



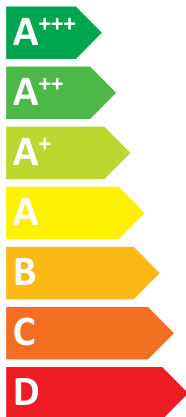
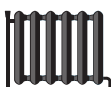
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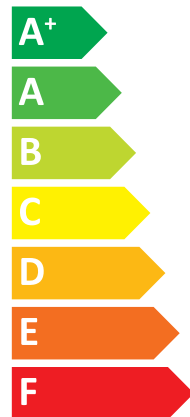
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Indoor unit EHST17/20D-****D
Outdoor unit SUZ-SHWM30VAH



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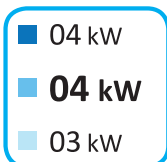
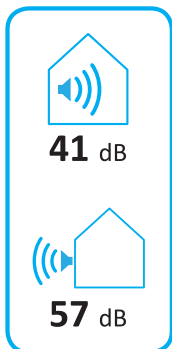


Table 1: SPACE HEATER. Columns: 1, 2, 3, 6, 8, 11, 9, 13, 15, 16, 21, 22, 17, 18, 25, 4, 6, 8, 11, 9, 13, 15, 16, 21, 22, 17, 18, 25. Rows: SUZ-SWM30VA, SUZ-SHW30VAH, SUZ-SWM40VA2(SC), SUZ-SHW40VAH(SC), SUZ-SWM60VA2(SC), SUZ-SHW60VAH(SC), SUZ-SWM80VA2, SUZ-SWM80VAH2, SUZ-SWM100VA, SUZ-SWM100VAH.

Table 2: COMBINATION HEATER. Columns: 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25. Rows: SUZ-SWM30VA, SUZ-SHW30VAH, SUZ-SWM40VA2(SC), SUZ-SHW40VAH(SC), SUZ-SWM60VA2(SC), SUZ-SHW60VAH(SC), SUZ-SWM80VA2, SUZ-SHW80VAH2, SUZ-SWM100VA, SUZ-SWM100VAH.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---------------------------------------|---------------|---------------------------------|
| Model(s): | Outdoor unit: | SUZ-SHWM30VAH |
| | Indoor unit: | EHST17D-****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 | 3.6 | kW | Seasonal space heating energy efficiency | η_s | 124 | % |
| 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 | 3.2 | kW | Tj = - 7 °C | COPd | 2.18 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = + 2 °C | COPd | 2.87 | - |
| Tj = + 2 °C | Pdh | 2.0 | kW | Tj = + 7 °C | COPd | 4.53 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = +12 °C | COPd | 7.17 | - |
| Tj = + 7 °C | Pdh | 2.2 | kW | Tj = bivalent temperature | COPd | 1.69 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Tj = operation limit temperature (***) | COPd | 1.69 | - |
| Tj = +12 °C | Pdh | 2.0 | kW | Operation limit temperature | TOL | -25 | °C |
| Degradation co-efficient (**) | Cdh | 0.96 | - | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = bivalent temperature | Pdh | 3.6 | kW | Supplementary heater | | | |
| Tj = operation limit temperature (***) | Pdh | 3.6 | kW | Rated heat output (*) | Psup | 0.0 | kW |
| Bivalent temperature | Tbiv | -10 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | Tdesignh | -10 | °C | Power consumption in modes other than active mode | | | |
| Off mode | | | | P _{OFF} | | | |
| Thermostat-off mode | | | | P _{TO} | | | |
| Standby mode | | | | P _{SB} | | | |
| Crankcase heater mode | | | | P _{CK} | | | |
| Other items | | | | Rated air flow rate, outdoors | | | |
| Capacity control | variable | | | - | 1680 | m ³ /h | |
| Sound power level, indoors/outdoors | L _{WA} | 41 / 57 | dB(A) | | | | |
| Annual energy consumption | Q _{HE} | 2347 | kWh | | | | |
| For heat pump combination heater: | | | | Water heating energy efficiency | | | |
| Declared load profile | L | | | η_{wh} | 147 | % | |
| Daily electricity consumption | Q _{elec} | 3.530 | kWh | | | | |
| Annual electricity consumption | AEC | 776 | kWh | | | | |

| | | | | | | | |
|--|--|--|--|---|--|--|--|
| Contact details | | | | | | | |
| MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. | | | | 700/406 moo 7, Tambon don hua roh, Amphur muang, chonburi 20000, Thailand | | | |
| The identification and signature of the person empowered to bind the supplier: | | | | | | | |

Tadashi SAITO
 Manager, Quality Assurance Department
 THAILAND

· 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: | SUZ-SHWM30VAH |
| | Indoor unit: | EHST17D-****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 | 4.0 | kW | Seasonal space heating energy efficiency | η_s | 180 | % |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j | | | | 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 | P _{dh} | 3.6 | kW | T _j = - 7 °C | COP _d | 3.23 | - |
| Degradation co-efficient (**) | C _{dh} | 0.99 | - | T _j = + 2 °C | COP _d | 4.19 | - |
| T _j = + 2 °C | P _{dh} | 2.2 | kW | T _j = + 7 °C | COP _d | 6.62 | - |
| Degradation co-efficient (**) | C _{dh} | 0.98 | - | T _j = +12 °C | COP _d | 9.51 | - |
| T _j = + 7 °C | P _{dh} | 2.4 | kW | T _j = bivalent temperature | COP _d | 2.69 | - |
| Degradation co-efficient (**) | C _{dh} | 0.97 | - | T _j = operation limit temperature (***) | COP _d | 2.69 | - |
| T _j = +12 °C | P _{dh} | 2.4 | kW | Operation limit temperature | TOL | -25 | °C |
| Degradation co-efficient (**) | C _{dh} | 0.96 | - | Heating water operating limit temperature | WTOL | 60 | °C |
| T _j = bivalent temperature | P _{dh} | 4.0 | kW | Supplementary heater | | | |
| T _j = operation limit temperature (***) | P _{dh} | 4.0 | kW | Rated heat output (*) | P _{sup} | 0.0 | kW |
| Bivalent temperature | T _{biv} | -10 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | T _{designh} | -10 | °C | Power consumption in modes other than active mode | | | |
| Power consumption in modes other than active mode | | | | Off mode | | | |
| Off mode | P _{OFF} | 0.010 | kW | Thermostat-off mode | P _{TO} | 0.010 | kW |
| Thermostat-off mode | P _{TO} | 0.010 | kW | Standby mode | P _{SB} | 0.010 | kW |
| Standby mode | P _{SB} | 0.010 | kW | Crankcase heater mode | P _{CK} | 0.000 | kW |
| Crankcase heater mode | P _{CK} | 0.000 | kW | Other items | | | |
| Capacity control | | | | Rated air flow rate, outdoors | | | |
| variable | | | | - | | | |
| Sound power level, indoors/outdoors | L _{WA} | 41 / 57 | dB(A) | 1680 | | | |
| Annual energy consumption | Q _{HE} | 1802 | kWh | m ³ /h | | | |

