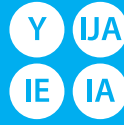




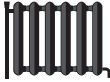
# ENERG

енергия · ενεργεια



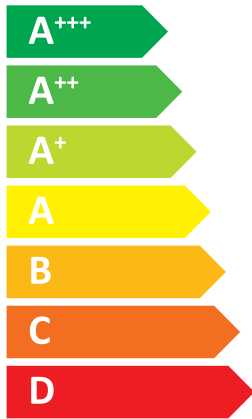
Indoor unit  
Outdoor unit

E\*SD-\*\*\*\*D  
PUZ-SHWM100VAA



55 °C

35 °C



**A++**

**A+++**



**41** dB



**58** dB

■ 10  
■ **10**  
■ 10  
kW

■ 10  
■ **10**  
■ 10  
kW



2019

811/2013

DG79V342H13



PRODUCT FICHE

Mitsubishi Electric Erp Directive Related Product Information: erp.mitsubishielectric.eu/erp
Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.
This information is based on EU regulation No 811/2013 and No 813/2013.

DG79A02MH01

Table 1: SPACE HEATER. Columns include Outdoor unit, Indoor unit, and performance metrics for medium-temperature and low-temperature applications. Rows list various models like PUZ-SWM60VAA, PUZ-SWM80VAA, etc.

Table 2: COMBINATION HEATER. Columns include Outdoor unit, Indoor unit, and performance metrics for medium-temperature and low-temperature applications. Rows list various models like PUZ-SWM60VAA, PUZ-SWM80VAA, etc.

|              |  |  |                                   |                                   |
|--------------|--|--|-----------------------------------|-----------------------------------|
| English      | Deutsch                                | Franglais                              | Italiano                          | Espanol                           |
| Nederlands   | Svenska                                | Dansk                                  | Portugals                         | Ελληνικά                          |
| suomi        | Čeština                                | Български                              | Polski                            | Ελληνικά                          |
| Outdoor unit | Außengerät                             | unité extérieure                       | unità esterna                     | unidad exterior                   |
| 1            | Ulmohäsenhet                           | Uleniders enheid                       | unidad exterior                   | Εξωτερική μονάδα                  |
| Ulkokeskus   | Ulmohäsenhet                           | Внешний тпоз                           | repositio zewnętrza               | unidad interior                   |
| Indoor unit  | Innengerät                             | unité intérieure                       | unidad interior                   | Εσωτερική μονάδα                  |
| 2            | Внутренний                             | Innengerät                             | interne interior                  | Εσωτερική μονάδα                  |
| Внутренний   | Внутренний                             | Внутренний тпоз                        | repositio interna                 | Εσωτερική μονάδα                  |
| 3            | Медиум-температуре приложение          | Медиумтемпературе приложение           | репозитиоа межтемпературна        | репозитиоа межтемпературна        |
| 3            | Mediumpreteratuurtoepassing            | Mediumpreteratuurtoepassing            | репозитиоа в средних температурах | репозитиоа в средних температурах |
| 3            | Keskilämpötilan sovellus               | Nedertemperatuurtoepassing             | repositioa a bassa temperatura    | repositioa a bassa temperatura    |
| 4            | Идентификация приложения               | Идентификация приложения               | repositioa a alta temperatura     | repositioa a alta temperatura     |
| 4            | Identifiointi-sovellus                 | Identifiointi-sovellus                 | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 5            | Объединенный канал                     | Объединенный канал                     | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 5            | Yhdistetty kanavaväylä                 | Yhdistetty kanavaväylä                 | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 6            | Сезонная рабочая температура           | Сезонная рабочая температура           | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 6            | Säätöasteikon lämpötilaluokka          | Säätöasteikon lämpötilaluokka          | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 7            | Матрица приложений                     | Матрица приложений                     | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 7            | Maailmanlaajuisen sovelluksen matriisi | Maailmanlaajuisen sovelluksen matriisi | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 8            | Работает в режиме ожидания             | Работает в режиме ожидания             | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 8            | Rakast heid sovellyksen odotustila     | Rakast heid sovellyksen odotustila     | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 9            | Воздухонепроницаемая конструкция       | Воздухонепроницаемая конструкция       | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 9            | Vuorovesihermitys                      | Vuorovesihermitys                      | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 10           | Воздухонепроницаемая конструкция       | Воздухонепроницаемая конструкция       | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 10           | Vuorovesihermitys                      | Vuorovesihermitys                      | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 11           | Сезонная рабочая температура           | Сезонная рабочая температура           | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 11           | Säätöasteikon lämpötilaluokka          | Säätöasteikon lämpötilaluokka          | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 12           | Матрица приложений                     | Матрица приложений                     | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 12           | Maailmanlaajuisen sovelluksen matriisi | Maailmanlaajuisen sovelluksen matriisi | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 13           | Работает в режиме ожидания             | Работает в режиме ожидания             | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 13           | Rakast heid sovellyksen odotustila     | Rakast heid sovellyksen odotustila     | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 14           | Воздухонепроницаемая конструкция       | Воздухонепроницаемая конструкция       | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 14           | Vuorovesihermitys                      | Vuorovesihermitys                      | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 15           | Сезонная рабочая температура           | Сезонная рабочая температура           | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 15           | Säätöasteikon lämpötilaluokka          | Säätöasteikon lämpötilaluokka          | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 16           | Матрица приложений                     | Матрица приложений                     | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 16           | Maailmanlaajuisen sovelluksen matriisi | Maailmanlaajuisen sovelluksen matriisi | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 17           | Работает в режиме ожидания             | Работает в режиме ожидания             | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 17           | Rakast heid sovellyksen odotustila     | Rakast heid sovellyksen odotustila     | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 18           | Воздухонепроницаемая конструкция       | Воздухонепроницаемая конструкция       | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 18           | Vuorovesihermitys                      | Vuorovesihermitys                      | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 19           | Сезонная рабочая температура           | Сезонная рабочая температура           | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 19           | Säätöasteikon lämpötilaluokka          | Säätöasteikon lämpötilaluokka          | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 20           | Матрица приложений                     | Матрица приложений                     | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 20           | Maailmanlaajuisen sovelluksen matriisi | Maailmanlaajuisen sovelluksen matriisi | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 21           | Работает в режиме ожидания             | Работает в режиме ожидания             | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 21           | Rakast heid sovellyksen odotustila     | Rakast heid sovellyksen odotustila     | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 22           | Воздухонепроницаемая конструкция       | Воздухонепроницаемая конструкция       | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 22           | Vuorovesihermitys                      | Vuorovesihermitys                      | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 23           | Сезонная рабочая температура           | Сезонная рабочая температура           | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 23           | Säätöasteikon lämpötilaluokka          | Säätöasteikon lämpötilaluokka          | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 24           | Матрица приложений                     | Матрица приложений                     | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 24           | Maailmanlaajuisen sovelluksen matriisi | Maailmanlaajuisen sovelluksen matriisi | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 25           | Работает в режиме ожидания             | Работает в режиме ожидания             | repositioa a temperatura normala  | repositioa a temperatura normala  |
| 25           | Rakast heid sovellyksen odotustila     | Rakast heid sovellyksen odotustila     | repositioa a temperatura normala  | repositioa a temperatura normala  |

