



1. SPACE HEATER

Table with columns for Outdoor unit, Indoor unit, and performance metrics for medium-temperature and low-temperature applications. Includes models like PUD-SWM60VAA(BS) and PUD-SWM100VAA(BS).

2. COMBINATION HEATER

Large table with columns for Outdoor unit, Indoor unit, and performance metrics for medium-temperature and low-temperature applications. Includes models like PUD-SWM60VAA(BS) and PUD-SWM100VAA(BS).

|    |  |   |  |   |  |
|----|--|---|--|---|--|
|    | English<br>Nederlands<br>suomi   | Deutsch<br>Svenska<br>Čeština   | Français<br>Dansk<br>Български   | Italiano<br>Português<br>Polski   | Español<br>Ελληνικά<br>-   |
| 1  | Outdoor unit<br>buitenunit<br>Ulkoyksikkö  | Außengerät<br>Utomhusenhet<br>Venkovní jednotka   | unité extérieure<br>Udendørs enhed<br>Външно тяло  | unità esterna<br>unidade exterior<br>jednostka zewnętrzna   | unidad exterior<br>Εξωτερική μονάδα<br>-   |
| 2  | Indoor unit<br>binnenunit<br>Sisäyksikkö   | Innengerät<br>Inomhusenhet<br>Vnitřní jednotka  | unité intérieure<br>Indendørs enhed<br>Вътрешно тяло   | unità interna<br>unidade interior<br>jednostka wewnątrzna   | unidad interior<br>Εσωτερική μονάδα<br>-   |
| 3  | Medium-temperature application<br>middentemperatuur-toepassing<br>keskilämpötilan sovellus   | Mitteltemperaturanwendung<br>mediumentemperatuurapplikation<br>středněteplotní aplikace   | l'application à moyenne température<br>middeltemperatuuravvendelsen<br>среднотемпературното приложение   | le applicazioni a media temperatura<br>a aplicação a média temperatura<br>zastosowania w średnich temperaturach   | la aplicación de media temperatura<br>η εφαρμογή σε μέση θερμοκρασία<br>-  |
| 4  | Low-temperature application<br>lagetemperatuur-toepassing<br>matalanlämpötilan sovellus  | Niedertemperaturanwendung<br>lågtemperaturapplikation<br>nízkoteplotní aplikace   | l'application à basse température<br>lavtemperaturavvendelsen<br>нискотемпературни приложения  | le applicazioni a bassa temperatura<br>a aplicação a baixa temperatura<br>zastosowania w niskich temperaturach  | la aplicación de baja temperatura<br>η εφαρμογή σε χαμηλή θερμοκρασία<br>-   |
| 5  | Declared load profile<br>Opgegeven capaciteitsprofiel<br>Ilmoitettu kuormitusprofiili  | Angegebenes Lastprofil<br>Deklarerad belastningsprofil<br>Deklarovaný zátěžový profil   | Profil de soutirage déclaré<br>Angivet forbrugsprofil<br>Объявлен товароv профиль  | Profilo di carico dichiarato<br>Perfil de carga declarado<br>Deklarowany profil obciążenia  | Perfil de carga declarado<br>Δηλωμένο προφίλ φορτίου<br>-  |
| 6  | Seasonal space heating energy efficiency class<br>de seizoensgebonden energie-efficiëntieklasse voor ruimteverwarming<br>tilalämmityksen kausittainen energiatehokkuusluokka   | die Klasse für die jahreszeitbedingte Raumheizungs-Energieeffizienz<br>säsongrelaterade energieeffektivitetsklass vid rumsuppvärmning<br>třída sezonní energetické účinnosti vytápění   | la classe d'efficacité énergétique saisonnière, pour le chauffage des locaux<br>klassen for årsvirkningsgrad ved rumopvarmning<br>класът на сезонната отоплителна енергийна ефективност  | la classe di efficienza energetica stagionale del riscaldamento d'ambiente<br>A classe de eficiência energética do aquecimento ambiente sazonal<br>A klasa sezonowej efektywności energetycznej ogrzewania pomieszczeń  | la clase de eficiencia energética estacional de calefacción<br>η τάξη ενεργειακής απόδοσης της εποχιακής θέρμανσης χώρου<br>-  |
| 7  | Water heating energy efficiency class<br>de energie-efficiëntieklasse voor waterverwarming<br>vedenlämmityksen energiatehokkuusluokka  | die Klasse für die Warmwasserbereitungs-Energieeffizienz<br>energieeffektivitetsklass vid vattenuppvärmning<br>třída energetické účinnosti ohřevu vody  | la classe d'efficacité énergétique, pour le chauffage de l'eau<br>klassen for årsvirkningsgrad ved vandopvarmning<br>класът на енергийната ефективност при подгряване на вода  | la classe di efficienza energetica del riscaldamento dell'acqua<br>A classe de eficiência energética do aquecimento de água<br>Klasa efektywności energetycznej podgrzewania wody   | la clase de eficiencia energética del caldeo de agua<br>η τάξη ενεργειακής απόδοσης θέρμανσης νερού<br>-   |
| 8  | Rated heat output under average climate conditions<br>de nominale warmteafgifte(onder gemiddelde klimaatomstandigheden)<br>nimellislämpöteho(keskimääräisissä ilmasto-olosuhteissa)  | die Wärmenennleistung bei durchschnittlichen Klimaverhältnissen<br>Den nominella avgivna värmeeffekten(under genomsnittliga klimatförhållanden)<br>jmenovitý tepelný výkon(za průměrných klimatických podmínek)   | la puissance thermique nominale dans les conditions climatiques moyennes<br>den nominelle nytteeffekt(under gennemsnitlige klimaforhold)<br>номиналната топлинна мощност(при средни климатични условия)  | la potenza termica nominale(in condizioni climatiche medie)<br>A potência calorífica nominal(em condições climáticas médias)<br>znamionowa moc cieplna(w warunkach klimatu umiarkowanego)   | la potencia calorífica nominal(en condiciones climáticas medias)<br>η ονομαστική θερμική ισχύς(υπό μέσες κλιματικές συνθήκες)<br>-   |
| 9  | For space heating, annual energy consumption under average climate conditions<br>voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden)<br>tilalämmityksestä vuotuinen energiankulutus(keskimääräisissä ilmasto-olosuhteissa)           | für die Raumheizung, den jährlichen Energieverbrauch bei durchschnittlichen Klimaverhältnissen<br>För rumsuppvärmning, årlig energiförbrukning(vid genomsnittliga klimatförhållanden)<br>pro vytápění – roční spotřeba energie za průměrných klimatických podmínek                  | pour le chauffage des locaux, la consommation annuelle d'énergie(dans les conditions climatiques moyennes)<br>for rumopvarmning det årlige energiforbrug(under gennemsnitlige klimaforhold)<br>за отопление, годишното потребление на енергия(при средни климатични условия)               | per il riscaldamento d'ambiente, il consumo annuo di energia(in condizioni climatiche medie)<br>Para o aquecimento ambiente, o consumo anual de energia(em condições climáticas médias)<br>w odniesieniu do ogrzewania pomieszczeń, roczne zużycie energii(w warunkach klimatu umiarkowanego)                 | para calentar espacios, el consumo anual de energía(en condiciones climáticas medias)<br>για τη θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας(υπό μέσες κλιματικές συνθήκες)<br>-                  |
| 10 | For water heating, annual electricity consumption under average climate conditions<br>voor waterverwarming, het jaarlijkse elektriciteitsverbruik(onder gemiddelde klimaatomstandigheden)<br>vedenlämmityksestä vuotuinen sähkönkulutus(keskimääräisissä ilmasto-olosuhteissa) | für die Warmwasserbereitung, den jährlichen Stromverbrauch bei durchschnittlichen Klimaverhältnissen<br>För vattenuppvärmning, årlig elförbrukning(vid genomsnittliga klimatförhållanden)<br>pro ohřev vody – roční spotřeba elektrické energie za průměrných klimatických podmínek | pour le chauffage de l'eau, la consommation annuelle d'électricité(dans les conditions climatiques moyennes)<br>for vandopvarmning det årlige elforbrug(under gennemsnitlige klimaforhold)<br>за подгряване на вода, годишното потребление(при средни климатични условия)                  | per il riscaldamento dell'acqua, il consumo annuo di energia(in condizioni climatiche medie)<br>para o aquecimento de água, o consumo anual de electricidade(em condições climáticas médias)<br>w odniesieniu do podgrzewania wody, roczne zużycie energii elektrycznej(w warunkach klimatu umiarkowanego)    | para calentar agua, el consumo anual de electricidad(en condiciones climáticas medias)<br>για την θέρμανση νερού, η ετήσια κατανάλωση ηλεκτρικής ενέργειας(υπό μέσες κλιματικές συνθήκες)<br>-     |
| 11 | Seasonal space heating energy efficiency under average climate conditions<br>de seizoensgebonden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden)<br>tilalämmityksen kausittainen energiatehokkuus(keskimääräisissä ilmasto-olosuhteissa)     | die jahreszeitbedingte Raumheizungs-Energieeffizienz bei durchschnittlichen Klimaverhältnissen<br>Säsongmedelverkningsgrad för rumsuppvärmning(vid genomsnittliga klimatförhållanden)<br>sezonní energetická účinnost vytápění za průměrných klimatických podmínek                  | l'efficacité énergétique saisonnière pour le chauffage des locaux(dans les conditions climatiques moyennes)<br>årsvirkningsgraden ved rumopvarmning(under gennemsnitlige klimaforhold)<br>сезонната енергийна ефективност при отопление(при средни климатични условия)                     | l'efficienza energetica stagionale di riscaldamento d'ambiente(in condizioni climatiche medie)<br>A eficiência energética do aquecimento ambiente sazonal(em condições climáticas médias)<br>sezonowa efektywność energetyczna ogrzewania pomieszczeń(w warunkach klimatu umiarkowanego)                      | la eficiencia energética estacional de calefacción(en condiciones climáticas medias)<br>η ενεργειακή απόδοση της εποχιακής θέρμανσης χώρου(υπό μέσες κλιματικές συνθήκες)<br>-                     |
| 12 | Water heating energy efficiency under average climate conditions<br>de energie-efficiëntie voor waterverwarming(onder gemiddelde klimaatomstandigheden)<br>vedenlämmityksen energiatehokkuus(keskimääräisissä ilmasto-olosuhteissa)  | die Warmwasserbereitungs-Energieeffizienz bei durchschnittlichen Klimaverhältnissen<br>Energieeffektivität vid vattenuppvärmning(vid genomsnittliga klimatförhållanden)<br>energetická účinnost ohřevu vody za průměrných klimatických podmínek                                     | l'efficacité énergétique pour le chauffage de l'eau(dans les conditions climatiques moyennes)<br>energieeffektivitet ved vandopvarmning(under gennemsnitlige klimaforhold)<br>енергийната ефективност при подгряване на вода(при средни климатични условия)                                | l'efficienza energetica di riscaldamento dell'acqua(in condizioni climatiche medie)<br>a eficiência energética do aquecimento de água(em condições climáticas médias)<br>efektywność energetyczna podgrzewania wody(w warunkach klimatu umiarkowanego)  | la eficiencia energética del caldeo de agua(en condiciones climáticas medias)<br>η ενεργειακή απόδοση θέρμανσης νερού(υπό μέσες κλιματικές συνθήκες)<br>-  |
| 13 | Sound power level L <sub>WA</sub> indoor<br>het geluidsvermogensniveau L <sub>WA</sub> binnen<br>äänitehotaso L <sub>WA</sub> sisällä  | der Schalleistungspegel L <sub>WA</sub> in Gebäuden<br>Ljudeffektivnivå L <sub>WA</sub> i inomhus<br>hladina akustického výkonu L <sub>WA</sub> ve vnitřním prostoru  | le niveau de puissance acoustique L <sub>WA</sub> , à l'intérieur<br>lydeeffektiveauet L <sub>WA</sub> i inde<br>ниводо на звуковата мощност L <sub>WA</sub> на закрито  | il livello di potenza sonora L <sub>WA</sub> all'interno<br>O nível de potência sonora L <sub>WA</sub> no interior<br>poziom mocy akustycznej L <sub>WA</sub> w pomieszczeniu   | el nivel de potencia acústica L <sub>WA</sub> en interiores<br>η στάθμη ηχητικής ισχύος L <sub>WA</sub> εσωτερικού χώρου<br>-  |
| 14 | Work only during off-peak hours<br>werken uitsluitend in de daluren<br>toimimaan ainoastaan kulutusluppujen ulkopuolella   | dass ein ausschließlicher Betrieb des Kombiheizgerätes zu Schwachlastzeiten<br>drivas uteslutande under perioder med låg belastning<br>provouz pouze mimo špičku  | fonctionner qu'en heures creuses<br>fungere uden for spidsbelastningsperioder<br>работи само в часовете извън върховото натоварване  | funzionare soltanto durante le ore morte<br>de funcionar unicamente fora das horas de pico<br>pracować jedynie w godzinach poza szczytowym obciążeniem  | funcionar solamente durante las horas de baja demanda<br>λειτουργία μόνο εκτός των ωρών αιχμής<br>-  |
| 15 | Rated heat output under colder climate conditions<br>de nominale warmteafgifte, onder koudere klimaatomstandigheden<br>nimellislämpöteho, kylmissä ilmasto-olosuhteissa  | die Wärmenennleistung bei kälteren Klimaverhältnissen<br>Nominell avgiven värmeeffekt vid kallare klimatförhållanden<br>jmenovitý tepelný výkon za chladnějších klimatických podmínek   | la puissance thermique nominale, dans les conditions climatiques plus froides<br>den nominelle nytteeffekt under koldere klimaforhold<br>номиналната топлинна мощност при по-студени климатични условия  | A potencia calorífica nominal em condições climáticas mais frias<br>Znamionowa moc cieplna w warunkach klimatu chłodnego  | la potencia calorífica nominal en condiciones climáticas más frías<br>η ονομαστική θερμική ισχύς υπό ψυχρότερες κλιματικές συνθήκες<br>-   |