For heat pump combination heater:

| | | | | | | | |
|--------------------------------|-------------------|-------|-----|---------------------------------|-------------|-----|---|
| Declared load profile | L | | | Water heating energy efficiency | η_{wh} | 147 | % |
| Daily electricity consumption | Q _{elec} | 3.530 | kWh | | | | |
| Annual electricity consumption | AEC | 776 | kWh | | | | |

Contact details

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700/406 moo 7, Tambon don hua roh, Amphur muang, chonburi 20000, Thailand

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

Tadashi SAITO

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

Manager, Quality Assurance Department

THAILAND

· 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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---------------------------------------|---------------|---------------------------------|
| Model(s): | Outdoor unit: | SUZ-SHWM30VAH |
| | Indoor unit: | EHST17D-****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 | 3.6 | kW | Seasonal space heating energy efficiency | η_s | 104 | % |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j | | | | 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 | P _{dh} | 2.1 | kW | T _j = - 7 °C | COP _d | 2.31 | - |
| Degradation co-efficient (**) | C _{dh} | 0.99 | - | T _j = + 2 °C | COP _d | 3.05 | - |
| T _j = + 2 °C | P _{dh} | 1.8 | kW | T _j = + 7 °C | COP _d | 4.84 | - |
| Degradation co-efficient (**) | C _{dh} | 0.98 | - | T _j = +12 °C | COP _d | 7.14 | - |
| T _j = + 7 °C | P _{dh} | 2.2 | kW | T _j = bivalent temperature | COP _d | 1.70 | - |
| Degradation co-efficient (**) | C _{dh} | 0.98 | - | T _j = operation limit temperature (***) | COP _d | 1.54 | - |
| T _j = +12 °C | P _{dh} | 2.3 | kW | T _j = - 15 °C (if TOL < - 20 °C) | COP _d | 1.70 | - |
| Degradation co-efficient (**) | C _{dh} | 0.97 | - | Operation limit temperature | TOL | -25 | °C |
| T _j = bivalent temperature | P _{dh} | 2.9 | kW | Heating water operating limit temperature | WTOL | 60 | °C |
| T _j = operation limit temperature (***) | P _{dh} | 3.2 | kW | Supplementary heater | | | |
| T _j = - 15 °C (if TOL < - 20 °C) | P _{dh} | 2.9 | kW | Rated heat output (*) | P _{sup} | 3.6 | kW |
| Bivalent temperature | T _{biv} | -15 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | T _{designh} | -22 | °C | Power consumption in modes other than active mode | | | |
| Power consumption in modes other than active mode | | | | Off mode | | | |
| Off mode | P _{OFF} | 0.010 | kW | Thermostat-off mode | P _{TO} | 0.010 | kW |
| Thermostat-off mode | P _{TO} | 0.010 | kW | Standby mode | P _{SB} | 0.010 | kW |
| Standby mode | P _{SB} | 0.010 | kW | Crankcase heater mode | P _{CK} | 0.000 | kW |
| Crankcase heater mode | P _{CK} | 0.000 | kW | Other items | | | |
| Capacity control | | | | Rated air flow rate, outdoors | | | |
| variable | | | | - | | | |
| Sound power level, indoors/outdoors | | | | 1680 | | | |
| L _{WA} | | | | m ³ /h | | | |
| 41 / 57 | | | | | | | |
| Annual energy consumption | | | | | | | |
| Q _{HE} | | | | | | | |
| 3307 | | | | | | | |
| kWh | | | | | | | |
| For heat pump combination heater: | | | | Declared load profile | | | |
| L | | | | Water heating energy efficiency | | | |
| Daily electricity consumption | | | | η_{wh} | | | |
| Q _{elec} | | | | 121 | | | |
| 4.030 | | | | % | | | |
| kWh | | | | | | | |
| Annual electricity consumption | | | | | | | |
| AEC | | | | | | | |
| 886 | | | | | | | |
| kWh | | | | | | | |

Contact details

MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD.

700/406 moo 7, Tambon don hua roh, Amphur muang, chonburi 20000, Thailand

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

Tadashi SAITO

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

Manager, Quality Assurance Department

THAILAND

· 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: | SUZ-SHWM30VAH |
| | Indoor unit: | EHST17D-****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 | 3.6 | kW | Seasonal space heating energy efficiency | η_s | 138 | % |
| 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 | 2.3 | kW | Tj = - 7 °C | COPd | 3.14 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = + 2 °C | COPd | 3.91 | - |
| Tj = + 2 °C | Pdh | 1.9 | kW | Tj = + 7 °C | COPd | 5.94 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Tj = +12 °C | COPd | 8.32 | - |
| Tj = + 7 °C | Pdh | 2.3 | kW | Tj = bivalent temperature | COPd | 2.28 | - |
| Degradation co-efficient (**) | Cdh | 0.97 | - | Tj = operation limit temperature (***) | COPd | 1.85 | - |
| Tj = +12 °C | Pdh | 2.4 | kW | Tj = - 15 °C (if TOL < - 20 °C) | COPd | 2.28 | - |
| Degradation co-efficient (**) | Cdh | 0.97 | - | Operation limit temperature | TOL | -25 | °C |
| Tj = bivalent temperature | Pdh | 2.9 | kW | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = operation limit temperature (***) | Pdh | 2.9 | kW | Supplementary heater | | | |
| Tj = - 15 °C (if TOL < - 20 °C) | Pdh | 2.9 | kW | Rated heat output (*) | Psup | 0.7 | kW |
| Bivalent temperature | Tbiv | -15 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | Tdesignh | -22 | °C | Power consumption in modes other than active mode | | | |
| Off mode | | | | P _{OFF} | | | |
| Thermostat-off mode | | | | P _{TO} | | | |
| Standby mode | | | | P _{SB} | | | |
| Crankcase heater mode | | | | P _{CK} | | | |
| Other items | | | | Rated air flow rate, outdoors | | | |
| Capacity control | variable | | | - | 1680 | m ³ /h | |
| Sound power level, indoors/outdoors | L _{WA} | 41 / 57 | dB(A) | | | | |
| Annual energy consumption | Q _{HE} | 2521 | kWh | | | | |
| For heat pump combination heater: | | | | Water heating energy efficiency | | | |
| Declared load profile | L | | | η_{wh} | 121 | % | |
| Daily electricity consumption | Q _{elec} | 4.030 | kWh | | | | |
| Annual electricity consumption | AEC | 886 | kWh | | | | |

| | | | | | | | |
|--|--|--|--|---|--|--|--|
| Contact details | | | | | | | |
| MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. | | | | 700/406 moo 7, Tambon don hua roh, Amphur muang, chonburi 20000, Thailand | | | |
| The identification and signature of the person empowered to bind the supplier; | | | | | | | |
| The signature is signed in the average climate / medium-temperature section. | | | | Tadashi SAITO Manager, Quality Assurance Department THAILAND | | | |

