



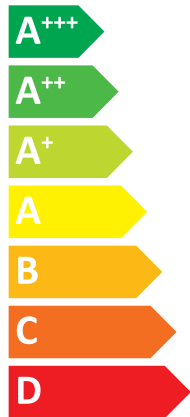
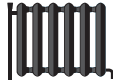
# ENERG

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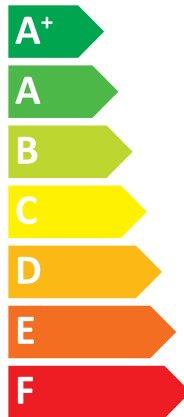


Indoor unit  
Outdoor unit

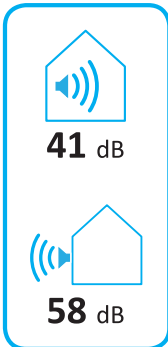
E\*ST20D-\*\*\*\*D  
PUZ-SWM140VAA



**A++**



**A+**



2019

811/2013

DG79V341H08



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: Outdoor unit, Indoor unit, Medium-temperature application (3-25), Low-temperature application (4-25). Rows: PUZ-SWM60VAA, PUZ-SWM80VAA, PUZ-SWM80YAA, PUZ-SWM100VAA, PUZ-SWM100YAA, PUZ-SWM120VAA, PUZ-SWM120YAA, PUZ-SWM140VAA, PUZ-SWM140YAA, PUZ-SWM80VAA, PUZ-SWM80YAA, PUZ-SWM100VAA, PUZ-SWM100YAA, PUZ-SWM120VAA, PUZ-SWM120YAA, PUZ-SWM140VAA, PUZ-SWM140YAA.

Table 2: COMBINATION HEATER. Columns: Outdoor unit, Indoor unit, Medium-temperature application (3-25), Low-temperature application (4-25). Rows: PUZ-SWM60VAA, PUZ-SWM80VAA, PUZ-SWM80YAA, PUZ-SWM100VAA, PUZ-SWM100YAA, PUZ-SWM120VAA, PUZ-SWM120YAA, PUZ-SWM140VAA, PUZ-SWM140YAA, PUZ-SWM80VAA, PUZ-SWM80YAA, PUZ-SWM100VAA, PUZ-SWM100YAA, PUZ-SWM120VAA, PUZ-SWM120YAA, PUZ-SWM140VAA, PUZ-SWM140YAA.

