climate conditions | % | 134 |
| 12 | Water heating energy efficiency under average climate conditions | % | 137 |
| 13 | Sound power level $L_{WA}$ indoor | dB | 41 |
| 14 | Work only during off-peak hours | | - |
| 19 | For water heating, annual energy consumption under colder climate conditions | kWh | 945 |
| 20 | For water heating, annual energy consumption under warmer climate conditions | kWh | 696 |
| 25 | Sound power level $L_{WA}$ outdoor | dB | 58 |
| **For low-temperature application** | | | |
| 4 | Low-temperature application | | ✓ |
| 5 | Declared load profile | | **L** |
| 6 | Seasonal space heating energy efficiency class | | **A+++** |
| 7 | Water heating energy efficiency class | | **A+** |
| 11 | Seasonal space heating energy efficiency under average climate conditions | % | 180 |
| 12 | Water heating energy efficiency under average climate conditions | % | 137 |
| 25 | Sound power level $L_{WA}$ outdoor | dB | 58 |

## PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---|---|---|
| Model(s): | Outdoor unit: | PUZ-SWM100YAA |
| | Indoor unit: | ERST20F-YM9E |
| 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(*) | $P_{rated}$ | 10.0 | kW |
| Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature $T_j$ | | | |
| $T_j$ = -7°C | $P_{dh}$ | 8.8 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 1.00 | |
| $T_j$ = +2°C | $P_{dh}$ | 5.4 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.99 | |
| $T_j$ = +7°C | $P_{dh}$ | 4.8 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.98 | |
| $T_j$ = +12°C | $P_{dh}$ | 2.9 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.96 | |
| $T_j$ = bivalent temperature | $P_{dh}$ | 8.8 | kW |
| $T_j$ = operation limit temperature(***) | $P_{dh}$ | 8.5 | kW |
| Bivalent temperature | $T_{biv}$ | -7 | °C |
| Reference design conditions for space heating | $T_{designh}$ | -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 | dB |
| Annual energy consumption | $Q_{HE}$ | 6042 | kWh |
| For heat pump combination heater: | | | |
| Declared load profile | | L | |
| Daily electricity consumption | $Q_{elec}$ | 3.620 | kWh |
| Annual electricity consumption | AEC | 796 | kWh |

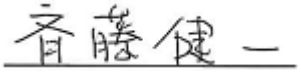
| Item | Symbol | Value | Unit |
|---|---|---|---|
| Seasonal space heating energy efficiency | $\eta_s$ | 134 | % |
| Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature $T_j$ | | | |
| $T_j$ = -7°C | $COP_d$ | 2.15 | |
| $T_j$ = +2°C | $COP_d$ | 3.35 | |
| $T_j$ = +7°C | $COP_d$ | 4.39 | |
| $T_j$ = +12°C | $COP_d$ | 5.99 | |
| $T_j$ = bivalent temperature | $COP_d$ | 2.15 | |
| $T_j$ = operation limit temperature(***) | $COP_d$ | 1.70 | |
| Operation limit temperature | $T_{OL}$ | -25 | °C |
| Heating water operating limit temperature | $W_{TOL}$ | 70 | °C |
| Supplementary heater | | | |
| Rated heat output(*) | $P_{sup}$ | 0.1 | kW |
| Type of energy input | | Electrical | |
| Rated air flow rate, outdoors | | 2640 | m³/h |
| Water heating energy efficiency | $\eta_{wh}$ | 137 | % |

