

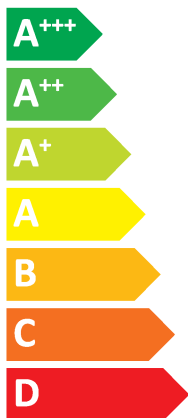


ENERG

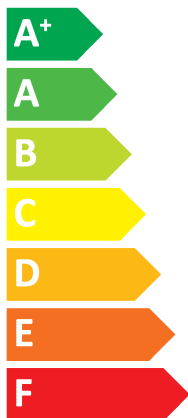
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Indoor unit ERST30F-VM6EE
Outdoor unit PUZ-SHWM120VAA



A⁺⁺



A⁺

Two icons showing sound power levels: a speaker icon with a house and the value 41 dB, and a house icon with a speaker and the value 58 dB.



Legend for power consumption: a dark blue square for 12 kW, a medium blue square for 12 kW, and a light blue square for 12 kW.

1. SPACE HEATER

| | | 1 | Outdoor unit | PUZ-SHWM120VAA |
|------------------------------------|----|---|--------------|----------------|
| | | 2 | Indoor unit | ERST30F-VM6EE |
| 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 | 12 |
| | 11 | Seasonal space heating energy efficiency under average climate conditions | % | 138 |
| | 9 | For space heating, annual energy consumption under average climate conditions | kWh | 7074 |
| | 13 | Sound power level L _{WA} indoor | dB | 41 |
| | 15 | Rated heat output under colder climate conditions | kW | 12 |
| | 16 | Rated heat output under warmer climate conditions | kW | 12 |
| | 21 | Seasonal space heating energy efficiency under colder climate conditions | % | 119 |
| | 22 | Seasonal space heating energy efficiency under warmer climate conditions | % | 164 |
| | 17 | For space heating, annual energy consumption under colder climate conditions | kWh | 9818 |
| | 18 | For space heating, annual energy consumption under warmer climate conditions | kWh | 3869 |
| | 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 | 12 |
| | 11 | Seasonal space heating energy efficiency under average climate conditions | % | 182 |
| | 9 | For space heating, annual energy consumption under average climate conditions | kWh | 5394 |
| | 13 | Sound power level L _{WA} indoor | dB | 41 |
| | 15 | Rated heat output under colder climate conditions | kW | 12 |
| | 16 | Rated heat output under warmer climate conditions | kW | 12 |
| | 21 | Seasonal space heating energy efficiency under colder climate conditions | % | 151 |
| | 22 | Seasonal space heating energy efficiency under warmer climate conditions | % | 239 |
| | 17 | For space heating, annual energy consumption under colder climate conditions | kWh | 7772 |
| | 18 | For space heating, annual energy consumption under warmer climate conditions | kWh | 2671 |
| | 25 | Sound power level L _{WA} outdoor | dB | 58 |

2. COMBINATION HEATER

| | | 1 | Outdoor unit | PUZ-SHWM120VAA | |
|------------------------------------|---------------------------------|--|--|----------------|------|
| | | 2 | Indoor unit | ERST30F-VM6EE | |
| 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 | 12 | |
| | 9 | For space heating, annual energy consumption under average climate conditions | kWh | 7074 | |
| | 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 _{WA} indoor | dB | 41 | |
| | 14 | Work only during off-peak hours | | - | |
| | 15 | Rated heat output under colder climate conditions | kW | 12 | |
| | 16 | Rated heat output under warmer climate conditions | kW | 12 | |
| | 17 | For space heating, annual energy consumption under colder climate conditions | kWh | 9818 | |
| | 18 | For space heating, annual energy consumption under warmer climate conditions | kWh | 3869 | |
| | 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 | % | 119 | |
| | 22 | Seasonal space heating energy efficiency under warmer climate conditions | % | 164 | |
| | 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 _{WA} 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 | 12 | |
| 9 | | For space heating, annual energy consumption under average climate conditions | kWh | 5394 | |
| 10 | | For water heating, annual electricity consumption under average climate conditions | kWh | 1345 | |
| 11 | | Seasonal space heating energy efficiency under average climate conditions | % | 182 | |
| 12 | | Water heating energy efficiency under average climate conditions | % | 130 | |
| 13 | | Sound power level L _{WA} indoor | dB | 41 | |
| 14 | | Work only during off-peak hours | | - | |
| 15 | | Rated heat output under colder climate conditions | kW | 12 | |
| 16 | | Rated heat output under warmer climate conditions | kW | 12 | |
| 17 | | For space heating, annual energy consumption under colder climate conditions | kWh | 7772 | |
| 18 | | For space heating, annual energy consumption under warmer climate conditions | kWh | 2671 | |
| 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 | % | 151 | |
| 22 | | Seasonal space heating energy efficiency under warmer climate conditions | % | 239 | |
| 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 _{WA} outdoor | dB | 58 | |

