

**Subtype Samsung EHS TDM Plus R410A 12 kW & 16 kW(WMHTIH 200L)**

|                     |   |
|---------------------|---|
| Certificate Holder  | Samsung Electronics Air Conditioner Europe B.V.       |
| Address             | Evert van de Beekstraat 310                           |
| ZIP                 | 1118 CX   |
| City                | Schiphol  |
| Country             | NL  |
| Certification Body  | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH |
| Subtype title       | Samsung EHS TDM Plus R410A 12 kW & 16 kW(WMHTIH 200L) |
| Registration number | 011-1W0998  |
| Heat Pump Type      | Outdoor Air/Water                                     |
| Refrigerant         | R410A   |
| Mass of Refrigerant | 3.5 kg  |
| Certification Date  | 17.03.2025  |
| Testing basis       | HP KEYMARK certification scheme rules rev. 14         |

**Model AE120MXTPEH/EU AE200DNXTPH/EU**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Model name                          | AE120MXTPEH/EU AE200DNXTPH/EU |
| Application                         | Heating + DHW + low temp      |
| Units                               | Indoor, Outdoor               |
| Climate zone (for heating)          | n/a                           |
| Reversibility                       | Yes                           |
| Cooling mode application (optional) | n/a                           |
| Any additional heat sources         | n/a                           |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water****EN 16147 | Average Climate**

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency $\eta_{DHW}$         | 148 %      |
| COP                             | 3.40       |
| Heating up time                 | 1:10 h:min |
| Standby power input             | 45.0 W     |
| Reference hot water temperature | 49.0 °C    |
| Mixed water at 40°C             | 220 l      |

**EN 14511-4 | Heating**

|  |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

**EN 14511-2 | Heating**

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 12 kW           | 10.72 kW           |
| El input    | 2.72 kW         | 3.91 kW            |
| COP         | 4.41            | 2.74               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 47 dB(A)        | 47 dB(A)           |
| Sound power level outdoor | 70 dB(A)        | 70 dB(A)           |

**EN 14825 | Average Climate**

|          | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| $\eta_S$ | 183 %           | 114 %              |

|   |             |             |
|---|-------------|-------------|
| Prated  | 10 kW       | 8 kW        |
| SCOP  | 4.65        | 2.92        |
| Tbiv  | -10 °C      | -10 °C      |
| TOL   | -10 °C      | -10 °C      |
| Pdh Tj = -7°C                                       | 8.8 kW      | 7.1 kW      |
| COP Tj = -7°C                                       | 2.72        | 1.94        |
| Cdh Tj = -7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +2°C                                       | 5.4 kW      | 4.3 kW      |
| COP Tj = +2°C                                       | 4.69        | 2.86        |
| Cdh Tj = +2 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +7°C                                       | 3.5 kW      | 2.8 kW      |
| COP Tj = +7°C                                       | 5.92        | 3.43        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 4.4 kW      | 5 kW        |
| COP Tj = 12°C                                       | 7.85        | 5.52        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 10 kW       | 8 kW        |
| COP Tj = Tbiv                                       | 2.41        | 1.79        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10 kW       | 8 kW        |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.41        | 1.79        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0 kW        | 0 kW        |
| Annual energy consumption Qhe                       | 4516 kWh    | 5799 kWh    |

**Model AE120MXTPEH/EU AE200DNWTPH/EU**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Model name                          | AE120MXTPEH/EU AE200DNWTPH/EU |
| Application                         | Heating + DHW + low temp      |
| Units                               | Indoor, Outdoor               |
| Climate zone (for heating)          | n/a                           |
| Reversibility                       | Yes                           |
| Cooling mode application (optional) | n/a                           |
| Any additional heat sources         | n/a                           |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water****EN 16147 | Average Climate**

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency $\eta_{DHW}$         | 148 %      |
| COP                             | 3.40       |
| Heating up time                 | 1:10 h:min |
| Standby power input             | 45.0 W     |
| Reference hot water temperature | 49.0 °C    |
| Mixed water at 40°C             | 220 l      |

**EN 14511-4 | Heating**

|  |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

**EN 14511-2 | Heating**

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 12 kW           | 10.72 kW           |
| El input    | 2.72 kW         | 3.91 kW            |
| COP         | 4.41            | 2.74               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 45 dB(A)        | 45 dB(A)           |
| Sound power level outdoor | 70 dB(A)        | 70 dB(A)           |