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

Manager, Quality Assuarance Department

TURKEY

## PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---|---|---|
| Model(s): | Outdoor unit: | PUZ-SWM100YAA |
| | Indoor unit: | ERST20F-YM9E |
| 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(*) | $P_{rated}$ | 10.0 | kW |
| Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature $T_j$ | | | |
| $T_j$ = -7°C | $P_{dh}$ | 8.8 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 1.00 | |
| $T_j$ = +2°C | $P_{dh}$ | 5.4 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.99 | |
| $T_j$ = +7°C | $P_{dh}$ | 4.8 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.98 | |
| $T_j$ = +12°C | $P_{dh}$ | 2.9 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.96 | |
| $T_j$ = bivalent temperature | $P_{dh}$ | 8.8 | kW |
| $T_j$ = operation limit temperature(***) | $P_{dh}$ | 8.5 | kW |
| Bivalent temperature | $T_{biv}$ | -7 | °C |
| Reference design conditions for space heating | $T_{designh}$ | -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 | dB |
| Annual energy consumption | $Q_{HE}$ | 8747 | kWh |
| For heat pump combination heater: | | | |
| Declared load profile | | L | |
| Daily electricity consumption | $Q_{elec}$ | 4.290 | kWh |
| Annual electricity consumption | AEC | 945 | kWh |

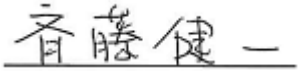
| Item | Symbol | Value | Unit |
|---|---|---|---|
| Seasonal space heating energy efficiency | $\eta_s$ | 110 | % |
| Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature $T_j$ | | | |
| $T_j$ = -7°C | $COP_d$ | 2.15 | |
| $T_j$ = +2°C | $COP_d$ | 3.35 | |
| $T_j$ = +7°C | $COP_d$ | 4.39 | |
| $T_j$ = +12°C | $COP_d$ | 5.99 | |
| $T_j$ = bivalent temperature | $COP_d$ | 2.15 | |
| $T_j$ = operation limit temperature(***) | $COP_d$ | 1.70 | |
| Operation limit temperature | $T_{OL}$ | -25 | °C |
| Heating water operating limit temperature | $W_{TOL}$ | 70 | °C |
| Supplementary heater | | | |
| Rated heat output(*) | $P_{sup}$ | 0.1 | kW |
| Type of energy input | | Electrical | |
| Rated air flow rate, outdoors | | 2640 | m³/h |
| Water heating energy efficiency | $\eta_{wh}$ | 115 | % |

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

Manager, Quality Assuarance Department

TURKEY

## PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---|---|---|
| Model(s): | Outdoor unit: | PUZ-SWM100YAA |
| | Indoor unit: | ERST20F-YM9E |
| 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(*) | $P_{rated}$ | 10.0 | kW |
| Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature $T_j$ | | | |
| $T_j$ = -7°C | $P_{dh}$ | 8.8 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 1.00 | |
| $T_j$ = +2°C | $P_{dh}$ | 5.4 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.99 | |
| $T_j$ = +7°C | $P_{dh}$ | 4.8 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.98 | |
| $T_j$ = +12°C | $P_{dh}$ | 2.9 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.96 | |
| $T_j$ = bivalent temperature | $P_{dh}$ | 8.8 | kW |
| $T_j$ = operation limit temperature(***) | $P_{dh}$ | 8.5 | kW |
| Bivalent temperature | $T_{biv}$ | -7 | °C |
| Reference design conditions for space heating | $T_{designh}$ | -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 | dB |
| Annual energy consumption | $Q_{HE}$ | 3292 | kWh |
| For heat pump combination heater: | | | |
| Declared load profile | | L | |
| Daily electricity consumption | $Q_{elec}$ | 3.160 | kWh |
| Annual electricity consumption | AEC | 696 | kWh |

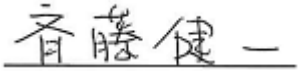
| Item | Symbol | Value | Unit |
|---|---|---|---|
| Seasonal space heating energy efficiency | $\eta_s$ | 159 | % |
| Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature $T_j$ | | | |
| $T_j$ = -7°C | $COP_d$ | 2.15 | |
| $T_j$ = +2°C | $COP_d$ | 3.35 | |
| $T_j$ = +7°C | $COP_d$ | 4.39 | |
| $T_j$ = +12°C | $COP_d$ | 5.99 | |
| $T_j$ = bivalent temperature | $COP_d$ | 2.15 | |
| $T_j$ = operation limit temperature(***) | $COP_d$ | 1.70 | |
| Operation limit temperature | $T_{OL}$ | -25 | °C |
| Heating water operating limit temperature | $W_{TOL}$ | 70 | °C |
| Supplementary heater | | | |
| Rated heat output(*) | $P_{sup}$ | 0.1 | kW |
| Type of energy input | | Electrical | |
| Rated air flow rate, outdoors | | 2640 | m³/h |
| Water heating energy efficiency | $\eta_{wh}$ | 158 | % |

