



ENERG Y IJA
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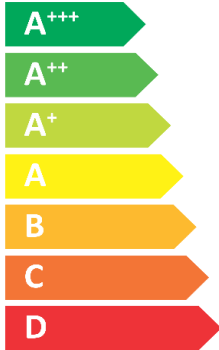
Indoor unit
 Outdoor unit

E*PX-***#D
 PUZ-HWM140VHA(-BS)




55 °C


35 °C




A++

A+++


40 dB


67 dB

| | |
|------|------|
| ■ 14 | ■ 14 |
| ■ 14 | ■ 14 |
| ■ 14 | ■ 14 |
| kW | kW |



2019

811/2013

1. SPACE HEATER

| | | For medium-temperature application | | | | | | | | | | | | | For low-temperature application | | | | | | | | | | | | |
|--------------------|-------------|------------------------------------|--|--|---|---|--|---|---|--|--|--|--|---|---------------------------------|--|--|---|---|--|---|---|--|--|--|--|---|
| 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 |
| Outdoor unit | Indoor unit | Medium-temperature application | Seasonal space heating energy efficiency class | Rated heat output under average climate conditions | Seasonal space heating energy efficiency under average climate conditions | For space heating, annual energy consumption under average climate conditions | Sound power level L _{WA} , indoor | Rated heat output under colder climate conditions | Rated heat output under warmer climate conditions | Seasonal space heating energy efficiency under colder climate conditions | Seasonal space heating energy efficiency under warmer climate conditions | For space heating, annual energy consumption under colder climate conditions | For space heating, annual energy consumption under warmer climate conditions | Sound power level L _{WA} , outdoor | Low-temperature application | Seasonal space heating energy efficiency class | Rated heat output under average climate conditions | Seasonal space heating energy efficiency under average climate conditions | For space heating, annual energy consumption under average climate conditions | Sound power level L _{WA} , indoor | Rated heat output under colder climate conditions | Rated heat output under warmer climate conditions | Seasonal space heating energy efficiency under colder climate conditions | Seasonal space heating energy efficiency under warmer climate conditions | For space heating, annual energy consumption under colder climate conditions | For space heating, annual energy consumption under warmer climate conditions | Sound power level L _{WA} , outdoor |
| | | kW | % | kWh | dB | kW | kW | % | % | kWh | kWh | dB | A+++ | kW | % | kWh | dB | kW | kW | % | % | kWh | kWh | dB | | | |
| PUZ-HWM140VHA(-BS) | EHPX-****D | ✓ | A++ | 14 | 132 | 8589 | 40 | 14 | 14 | 117 | 160 | 11133 | 4593 | 67 | ✓ | A+++ | 14 | 176 | 6470 | 40 | 14 | 14 | 152 | 227 | 8568 | 3252 | 67 |
| | ERPX-****D | ✓ | A++ | 14 | 133 | 8534 | 40 | 14 | 14 | 117 | 162 | 11100 | 4527 | 67 | ✓ | A+++ | 14 | 178 | 6407 | 40 | 14 | 14 | 153 | 232 | 8534 | 3186 | 67 |
| PUZ-HWM140YHA(-BS) | EHPX-****D | ✓ | A++ | 14 | 131 | 8608 | 40 | 14 | 14 | 116 | 159 | 11159 | 4628 | 67 | ✓ | A+++ | 14 | 175 | 6492 | 40 | 14 | 14 | 152 | 225 | 8589 | 3288 | 67 |
| | ERPX-****D | ✓ | A++ | 14 | 133 | 8528 | 40 | 14 | 14 | 117 | 162 | 11110 | 4531 | 67 | ✓ | A+++ | 14 | 177 | 6412 | 40 | 14 | 14 | 153 | 231 | 8541 | 3191 | 67 |

