

Subtype Samsung EHS TDM Plus R410A 9 kW 1Phase (space heating/ 260L)

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|---------------------|--|
| 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 9 kW 1Phase (space heating/ 260L) |
| Registration number | 011-1W0373 |
| Heat Pump Type | Outdoor Air/Water |
| Refrigerant | R410A |
| Mass of Refrigerant | 2.4 kg |
| Certification Date | 29.07.2020 |
| Testing basis | HP KEYMARK certification scheme rules rev. 14 |

Model AE090MXTPEH/EU & AE260TNWTEH/EU

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|-------------------------------------|---------------------------------|
| Model name | AE090MXTPEH/EU & AE260TNWTEH/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 | XL |
| Efficiency η_{DHW} | 105 % |
| COP | 2.60 |
| Heating up time | 2:30 h:min |
| Standby power input | 85.0 W |
| Reference hot water temperature | 52.0 °C |
| Mixed water at 40°C | 290 l |

EN 14511-4 | Heating

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|--|--------|
| 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 | 9.00 kW | 7.66 kW |
| El input | 2.12 kW | 2.82 kW |
| COP | 4.25 | 2.72 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 43 dB(A) | 43 dB(A) |
| Sound power level outdoor | 69 dB(A) | 69 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------|-----------------|--------------------|
| η_S | 174 % | 117 % |

| | | |
|---|-------------|-------------|
| Prated | 5.60 kW | 5.50 kW |
| SCOP | 4.42 | 3.01 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 5.00 kW | 4.90 kW |
| COP Tj = -7°C | 2.67 | 1.77 |
| Cdh Tj = -7 °C | 0.900 | 0.900 |
| Pdh Tj = +2°C | 3.00 kW | 3.00 kW |
| COP Tj = +2°C | 4.47 | 3.02 |
| Cdh Tj = +2 °C | 0.900 | 0.900 |
| Pdh Tj = +7°C | 3.20 kW | 2.30 kW |
| COP Tj = +7°C | 5.74 | 3.90 |
| Cdh Tj = +7 °C | 0.900 | 0.900 |
| Pdh Tj = 12°C | 3.00 kW | 2.20 kW |
| COP Tj = 12°C | 8.27 | 4.90 |
| Cdh Tj = +12 °C | 0.900 | 0.900 |
| Pdh Tj = Tbiv | 5.60 kW | 5.50 kW |
| COP Tj = Tbiv | 2.31 | 1.59 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.60 kW | 5.50 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.31 | 1.59 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | | |
| 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 | 0.00 kW | 0.00 kW |
| Annual energy consumption Qhe | 2660 kWh | 3885 kWh |

Model AE090MXTPEH/EU & AE090BNYDEH/EU

| | |
|-------------------------------------|---------------------------------|
| Model name | AE090MXTPEH/EU & AE090BNYDEH/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 | 9 kW | 7.66 kW |
| El input | 2.12 kW | 2.82 kW |
| COP | 4.25 | 2.72 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 48 dB(A) | 48 dB(A) |
| Sound power level outdoor | 69 dB(A) | 69 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 174 % | 117 % |
| Prated | 5.6 kW | 5.5 kW |
| SCOP | 4.42 | 3.01 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 5 kW | 4.9 kW |
| COP Tj = -7°C | 2.67 | 1.77 |
| Cdh Tj = -7 °C | 0.9 | 0.9 |
| Pdh Tj = +2°C | 3 kW | 3 kW |
| COP Tj = +2°C | 4.47 | 3.02 |
| Cdh Tj = +2 °C | 0.9 | 0.9 |

| | | |
|---|-------------|-------------|
| Pdh Tj = +7°C | 3.2 kW | 2.3 kW |
| COP Tj = +7°C | 5.74 | 3.9 |
| Cdh Tj = +7 °C | 0.9 | 0.9 |
| Pdh Tj = 12°C | 3 kW | 2.2 kW |
| COP Tj = 12°C | 8.27 | 4.9 |
| Cdh Tj = +12 °C | 0.9 | 0.9 |
| Pdh Tj = Tbiv | 5.6 kW | 5.5 kW |
| COP Tj = Tbiv | 2.31 | 1.59 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.6 kW | 5.5 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.31 | 1.59 |
| 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 | 2660 kWh | 3885 kWh |

Model AE090MXTPEH/EU & AE090MNYDEH/EU

| | |
|-------------------------------------|---------------------------------|
| Model name | AE090MXTPEH/EU & AE090MNYDEH/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 | 9 kW | 7.66 kW |
| El input | 2.12 kW | 2.82 kW |
| COP | 4.25 | 2.72 |

EN 12102-1 | Average Climate

| | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor | 48 dB(A) | 48 dB(A) |
| Sound power level outdoor | 69 dB(A) | 69 dB(A) |

EN 14825 | Average Climate

| | Low temperature | Medium temperature |
|----------------|-----------------|--------------------|
| η_s | 174 % | 117 % |
| Prated | 5.6 kW | 5.5 kW |
| SCOP | 4.42 | 3.01 |
| Tbiv | -10 °C | -10 °C |
| TOL | -10 °C | -10 °C |
| Pdh Tj = -7°C | 5 kW | 4.9 kW |
| COP Tj = -7°C | 2.67 | 1.77 |
| Cdh Tj = -7 °C | 0.9 | 0.9 |
| Pdh Tj = +2°C | 3 kW | 3 kW |
| COP Tj = +2°C | 4.47 | 3.02 |
| Cdh Tj = +2 °C | 0.9 | 0.9 |

| | | |
|---|-------------|-------------|
| Pdh Tj = +7°C | 3.2 kW | 2.3 kW |
| COP Tj = +7°C | 5.74 | 3.9 |
| Cdh Tj = +7 °C | 0.9 | 0.9 |
| Pdh Tj = 12°C | 3 kW | 2.2 kW |
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| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 5.6 kW | 5.5 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.31 | 1.59 |
| 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 | 2660 kWh | 3885 kWh |