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

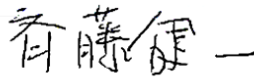
|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SHWM100VAA                  |
|                                       | Indoor unit:  | EHSD-****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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 136   | %    |
| 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              | 8.9   | kW   | Tj = - 7 ° C  | COPd       | 2.19  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = + 2 ° C  | COPd       | 3.38  | -    |
| Tj = + 2 ° C  | Pdh              | 5.4   | kW   | Tj = + 7 ° C  | COPd       | 4.62  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.30  | -    |
| Tj = + 7 ° C  | Pdh              | 4.8   | kW   | Tj = bivalent temperature   | COPd       | 1.69  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 1.69  | -    |
| Tj = +12 ° C  | Pdh              | 2.9   | kW   | Operation limit temperature   | TOL        | -30   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.97  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 10.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 10.0  | 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   |                  |       |      |   |            |       |      |
| Off mode  | P <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 5936    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |                                 |   |   |  |
| Annual electricity consumption    | AEC               | - | kWh |                                 |   |   |  |

Contact details  
 MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY  
 Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusemre - Manisa, Turkey

The identification and signature of the person empowered to bind the supplier:  
  
 Kenichi SAITO  
 Manager, Quality Assurance Department  
 TURKEY

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                              |
|---------------------------------------|---------------|------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SHWM100VAA               |
|                                       | Indoor unit:  | EHSD-****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   | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 183   | %    |
| 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      | 8.9   | kW   | Tj = - 7 ° C  | COPd       | 3.10  | -    |
| Degradation co-efficient (**)   | Cdh      | 1.00  | -    | Tj = + 2 ° C  | COPd       | 4.62  | -    |
| Tj = + 2 ° C  | Pdh      | 5.4   | kW   | Tj = + 7 ° C  | COPd       | 6.00  | -    |
| Degradation co-efficient (**)   | Cdh      | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.96  | -    |
| Tj = + 7 ° C  | Pdh      | 5.2   | kW   | Tj = bivalent temperature   | COPd       | 2.49  | -    |
| Degradation co-efficient (**)   | Cdh      | 0.98  | -    | Tj = operation limit temperature (***)  | COPd       | 2.49  | -    |
| Tj = +12 ° C  | Pdh      | 3.2   | kW   | Operation limit temperature   | TOL        | -30   | ° C  |
| Degradation co-efficient (**)   | Cdh      | 0.97  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh      | 10.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh      | 10.0  | 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   |            |       |      |
| Off mode  |          |       |      | P <sub>OFF</sub>  |            |       |      |
| Thermostat-off mode   |          |       |      | P <sub>TO</sub>   |            |       |      |
| Standby mode  |          |       |      | P <sub>SB</sub>   |            |       |      |
| Crankcase heater mode   |          |       |      | P <sub>CK</sub>   |            |       |      |

|                                     |                 |         |  |                               |      |                   |  |
|-------------------------------------|-----------------|---------|--|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |  | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |  | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 |  | dBA                           |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 4444    |  | kWh                           |      |                   |  |

|                                   |                   |   |  |                                 |   |   |  |
|-----------------------------------|-------------------|---|--|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |  | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |  | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - |  | kWh                             |   |   |  |
| Annual electricity consumption    | AEC               | - |  | kWh                             |   |   |  |