|   |   |   |   |   |
|---|---|---|---|---|
| English   | German  | French  | Italian   | Spanish   |
| Nederlands  | Svenska   | Dansk   | Portuguesa  | Espanol   |
| suomi   | Cestina   | Български   | Polski  | Ελληνικά  |
| Outdoor unit  | Außengerät  | unité extérieure  | unità esterna   | unidad exterior   |
| 1   | Utlomsenhet   | Utenriets enhed   | unidad exterior   | Εξωτερική μονάδα  |
| Ulkoyksykko   | Utlomsenhet   | Внешний блок  | república zewnątrzlożowa  | unidad interior   |
| 2   | Indoor unit   | unité intérieure  | unità interna   | interior  |
| sisäyksykko   | Indoor unit   | Interiören  | interior  | Екстерна  |
| 3   | Medium-temperature application  | Mitteltemperaturanwendung   | републіка внутрішня   | la aplicación de media temperatura  |
| keskilämpötilan sovellus  | mittelmitteltemperaturanwendung   | middletemperature application   | a aplicazio a media temperatura   | la aplicación de alta temperatura   |
| 4   | Low-temperature application   | Niedertemperaturanwendung   | забавляваща в средни температури  | la aplicación de baja temperatura   |
| alagtemperatuurilinen sovellus  | Niedertemperaturanwendung   | lowtemperature application  | a aplicazio a bassa temperatura   | la aplicación de temperatura ambiente   |
| 5   | Designed load profile   | insoportatörprofil  | апликацио а температура   | la aplicación de temperatura ambiente   |
| Arvotettu kuormitusprofiili   | Агрегованење састројил  | Profil de sarcină de lucru  | Profilo di carico dichiarato  | Perfil de carga declarado   |
| 6   | Seasonal space heating energy efficiency class  | Декларовану захтеву профил  | Arvotettu kuormitusprofiili   | Декларован профил оптерећења  |
| de seizoenruimteverwarming energie-efficiëntieklasse voor ruimteverwarming                                    | die Klasse für die jahreszeitbedingte Raumheizungs-Energieeffizienz saisonaler Gebäudeenergieeffizienzklasse für Raumverwarming | la classe d'efficacité énergétique saisonnière pour le chauffage des locaux   | la classe d'efficacité énergétique saisonnière pour le chauffage des locaux   | la classe d'efficacité énergétique saisonnière pour le chauffage des locaux   |
| 7   | Water heating energy efficiency class   | Ита енергетска класа за водену гретину  | Класа за енергијна ефикасност при подизању на вода  | Класа ефикасности енергетског подизања воду   |
| de energie-efficiëntieklasse voor waterverwarming   | die Klasse für die Warmwasserherstellung, den jährlichen Stromverbrauch bei durchschnittlichen Klimaverhältnissen               | la classe pour le chauffage de l'eau, la consommation annuelle d'électricité dans les conditions climatiques moyennes | la classe pour le chauffage de l'eau, la consommation annuelle d'électricité dans les conditions climatiques moyennes | la classe pour le chauffage de l'eau, la consommation annuelle d'électricité dans les conditions climatiques moyennes |
| 8   | Rated heat output under average climate conditions  | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| de nominale warmteafvoer (onder gemiddelde klimaatomstandigheden)   | den nominale warmteafvoer (onder gemiddelde klimaatomstandigheden)  | la puissance thermique nominale dans les conditions climatiques moyennes  | la puissance thermique nominale dans les conditions climatiques moyennes  | la potencia térmica nominal (en condiciones climáticas medias)  |
| 9   | For space heating, annual energy consumption under average climate conditions   | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| voor ruimteverwarming, het jaarlijkse energieverbruik (onder gemiddelde klimaatomstandigheden)                | für die Raumheizung, der jährliche Energieverbrauch bei durchschnittlichen Klimaverhältnissen                                   | la consommation annuelle d'énergie (pour le chauffage des locaux)   | la consommation annuelle d'énergie (pour le chauffage des locaux)   | la potencia calorífica nominal en condiciones climáticas medias   |
| 10  | For water heating, annual electricity consumption under average climate conditions  | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| voor waterverwarming, het jaarlijkse elektriciteitsverbruik (onder gemiddelde klimaatomstandigheden)          | für die Warmwasserherstellung, den jährlichen Stromverbrauch bei durchschnittlichen Klimaverhältnissen                          | la consommation annuelle d'électricité (pour le chauffage de l'eau)   | la consommation annuelle d'électricité (pour le chauffage de l'eau)   | la potencia calorífica nominal en condiciones climáticas medias   |
| 11  | Seasonal space heating energy efficiency under average climate conditions   | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| de seizoenruimteverwarming energie-efficiëntie voor ruimteverwarming (onder gemiddelde klimaatomstandigheden) | die jahreszeitbedingte Raumheizungs-Energieeffizienz bei durchschnittlichen Klimaverhältnissen                                  | l'efficacité énergétique saisonnière pour le chauffage des locaux (dans les conditions climatiques moyennes)          | l'efficacité énergétique saisonnière pour le chauffage des locaux (dans les conditions climatiques moyennes)          | l'eficiencia energética de aqueducto ambiental estacional en condiciones climáticas medias                            |
| 12  | Water heating energy efficiency under average climate conditions  | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| de energie-efficiëntie voor waterverwarming (onder gemiddelde klimaatomstandigheden)                          | die Warmwasserherstellungs-Energieeffizienz bei durchschnittlichen Klimaverhältnissen   | l'efficacité énergétique pour le chauffage de l'eau (dans les conditions climatiques moyennes)                        | l'efficacité énergétique pour le chauffage de l'eau (dans les conditions climatiques moyennes)                        | l'eficiencia energética de aqueducto ambiental en condiciones climáticas medias                                       |
| 13  | Sound power level L <sub>WA</sub> indoor  | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| het geluidsvermogeniveau L <sub>WA</sub> binnen   | der Schalleistungspegel L <sub>WA</sub> in Gebäuden   | le niveau de puissance acoustique L <sub>WA</sub> à l'intérieur   | el nivel de potencia acústica L <sub>WA</sub> en interiores   | el nivel de potencia acústica L <sub>WA</sub> en interiores   |
| 14  | Work only during off-peak hours   | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| Werken uitsluitend in de daluren  | arbeiten ausschließlich während der Nachtstunden  | fonctionner uniquement pendant les heures creuses   | funciononar solamente durante las horas de baja demanda   | funciononar solamente durante las horas de baja demanda   |
| 15  | Room air conditions   | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| kommissie aanvaardt kameromstandigheden   | die Raumluftbedingungen   | travailler dans des conditions climatiques moyennes   | trabajar en condiciones climáticas medias   | trabajar en condiciones climáticas medias   |
| 16  | Rated heat output under colder climate conditions   | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| de nominale warmteafvoer onder kouder klimaatomstandigheden   | den nominale warmteafvoer onder kouder klimaatomstandigheden  | la puissance thermique nominale dans les conditions climatiques plus froides  | la puissance thermique nominale dans les conditions climatiques plus froides  | la potencia térmica nominal en condiciones climáticas más frías   |
| 17  | For space heating, annual energy consumption under colder climate conditions  | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| voor ruimteverwarming, het jaarlijkse energieverbruik onder koudere klimaatomstandigheden                     | für die Raumheizung, der jährliche Energieverbrauch bei kälteren Klimaverhältnissen   | la consommation annuelle d'énergie (pour le chauffage des locaux)   | la consommation annuelle d'énergie (pour le chauffage des locaux)   | la potencia calorífica nominal en condiciones climáticas más frías  |
| 18  | For water heating, annual energy consumption under colder climate conditions  | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder koudere klimaatomstandigheden               | für die Warmwasserherstellung, der jährliche Stromverbrauch bei kälteren Klimaverhältnissen                                     | la consommation annuelle d'électricité (pour le chauffage de l'eau)   | la consommation annuelle d'électricité (pour le chauffage de l'eau)   | la potencia calorífica nominal en condiciones climáticas más frías  |
| 19  | Water heating, annual energy consumption under warmer climate conditions  | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder warmere klimaatomstandigheden               | für die Warmwasserherstellung, der jährliche Stromverbrauch bei wärmeren Klimaverhältnissen                                     | la consommation annuelle d'électricité (pour le chauffage de l'eau)   | la consommation annuelle d'électricité (pour le chauffage de l'eau)   | la potencia calorífica nominal en condiciones climáticas más cálidas  |
| 20  | For water heating, annual energy consumption under warmer climate conditions  | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder warmere klimaatomstandigheden               | für die Warmwasserherstellung, der jährliche Stromverbrauch bei wärmeren Klimaverhältnissen                                     | la consommation annuelle d'électricité (pour le chauffage de l'eau)   | la consommation annuelle d'électricité (pour le chauffage de l'eau)   | la potencia calorífica nominal en condiciones climáticas más cálidas  |
| 21  | Seasonal space heating energy efficiency under warmer climate conditions  | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| de seizoenruimteverwarming energie-efficiëntie voor ruimteverwarming (onder warmere klimaatomstandigheden)    | die jahreszeitbedingte Raumheizungs-Energieeffizienz bei kälteren Klimaverhältnissen  | l'efficacité énergétique saisonnière pour le chauffage des locaux (dans les conditions climatiques moyennes)          | l'efficacité énergétique saisonnière pour le chauffage des locaux (dans les conditions climatiques moyennes)          | l'eficiencia energética estacional de calefacción en condiciones climáticas más cálidas                               |
| 22  | Seasonal space heating energy efficiency under warmer climate conditions  | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| de seizoenruimteverwarming energie-efficiëntie voor ruimteverwarming (onder warmere klimaatomstandigheden)    | die jahreszeitbedingte Raumheizungs-Energieeffizienz bei wärmeren Klimaverhältnissen  | l'efficacité énergétique saisonnière pour le chauffage des locaux (dans les conditions climatiques moyennes)          | l'efficacité énergétique saisonnière pour le chauffage des locaux (dans les conditions climatiques moyennes)          | l'eficiencia energética estacional de calefacción en condiciones climáticas más cálidas                               |
| 23  | Water heating energy efficiency under colder climate conditions   | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| de energie-efficiëntie voor waterverwarming (onder kouder klimaatomstandigheden)                              | die Warmwasserherstellungs-Energieeffizienz bei kälteren Klimaverhältnissen   | l'efficacité énergétique pour le chauffage de l'eau (dans les conditions climatiques plus froides)                    | l'efficacité énergétique pour le chauffage de l'eau (dans les conditions climatiques plus froides)                    | l'eficiencia energética de calefacción en condiciones climáticas más frías  |
| 24  | Water heating energy efficiency under warmer climate conditions   | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| de energie-efficiëntie voor waterverwarming (onder warmere klimaatomstandigheden)                             | die Warmwasserherstellungs-Energieeffizienz bei wärmeren Klimaverhältnissen   | l'efficacité énergétique pour le chauffage de l'eau (dans les conditions climatiques plus chaudes)                    | l'efficacité énergétique pour le chauffage de l'eau (dans les conditions climatiques plus chaudes)                    | l'eficiencia energética de calefacción en condiciones climáticas más cálidas  |
| 25  | Sound power level L <sub>WA</sub> outdoor   | Ита енергетска класа за водену гретину  | Класа ефикасности енергетског подизања воду   | Класа ефикасности енергетског подизања воду   |
| het geluidsvermogeniveau L <sub>WA</sub> buiten   | der Schalleistungspegel L <sub>WA</sub> im Freien   | le niveau de puissance acoustique L <sub>WA</sub> à l'extérieur   | el nivel de potencia acústica L <sub>WA</sub> en exteriores   | el nivel de potencia acústica L <sub>WA</sub> en exteriores   |
| Αριθμητικό L <sub>WA</sub> ελκωμα   | Hadina akustičkoho výkonu L <sub>WA</sub> ve vonkovejm prostoru   | иниво на акувавага мошност L <sub>WA</sub> на отворито  | иниво на акувавага мошност L <sub>WA</sub> на отворито  | иниво на акувавага мошност L <sub>WA</sub> на отворито  |