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY

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Kenichi SAITO

Manager, Quality Assuarance Department

TURKEY

## PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---|---|---|
| Model(s): | Outdoor unit: | PUZ-SWM100YAA |
| | Indoor unit: | ERST20F-YM9E |
| 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(*) | $P_{rated}$ | 10.0 | kW |
| Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature $T_j$ | | | |
| $T_j$ = -7°C | $P_{dh}$ | 8.8 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.99 | |
| $T_j$ = +2°C | $P_{dh}$ | 5.4 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.98 | |
| $T_j$ = +7°C | $P_{dh}$ | 5.2 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.98 | |
| $T_j$ = +12°C | $P_{dh}$ | 3.2 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.96 | |
| $T_j$ = bivalent temperature | $P_{dh}$ | 8.8 | kW |
| $T_j$ = operation limit temperature(***) | $P_{dh}$ | 9.0 | kW |
| Bivalent temperature | $T_{biv}$ | -7 | °C |
| Reference design conditions for space heating | $T_{designh}$ | -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 | dB |
| Annual energy consumption | $Q_{HE}$ | 4505 | kWh |
| For heat pump combination heater: | | | |
| Declared load profile | | L | |
| Daily electricity consumption | $Q_{elec}$ | 3.620 | kWh |
| Annual electricity consumption | AEC | 796 | kWh |

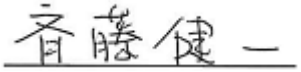
| Item | Symbol | Value | Unit |
|---|---|---|---|
| Seasonal space heating energy efficiency | $\eta_s$ | 180 | % |
| Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature $T_j$ | | | |
| $T_j$ = -7°C | $COP_d$ | 3.05 | |
| $T_j$ = +2°C | $COP_d$ | 4.61 | |
| $T_j$ = +7°C | $COP_d$ | 5.70 | |
| $T_j$ = +12°C | $COP_d$ | 6.61 | |
| $T_j$ = bivalent temperature | $COP_d$ | 3.05 | |
| $T_j$ = operation limit temperature(***) | $COP_d$ | 2.40 | |
| Operation limit temperature | $T_{OL}$ | -25 | °C |
| Heating water operating limit temperature | $W_{TOL}$ | 70 | °C |
| Supplementary heater | | | |
| Rated heat output(*) | $P_{sup}$ | 0.1 | kW |
| Type of energy input | | Electrical | |
| Rated air flow rate, outdoors | | 2640 | m³/h |
| Water heating energy efficiency | $\eta_{wh}$ | 137 | % |

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

Manager, Quality Assuarance Department

TURKEY

## PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---|---|---|
| Model(s): | Outdoor unit: | PUZ-SWM100YAA |
| | Indoor unit: | ERST20F-YM9E |
| 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(*) | $P_{rated}$ | 10.0 | kW |
| Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature $T_j$ | | | |
| $T_j$ = -7°C | $P_{dh}$ | 8.8 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.99 | |
| $T_j$ = +2°C | $P_{dh}$ | 5.4 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.98 | |
| $T_j$ = +7°C | $P_{dh}$ | 5.2 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.98 | |
| $T_j$ = +12°C | $P_{dh}$ | 3.2 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.96 | |
| $T_j$ = bivalent temperature | $P_{dh}$ | 8.8 | kW |
| $T_j$ = operation limit temperature(***) | $P_{dh}$ | 9.0 | kW |
| Bivalent temperature | $T_{biv}$ | -7 | °C |
| Reference design conditions for space heating | $T_{designh}$ | -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 | dB |
| Annual energy consumption | $Q_{HE}$ | 6526 | kWh |
| For heat pump combination heater: | | | |
| Declared load profile | | L | |
| Daily electricity consumption | $Q_{elec}$ | 4.290 | kWh |
| Annual electricity consumption | AEC | 945 | kWh |