· 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: | SUZ-SHWM30VAH |
| | Indoor unit: | EHST17D-****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 | 3.0 | kW | Seasonal space heating energy efficiency | η_s | 167 | % |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj | | | | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj | | | |
| Tj = - 7 °C | Pdh | - | kW | Tj = - 7 °C | COPd | - | - |
| Degradation co-efficient (**) | Cdh | - | - | Tj = + 2 °C | COPd | 2.36 | - |
| Tj = + 2 °C | Pdh | 3.0 | kW | Tj = + 7 °C | COPd | 3.60 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = +12 °C | COPd | 6.44 | - |
| Tj = + 7 °C | Pdh | 2.1 | kW | Tj = bivalent temperature | COPd | 2.36 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Tj = operation limit temperature (***) | COPd | 2.36 | - |
| Tj = +12 °C | Pdh | 2.3 | 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 | 3.0 | kW | Supplementary heater | | | |
| Tj = operation limit temperature (***) | Pdh | 3.0 | kW | Rated heat output (*) | Psup | 0.0 | kW |
| Bivalent temperature | Tbiv | 2 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | Tdesignh | 2 | °C | Power consumption in modes other than active mode | | | |
| Power consumption in modes other than active mode | | | | Off mode | | | |
| Off mode | P _{OFF} | 0.010 | kW | Thermostat-off mode | P _{TO} | 0.010 | kW |
| Thermostat-off mode | P _{TO} | 0.010 | kW | Standby mode | P _{SB} | 0.010 | kW |
| Standby mode | P _{SB} | 0.010 | kW | Crankcase heater mode | P _{CK} | 0.000 | kW |
| Crankcase heater mode | P _{CK} | 0.000 | kW | Other items | | | |
| Capacity control | | | | Rated air flow rate, outdoors | | | |
| variable | | | | - | | | |
| Sound power level, indoors/outdoors | | | | 1680 | | | |
| L _{WA} | | | | m ³ /h | | | |
| 41 / 57 | | | | | | | |
| Annual energy consumption | | | | | | | |
| Q _{HE} | | | | | | | |
| 940 | | | | | | | |
| kWh | | | | | | | |

| | | | | | | | |
|-----------------------------------|-------|-------|-----|---------------------------------|-------------|-----|---|
| For heat pump combination heater: | | | | | | | |
| Declared load profile | L | | | Water heating energy efficiency | η_{wh} | 169 | % |
| Daily electricity consumption | Qelec | 3.220 | kWh | | | | |
| Annual electricity consumption | AEC | 709 | kWh | | | | |

Contact details
 MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. 700/406 moo 7, Tambon don hua roh, Amphur muang, chonburi 20000, Thailand

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 Tadashi SAITO
 Manager, Quality Assurance Department
 THAILAND

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

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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: | SUZ-SHWM30VAH |
| | Indoor unit: | EHST17D-****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 | 3.0 | kW | Seasonal space heating energy efficiency | η_s | 237 | % |
| 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 | 3.65 | - |
| Tj = + 2 °C | Pdh | 3.0 | kW | Tj = + 7 °C | COPd | 6.04 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = +12 °C | COPd | 8.03 | - |
| Tj = + 7 °C | Pdh | 2.4 | kW | Tj = bivalent temperature | COPd | 3.65 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Tj = operation limit temperature (***) | COPd | 3.65 | - |
| Tj = +12 °C | Pdh | 2.3 | 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 | 3.0 | kW | Supplementary heater | | | |
| Tj = operation limit temperature (***) | Pdh | 3.0 | kW | Rated heat output (*) | Psup | 0.0 | kW |
| Bivalent temperature | Tbiv | 2 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | Tdesignh | 2 | °C | Power consumption in modes other than active mode | | | |
| Off mode | | | | P _{OFF} | | | |
| Thermostat-off mode | | | | P _{TO} | | | |
| Standby mode | | | | P _{SB} | | | |
| Crankcase heater mode | | | | P _{CK} | | | |
| Other items | | | | Rated air flow rate, outdoors | | | |
| Capacity control | variable | | | - | 1680 | m ³ /h | |
| Sound power level, indoors/outdoors | L _{WA} | 41 / 57 | dB(A) | | | | |
| Annual energy consumption | Q _{HE} | 668 | kWh | | | | |
| For heat pump combination heater: | | | | Water heating energy efficiency | | | |
| Declared load profile | L | | | η_{wh} | 169 | % | |
| Daily electricity consumption | Q _{elec} | 3.220 | kWh | | | | |
| Annual electricity consumption | AEC | 709 | kWh | | | | |

| | | | | | | | |
|--|--|--|--|---|--|--|--|
| Contact details | | | | | | | |
| MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. | | | | 700/406 moo 7, Tambon don hua roh, Amphur muang, chonburi 20000, Thailand | | | |
| The identification and signature of the person empowered to bind the supplier; | | | | | | | |
| The signature is signed in the average climate / medium-temperature section. | | | | Tadashi SAITO Manager, Quality Assurance Department THAILAND | | | |

· 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: | SUZ-SHWM30VAH |
| | 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 | 3.6 | kW | Seasonal space heating energy efficiency | η_s | 124 | % |
| 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 | 3.2 | kW | Tj = - 7 °C | COPd | 2.18 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = + 2 °C | COPd | 2.87 | - |
| Tj = + 2 °C | Pdh | 2.0 | kW | Tj = + 7 °C | COPd | 4.53 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = +12 °C | COPd | 7.17 | - |
| Tj = + 7 °C | Pdh | 2.2 | kW | Tj = bivalent temperature | COPd | 1.69 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Tj = operation limit temperature (***) | COPd | 1.69 | - |
| Tj = +12 °C | Pdh | 2.0 | kW | Operation limit temperature | TOL | -25 | °C |
| Degradation co-efficient (**) | Cdh | 0.96 | - | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = bivalent temperature | Pdh | 3.6 | kW | Supplementary heater | | | |
| Tj = operation limit temperature (***) | Pdh | 3.6 | kW | Rated heat output (*) | Psup | 0.0 | kW |
| Bivalent temperature | Tbiv | -10 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | Tdesignh | -10 | °C | Power consumption in modes other than active mode | | | |
| Power consumption in modes other than active mode | | | | Off mode | | | |
| Off mode | P _{OFF} | 0.010 | kW | Thermostat-off mode | P _{TO} | 0.010 | kW |
| Thermostat-off mode | P _{TO} | 0.010 | kW | Standby mode | P _{SB} | 0.010 | kW |
| Standby mode | P _{SB} | 0.010 | kW | Crankcase heater mode | P _{CK} | 0.000 | kW |
| Crankcase heater mode | P _{CK} | 0.000 | kW | Other items | | | |
| Capacity control | | | | Rated air flow rate, outdoors | | | |
| variable | | | | - | | | |
| Sound power level, indoors/outdoors | | | | 1680 | | | |
| L _{WA} | | | | m ³ /h | | | |
| 41 / 57 | | | | | | | |
| Annual energy consumption | | | | | | | |
| Q _{HE} | | | | | | | |
| 2347 | | | | | | | |
| kWh | | | | | | | |
| For heat pump combination heater: | | | | Declared load profile | | | |
| L | | | | Water heating energy efficiency | | | |
| Daily electricity consumption | | | | η_{wh} | | | |
| Q _{elec} | | | | 147 | | | |
| 3.730 | | | | % | | | |
| kWh | | | | | | | |
| Annual electricity consumption | | | | | | | |
| AEC | | | | | | | |
| 821 | | | | | | | |
| kWh | | | | | | | |