2. COMBINATION HEATER

| | | For medium-temperature application | | | | | | | | | | | | | | | | | For low-temperature application | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|------------------|------------------------------------|-----------------------|--|---------------------------------------|--|---|--|---|--|--|---------------------------------|---|---|--|--|--|--|--|--|---|---|---|-----------------------------|-----------------------|--|---------------------------------------|--|---|--|---|--|--|---------------------------------|---|---|--|--|---|---|--|--|---|---|---|
| 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 |
| Outdoor unit | Indoor unit | Medium-temperature application | Declared load profile | Seasonal space heating energy efficiency class | Water heating energy efficiency class | Rated heat output under average climate conditions | For space heating, annual energy consumption under average climate conditions | For water heating, annual electricity consumption under average climate conditions | Seasonal space heating energy efficiency under average climate conditions | Water heating energy efficiency under average climate conditions | Sound power level L _{WA} , indoor | Work only during off-peak hours | Rated heat output under colder climate conditions | Rated heat output under warmer climate conditions | For space heating, annual energy consumption under colder climate conditions | For space heating, annual energy consumption under warmer climate conditions | For water heating, annual energy consumption under colder climate conditions | For water heating, annual energy consumption under warmer climate conditions | Seasonal space heating energy efficiency under colder climate conditions | Seasonal space heating energy efficiency under warmer climate conditions | Water heating energy efficiency under colder climate conditions | Water heating energy efficiency under warmer climate conditions | Sound power level L _{WA} , outdoor | Low-temperature application | Declared load profile | Seasonal space heating energy efficiency class | Water heating energy efficiency class | Rated heat output under average climate conditions | For space heating, annual energy consumption under average climate conditions | For water heating, annual electricity consumption under average climate conditions | Seasonal space heating energy efficiency under average climate conditions | Water heating energy efficiency under average climate conditions | Sound power level L _{WA} , indoor | Work only during off-peak hours | Rated heat output under colder climate conditions | Rated heat output under warmer climate conditions | For space heating, annual energy consumption under colder climate conditions | For space heating, annual energy consumption under warmer climate conditions | For water heating, annual electricity consumption under colder climate conditions | For water heating, annual electricity consumption under warmer climate conditions | Seasonal space heating energy efficiency under colder climate conditions | Seasonal space heating energy efficiency under warmer climate conditions | Water heating energy efficiency under colder climate conditions | Water heating energy efficiency under warmer climate conditions | Sound power level L _{WA} , outdoor |
| | | kW | kWh | kWh | % | % | dB | % | % | kWh | kWh | kWh | kWh | % | % | % | % | % | % | % | % | % | % | dB | L | A+++ | A+ | kW | kWh | kWh | % | % | dB | % | % | kW | kWh | kWh | % | % | kWh | kWh | % | % | dB |
| PUZ-HWM140VHA(-BS) | EHPT20X-****D(W) | ✓ | L | A++ | A+ | 14 | 8589 | 836 | 132 | 130 | 40 | - | 14 | 14 | 11133 | 4593 | 984 | 716 | 117 | 160 | 110 | 152 | 67 | ✓ | L | A+++ | A+ | 14 | 6470 | 836 | 176 | 130 | 40 | - | 14 | 14 | 8568 | 3252 | 984 | 716 | 152 | 227 | 110 | 152 | 67 |
| | ERPT20X-****D(W) | ✓ | L | A++ | A+ | 14 | 8534 | 836 | 133 | 130 | 40 | - | 14 | 14 | 11100 | 4527 | 984 | 716 | 117 | 162 | 110 | 152 | 67 | ✓ | L | A+++ | A+ | 14 | 6407 | 836 | 178 | 130 | 40 | - | 14 | 14 | 8534 | 3186 | 984 | 716 | 153 | 232 | 110 | 152 | 67 |
| | EHP30X-****D | ✓ | XL | A++ | A | 14 | 8589 | 1483 | 132 | 118 | 40 | - | 14 | 14 | 11133 | 4593 | 1948 | 1388 | 117 | 160 | 89 | 125 | 67 | ✓ | XL | A+++ | A | 14 | 6470 | 1483 | 176 | 118 | 40 | - | 14 | 14 | 8568 | 3252 | 1948 | 1388 | 152 | 227 | 89 | 125 | 67 |
| | ERPT30X-****D | ✓ | XL | A++ | A | 14 | 8534 | 1483 | 133 | 118 | 40 | - | 14 | 14 | 11100 | 4527 | 1948 | 1388 | 117 | 162 | 89 | 125 | 67 | ✓ | XL | A+++ | A | 14 | 6407 | 1483 | 178 | 118 | 40 | - | 14 | 14 | 8534 | 3186 | 1948 | 1388 | 153 | 232 | 89 | 125 | 67 |
| PUZ-HWM140YHA(-BS) | EHP30X-****D(W) | ✓ | L | A++ | A+ | 14 | 8608 | 836 | 131 | 130 | 40 | - | 14 | 14 | 11159 | 4628 | 984 | 716 | 116 | 159 | 110 | 152 | 67 | ✓ | L | A+++ | A+ | 14 | 6492 | 836 | 175 | 130 | 40 | - | 14 | 14 | 8589 | 3288 | 984 | 716 | 152 | 225 | 110 | 152 | 67 |
| | ERPT20X-****D(W) | ✓ | L | A++ | A+ | 14 | 8528 | 836 | 133 | 130 | 40 | - | 14 | 14 | 11110 | 4531 | 984 | 716 | 117 | 162 | 110 | 152 | 67 | ✓ | L | A+++ | A+ | 14 | 6412 | 836 | 177 | 130 | 40 | - | 14 | 14 | 8541 | 3191 | 984 | 716 | 153 | 231 | 110 | 152 | 67 |
| | EHP30X-****D | ✓ | XL | A++ | A | 14 | 8608 | 1483 | 131 | 118 | 40 | - | 14 | 14 | 11159 | 4628 | 1948 | 1388 | 116 | 159 | 89 | 125 | 67 | ✓ | XL | A+++ | A | 14 | 6492 | 1483 | 175 | 118 | 40 | - | 14 | 14 | 8589 | 3288 | 1948 | 1388 | 152 | 225 | 89 | 125 | 67 |
| | ERPT30X-****D | ✓ | XL | A++ | A | 14 | 8528 | 1483 | 133 | 118 | 40 | - | 14 | 14 | 11110 | 4531 | 1948 | 1388 | 117 | 162 | 89 | 125 | 67 | ✓ | XL | A+++ | A | 14 | 6412 | 1483 | 177 | 118 | 40 | - | 14 | 14 | 8541 | 3191 | 1948 | 1388 | 153 | 231 | 89 | 125 | 67 |