**EN 14825 | Average Climate**

|          | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| $\eta_S$ | 183 %           | 114 %              |

|   |             |             |
|---|-------------|-------------|
| Prated  | 10 kW       | 8 kW        |
| SCOP  | 4.65        | 2.92        |
| Tbiv  | -10 °C      | -10 °C      |
| TOL   | -10 °C      | -10 °C      |
| Pdh Tj = -7°C                                       | 8.8 kW      | 7.1 kW      |
| COP Tj = -7°C                                       | 2.72        | 1.94        |
| Cdh Tj = -7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +2°C                                       | 5.4 kW      | 4.3 kW      |
| COP Tj = +2°C                                       | 4.69        | 2.86        |
| Cdh Tj = +2 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +7°C                                       | 3.5 kW      | 2.8 kW      |
| COP Tj = +7°C                                       | 5.92        | 3.43        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 4.4 kW      | 5 kW        |
| COP Tj = 12°C                                       | 7.85        | 5.52        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 10 kW       | 8 kW        |
| COP Tj = Tbiv                                       | 2.41        | 1.79        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10 kW       | 8 kW        |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.41        | 1.79        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0 kW        | 0 kW        |
| Annual energy consumption Qhe                       | 4516 kWh    | 5799 kWh    |

**Model AE120MXTPEH/EU AE160DNZTPH/EU**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Model name                          | AE120MXTPEH/EU AE160DNZTPH/EU |
| Application                         | Heating (medium temp)         |
| Units                               | Indoor, Outdoor               |
| Climate zone (for heating)          | n/a                           |
| Reversibility                       | Yes                           |
| Cooling mode application (optional) | n/a                           |
| Any additional heat sources         | n/a                           |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

|                               |        |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test                  | passed |
| Starting and operating test   | passed |

**EN 14511-2 | Heating**

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 12 kW           | 10.72 kW           |
| El input    | 2.72 kW         | 3.91 kW            |
| COP         | 4.41            | 2.74               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 47 dB(A)        | 47 dB(A)           |
| Sound power level outdoor | 70 dB(A)        | 70 dB(A)           |

**EN 14825 | Average Climate**

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 183 %           | 114 %              |
| Prated         | 10 kW           | 8 kW               |
| SCOP           | 4.65            | 2.92               |
| Tbiv           | -10 °C          | -10 °C             |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 8.8 kW          | 7.1 kW             |
| COP Tj = -7°C  | 2.72            | 1.94               |
| Cdh Tj = -7 °C | 0.9             | 0.9                |
| Pdh Tj = +2°C  | 5.4 kW          | 4.3 kW             |
| COP Tj = +2°C  | 4.69            | 2.86               |
| Cdh Tj = +2 °C | 0.9             | 0.9                |

|   |             |             |
|---|-------------|-------------|
| Pdh Tj = +7°C                                       | 3.5 kW      | 2.8 kW      |
| COP Tj = +7°C                                       | 5.92        | 3.43        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 4.4 kW      | 5 kW        |
| COP Tj = 12°C                                       | 7.85        | 5.52        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 10 kW       | 8 kW        |
| COP Tj = Tbiv                                       | 2.41        | 1.79        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10 kW       | 8 kW        |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.41        | 1.79        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0 kW        | 0 kW        |
| Annual energy consumption Qhe                       | 4516 kWh    | 5799 kWh    |

**Model AE120MXTPEH/EU AE160DNYTPH/EU**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Model name                          | AE120MXTPEH/EU AE160DNYTPH/EU |
| Application                         | Heating (medium temp)         |
| Units                               | Indoor, Outdoor               |
| Climate zone (for heating)          | n/a                           |
| Reversibility                       | Yes                           |
| Cooling mode application (optional) | n/a                           |
| Any additional heat sources         | n/a                           |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

|                               |        |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test                  | passed |
| Starting and operating test   | passed |

**EN 14511-2 | Heating**

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 12 kW           | 10.72 kW           |
| El input    | 2.72 kW         | 3.91 kW            |
| COP         | 4.41            | 2.74               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 45 dB(A)        | 45 dB(A)           |
| Sound power level outdoor | 70 dB(A)        | 70 dB(A)           |

**EN 14825 | Average Climate**

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 183 %           | 114 %              |
| Prated         | 10 kW           | 8 kW               |
| SCOP           | 4.65            | 2.92               |
| Tbiv           | -10 °C          | -10 °C             |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 8.8 kW          | 7.1 kW             |
| COP Tj = -7°C  | 2.72            | 1.94               |
| Cdh Tj = -7 °C | 0.9             | 0.9                |
| Pdh Tj = +2°C  | 5.4 kW          | 4.3 kW             |
| COP Tj = +2°C  | 4.69            | 2.86               |
| Cdh Tj = +2 °C | 0.9             | 0.9                |

|   |             |             |
|---|-------------|-------------|
| Pdh Tj = +7°C                                       | 3.5 kW      | 2.8 kW      |
| COP Tj = +7°C                                       | 5.92        | 3.43        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 4.4 kW      | 5 kW        |
| COP Tj = 12°C                                       | 7.85        | 5.52        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 10 kW       | 8 kW        |
| COP Tj = Tbiv                                       | 2.41        | 1.79        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10 kW       | 8 kW        |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.41        | 1.79        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0 kW        | 0 kW        |
| Annual energy consumption Qhe                       | 4516 kWh    | 5799 kWh    |