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---------------------------------------|---------------|---------------------------------|
| Model(s): | Outdoor unit: | PUZ-SHWM120VAA |
| | Indoor unit: | ERST30F-VM6EE |
| 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 | 12.1 | kW |
| Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j | | | |
| T _j = -7°C | P _{dh} | 10.7 | kW |
| Degradation co-efficient(**) | C _{dh} | 1.00 | |
| T _j = +2°C | P _{dh} | 6.5 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.99 | |
| T _j = +7°C | P _{dh} | 5.0 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.99 | |
| T _j = +12°C | P _{dh} | 3.8 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.98 | |
| T _j = bivalent temperature | P _{dh} | 12.1 | kW |
| T _j = operation limit temperature(***) | P _{dh} | 12.1 | kW |
| Bivalent temperature | T _{biv} | -10 | °C |
| Reference design conditions for space heating | T _{designh} | -10 | °C |
| Power consumption in modes other than active mode | | | |
| Off mode | P _{OFF} | 0.015 | kW |
| Thermostat-off mode | P _{TO} | 0.015 | kW |
| Standby mode | P _{SB} | 0.015 | kW |
| Crankcase heater mode | P _{CK} | 0.000 | kW |

| Item | Symbol | Value | Unit |
|---|------------------|------------|------|
| Seasonal space heating energy efficiency | η _s | 138 | % |
| 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 | 2.16 | |
| T _j = +2°C | COP _d | 3.38 | |
| T _j = +7°C | COP _d | 4.75 | |
| T _j = +12°C | COP _d | 6.32 | |
| T _j = bivalent temperature | COP _d | 1.79 | |
| T _j = operation limit temperature(***) | COP _d | 1.79 | |
| Operation limit temperature | TOL | -30 | °C |
| Heating water operating limit temperature | WTOL | 70 | °C |
| Supplementary heater | | | |
| Rated heat output(*) | P _{sup} | 0.0 | kW |
| Type of energy input | | Electrical | |

| Other items | | | |
|-------------------------------------|-----------------|----------|-----|
| Capacity control | | variable | |
| Sound power level, indoors/outdoors | L _{WA} | 41 / 58 | dB |
| Annual energy consumption | Q _{HE} | 7074 | kWh |

| | | | |
|-------------------------------|--|------|-------------------|
| Rated air flow rate, outdoors | | 2640 | m ³ /h |
|-------------------------------|--|------|-------------------|

| For heat pump combination heater: | | | |
|-----------------------------------|-------------------|-------|-----|
| Declared load profile | | XL | |
| Daily electricity consumption | Q _{elec} | 6.110 | kWh |
| Annual electricity consumption | AEC | 1345 | kWh |

| | | | |
|---------------------------------|-----------------|-----|---|
| Water heating energy efficiency | η _{wh} | 130 | % |
|---------------------------------|-----------------|-----|---|

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY INC. SÖĞÜTÖRKÜYÜ Yolu No:19, 06510 Yenimahalle/Ankara, Turkey

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



Kenichi SAITO
 Manager, Quality Assurance Department
 TURKEY

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---------------------------------------|---------------|------------------------------|
| Model(s): | Outdoor unit: | PUZ-SHWM120VAA |
| | Indoor unit: | ERST30F-VM6EE |
| 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 | 12.1 | kW |
| Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j | | | |
| T _j = -7°C | P _{dh} | 10.7 | kW |
| Degradation co-efficient(**) | C _{dh} | 1.00 | |
| T _j = +2°C | P _{dh} | 6.5 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.99 | |
| T _j = +7°C | P _{dh} | 5.2 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.98 | |
| T _j = +12°C | P _{dh} | 4.0 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.97 | |
| T _j = bivalent temperature | P _{dh} | 12.1 | kW |
| T _j = operation limit temperature(***) | P _{dh} | 12.1 | kW |
| Bivalent temperature | T _{biv} | -10 | °C |
| Reference design conditions for space heating | T _{designh} | -10 | °C |
| Power consumption in modes other than active mode | | | |
| Off mode | P _{OFF} | 0.015 | kW |
| Thermostat-off mode | P _{TO} | 0.015 | kW |
| Standby mode | P _{SB} | 0.015 | kW |
| Crankcase heater mode | P _{CK} | 0.000 | kW |