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---------------------------------------|---------------|---------------------------------|
| Model(s): | Outdoor unit: | PUZ-HWM140VHA(-BS) |
| | Indoor unit: | EHPX-****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: | | no |
| Parameters for | | medium-temperature application. |
| Parameters for | | average climate conditions. |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|----------|-------|------|--|------------|-------|------|
| Rated heat output (*) | Prated | 14.0 | kW | Seasonal space heating energy efficiency | η_s | 132 | % |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj | | | | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj | | | |
| Tj = - 7 °C | Pdh | 12.4 | kW | Tj = - 7 °C | COPd | 1.98 | - |
| Degradation co-efficient (**) | Cdh | 1.00 | - | Tj = + 2 °C | COPd | 3.25 | - |
| Tj = + 2 °C | Pdh | 7.5 | kW | Tj = + 7 °C | COPd | 4.64 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = +12 °C | COPd | 6.24 | - |
| Tj = + 7 °C | Pdh | 5.1 | kW | Tj = bivalent temperature | COPd | 1.98 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = operation limit temperature (***) | COPd | 1.75 | - |
| Tj = +12 °C | Pdh | 5.2 | kW | Operation limit temperature | TOL | -28 | °C |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = bivalent temperature | Pdh | 12.4 | kW | Supplementary heater | | | |
| Tj = operation limit temperature (***) | Pdh | 13.9 | kW | Rated heat output (*) | Psup | 0.1 | kW |
| Bivalent temperature | Tbiv | -7 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | Tdesignh | -10 | °C | Power consumption in modes other than active mode | | | |
| Off mode | | | | P _{OFF} | | | |
| Thermostat-off mode | | | | P _{TO} | | | |
| Standby mode | | | | P _{SB} | | | |
| Crankcase heater mode | | | | P _{CK} | | | |

| | | | | | | | |
|-------------------------------------|-----------------|---------|-----|-------------------------------|---|------|-------------------|
| Capacity control | variable | | | Rated air flow rate, outdoors | - | 5200 | m ³ /h |
| Sound power level, indoors/outdoors | L _{WA} | 40 / 67 | dBA | | | | |
| Annual energy consumption | Q _{HE} | 8589 | kWh | | | | |

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

Contact details

MITSUBISHI ELECTRIC CORPORATION SHIZUOKA WORKS 3-18-1, Oshika, Suruga-ku, Shizuoka 422-8528, Japan

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



Tomoyuki MIWA
 General Manager, Quality Assurance Department
 Shizuoka JAPAN

· 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-HWM140VHA(-BS) |
| | Indoor unit: | EHPX-****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: | | no |
| Parameters for | | low-temperature application. |
| Parameters for | | average climate conditions. |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|----------|-------|------|--|------------|-------|------|
| Rated heat output (*) | Prated | 14.0 | kW | Seasonal space heating energy efficiency | η_s | 176 | % |
| 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 | 12.4 | kW | Tj = - 7 °C | COPd | 2.55 | - |
| Degradation co-efficient (**) | Cdh | 1.00 | - | Tj = + 2 °C | COPd | 4.40 | - |
| Tj = + 2 °C | Pdh | 7.5 | kW | Tj = + 7 °C | COPd | 6.28 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = +12 °C | COPd | 7.43 | - |
| Tj = + 7 °C | Pdh | 4.9 | kW | Tj = bivalent temperature | COPd | 2.55 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Tj = operation limit temperature (***) | COPd | 2.40 | - |
| Tj = +12 °C | Pdh | 5.7 | kW | Operation limit temperature | TOL | -28 | °C |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = bivalent temperature | Pdh | 12.4 | kW | Supplementary heater | | | |
| Tj = operation limit temperature (***) | Pdh | 13.9 | kW | Rated heat output (*) | Psup | 0.1 | kW |
| Bivalent temperature | Tbiv | -7 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | Tdesignh | -10 | °C | Power consumption in modes other than active mode | | | |
| Off mode | | | | P _{OFF} | | | |
| Thermostat-off mode | | | | P _{TO} | | | |
| Standby mode | | | | P _{SB} | | | |
| Crankcase heater mode | | | | P _{CK} | | | |