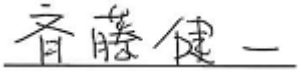
| Item | Symbol | Value | Unit |
|---|---|---|---|
| Seasonal space heating energy efficiency | $\eta_s$ | 148 | % |
| Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature $T_j$ | | | |
| $T_j$ = -7°C | $COP_d$ | 3.05 | |
| $T_j$ = +2°C | $COP_d$ | 4.61 | |
| $T_j$ = +7°C | $COP_d$ | 5.70 | |
| $T_j$ = +12°C | $COP_d$ | 6.61 | |
| $T_j$ = bivalent temperature | $COP_d$ | 3.05 | |
| $T_j$ = operation limit temperature(***) | $COP_d$ | 2.40 | |
| Operation limit temperature | $T_{OL}$ | -25 | °C |
| Heating water operating limit temperature | $W_{TOL}$ | 70 | °C |
| Supplementary heater | | | |
| Rated heat output(*) | $P_{sup}$ | 0.1 | kW |
| Type of energy input | | Electrical | |
| Rated air flow rate, outdoors | | 2640 | m³/h |
| Water heating energy efficiency | $\eta_{wh}$ | 115 | % |

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

Manager, Quality Assuarance Department

TURKEY

## PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---|---|---|
| Model(s): | Outdoor unit: | PUZ-SWM100YAA |
| | Indoor unit: | ERST20F-YM9E |
| 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(*) | $P_{rated}$ | 10.0 | kW |
| Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature $T_j$ | | | |
| $T_j$ = -7°C | $P_{dh}$ | 8.8 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.99 | |
| $T_j$ = +2°C | $P_{dh}$ | 5.4 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.98 | |
| $T_j$ = +7°C | $P_{dh}$ | 5.2 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.98 | |
| $T_j$ = +12°C | $P_{dh}$ | 3.2 | kW |
| *Degradation co-efficient(**)* | $C_{dh}$ | 0.96 | |
| $T_j$ = bivalent temperature | $P_{dh}$ | 8.8 | kW |
| $T_j$ = operation limit temperature(***) | $P_{dh}$ | 9.0 | kW |
| Bivalent temperature | $T_{biv}$ | -7 | °C |
| Reference design conditions for space heating | $T_{designh}$ | -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 | dB |
| Annual energy consumption | $Q_{HE}$ | 2305 | kWh |
| For heat pump combination heater: | | | |
| Declared load profile | | L | |
| Daily electricity consumption | $Q_{elec}$ | 3.160 | kWh |
| Annual electricity consumption | AEC | 696 | kWh |

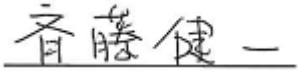
| Item | Symbol | Value | Unit |
|---|---|---|---|
| Seasonal space heating energy efficiency | $\eta_s$ | 229 | % |
| Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature $T_j$ | | | |
| $T_j$ = -7°C | $COP_d$ | 3.05 | |
| $T_j$ = +2°C | $COP_d$ | 4.61 | |
| $T_j$ = +7°C | $COP_d$ | 5.70 | |
| $T_j$ = +12°C | $COP_d$ | 6.61 | |
| $T_j$ = bivalent temperature | $COP_d$ | 3.05 | |
| $T_j$ = operation limit temperature(***) | $COP_d$ | 2.40 | |
| Operation limit temperature | $T_{OL}$ | -25 | °C |
| Heating water operating limit temperature | $W_{TOL}$ | 70 | °C |
| Supplementary heater | | | |
| Rated heat output(*) | $P_{sup}$ | 0.1 | kW |
| Type of energy input | | Electrical | |
| Rated air flow rate, outdoors | | 2640 | m³/h |
| For heat pump combination heater: | | | |
| Water heating energy efficiency | $\eta_{wh}$ | 158 | % |

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY

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



Kenichi SAITO

Manager, Quality Assuarance Department

TURKEY