**Model AE120MXTPGH/EU AE200DNXTPH/EU**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Model name                          | AE120MXTPGH/EU AE200DNXTPH/EU |
| Application                         | Heating + DHW + low temp      |
| Units                               | Indoor, Outdoor               |
| Climate zone (for heating)          | n/a                           |
| Reversibility                       | Yes                           |
| Cooling mode application (optional) | n/a                           |
| Any additional heat sources         | n/a                           |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 3x400V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water****EN 16147 | Average Climate**

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency $\eta_{DHW}$         | 148 %      |
| COP                             | 3.40       |
| Heating up time                 | 1:10 h:min |
| Standby power input             | 45.0 W     |
| Reference hot water temperature | 49.0 °C    |
| Mixed water at 40°C             | 220 l      |

**EN 14511-4 | Heating**

|  |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

**EN 14511-2 | Heating**

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 12 kW           | 10.72 kW           |
| El input    | 2.72 kW         | 3.91 kW            |
| COP         | 4.41            | 2.74               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 47 dB(A)        | 47 dB(A)           |
| Sound power level outdoor | 70 dB(A)        | 70 dB(A)           |

**EN 14825 | Average Climate**

|          | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| $\eta_S$ | 183 %           | 114 %              |

|   |             |             |
|---|-------------|-------------|
| Prated  | 10 kW       | 8 kW        |
| SCOP  | 4.65        | 2.92        |
| Tbiv  | -10 °C      | -10 °C      |
| TOL   | -10 °C      | -10 °C      |
| Pdh Tj = -7°C                                       | 8.8 kW      | 7.1 kW      |
| COP Tj = -7°C                                       | 2.72        | 1.94        |
| Cdh Tj = -7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +2°C                                       | 5.4 kW      | 4.3 kW      |
| COP Tj = +2°C                                       | 4.69        | 2.86        |
| Cdh Tj = +2 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +7°C                                       | 3.5 kW      | 2.8 kW      |
| COP Tj = +7°C                                       | 5.92        | 3.43        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 4.4 kW      | 5 kW        |
| COP Tj = 12°C                                       | 7.85        | 5.52        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 10 kW       | 8 kW        |
| COP Tj = Tbiv                                       | 2.41        | 1.79        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10 kW       | 8 kW        |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.41        | 1.79        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0 kW        | 0 kW        |
| Annual energy consumption Qhe                       | 4516 kWh    | 5799 kWh    |

**Model AE120MXTPGH/EU AE200DNWTPH/EU**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Model name                          | AE120MXTPGH/EU AE200DNWTPH/EU |
| Application                         | Heating + DHW + low temp      |
| Units                               | Indoor, Outdoor               |
| Climate zone (for heating)          | n/a                           |
| Reversibility                       | Yes                           |
| Cooling mode application (optional) | n/a                           |
| Any additional heat sources         | n/a                           |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 3x400V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water****EN 16147 | Average Climate**

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency $\eta_{DHW}$         | 148 %      |
| COP                             | 3.40       |
| Heating up time                 | 1:10 h:min |
| Standby power input             | 45.0 W     |
| Reference hot water temperature | 49.0 °C    |
| Mixed water at 40°C             | 220 l      |

**EN 14511-4 | Heating**

|  |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

**EN 14511-2 | Heating**

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 12 kW           | 10.72 kW           |
| El input    | 2.72 kW         | 3.91 kW            |
| COP         | 4.41            | 2.74               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 45 dB(A)        | 45 dB(A)           |
| Sound power level outdoor | 70 dB(A)        | 70 dB(A)           |

**EN 14825 | Average Climate**

|          | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| $\eta_S$ | 183 %           | 114 %              |

|   |             |             |
|---|-------------|-------------|
| Prated  | 10 kW       | 8 kW        |
| SCOP  | 4.65        | 2.92        |
| Tbiv  | -10 °C      | -10 °C      |
| TOL   | -10 °C      | -10 °C      |
| Pdh Tj = -7°C                                       | 8.8 kW      | 7.1 kW      |
| COP Tj = -7°C                                       | 2.72        | 1.94        |
| Cdh Tj = -7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +2°C                                       | 5.4 kW      | 4.3 kW      |
| COP Tj = +2°C                                       | 4.69        | 2.86        |
| Cdh Tj = +2 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +7°C                                       | 3.5 kW      | 2.8 kW      |
| COP Tj = +7°C                                       | 5.92        | 3.43        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 4.4 kW      | 5 kW        |
| COP Tj = 12°C                                       | 7.85        | 5.52        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 10 kW       | 8 kW        |
| COP Tj = Tbiv                                       | 2.41        | 1.79        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10 kW       | 8 kW        |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.41        | 1.79        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0 kW        | 0 kW        |
| Annual energy consumption Qhe                       | 4516 kWh    | 5799 kWh    |