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY      Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey

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

Kenichi SAITO

The signature is signed in the average climate / medium-temperature section.      Manager, Quality Assurance Department

TURKEY

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SHWM100VAA                  |
|                                       | Indoor unit:  | EHSD-****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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 116   | %    |
| 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              | 6.1   | kW   | Tj = - 7 ° C  | COPd       | 2.62  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = + 2 ° C  | COPd       | 3.50  | -    |
| Tj = + 2 ° C  | Pdh              | 4.0   | kW   | Tj = + 7 ° C  | COPd       | 4.59  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.88  | -    |
| Tj = + 7 ° C  | Pdh              | 3.8   | kW   | Tj = bivalent temperature   | COPd       | 1.57  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Tj = operation limit temperature (***)  | COPd       | 1.59  | -    |
| Tj = +12 ° C  | Pdh              | 4.4   | kW   | Tj = - 15 ° C (if TOL < - 20 ° C)   | COPd       | 1.57  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Operation limit temperature   | TOL        | -30   | ° C  |
| Tj = bivalent temperature   | Pdh              | 8.4   | kW   | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = operation limit temperature (***)  | Pdh              | 8.0   | kW   | Supplementary heater  |            |       |      |
| Tj = - 15 ° C (if TOL < - 20 ° C)   | Pdh              | 8.2   | kW   | Rated heat output (*)   | Psup       | 2.0   | kW   |
| Bivalent temperature  | Tbiv             | -16   | ° 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 <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 8272    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |                                 |   |   |  |
| Annual electricity consumption    | AEC               | - | kWh |                                 |   |   |  |

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY      Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusemre - Manisa, Turkey

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

Kenichi SAITO

The signature is signed in the average climate / medium-temperature section.      Manager, Quality Assurance Department

TURKEY

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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.

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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-SHWM100VAA               |
|                                       | Indoor unit:  | EHSD-****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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 149   | %    |
| 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              | 6.2   | kW   | Tj = - 7 ° C  | COPd       | 3.71  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = + 2 ° C  | COPd       | 4.35  | -    |
| Tj = + 2 ° C  | Pdh              | 4.1   | kW   | Tj = + 7 ° C  | COPd       | 5.34  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Tj = +12 ° C  | COPd       | 7.50  | -    |
| Tj = + 7 ° C  | Pdh              | 3.9   | kW   | Tj = bivalent temperature   | COPd       | 2.00  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Tj = operation limit temperature (***)  | COPd       | 1.57  | -    |
| Tj = +12 ° C  | Pdh              | 4.5   | kW   | Tj = - 15 ° C (if TOL < - 20 ° C)   | COPd       | 2.00  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Operation limit temperature   | TOL        | -30   | ° C  |
| Tj = bivalent temperature   | Pdh              | 8.4   | kW   | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = operation limit temperature (***)  | Pdh              | 7.7   | kW   | Supplementary heater  |            |       |      |
| Tj = - 15 ° C (if TOL < - 20 ° C)   | Pdh              | 8.2   | kW   | Rated heat output (*)   | Psup       | 2.3   | kW   |
| Bivalent temperature  | Tbiv             | -16   | ° 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 <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 6480    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |                                 |   |   |  |
| Annual electricity consumption    | AEC               | - | kWh |                                 |   |   |  |

Contact details

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Kenichi SAITO

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TURKEY

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(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(\*\*\*) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SHWM100VAA                  |
|                                       | Indoor unit:  | EHSD-****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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 164   | %    |
| 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       | 2.10  | -    |
| Tj = + 2 ° C  | Pdh              | 10.0  | kW   | Tj = + 7 ° C  | COPd       | 3.53  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = +12 ° C  | COPd       | 5.75  | -    |
| Tj = + 7 ° C  | Pdh              | 6.4   | kW   | Tj = bivalent temperature   | COPd       | 2.10  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 2.10  | -    |
| Tj = +12 ° C  | Pdh              | 4.2   | kW   | Operation limit temperature   | TOL        | -30   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 10.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 10.0  | 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 <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 3204    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |                                 |   |   |  |
| Annual electricity consumption    | AEC               | - | kWh |                                 |   |   |  |

Contact details

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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-SHWM100VAA               |
|                                       | Indoor unit:  | EHSD-****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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 236   | %    |
| 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       | 3.50  | -    |
| Tj = + 2 ° C  | Pdh              | 10.0  | kW   | Tj = + 7 ° C  | COPd       | 5.55  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = +12 ° C  | COPd       | 7.54  | -    |
| Tj = + 7 ° C  | Pdh              | 6.4   | kW   | Tj = bivalent temperature   | COPd       | 3.50  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 3.50  | -    |
| Tj = +12 ° C  | Pdh              | 4.4   | kW   | Operation limit temperature   | TOL        | -30   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.97  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 10.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 10.0  | 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 <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 2233    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |                                 |   |   |  |
| Annual electricity consumption    | AEC               | - | kWh |                                 |   |   |  |