| 16 | Rated heat output under warmer climate conditions<br>de nominale warmteafgifte, onder warmere klimaatomstandigheden<br>nimellislämpöteho, lämpimissä ilmasto-olosuhteissa  | die Wärmenennleistung bei wärmeren Klimaverhältnissen<br>Nominell avgiven värmeeffekt vid varmare klimatförhållanden<br>jmenovitý tepelný výkon za teplejších klimatických podmínek   | la puissance thermique nominale, dans les conditions climatiques plus chaudes<br>den nominelle nytteeffekt under varmere klimaforhold<br>номиналната топлинна мощност при по-топли климатични условия  | A potencia termica nominal, in condizioni climatiche più calde<br>A potência calorífica nominal em condições climáticas mais quentes<br>znamionowa moc cieplna w warunkach klimatu ciepłego   | la potencia calorífica nominal en condiciones climáticas más cálidas<br>η ονομαστική θερμική ισχύς υπό θερμότερες κλιματικές συνθήκες<br>-   |
| 17 | For space heating, annual energy consumption under colder climate conditions<br>voor ruimteverwarming, het jaarlijkse energieverbruik onder koudere klimaatomstandigheden<br>tilalämmityksestä vuotuinen energiankulutus kylmissä ilmasto-olosuhteissa                         | für die Raumheizung, der jährliche Energieverbrauch bei kälteren Klimaverhältnissen<br>För rumsuppvärmning, årlig energiförbrukning under kallare klimatförhållanden<br>pro vytápění – roční spotřeba energie za chladnějších klimatických podmínek                                 | pour le chauffage des locaux, la consommation annuelle d'énergie, dans les conditions climatiques plus froides<br>for rumopvarmning det årlige energiforbrug under koldere klimaforhold<br>за отопление, годишното потребление на енергия при по-студени климатични условия                | per il riscaldamento d'ambiente, il consumo annuo di energia, in condizioni climatiche più fredde<br>Para o aquecimento ambiente, o consumo anual de energia em condições climáticas mais frias<br>w odniesieniu do ogrzewania pomieszczeń, roczne zużycie energii w warunkach klimatu chłodnego              | para calentar espacios, el consumo anual de energía en condiciones climáticas más frías<br>για θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας υπό ψυχρότερες κλιματικές συνθήκες<br>-               |
| 18 | For space heating, annual energy consumption under warmer climate conditions<br>voor ruimteverwarming, het jaarlijkse energieverbruik onder warmere klimaatomstandigheden<br>tilalämmityksestä vuotuinen energiankulutus lämpimissä ilmasto-olosuhteissa                       | für die Raumheizung, der jährliche Energieverbrauch bei wärmeren Klimaverhältnissen<br>För rumsuppvärmning, årlig energiförbrukning under varmare klimatförhållanden<br>pro vytápění – roční spotřeba energie za teplejších klimatických podmínek                                   | pour le chauffage des locaux, la consommation annuelle d'énergie, dans les conditions climatiques plus chaudes<br>for rumopvarmning det årlige energiforbrug under varmere klimaforhold<br>за отопление, годишното потребление на енергия при по-топли климатични условия                  | per il riscaldamento d'ambiente, il consumo annuo di energia, in condizioni climatiche più calde<br>Para o aquecimento ambiente, o consumo anual de energia em condições climáticas mais quentes<br>w odniesieniu do ogrzewania pomieszczeń, roczne zużycie energii w warunkach klimatu ciepłego              | para calentar espacios, el consumo anual de energía en condiciones climáticas más cálidas<br>για θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας υπό θερμότερες κλιματικές συνθήκες<br>-             |
| 19 | For water heating, annual energy consumption under colder climate conditions<br>voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder koudere klimaatomstandigheden<br>vedenlämmityksestä vuotuinen sähkönkulutus kylmissä ilmasto-olosuhteissa                    | für die Warmwasserbereitung, der jährliche Stromverbrauch bei kälteren Klimaverhältnissen<br>För vattenuppvärmning, årlig elförbrukning under kallare klimatförhållanden<br>pro ohřev vody – roční spotřeba elektrické energie za chladnějších klimatických podmínek                | pour le chauffage de l'eau, la consommation annuelle d'électricité, dans les conditions climatiques plus froides<br>for vandopvarmning det årlige elforbrug under koldere klimaforhold<br>за подгряване на вода, годишното потребление на електроенергия при по-студени климатични условия | per il riscaldamento dell'acqua, il consumo annuo di energia, in condizioni climatiche più fredde<br>para o aquecimento de água, o consumo anual de electricidade em condições climáticas mais frias<br>w odniesieniu do podgrzewania wody, roczne zużycie energii elektrycznej w warunkach klimatu chłodnego | para calentar agua, el consumo anual de electricidad en condiciones climáticas más frías<br>για θέρμανση νερού, η ετήσια κατανάλωση ηλεκτρικής ενέργειας υπό ψυχρότερες κλιματικές συνθήκες<br>-   |
| 20 | For water heating, annual energy consumption under warmer climate conditions<br>voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder warmere klimaatomstandigheden<br>vedenlämmityksestä vuotuinen sähkönkulutus lämpimissä ilmasto-olosuhteissa                  | für die Warmwasserbereitung, der jährliche Stromverbrauch bei wärmeren Klimaverhältnissen<br>För vattenuppvärmning, årlig elförbrukning under varmare klimatförhållanden<br>pro ohřev vody – roční spotřeba elektrické energie za teplejších klimatických podmínek                  | pour le chauffage de l'eau, la consommation annuelle d'électricité, dans les conditions climatiques plus chaudes<br>for vandopvarmning det årlige elforbrug under varmere klimaforhold<br>за подгряване на вода, годишното потребление на електроенергия при по-топли климатични условия   | per il riscaldamento dell'acqua, il consumo annuo di energia, in condizioni climatiche più calde<br>para o aquecimento de água, o consumo anual de electricidade em condições climáticas mais quentes<br>w odniesieniu do podgrzewania wody, roczne zużycie energii elektrycznej w warunkach klimatu ciepłego | para calentar agua, el consumo anual de electricidad en condiciones climáticas más cálidas<br>για θέρμανση νερού, η ετήσια κατανάλωση ηλεκτρικής ενέργειας υπό θερμότερες κλιματικές συνθήκες<br>- |
| 21 | Seasonal space heating energy efficiency under colder climate conditions<br>de seizoensgebonden energie-efficiëntie voor ruimteverwarming onder koudere klimaatomstandigheden<br>tilalämmityksen kausittainen energiatehokkuus kylmissä ilmasto-olosuhteissa                   | die jahreszeitbedingte Raumheizungs-Energieeffizienz bei kälteren Klimaverhältnissen<br>Säsongmedelverkningsgrad för rumsuppvärmning under kallare klimatförhållanden<br>sezonní energetická účinnost vytápění za chladnějších klimatických podmínek                                | l'efficacité énergétique saisonnière pour le chauffage des locaux, dans les conditions climatiques plus froides<br>årsvirkningsgraden ved rumopvarmning under koldere klimaforhold<br>сезонната енергийна ефективност при отопление при по-студени климатични условия                      | l'efficienza energetica stagionale di riscaldamento d'ambiente in condizioni climatiche più fredde<br>A eficiência energética do aquecimento ambiente sazonal em condições climáticas mais frias<br>sezonowa efektywność energetyczna ogrzewania pomieszczeń w warunkach klimatu chłodnego                    | la eficiencia energética estacional de calefacción en condiciones climáticas más frías<br>η ενεργειακή απόδοση της εποχιακής θέρμανσης χώρου υπό ψυχρότερες κλιματικές συνθήκες<br>-               |
| 22 | Seasonal space heating energy efficiency under warmer climate conditions<br>de seizoensgebonden energie-efficiëntie voor ruimteverwarming onder warmere klimaatomstandigheden<br>tilalämmityksen kausittainen energiatehokkuus lämpimissä ilmasto-olosuhteissa                 | die jahreszeitbedingte Raumheizungs-Energieeffizienz bei wärmeren Klimaverhältnissen<br>Säsongmedelverkningsgrad för rumsuppvärmning under varmare klimatförhållanden<br>sezonní energetická účinnost vytápění za teplejších klimatických podmínek                                  | l'efficacité énergétique saisonnière pour le chauffage des locaux, dans les conditions climatiques plus chaudes<br>årsvirkningsgraden ved rumopvarmning under varmere klimaforhold<br>сезонната енергийна ефективност при отопление при по-топли климатични условия                        | l'efficienza energetica stagionale di riscaldamento d'ambiente in condizioni climatiche più calde<br>A eficiência energética do aquecimento ambiente sazonal em condições climáticas mais quentes<br>sezonowa efektywność energetyczna ogrzewania pomieszczeń w warunkach klimatu ciepłego                    | la eficiencia energética estacional de calefacción en condiciones climáticas más cálidas<br>η ενεργειακή απόδοση της εποχιακής θέρμανσης χώρου υπό θερμότερες κλιματικές συνθήκες<br>-             |
| 23 | Water heating energy efficiency under colder climate conditions<br>de energie-efficiëntie voor waterverwarming onder koudere klimaatomstandigheden<br>vedenlämmityksen energiatehokkuus kylmissä ilmasto-olosuhteissa  | die Warmwasserbereitungs-Energieeffizienz bei kälteren Klimaverhältnissen<br>Energieeffektivität vid vattenuppvärmning under kallare klimatförhållanden<br>energetická účinnost ohřevu vody za chladnějších klimatických podmínek   | l'efficacité énergétique pour le chauffage de l'eau, dans les conditions climatiques plus froides<br>energieeffektivitet ved vandopvarmning under koldere klimaforhold<br>енергийната ефективност при подгряване на вода при по-студени климатични условия                                 | l'efficienza energetica di riscaldamento dell'acqua in condizioni climatiche più fredde<br>a eficiencia energética do aquecimento de água em condições climáticas mais frias<br>efektywność energetyczna podgrzewania wody w warunkach klimatu chłodnego  | la eficiencia energética de caldeo de agua en condiciones climáticas más frías<br>η ενεργειακή απόδοση της θέρμανσης νερού υπό ψυχρότερες κλιματικές συνθήκες<br>-                                 |
| 24 | Water heating energy efficiency under warmer climate conditions<br>de energie-efficiëntie voor waterverwarming onder warmere klimaatomstandigheden<br>vedenlämmityksen energiatehokkuus lämpimissä ilmasto-olosuhteissa  | die Warmwasserbereitungs-Energieeffizienz bei wärmeren Klimaverhältnissen<br>Energieeffektivität vid vattenuppvärmning under varmare klimatförhållanden<br>energetická účinnost ohřevu vody za teplejších klimatických podmínek   | l'efficacité énergétique pour le chauffage de l'eau, dans les conditions climatiques plus chaudes<br>energieeffektivitet ved vandopvarmning under varmere klimaforhold<br>енергийната ефективност при подгряване на вода при по-топли климатични условия                                   | l'efficienza energetica di riscaldamento dell'acqua in condizioni climatiche più calde<br>a eficiencia energética do aquecimento de água em condições climáticas mais quentes<br>efektywność energetyczna podgrzewania wody w warunkach klimatu ciepłego  | la eficiencia energética de caldeo de agua en condiciones climáticas más cálidas<br>η ενεργειακή απόδοση της θέρμανσης νερού υπό θερμότερες κλιματικές συνθήκες<br>-                               |
| 25 | Sound power level L <sub>WA</sub> outdoor<br>het geluidsvermogensniveau L <sub>WA</sub> buiten<br>äänitehotaso L <sub>WA</sub> ulkona  | der Schalleistungspegel L <sub>WA</sub> im Freien<br>Ljudeffektivnivå L <sub>WA</sub> i utomhus<br>hladina akustického výkonu L <sub>WA</sub> ve venkovním prostoru   | le niveau de puissance acoustique L <sub>WA</sub> à l'extérieur<br>lydeeffektiveau L <sub>WA</sub> i ude<br>ниводо на звуковата мощност L <sub>WA</sub> на открито   | il livello di potenza sonora L <sub>WA</sub> all'esterno<br>O nível de potência sonora L <sub>WA</sub> no exterior<br>poziom mocy akustycznej L <sub>WA</sub> na zewnątrz   | el nivel de potencia acústica L <sub>WA</sub> en exteriores<br>η στάθμη ηχητικής ισχύος L <sub>WA</sub> εξωτερικού χώρου<br>-  |