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

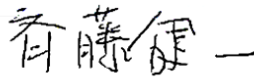
|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SWM140VAA                   |
|                                       | Indoor unit:  | EHST20D-****D                   |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | yes                             |
| Heat pump combination heater:         |               | yes                             |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | average climate conditions.     |

| Item  | Symbol           | Value | Unit | Item  | Symbol     | Value | Unit |
|---|------------------|-------|------|---|------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 134   | %    |
| Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj |                  |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj |            |       |      |
| Tj = - 7 ° C  | Pdh              | 12.4  | kW   | Tj = - 7 ° C  | COPd       | 1.98  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = + 2 ° C  | COPd       | 3.40  | -    |
| Tj = + 2 ° C  | Pdh              | 7.5   | kW   | Tj = + 7 ° C  | COPd       | 4.61  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.28  | -    |
| Tj = + 7 ° C  | Pdh              | 6.3   | kW   | Tj = bivalent temperature   | COPd       | 1.98  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 1.75  | -    |
| Tj = +12 ° C  | Pdh              | 3.9   | kW   | Operation limit temperature   | TOL        | -25   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 12.4  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 11.0  | kW   | Rated heat output (*)   | Psup       | 3.0   | kW   |
| Bivalent temperature  | Tbiv             | -7    | ° C  | Type of energy input  | Electrical |       |      |
| Reference design conditions for space heating   | Tdesignh         | -10   | ° C  |   |            |       |      |
| Power consumption in modes other than active mode   |                  |       |      |   |            |       |      |
| Off mode  | P <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> | 8438    | kWh |                               |  |      |                   |

|                                   |                   |       |     |                                 |     |   |  |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-----|---|--|
| For heat pump combination heater: |                   |       |     | Water heating energy efficiency |     |   |  |
| Declared load profile             | L                 |       |     | $\eta_{wh}$                     | 123 | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | 4.380 | kWh |                                 |     |   |  |
| Annual electricity consumption    | AEC               | 965   | 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-SWM140VAA                |
|                                       | Indoor unit:  | EHST20D-****D                |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | yes                          |
| Heat pump combination heater:         |               | yes                          |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | average climate conditions.  |

| Item  | Symbol           | Value | Unit | Item  | Symbol          | Value | Unit |
|---|------------------|-------|------|---|-----------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$        | 175   | %    |
| Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj |                  |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj |                 |       |      |
| Tj = - 7 ° C  | Pdh              | 12.4  | kW   | Tj = - 7 ° C  | COPd            | 2.70  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = + 2 ° C  | COPd            | 4.51  | -    |
| Tj = + 2 ° C  | Pdh              | 7.6   | kW   | Tj = + 7 ° C  | COPd            | 5.91  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd            | 7.03  | -    |
| Tj = + 7 ° C  | Pdh              | 6.4   | kW   | Tj = bivalent temperature   | COPd            | 2.70  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd            | 2.40  | -    |
| Tj = +12 ° C  | Pdh              | 4.1   | kW   | Operation limit temperature   | TOL             | -25   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.97  | -    | Heating water operating limit temperature   | WTOL            | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 12.4  | kW   | Supplementary heater  |                 |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 11.0  | kW   | Rated heat output (*)   | Psup            | 3.0   | kW   |
| Bivalent temperature  | Tbiv             | -7    | ° C  | Type of energy input  | Electrical      |       |      |
| Reference design conditions for space heating   | Tdesignh         | -10   | ° C  | Power consumption in modes other than active mode   |                 |       |      |
| Power consumption in modes other than active mode   |                  |       |      | Off mode  |                 |       |      |
| Off mode  | P <sub>OFF</sub> | 0.015 | kW   | Thermostat-off mode   | P <sub>TO</sub> | 0.015 | kW   |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   | Standby mode  | P <sub>SB</sub> | 0.015 | kW   |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   | Crankcase heater mode   | P <sub>CK</sub> | 0.000 | kW   |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   | Other items   |                 |       |      |
| Capacity control  |                  |       |      | Rated air flow rate, outdoors   |                 |       |      |
| variable  |                  |       |      | -   |                 |       |      |
| Sound power level, indoors/outdoors   |                  |       |      | 2640  |                 |       |      |
| L <sub>WA</sub>   |                  |       |      | m <sup>3</sup> /h   |                 |       |      |
| 41 / 58   |                  |       |      |   |                 |       |      |
| Annual energy consumption   |                  |       |      |   |                 |       |      |
| Q <sub>HE</sub>   |                  |       |      |   |                 |       |      |
| 6483  |                  |       |      |   |                 |       |      |
| kWh   |                  |       |      |   |                 |       |      |
| For heat pump combination heater:   |                  |       |      |   |                 |       |      |
| Declared load profile   |                  |       |      | Water heating energy efficiency   |                 |       |      |
| L   |                  |       |      | $\eta_{wh}$   |                 |       |      |
| Daily electricity consumption   |                  |       |      | 123   |                 |       |      |
| Q <sub>elec</sub>   |                  |       |      | %   |                 |       |      |
| 4.380   |                  |       |      |   |                 |       |      |
| Annual electricity consumption  |                  |       |      |   |                 |       |      |
| AEC   |                  |       |      |   |                 |       |      |
| 965   |                  |       |      |   |                 |       |      |
| kWh   |                  |       |      |   |                 |       |      |

|                                     |  |  |  |                               |  |  |  |
|-------------------------------------|--|--|--|-------------------------------|--|--|--|
| Other items                         |  |  |  |                               |  |  |  |
| Capacity control                    |  |  |  | Rated air flow rate, outdoors |  |  |  |
| variable                            |  |  |  | -                             |  |  |  |
| Sound power level, indoors/outdoors |  |  |  | 2640                          |  |  |  |
| L <sub>WA</sub>                     |  |  |  | m <sup>3</sup> /h             |  |  |  |
| 41 / 58                             |  |  |  |                               |  |  |  |
| Annual energy consumption           |  |  |  |                               |  |  |  |
| Q <sub>HE</sub>                     |  |  |  |                               |  |  |  |
| 6483                                |  |  |  |                               |  |  |  |
| kWh                                 |  |  |  |                               |  |  |  |