| Item | Symbol | Value | Unit |
|---|------------------|------------|------|
| Seasonal space heating energy efficiency | η _s | 182 | % |
| 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 | 2.87 | |
| T _j = +2°C | COP _d | 4.57 | |
| T _j = +7°C | COP _d | 6.04 | |
| T _j = +12°C | COP _d | 7.02 | |
| T _j = bivalent temperature | COP _d | 2.45 | |
| T _j = operation limit temperature(***) | COP _d | 2.45 | |
| Operation limit temperature | TOL | -30 | °C |
| Heating water operating limit temperature | WTOL | 70 | °C |
| Supplementary heater | | | |
| Rated heat output(*) | P _{sup} | 0.0 | kW |
| Type of energy input | | Electrical | |

| Other items | | | |
|-------------------------------------|-----------------|----------|-----|
| Capacity control | | variable | |
| Sound power level, indoors/outdoors | L _{WA} | 41 / 58 | dB |
| Annual energy consumption | Q _{HE} | 5394 | kWh |

| | | | |
|-------------------------------|--|------|-------------------|
| Rated air flow rate, outdoors | | 2640 | m ³ /h |
|-------------------------------|--|------|-------------------|

| For heat pump combination heater: | | | |
|-----------------------------------|-------------------|-------|-----|
| Declared load profile | | XL | |
| Daily electricity consumption | Q _{elec} | 6.110 | kWh |
| Annual electricity consumption | AEC | 1345 | kWh |

| | | | |
|---------------------------------|-----------------|-----|---|
| Water heating energy efficiency | η _{wh} | 130 | % |
|---------------------------------|-----------------|-----|---|

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY ANON İŞTİSM. ŞİRKETİ
 Yabancı Satış Birimi, Yabancı Satış 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

· 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-SHWM120VAA |
| | Indoor unit: | ERST30F-VM6EE |
| 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 | 12.1 | kW |
| Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j | | | |
| T _j = -7°C | P _{dh} | 7.3 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.99 | |
| T _j = +2°C | P _{dh} | 4.4 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.99 | |
| T _j = +7°C | P _{dh} | 3.8 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.98 | |
| T _j = +12°C | P _{dh} | 4.4 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.98 | |
| T _j = bivalent temperature | P _{dh} | 10.2 | kW |
| T _j = operation limit temperature(***) | P _{dh} | 8.2 | kW |
| T _j = -15°C (if TOL < -20°C) | P _{dh} | 9.9 | kW |
| Bivalent temperature | T _{biv} | -16 | °C |
| Reference design conditions for space heating | T _{designh} | -22 | °C |
| Power consumption in modes other than active mode | | | |
| Off mode | P _{OFF} | 0.015 | kW |
| Thermostat-off mode | P _{TO} | 0.015 | kW |
| Standby mode | P _{SB} | 0.015 | kW |
| Crankcase heater mode | P _{CK} | 0.000 | kW |

| Item | Symbol | Value | Unit |
|---|------------------|-------|------|
| Seasonal space heating energy efficiency | η _s | 119 | % |
| 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 | 2.70 | |
| T _j = +2°C | COP _d | 3.53 | |
| T _j = +7°C | COP _d | 4.78 | |
| T _j = +12°C | COP _d | 7.00 | |
| T _j = bivalent temperature | COP _d | 1.57 | |
| T _j = operation limit temperature(***) | COP _d | 1.54 | |
| T _j = -15°C (if TOL < -20°C) | COP _d | 1.57 | |
| Operation limit temperature | TOL | -30 | °C |
| Heating water operating limit temperature | WTOL | 70 | °C |
| Supplementary heater | | | |
| Rated heat output(*) | P _{sup} | 3.9 | kW |
| Type of energy input | Electrical | | |

| Other items | | | |
|-------------------------------------|-----------------|----------|-----|
| Capacity control | | variable | |
| Sound power level, indoors/outdoors | L _{WA} | 41 / 58 | dB |
| Annual energy consumption | Q _{HE} | 9818 | kWh |

| | | |
|-------------------------------|------|-------------------|
| Rated air flow rate, outdoors | 2640 | m ³ /h |
|-------------------------------|------|-------------------|

| For heat pump combination heater: | | | |
|-----------------------------------|-------------------|-------|-----|
| Declared load profile | | XL | |
| Daily electricity consumption | Q _{elec} | 7.910 | kWh |
| Annual electricity consumption | AEC | 1741 | kWh |

| | | | |
|---------------------------------|-----------------|-----|---|
| Water heating energy efficiency | η _{wh} | 100 | % |
|---------------------------------|-----------------|-----|---|