**Model AE120MXTPGH/EU AE160DNZTPH/EU**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Model name                          | AE120MXTPGH/EU AE160DNZTPH/EU |
| Application                         | Heating (medium temp)         |
| Units                               | Indoor, Outdoor               |
| Climate zone (for heating)          | n/a                           |
| Reversibility                       | Yes                           |
| Cooling mode application (optional) | n/a                           |
| Any additional heat sources         | n/a                           |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 3x400V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water****EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

|                               |        |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test                  | passed |
| Starting and operating test   | passed |

**EN 14511-2 | Heating**

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 12 kW           | 10.72 kW           |
| El input    | 2.72 kW         | 3.91 kW            |
| COP         | 4.41            | 2.74               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 47 dB(A)        | 47 dB(A)           |
| Sound power level outdoor | 70 dB(A)        | 70 dB(A)           |

**EN 14825 | Average Climate**

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 183 %           | 114 %              |
| Prated         | 10 kW           | 8 kW               |
| SCOP           | 4.65            | 2.92               |
| Tbiv           | -10 °C          | -10 °C             |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 8.8 kW          | 7.1 kW             |
| COP Tj = -7°C  | 2.72            | 1.94               |
| Cdh Tj = -7 °C | 0.9             | 0.9                |
| Pdh Tj = +2°C  | 5.4 kW          | 4.3 kW             |
| COP Tj = +2°C  | 4.69            | 2.86               |
| Cdh Tj = +2 °C | 0.9             | 0.9                |

|   |             |             |
|---|-------------|-------------|
| Pdh Tj = +7°C                                       | 3.5 kW      | 2.8 kW      |
| COP Tj = +7°C                                       | 5.92        | 3.43        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 4.4 kW      | 5 kW        |
| COP Tj = 12°C                                       | 7.85        | 5.52        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 10 kW       | 8 kW        |
| COP Tj = Tbiv                                       | 2.41        | 1.79        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10 kW       | 8 kW        |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.41        | 1.79        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0 kW        | 0 kW        |
| Annual energy consumption Qhe                       | 4516 kWh    | 5799 kWh    |

**Model AE120MXTPGH/EU AE160DNYTPH/EU**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Model name                          | AE120MXTPGH/EU AE160DNYTPH/EU |
| Application                         | Heating (medium temp)         |
| Units                               | Indoor, Outdoor               |
| Climate zone (for heating)          | n/a                           |
| Reversibility                       | Yes                           |
| Cooling mode application (optional) | n/a                           |
| Any additional heat sources         | n/a                           |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 3x400V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water**
**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

|                               |        |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test                  | passed |
| Starting and operating test   | passed |

**EN 14511-2 | Heating**

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 12 kW           | 10.72 kW           |
| El input    | 2.72 kW         | 3.91 kW            |
| COP         | 4.41            | 2.74               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 45 dB(A)        | 45 dB(A)           |
| Sound power level outdoor | 70 dB(A)        | 70 dB(A)           |

**EN 14825 | Average Climate**

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 183 %           | 114 %              |
| Prated         | 10 kW           | 8 kW               |
| SCOP           | 4.65            | 2.92               |
| Tbiv           | -10 °C          | -10 °C             |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 8.8 kW          | 7.1 kW             |
| COP Tj = -7°C  | 2.72            | 1.94               |
| Cdh Tj = -7 °C | 0.9             | 0.9                |
| Pdh Tj = +2°C  | 5.4 kW          | 4.3 kW             |
| COP Tj = +2°C  | 4.69            | 2.86               |
| Cdh Tj = +2 °C | 0.9             | 0.9                |

|   |             |             |
|---|-------------|-------------|
| Pdh Tj = +7°C                                       | 3.5 kW      | 2.8 kW      |
| COP Tj = +7°C                                       | 5.92        | 3.43        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 4.4 kW      | 5 kW        |
| COP Tj = 12°C                                       | 7.85        | 5.52        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 10 kW       | 8 kW        |
| COP Tj = Tbiv                                       | 2.41        | 1.79        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 10 kW       | 8 kW        |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.41        | 1.79        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0 kW        | 0 kW        |
| Annual energy consumption Qhe                       | 4516 kWh    | 5799 kWh    |