|                                   |  |  |  |                                 |  |  |  |
|-----------------------------------|--|--|--|---------------------------------|--|--|--|
| For heat pump combination heater: |  |  |  |                                 |  |  |  |
| Declared load profile             |  |  |  | Water heating energy efficiency |  |  |  |
| L                                 |  |  |  | $\eta_{wh}$                     |  |  |  |
| Daily electricity consumption     |  |  |  | 123                             |  |  |  |
| Q <sub>elec</sub>                 |  |  |  | %                               |  |  |  |
| 4.380                             |  |  |  |                                 |  |  |  |
| Annual electricity consumption    |  |  |  |                                 |  |  |  |
| AEC                               |  |  |  |                                 |  |  |  |
| 965                               |  |  |  |                                 |  |  |  |
| 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-SWM140VAA                   |
|                                       | Indoor unit:  | EHST20D-****D                   |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | yes                             |
| Heat pump combination heater:         |               | yes                             |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | colder climate conditions.      |

| Item  | Symbol           | Value | Unit | Item  | Symbol     | Value | Unit |
|---|------------------|-------|------|---|------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 104   | %    |
| Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj |                  |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj |            |       |      |
| Tj = - 7 ° C  | Pdh              | 8.5   | kW   | Tj = - 7 ° C  | COPd       | 2.20  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = + 2 ° C  | COPd       | 3.30  | -    |
| Tj = + 2 ° C  | Pdh              | 5.2   | kW   | Tj = + 7 ° C  | COPd       | 4.30  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.60  | -    |
| Tj = + 7 ° C  | Pdh              | 4.4   | kW   | Tj = bivalent temperature   | COPd       | 1.60  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 1.20  | -    |
| Tj = +12 ° C  | Pdh              | 4.5   | kW   | Tj = - 15 ° C (if TOL < - 20 ° C)   | COPd       | 1.60  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Operation limit temperature   | TOL        | -25   | ° C  |
| Tj = bivalent temperature   | Pdh              | 10.7  | 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              | 10.5  | kW   | Rated heat output (*)   | Psup       | 6.0   | kW   |
| Bivalent temperature  | Tbiv             | -13   | ° 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> | 12843   | kWh |                               |      |                   |  |

|                                   |                   |       |     |                                 |     |   |  |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-----|---|--|
| For heat pump combination heater: |                   |       |     | Water heating energy efficiency |     |   |  |
| Declared load profile             | L                 |       |     | $\eta_{wh}$                     | 105 | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | 4.860 | kWh |                                 |     |   |  |
| Annual electricity consumption    | AEC               | 1070  | 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

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

· Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.  
 · Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.  
 (\*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).  
 (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.  
 (\*\*\*) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                              |
|---------------------------------------|---------------|------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SWM140VAA                |
|                                       | Indoor unit:  | EHST20D-****D                |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | yes                          |
| Heat pump combination heater:         |               | yes                          |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | colder climate conditions.   |

| Item  | Symbol           | Value | Unit | Item  | Symbol     | Value | Unit |
|---|------------------|-------|------|---|------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 132   | %    |
| Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj |                  |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj |            |       |      |
| Tj = - 7 ° C  | Pdh              | 8.5   | kW   | Tj = - 7 ° C  | COPd       | 3.30  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = + 2 ° C  | COPd       | 3.60  | -    |
| Tj = + 2 ° C  | Pdh              | 5.2   | kW   | Tj = + 7 ° C  | COPd       | 5.10  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 7.60  | -    |
| Tj = + 7 ° C  | Pdh              | 4.6   | kW   | Tj = bivalent temperature   | COPd       | 1.90  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Tj = operation limit temperature (***)  | COPd       | 1.50  | -    |
| Tj = +12 ° C  | Pdh              | 4.5   | kW   | Tj = - 15 ° C (if TOL < - 20 ° C)   | COPd       | 1.90  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Operation limit temperature   | TOL        | -25   | ° C  |
| Tj = bivalent temperature   | Pdh              | 11.8  | kW   | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = operation limit temperature (***)  | Pdh              | 9.2   | kW   | Supplementary heater  |            |       |      |
| Tj = - 15 ° C (if TOL < - 20 ° C)   | Pdh              | 11.4  | kW   | Rated heat output (*)   | Psup       | 4.8   | 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> | 10250   | kWh |                               |      |                   |  |

|                                   |                   |       |     |                                 |     |   |  |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-----|---|--|
| For heat pump combination heater: |                   |       |     | Water heating energy efficiency |     |   |  |
| Declared load profile             | L                 |       |     | $\eta_{wh}$                     | 105 | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | 4.860 | kWh |                                 |     |   |  |
| Annual electricity consumption    | AEC               | 1070  | 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-SWM140VAA                   |
|                                       | Indoor unit:  | EHST20D-****D                   |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | yes                             |
| Heat pump combination heater:         |               | yes                             |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | warmer climate conditions.      |

| Item  | Symbol           | Value | Unit | Item  | Symbol     | Value | Unit |
|---|------------------|-------|------|---|------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | 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              | -     | kW   | Tj = - 7 ° C  | COPd       | -     | -    |
| Degradation co-efficient (**)   | Cdh              | -     | -    | Tj = + 2 ° C  | COPd       | 1.90  | -    |
| Tj = + 2 ° C  | Pdh              | 14.0  | kW   | Tj = + 7 ° C  | COPd       | 3.10  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = +12 ° C  | COPd       | 5.40  | -    |
| Tj = + 7 ° C  | Pdh              | 8.8   | kW   | Tj = bivalent temperature   | COPd       | 1.90  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = operation limit temperature (***)  | COPd       | 1.90  | -    |
| Tj = +12 ° C  | Pdh              | 5.5   | kW   | Operation limit temperature   | TOL        | -25   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 14.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 14.0  | kW   | Rated heat output (*)   | Psup       | 0.0   | kW   |
| Bivalent temperature  | Tbiv             | 2     | ° C  | Type of energy input  | Electrical |       |      |
| Reference design conditions for space heating   | Tdesignh         | 2     | ° C  |   |            |       |      |
| Power consumption in modes other than active mode   |                  |       |      |   |            |       |      |
| Off mode  | P <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> | 4893    | kWh |                               |      |                   |  |

|                                   |                   |       |     |                                 |     |   |  |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-----|---|--|
| For heat pump combination heater: |                   |       |     | Water heating energy efficiency |     |   |  |
| Declared load profile             | L                 |       |     | $\eta_{wh}$                     | 130 | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | 4.030 | kWh |                                 |     |   |  |
| Annual electricity consumption    | AEC               | 888   | kWh |                                 |     |   |  |

Contact details

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Kenichi SAITO

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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-SWM140VAA                |
|                                       | Indoor unit:  | EHST20D-****D                |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | yes                          |
| Heat pump combination heater:         |               | yes                          |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | warmer climate conditions.   |

| Item  | Symbol           | Value | Unit | Item  | Symbol     | Value | Unit |
|---|------------------|-------|------|---|------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 219   | %    |
| 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       | 3.10  | -    |
| Tj = + 2 ° C  | Pdh              | 14.0  | kW   | Tj = + 7 ° C  | COPd       | 5.01  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = +12 ° C  | COPd       | 7.01  | -    |
| Tj = + 7 ° C  | Pdh              | 9.0   | kW   | Tj = bivalent temperature   | COPd       | 3.10  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 3.10  | -    |
| Tj = +12 ° C  | Pdh              | 5.1   | kW   | Operation limit temperature   | TOL        | -25   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 14.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 14.0  | kW   | Rated heat output (*)   | Psup       | 0.0   | kW   |
| Bivalent temperature  | Tbiv             | 2     | ° C  | Type of energy input  | Electrical |       |      |
| Reference design conditions for space heating   | Tdesignh         | 2     | ° C  |   |            |       |      |
| Power consumption in modes other than active mode   |                  |       |      |   |            |       |      |
| Off mode  | P <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> | 3367    | kWh |                               |      |                   |  |

|                                   |                   |       |     |                                 |     |   |  |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-----|---|--|
| For heat pump combination heater: |                   |       |     | Water heating energy efficiency |     |   |  |
| Declared load profile             | L                 |       |     | $\eta_{wh}$                     | 130 | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | 4.030 | kWh |                                 |     |   |  |
| Annual electricity consumption    | AEC               | 888   | 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**