| | | | | | | | |
|-------------------------------------|-----------------|---------|-----|-------------------------------|---|------|-------------------|
| Capacity control | variable | | | Rated air flow rate, outdoors | - | 5200 | m ³ /h |
| Sound power level, indoors/outdoors | L _{WA} | 40 / 67 | dBA | | | | |
| Annual energy consumption | Q _{HE} | 6470 | kWh | | | | |

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

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 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---------------------------------------|---------------|---------------------------------|
| Model(s): | Outdoor unit: | PUZ-HWM140VHA(-BS) |
| | Indoor unit: | EHPX-****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: | | no |
| Parameters for | | medium-temperature application. |
| Parameters for | | colder climate conditions. |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|------------------|-------|------|--|------------|-------|------|
| Rated heat output (*) | Prated | 13.5 | kW | Seasonal space heating energy efficiency | η_s | 117 | % |
| 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 | 8.2 | kW | Tj = - 7 °C | COPd | 2.96 | - |
| Degradation co-efficient (**) | Cdh | 1.00 | - | Tj = + 2 °C | COPd | 3.31 | - |
| Tj = + 2 °C | Pdh | 5.4 | kW | Tj = + 7 °C | COPd | 4.54 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = +12 °C | COPd | 7.01 | - |
| Tj = + 7 °C | Pdh | 4.4 | kW | Tj = bivalent temperature | COPd | 1.47 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = operation limit temperature (***) | COPd | 1.30 | - |
| Tj = +12 °C | Pdh | 5.4 | kW | Tj = - 15 °C (if TOL < - 20 °C) | COPd | 1.47 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Operation limit temperature | TOL | -28 | °C |
| Tj = bivalent temperature | Pdh | 11.0 | kW | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = operation limit temperature (***) | Pdh | 10.0 | kW | Supplementary heater | | | |
| Tj = - 15 °C (if TOL < - 20 °C) | Pdh | 11.0 | kW | Rated heat output (*) | Psup | 3.5 | 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} | 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 | | | | |

| | | | | | | | |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items | | | | Rated air flow rate, outdoors | | | |
| Capacity control | variable | | | - | 5200 | m ³ /h | |
| Sound power level, indoors/outdoors | L _{WA} | 40 / 67 | dBA | | | | |
| Annual energy consumption | Q _{HE} | 11133 | kWh | | | | |

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---------------------------------------|---------------|------------------------------|
| Model(s): | Outdoor unit: | PUZ-HWM140VHA(-BS) |
| | Indoor unit: | EHPX-****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: | | no |
| Parameters for | | low-temperature application. |
| Parameters for | | colder climate conditions. |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|------------------|-------|------|--|------------|-------|------|
| Rated heat output (*) | Prated | 13.5 | kW | Seasonal space heating energy efficiency | η_s | 152 | % |
| 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 | 8.2 | kW | Tj = - 7 °C | COPd | 3.45 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = + 2 °C | COPd | 4.55 | - |
| Tj = + 2 °C | Pdh | 6.1 | kW | Tj = + 7 °C | COPd | 5.81 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = +12 °C | COPd | 8.21 | - |
| Tj = + 7 °C | Pdh | 4.3 | kW | Tj = bivalent temperature | COPd | 2.32 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Tj = operation limit temperature (***) | COPd | 1.60 | - |
| Tj = +12 °C | Pdh | 5.5 | kW | Tj = - 15 °C (if TOL < - 20 °C) | COPd | 2.32 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Operation limit temperature | TOL | -28 | °C |
| Tj = bivalent temperature | Pdh | 11.0 | kW | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = operation limit temperature (***) | Pdh | 10.0 | kW | Supplementary heater | | | |
| Tj = - 15 °C (if TOL < - 20 °C) | Pdh | 11.0 | kW | Rated heat output (*) | Psup | 3.5 | 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} | 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 | | | | |

| | | | | | | | |
|-------------------------------------|-----------------|---------|-----|-------------------------------|---|------|-------------------|
| Other items | | | | Rated air flow rate, outdoors | - | 5200 | m ³ /h |
| Capacity control | variable | | | | | | |
| Sound power level, indoors/outdoors | L _{WA} | 40 / 67 | dBA | | | | |
| Annual energy consumption | Q _{HE} | 8568 | kWh | | | | |