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUD-SHWM120VAA(-BS)             |
|                                       | Indoor unit:  | EHSD-****D                      |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | yes                             |
| Heat pump combination heater:         |               | no                              |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | average climate conditions.     |


| Item   | Symbol   | Value | Unit | Item   | Symbol     | Value | Unit |
|--|----------|-------|------|--|------------|-------|------|
| Rated heat output (*)  | Prated   | 12.0  | 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      | 10.6  | kW   | Tj = - 7 °C  | COPd       | 2.14  | -    |
| Degradation co-efficient (**)  | Cdh      | 1.00  | -    | Tj = + 2 °C  | COPd       | 3.24  | -    |
| Tj = + 2 °C  | Pdh      | 6.5   | kW   | Tj = + 7 °C  | COPd       | 4.82  | -    |
| Degradation co-efficient (**)  | Cdh      | 0.99  | -    | Tj = +12 °C  | COPd       | 6.94  | -    |
| Tj = + 7 °C  | Pdh      | 5.3   | kW   | Tj = bivalent temperature  | COPd       | 1.87  | -    |
| Degradation co-efficient (**)  | Cdh      | 0.99  | -    | Tj = operation limit temperature (***)   | COPd       | 1.87  | -    |
| Tj = +12 °C  | Pdh      | 4.3   | kW   | Operation limit temperature  | TOL        | -28   | °C   |
| Degradation co-efficient (**)  | Cdh      | 0.98  | -    | Heating water operating limit temperature  | WTOL       | 60    | °C   |
| Tj = bivalent temperature  | Pdh      | 12.0  | kW   | Supplementary heater   |            |       |      |
| Tj = operation limit temperature (***)   | Pdh      | 12.0  | kW   | Rated heat output (*)  | Psup       | 0.0   | kW   |
| Bivalent temperature   | Tbiv     | -10   | °C   | Type of energy input   | Electrical |       |      |
| Reference design conditions for space heating  | Tdesignh | -10   | °C   | Power consumption in modes other than active mode  |            |       |      |
| Off mode   |          |       |      | P <sub>OFF</sub>   |            |       |      |
| Thermostat-off mode  |          |       |      | P <sub>TO</sub>  |            |       |      |
| Standby mode   |          |       |      | P <sub>SB</sub>  |            |       |      |
| Crankcase heater mode  |          |       |      | P <sub>CK</sub>  |            |       |      |

|                                     |                 |         |     |                               |   |      |                   |
|-------------------------------------|-----------------|---------|-----|-------------------------------|---|------|-------------------|
| Capacity control                    | variable        |         |     | Rated air flow rate, outdoors | - | 2640 | m <sup>3</sup> /h |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 60 | dBA |                               |   |      |                   |
| Annual energy consumption           | Q <sub>HE</sub> | 7170    | kWh |                               |   |      |                   |

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

Contact details: MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD. Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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



Atsushi EDAYOSHI  
 Manager, Quality Assurance Department  
 UNITED KINGDOM

· 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: | PUD-SHWM120VAA(-BS)          |
|                                       | Indoor unit:  | EHSD-****D                   |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | yes                          |
| Heat pump combination heater:         |               | no                           |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | average climate conditions.  |

| Item   | Symbol           | Value | Unit | Item   | Symbol          | Value   | Unit              |
|--|------------------|-------|------|--|-----------------|---------|-------------------|
| Rated heat output (*)  | Prated           | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$        | 179     | %                 |
| 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              | 10.6  | kW   | Tj = - 7 °C  | COPd            | 2.85    | -                 |
| Degradation co-efficient (**)  | Cdh              | 1.00  | -    | Tj = + 2 °C  | COPd            | 4.46    | -                 |
| Tj = + 2 °C  | Pdh              | 6.5   | kW   | Tj = + 7 °C  | COPd            | 5.89    | -                 |
| Degradation co-efficient (**)  | Cdh              | 0.99  | -    | Tj = +12 °C  | COPd            | 8.00    | -                 |
| Tj = + 7 °C  | Pdh              | 5.6   | kW   | Tj = bivalent temperature  | COPd            | 2.77    | -                 |
| Degradation co-efficient (**)  | Cdh              | 0.98  | -    | Tj = operation limit temperature (***)   | COPd            | 2.77    | -                 |
| Tj = +12 °C  | Pdh              | 4.4   | kW   | Operation limit temperature  | TOL             | -28     | °C                |
| Degradation co-efficient (**)  | Cdh              | 0.97  | -    | Heating water operating limit temperature  | WTOL            | 60      | °C                |
| Tj = bivalent temperature  | Pdh              | 12.0  | kW   | Supplementary heater   |                 |         |                   |
| Tj = operation limit temperature (***)   | Pdh              | 12.0  | kW   | Rated heat output (*)  | Psup            | 0.0     | kW                |
| Bivalent temperature   | Tbiv             | -10   | °C   | Type of energy input   | Electrical      |         |                   |
| Reference design conditions for space heating  | Tdesignh         | -10   | °C   | Power consumption in modes other than active mode  |                 |         |                   |
| Power consumption in modes other than active mode  |                  |       |      | Rated air flow rate, outdoors  |                 |         |                   |
| Off mode   | P <sub>OFF</sub> | 0.015 | kW   |  |                 | 2640    | m <sup>3</sup> /h |
| Thermostat-off mode  | P <sub>TO</sub>  | 0.015 | kW   | Other items  |                 |         |                   |
| Standby mode   | P <sub>SB</sub>  | 0.015 | kW   | Capacity control   | variable        |         |                   |
| Crankcase heater mode  | P <sub>CK</sub>  | 0.000 | kW   | Sound power level, indoors/outdoors  | L <sub>WA</sub> | 41 / 60 | dBA               |
|  |                  |       |      | Annual energy consumption  | Q <sub>HE</sub> | 5453    | kWh               |

|                                     |                 |         |     |                                   |                   |   |     |
|-------------------------------------|-----------------|---------|-----|-----------------------------------|-------------------|---|-----|
| Other items                         |                 |         |     | For heat pump combination heater: |                   |   |     |
| Capacity control                    | variable        |         |     | Declared load profile             | -                 |   |     |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 60 | dBA | Daily electricity consumption     | Q <sub>elec</sub> | - | kWh |
| Annual energy consumption           | Q <sub>HE</sub> | 5453    | kWh | Annual electricity consumption    | AEC               | - | kWh |
|                                     |                 |         |     | Water heating energy efficiency   | $\eta_{wh}$       | - | %   |

Contact details  
 MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.      Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

The identification and signature of the person empowered to bind the supplier;  
 Atsushi EDAYOSHI  
 The signature is signed in the average climate / medium-temperature section.  
 Manager, Quality Assurance Department  
 UNITED KINGDOM

· 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: | PUD-SHWM120VAA(-BS)             |
|                                       | Indoor unit:  | EHSD-****D                      |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | yes                             |
| Heat pump combination heater:         |               | no                              |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | colder climate conditions.      |

| Item   | Symbol               | Value | Unit | Item   | Symbol           | Value | Unit |
|--|----------------------|-------|------|--|------------------|-------|------|
| Rated heat output (*)  | Prated               | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$         | 115   | %    |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub> |                      |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub> |                  |       |      |
| T <sub>j</sub> = - 7 °C  | P <sub>dH</sub>      | 7.3   | kW   | T <sub>j</sub> = - 7 °C  | COP <sub>d</sub> | 2.66  | -    |
| Degradation co-efficient (**)  | C <sub>dH</sub>      | 1.00  | -    | T <sub>j</sub> = + 2 °C  | COP <sub>d</sub> | 3.35  | -    |
| T <sub>j</sub> = + 2 °C  | P <sub>dH</sub>      | 4.4   | kW   | T <sub>j</sub> = + 7 °C  | COP <sub>d</sub> | 4.75  | -    |
| Degradation co-efficient (**)  | C <sub>dH</sub>      | 0.99  | -    | T <sub>j</sub> = +12 °C  | COP <sub>d</sub> | 7.00  | -    |
| T <sub>j</sub> = + 7 °C  | P <sub>dH</sub>      | 3.8   | kW   | T <sub>j</sub> = bivalent temperature  | COP <sub>d</sub> | 1.52  | -    |
| Degradation co-efficient (**)  | C <sub>dH</sub>      | 0.98  | -    | T <sub>j</sub> = operation limit temperature (***)   | COP <sub>d</sub> | 1.54  | -    |
| T <sub>j</sub> = +12 °C  | P <sub>dH</sub>      | 4.4   | kW   | T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)  | COP <sub>d</sub> | 1.52  | -    |
| Degradation co-efficient (**)  | C <sub>dH</sub>      | 0.98  | -    | Operation limit temperature  | TOL              | -28   | °C   |
| T <sub>j</sub> = bivalent temperature  | P <sub>dH</sub>      | 10.1  | kW   | Heating water operating limit temperature  | WTOL             | 60    | °C   |
| T <sub>j</sub> = operation limit temperature (***)   | P <sub>dH</sub>      | 9.7   | kW   | Supplementary heater   |                  |       |      |
| T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)  | P <sub>dH</sub>      | 10.2  | kW   | Rated heat output (*)  | P <sub>sup</sub> | 2.4   | kW   |
| Bivalent temperature   | T <sub>biv</sub>     | -16   | °C   | Type of energy input   | Electrical       |       |      |
| Reference design conditions for space heating  | T <sub>designh</sub> | -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 / 60 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 10055   | kWh |                               |      |                   |  |

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

|                 |  |  |
|-----------------|--|--|
| Contact details | MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD. | Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K. |
|-----------------|--|--|

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

Atsushi EDAYOSHI

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

Manager, Quality Assurance Department

UNITED KINGDOM

· 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(T<sub>j</sub>).