**Model AE160MXTPEH/EU AE200DNXTPH/EU**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Model name                          | AE160MXTPEH/EU AE200DNXTPH/EU |
| Application                         | Heating + DHW + low temp      |
| Units                               | Indoor, Outdoor               |
| Climate zone (for heating)          | n/a                           |
| Reversibility                       | Yes                           |
| Cooling mode application (optional) | n/a                           |
| Any additional heat sources         | n/a                           |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water****EN 16147 | Average Climate**

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency $\eta_{DHW}$         | 148 %      |
| COP                             | 3.40       |
| Heating up time                 | 1:10 h:min |
| Standby power input             | 45.0 W     |
| Reference hot water temperature | 49.0 °C    |
| Mixed water at 40°C             | 220 l      |

**EN 14511-4 | Heating**

|  |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

**EN 14511-2 | Heating**

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 16 kW           | 14.6 kW            |
| EI input    | 3.95 kW         | 5.32 kW            |
| COP         | 4.05            | 2.74               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 47 dB(A)        | 47 dB(A)           |
| Sound power level outdoor | 73 dB(A)        | 73 dB(A)           |

**EN 14825 | Average Climate**

|          | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| $\eta_S$ | 182 %           | 119 %              |

|   |             |             |
|---|-------------|-------------|
| Prated  | 11 kW       | 9 kW        |
| SCOP  | 4.63        | 3.06        |
| Tbiv  | -10 °C      | -10 °C      |
| TOL   | -10 °C      | -10 °C      |
| Pdh Tj = -7°C                                       | 9.9 kW      | 7.8 kW      |
| COP Tj = -7°C                                       | 2.65        | 2.01        |
| Cdh Tj = -7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +2°C                                       | 6 kW        | 4.7 kW      |
| COP Tj = +2°C                                       | 4.62        | 2.97        |
| Cdh Tj = +2 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +7°C                                       | 3.9 kW      | 3.5 kW      |
| COP Tj = +7°C                                       | 6.12        | 3.73        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 4.4 kW      | 5 kW        |
| COP Tj = 12°C                                       | 7.85        | 5.52        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 11.2 kW     | 8.8 kW      |
| COP Tj = Tbiv                                       | 2.33        | 1.83        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.2 kW     | 8.8 kW      |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.3         | 1.83        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0 kW        | 0 kW        |
| Annual energy consumption Qhe                       | 5086 kWh    | 6111 kWh    |

**Model AE160MXTPEH/EU AE200DNWTPH/EU**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Model name                          | AE160MXTPEH/EU AE200DNWTPH/EU |
| Application                         | Heating + DHW + low temp      |
| Units                               | Indoor, Outdoor               |
| Climate zone (for heating)          | n/a                           |
| Reversibility                       | Yes                           |
| Cooling mode application (optional) | n/a                           |
| Any additional heat sources         | n/a                           |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water****EN 16147 | Average Climate**

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency $\eta_{DHW}$         | 148 %      |
| COP                             | 3.40       |
| Heating up time                 | 1:10 h:min |
| Standby power input             | 45.0 W     |
| Reference hot water temperature | 49.0 °C    |
| Mixed water at 40°C             | 220 l      |

**EN 14511-4 | Heating**

|  |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

**EN 14511-2 | Heating**

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 16 kW           | 14.6 kW            |
| EI input    | 3.95 kW         | 5.32 kW            |
| COP         | 4.05            | 2.74               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 45 dB(A)        | 45 dB(A)           |
| Sound power level outdoor | 73 dB(A)        | 73 dB(A)           |

**EN 14825 | Average Climate**

|          | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| $\eta_S$ | 182 %           | 119 %              |

|   |             |             |
|---|-------------|-------------|
| Prated  | 11 kW       | 9 kW        |
| SCOP  | 4.63        | 3.06        |
| Tbiv  | -10 °C      | -10 °C      |
| TOL   | -10 °C      | -10 °C      |
| Pdh Tj = -7°C                                       | 9.9 kW      | 7.8 kW      |
| COP Tj = -7°C                                       | 2.65        | 2.01        |
| Cdh Tj = -7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +2°C                                       | 6 kW        | 4.7 kW      |
| COP Tj = +2°C                                       | 4.62        | 2.97        |
| Cdh Tj = +2 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +7°C                                       | 3.9 kW      | 3.5 kW      |
| COP Tj = +7°C                                       | 6.12        | 3.73        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 4.4 kW      | 5 kW        |
| COP Tj = 12°C                                       | 7.85        | 5.52        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 11.2 kW     | 8.8 kW      |
| COP Tj = Tbiv                                       | 2.33        | 1.83        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.2 kW     | 8.8 kW      |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.3         | 1.83        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0 kW        | 0 kW        |
| Annual energy consumption Qhe                       | 5086 kWh    | 6111 kWh    |