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

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 (**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
 (***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---------------------------------------|---------------|---------------------------------|
| Model(s): | Outdoor unit: | PUZ-HWM140VHA(-BS) |
| | Indoor unit: | EHPX-****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: | | no |
| Parameters for | | medium-temperature application. |
| Parameters for | | warmer climate conditions. |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|------------------|---------|------|--|-----------------|-------|------|
| Rated heat output (*) | Prated | 14.0 | kW | Seasonal space heating energy efficiency | η_s | 160 | % |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj | | | | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj | | | |
| Tj = - 7 °C | Pdh | - | kW | Tj = - 7 °C | COPd | - | - |
| Degradation co-efficient (**) | Cdh | - | - | Tj = + 2 °C | COPd | 1.94 | - |
| Tj = + 2 °C | Pdh | 14.0 | kW | Tj = + 7 °C | COPd | 3.25 | - |
| Degradation co-efficient (**) | Cdh | 1.00 | - | Tj = +12 °C | COPd | 5.91 | - |
| Tj = + 7 °C | Pdh | 9.0 | kW | Tj = bivalent temperature | COPd | 1.94 | - |
| Degradation co-efficient (**) | Cdh | 1.00 | - | Tj = operation limit temperature (***) | COPd | 1.94 | - |
| Tj = +12 °C | Pdh | 5.2 | kW | Operation limit temperature | TOL | -28 | °C |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = bivalent temperature | Pdh | 14.0 | kW | Supplementary heater | | | |
| Tj = operation limit temperature (***) | Pdh | 14.0 | 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} | 0.015 | kW | Thermostat-off mode | P _{TO} | 0.015 | kW |
| Thermostat-off mode | P _{TO} | 0.015 | kW | Standby mode | P _{SB} | 0.015 | kW |
| Standby mode | P _{SB} | 0.015 | 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} | 40 / 67 | dBA | 5200 | | | |
| Annual energy consumption | Q _{HE} | 4593 | kWh | m ³ /h | | | |

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

Contact details

MITSUBISHI ELECTRIC CORPORATION SHIZUOKA WORKS

3-18-1, Oshika, Suruga-ku, Shizuoka 422-8528, Japan

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

Tomoyuki MIWA

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

General Manager, Quality Assurance Department

Shizuoka JAPAN

· 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-HWM140VHA(-BS) |
| | Indoor unit: | EHPX-****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: | | no |
| Parameters for | | low-temperature application. |
| Parameters for | | warmer climate conditions. |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|----------|-------|------|--|------------|-------|------|
| Rated heat output (*) | Prated | 14.0 | kW | Seasonal space heating energy efficiency | η_s | 227 | % |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj | | | | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj | | | |
| Tj = - 7 °C | Pdh | - | kW | Tj = - 7 °C | COPd | - | - |
| Degradation co-efficient (**) | Cdh | - | - | Tj = + 2 °C | COPd | 3.15 | - |
| Tj = + 2 °C | Pdh | 14.0 | kW | Tj = + 7 °C | COPd | 5.10 | - |
| Degradation co-efficient (**) | Cdh | 1.00 | - | Tj = +12 °C | COPd | 7.43 | - |
| Tj = + 7 °C | Pdh | 9.0 | kW | Tj = bivalent temperature | COPd | 3.15 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = operation limit temperature (***) | COPd | 3.15 | - |
| Tj = +12 °C | Pdh | 5.5 | kW | Operation limit temperature | TOL | -28 | °C |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = bivalent temperature | Pdh | 14.0 | kW | Supplementary heater | | | |
| Tj = operation limit temperature (***) | Pdh | 14.0 | 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} | | | |

| | | | | | | | |
|-------------------------------------|-----------------|---------|-----|-------------------------------|---|------|-------------------|
| Capacity control | variable | | | Rated air flow rate, outdoors | - | 5200 | m ³ /h |
| Sound power level, indoors/outdoors | L _{WA} | 40 / 67 | dBA | | | | |
| Annual energy consumption | Q _{HE} | 3252 | kWh | | | | |

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

Contact details

MITSUBISHI ELECTRIC CORPORATION SHIZUOKA WORKS 3-18-1, Oshika, Suruga-ku, Shizuoka 422-8528, Japan