(\*\*) If C<sub>dH</sub> is not determined by measurement then the default degradation coefficient is C<sub>dH</sub> = 0,9.

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                              |
|---------------------------------------|---------------|------------------------------|
| Model(s):                             | Outdoor unit: | PUD-SHWM120VAA(-BS)          |
|                                       | Indoor unit:  | EHSD-****D                   |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | yes                          |
| Heat pump combination heater:         |               | no                           |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | colder climate conditions.   |

| Item   | Symbol           | Value | Unit | Item   | Symbol          | Value | Unit |
|--|------------------|-------|------|--|-----------------|-------|------|
| Rated heat output (*)  | Prated           | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$        | 149   | %    |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj |                  |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj |                 |       |      |
| Tj = - 7 °C  | Pdh              | 7.3   | kW   | Tj = - 7 °C  | COPd            | 3.70  | -    |
| Degradation co-efficient (**)  | Cdh              | 0.99  | -    | Tj = + 2 °C  | COPd            | 4.15  | -    |
| Tj = + 2 °C  | Pdh              | 4.5   | kW   | Tj = + 7 °C  | COPd            | 5.50  | -    |
| Degradation co-efficient (**)  | Cdh              | 0.99  | -    | Tj = +12 °C  | COPd            | 7.43  | -    |
| Tj = + 7 °C  | Pdh              | 3.9   | kW   | Tj = bivalent temperature  | COPd            | 2.10  | -    |
| Degradation co-efficient (**)  | Cdh              | 0.98  | -    | Tj = operation limit temperature (***)   | COPd            | 1.83  | -    |
| Tj = +12 °C  | Pdh              | 5.5   | kW   | Tj = - 15 °C (if TOL < - 20 °C)  | COPd            | 2.15  | -    |
| Degradation co-efficient (**)  | Cdh              | 0.98  | -    | Operation limit temperature  | TOL             | -28   | °C   |
| Tj = bivalent temperature  | Pdh              | 10.1  | kW   | Heating water operating limit temperature  | WTOL            | 60    | °C   |
| Tj = operation limit temperature (***)   | Pdh              | 9.7   | kW   | Supplementary heater   |                 |       |      |
| Tj = - 15 °C (if TOL < - 20 °C)  | Pdh              | 10.2  | kW   | Rated heat output (*)  | Psup            | 2.4   | 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  |                 |       |      |
| 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                    | variable        |         |     | Rated air flow rate, outdoors | - | 2640 | m <sup>3</sup> /h |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 60 | dBA |                               |   |      |                   |
| Annual energy consumption           | Q <sub>HE</sub> | 7792    | kWh |                               |   |      |                   |

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

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.      Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

Atsushi EDAYOSHI

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

Manager, Quality Assurance Department

UNITED KINGDOM

· 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: | PUD-SHWM120VAA(-BS)             |
|                                       | Indoor unit:  | EHSD-****D                      |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | yes                             |
| Heat pump combination heater:         |               | no                              |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | warmer climate conditions.      |

| Item   | Symbol   | Value | Unit | Item   | Symbol     | Value | Unit |
|--|----------|-------|------|--|------------|-------|------|
| Rated heat output (*)  | Prated   | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$   | 159   | %    |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj |          |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj |            |       |      |
| Tj = - 7 °C  | Pdh      | -     | kW   | Tj = - 7 °C  | COPd       | -     | -    |
| Degradation co-efficient (**)  | Cdh      | -     | -    | Tj = + 2 °C  | COPd       | 2.03  | -    |
| Tj = + 2 °C  | Pdh      | 12.0  | kW   | Tj = + 7 °C  | COPd       | 3.38  | -    |
| Degradation co-efficient (**)  | Cdh      | 1.00  | -    | Tj = +12 °C  | COPd       | 5.59  | -    |
| Tj = + 7 °C  | Pdh      | 7.7   | kW   | Tj = bivalent temperature  | COPd       | 2.03  | -    |
| Degradation co-efficient (**)  | Cdh      | 0.99  | -    | Tj = operation limit temperature (***)   | COPd       | 2.03  | -    |
| Tj = +12 °C  | Pdh      | 5.2   | kW   | Operation limit temperature  | TOL        | -28   | °C   |
| Degradation co-efficient (**)  | Cdh      | 0.98  | -    | Heating water operating limit temperature  | WTOL       | 60    | °C   |
| Tj = bivalent temperature  | Pdh      | 12.0  | kW   | Supplementary heater   |            |       |      |
| Tj = operation limit temperature (***)   | Pdh      | 12.0  | 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>   |            |       |      |
| Thermostat-off mode  |          |       |      | P <sub>TO</sub>  |            |       |      |
| Standby mode   |          |       |      | P <sub>SB</sub>  |            |       |      |
| Crankcase heater mode  |          |       |      | P <sub>CK</sub>  |            |       |      |

|             |                                     |                         |                               |   |      |                   |
|-------------|-------------------------------------|-------------------------|-------------------------------|---|------|-------------------|
| Other items | Capacity control                    | variable                | Rated air flow rate, outdoors | - | 2640 | m <sup>3</sup> /h |
|             | Sound power level, indoors/outdoors | L <sub>WA</sub> 41 / 60 |                               |   |      | dBA               |
|             | Annual energy consumption           | Q <sub>HE</sub> 3963    |                               |   |      | kWh               |

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

Contact details  
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The identification and signature of the person empowered to bind the supplier;  
 Atsushi EDAYOSHI  
 The signature is signed in the average climate / medium-temperature section.  
 Manager, Quality Assurance Department  
 UNITED KINGDOM

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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: | PUD-SHWM120VAA(-BS)          |
|                                       | Indoor unit:  | EHSD-****D                   |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | yes                          |
| Heat pump combination heater:         |               | no                           |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | warmer climate conditions.   |

| Item   | Symbol               | Value   | Unit | Item   | Symbol           | Value             | Unit |
|--|----------------------|---------|------|--|------------------|-------------------|------|
| Rated heat output (*)  | Prated               | 12.0    | kW   | Seasonal space heating energy efficiency   | $\eta_s$         | 231               | %    |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub> |                      |         |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub> |                  |                   |      |
| T <sub>j</sub> = - 7 °C  | P <sub>d,h</sub>     | -       | kW   | T <sub>j</sub> = - 7 °C  | COP <sub>d</sub> | -                 | -    |
| Degradation co-efficient (**)  | C <sub>d,h</sub>     | -       | -    | T <sub>j</sub> = + 2 °C  | COP <sub>d</sub> | 3.30              | -    |
| T <sub>j</sub> = + 2 °C  | P <sub>d,h</sub>     | 12.0    | kW   | T <sub>j</sub> = + 7 °C  | COP <sub>d</sub> | 5.26              | -    |
| Degradation co-efficient (**)  | C <sub>d,h</sub>     | 1.00    | -    | T <sub>j</sub> = +12 °C  | COP <sub>d</sub> | 7.46              | -    |
| T <sub>j</sub> = + 7 °C  | P <sub>d,h</sub>     | 7.7     | kW   | T <sub>j</sub> = bivalent temperature  | COP <sub>d</sub> | 3.30              | -    |
| Degradation co-efficient (**)  | C <sub>d,h</sub>     | 0.99    | -    | T <sub>j</sub> = operation limit temperature (***)   | COP <sub>d</sub> | 3.30              | -    |
| T <sub>j</sub> = +12 °C  | P <sub>d,h</sub>     | 4.4     | kW   | Operation limit temperature  | TOL              | -28               | °C   |
| Degradation co-efficient (**)  | C <sub>d,h</sub>     | 0.98    | -    | Heating water operating limit temperature  | WTOL             | 60                | °C   |
| T <sub>j</sub> = bivalent temperature  | P <sub>d,h</sub>     | 12.0    | kW   | Supplementary heater   |                  |                   |      |
| T <sub>j</sub> = operation limit temperature (***)   | P <sub>d,h</sub>     | 12.0    | kW   | Rated heat output (*)  | P <sub>sup</sub> | 0.0               | kW   |
| Bivalent temperature   | T <sub>biv</sub>     | 2       | °C   | Type of energy input   | Electrical       |                   |      |
| Reference design conditions for space heating  | T <sub>designh</sub> | 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 / 60 | dBA  |  |                  |                   |      |
| Annual energy consumption  | Q <sub>HE</sub>      | 2745    | kWh  |  |                  |                   |      |
| For heat pump combination heater:  |                      |         |      | Water heating energy efficiency  |                  |                   |      |
| Declared load profile  | -                    |         |      | $\eta_{wh}$  | -                | %                 |      |
| Daily electricity consumption  | Q <sub>elec</sub>    | -       | kWh  |  |                  |                   |      |
| Annual electricity consumption   | AEC                  | -       | kWh  |  |                  |                   |      |

**Contact details**

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Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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Atsushi EDAYOSHI

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

Manager, Quality Assurance Department

UNITED KINGDOM

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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(T<sub>j</sub>).

 (\*\*) If C<sub>d,h</sub> is not determined by measurement then the default degradation coefficient is C<sub>d,h</sub> = 0,9.

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



**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUD-SHWM120VAA(-BS)             |
|                                       | Indoor unit:  | EHSD-MED                        |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | no                              |
| Heat pump combination heater:         |               | no                              |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | average climate conditions.     |


| Item   | Symbol   | Value | Unit | Item   | Symbol     | Value | Unit |
|--|----------|-------|------|--|------------|-------|------|
| Rated heat output (*)  | Prated   | 12.0  | 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      | 10.6  | kW   | Tj = - 7 °C  | COPd       | 2.14  | -    |
| Degradation co-efficient (**)  | Cdh      | 1.00  | -    | Tj = + 2 °C  | COPd       | 3.24  | -    |
| Tj = + 2 °C  | Pdh      | 6.5   | kW   | Tj = + 7 °C  | COPd       | 4.82  | -    |
| Degradation co-efficient (**)  | Cdh      | 0.99  | -    | Tj = +12 °C  | COPd       | 6.94  | -    |
| Tj = + 7 °C  | Pdh      | 5.3   | kW   | Tj = bivalent temperature  | COPd       | 1.87  | -    |
| Degradation co-efficient (**)  | Cdh      | 0.99  | -    | Tj = operation limit temperature (***)   | COPd       | 1.87  | -    |
| Tj = +12 °C  | Pdh      | 4.3   | kW   | Operation limit temperature  | TOL        | -28   | °C   |
| Degradation co-efficient (**)  | Cdh      | 0.98  | -    | Heating water operating limit temperature  | WTOL       | 60    | °C   |
| Tj = bivalent temperature  | Pdh      | 12.0  | kW   | Supplementary heater   |            |       |      |
| Tj = operation limit temperature (***)   | Pdh      | 12.0  | kW   | Rated heat output (*)  | Psup       | 0.0   | kW   |
| Bivalent temperature   | Tbiv     | -10   | °C   | Type of energy input   | Electrical |       |      |
| Reference design conditions for space heating  | Tdesignh | -10   | °C   | Power consumption in modes other than active mode  |            |       |      |
| Off mode   |          |       |      | P <sub>OFF</sub>   |            |       |      |
| Thermostat-off mode  |          |       |      | P <sub>TO</sub>  |            |       |      |
| Standby mode   |          |       |      | P <sub>SB</sub>  |            |       |      |
| Crankcase heater mode  |          |       |      | P <sub>CK</sub>  |            |       |      |

|                                     |                 |         |     |                               |   |      |                   |
|-------------------------------------|-----------------|---------|-----|-------------------------------|---|------|-------------------|
| Capacity control                    | variable        |         |     | Rated air flow rate, outdoors | - | 2640 | m <sup>3</sup> /h |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 60 | dBA |                               |   |      |                   |
| Annual energy consumption           | Q <sub>HE</sub> | 7170    | kWh |                               |   |      |                   |