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:

Kenichi SAITO
 Manager, Quality Assurance Department
 TURKEY

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

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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.
 (*) 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-SHWM120VAA |
| | Indoor unit: | ERST30F-VM6EE |
| 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 | 12.1 | kW |
| Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j | | | |
| T _j = -7°C | P _{dh} | 7.3 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.99 | |
| T _j = +2°C | P _{dh} | 4.5 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.99 | |
| T _j = +7°C | P _{dh} | 3.9 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.98 | |
| T _j = +12°C | P _{dh} | 4.6 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.97 | |
| T _j = bivalent temperature | P _{dh} | 10.2 | kW |
| T _j = operation limit temperature(***) | P _{dh} | 8.7 | kW |
| T _j = -15°C (if TOL < -20°C) | P _{dh} | 9.9 | kW |
| Bivalent temperature | T _{biv} | -16 | °C |
| Reference design conditions for space heating | T _{designh} | -22 | °C |
| Power consumption in modes other than active mode | | | |
| Off mode | P _{OFF} | 0.015 | kW |
| Thermostat-off mode | P _{TO} | 0.015 | kW |
| Standby mode | P _{SB} | 0.015 | kW |
| Crankcase heater mode | P _{CK} | 0.000 | kW |

| Item | Symbol | Value | Unit |
|---|------------------|-------|------|
| Seasonal space heating energy efficiency | η _s | 151 | % |
| 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 | 3.67 | |
| T _j = +2°C | COP _d | 4.34 | |
| T _j = +7°C | COP _d | 5.38 | |
| T _j = +12°C | COP _d | 8.02 | |
| T _j = bivalent temperature | COP _d | 2.10 | |
| T _j = operation limit temperature(***) | COP _d | 1.56 | |
| T _j = -15°C (if TOL < -20°C) | COP _d | 2.06 | |
| Operation limit temperature | TOL | -30 | °C |
| Heating water operating limit temperature | WTOL | 70 | °C |
| Supplementary heater | | | |
| Rated heat output(*) | P _{sup} | 3.4 | kW |
| Type of energy input | Electrical | | |

| Other items | | | |
|-------------------------------------|-----------------|----------|-----|
| Capacity control | | variable | |
| Sound power level, indoors/outdoors | L _{WA} | 41 / 58 | dB |
| Annual energy consumption | Q _{HE} | 7772 | kWh |

| | | |
|-------------------------------|------|-------------------|
| Rated air flow rate, outdoors | 2640 | m ³ /h |
|-------------------------------|------|-------------------|

| For heat pump combination heater: | | | |
|-----------------------------------|-------------------|-------|-----|
| Declared load profile | | XL | |
| Daily electricity consumption | Q _{elec} | 7.910 | kWh |
| Annual electricity consumption | AEC | 1741 | kWh |

| | | | |
|---------------------------------|-----------------|-----|---|
| Water heating energy efficiency | η _{wh} | 100 | % |
|---------------------------------|-----------------|-----|---|

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:

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-SHWM120VAA |
| | Indoor unit: | ERST30F-VM6EE |
| 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 | 12.1 | kW |
| Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j | | | |
| T _j = -7°C | P _{dh} | - | kW |
| Degradation co-efficient(**) | C _{dh} | - | |
| T _j = +2°C | P _{dh} | 12.1 | kW |
| Degradation co-efficient(**) | C _{dh} | 1.00 | |
| T _j = +7°C | P _{dh} | 7.7 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.99 | |
| T _j = +12°C | P _{dh} | 5.2 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.98 | |
| T _j = bivalent temperature | P _{dh} | 12.1 | kW |
| T _j = operation limit temperature(***) | P _{dh} | 12.1 | kW |
| Bivalent temperature | T _{biv} | 2 | °C |
| Reference design conditions for space heating | T _{designh} | 2 | °C |
| Power consumption in modes other than active mode | | | |
| Off mode | P _{OFF} | 0.015 | kW |
| Thermostat-off mode | P _{TO} | 0.015 | kW |
| Standby mode | P _{SB} | 0.015 | kW |
| Crankcase heater mode | P _{CK} | 0.000 | kW |