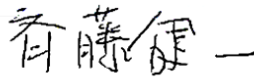
|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SWM140VAA                   |
|                                       | Indoor unit:  | ERST20D-****D                   |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | yes                             |
| Heat pump combination heater:         |               | yes                             |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | average climate conditions.     |

| Item  | Symbol           | Value | Unit | Item  | Symbol     | Value | Unit |
|---|------------------|-------|------|---|------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 135   | %    |
| Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj |                  |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj |            |       |      |
| Tj = - 7 ° C  | Pdh              | 12.4  | kW   | Tj = - 7 ° C  | COPd       | 1.98  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = + 2 ° C  | COPd       | 3.40  | -    |
| Tj = + 2 ° C  | Pdh              | 7.5   | kW   | Tj = + 7 ° C  | COPd       | 4.61  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.28  | -    |
| Tj = + 7 ° C  | Pdh              | 6.3   | kW   | Tj = bivalent temperature   | COPd       | 1.98  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 1.75  | -    |
| Tj = +12 ° C  | Pdh              | 3.9   | kW   | Operation limit temperature   | TOL        | -25   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 12.4  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 11.0  | kW   | Rated heat output (*)   | Psup       | 3.0   | kW   |
| Bivalent temperature  | Tbiv             | -7    | ° C  | Type of energy input  | Electrical |       |      |
| Reference design conditions for space heating   | Tdesignh         | -10   | ° C  |   |            |       |      |
| Power consumption in modes other than active mode   |                  |       |      |   |            |       |      |
| Off mode  | P <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> | 8383    | kWh |                               |      |                   |  |

|                                   |                   |       |     |                                 |     |   |  |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-----|---|--|
| For heat pump combination heater: |                   |       |     | Water heating energy efficiency |     |   |  |
| Declared load profile             | L                 |       |     | $\eta_{wh}$                     | 123 | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | 4.380 | kWh |                                 |     |   |  |
| Annual electricity consumption    | AEC               | 965   | kWh |                                 |     |   |  |

Contact details  
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The identification and signature of the person empowered to bind the supplier:  
  
 Kenichi SAITO  
 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-SWM140VAA                |
|                                       | Indoor unit:  | ERST20D-****D                |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | yes                          |
| Heat pump combination heater:         |               | yes                          |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | average climate conditions.  |

| Item  | Symbol   | Value | Unit | Item  | Symbol     | Value | Unit |
|---|----------|-------|------|---|------------|-------|------|
| Rated heat output (*)   | Prated   | 14.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 177   | %    |
| Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj |          |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj |            |       |      |
| Tj = - 7 ° C  | Pdh      | 12.4  | kW   | Tj = - 7 ° C  | COPd       | 2.70  | -    |
| Degradation co-efficient (**)   | Cdh      | 1.00  | -    | Tj = + 2 ° C  | COPd       | 4.51  | -    |
| Tj = + 2 ° C  | Pdh      | 7.6   | kW   | Tj = + 7 ° C  | COPd       | 5.91  | -    |
| Degradation co-efficient (**)   | Cdh      | 0.99  | -    | Tj = +12 ° C  | COPd       | 7.03  | -    |
| Tj = + 7 ° C  | Pdh      | 6.4   | kW   | Tj = bivalent temperature   | COPd       | 2.70  | -    |
| Degradation co-efficient (**)   | Cdh      | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 2.40  | -    |
| Tj = +12 ° C  | Pdh      | 4.1   | kW   | Operation limit temperature   | TOL        | -25   | ° C  |
| Degradation co-efficient (**)   | Cdh      | 0.97  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh      | 12.4  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh      | 11.0  | kW   | Rated heat output (*)   | Psup       | 3.0   | kW   |
| Bivalent temperature  | Tbiv     | -7    | ° C  | Type of energy input  | Electrical |       |      |
| Reference design conditions for space heating   | Tdesignh | -10   | ° C  | Power consumption in modes other than active mode   |            |       |      |
| Off mode  |          |       |      | P <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> | 6428    |  | kWh                           |      |                   |  |

|                                   |                   |       |  |                                 |     |   |  |
|-----------------------------------|-------------------|-------|--|---------------------------------|-----|---|--|
| For heat pump combination heater: |                   |       |  | Water heating energy efficiency |     |   |  |
| Declared load profile             | L                 |       |  | $\eta_{wh}$                     | 123 | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | 4.380 |  | kWh                             |     |   |  |
| Annual electricity consumption    | AEC               | 965   |  | kWh                             |     |   |  |

Contact details

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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-SWM140VAA                   |
|                                       | Indoor unit:  | ERST20D-****D                   |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | yes                             |
| Heat pump combination heater:         |               | yes                             |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | colder climate conditions.      |

| Item  | Symbol           | Value | Unit | Item  | Symbol     | Value | Unit |
|---|------------------|-------|------|---|------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 105   | %    |
| 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              | 8.5   | kW   | Tj = - 7 ° C  | COPd       | 2.20  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = + 2 ° C  | COPd       | 3.30  | -    |
| Tj = + 2 ° C  | Pdh              | 5.2   | kW   | Tj = + 7 ° C  | COPd       | 4.30  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.60  | -    |
| Tj = + 7 ° C  | Pdh              | 4.4   | kW   | Tj = bivalent temperature   | COPd       | 1.60  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 1.20  | -    |
| Tj = +12 ° C  | Pdh              | 4.5   | kW   | Tj = - 15 ° C (if TOL < - 20 ° C)   | COPd       | 1.60  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Operation limit temperature   | TOL        | -25   | ° C  |
| Tj = bivalent temperature   | Pdh              | 10.7  | 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              | 10.5  | kW   | Rated heat output (*)   | Psup       | 6.0   | kW   |
| Bivalent temperature  | Tbiv             | -13   | ° 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> | 12810   | kWh |                               |      |                   |  |

|                                   |                   |       |     |                                 |     |   |  |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-----|---|--|
| For heat pump combination heater: |                   |       |     | Water heating energy efficiency |     |   |  |
| Declared load profile             | L                 |       |     | $\eta_{wh}$                     | 105 | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | 4.860 | kWh |                                 |     |   |  |
| Annual electricity consumption    | AEC               | 1070  | kWh |                                 |     |   |  |