| | | | | | | | |
|--|--|--|--|---|--|--|--|
| Contact details | | | | | | | |
| MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. | | | | 700/406 moo 7, Tambon don hua roh, Amphur muang, chonburi 20000, Thailand | | | |
| The identification and signature of the person empowered to bind the supplier: | | | | | | | |

Tadashi SAITO
 Manager, Quality Assurance Department
 THAILAND

· 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: | SUZ-SHWM30VAH |
| | 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 | 4.0 | kW | Seasonal space heating energy efficiency | η_s | 180 | % |
| 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 | 3.6 | kW | Tj = - 7 °C | COPd | 3.23 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = + 2 °C | COPd | 4.19 | - |
| Tj = + 2 °C | Pdh | 2.2 | kW | Tj = + 7 °C | COPd | 6.62 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Tj = +12 °C | COPd | 9.51 | - |
| Tj = + 7 °C | Pdh | 2.4 | kW | Tj = bivalent temperature | COPd | 2.69 | - |
| Degradation co-efficient (**) | Cdh | 0.97 | - | Tj = operation limit temperature (***) | COPd | 2.69 | - |
| Tj = +12 °C | Pdh | 2.4 | kW | Operation limit temperature | TOL | -25 | °C |
| Degradation co-efficient (**) | Cdh | 0.96 | - | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = bivalent temperature | Pdh | 4.0 | kW | Supplementary heater | | | |
| Tj = operation limit temperature (***) | Pdh | 4.0 | kW | Rated heat output (*) | Psup | 0.0 | kW |
| Bivalent temperature | Tbiv | -10 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | Tdesignh | -10 | °C | Power consumption in modes other than active mode | | | |
| Power consumption in modes other than active mode | | | | Off mode | | | |
| Off mode | P _{OFF} | 0.010 | kW | Thermostat-off mode | P _{TO} | 0.010 | kW |
| Thermostat-off mode | P _{TO} | 0.010 | kW | Standby mode | P _{SB} | 0.010 | kW |
| Standby mode | P _{SB} | 0.010 | kW | Crankcase heater mode | P _{CK} | 0.000 | kW |
| Crankcase heater mode | P _{CK} | 0.000 | kW | Other items | | | |
| Capacity control | | | | Rated air flow rate, outdoors | | | |
| variable | | | | - | | | |
| Sound power level, indoors/outdoors | | | | 1680 | | | |
| L _{WA} | | | | m ³ /h | | | |
| 41 / 57 | | | | | | | |
| Annual energy consumption | | | | | | | |
| Q _{HE} | | | | | | | |
| 1802 | | | | | | | |
| kWh | | | | | | | |
| For heat pump combination heater: | | | | | | | |
| Declared load profile | | | | Water heating energy efficiency | | | |
| L | | | | η_{wh} | | | |
| Daily electricity consumption | | | | 147 | | | |
| Q _{elec} | | | | % | | | |
| 3.730 | | | | | | | |
| Annual electricity consumption | | | | | | | |
| AEC | | | | | | | |
| 821 | | | | | | | |
| kWh | | | | | | | |

| | | | | | | | |
|-------------------------------------|--|--|--|---------------------------------|--|--|--|
| Other items | | | | | | | |
| Capacity control | | | | Rated air flow rate, outdoors | | | |
| variable | | | | - | | | |
| Sound power level, indoors/outdoors | | | | 1680 | | | |
| L _{WA} | | | | m ³ /h | | | |
| 41 / 57 | | | | | | | |
| Annual energy consumption | | | | | | | |
| Q _{HE} | | | | | | | |
| 1802 | | | | | | | |
| kWh | | | | | | | |
| For heat pump combination heater: | | | | | | | |
| Declared load profile | | | | Water heating energy efficiency | | | |
| L | | | | η_{wh} | | | |
| Daily electricity consumption | | | | 147 | | | |
| Q _{elec} | | | | % | | | |
| 3.730 | | | | | | | |
| Annual electricity consumption | | | | | | | |
| AEC | | | | | | | |
| 821 | | | | | | | |
| kWh | | | | | | | |

Contact details
 MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. 700/406 moo 7, Tambon don hua roh, Amphur muang, chonburi 20000, Thailand

The identification and signature of the person empowered to bind the supplier;
 Tadashi SAITO
 Manager, Quality Assurance Department
 THAILAND