| Item | Symbol | Value | Unit |
|---|------------------|------------|------|
| Seasonal space heating energy efficiency | η _s | 164 | % |
| 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 | - | |
| T _j = +2°C | COP _d | 2.05 | |
| T _j = +7°C | COP _d | 3.44 | |
| T _j = +12°C | COP _d | 5.67 | |
| T _j = bivalent temperature | COP _d | 2.05 | |
| T _j = operation limit temperature(***) | COP _d | 2.05 | |
| Operation limit temperature | TOL | -30 | °C |
| Heating water operating limit temperature | WTOL | 70 | °C |
| Supplementary heater | | | |
| Rated heat output(*) | P _{sup} | 0.0 | kW |
| Type of energy input | | Electrical | |

| Other items | | | |
|-------------------------------------|-----------------|----------|-----|
| Capacity control | | variable | |
| Sound power level, indoors/outdoors | L _{WA} | 41 / 58 | dB |
| Annual energy consumption | Q _{HE} | 3869 | kWh |

| | | | |
|-------------------------------|--|------|-------------------|
| Rated air flow rate, outdoors | | 2640 | m ³ /h |
|-------------------------------|--|------|-------------------|

| For heat pump combination heater: | | | |
|-----------------------------------|-------------------|-------|-----|
| Declared load profile | | XL | |
| Daily electricity consumption | Q _{elec} | 5.430 | kWh |
| Annual electricity consumption | AEC | 1195 | kWh |

| | | | |
|---------------------------------|-----------------|-----|---|
| Water heating energy efficiency | η _{wh} | 147 | % |
|---------------------------------|-----------------|-----|---|

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY ANONUS HİSİTİM VE İNŞAAT PAZARLAMA VE DAĞITIM ŞİRKETİ
 Yabancı Sanayi Bölgeleri, 15070. Söğütözü 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

· 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-SHWM120VAA |
| | Indoor unit: | ERST30F-VM6EE |
| 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 | 12.1 | kW |
| Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T _j | | | |
| T _j = - 7°C | P _{dh} | - | kW |
| Degradation co-efficient(**) | C _{dh} | - | |
| T _j = + 2°C | P _{dh} | 12.1 | kW |
| Degradation co-efficient(**) | C _{dh} | 1.00 | |
| T _j = + 7°C | P _{dh} | 7.7 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.99 | |
| T _j = + 12°C | P _{dh} | 4.4 | kW |
| Degradation co-efficient(**) | C _{dh} | 0.97 | |
| T _j = bivalent temperature | P _{dh} | 12.1 | kW |
| T _j = operation limit temperature(***) | P _{dh} | 12.1 | kW |
| Bivalent temperature | T _{biv} | 2 | °C |
| Reference design conditions for space heating | T _{designh} | 2 | °C |
| Power consumption in modes other than active mode | | | |
| Off mode | P _{OFF} | 0.015 | kW |
| Thermostat-off mode | P _{TO} | 0.015 | kW |
| Standby mode | P _{SB} | 0.015 | kW |
| Crankcase heater mode | P _{CK} | 0.000 | kW |

| Item | Symbol | Value | Unit |
|---|------------------|-------|------|
| Seasonal space heating energy efficiency | η _s | 239 | % |
| 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 | - | |
| T _j = + 2°C | COP _d | 3.30 | |
| T _j = + 7°C | COP _d | 5.37 | |
| T _j = + 12°C | COP _d | 7.49 | |
| T _j = bivalent temperature | COP _d | 3.30 | |
| T _j = operation limit temperature(***) | COP _d | 3.30 | |
| Operation limit temperature | TOL | -30 | °C |
| Heating water operating limit temperature | WTOL | 70 | °C |
| Supplementary heater | | | |
| Rated heat output(*) | P _{sup} | 0.0 | kW |
| Type of energy input | Electrical | | |

| Other items | | | |
|-------------------------------------|-----------------|---------|-----|
| Capacity control | variable | | |
| Sound power level, indoors/outdoors | L _{WA} | 41 / 58 | dB |
| Annual energy consumption | Q _{HE} | 2671 | kWh |

| | | |
|-------------------------------|------|-------------------|
| Rated air flow rate, outdoors | 2640 | m ³ /h |
|-------------------------------|------|-------------------|

| For heat pump combination heater: | | | |
|-----------------------------------|-------------------|-------|-----|
| Declared load profile | XL | | |
| Daily electricity consumption | Q _{elec} | 5.430 | kWh |
| Annual electricity consumption | AEC | 1195 | kWh |

| | | | |
|---------------------------------|-----------------|-----|---|
| Water heating energy efficiency | η _{wh} | 147 | % |
|---------------------------------|-----------------|-----|---|

Contact details

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

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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.