Contact details

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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-SWM140VAA                |
|                                       | Indoor unit:  | ERST20D-****D                |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | yes                          |
| Heat pump combination heater:         |               | yes                          |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | colder climate conditions.   |

| Item  | Symbol           | Value | Unit | Item  | Symbol     | Value | Unit |
|---|------------------|-------|------|---|------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 132   | %    |
| Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj |                  |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj |            |       |      |
| Tj = - 7 ° C  | Pdh              | 8.5   | kW   | Tj = - 7 ° C  | COPd       | 3.30  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = + 2 ° C  | COPd       | 3.60  | -    |
| Tj = + 2 ° C  | Pdh              | 5.2   | kW   | Tj = + 7 ° C  | COPd       | 5.10  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 7.60  | -    |
| Tj = + 7 ° C  | Pdh              | 4.6   | kW   | Tj = bivalent temperature   | COPd       | 1.90  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Tj = operation limit temperature (***)  | COPd       | 1.50  | -    |
| Tj = +12 ° C  | Pdh              | 4.5   | kW   | Tj = - 15 ° C (if TOL < - 20 ° C)   | COPd       | 1.90  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Operation limit temperature   | TOL        | -25   | ° C  |
| Tj = bivalent temperature   | Pdh              | 11.8  | kW   | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = operation limit temperature (***)  | Pdh              | 9.2   | kW   | Supplementary heater  |            |       |      |
| Tj = - 15 ° C (if TOL < - 20 ° C)   | Pdh              | 11.4  | kW   | Rated heat output (*)   | Psup       | 4.8   | 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> | 10217   | kWh |                               |      |                   |  |

|                                   |                   |       |     |                                 |     |   |  |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-----|---|--|
| For heat pump combination heater: |                   |       |     | Water heating energy efficiency |     |   |  |
| Declared load profile             | L                 |       |     | $\eta_{wh}$                     | 105 | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | 4.860 | kWh |                                 |     |   |  |
| Annual electricity consumption    | AEC               | 1070  | 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-SWM140VAA                   |
|                                       | Indoor unit:  | ERST20D-****D                   |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | yes                             |
| Heat pump combination heater:         |               | yes                             |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | warmer climate conditions.      |

| Item  | Symbol           | Value | Unit | Item  | Symbol     | Value | Unit |
|---|------------------|-------|------|---|------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 152   | %    |
| Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj |                  |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj |            |       |      |
| Tj = - 7 ° C  | Pdh              | -     | kW   | Tj = - 7 ° C  | COPd       | -     | -    |
| Degradation co-efficient (**)   | Cdh              | -     | -    | Tj = + 2 ° C  | COPd       | 1.90  | -    |
| Tj = + 2 ° C  | Pdh              | 14.0  | kW   | Tj = + 7 ° C  | COPd       | 3.10  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = +12 ° C  | COPd       | 5.40  | -    |
| Tj = + 7 ° C  | Pdh              | 8.8   | kW   | Tj = bivalent temperature   | COPd       | 1.90  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = operation limit temperature (***)  | COPd       | 1.90  | -    |
| Tj = +12 ° C  | Pdh              | 5.5   | kW   | Operation limit temperature   | TOL        | -25   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 14.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 14.0  | kW   | Rated heat output (*)   | Psup       | 0.0   | kW   |
| Bivalent temperature  | Tbiv             | 2     | ° C  | Type of energy input  | Electrical |       |      |
| Reference design conditions for space heating   | Tdesignh         | 2     | ° C  |   |            |       |      |
| Power consumption in modes other than active mode   |                  |       |      |   |            |       |      |
| Off mode  | P <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> | 4826    | kWh |                               |      |                   |  |

|                                   |                   |       |     |                                 |     |   |  |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-----|---|--|
| For heat pump combination heater: |                   |       |     | Water heating energy efficiency |     |   |  |
| Declared load profile             | L                 |       |     | $\eta_{wh}$                     | 130 | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | 4.030 | kWh |                                 |     |   |  |
| Annual electricity consumption    | AEC               | 888   | 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-SWM140VAA                |
|                                       | Indoor unit:  | ERST20D-****D                |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | yes                          |
| Heat pump combination heater:         |               | yes                          |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | warmer climate conditions.   |

| Item  | Symbol           | Value | Unit | Item  | Symbol     | Value | Unit |
|---|------------------|-------|------|---|------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 224   | %    |
| 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       | 3.10  | -    |
| Tj = + 2 ° C  | Pdh              | 14.0  | kW   | Tj = + 7 ° C  | COPd       | 5.01  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = +12 ° C  | COPd       | 7.01  | -    |
| Tj = + 7 ° C  | Pdh              | 9.0   | kW   | Tj = bivalent temperature   | COPd       | 3.10  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 3.10  | -    |
| Tj = +12 ° C  | Pdh              | 5.1   | kW   | Operation limit temperature   | TOL        | -25   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 14.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 14.0  | kW   | Rated heat output (*)   | Psup       | 0.0   | kW   |
| Bivalent temperature  | Tbiv             | 2     | ° C  | Type of energy input  | Electrical |       |      |
| Reference design conditions for space heating   | Tdesignh         | 2     | ° C  |   |            |       |      |
| Power consumption in modes other than active mode   |                  |       |      |   |            |       |      |
| Off mode  | P <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> | 3301    | kWh |                               |      |                   |  |

|                                   |                   |       |     |                                 |     |   |  |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-----|---|--|
| For heat pump combination heater: |                   |       |     | Water heating energy efficiency |     |   |  |
| Declared load profile             | L                 |       |     | $\eta_{wh}$                     | 130 | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | 4.030 | kWh |                                 |     |   |  |
| Annual electricity consumption    | AEC               | 888   | 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**

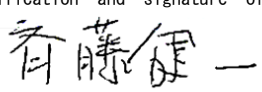
|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUZ-SWM140VAA                   |
|                                       | Indoor unit:  | EHST20D-MED                     |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | no                              |
| Heat pump combination heater:         |               | yes                             |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | average climate conditions.     |

| Item  | Symbol           | Value | Unit | Item  | Symbol     | Value | Unit |
|---|------------------|-------|------|---|------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 134   | %    |
| Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj |                  |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj |            |       |      |
| Tj = - 7 ° C  | Pdh              | 12.4  | kW   | Tj = - 7 ° C  | COPd       | 1.98  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = + 2 ° C  | COPd       | 3.40  | -    |
| Tj = + 2 ° C  | Pdh              | 7.5   | kW   | Tj = + 7 ° C  | COPd       | 4.61  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.28  | -    |
| Tj = + 7 ° C  | Pdh              | 6.3   | kW   | Tj = bivalent temperature   | COPd       | 1.98  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 1.75  | -    |
| Tj = +12 ° C  | Pdh              | 3.9   | kW   | Operation limit temperature   | TOL        | -25   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 12.4  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 11.0  | kW   | Rated heat output (*)   | Psup       | 3.0   | kW   |
| Bivalent temperature  | Tbiv             | -7    | ° C  | Type of energy input  | Electrical |       |      |
| Reference design conditions for space heating   | Tdesignh         | -10   | ° C  |   |            |       |      |
| Power consumption in modes other than active mode   |                  |       |      |   |            |       |      |
| Off mode  | P <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> | 8438    | kWh |                               |      |                   |  |