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TURKEY

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(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

(\*\*\*) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

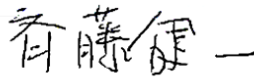
|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SHWM100VAA                  |
|                                       | Indoor unit:  | ERSD-****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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 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              | 8.9   | kW   | Tj = - 7 ° C  | COPd       | 2.19  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = + 2 ° C  | COPd       | 3.38  | -    |
| Tj = + 2 ° C  | Pdh              | 5.4   | kW   | Tj = + 7 ° C  | COPd       | 4.62  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.30  | -    |
| Tj = + 7 ° C  | Pdh              | 4.8   | kW   | Tj = bivalent temperature   | COPd       | 1.69  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 1.69  | -    |
| Tj = +12 ° C  | Pdh              | 2.9   | kW   | Operation limit temperature   | TOL        | -30   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.97  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 10.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 10.0  | 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   |                  |       |      |   |            |       |      |
| Off mode  | P <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 5881    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |                                 |   |   |  |
| Annual electricity consumption    | AEC               | - | kWh |                                 |   |   |  |

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 Kenichi SAITO  
 Manager, Quality Assurance Department  
 TURKEY

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                              |
|---------------------------------------|---------------|------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SHWM100VAA               |
|                                       | Indoor unit:  | ERSD-****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   | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 185   | %    |
| 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      | 8.9   | kW   | Tj = - 7 ° C  | COPd       | 3.10  | -    |
| Degradation co-efficient (**)   | Cdh      | 1.00  | -    | Tj = + 2 ° C  | COPd       | 4.62  | -    |
| Tj = + 2 ° C  | Pdh      | 5.4   | kW   | Tj = + 7 ° C  | COPd       | 6.00  | -    |
| Degradation co-efficient (**)   | Cdh      | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.96  | -    |
| Tj = + 7 ° C  | Pdh      | 5.2   | kW   | Tj = bivalent temperature   | COPd       | 2.49  | -    |
| Degradation co-efficient (**)   | Cdh      | 0.98  | -    | Tj = operation limit temperature (***)  | COPd       | 2.49  | -    |
| Tj = +12 ° C  | Pdh      | 3.2   | kW   | Operation limit temperature   | TOL        | -30   | ° C  |
| Degradation co-efficient (**)   | Cdh      | 0.97  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh      | 10.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh      | 10.0  | 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   |            |       |      |
| Off mode  |          |       |      | P <sub>OFF</sub>  |            |       |      |
| Thermostat-off mode   |          |       |      | P <sub>TO</sub>   |            |       |      |
| Standby mode  |          |       |      | P <sub>SB</sub>   |            |       |      |
| Crankcase heater mode   |          |       |      | P <sub>CK</sub>   |            |       |      |

|                                     |                 |         |  |                               |      |                   |  |
|-------------------------------------|-----------------|---------|--|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |  | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |  | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 |  | dBA                           |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 4389    |  | kWh                           |      |                   |  |

|                                   |                   |   |  |                                 |   |  |  |
|-----------------------------------|-------------------|---|--|---------------------------------|---|--|--|
| For heat pump combination heater: |                   |   |  | Water heating energy efficiency |   |  |  |
| Declared load profile             | -                 |   |  | $\eta_{wh}$                     | - |  |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - |  | kWh                             |   |  |  |
| Annual electricity consumption    | AEC               | - |  | kWh                             |   |  |  |

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY      Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey

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

Kenichi SAITO

The signature is signed in the average climate / medium-temperature section.      Manager, Quality Assurance Department

TURKEY

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· Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

(\*\*\*) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SHWM100VAA                  |
|                                       | Indoor unit:  | ERSD-****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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 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              | 6.1   | kW   | Tj = - 7 ° C  | COPd       | 2.62  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = + 2 ° C  | COPd       | 3.50  | -    |
| Tj = + 2 ° C  | Pdh              | 4.0   | kW   | Tj = + 7 ° C  | COPd       | 4.59  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.88  | -    |
| Tj = + 7 ° C  | Pdh              | 3.8   | kW   | Tj = bivalent temperature   | COPd       | 1.57  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Tj = operation limit temperature (***)  | COPd       | 1.59  | -    |
| Tj = +12 ° C  | Pdh              | 4.4   | kW   | Tj = - 15 ° C (if TOL < - 20 ° C)   | COPd       | 1.57  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Operation limit temperature   | TOL        | -30   | ° C  |
| Tj = bivalent temperature   | Pdh              | 8.4   | kW   | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = operation limit temperature (***)  | Pdh              | 8.0   | kW   | Supplementary heater  |            |       |      |
| Tj = - 15 ° C (if TOL < - 20 ° C)   | Pdh              | 8.2   | kW   | Rated heat output (*)   | Psup       | 2.0   | kW   |
| Bivalent temperature  | Tbiv             | -16   | ° 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 <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 8239    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |                                 |   |   |  |
| Annual electricity consumption    | AEC               | - | kWh |                                 |   |   |  |