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

· 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: | SUZ-SHWM30VAH |
| | 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 | 3.6 | kW | Seasonal space heating energy efficiency | η_s | 104 | % |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j | | | | 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 | P _{dh} | 2.1 | kW | T _j = - 7 °C | COP _d | 2.31 | - |
| Degradation co-efficient (**) | C _{dh} | 0.99 | - | T _j = + 2 °C | COP _d | 3.05 | - |
| T _j = + 2 °C | P _{dh} | 1.8 | kW | T _j = + 7 °C | COP _d | 4.84 | - |
| Degradation co-efficient (**) | C _{dh} | 0.98 | - | T _j = +12 °C | COP _d | 7.14 | - |
| T _j = + 7 °C | P _{dh} | 2.2 | kW | T _j = bivalent temperature | COP _d | 1.70 | - |
| Degradation co-efficient (**) | C _{dh} | 0.98 | - | T _j = operation limit temperature (***) | COP _d | 1.54 | - |
| T _j = +12 °C | P _{dh} | 2.3 | kW | T _j = - 15 °C (if TOL < - 20 °C) | COP _d | 1.70 | - |
| Degradation co-efficient (**) | C _{dh} | 0.97 | - | Operation limit temperature | TOL | -25 | °C |
| T _j = bivalent temperature | P _{dh} | 2.9 | kW | Heating water operating limit temperature | WTOL | 60 | °C |
| T _j = operation limit temperature (***) | P _{dh} | 3.2 | kW | Supplementary heater | | | |
| T _j = - 15 °C (if TOL < - 20 °C) | P _{dh} | 2.9 | kW | Rated heat output (*) | P _{sup} | 3.6 | kW |
| Bivalent temperature | T _{biv} | -15 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | T _{designh} | -22 | °C | Power consumption in modes other than active mode | | | |
| Power consumption in modes other than active mode | | | | Off mode | | | |
| Off mode | P _{OFF} | 0.010 | kW | Thermostat-off mode | P _{TO} | 0.010 | kW |
| Thermostat-off mode | P _{TO} | 0.010 | kW | Standby mode | P _{SB} | 0.010 | kW |
| Standby mode | P _{SB} | 0.010 | kW | Crankcase heater mode | P _{CK} | 0.000 | kW |
| Crankcase heater mode | P _{CK} | 0.000 | kW | Other items | | | |
| Capacity control | | | | Rated air flow rate, outdoors | | | |
| variable | | | | - | | | |
| Sound power level, indoors/outdoors | | | | 1680 | | | |
| L _{WA} | | | | m ³ /h | | | |
| 41 / 57 | | | | | | | |
| Annual energy consumption | | | | | | | |
| Q _{HE} | | | | | | | |
| 3307 | | | | | | | |
| kWh | | | | | | | |
| For heat pump combination heater: | | | | Declared load profile | | | |
| L | | | | Water heating energy efficiency | | | |
| | | | | η_{wh} | | | |
| Daily electricity consumption | | | | 127 | | | |
| Q _{elec} | | | | % | | | |
| 4.020 | | | | | | | |
| Annual electricity consumption | | | | | | | |
| AEC | | | | | | | |
| 883 | | | | | | | |
| kWh | | | | | | | |

| | | | | | | | |
|--|--|--|--|---|--|--|--|
| Contact details | | | | | | | |
| MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. | | | | 700/406 moo 7, Tambon don hua roh, Amphur muang, chonburi 20000, Thailand | | | |
| The identification and signature of the person empowered to bind the supplier; | | | | | | | |
| The signature is signed in the average climate / medium-temperature section. | | | | Tadashi SAITO Manager, Quality Assurance Department THAILAND | | | |

· 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: | SUZ-SHWM30VAH |
| | 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 | 3.6 | kW | Seasonal space heating energy efficiency | η_s | 138 | % |
| 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 | 2.3 | kW | Tj = - 7 °C | COPd | 3.14 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = + 2 °C | COPd | 3.91 | - |
| Tj = + 2 °C | Pdh | 1.9 | kW | Tj = + 7 °C | COPd | 5.94 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Tj = +12 °C | COPd | 8.32 | - |
| Tj = + 7 °C | Pdh | 2.3 | kW | Tj = bivalent temperature | COPd | 2.28 | - |
| Degradation co-efficient (**) | Cdh | 0.97 | - | Tj = operation limit temperature (***) | COPd | 1.85 | - |
| Tj = +12 °C | Pdh | 2.4 | kW | Tj = - 15 °C (if TOL < - 20 °C) | COPd | 2.28 | - |
| Degradation co-efficient (**) | Cdh | 0.97 | - | Operation limit temperature | TOL | -25 | °C |
| Tj = bivalent temperature | Pdh | 2.9 | kW | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = operation limit temperature (***) | Pdh | 2.9 | kW | Supplementary heater | | | |
| Tj = - 15 °C (if TOL < - 20 °C) | Pdh | 2.9 | kW | Rated heat output (*) | Psup | 0.7 | kW |
| Bivalent temperature | Tbiv | -15 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | Tdesignh | -22 | °C | Power consumption in modes other than active mode | | | |
| Power consumption in modes other than active mode | | | | Off mode | | | |
| Off mode | P _{OFF} | 0.010 | kW | Thermostat-off mode | P _{TO} | 0.010 | kW |
| Thermostat-off mode | P _{TO} | 0.010 | kW | Standby mode | P _{SB} | 0.010 | kW |
| Standby mode | P _{SB} | 0.010 | kW | Crankcase heater mode | P _{CK} | 0.000 | kW |
| Crankcase heater mode | P _{CK} | 0.000 | kW | Other items | | | |
| Capacity control | | | | Rated air flow rate, outdoors | | | |
| variable | | | | - | | | |
| Sound power level, indoors/outdoors | | | | 1680 | | | |
| L _{WA} | | | | m ³ /h | | | |
| 41 / 57 | | | | | | | |
| Annual energy consumption | | | | | | | |
| Q _{HE} | | | | | | | |
| 2521 | | | | | | | |
| kWh | | | | | | | |
| For heat pump combination heater: | | | | Declared load profile | | | |
| L | | | | Water heating energy efficiency | | | |
| Daily electricity consumption | | | | η_{wh} | | | |
| Q _{elec} | | | | 127 | | | |
| 4.020 | | | | % | | | |
| Annual electricity consumption | | | | | | | |
| AEC | | | | | | | |
| 883 | | | | | | | |
| kWh | | | | | | | |

| | | | | | | | |
|--|--|--|--|---|--|--|--|
| Contact details | | | | | | | |
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| The identification and signature of the person empowered to bind the supplier; | | | | | | | |
| The signature is signed in the average climate / medium-temperature section. | | | | Tadashi SAITO | | | |
| | | | | Manager, Quality Assurance Department | | | |
| | | | | THAILAND | | | |

· 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: | SUZ-SHWM30VAH |
| | 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 | 3.0 | kW | Seasonal space heating energy efficiency | η_s | 167 | % |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j | | | | 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 | P _{dh} | - | kW | T _j = - 7 °C | COP _d | - | - |
| Degradation co-efficient (**) | C _{dh} | - | - | T _j = + 2 °C | COP _d | 2.36 | - |
| T _j = + 2 °C | P _{dh} | 3.0 | kW | T _j = + 7 °C | COP _d | 3.60 | - |
| Degradation co-efficient (**) | C _{dh} | 0.99 | - | T _j = +12 °C | COP _d | 6.44 | - |
| T _j = + 7 °C | P _{dh} | 2.1 | kW | T _j = bivalent temperature | COP _d | 2.36 | - |
| Degradation co-efficient (**) | C _{dh} | 0.98 | - | T _j = operation limit temperature (***) | COP _d | 2.36 | - |
| T _j = +12 °C | P _{dh} | 2.3 | kW | Operation limit temperature | TOL | -25 | °C |
| Degradation co-efficient (**) | C _{dh} | 0.97 | - | Heating water operating limit temperature | WTOL | 60 | °C |
| T _j = bivalent temperature | P _{dh} | 3.0 | kW | Supplementary heater | | | |
| T _j = operation limit temperature (***) | P _{dh} | 3.0 | kW | Rated heat output (*) | P _{sup} | 0.0 | kW |
| Bivalent temperature | T _{biv} | 2 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | T _{designh} | 2 | °C | Power consumption in modes other than active mode | | | |
| Power consumption in modes other than active mode | | | | Off mode | | | |
| Off mode | P _{OFF} | 0.010 | kW | Thermostat-off mode | P _{TO} | 0.010 | kW |
| Thermostat-off mode | P _{TO} | 0.010 | kW | Standby mode | P _{SB} | 0.010 | kW |
| Standby mode | P _{SB} | 0.010 | kW | Crankcase heater mode | P _{CK} | 0.000 | kW |
| Crankcase heater mode | P _{CK} | 0.000 | kW | Other items | | | |
| Capacity control | | | | Rated air flow rate, outdoors | | | |
| variable | | | | - | | | |
| Sound power level, indoors/outdoors | | | | 1680 | | | |
| L _{WA} | | | | m ³ /h | | | |
| 41 / 57 | | | | | | | |
| Annual energy consumption | | | | | | | |
| Q _{HE} | | | | | | | |
| 940 | | | | | | | |
| kWh | | | | | | | |