**Model AE160MXTPEH/EU AE160DNZTPH/EU**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Model name                          | AE160MXTPEH/EU AE160DNZTPH/EU |
| Application                         | Heating (medium temp)         |
| Units                               | Indoor, Outdoor               |
| Climate zone (for heating)          | n/a                           |
| Reversibility                       | Yes                           |
| Cooling mode application (optional) | n/a                           |
| Any additional heat sources         | n/a                           |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water**
**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

|                               |        |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test                  | passed |
| Starting and operating test   | passed |

**EN 14511-2 | Heating**

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 16 kW           | 14.6 kW            |
| El input    | 3.95 kW         | 5.32 kW            |
| COP         | 4.05            | 2.74               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 47 dB(A)        | 47 dB(A)           |
| Sound power level outdoor | 73 dB(A)        | 73 dB(A)           |

**EN 14825 | Average Climate**

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 182 %           | 119 %              |
| Prated         | 11 kW           | 9 kW               |
| SCOP           | 4.63            | 3.06               |
| Tbiv           | -10 °C          | -10 °C             |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 9.9 kW          | 7.8 kW             |
| COP Tj = -7°C  | 2.65            | 2.01               |
| Cdh Tj = -7 °C | 0.9             | 0.9                |
| Pdh Tj = +2°C  | 6 kW            | 4.7 kW             |
| COP Tj = +2°C  | 4.62            | 2.97               |
| Cdh Tj = +2 °C | 0.9             | 0.9                |

|   |             |             |
|---|-------------|-------------|
| Pdh Tj = +7°C                                       | 3.9 kW      | 3.5 kW      |
| COP Tj = +7°C                                       | 6.12        | 3.73        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 4.4 kW      | 5 kW        |
| COP Tj = 12°C                                       | 7.85        | 5.52        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 11.2 kW     | 8.8 kW      |
| COP Tj = Tbiv                                       | 2.33        | 1.83        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.2 kW     | 8.8 kW      |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.3         | 1.83        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0 kW        | 0 kW        |
| Annual energy consumption Qhe                       | 5086 kWh    | 6111 kWh    |

**Model AE160MXTPEH/EU AE160DNYTPH/EU**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Model name                          | AE160MXTPEH/EU AE160DNYTPH/EU |
| Application                         | Heating (medium temp)         |
| Units                               | Indoor, Outdoor               |
| Climate zone (for heating)          | n/a                           |
| Reversibility                       | Yes                           |
| Cooling mode application (optional) | n/a                           |
| Any additional heat sources         | n/a                           |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water**
**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

|                               |        |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test                  | passed |
| Starting and operating test   | passed |

**EN 14511-2 | Heating**

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 16 kW           | 14.6 kW            |
| El input    | 3.95 kW         | 5.32 kW            |
| COP         | 4.05            | 2.74               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 45 dB(A)        | 45 dB(A)           |
| Sound power level outdoor | 73 dB(A)        | 73 dB(A)           |

**EN 14825 | Average Climate**

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 182 %           | 119 %              |
| Prated         | 11 kW           | 9 kW               |
| SCOP           | 4.63            | 3.06               |
| Tbiv           | -10 °C          | -10 °C             |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 9.9 kW          | 7.8 kW             |
| COP Tj = -7°C  | 2.65            | 2.01               |
| Cdh Tj = -7 °C | 0.9             | 0.9                |
| Pdh Tj = +2°C  | 6 kW            | 4.7 kW             |
| COP Tj = +2°C  | 4.62            | 2.97               |
| Cdh Tj = +2 °C | 0.9             | 0.9                |

|   |             |             |
|---|-------------|-------------|
| Pdh Tj = +7°C                                       | 3.9 kW      | 3.5 kW      |
| COP Tj = +7°C                                       | 6.12        | 3.73        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 4.4 kW      | 5 kW        |
| COP Tj = 12°C                                       | 7.85        | 5.52        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 11.2 kW     | 8.8 kW      |
| COP Tj = Tbiv                                       | 2.33        | 1.83        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.2 kW     | 8.8 kW      |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.3         | 1.83        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0 kW        | 0 kW        |
| Annual energy consumption Qhe                       | 5086 kWh    | 6111 kWh    |

**Model AE160MXTPGH/EU AE200DNXTPH/EU**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Model name                          | AE160MXTPGH/EU AE200DNXTPH/EU |
| Application                         | Heating + DHW + low temp      |
| Units                               | Indoor, Outdoor               |
| Climate zone (for heating)          | n/a                           |
| Reversibility                       | Yes                           |
| Cooling mode application (optional) | n/a                           |
| Any additional heat sources         | n/a                           |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 3x400V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water****EN 16147 | Average Climate**

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency $\eta_{DHW}$         | 148 %      |
| COP                             | 3.40       |
| Heating up time                 | 1:10 h:min |
| Standby power input             | 45.0 W     |
| Reference hot water temperature | 49.0 °C    |
| Mixed water at 40°C             | 220 l      |