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

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Atsushi EDAYOSHI  
 Manager, Quality Assurance Department  
 UNITED KINGDOM

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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: | PUD-SHWM120VAA(-BS)          |
|                                       | Indoor unit:  | EHSD-MED                     |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | no                           |
| Heat pump combination heater:         |               | no                           |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | average climate conditions.  |

| Item   | Symbol   | Value | Unit | Item   | Symbol     | Value | Unit |
|--|----------|-------|------|--|------------|-------|------|
| Rated heat output (*)  | Prated   | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$   | 179   | %    |
| 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      | 10.6  | kW   | Tj = - 7 °C  | COPd       | 2.85  | -    |
| Degradation co-efficient (**)  | Cdh      | 1.00  | -    | Tj = + 2 °C  | COPd       | 4.46  | -    |
| Tj = + 2 °C  | Pdh      | 6.5   | kW   | Tj = + 7 °C  | COPd       | 5.89  | -    |
| Degradation co-efficient (**)  | Cdh      | 0.99  | -    | Tj = +12 °C  | COPd       | 8.00  | -    |
| Tj = + 7 °C  | Pdh      | 5.6   | kW   | Tj = bivalent temperature  | COPd       | 2.77  | -    |
| Degradation co-efficient (**)  | Cdh      | 0.98  | -    | Tj = operation limit temperature (***)   | COPd       | 2.77  | -    |
| Tj = +12 °C  | Pdh      | 4.4   | kW   | Operation limit temperature  | TOL        | -28   | °C   |
| Degradation co-efficient (**)  | Cdh      | 0.97  | -    | Heating water operating limit temperature  | WTOL       | 60    | °C   |
| Tj = bivalent temperature  | Pdh      | 12.0  | kW   | Supplementary heater   |            |       |      |
| Tj = operation limit temperature (***)   | Pdh      | 12.0  | kW   | Rated heat output (*)  | Psup       | 0.0   | kW   |
| Bivalent temperature   | Tbiv     | -10   | °C   | Type of energy input   | Electrical |       |      |
| Reference design conditions for space heating  | Tdesignh | -10   | °C   | Power consumption in modes other than active mode  |            |       |      |
| Off mode   |          |       |      | P <sub>OFF</sub>   |            |       |      |
| Thermostat-off mode  |          |       |      | P <sub>TO</sub>  |            |       |      |
| Standby mode   |          |       |      | P <sub>SB</sub>  |            |       |      |
| Crankcase heater mode  |          |       |      | P <sub>CK</sub>  |            |       |      |

|                                     |                 |         |     |                               |      |                   |  |
|-------------------------------------|-----------------|---------|-----|-------------------------------|------|-------------------|--|
| Other items                         |                 |         |     | Rated air flow rate, outdoors |      |                   |  |
| Capacity control                    | variable        |         |     | -                             | 2640 | m <sup>3</sup> /h |  |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 60 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 5453    | kWh |                               |      |                   |  |

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

|                 |  |  |
|-----------------|--|--|
| Contact details | MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD. | Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K. |
|-----------------|--|--|

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Atsushi EDAYOSHI

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Manager, Quality Assurance Department

UNITED KINGDOM

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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: | PUD-SHWM120VAA(-BS)             |
|                                       | Indoor unit:  | EHSD-MED                        |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | no                              |
| Heat pump combination heater:         |               | no                              |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | colder climate conditions.      |

| Item   | Symbol               | Value   | Unit | Item   | Symbol           | Value | Unit |
|--|----------------------|---------|------|--|------------------|-------|------|
| Rated heat output (*)  | Prated               | 12.0    | kW   | Seasonal space heating energy efficiency   | $\eta_s$         | 115   | %    |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub> |                      |         |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub> |                  |       |      |
| T <sub>j</sub> = - 7 °C  | P <sub>dH</sub>      | 7.3     | kW   | T <sub>j</sub> = - 7 °C  | COP <sub>d</sub> | 2.66  | -    |
| Degradation co-efficient (**)  | C <sub>dH</sub>      | 1.00    | -    | T <sub>j</sub> = + 2 °C  | COP <sub>d</sub> | 3.35  | -    |
| T <sub>j</sub> = + 2 °C  | P <sub>dH</sub>      | 4.4     | kW   | T <sub>j</sub> = + 7 °C  | COP <sub>d</sub> | 4.75  | -    |
| Degradation co-efficient (**)  | C <sub>dH</sub>      | 0.99    | -    | T <sub>j</sub> = +12 °C  | COP <sub>d</sub> | 7.00  | -    |
| T <sub>j</sub> = + 7 °C  | P <sub>dH</sub>      | 3.8     | kW   | T <sub>j</sub> = bivalent temperature  | COP <sub>d</sub> | 1.52  | -    |
| Degradation co-efficient (**)  | C <sub>dH</sub>      | 0.98    | -    | T <sub>j</sub> = operation limit temperature (***)   | COP <sub>d</sub> | 1.54  | -    |
| T <sub>j</sub> = +12 °C  | P <sub>dH</sub>      | 4.4     | kW   | T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)  | COP <sub>d</sub> | 1.52  | -    |
| Degradation co-efficient (**)  | C <sub>dH</sub>      | 0.98    | -    | Operation limit temperature  | TOL              | -28   | °C   |
| T <sub>j</sub> = bivalent temperature  | P <sub>dH</sub>      | 10.1    | kW   | Heating water operating limit temperature  | WTOL             | 60    | °C   |
| T <sub>j</sub> = operation limit temperature (***)   | P <sub>dH</sub>      | 9.7     | kW   | Supplementary heater   |                  |       |      |
| T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)  | P <sub>dH</sub>      | 10.2    | kW   | Rated heat output (*)  | P <sub>sup</sub> | 2.4   | kW   |
| Bivalent temperature   | T <sub>biv</sub>     | -16     | °C   | Type of energy input   | Electrical       |       |      |
| Reference design conditions for space heating  | T <sub>designh</sub> | -22     | °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  | L <sub>WA</sub>      | 41 / 60 | dBA  | 2640   |                  |       |      |
| Annual energy consumption  | Q <sub>HE</sub>      | 10055   | kWh  | m <sup>3</sup> /h  |                  |       |      |

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

|                 |  |  |
|-----------------|--|--|
| Contact details | MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD. | Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K. |
|-----------------|--|--|

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

Atsushi EDAYOSHI

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

Manager, Quality Assurance Department

UNITED KINGDOM

· 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(T<sub>j</sub>).

(\*\*) If C<sub>dH</sub> is not determined by measurement then the default degradation coefficient is C<sub>dH</sub> = 0,9.

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |                              |                     |
|---------------------------------------|------------------------------|---------------------|
| Model(s):                             | Outdoor unit:                | PUD-SHWM120VAA(-BS) |
|                                       | Indoor unit:                 | EHSD-MED            |
| Air-to-water heat pump:               | yes                          |                     |
| Water-to-water heat pump:             | no                           |                     |
| Brine-to-water heat pump:             | no                           |                     |
| Low-temperature heat pump:            | no                           |                     |
| Equipped with a supplementary heater: | no                           |                     |
| Heat pump combination heater:         | no                           |                     |
| Parameters for                        | low-temperature application. |                     |
| Parameters for                        | colder climate conditions.   |                     |

| Item   | Symbol               | Value | Unit | Item   | Symbol           | Value | Unit |
|--|----------------------|-------|------|--|------------------|-------|------|
| Rated heat output (*)  | Prated               | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$         | 149   | %    |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub> |                      |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub> |                  |       |      |
| T <sub>j</sub> = - 7 °C  | P <sub>d,h</sub>     | 7.3   | kW   | T <sub>j</sub> = - 7 °C  | COP <sub>d</sub> | 3.70  | -    |
| Degradation co-efficient (**)  | C <sub>d,h</sub>     | 0.99  | -    | T <sub>j</sub> = + 2 °C  | COP <sub>d</sub> | 4.15  | -    |
| T <sub>j</sub> = + 2 °C  | P <sub>d,h</sub>     | 4.5   | kW   | T <sub>j</sub> = + 7 °C  | COP <sub>d</sub> | 5.50  | -    |
| Degradation co-efficient (**)  | C <sub>d,h</sub>     | 0.99  | -    | T <sub>j</sub> = +12 °C  | COP <sub>d</sub> | 7.43  | -    |
| T <sub>j</sub> = + 7 °C  | P <sub>d,h</sub>     | 3.9   | kW   | T <sub>j</sub> = bivalent temperature  | COP <sub>d</sub> | 2.10  | -    |
| Degradation co-efficient (**)  | C <sub>d,h</sub>     | 0.98  | -    | T <sub>j</sub> = operation limit temperature (***)   | COP <sub>d</sub> | 1.83  | -    |
| T <sub>j</sub> = +12 °C  | P <sub>d,h</sub>     | 5.5   | kW   | T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)  | COP <sub>d</sub> | 2.15  | -    |
| Degradation co-efficient (**)  | C <sub>d,h</sub>     | 0.98  | -    | Operation limit temperature  | TOL              | -28   | °C   |
| T <sub>j</sub> = bivalent temperature  | P <sub>d,h</sub>     | 10.1  | kW   | Heating water operating limit temperature  | WTOL             | 60    | °C   |
| T <sub>j</sub> = operation limit temperature (***)   | P <sub>d,h</sub>     | 9.7   | kW   | Supplementary heater   |                  |       |      |
| T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)  | P <sub>d,h</sub>     | 10.2  | kW   | Rated heat output (*)  | P <sub>sup</sub> | 2.4   | kW   |
| Bivalent temperature   | T <sub>biv</sub>     | -16   | °C   | Type of energy input   | Electrical       |       |      |
| Reference design conditions for space heating  | T <sub>designh</sub> | -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 / 60 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 7792    | kWh |                               |      |                   |  |

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

|                 |  |  |  |  |  |
|-----------------|--|--|--|--|--|
| Contact details |  | MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD. |  | Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K. |  |
|-----------------|--|--|--|--|--|

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

Atsushi EDAYOSHI

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

Manager, Quality Assurance Department

UNITED KINGDOM

\* 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 P<sub>designh</sub>, and the rated heat output of a supplementary heater P<sub>sup</sub> is equal to the supplementary capacity for heating sup(T<sub>j</sub>).

(\*\*) If C<sub>d,h</sub> is not determined by measurement then the default degradation coefficient is C<sub>d,h</sub> = 0,9.