|                                   |                   |       |     |                                 |     |   |  |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-----|---|--|
| For heat pump combination heater: |                   |       |     | Water heating energy efficiency |     |   |  |
| Declared load profile             | L                 |       |     | $\eta_{wh}$                     | 123 | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | 4.380 | kWh |                                 |     |   |  |
| Annual electricity consumption    | AEC               | 965   | 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-SWM140VAA                |
|                                       | Indoor unit:  | EHST20D-MED                  |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | no                           |
| Heat pump combination heater:         |               | yes                          |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | average climate conditions.  |

| Item  | Symbol           | Value | Unit | Item  | Symbol          | Value | Unit |
|---|------------------|-------|------|---|-----------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$        | 175   | %    |
| Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj |                  |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj |                 |       |      |
| Tj = - 7 ° C  | Pdh              | 12.4  | kW   | Tj = - 7 ° C  | COPd            | 2.70  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = + 2 ° C  | COPd            | 4.51  | -    |
| Tj = + 2 ° C  | Pdh              | 7.6   | kW   | Tj = + 7 ° C  | COPd            | 5.91  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd            | 7.03  | -    |
| Tj = + 7 ° C  | Pdh              | 6.4   | kW   | Tj = bivalent temperature   | COPd            | 2.70  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd            | 2.40  | -    |
| Tj = +12 ° C  | Pdh              | 4.1   | kW   | Operation limit temperature   | TOL             | -25   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.97  | -    | Heating water operating limit temperature   | WTOL            | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 12.4  | kW   | Supplementary heater  |                 |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 11.0  | kW   | Rated heat output (*)   | Psup            | 3.0   | kW   |
| Bivalent temperature  | Tbiv             | -7    | ° C  | Type of energy input  | Electrical      |       |      |
| Reference design conditions for space heating   | Tdesignh         | -10   | ° C  | Power consumption in modes other than active mode   |                 |       |      |
| Power consumption in modes other than active mode   |                  |       |      | Off mode  |                 |       |      |
| Off mode  | P <sub>OFF</sub> | 0.015 | kW   | Thermostat-off mode   | P <sub>TO</sub> | 0.015 | kW   |
| Thermostat-off mode   | P <sub>TO</sub>  | 0.015 | kW   | Standby mode  | P <sub>SB</sub> | 0.015 | kW   |
| Standby mode  | P <sub>SB</sub>  | 0.015 | kW   | Crankcase heater mode   | P <sub>CK</sub> | 0.000 | kW   |
| Crankcase heater mode   | P <sub>CK</sub>  | 0.000 | kW   | Other items   |                 |       |      |
| Capacity control  |                  |       |      | Rated air flow rate, outdoors   |                 |       |      |
| variable  |                  |       |      | -   |                 |       |      |
| Sound power level, indoors/outdoors   |                  |       |      | 2640  |                 |       |      |
| L <sub>WA</sub>   |                  |       |      | m <sup>3</sup> /h   |                 |       |      |
| 41 / 58   |                  |       |      |   |                 |       |      |
| Annual energy consumption   |                  |       |      |   |                 |       |      |
| Q <sub>HE</sub>   |                  |       |      |   |                 |       |      |
| 6483  |                  |       |      |   |                 |       |      |
| kWh   |                  |       |      |   |                 |       |      |
| For heat pump combination heater:   |                  |       |      |   |                 |       |      |
| Declared load profile   |                  |       |      | Water heating energy efficiency   |                 |       |      |
| L   |                  |       |      | $\eta_{wh}$   |                 |       |      |
| Daily electricity consumption   |                  |       |      | 123   |                 |       |      |
| Q <sub>elec</sub>   |                  |       |      | %   |                 |       |      |
| 4.380   |                  |       |      |   |                 |       |      |
| Annual electricity consumption  |                  |       |      |   |                 |       |      |
| AEC   |                  |       |      |   |                 |       |      |
| 965   |                  |       |      |   |                 |       |      |
| kWh   |                  |       |      |   |                 |       |      |

|                                     |  |  |  |                               |  |  |  |
|-------------------------------------|--|--|--|-------------------------------|--|--|--|
| Other items                         |  |  |  |                               |  |  |  |
| Capacity control                    |  |  |  | Rated air flow rate, outdoors |  |  |  |
| variable                            |  |  |  | -                             |  |  |  |
| Sound power level, indoors/outdoors |  |  |  | 2640                          |  |  |  |
| L <sub>WA</sub>                     |  |  |  | m <sup>3</sup> /h             |  |  |  |
| 41 / 58                             |  |  |  |                               |  |  |  |
| Annual energy consumption           |  |  |  |                               |  |  |  |
| Q <sub>HE</sub>                     |  |  |  |                               |  |  |  |
| 6483                                |  |  |  |                               |  |  |  |
| kWh                                 |  |  |  |                               |  |  |  |

|                                   |  |  |  |                                 |  |  |  |
|-----------------------------------|--|--|--|---------------------------------|--|--|--|
| For heat pump combination heater: |  |  |  |                                 |  |  |  |
| Declared load profile             |  |  |  | Water heating energy efficiency |  |  |  |
| L                                 |  |  |  | $\eta_{wh}$                     |  |  |  |
| Daily electricity consumption     |  |  |  | 123                             |  |  |  |
| Q <sub>elec</sub>                 |  |  |  | %                               |  |  |  |
| 4.380                             |  |  |  |                                 |  |  |  |
| Annual electricity consumption    |  |  |  |                                 |  |  |  |
| AEC                               |  |  |  |                                 |  |  |  |
| 965                               |  |  |  |                                 |  |  |  |
| 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-SWM140VAA                   |
|                                       | Indoor unit:  | EHST20D-MED                     |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | no                              |
| Heat pump combination heater:         |               | yes                             |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | colder climate conditions.      |

| Item  | Symbol           | Value | Unit | Item  | Symbol     | Value | Unit |
|---|------------------|-------|------|---|------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 104   | %    |
| Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj |                  |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj |            |       |      |
| Tj = - 7 ° C  | Pdh              | 8.5   | kW   | Tj = - 7 ° C  | COPd       | 2.20  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = + 2 ° C  | COPd       | 3.30  | -    |
| Tj = + 2 ° C  | Pdh              | 5.2   | kW   | Tj = + 7 ° C  | COPd       | 4.30  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 6.60  | -    |
| Tj = + 7 ° C  | Pdh              | 4.4   | kW   | Tj = bivalent temperature   | COPd       | 1.60  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 1.20  | -    |
| Tj = +12 ° C  | Pdh              | 4.5   | kW   | Tj = - 15 ° C (if TOL < - 20 ° C)   | COPd       | 1.60  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Operation limit temperature   | TOL        | -25   | ° C  |
| Tj = bivalent temperature   | Pdh              | 10.7  | 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              | 10.5  | kW   | Rated heat output (*)   | Psup       | 6.0   | kW   |
| Bivalent temperature  | Tbiv             | -13   | ° 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> | 12843   | kWh |                               |      |                   |  |

|                                   |                   |       |     |                                 |     |   |  |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-----|---|--|
| For heat pump combination heater: |                   |       |     | Water heating energy efficiency |     |   |  |
| Declared load profile             | L                 |       |     | $\eta_{wh}$                     | 105 | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | 4.860 | kWh |                                 |     |   |  |
| Annual electricity consumption    | AEC               | 1070  | kWh |                                 |     |   |  |