Contact details

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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-SHWM100VAA               |
|                                       | Indoor unit:  | ERSD-****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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 150   | %    |
| 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              | 6.2   | kW   | Tj = - 7 ° C  | COPd       | 3.71  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = + 2 ° C  | COPd       | 4.35  | -    |
| Tj = + 2 ° C  | Pdh              | 4.1   | kW   | Tj = + 7 ° C  | COPd       | 5.34  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Tj = +12 ° C  | COPd       | 7.50  | -    |
| Tj = + 7 ° C  | Pdh              | 3.9   | kW   | Tj = bivalent temperature   | COPd       | 2.00  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Tj = operation limit temperature (***)  | COPd       | 1.57  | -    |
| Tj = +12 ° C  | Pdh              | 4.5   | kW   | Tj = - 15 ° C (if TOL < - 20 ° C)   | COPd       | 2.00  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Operation limit temperature   | TOL        | -30   | ° C  |
| Tj = bivalent temperature   | Pdh              | 8.4   | kW   | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = operation limit temperature (***)  | Pdh              | 7.7   | kW   | Supplementary heater  |            |       |      |
| Tj = - 15 ° C (if TOL < - 20 ° C)   | Pdh              | 8.2   | kW   | Rated heat output (*)   | Psup       | 2.3   | kW   |
| Bivalent temperature  | Tbiv             | -16   | ° 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 <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 6447    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |                                 |   |   |  |
| Annual electricity consumption    | AEC               | - | kWh |                                 |   |   |  |

Contact details

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

Kenichi SAITO

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TURKEY

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(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(\*\*\*) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SHWM100VAA                  |
|                                       | Indoor unit:  | ERSD-****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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 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       | 2.10  | -    |
| Tj = + 2 ° C  | Pdh              | 10.0  | kW   | Tj = + 7 ° C  | COPd       | 3.53  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = +12 ° C  | COPd       | 5.75  | -    |
| Tj = + 7 ° C  | Pdh              | 6.4   | kW   | Tj = bivalent temperature   | COPd       | 2.10  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 2.10  | -    |
| Tj = +12 ° C  | Pdh              | 4.2   | kW   | Operation limit temperature   | TOL        | -30   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 10.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 10.0  | 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 <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 3138    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |                                 |   |   |  |
| Annual electricity consumption    | AEC               | - | kWh |                                 |   |   |  |

|  |  |  |  |   |  |  |  |
|--|--|--|--|---|--|--|--|
| Contact details  |  |  |  | MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY           |  |  |  |
|  |  |  |  | Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusemre - Manisa, Turkey |  |  |  |
| The identification and signature of the person empowered to bind the supplier; |  |  |  | Kenichi SAITO   |  |  |  |
| The signature is signed in the average climate / medium-temperature section.   |  |  |  | Manager, Quality Assurance Department   |  |  |  |
|  |  |  |  | TURKEY  |  |  |  |

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(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(\*\*\*) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                              |
|---------------------------------------|---------------|------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SHWM100VAA               |
|                                       | Indoor unit:  | ERSD-****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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 244   | %    |
| 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       | 3.50  | -    |
| Tj = + 2 ° C  | Pdh              | 10.0  | kW   | Tj = + 7 ° C  | COPd       | 5.55  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = +12 ° C  | COPd       | 7.54  | -    |
| Tj = + 7 ° C  | Pdh              | 6.4   | kW   | Tj = bivalent temperature   | COPd       | 3.50  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 3.50  | -    |
| Tj = +12 ° C  | Pdh              | 4.4   | kW   | Operation limit temperature   | TOL        | -30   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.97  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 10.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 10.0  | 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 <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 2167    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | 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-SHWM100VAA                  |
|                                       | Indoor unit:  | EHSD-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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 136   | %    |
| 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              | 8.9   | kW   | Tj = - 7 ° C  | COPd       | 2.19  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = + 2 ° C  | COPd       | 3.38  | -    |
| Tj = + 2 ° C  | Pdh              | 5.4   | kW   | Tj = + 7 ° C  | COPd       | 4.62  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.30  | -    |
| Tj = + 7 ° C  | Pdh              | 4.8   | kW   | Tj = bivalent temperature   | COPd       | 1.69  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 1.69  | -    |
| Tj = +12 ° C  | Pdh              | 2.9   | kW   | Operation limit temperature   | TOL        | -30   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.97  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 10.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 10.0  | 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   |                  |       |      |   |            |       |      |
| Off mode  | P <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

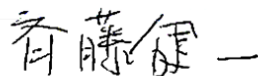
|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 5936    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |                                 |   |   |  |
| Annual electricity consumption    | AEC               | - | kWh |                                 |   |   |  |