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUD-SHWM120VAA(-BS)             |
|                                       | Indoor unit:  | EHSD-MED                        |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | no                              |
| Heat pump combination heater:         |               | no                              |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | warmer climate conditions.      |

| Item   | Symbol   | Value | Unit | Item   | Symbol     | Value | Unit |
|--|----------|-------|------|--|------------|-------|------|
| Rated heat output (*)  | Prated   | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$   | 159   | %    |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj |          |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj |            |       |      |
| Tj = - 7 °C  | Pdh      | -     | kW   | Tj = - 7 °C  | COPd       | -     | -    |
| Degradation co-efficient (**)  | Cdh      | -     | -    | Tj = + 2 °C  | COPd       | 2.03  | -    |
| Tj = + 2 °C  | Pdh      | 12.0  | kW   | Tj = + 7 °C  | COPd       | 3.38  | -    |
| Degradation co-efficient (**)  | Cdh      | 1.00  | -    | Tj = +12 °C  | COPd       | 5.59  | -    |
| Tj = + 7 °C  | Pdh      | 7.7   | kW   | Tj = bivalent temperature  | COPd       | 2.03  | -    |
| Degradation co-efficient (**)  | Cdh      | 0.99  | -    | Tj = operation limit temperature (***)   | COPd       | 2.03  | -    |
| Tj = +12 °C  | Pdh      | 5.2   | kW   | Operation limit temperature  | TOL        | -28   | °C   |
| Degradation co-efficient (**)  | Cdh      | 0.98  | -    | Heating water operating limit temperature  | WTOL       | 60    | °C   |
| Tj = bivalent temperature  | Pdh      | 12.0  | kW   | Supplementary heater   |            |       |      |
| Tj = operation limit temperature (***)   | Pdh      | 12.0  | 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>   |            |       |      |
| Thermostat-off mode  |          |       |      | P <sub>TO</sub>  |            |       |      |
| Standby mode   |          |       |      | P <sub>SB</sub>  |            |       |      |
| Crankcase heater mode  |          |       |      | P <sub>CK</sub>  |            |       |      |

|             |                                     |                 |                               |   |      |                   |
|-------------|-------------------------------------|-----------------|-------------------------------|---|------|-------------------|
| Other items | Capacity control                    | variable        | Rated air flow rate, outdoors | - | 2640 | m <sup>3</sup> /h |
|             | Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 60                       |   |      | dBA               |
|             | Annual energy consumption           | Q <sub>HE</sub> | 3963                          |   |      | kWh               |

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

Contact details  
 MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.      Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

The identification and signature of the person empowered to bind the supplier;  
 Atsushi EDAYOSHI  
 The signature is signed in the average climate / medium-temperature section.  
 Manager, Quality Assurance Department  
 UNITED KINGDOM

· 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: | PUD-SHWM120VAA(-BS)          |
|                                       | Indoor unit:  | EHSD-MED                     |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | no                           |
| Heat pump combination heater:         |               | no                           |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | warmer climate conditions.   |

| Item   | Symbol            | Value   | Unit | Item   | Symbol     | Value             | Unit |
|--|-------------------|---------|------|--|------------|-------------------|------|
| Rated heat output (*)  | Prated            | 12.0    | kW   | Seasonal space heating energy efficiency   | $\eta_s$   | 231               | %    |
| 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       | 3.30              | -    |
| Tj = + 2 °C  | Pdh               | 12.0    | kW   | Tj = + 7 °C  | COPd       | 5.26              | -    |
| Degradation co-efficient (**)  | Cdh               | 1.00    | -    | Tj = +12 °C  | COPd       | 7.46              | -    |
| Tj = + 7 °C  | Pdh               | 7.7     | kW   | Tj = bivalent temperature  | COPd       | 3.30              | -    |
| Degradation co-efficient (**)  | Cdh               | 0.99    | -    | Tj = operation limit temperature (***)   | COPd       | 3.30              | -    |
| Tj = +12 °C  | Pdh               | 4.4     | kW   | Operation limit temperature  | TOL        | -28               | °C   |
| Degradation co-efficient (**)  | Cdh               | 0.98    | -    | Heating water operating limit temperature  | WTOL       | 60                | °C   |
| Tj = bivalent temperature  | Pdh               | 12.0    | kW   | Supplementary heater   |            |                   |      |
| Tj = operation limit temperature (***)   | Pdh               | 12.0    | 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>   |            |                   |      |
| 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 / 60 | dBA  |  |            |                   |      |
| Annual energy consumption  | Q <sub>HE</sub>   | 2745    | kWh  |  |            |                   |      |
| For heat pump combination heater:  |                   |         |      | Water heating energy efficiency  |            |                   |      |
| Declared load profile  | -                 |         |      | $\eta_{wh}$  | -          | %                 |      |
| Daily electricity consumption  | Q <sub>elec</sub> | -       | kWh  |  |            |                   |      |
| Annual electricity consumption   | AEC               | -       | kWh  |  |            |                   |      |

**Contact details**

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.

Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

Atsushi EDAYOSHI

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

Manager, Quality Assurance Department

UNITED KINGDOM

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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: | PUD-SHWM120VAA(-BS)             |
|                                       | Indoor unit:  | ERSD-****D                      |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | yes                             |
| Heat pump combination heater:         |               | no                              |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | average climate conditions.     |

| Item   | Symbol           | Value | Unit | Item   | Symbol          | Value | Unit |
|--|------------------|-------|------|--|-----------------|-------|------|
| Rated heat output (*)  | Prated           | 12.0  | 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              | 10.6  | kW   | Tj = - 7 °C  | COPd            | 2.14  | -    |
| Degradation co-efficient (**)  | Cdh              | 1.00  | -    | Tj = + 2 °C  | COPd            | 3.24  | -    |
| Tj = + 2 °C  | Pdh              | 6.5   | kW   | Tj = + 7 °C  | COPd            | 4.82  | -    |
| Degradation co-efficient (**)  | Cdh              | 0.99  | -    | Tj = +12 °C  | COPd            | 6.94  | -    |
| Tj = + 7 °C  | Pdh              | 5.3   | kW   | Tj = bivalent temperature  | COPd            | 1.87  | -    |
| Degradation co-efficient (**)  | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)   | COPd            | 1.87  | -    |
| Tj = +12 °C  | Pdh              | 4.3   | kW   | Operation limit temperature  | TOL             | -28   | °C   |
| Degradation co-efficient (**)  | Cdh              | 0.98  | -    | Heating water operating limit temperature  | WTOL            | 60    | °C   |
| Tj = bivalent temperature  | Pdh              | 12.0  | kW   | Supplementary heater   |                 |       |      |
| Tj = operation limit temperature (***)   | Pdh              | 12.0  | kW   | Rated heat output (*)  | Psup            | 0.0   | kW   |
| Bivalent temperature   | Tbiv             | -10   | °C   | Type of energy input   | Electrical      |       |      |
| Reference design conditions for space heating  | Tdesignh         | -10   | °C   | Power consumption in modes other than active mode  |                 |       |      |
| Power consumption in modes other than active mode  |                  |       |      | Off mode   |                 |       |      |
| Off mode   | P <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                    | variable        |         |     | Rated air flow rate, outdoors | - | 2640 | m <sup>3</sup> /h |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 60 | dBA |                               |   |      |                   |
| Annual energy consumption           | Q <sub>HE</sub> | 7170    | kWh |                               |   |      |                   |

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

Contact details  
 MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.      Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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



Atsushi EDAYOSHI  
 Manager, Quality Assurance Department  
 UNITED KINGDOM

· 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: | PUD-SHWM120VAA(-BS)          |
|                                       | Indoor unit:  | ERSD-****D                   |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | yes                          |
| Heat pump combination heater:         |               | no                           |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | average climate conditions.  |

| Item   | Symbol   | Value | Unit | Item   | Symbol   | Value | Unit |
|--|----------|-------|------|--|----------|-------|------|
| Rated heat output (*)  | Prated   | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$ | 179   | %    |
| 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      | 10.6  | kW   | Tj = - 7 °C  | COPd     | 2.85  | -    |
| Degradation co-efficient (**)  | Cdh      | 1.00  | -    | Tj = + 2 °C  | COPd     | 4.46  | -    |
| Tj = + 2 °C  | Pdh      | 6.5   | kW   | Tj = + 7 °C  | COPd     | 5.89  | -    |
| Degradation co-efficient (**)  | Cdh      | 0.99  | -    | Tj = +12 °C  | COPd     | 8.00  | -    |
| Tj = + 7 °C  | Pdh      | 5.6   | kW   | Tj = bivalent temperature  | COPd     | 2.77  | -    |
| Degradation co-efficient (**)  | Cdh      | 0.98  | -    | Tj = operation limit temperature (***)   | COPd     | 2.77  | -    |
| Tj = +12 °C  | Pdh      | 4.4   | kW   | Operation limit temperature  | TOL      | -28   | °C   |
| Degradation co-efficient (**)  | Cdh      | 0.97  | -    | Heating water operating limit temperature  | WTOL     | 60    | °C   |
| Tj = bivalent temperature  | Pdh      | 12.0  | kW   |  |          |       |      |
| Tj = operation limit temperature (***)   | Pdh      | 12.0  | kW   |  |          |       |      |
| Bivalent temperature   | Tbiv     | -10   | °C   |  |          |       |      |
| Reference design conditions for space heating  | Tdesignh | -10   | °C   |  |          |       |      |

|   |                  |          |     |                       |                  |     |    |
|---|------------------|----------|-----|-----------------------|------------------|-----|----|
| Power consumption in modes other than active mode |                  |          |     | Supplementary heater  |                  |     |    |
| Off mode  | P <sub>OFF</sub> | 0.015    | kW  | Rated heat output (*) | P <sub>sup</sub> | 0.0 | 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                                       |                  |          |     | Type of energy input  |                  |     |    |
| Capacity control                                  |                  | variable |     | Electrical            |                  |     |    |
| Sound power level, indoors/outdoors               | L <sub>WA</sub>  | 41 / 60  | dBA |                       |                  |     |    |
| Annual energy consumption                         | Q <sub>HE</sub>  | 5453     | kWh |                       |                  |     |    |

|                                     |                 |          |     |                               |      |                   |  |
|-------------------------------------|-----------------|----------|-----|-------------------------------|------|-------------------|--|
| 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 / 60  | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 5453     | kWh |                               |      |                   |  |

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

Contact details  
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The identification and signature of the person empowered to bind the supplier;  
 Atsushi EDAYOSHI  
 The signature is signed in the average climate / medium-temperature section.  
 Manager, Quality Assurance Department  
 UNITED KINGDOM

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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: | PUD-SHWM120VAA(-BS)             |
|                                       | Indoor unit:  | ERSD-****D                      |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | yes                             |
| Heat pump combination heater:         |               | no                              |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | colder climate conditions.      |

| Item   | Symbol   | Value | Unit | Item   | Symbol     | Value | Unit |
|--|----------|-------|------|--|------------|-------|------|
| Rated heat output (*)  | Prated   | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$   | 115   | %    |
| 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      | 7.3   | kW   | Tj = - 7 °C  | COPd       | 2.66  | -    |
| Degradation co-efficient (**)  | Cdh      | 1.00  | -    | Tj = + 2 °C  | COPd       | 3.35  | -    |
| Tj = + 2 °C  | Pdh      | 4.4   | kW   | Tj = + 7 °C  | COPd       | 4.75  | -    |
| Degradation co-efficient (**)  | Cdh      | 0.99  | -    | Tj = +12 °C  | COPd       | 7.00  | -    |
| Tj = + 7 °C  | Pdh      | 3.8   | kW   | Tj = bivalent temperature  | COPd       | 1.52  | -    |
| Degradation co-efficient (**)  | Cdh      | 0.98  | -    | Tj = operation limit temperature (***)   | COPd       | 1.54  | -    |
| Tj = +12 °C  | Pdh      | 4.4   | kW   | Tj = - 15 °C (if TOL < - 20 °C)  | COPd       | 1.52  | -    |
| Degradation co-efficient (**)  | Cdh      | 0.98  | -    | Operation limit temperature  | TOL        | -28   | °C   |
| Tj = bivalent temperature  | Pdh      | 10.1  | kW   | Heating water operating limit temperature  | WTOL       | 60    | °C   |
| Tj = operation limit temperature (***)   | Pdh      | 9.7   | kW   | Supplementary heater   |            |       |      |
| Tj = - 15 °C (if TOL < - 20 °C)  | Pdh      | 10.2  | kW   | Rated heat output (*)  | Psup       | 2.4   | 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>   |            |       |      |
| 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 / 60 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 10055   | kWh |                               |      |                   |  |

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

|                 |  |  |
|-----------------|--|--|
| Contact details | MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD. | Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K. |
|-----------------|--|--|