Contact details

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Kenichi SAITO

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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-SWM140VAA                |
|                                       | Indoor unit:  | EHST20D-MED                  |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | no                           |
| Heat pump combination heater:         |               | yes                          |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | colder climate conditions.   |

| Item  | Symbol           | Value | Unit | Item  | Symbol     | Value | Unit |
|---|------------------|-------|------|---|------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 132   | %    |
| Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj |                  |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj |            |       |      |
| Tj = - 7 ° C  | Pdh              | 8.5   | kW   | Tj = - 7 ° C  | COPd       | 3.30  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = + 2 ° C  | COPd       | 3.60  | -    |
| Tj = + 2 ° C  | Pdh              | 5.2   | kW   | Tj = + 7 ° C  | COPd       | 5.10  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = +12 ° C  | COPd       | 7.60  | -    |
| Tj = + 7 ° C  | Pdh              | 4.6   | kW   | Tj = bivalent temperature   | COPd       | 1.90  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Tj = operation limit temperature (***)  | COPd       | 1.50  | -    |
| Tj = +12 ° C  | Pdh              | 4.5   | kW   | Tj = - 15 ° C (if TOL < - 20 ° C)   | COPd       | 1.90  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Operation limit temperature   | TOL        | -25   | ° C  |
| Tj = bivalent temperature   | Pdh              | 11.8  | kW   | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = operation limit temperature (***)  | Pdh              | 9.2   | kW   | Supplementary heater  |            |       |      |
| Tj = - 15 ° C (if TOL < - 20 ° C)   | Pdh              | 11.4  | kW   | Rated heat output (*)   | Psup       | 4.8   | 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> | 10250   | kWh |                               |      |                   |  |

|                                   |                   |       |     |                                 |     |   |  |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-----|---|--|
| For heat pump combination heater: |                   |       |     | Water heating energy efficiency |     |   |  |
| Declared load profile             | L                 |       |     | $\eta_{wh}$                     | 105 | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | 4.860 | kWh |                                 |     |   |  |
| Annual electricity consumption    | AEC               | 1070  | 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-SWM140VAA                   |
|                                       | Indoor unit:  | EHST20D-MED                     |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | no                              |
| Heat pump combination heater:         |               | yes                             |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | warmer climate conditions.      |

| Item  | Symbol           | Value | Unit | Item  | Symbol     | Value | Unit |
|---|------------------|-------|------|---|------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | 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              | -     | kW   | Tj = - 7 ° C  | COPd       | -     | -    |
| Degradation co-efficient (**)   | Cdh              | -     | -    | Tj = + 2 ° C  | COPd       | 1.90  | -    |
| Tj = + 2 ° C  | Pdh              | 14.0  | kW   | Tj = + 7 ° C  | COPd       | 3.10  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = +12 ° C  | COPd       | 5.40  | -    |
| Tj = + 7 ° C  | Pdh              | 8.8   | kW   | Tj = bivalent temperature   | COPd       | 1.90  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = operation limit temperature (***)  | COPd       | 1.90  | -    |
| Tj = +12 ° C  | Pdh              | 5.5   | kW   | Operation limit temperature   | TOL        | -25   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 14.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 14.0  | kW   | Rated heat output (*)   | Psup       | 0.0   | kW   |
| Bivalent temperature  | Tbiv             | 2     | ° C  | Type of energy input  | Electrical |       |      |
| Reference design conditions for space heating   | Tdesignh         | 2     | ° C  |   |            |       |      |
| Power consumption in modes other than active mode   |                  |       |      |   |            |       |      |
| Off mode  | P <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> | 4893    | kWh |                               |      |                   |  |

|                                   |                   |       |     |                                 |     |   |  |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-----|---|--|
| For heat pump combination heater: |                   |       |     | Water heating energy efficiency |     |   |  |
| Declared load profile             | L                 |       |     | $\eta_{wh}$                     | 130 | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | 4.030 | kWh |                                 |     |   |  |
| Annual electricity consumption    | AEC               | 888   | 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-SWM140VAA                |
|                                       | Indoor unit:  | EHST20D-MED                  |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | no                           |
| Heat pump combination heater:         |               | yes                          |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | warmer climate conditions.   |

| Item  | Symbol           | Value | Unit | Item  | Symbol     | Value | Unit |
|---|------------------|-------|------|---|------------|-------|------|
| Rated heat output (*)   | Prated           | 14.0  | kW   | Seasonal space heating energy efficiency  | $\eta_s$   | 219   | %    |
| 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       | 3.10  | -    |
| Tj = + 2 ° C  | Pdh              | 14.0  | kW   | Tj = + 7 ° C  | COPd       | 5.01  | -    |
| Degradation co-efficient (**)   | Cdh              | 1.00  | -    | Tj = +12 ° C  | COPd       | 7.01  | -    |
| Tj = + 7 ° C  | Pdh              | 9.0   | kW   | Tj = bivalent temperature   | COPd       | 3.10  | -    |
| Degradation co-efficient (**)   | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)  | COPd       | 3.10  | -    |
| Tj = +12 ° C  | Pdh              | 5.1   | kW   | Operation limit temperature   | TOL        | -25   | ° C  |
| Degradation co-efficient (**)   | Cdh              | 0.98  | -    | Heating water operating limit temperature   | WTOL       | 60    | ° C  |
| Tj = bivalent temperature   | Pdh              | 14.0  | kW   | Supplementary heater  |            |       |      |
| Tj = operation limit temperature (***)  | Pdh              | 14.0  | kW   | Rated heat output (*)   | Psup       | 0.0   | kW   |
| Bivalent temperature  | Tbiv             | 2     | ° C  | Type of energy input  | Electrical |       |      |
| Reference design conditions for space heating   | Tdesignh         | 2     | ° C  |   |            |       |      |
| Power consumption in modes other than active mode   |                  |       |      |   |            |       |      |
| Off mode  | P <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> | 3367    | kWh |                               |      |                   |  |

|                                   |                   |       |     |                                 |     |   |  |
|-----------------------------------|-------------------|-------|-----|---------------------------------|-----|---|--|
| For heat pump combination heater: |                   |       |     | Water heating energy efficiency |     |   |  |
| Declared load profile             | L                 |       |     | $\eta_{wh}$                     | 130 | % |  |
| Daily electricity consumption     | Q <sub>elec</sub> | 4.030 | kWh |                                 |     |   |  |
| Annual electricity consumption    | AEC               | 888   | kWh |                                 |     |   |  |

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