**Contact details**

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusemre - Manisa, Turkey

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



Kenichi SAITO  
 Manager, Quality Assurance Department  
 TURKEY

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



**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                              |
|---------------------------------------|---------------|------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SHWM100VAA               |
|                                       | Indoor unit:  | EHSD-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   | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 183   | %    |
| 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      | 8.9   | kW   | Tj = - 7 ° C  | COPd       | 3.10  | -    |
| Degradation co-efficient (**)   | Cdh      | 1.00  | -    | Tj = + 2 ° C  | COPd       | 4.62  | -    |
| Tj = + 2 ° C  | Pdh      | 5.4   | kW   | Tj = + 7 ° C  | COPd       | 6.00  | -    |
| Degradation co-efficient (**)   | Cdh      | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.96  | -    |
| Tj = + 7 ° C  | Pdh      | 5.2   | kW   | Tj = bivalent temperature   | COPd       | 2.49  | -    |
| Degradation co-efficient (**)   | Cdh      | 0.98  | -    | Tj = operation limit temperature (***)  | COPd       | 2.49  | -    |
| Tj = +12 ° C  | Pdh      | 3.2   | kW   | Operation limit temperature   | TOL        | -30   | ° C  |
| Degradation co-efficient (**)   | Cdh      | 0.97  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh      | 10.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh      | 10.0  | 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   |            |       |      |
| Off mode  |          |       |      | P <sub>OFF</sub>  |            |       |      |
| Thermostat-off mode   |          |       |      | P <sub>TO</sub>   |            |       |      |
| Standby mode  |          |       |      | P <sub>SB</sub>   |            |       |      |
| Crankcase heater mode   |          |       |      | P <sub>CK</sub>   |            |       |      |

|                                     |                 |         |  |                               |      |                   |  |
|-------------------------------------|-----------------|---------|--|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |  | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |  | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 |  | dBA                           |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 4444    |  | kWh                           |      |                   |  |

|                                   |                   |   |  |                                 |   |  |  |
|-----------------------------------|-------------------|---|--|---------------------------------|---|--|--|
| For heat pump combination heater: |                   |   |  | Water heating energy efficiency |   |  |  |
| Declared load profile             | -                 |   |  | $\eta_{wh}$                     | - |  |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - |  | kWh                             |   |  |  |
| Annual electricity consumption    | AEC               | - |  | kWh                             |   |  |  |

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Kenichi SAITO

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TURKEY

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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-SHWM100VAA                  |
|                                       | Indoor unit:  | EHSD-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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 116   | %    |
| 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              | 6.1   | kW   | Tj = - 7 ° C  | COPd       | 2.62  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = + 2 ° C  | COPd       | 3.50  | -    |
| Tj = + 2 ° C  | Pdh              | 4.0   | kW   | Tj = + 7 ° C  | COPd       | 4.59  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.88  | -    |
| Tj = + 7 ° C  | Pdh              | 3.8   | kW   | Tj = bivalent temperature   | COPd       | 1.57  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Tj = operation limit temperature (***)  | COPd       | 1.59  | -    |
| Tj = +12 ° C  | Pdh              | 4.4   | kW   | Tj = - 15 ° C (if TOL < - 20 ° C)   | COPd       | 1.57  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Operation limit temperature   | TOL        | -30   | ° C  |
| Tj = bivalent temperature   | Pdh              | 8.4   | kW   | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = operation limit temperature (***)  | Pdh              | 8.0   | kW   | Supplementary heater  |            |       |      |
| Tj = - 15 ° C (if TOL < - 20 ° C)   | Pdh              | 8.2   | kW   | Rated heat output (*)   | Psup       | 2.0   | kW   |
| Bivalent temperature  | Tbiv             | -16   | ° 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 <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 8272    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |                                 |   |   |  |
| Annual electricity consumption    | AEC               | - | kWh |                                 |   |   |  |

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TURKEY

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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-SHWM100VAA               |
|                                       | Indoor unit:  | EHSD-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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 149   | %    |
| 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              | 6.2   | kW   | Tj = - 7 ° C  | COPd       | 3.71  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = + 2 ° C  | COPd       | 4.35  | -    |
| Tj = + 2 ° C  | Pdh              | 4.1   | kW   | Tj = + 7 ° C  | COPd       | 5.34  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Tj = +12 ° C  | COPd       | 7.50  | -    |
| Tj = + 7 ° C  | Pdh              | 3.9   | kW   | Tj = bivalent temperature   | COPd       | 2.00  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Tj = operation limit temperature (***)  | COPd       | 1.57  | -    |
| Tj = +12 ° C  | Pdh              | 4.5   | kW   | Tj = - 15 ° C (if TOL < - 20 ° C)   | COPd       | 2.00  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Operation limit temperature   | TOL        | -30   | ° C  |
| Tj = bivalent temperature   | Pdh              | 8.4   | kW   | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = operation limit temperature (***)  | Pdh              | 7.7   | kW   | Supplementary heater  |            |       |      |
| Tj = - 15 ° C (if TOL < - 20 ° C)   | Pdh              | 8.2   | kW   | Rated heat output (*)   | Psup       | 2.3   | kW   |
| Bivalent temperature  | Tbiv             | -16   | ° 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 <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 6480    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |                                 |   |   |  |
| Annual electricity consumption    | AEC               | - | kWh |                                 |   |   |  |