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

Atsushi EDAYOSHI

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

Manager, Quality Assurance Department

UNITED KINGDOM

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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: | PUD-SHWM120VAA(-BS)          |
|                                       | Indoor unit:  | ERSD-****D                   |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | yes                          |
| Heat pump combination heater:         |               | no                           |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | colder climate conditions.   |

| Item   | Symbol           | Value | Unit | Item   | Symbol          | Value | Unit |
|--|------------------|-------|------|--|-----------------|-------|------|
| Rated heat output (*)  | Prated           | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$        | 149   | %    |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj |                  |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj |                 |       |      |
| Tj = - 7 °C  | Pdh              | 7.3   | kW   | Tj = - 7 °C  | COPd            | 3.70  | -    |
| Degradation co-efficient (**)  | Cdh              | 0.99  | -    | Tj = + 2 °C  | COPd            | 4.15  | -    |
| Tj = + 2 °C  | Pdh              | 4.5   | kW   | Tj = + 7 °C  | COPd            | 5.50  | -    |
| Degradation co-efficient (**)  | Cdh              | 0.99  | -    | Tj = +12 °C  | COPd            | 7.43  | -    |
| Tj = + 7 °C  | Pdh              | 3.9   | kW   | Tj = bivalent temperature  | COPd            | 2.10  | -    |
| Degradation co-efficient (**)  | Cdh              | 0.98  | -    | Tj = operation limit temperature (***)   | COPd            | 1.83  | -    |
| Tj = +12 °C  | Pdh              | 5.5   | kW   | Tj = - 15 °C (if TOL < - 20 °C)  | COPd            | 2.15  | -    |
| Degradation co-efficient (**)  | Cdh              | 0.98  | -    | Operation limit temperature  | TOL             | -28   | °C   |
| Tj = bivalent temperature  | Pdh              | 10.1  | kW   | Heating water operating limit temperature  | WTOL            | 60    | °C   |
| Tj = operation limit temperature (***)   | Pdh              | 9.7   | kW   | Supplementary heater   |                 |       |      |
| Tj = - 15 °C (if TOL < - 20 °C)  | Pdh              | 10.2  | kW   | Rated heat output (*)  | Psup            | 2.4   | 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  |                 |       |      |
| 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                    | variable        |         |     | Rated air flow rate, outdoors | - | 2640 | m <sup>3</sup> /h |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 60 | dBA |                               |   |      |                   |
| Annual energy consumption           | Q <sub>HE</sub> | 7792    | kWh |                               |   |      |                   |

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

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD. Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

Atsushi EDAYOSHI

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

Manager, Quality Assurance Department

UNITED KINGDOM

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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: | PUD-SHWM120VAA(-BS)             |
|                                       | Indoor unit:  | ERSD-****D                      |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | yes                             |
| Heat pump combination heater:         |               | no                              |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | warmer climate conditions.      |

| Item   | Symbol   | Value | Unit | Item   | Symbol     | Value | Unit |
|--|----------|-------|------|--|------------|-------|------|
| Rated heat output (*)  | Prated   | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$   | 159   | %    |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj |          |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj |            |       |      |
| Tj = - 7 °C  | Pdh      | -     | kW   | Tj = - 7 °C  | COPd       | -     | -    |
| Degradation co-efficient (**)  | Cdh      | -     | -    | Tj = + 2 °C  | COPd       | 2.03  | -    |
| Tj = + 2 °C  | Pdh      | 12.0  | kW   | Tj = + 7 °C  | COPd       | 3.38  | -    |
| Degradation co-efficient (**)  | Cdh      | 1.00  | -    | Tj = +12 °C  | COPd       | 5.59  | -    |
| Tj = + 7 °C  | Pdh      | 7.7   | kW   | Tj = bivalent temperature  | COPd       | 2.03  | -    |
| Degradation co-efficient (**)  | Cdh      | 0.99  | -    | Tj = operation limit temperature (***)   | COPd       | 2.03  | -    |
| Tj = +12 °C  | Pdh      | 5.2   | kW   | Operation limit temperature  | TOL        | -28   | °C   |
| Degradation co-efficient (**)  | Cdh      | 0.98  | -    | Heating water operating limit temperature  | WTOL       | 60    | °C   |
| Tj = bivalent temperature  | Pdh      | 12.0  | kW   | Supplementary heater   |            |       |      |
| Tj = operation limit temperature (***)   | Pdh      | 12.0  | 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>   |            |       |      |
| Thermostat-off mode  |          |       |      | P <sub>TO</sub>  |            |       |      |
| Standby mode   |          |       |      | P <sub>SB</sub>  |            |       |      |
| Crankcase heater mode  |          |       |      | P <sub>CK</sub>  |            |       |      |

|                                     |                 |         |     |                               |   |      |                   |
|-------------------------------------|-----------------|---------|-----|-------------------------------|---|------|-------------------|
| Capacity control                    | variable        |         |     | Rated air flow rate, outdoors | - | 2640 | m <sup>3</sup> /h |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 60 | dBA |                               |   |      |                   |
| Annual energy consumption           | Q <sub>HE</sub> | 3963    | kWh |                               |   |      |                   |

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

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Atsushi EDAYOSHI

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Manager, Quality Assurance Department

UNITED KINGDOM

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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: | PUD-SHWM120VAA(-BS)          |
|                                       | Indoor unit:  | ERSD-****D                   |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | yes                          |
| Heat pump combination heater:         |               | no                           |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | warmer climate conditions.   |

| Item   | Symbol           | Value | Unit | Item   | Symbol     | Value | Unit |
|--|------------------|-------|------|--|------------|-------|------|
| Rated heat output (*)  | Prated           | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$   | 231   | %    |
| 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       | 3.30  | -    |
| Tj = + 2 °C  | Pdh              | 12.0  | kW   | Tj = + 7 °C  | COPd       | 5.26  | -    |
| Degradation co-efficient (**)  | Cdh              | 1.00  | -    | Tj = +12 °C  | COPd       | 7.46  | -    |
| Tj = + 7 °C  | Pdh              | 7.7   | kW   | Tj = bivalent temperature  | COPd       | 3.30  | -    |
| Degradation co-efficient (**)  | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)   | COPd       | 3.30  | -    |
| Tj = +12 °C  | Pdh              | 4.4   | kW   | Operation limit temperature  | TOL        | -28   | °C   |
| Degradation co-efficient (**)  | Cdh              | 0.98  | -    | Heating water operating limit temperature  | WTOL       | 60    | °C   |
| Tj = bivalent temperature  | Pdh              | 12.0  | kW   | Supplementary heater   |            |       |      |
| Tj = operation limit temperature (***)   | Pdh              | 12.0  | 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 | - | 2640 | m <sup>3</sup> /h |
| Capacity control                    | variable        |         |     |                               |   |      |                   |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 60 | dBA |                               |   |      |                   |
| Annual energy consumption           | Q <sub>HE</sub> | 2745    | kWh |                               |   |      |                   |

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

Contact details  
 MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.      Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

The identification and signature of the person empowered to bind the supplier;  
 Atsushi EDAYOSHI  
 The signature is signed in the average climate / medium-temperature section.  
 Manager, Quality Assurance Department  
 UNITED KINGDOM

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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: | PUD-SHWM120VAA(-BS)             |
|                                       | Indoor unit:  | ERSD-MED                        |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | no                              |
| Heat pump combination heater:         |               | no                              |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | average climate conditions.     |

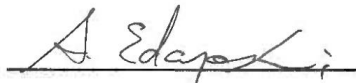
| Item   | Symbol   | Value | Unit | Item   | Symbol     | Value | Unit |
|--|----------|-------|------|--|------------|-------|------|
| Rated heat output (*)  | Prated   | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$   | 135   | %    |
| Declared capacity for heating for part 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      | 10.6  | kW   | Tj = - 7 °C  | COPd       | 2.14  | -    |
| Degradation co-efficient (**)  | Cdh      | 1.00  | -    | Tj = + 2 °C  | COPd       | 3.24  | -    |
| Tj = + 2 °C  | Pdh      | 6.5   | kW   | Tj = + 7 °C  | COPd       | 4.82  | -    |
| Degradation co-efficient (**)  | Cdh      | 0.99  | -    | Tj = +12 °C  | COPd       | 6.94  | -    |
| Tj = + 7 °C  | Pdh      | 5.3   | kW   | Tj = bivalent temperature  | COPd       | 1.87  | -    |
| Degradation co-efficient (**)  | Cdh      | 0.99  | -    | Tj = operation limit temperature (***)   | COPd       | 1.87  | -    |
| Tj = +12 °C  | Pdh      | 4.3   | kW   | Operation limit temperature  | TOL        | -28   | °C   |
| Degradation co-efficient (**)  | Cdh      | 0.98  | -    | Heating water operating limit temperature  | WTOL       | 60    | °C   |
| Tj = bivalent temperature  | Pdh      | 12.0  | kW   | Supplementary heater   |            |       |      |
| Tj = operation limit temperature (***)   | Pdh      | 12.0  | kW   | Rated heat output (*)  | Psup       | 0.0   | kW   |
| Bivalent temperature   | Tbiv     | -10   | °C   | Type of energy input   | Electrical |       |      |
| Reference design conditions for space heating  | Tdesignh | -10   | °C   | Power consumption in modes other than active mode  |            |       |      |
| Off mode   |          |       |      | P <sub>OFF</sub>   |            |       |      |
| Thermostat-off mode  |          |       |      | P <sub>TO</sub>  |            |       |      |
| Standby mode   |          |       |      | P <sub>SB</sub>  |            |       |      |
| Crankcase heater mode  |          |       |      | P <sub>CK</sub>  |            |       |      |

|                                     |                 |         |     |                               |   |      |                   |
|-------------------------------------|-----------------|---------|-----|-------------------------------|---|------|-------------------|
| Capacity control                    | variable        |         |     | Rated air flow rate, outdoors | - | 2640 | m <sup>3</sup> /h |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 60 | dBA |                               |   |      |                   |
| Annual energy consumption           | Q <sub>HE</sub> | 7170    | kWh |                               |   |      |                   |

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

Contact details: MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD. Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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



Atsushi EDAYOSHI  
 Manager, Quality Assurance Department  
 UNITED KINGDOM

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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: | PUD-SHWM120VAA(-BS)          |
|                                       | Indoor unit:  | ERSD-MED                     |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | no                           |
| Heat pump combination heater:         |               | no                           |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | average climate conditions.  |

| Item   | Symbol               | Value   | Unit | Item   | Symbol           | Value | Unit |
|--|----------------------|---------|------|--|------------------|-------|------|
| Rated heat output (*)  | Prated               | 12.0    | kW   | Seasonal space heating energy efficiency   | $\eta_s$         | 179   | %    |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub> |                      |         |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub> |                  |       |      |
| T <sub>j</sub> = - 7 °C  | P <sub>dH</sub>      | 10.6    | kW   | T <sub>j</sub> = - 7 °C  | COP <sub>d</sub> | 2.85  | -    |
| Degradation co-efficient (**)  | C <sub>dH</sub>      | 1.00    | -    | T <sub>j</sub> = + 2 °C  | COP <sub>d</sub> | 4.46  | -    |
| T <sub>j</sub> = + 2 °C  | P <sub>dH</sub>      | 6.5     | kW   | T <sub>j</sub> = + 7 °C  | COP <sub>d</sub> | 5.89  | -    |
| Degradation co-efficient (**)  | C <sub>dH</sub>      | 0.99    | -    | T <sub>j</sub> = +12 °C  | COP <sub>d</sub> | 8.00  | -    |
| T <sub>j</sub> = + 7 °C  | P <sub>dH</sub>      | 5.6     | kW   | T <sub>j</sub> = bivalent temperature  | COP <sub>d</sub> | 2.77  | -    |
| Degradation co-efficient (**)  | C <sub>dH</sub>      | 0.98    | -    | T <sub>j</sub> = operation limit temperature (***)   | COP <sub>d</sub> | 2.77  | -    |
| T <sub>j</sub> = +12 °C  | P <sub>dH</sub>      | 4.4     | kW   | Operation limit temperature  | TOL              | -28   | °C   |
| Degradation co-efficient (**)  | C <sub>dH</sub>      | 0.97    | -    | Heating water operating limit temperature  | WTOL             | 60    | °C   |
| T <sub>j</sub> = bivalent temperature  | P <sub>dH</sub>      | 12.0    | kW   | Supplementary heater   |                  |       |      |
| T <sub>j</sub> = operation limit temperature (***)   | P <sub>dH</sub>      | 12.0    | kW   | Rated heat output (*)  | P <sub>sup</sub> | 0.0   | kW   |
| Bivalent temperature   | T <sub>biv</sub>     | -10     | °C   | Type of energy input   | Electrical       |       |      |
| Reference design conditions for space heating  | T <sub>designh</sub> | -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  | L <sub>WA</sub>      | 41 / 60 | dBA  | 2640   |                  |       |      |
| Annual energy consumption  | Q <sub>HE</sub>      | 5453    | kWh  | m <sup>3</sup> /h  |                  |       |      |

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

|                 |  |  |
|-----------------|--|--|
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|-----------------|--|--|

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Atsushi EDAYOSHI

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

Manager, Quality Assurance Department

UNITED KINGDOM

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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(T<sub>j</sub>).