**EN 14511-4 | Heating**

|  |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

**EN 14511-2 | Heating**

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 16 kW           | 14.6 kW            |
| El input    | 3.95 kW         | 5.32 kW            |
| COP         | 4.05            | 2.74               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 47 dB(A)        | 47 dB(A)           |
| Sound power level outdoor | 73 dB(A)        | 73 dB(A)           |

**EN 14825 | Average Climate**

|          | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| $\eta_S$ | 182 %           | 119 %              |

|   |             |             |
|---|-------------|-------------|
| Prated  | 11 kW       | 9 kW        |
| SCOP  | 4.63        | 3.06        |
| Tbiv  | -10 °C      | -10 °C      |
| TOL   | -10 °C      | -10 °C      |
| Pdh Tj = -7°C                                       | 9.9 kW      | 7.8 kW      |
| COP Tj = -7°C                                       | 2.65        | 2.01        |
| Cdh Tj = -7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +2°C                                       | 6 kW        | 4.7 kW      |
| COP Tj = +2°C                                       | 4.62        | 2.97        |
| Cdh Tj = +2 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +7°C                                       | 3.9 kW      | 3.5 kW      |
| COP Tj = +7°C                                       | 6.12        | 3.73        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 4.4 kW      | 5 kW        |
| COP Tj = 12°C                                       | 7.85        | 5.52        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 11.2 kW     | 8.8 kW      |
| COP Tj = Tbiv                                       | 2.33        | 1.83        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.2 kW     | 8.8 kW      |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.3         | 1.83        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0 kW        | 0 kW        |
| Annual energy consumption Qhe                       | 5086 kWh    | 6111 kWh    |

**Model AE160MXTPGH/EU AE200DNWTPH/EU**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Model name                          | AE160MXTPGH/EU AE200DNWTPH/EU |
| Application                         | Heating + DHW + low temp      |
| Units                               | Indoor, Outdoor               |
| Climate zone (for heating)          | n/a                           |
| Reversibility                       | Yes                           |
| Cooling mode application (optional) | n/a                           |
| Any additional heat sources         | n/a                           |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 3x400V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water****EN 16147 | Average Climate**

|                                 |            |
|---------------------------------|------------|
| Declared load profile           | L          |
| Efficiency $\eta_{DHW}$         | 148 %      |
| COP                             | 3.40       |
| Heating up time                 | 1:10 h:min |
| Standby power input             | 45.0 W     |
| Reference hot water temperature | 49.0 °C    |
| Mixed water at 40°C             | 220 l      |

**EN 14511-4 | Heating**

|  |        |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |
| Starting and operating test                | passed |

**EN 14511-2 | Heating**

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 16 kW           | 14.6 kW            |
| El input    | 3.95 kW         | 5.32 kW            |
| COP         | 4.05            | 2.74               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 45 dB(A)        | 45 dB(A)           |
| Sound power level outdoor | 73 dB(A)        | 73 dB(A)           |

**EN 14825 | Average Climate**

|          | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| $\eta_S$ | 182 %           | 119 %              |

|   |             |             |
|---|-------------|-------------|
| Prated  | 11 kW       | 9 kW        |
| SCOP  | 4.63        | 3.06        |
| Tbiv  | -10 °C      | -10 °C      |
| TOL   | -10 °C      | -10 °C      |
| Pdh Tj = -7°C                                       | 9.9 kW      | 7.8 kW      |
| COP Tj = -7°C                                       | 2.65        | 2.01        |
| Cdh Tj = -7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +2°C                                       | 6 kW        | 4.7 kW      |
| COP Tj = +2°C                                       | 4.62        | 2.97        |
| Cdh Tj = +2 °C                                      | 0.9         | 0.9         |
| Pdh Tj = +7°C                                       | 3.9 kW      | 3.5 kW      |
| COP Tj = +7°C                                       | 6.12        | 3.73        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 4.4 kW      | 5 kW        |
| COP Tj = 12°C                                       | 7.85        | 5.52        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 11.2 kW     | 8.8 kW      |
| COP Tj = Tbiv                                       | 2.33        | 1.83        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.2 kW     | 8.8 kW      |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.3         | 1.83        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0 kW        | 0 kW        |
| Annual energy consumption Qhe                       | 5086 kWh    | 6111 kWh    |

**Model AE160MXTPGH/EU AE160DNZTPH/EU**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Model name                          | AE160MXTPGH/EU AE160DNZTPH/EU |
| Application                         | Heating (medium temp)         |
| Units                               | Indoor, Outdoor               |
| Climate zone (for heating)          | n/a                           |
| Reversibility                       | Yes                           |
| Cooling mode application (optional) | n/a                           |
| Any additional heat sources         | n/a                           |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 3x400V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water**
**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

|                               |        |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test                  | passed |
| Starting and operating test   | passed |