Contact details

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TURKEY

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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-SHWM100VAA                  |
|                                       | Indoor unit:  | EHSD-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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 164   | %    |
| 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       | 2.10  | -    |
| Tj = + 2 ° C  | Pdh              | 10.0  | kW   | Tj = + 7 ° C  | COPd       | 3.53  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = +12 ° C  | COPd       | 5.75  | -    |
| Tj = + 7 ° C  | Pdh              | 6.4   | kW   | Tj = bivalent temperature   | COPd       | 2.10  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 2.10  | -    |
| Tj = +12 ° C  | Pdh              | 4.2   | kW   | Operation limit temperature   | TOL        | -30   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 10.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 10.0  | 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 <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 3204    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | 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-SHWM100VAA               |
|                                       | Indoor unit:  | EHSD-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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 236   | %    |
| 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       | 3.50  | -    |
| Tj = + 2 ° C  | Pdh              | 10.0  | kW   | Tj = + 7 ° C  | COPd       | 5.55  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = +12 ° C  | COPd       | 7.54  | -    |
| Tj = + 7 ° C  | Pdh              | 6.4   | kW   | Tj = bivalent temperature   | COPd       | 3.50  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 3.50  | -    |
| Tj = +12 ° C  | Pdh              | 4.4   | kW   | Operation limit temperature   | TOL        | -30   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.97  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 10.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 10.0  | 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 <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 2233    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |                                 |   |   |  |
| Annual electricity consumption    | AEC               | - | kWh |                                 |   |   |  |

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY      Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusemre - Manisa, Turkey

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

Kenichi SAITO

The signature is signed in the average climate / medium-temperature section.      Manager, Quality Assurance Department

TURKEY

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

· Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(\*\*\*) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

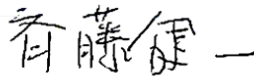
|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SHWM100VAA                  |
|                                       | Indoor unit:  | ERSD-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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 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              | 8.9   | kW   | Tj = - 7 ° C  | COPd       | 2.19  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = + 2 ° C  | COPd       | 3.38  | -    |
| Tj = + 2 ° C  | Pdh              | 5.4   | kW   | Tj = + 7 ° C  | COPd       | 4.62  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.30  | -    |
| Tj = + 7 ° C  | Pdh              | 4.8   | kW   | Tj = bivalent temperature   | COPd       | 1.69  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 1.69  | -    |
| Tj = +12 ° C  | Pdh              | 2.9   | kW   | Operation limit temperature   | TOL        | -30   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.97  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 10.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 10.0  | 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   |                  |       |      |   |            |       |      |
| Off mode  | P <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 5881    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |                                 |   |   |  |
| Annual electricity consumption    | AEC               | - | kWh |                                 |   |   |  |

Contact details  
 MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY  
 Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusemre - Manisa, Turkey

The identification and signature of the person empowered to bind the supplier:  
  
 Kenichi SAITO  
 Manager, Quality Assurance Department  
 TURKEY

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                              |
|---------------------------------------|---------------|------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SHWM100VAA               |
|                                       | Indoor unit:  | ERSD-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   | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 185   | %    |
| 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      | 8.9   | kW   | Tj = - 7 ° C  | COPd       | 3.10  | -    |
| Degradation co-efficient (**)   | Cdh      | 1.00  | -    | Tj = + 2 ° C  | COPd       | 4.62  | -    |
| Tj = + 2 ° C  | Pdh      | 5.4   | kW   | Tj = + 7 ° C  | COPd       | 6.00  | -    |
| Degradation co-efficient (**)   | Cdh      | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.96  | -    |
| Tj = + 7 ° C  | Pdh      | 5.2   | kW   | Tj = bivalent temperature   | COPd       | 2.49  | -    |
| Degradation co-efficient (**)   | Cdh      | 0.98  | -    | Tj = operation limit temperature (***)  | COPd       | 2.49  | -    |
| Tj = +12 ° C  | Pdh      | 3.2   | kW   | Operation limit temperature   | TOL        | -30   | ° C  |
| Degradation co-efficient (**)   | Cdh      | 0.97  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh      | 10.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh      | 10.0  | 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   |            |       |      |
| Off mode  |          |       |      | P <sub>OFF</sub>  |            |       |      |
| Thermostat-off mode   |          |       |      | P <sub>TO</sub>   |            |       |      |
| Standby mode  |          |       |      | P <sub>SB</sub>   |            |       |      |
| Crankcase heater mode   |          |       |      | P <sub>CK</sub>   |            |       |      |

|                                     |                 |         |  |                               |      |                   |  |
|-------------------------------------|-----------------|---------|--|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |  | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |  | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 |  | dBA                           |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 4389    |  | kWh                           |      |                   |  |

|                                   |                   |   |  |                                 |   |  |  |
|-----------------------------------|-------------------|---|--|---------------------------------|---|--|--|
| For heat pump combination heater: |                   |   |  | Water heating energy efficiency |   |  |  |
| Declared load profile             | -                 |   |  | $\eta_{wh}$                     | - |  |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - |  | kWh                             |   |  |  |
| Annual electricity consumption    | AEC               | - |  | kWh                             |   |  |  |

Contact details

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

Kenichi SAITO

The signature is signed in the average climate / medium-temperature section.      Manager, Quality Assurance Department