(\*\*) If C<sub>dH</sub> is not determined by measurement then the default degradation coefficient is C<sub>dH</sub> = 0,9.

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUD-SHWM120VAA(-BS)             |
|                                       | Indoor unit:  | ERSD-MED                        |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | no                              |
| Heat pump combination heater:         |               | no                              |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | colder climate conditions.      |

| Item   | Symbol               | Value | Unit | Item   | Symbol           | Value | Unit |
|--|----------------------|-------|------|--|------------------|-------|------|
| Rated heat output (*)  | Prated               | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$         | 115   | %    |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub> |                      |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub> |                  |       |      |
| T <sub>j</sub> = - 7 °C  | P <sub>dH</sub>      | 7.3   | kW   | T <sub>j</sub> = - 7 °C  | COP <sub>d</sub> | 2.66  | -    |
| Degradation co-efficient (**)  | C <sub>dH</sub>      | 1.00  | -    | T <sub>j</sub> = + 2 °C  | COP <sub>d</sub> | 3.35  | -    |
| T <sub>j</sub> = + 2 °C  | P <sub>dH</sub>      | 4.4   | kW   | T <sub>j</sub> = + 7 °C  | COP <sub>d</sub> | 4.75  | -    |
| Degradation co-efficient (**)  | C <sub>dH</sub>      | 0.99  | -    | T <sub>j</sub> = +12 °C  | COP <sub>d</sub> | 7.00  | -    |
| T <sub>j</sub> = + 7 °C  | P <sub>dH</sub>      | 3.8   | kW   | T <sub>j</sub> = bivalent temperature  | COP <sub>d</sub> | 1.52  | -    |
| Degradation co-efficient (**)  | C <sub>dH</sub>      | 0.98  | -    | T <sub>j</sub> = operation limit temperature (***)   | COP <sub>d</sub> | 1.54  | -    |
| T <sub>j</sub> = +12 °C  | P <sub>dH</sub>      | 4.4   | kW   | T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)  | COP <sub>d</sub> | 1.52  | -    |
| Degradation co-efficient (**)  | C <sub>dH</sub>      | 0.98  | -    | Operation limit temperature  | TOL              | -28   | °C   |
| T <sub>j</sub> = bivalent temperature  | P <sub>dH</sub>      | 10.1  | kW   | Heating water operating limit temperature  | WTOL             | 60    | °C   |
| T <sub>j</sub> = operation limit temperature (***)   | P <sub>dH</sub>      | 9.7   | kW   | Supplementary heater   |                  |       |      |
| T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)  | P <sub>dH</sub>      | 10.2  | kW   | Rated heat output (*)  | P <sub>sup</sub> | 2.4   | kW   |
| Bivalent temperature   | T <sub>biv</sub>     | -16   | °C   | Type of energy input   | Electrical       |       |      |
| Reference design conditions for space heating  | T <sub>designh</sub> | -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 / 60 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 10055   | kWh |                               |      |                   |  |

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

|                 |  |  |
|-----------------|--|--|
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Manager, Quality Assurance Department

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(\*\*) If C<sub>dH</sub> is not determined by measurement then the default degradation coefficient is C<sub>dH</sub> = 0,9.

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |                              |                     |
|---------------------------------------|------------------------------|---------------------|
| Model(s):                             | Outdoor unit:                | PUD-SHWM120VAA(-BS) |
|                                       | Indoor unit:                 | ERSD-MED            |
| Air-to-water heat pump:               | yes                          |                     |
| Water-to-water heat pump:             | no                           |                     |
| Brine-to-water heat pump:             | no                           |                     |
| Low-temperature heat pump:            | no                           |                     |
| Equipped with a supplementary heater: | no                           |                     |
| Heat pump combination heater:         | no                           |                     |
| Parameters for                        | low-temperature application. |                     |
| Parameters for                        | colder climate conditions.   |                     |

| Item   | Symbol               | Value | Unit | Item   | Symbol           | Value | Unit |
|--|----------------------|-------|------|--|------------------|-------|------|
| Rated heat output (*)  | Prated               | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$         | 149   | %    |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub> |                      |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub> |                  |       |      |
| T <sub>j</sub> = - 7 °C  | P <sub>d,h</sub>     | 7.3   | kW   | T <sub>j</sub> = - 7 °C  | COP <sub>d</sub> | 3.70  | -    |
| Degradation co-efficient (**)  | C <sub>d,h</sub>     | 0.99  | -    | T <sub>j</sub> = + 2 °C  | COP <sub>d</sub> | 4.15  | -    |
| T <sub>j</sub> = + 2 °C  | P <sub>d,h</sub>     | 4.5   | kW   | T <sub>j</sub> = + 7 °C  | COP <sub>d</sub> | 5.50  | -    |
| Degradation co-efficient (**)  | C <sub>d,h</sub>     | 0.99  | -    | T <sub>j</sub> = +12 °C  | COP <sub>d</sub> | 7.43  | -    |
| T <sub>j</sub> = + 7 °C  | P <sub>d,h</sub>     | 3.9   | kW   | T <sub>j</sub> = bivalent temperature  | COP <sub>d</sub> | 2.10  | -    |
| Degradation co-efficient (**)  | C <sub>d,h</sub>     | 0.98  | -    | T <sub>j</sub> = operation limit temperature (***)   | COP <sub>d</sub> | 1.83  | -    |
| T <sub>j</sub> = +12 °C  | P <sub>d,h</sub>     | 5.5   | kW   | T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)  | COP <sub>d</sub> | 2.15  | -    |
| Degradation co-efficient (**)  | C <sub>d,h</sub>     | 0.98  | -    | Operation limit temperature  | TOL              | -28   | °C   |
| T <sub>j</sub> = bivalent temperature  | P <sub>d,h</sub>     | 10.1  | kW   | Heating water operating limit temperature  | WTOL             | 60    | °C   |
| T <sub>j</sub> = operation limit temperature (***)   | P <sub>d,h</sub>     | 9.7   | kW   | Supplementary heater   |                  |       |      |
| T <sub>j</sub> = - 15 °C (if TOL < - 20 °C)  | P <sub>d,h</sub>     | 10.2  | kW   | Rated heat output (*)  | P <sub>sup</sub> | 2.4   | kW   |
| Bivalent temperature   | T <sub>biv</sub>     | -16   | °C   | Type of energy input   | Electrical       |       |      |
| Reference design conditions for space heating  | T <sub>designh</sub> | -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 / 60 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 7792    | kWh |                               |      |                   |  |

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

|                 |  |  |
|-----------------|--|--|
| Contact details | MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD. | Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K. |
|-----------------|--|--|

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

Atsushi EDAYOSHI

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

Manager, Quality Assurance Department

UNITED KINGDOM

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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(T<sub>j</sub>).

(\*\*) If C<sub>d,h</sub> is not determined by measurement then the default degradation coefficient is C<sub>d,h</sub> = 0,9.

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



**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                                 |
|---------------------------------------|---------------|---------------------------------|
| Model(s):                             | Outdoor unit: | PUD-SHWM120VAA(-BS)             |
|                                       | Indoor unit:  | ERSD-MED                        |
| Air-to-water heat pump:               |               | yes                             |
| Water-to-water heat pump:             |               | no                              |
| Brine-to-water heat pump:             |               | no                              |
| Low-temperature heat pump:            |               | no                              |
| Equipped with a supplementary heater: |               | no                              |
| Heat pump combination heater:         |               | no                              |
| Parameters for                        |               | medium-temperature application. |
| Parameters for                        |               | warmer climate conditions.      |

| Item   | Symbol           | Value | Unit | Item   | Symbol     | Value | Unit |
|--|------------------|-------|------|--|------------|-------|------|
| Rated heat output (*)  | Prated           | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$   | 159   | %    |
| Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj |                  |       |      | Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj |            |       |      |
| Tj = - 7 °C  | Pdh              | -     | kW   | Tj = - 7 °C  | COPd       | -     | -    |
| Degradation co-efficient (**)  | Cdh              | -     | -    | Tj = + 2 °C  | COPd       | 2.03  | -    |
| Tj = + 2 °C  | Pdh              | 12.0  | kW   | Tj = + 7 °C  | COPd       | 3.38  | -    |
| Degradation co-efficient (**)  | Cdh              | 1.00  | -    | Tj = +12 °C  | COPd       | 5.59  | -    |
| Tj = + 7 °C  | Pdh              | 7.7   | kW   | Tj = bivalent temperature  | COPd       | 2.03  | -    |
| Degradation co-efficient (**)  | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)   | COPd       | 2.03  | -    |
| Tj = +12 °C  | Pdh              | 5.2   | kW   | Operation limit temperature  | TOL        | -28   | °C   |
| Degradation co-efficient (**)  | Cdh              | 0.98  | -    | Heating water operating limit temperature  | WTOL       | 60    | °C   |
| Tj = bivalent temperature  | Pdh              | 12.0  | kW   | Supplementary heater   |            |       |      |
| Tj = operation limit temperature (***)   | Pdh              | 12.0  | 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 / 60 | dBA |                               |      |                   |  |
| Annual energy consumption           | Q <sub>HE</sub> | 3963    | kWh |                               |      |                   |  |

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

Contact details

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

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

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

|                                       |               |                              |
|---------------------------------------|---------------|------------------------------|
| Model(s):                             | Outdoor unit: | PUD-SHWM120VAA(-BS)          |
|                                       | Indoor unit:  | ERSD-MED                     |
| Air-to-water heat pump:               |               | yes                          |
| Water-to-water heat pump:             |               | no                           |
| Brine-to-water heat pump:             |               | no                           |
| Low-temperature heat pump:            |               | no                           |
| Equipped with a supplementary heater: |               | no                           |
| Heat pump combination heater:         |               | no                           |
| Parameters for                        |               | low-temperature application. |
| Parameters for                        |               | warmer climate conditions.   |

| Item   | Symbol           | Value | Unit | Item   | Symbol     | Value | Unit |
|--|------------------|-------|------|--|------------|-------|------|
| Rated heat output (*)  | Prated           | 12.0  | kW   | Seasonal space heating energy efficiency   | $\eta_s$   | 231   | %    |
| 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       | 3.30  | -    |
| Tj = + 2 °C  | Pdh              | 12.0  | kW   | Tj = + 7 °C  | COPd       | 5.26  | -    |
| Degradation co-efficient (**)  | Cdh              | 1.00  | -    | Tj = +12 °C  | COPd       | 7.46  | -    |
| Tj = + 7 °C  | Pdh              | 7.7   | kW   | Tj = bivalent temperature  | COPd       | 3.30  | -    |
| Degradation co-efficient (**)  | Cdh              | 0.99  | -    | Tj = operation limit temperature (***)   | COPd       | 3.30  | -    |
| Tj = +12 °C  | Pdh              | 4.4   | kW   | Operation limit temperature  | TOL        | -28   | °C   |
| Degradation co-efficient (**)  | Cdh              | 0.98  | -    | Heating water operating limit temperature  | WTOL       | 60    | °C   |
| Tj = bivalent temperature  | Pdh              | 12.0  | kW   | Supplementary heater   |            |       |      |
| Tj = operation limit temperature (***)   | Pdh              | 12.0  | 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 | - | 2640 | m <sup>3</sup> /h |
| Capacity control                    | variable        |         |     |                               |   |      |                   |
| Sound power level, indoors/outdoors | L <sub>WA</sub> | 41 / 60 | dBA |                               |   |      |                   |
| Annual energy consumption           | Q <sub>HE</sub> | 2745    | kWh |                               |   |      |                   |

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

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

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