| | | | | | | | |
|-----------------------------------|--|--|--|---------------------------------|--|--|--|
| For heat pump combination heater: | | | | | | | |
| Declared load profile | | | | Water heating energy efficiency | | | |
| L | | | | η_{wh} | | | |
| Daily electricity consumption | | | | 173 | | | |
| Q _{elec} | | | | % | | | |
| 3.250 | | | | | | | |
| Annual electricity consumption | | | | | | | |
| AEC | | | | | | | |
| 714 | | | | | | | |
| kWh | | | | | | | |

Contact details
 MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. 700/406 moo 7, Tambon don hua roh, Amphur muang, chonburi 20000, Thailand

The identification and signature of the person empowered to bind the supplier;
 Tadashi SAITO
 Manager, Quality Assurance Department
 THAILAND

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

· 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: | SUZ-SHWM30VAH |
| | 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 | 3.0 | kW | Seasonal space heating energy efficiency | η_s | 237 | % |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j | | | | 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 | P _{dh} | - | kW | T _j = - 7 °C | COP _d | - | - |
| Degradation co-efficient (**) | C _{dh} | - | - | T _j = + 2 °C | COP _d | 3.65 | - |
| T _j = + 2 °C | P _{dh} | 3.0 | kW | T _j = + 7 °C | COP _d | 6.04 | - |
| Degradation co-efficient (**) | C _{dh} | 0.99 | - | T _j = +12 °C | COP _d | 8.03 | - |
| T _j = + 7 °C | P _{dh} | 2.4 | kW | T _j = bivalent temperature | COP _d | 3.65 | - |
| Degradation co-efficient (**) | C _{dh} | 0.98 | - | T _j = operation limit temperature (***) | COP _d | 3.65 | - |
| T _j = +12 °C | P _{dh} | 2.3 | kW | Operation limit temperature | TOL | -25 | °C |
| Degradation co-efficient (**) | C _{dh} | 0.97 | - | Heating water operating limit temperature | WTOL | 60 | °C |
| T _j = bivalent temperature | P _{dh} | 3.0 | kW | Supplementary heater | | | |
| T _j = operation limit temperature (***) | P _{dh} | 3.0 | kW | Rated heat output (*) | P _{sup} | 0.0 | kW |
| Bivalent temperature | T _{biv} | 2 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | T _{designh} | 2 | °C | Power consumption in modes other than active mode | | | |
| Off mode | | | | P _{OFF} | | | |
| Thermostat-off mode | | | | P _{TO} | | | |
| Standby mode | | | | P _{SB} | | | |
| Crankcase heater mode | | | | P _{CK} | | | |
| Capacity control | | | | variable | | | |
| Sound power level, indoors/outdoors | | | | L _{WA} | | | |
| Annual energy consumption | | | | Q _{HE} | | | |
| Rated air flow rate, outdoors | | | | - | | | |
| Rated air flow rate, outdoors | | | | 1680 | | | |
| Rated air flow rate, outdoors | | | | m ³ /h | | | |

For heat pump combination heater:

| | | | | | | | |
|--------------------------------|-------------------|-------|-----|---------------------------------|-------------|-----|---|
| Declared load profile | L | | | Water heating energy efficiency | η_{wh} | 173 | % |
| Daily electricity consumption | Q _{elec} | 3.250 | kWh | | | | |
| Annual electricity consumption | AEC | 714 | kWh | | | | |

Contact details

MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD.

700/406 moo 7, Tambon don hua roh, Amphur muang, chonburi 20000, Thailand

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

Tadashi SAITO

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

Manager, Quality Assurance Department

THAILAND

· 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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---------------------------------------|---------------|---------------------------------|
| Model(s): | Outdoor unit: | SUZ-SHWM30VAH |
| | 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 | 3.6 | kW | Seasonal space heating energy efficiency | η_s | 124 | % |
| 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 | 3.2 | kW | Tj = - 7 °C | COPd | 2.18 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = + 2 °C | COPd | 2.87 | - |
| Tj = + 2 °C | Pdh | 2.0 | kW | Tj = + 7 °C | COPd | 4.53 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = +12 °C | COPd | 7.17 | - |
| Tj = + 7 °C | Pdh | 2.2 | kW | Tj = bivalent temperature | COPd | 1.69 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Tj = operation limit temperature (***) | COPd | 1.69 | - |
| Tj = +12 °C | Pdh | 2.0 | kW | Operation limit temperature | TOL | -25 | °C |
| Degradation co-efficient (**) | Cdh | 0.96 | - | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = bivalent temperature | Pdh | 3.6 | kW | Supplementary heater | | | |
| Tj = operation limit temperature (***) | Pdh | 3.6 | kW | Rated heat output (*) | Psup | 0.0 | kW |
| Bivalent temperature | Tbiv | -10 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | Tdesignh | -10 | °C | Other items | | | |
| Power consumption in modes other than active mode | | | | Rated air flow rate, outdoors | | | |
| Off mode | P _{OFF} | 0.010 | kW | | | 1680 | m ³ /h |
| Thermostat-off mode | P _{TO} | 0.010 | kW | Capacity control | variable | | |
| Standby mode | P _{SB} | 0.010 | kW | Sound power level, indoors/outdoors | L _{WA} | 41 / 57 | dB(A) |
| Crankcase heater mode | P _{CK} | 0.000 | kW | Annual energy consumption | Q _{HE} | 2347 | kWh |

| | | | | | | | |
|-----------------------------------|-------|-------|-----|---------------------------------|-------------|-----|---|
| For heat pump combination heater: | | | | | | | |
| Declared load profile | L | | | Water heating energy efficiency | η_{wh} | 147 | % |
| Daily electricity consumption | Qelec | 3.730 | kWh | | | | |
| Annual electricity consumption | AEC | 821 | kWh | | | | |

Contact details
 MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. 700/406 moo 7, Tambon don hua roh, Amphur muang, chonburi 20000, Thailand