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

Tomoyuki MIWA
 General Manager, Quality Assurance Department
 Shizuoka JAPAN

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· Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.
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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.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---------------------------------------|---------------|---------------------------------|
| Model(s): | Outdoor unit: | PUZ-HWM140VHA(-BS) |
| | Indoor unit: | EHPX-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: | | no |
| Parameters for | | medium-temperature application. |
| Parameters for | | average climate conditions. |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|----------|-------|------|--|------------|-------|------|
| Rated heat output (*) | Prated | 14.0 | kW | Seasonal space heating energy efficiency | η_s | 132 | % |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj | | | | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj | | | |
| Tj = - 7 °C | Pdh | 12.4 | kW | Tj = - 7 °C | COPd | 1.98 | - |
| Degradation co-efficient (**) | Cdh | 1.00 | - | Tj = + 2 °C | COPd | 3.25 | - |
| Tj = + 2 °C | Pdh | 7.5 | kW | Tj = + 7 °C | COPd | 4.64 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = +12 °C | COPd | 6.24 | - |
| Tj = + 7 °C | Pdh | 5.1 | kW | Tj = bivalent temperature | COPd | 1.98 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = operation limit temperature (***) | COPd | 1.75 | - |
| Tj = +12 °C | Pdh | 5.2 | kW | Operation limit temperature | TOL | -28 | °C |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = bivalent temperature | Pdh | 12.4 | kW | Supplementary heater | | | |
| Tj = operation limit temperature (***) | Pdh | 13.9 | kW | Rated heat output (*) | Psup | 0.1 | kW |
| Bivalent temperature | Tbiv | -7 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | Tdesignh | -10 | °C | Power consumption in modes other than active mode | | | |
| Off mode | | | | P _{OFF} | | | |
| Thermostat-off mode | | | | P _{TO} | | | |
| Standby mode | | | | P _{SB} | | | |
| Crankcase heater mode | | | | P _{CK} | | | |

| | | | | | | | |
|-------------------------------------|-----------------|---------|-----|-------------------------------|---|------|-------------------|
| Capacity control | variable | | | Rated air flow rate, outdoors | - | 5200 | m ³ /h |
| Sound power level, indoors/outdoors | L _{WA} | 40 / 67 | dBA | | | | |
| Annual energy consumption | Q _{HE} | 8589 | kWh | | | | |

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

Contact details

MITSUBISHI ELECTRIC CORPORATION SHIZUOKA WORKS 3-18-1, Oshika, Suruga-ku, Shizuoka 422-8528, Japan

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



Tomoyuki MIWA
 General Manager, Quality Assurance Department
 Shizuoka JAPAN

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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.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---------------------------------------|---------------|------------------------------|
| Model(s): | Outdoor unit: | PUZ-HWM140VHA(-BS) |
| | Indoor unit: | EHPX-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: | | no |
| Parameters for | | low-temperature application. |
| Parameters for | | average climate conditions. |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|----------|-------|------|--|------------|-------|------|
| Rated heat output (*) | Prated | 14.0 | kW | Seasonal space heating energy efficiency | η_s | 176 | % |
| 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 | 12.4 | kW | Tj = - 7 °C | COPd | 2.55 | - |
| Degradation co-efficient (**) | Cdh | 1.00 | - | Tj = + 2 °C | COPd | 4.40 | - |
| Tj = + 2 °C | Pdh | 7.5 | kW | Tj = + 7 °C | COPd | 6.28 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = +12 °C | COPd | 7.43 | - |
| Tj = + 7 °C | Pdh | 4.9 | kW | Tj = bivalent temperature | COPd | 2.55 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Tj = operation limit temperature (***) | COPd | 2.40 | - |
| Tj = +12 °C | Pdh | 5.7 | kW | Operation limit temperature | TOL | -28 | °C |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = bivalent temperature | Pdh | 12.4 | kW | Supplementary heater | | | |
| Tj = operation limit temperature (***) | Pdh | 13.9 | kW | Rated heat output (*) | Psup | 0.1 | kW |
| Bivalent temperature | Tbiv | -7 | °C | Type of energy input | Electrical | | |
| Reference design conditions for space heating | Tdesignh | -10 | °C | Power consumption in modes other than active mode | | | |
| Off mode | | | | P _{OFF} | | | |
| Thermostat-off mode | | | | P _{TO} | | | |
| Standby mode | | | | P _{SB} | | | |
| Crankcase heater mode | | | | P _{CK} | | | |

| | | | | | | | |
|-------------------------------------|-----------------|---------|-----|-------------------------------|---|------|-------------------|
| Capacity control | variable | | | Rated air flow rate, outdoors | - | 5200 | m ³ /h |
| Sound power level, indoors/outdoors | L _{WA} | 40 / 67 | dBA | | | | |
| Annual energy consumption | Q _{HE} | 6470 | kWh | | | | |