TURKEY

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SHWM100VAA                  |
|                                       | Indoor unit:  | ERSD-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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 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              | 6.1   | kW   | Tj = - 7 ° C  | COPd       | 2.62  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = + 2 ° C  | COPd       | 3.50  | -    |
| Tj = + 2 ° C  | Pdh              | 4.0   | kW   | Tj = + 7 ° C  | COPd       | 4.59  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.88  | -    |
| Tj = + 7 ° C  | Pdh              | 3.8   | kW   | Tj = bivalent temperature   | COPd       | 1.57  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Tj = operation limit temperature (***)  | COPd       | 1.59  | -    |
| Tj = +12 ° C  | Pdh              | 4.4   | kW   | Tj = - 15 ° C (if TOL < - 20 ° C)   | COPd       | 1.57  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Operation limit temperature   | TOL        | -30   | ° C  |
| Tj = bivalent temperature   | Pdh              | 8.4   | kW   | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = operation limit temperature (***)  | Pdh              | 8.0   | kW   | Supplementary heater  |            |       |      |
| Tj = - 15 ° C (if TOL < - 20 ° C)   | Pdh              | 8.2   | kW   | Rated heat output (*)   | Psup       | 2.0   | kW   |
| Bivalent temperature  | Tbiv             | -16   | ° 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 <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 8239    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |             |   |   |
|-----------------------------------|-------------------|---|-----|---------------------------------|-------------|---|---|
| For heat pump combination heater: |                   |   |     |                                 |             |   |   |
| Declared load profile             | -                 |   |     | Water heating energy efficiency | $\eta_{wh}$ | - | % |
| Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |                                 |             |   |   |
| Annual electricity consumption    | AEC               | - | kWh |                                 |             |   |   |

Contact details

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TURKEY

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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-SHWM100VAA               |
|                                       | Indoor unit:  | ERSD-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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 150   | %    |
| 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              | 6.2   | kW   | Tj = - 7 ° C  | COPd       | 3.71  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = + 2 ° C  | COPd       | 4.35  | -    |
| Tj = + 2 ° C  | Pdh              | 4.1   | kW   | Tj = + 7 ° C  | COPd       | 5.34  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Tj = +12 ° C  | COPd       | 7.50  | -    |
| Tj = + 7 ° C  | Pdh              | 3.9   | kW   | Tj = bivalent temperature   | COPd       | 2.00  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Tj = operation limit temperature (***)  | COPd       | 1.57  | -    |
| Tj = +12 ° C  | Pdh              | 4.5   | kW   | Tj = - 15 ° C (if TOL < - 20 ° C)   | COPd       | 2.00  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Operation limit temperature   | TOL        | -30   | ° C  |
| Tj = bivalent temperature   | Pdh              | 8.4   | kW   | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = operation limit temperature (***)  | Pdh              | 7.7   | kW   | Supplementary heater  |            |       |      |
| Tj = - 15 ° C (if TOL < - 20 ° C)   | Pdh              | 8.2   | kW   | Rated heat output (*)   | Psup       | 2.3   | kW   |
| Bivalent temperature  | Tbiv             | -16   | ° 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 <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 6447    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |             |   |   |
|-----------------------------------|-------------------|---|-----|---------------------------------|-------------|---|---|
| For heat pump combination heater: |                   |   |     |                                 |             |   |   |
| Declared load profile             | -                 |   |     | Water heating energy efficiency | $\eta_{wh}$ | - | % |
| Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |                                 |             |   |   |
| Annual electricity consumption    | AEC               | - | kWh |                                 |             |   |   |

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY      Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusemre - Manisa, Turkey

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

Kenichi SAITO

The signature is signed in the average climate / medium-temperature section.      Manager, Quality Assurance Department

TURKEY

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

· Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(\*\*\*) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SHWM100VAA                  |
|                                       | Indoor unit:  | ERSD-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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 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       | 2.10  | -    |
| Tj = + 2 ° C  | Pdh              | 10.0  | kW   | Tj = + 7 ° C  | COPd       | 3.53  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = +12 ° C  | COPd       | 5.75  | -    |
| Tj = + 7 ° C  | Pdh              | 6.4   | kW   | Tj = bivalent temperature   | COPd       | 2.10  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 2.10  | -    |
| Tj = +12 ° C  | Pdh              | 4.2   | kW   | Operation limit temperature   | TOL        | -30   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 10.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 10.0  | 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 <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 3138    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | 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-SHWM100VAA               |
|                                       | Indoor unit:  | ERSD-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           | 10.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 244   | %    |
| 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       | 3.50  | -    |
| Tj = + 2 ° C  | Pdh              | 10.0  | kW   | Tj = + 7 ° C  | COPd       | 5.55  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = +12 ° C  | COPd       | 7.54  | -    |
| Tj = + 7 ° C  | Pdh              | 6.4   | kW   | Tj = bivalent temperature   | COPd       | 3.50  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 3.50  | -    |
| Tj = +12 ° C  | Pdh              | 4.4   | kW   | Operation limit temperature   | TOL        | -30   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.97  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 10.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 10.0  | 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 <sub>OFF</sub> | 0.015 | kW   |   |            |       |      |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   |   |            |       |      |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   |   |            |       |      |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   |   |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 58 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 2167    | kWh |                               |      |                   |  |

|                                   |                   |   |     |                                 |   |   |  |
|-----------------------------------|-------------------|---|-----|---------------------------------|---|---|--|
| For heat pump combination heater: |                   |   |     | Water heating energy efficiency |   |   |  |
| Declared load profile             | -                 |   |     | $\eta_{wh}$                     | - | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | - | 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.

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