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



Tadashi SAITO
 Manager, Quality Assurance Department
 THAILAND

- 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: | SUZ-SHWM30VAH |
| | 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 | 4.0 | kW | Seasonal space heating energy efficiency | η_s | 180 | % |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j | | | | 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 | P _{dh} | 3.6 | kW | T _j = - 7 °C | COP _d | 3.23 | - |
| Degradation co-efficient (**) | C _{dh} | 0.99 | - | T _j = + 2 °C | COP _d | 4.19 | - |
| T _j = + 2 °C | P _{dh} | 2.2 | kW | T _j = + 7 °C | COP _d | 6.62 | - |
| Degradation co-efficient (**) | C _{dh} | 0.98 | - | T _j = +12 °C | COP _d | 9.51 | - |
| T _j = + 7 °C | P _{dh} | 2.4 | kW | T _j = bivalent temperature | COP _d | 2.69 | - |
| Degradation co-efficient (**) | C _{dh} | 0.97 | - | T _j = operation limit temperature (***) | COP _d | 2.69 | - |
| T _j = +12 °C | P _{dh} | 2.4 | kW | Operation limit temperature | TOL | -25 | °C |
| Degradation co-efficient (**) | C _{dh} | 0.96 | - | Heating water operating limit temperature | WTOL | 60 | °C |
| T _j = bivalent temperature | P _{dh} | 4.0 | kW | Supplementary heater | | | |
| T _j = operation limit temperature (***) | P _{dh} | 4.0 | kW | Rated heat output (*) | P _{sup} | 0.0 | kW |
| Bivalent temperature | T _{biv} | -10 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | T _{designh} | -10 | °C | Other items | | | |
| Power consumption in modes other than active mode | | | | Rated air flow rate, outdoors | | | |
| Off mode | P _{OFF} | 0.010 | kW | | | 1680 | m ³ /h |
| Thermostat-off mode | P _{TO} | 0.010 | kW | Capacity control | variable | | |
| Standby mode | P _{SB} | 0.010 | kW | Sound power level, indoors/outdoors | L _{WA} | 41 / 57 | dB(A) |
| Crankcase heater mode | P _{CK} | 0.000 | kW | Annual energy consumption | Q _{HE} | 1802 | kWh |

| | | | | | | | |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-------------|-----|---|
| For heat pump combination heater: | | | | | | | |
| Declared load profile | L | | | Water heating energy efficiency | η_{wh} | 147 | % |
| Daily electricity consumption | Q _{elec} | 3.730 | kWh | | | | |
| Annual electricity consumption | AEC | 821 | kWh | | | | |

| | | | | | | | |
|--|--|--|--|---|--|--|--|
| Contact details | | | | | | | |
| MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. | | | | 700/406 moo 7, Tambon don hua roh, Amphur muang, chonburi 20000, Thailand | | | |
| The identification and signature of the person empowered to bind the supplier; | | | | | | | |
| | | | | Tadashi SAITO | | | |
| The signature is signed in the average climate / medium-temperature section. | | | | Manager, Quality Assurance Department | | | |
| | | | | THAILAND | | | |

· 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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---------------------------------------|---------------|---------------------------------|
| Model(s): | Outdoor unit: | SUZ-SHWM30VAH |
| | 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 | 3.6 | kW | Seasonal space heating energy efficiency | η_s | 104 | % |
| 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 | 2.1 | kW | Tj = - 7 °C | COPd | 2.31 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = + 2 °C | COPd | 3.05 | - |
| Tj = + 2 °C | Pdh | 1.8 | kW | Tj = + 7 °C | COPd | 4.84 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Tj = +12 °C | COPd | 7.14 | - |
| Tj = + 7 °C | Pdh | 2.2 | kW | Tj = bivalent temperature | COPd | 1.70 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Tj = operation limit temperature (***) | COPd | 1.54 | - |
| Tj = +12 °C | Pdh | 2.3 | kW | Tj = - 15 °C (if TOL < - 20 °C) | COPd | 1.70 | - |
| Degradation co-efficient (**) | Cdh | 0.97 | - | Operation limit temperature | TOL | -25 | °C |
| Tj = bivalent temperature | Pdh | 2.9 | kW | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = operation limit temperature (***) | Pdh | 3.2 | kW | | | | |
| Tj = - 15 °C (if TOL < - 20 °C) | Pdh | 2.9 | kW | | | | |
| Bivalent temperature | Tbiv | -15 | °C | | | | |
| Reference design conditions for space heating | Tdesignh | -22 | °C | | | | |
| Power consumption in modes other than active mode | | | | Supplementary heater | | | |
| Off mode | P _{OFF} | 0.010 | kW | Rated heat output (*) | P _{sup} | 3.6 | kW |
| Thermostat-off mode | P _{TO} | 0.010 | kW | Type of energy input | Electrical | | |
| Standby mode | P _{SB} | 0.010 | kW | | | | |
| Crankcase heater mode | P _{CK} | 0.000 | kW | | | | |
| Other items | | | | Rated air flow rate, outdoors | | | |
| Capacity control | variable | | | | | 1680 | m ³ /h |
| Sound power level, indoors/outdoors | L _{WA} | 41 / 57 | dB(A) | | | | |
| Annual energy consumption | Q _{HE} | 3307 | kWh | | | | |
| For heat pump combination heater: | | | | Water heating energy efficiency | | | |
| Declared load profile | L | | | | η_{wh} | 127 | % |
| Daily electricity consumption | Q _{elec} | 4.020 | kWh | | | | |
| Annual electricity consumption | AEC | 883 | kWh | | | | |

| | | | | | | | |
|--|--|--|--|---|--|--|--|
| Contact details | | | | | | | |
| MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. | | | | 700/406 moo 7, Tambon don hua roh, Amphur muang, chonburi 20000, Thailand | | | |
| The identification and signature of the person empowered to bind the supplier; | | | | | | | |
| The signature is signed in the average climate / medium-temperature section. | | | | Tadashi SAITO Manager, Quality Assurance Department THAILAND | | | |