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

Contact details

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Tomoyuki MIWA
 General Manager, Quality Assurance Department
 Shizuoka JAPAN

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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.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---------------------------------------|---------------|---------------------------------|
| Model(s): | Outdoor unit: | PUZ-HWM140VHA(-BS) |
| | Indoor unit: | EHPX-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: | | no |
| Parameters for | | medium-temperature application. |
| Parameters for | | colder climate conditions. |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|------------------|-------|------|--|------------|-------|------|
| Rated heat output (*) | Prated | 13.5 | kW | Seasonal space heating energy efficiency | η_s | 117 | % |
| 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 | 8.2 | kW | Tj = - 7 °C | COPd | 2.96 | - |
| Degradation co-efficient (**) | Cdh | 1.00 | - | Tj = + 2 °C | COPd | 3.31 | - |
| Tj = + 2 °C | Pdh | 5.4 | kW | Tj = + 7 °C | COPd | 4.54 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = +12 °C | COPd | 7.01 | - |
| Tj = + 7 °C | Pdh | 4.4 | kW | Tj = bivalent temperature | COPd | 1.47 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = operation limit temperature (***) | COPd | 1.30 | - |
| Tj = +12 °C | Pdh | 5.4 | kW | Tj = - 15 °C (if TOL < - 20 °C) | COPd | 1.47 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Operation limit temperature | TOL | -28 | °C |
| Tj = bivalent temperature | Pdh | 11.0 | kW | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = operation limit temperature (***) | Pdh | 10.0 | kW | Supplementary heater | | | |
| Tj = - 15 °C (if TOL < - 20 °C) | Pdh | 11.0 | kW | Rated heat output (*) | Psup | 3.5 | 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} | 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 | | | | |

| | | | | | | | |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items | | | | Rated air flow rate, outdoors | | | |
| Capacity control | variable | | | - | 5200 | m ³ /h | |
| Sound power level, indoors/outdoors | L _{WA} | 40 / 67 | dBA | | | | |
| Annual energy consumption | Q _{HE} | 11133 | kWh | | | | |

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

Contact details

MITSUBISHI ELECTRIC CORPORATION SHIZUOKA WORKS 3-18-1, Oshika, Suruga-ku, Shizuoka 422-8528, Japan

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Tomoyuki MIWA
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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-HWM140VHA(-BS) |
| | Indoor unit: | EHPX-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: | | no |
| Parameters for | | low-temperature application. |
| Parameters for | | colder climate conditions. |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|------------------|-------|------|--|-----------------|-------|------|
| Rated heat output (*) | Prated | 13.5 | kW | Seasonal space heating energy efficiency | η_s | 152 | % |
| 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 | 8.2 | kW | Tj = - 7 °C | COPd | 3.45 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = + 2 °C | COPd | 4.55 | - |
| Tj = + 2 °C | Pdh | 6.1 | kW | Tj = + 7 °C | COPd | 5.81 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = +12 °C | COPd | 8.21 | - |
| Tj = + 7 °C | Pdh | 4.3 | kW | Tj = bivalent temperature | COPd | 2.32 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Tj = operation limit temperature (***) | COPd | 1.60 | - |
| Tj = +12 °C | Pdh | 5.5 | kW | Tj = - 15 °C (if TOL < - 20 °C) | COPd | 2.32 | - |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Operation limit temperature | TOL | -28 | °C |
| Tj = bivalent temperature | Pdh | 11.0 | kW | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = operation limit temperature (***) | Pdh | 10.0 | kW | Supplementary heater | | | |
| Tj = - 15 °C (if TOL < - 20 °C) | Pdh | 11.0 | kW | Rated heat output (*) | Psup | 3.5 | 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} | 0.015 | kW | Thermostat-off mode | P _{TO} | 0.015 | kW |
| Thermostat-off mode | P _{TO} | 0.015 | kW | Standby mode | P _{SB} | 0.015 | kW |
| Standby mode | P _{SB} | 0.015 | kW | Crankcase heater mode | P _{CK} | 0.000 | kW |
| Crankcase heater mode | P _{CK} | 0.000 | kW | Other items | | | |

| | | | | | | | |
|-------------------------------------|-----------------|---------|-----|-------------------------------|---|------|-------------------|
| Capacity control | variable | | | Rated air flow rate, outdoors | - | 5200 | m ³ /h |
| Sound power level, indoors/outdoors | L _{WA} | 40 / 67 | dBA | | | | |
| Annual energy consumption | Q _{HE} | 8568 | kWh | | | | |