**EN 14511-2 | Heating**

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 16 kW           | 14.6 kW            |
| El input    | 3.95 kW         | 5.32 kW            |
| COP         | 4.05            | 2.74               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 47 dB(A)        | 47 dB(A)           |
| Sound power level outdoor | 73 dB(A)        | 73 dB(A)           |

**EN 14825 | Average Climate**

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 182 %           | 119 %              |
| Prated         | 11 kW           | 9 kW               |
| SCOP           | 4.63            | 3.06               |
| Tbiv           | -10 °C          | -10 °C             |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 9.9 kW          | 7.8 kW             |
| COP Tj = -7°C  | 2.65            | 2.01               |
| Cdh Tj = -7 °C | 0.9             | 0.9                |
| Pdh Tj = +2°C  | 6 kW            | 4.7 kW             |
| COP Tj = +2°C  | 4.62            | 2.97               |
| Cdh Tj = +2 °C | 0.9             | 0.9                |

|   |             |             |
|---|-------------|-------------|
| Pdh Tj = +7°C                                       | 3.9 kW      | 3.5 kW      |
| COP Tj = +7°C                                       | 6.12        | 3.73        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 4.4 kW      | 5 kW        |
| COP Tj = 12°C                                       | 7.85        | 5.52        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 11.2 kW     | 8.8 kW      |
| COP Tj = Tbiv                                       | 2.33        | 1.83        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.2 kW     | 8.8 kW      |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.3         | 1.83        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0 kW        | 0 kW        |
| Annual energy consumption Qhe                       | 5086 kWh    | 6111 kWh    |

**Model AE160MXTPGH/EU AE160DNYTPH/EU**

|                                     |                               |
|-------------------------------------|-------------------------------|
| Model name                          | AE160MXTPGH/EU AE160DNYTPH/EU |
| Application                         | Heating (medium temp)         |
| Units                               | Indoor, Outdoor               |
| Climate zone (for heating)          | n/a                           |
| Reversibility                       | Yes                           |
| Cooling mode application (optional) | n/a                           |
| Any additional heat sources         | n/a                           |

**General data**

|                  |             |
|------------------|-------------|
| Power supply     | 3x400V 50Hz |
| Off-peak product | n/a         |

**Outdoor Air/Water**
**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

|                               |        |
|-------------------------------|--------|
| Complete power supply failure | passed |
| Defrost test                  | passed |
| Starting and operating test   | passed |

**EN 14511-2 | Heating**

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 16 kW           | 14.6 kW            |
| El input    | 3.95 kW         | 5.32 kW            |
| COP         | 4.05            | 2.74               |

**EN 12102-1 | Average Climate**

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 45 dB(A)        | 45 dB(A)           |
| Sound power level outdoor | 73 dB(A)        | 73 dB(A)           |

**EN 14825 | Average Climate**

|                | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| $\eta_s$       | 182 %           | 119 %              |
| Prated         | 11 kW           | 9 kW               |
| SCOP           | 4.63            | 3.06               |
| Tbiv           | -10 °C          | -10 °C             |
| TOL            | -10 °C          | -10 °C             |
| Pdh Tj = -7°C  | 9.9 kW          | 7.8 kW             |
| COP Tj = -7°C  | 2.65            | 2.01               |
| Cdh Tj = -7 °C | 0.9             | 0.9                |
| Pdh Tj = +2°C  | 6 kW            | 4.7 kW             |
| COP Tj = +2°C  | 4.62            | 2.97               |
| Cdh Tj = +2 °C | 0.9             | 0.9                |

|   |             |             |
|---|-------------|-------------|
| Pdh Tj = +7°C                                       | 3.9 kW      | 3.5 kW      |
| COP Tj = +7°C                                       | 6.12        | 3.73        |
| Cdh Tj = +7 °C                                      | 0.9         | 0.9         |
| Pdh Tj = 12°C                                       | 4.4 kW      | 5 kW        |
| COP Tj = 12°C                                       | 7.85        | 5.52        |
| Cdh Tj = +12 °C                                     | 0.9         | 0.9         |
| Pdh Tj = Tbiv                                       | 11.2 kW     | 8.8 kW      |
| COP Tj = Tbiv                                       | 2.33        | 1.83        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.2 kW     | 8.8 kW      |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.3         | 1.83        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.9         | 0.9         |
| WTOL  | 55 °C       | 55 °C       |
| Poff  | 22 W        | 22 W        |
| PTO   | 22 W        | 22 W        |
| PSB   | 22 W        | 22 W        |
| PCK   | 0 W         | 0 W         |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 0 kW        | 0 kW        |
| Annual energy consumption Qhe                       | 5086 kWh    | 6111 kWh    |