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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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---------------------------------------|---------------|------------------------------|
| Model(s): | Outdoor unit: | SUZ-SHWM30VAH |
| | 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 | 3.6 | kW | Seasonal space heating energy efficiency | η_s | 138 | % |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j | | | | 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 | P _{dh} | 2.3 | kW | T _j = - 7 °C | COP _d | 3.14 | - |
| Degradation co-efficient (**) | C _{dh} | 0.99 | - | T _j = + 2 °C | COP _d | 3.91 | - |
| T _j = + 2 °C | P _{dh} | 1.9 | kW | T _j = + 7 °C | COP _d | 5.94 | - |
| Degradation co-efficient (**) | C _{dh} | 0.98 | - | T _j = +12 °C | COP _d | 8.32 | - |
| T _j = + 7 °C | P _{dh} | 2.3 | kW | T _j = bivalent temperature | COP _d | 2.28 | - |
| Degradation co-efficient (**) | C _{dh} | 0.97 | - | T _j = operation limit temperature (***) | COP _d | 1.85 | - |
| T _j = +12 °C | P _{dh} | 2.4 | kW | T _j = - 15 °C (if TOL < - 20 °C) | COP _d | 2.28 | - |
| Degradation co-efficient (**) | C _{dh} | 0.97 | - | Operation limit temperature | TOL | -25 | °C |
| T _j = bivalent temperature | P _{dh} | 2.9 | kW | Heating water operating limit temperature | WTOL | 60 | °C |
| T _j = operation limit temperature (***) | P _{dh} | 2.9 | kW | Supplementary heater | | | |
| T _j = - 15 °C (if TOL < - 20 °C) | P _{dh} | 2.9 | kW | Rated heat output (*) | P _{sup} | 0.7 | kW |
| Bivalent temperature | T _{biv} | -15 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | T _{designh} | -22 | °C | Other items | | | |
| Power consumption in modes other than active mode | | | | Rated air flow rate, outdoors | | | |
| Off mode | P _{OFF} | 0.010 | kW | | | 1680 | m ³ /h |
| Thermostat-off mode | P _{TO} | 0.010 | kW | Capacity control | | | |
| Standby mode | P _{SB} | 0.010 | kW | variable | | | |
| Crankcase heater mode | P _{CK} | 0.000 | kW | Sound power level, indoors/outdoors | | | |
| | | | | L _{WA} | | | |
| | | | | 41 / 57 | | | |
| | | | | Annual energy consumption | | | |
| | | | | Q _{HE} | | | |
| | | | | 2521 | | | |
| | | | | kWh | | | |

| | | | | | | | |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-------------|-----|---|
| For heat pump combination heater: | | | | | | | |
| Declared load profile | L | | | Water heating energy efficiency | η_{wh} | 127 | % |
| Daily electricity consumption | Q _{elec} | 4.020 | kWh | | | | |
| Annual electricity consumption | AEC | 883 | kWh | | | | |

Contact details
 MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. 700/406 moo 7, Tambon don hua roh, Amphur muang, chonburi 20000, Thailand

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 Tadashi SAITO
 Manager, Quality Assurance Department
 THAILAND

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 (**) If C_{dh} is not determined by measurement then the default degradation coefficient is C_{dh} = 0,9.
 (***) If the declared TOL is lower than the T_{designh} of the considered climate then the outdoor dry bulb temperature T_j is equal to T_{designh}.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---------------------------------------|---------------|---------------------------------|
| Model(s): | Outdoor unit: | SUZ-SHWM30VAH |
| | 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 | 3.0 | kW | Seasonal space heating energy efficiency | η_s | 167 | % |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj | | | | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj | | | |
| Tj = - 7 °C | Pdh | - | kW | Tj = - 7 °C | COPd | - | - |
| Degradation co-efficient (**) | Cdh | - | - | Tj = + 2 °C | COPd | 2.36 | - |
| Tj = + 2 °C | Pdh | 3.0 | kW | Tj = + 7 °C | COPd | 3.60 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = +12 °C | COPd | 6.44 | - |
| Tj = + 7 °C | Pdh | 2.1 | kW | Tj = bivalent temperature | COPd | 2.36 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Tj = operation limit temperature (***) | COPd | 2.36 | - |
| Tj = +12 °C | Pdh | 2.3 | 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 | 3.0 | kW | Supplementary heater | | | |
| Tj = operation limit temperature (***) | Pdh | 3.0 | kW | Rated heat output (*) | Psup | 0.0 | kW |
| Bivalent temperature | Tbiv | 2 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | Tdesignh | 2 | °C | Power consumption in modes other than active mode | | | |
| Off mode | | | | P _{OFF} | | | |
| Thermostat-off mode | | | | P _{TO} | | | |
| Standby mode | | | | P _{SB} | | | |
| Crankcase heater mode | | | | P _{CK} | | | |
| Other items | | | | Rated air flow rate, outdoors | | | |
| Capacity control | variable | | | - | 1680 | m ³ /h | |
| Sound power level, indoors/outdoors | L _{WA} | 41 / 57 | dB(A) | | | | |
| Annual energy consumption | Q _{HE} | 940 | kWh | | | | |
| For heat pump combination heater: | | | | Water heating energy efficiency | | | |
| Declared load profile | L | | | η_{wh} | 173 | % | |
| Daily electricity consumption | Q _{elec} | 3.250 | kWh | | | | |
| Annual electricity consumption | AEC | 714 | kWh | | | | |

| | | | | | | | |
|--|--|--|--|---|--|--|--|
| Contact details | | | | | | | |
| MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. | | | | 700/406 moo 7, Tambon don hua roh, Amphur muang, chonburi 20000, Thailand | | | |
| The identification and signature of the person empowered to bind the supplier; | | | | | | | |
| The signature is signed in the average climate / medium-temperature section. | | | | Tadashi SAITO Manager, Quality Assurance Department THAILAND | | | |

· 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: | SUZ-SHWM30VAH |
| | 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 | 3.0 | kW | Seasonal space heating energy efficiency | η_s | 237 | % |
| 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 | 3.65 | - |
| Tj = + 2 °C | Pdh | 3.0 | kW | Tj = + 7 °C | COPd | 6.04 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = +12 °C | COPd | 8.03 | - |
| Tj = + 7 °C | Pdh | 2.4 | kW | Tj = bivalent temperature | COPd | 3.65 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Tj = operation limit temperature (***) | COPd | 3.65 | - |
| Tj = +12 °C | Pdh | 2.3 | 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 | 3.0 | kW | Supplementary heater | | | |
| Tj = operation limit temperature (***) | Pdh | 3.0 | kW | Rated heat output (*) | Psup | 0.0 | kW |
| Bivalent temperature | Tbiv | 2 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | Tdesignh | 2 | °C | Power consumption in modes other than active mode | | | |
| Off mode | | | | P _{OFF} | | | |
| Thermostat-off mode | | | | P _{TO} | | | |
| Standby mode | | | | P _{SB} | | | |
| Crankcase heater mode | | | | P _{CK} | | | |
| Other items | | | | Rated air flow rate, outdoors | | | |
| Capacity control | variable | | | - | 1680 | m ³ /h | |
| Sound power level, indoors/outdoors | L _{WA} | 41 / 57 | dB(A) | | | | |
| Annual energy consumption | Q _{HE} | 668 | kWh | | | | |
| For heat pump combination heater: | | | | Water heating energy efficiency | | | |
| Declared load profile | L | | | η_{wh} | 173 | % | |
| Daily electricity consumption | Q _{elec} | 3.250 | kWh | | | | |
| Annual electricity consumption | AEC | 714 | kWh | | | | |

| | | | | | | | |
|--|--|--|--|---|--|--|--|
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 (*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.