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

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(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.
(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

| | | |
|---------------------------------------|---------------|---------------------------------|
| Model(s): | Outdoor unit: | PUZ-HWM140VHA(-BS) |
| | Indoor unit: | EHPX-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: | | no |
| Parameters for | | medium-temperature application. |
| Parameters for | | warmer climate conditions. |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|-------------------|---------|------|--|------------|-------------------|------|
| Rated heat output (*) | Prated | 14.0 | kW | Seasonal space heating energy efficiency | η_s | 160 | % |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj | | | | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj | | | |
| Tj = - 7 °C | Pdh | - | kW | Tj = - 7 °C | COPd | - | - |
| Degradation co-efficient (**) | Cdh | - | - | Tj = + 2 °C | COPd | 1.94 | - |
| Tj = + 2 °C | Pdh | 14.0 | kW | Tj = + 7 °C | COPd | 3.25 | - |
| Degradation co-efficient (**) | Cdh | 1.00 | - | Tj = +12 °C | COPd | 5.91 | - |
| Tj = + 7 °C | Pdh | 9.0 | kW | Tj = bivalent temperature | COPd | 1.94 | - |
| Degradation co-efficient (**) | Cdh | 1.00 | - | Tj = operation limit temperature (***) | COPd | 1.94 | - |
| Tj = +12 °C | Pdh | 5.2 | kW | Operation limit temperature | TOL | -28 | °C |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = bivalent temperature | Pdh | 14.0 | kW | Supplementary heater | | | |
| Tj = operation limit temperature (***) | Pdh | 14.0 | 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 | | | - | 5200 | m ³ /h | |
| Sound power level, indoors/outdoors | L _{WA} | 40 / 67 | dBA | | | | |
| Annual energy consumption | Q _{HE} | 4593 | kWh | | | | |
| For heat pump combination heater: | | | | Water heating energy efficiency | | | |
| Declared load profile | - | | | η_{wh} | - | % | |
| Daily electricity consumption | Q _{elec} | - | kWh | | | | |
| Annual electricity consumption | AEC | - | kWh | | | | |

Contact details

MITSUBISHI ELECTRIC CORPORATION SHIZUOKA WORKS

3-18-1, Oshika, Suruga-ku, Shizuoka 422-8528, Japan

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

Tomoyuki MIWA

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

General Manager, Quality Assurance Department
Shizuoka JAPAN

· 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-HWM140VHA(-BS) |
| | Indoor unit: | EHPX-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: | | no |
| Parameters for | | low-temperature application. |
| Parameters for | | warmer climate conditions. |

| Item | Symbol | Value | Unit | Item | Symbol | Value | Unit |
|--|----------|-------|------|--|------------|-------|------|
| Rated heat output (*) | Prated | 14.0 | kW | Seasonal space heating energy efficiency | η_s | 227 | % |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj | | | | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj | | | |
| Tj = - 7 °C | Pdh | - | kW | Tj = - 7 °C | COPd | - | - |
| Degradation co-efficient (**) | Cdh | - | - | Tj = + 2 °C | COPd | 3.15 | - |
| Tj = + 2 °C | Pdh | 14.0 | kW | Tj = + 7 °C | COPd | 5.10 | - |
| Degradation co-efficient (**) | Cdh | 1.00 | - | Tj = +12 °C | COPd | 7.43 | - |
| Tj = + 7 °C | Pdh | 9.0 | kW | Tj = bivalent temperature | COPd | 3.15 | - |
| Degradation co-efficient (**) | Cdh | 0.99 | - | Tj = operation limit temperature (***) | COPd | 3.15 | - |
| Tj = +12 °C | Pdh | 5.5 | kW | Operation limit temperature | TOL | -28 | °C |
| Degradation co-efficient (**) | Cdh | 0.98 | - | Heating water operating limit temperature | WTOL | 60 | °C |
| Tj = bivalent temperature | Pdh | 14.0 | kW | Supplementary heater | | | |
| Tj = operation limit temperature (***) | Pdh | 14.0 | 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} | | | |

| | | | | | | | |
|-------------------------------------|-----------------|---------|-----|-------------------------------|---|------|-------------------|
| Capacity control | variable | | | Rated air flow rate, outdoors | - | 5200 | m ³ /h |
| Sound power level, indoors/outdoors | L _{WA} | 40 / 67 | dBA | | | | |
| Annual energy consumption | Q _{HE} | 3252 | kWh | | | | |

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

Contact details

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Tomoyuki MIWA
 General Manager, Quality Assurance Department
 Shizuoka JAPAN

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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.