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This information was generated by the HP KEYMARK database on 23 Jun 2022

<u>Login</u>

| Summary of | Samsung EHS R410a Split 12kW & 16kW | Reg. No. | 011-1W0523 |
|---------------------|--|----------|-------------|
| Certificate Holder | | | |
| Name | Samsung Electronics Air Conditioner Europe B.V. | | |
| Address | Evert van de Beekstraat 310 | Zip | 1118 CX |
| City | Schiphol | Country | Netherlands |
| Certification Body | DIN CERTCO Gesellschaft für Konformitätsbewertung mbH | | |
| Subtype title | Samsung EHS R410a Split 12kW & 16kW | | |
| Heat Pump Type | Outdoor Air/Water | | |
| Refrigerant | R410A | | |
| Mass of Refrigerant | 2.98 kg | | |
| Certification Date | 29.04.2022 | | |
| Testing basis | ng basis European KEYMARK Scheme for Heat Pumps Rev. 9 (as of 2021-03) | | |



Model: AE160ANYDEH/EU + AE120AXEDEH/EU

| Configure model | | |
|-------------------------------------|---------------------------------|--|
| Model name | AE160ANYDEH/EU + AE120AXEDEH/EU | |
| Application | Heating (low temp) | |
| Units | Indoor + Outdoor | |
| Climate Zone | n/a | |
| Reversibility | Yes | |
| Cooling mode application (optional) | n/a | |

| General Data | | |
|--------------|-------------|--|
| Power supply | 1x230V 50Hz | |

Heating

| EN 14511-2 | | |
|-------------|-----------------|--|
| | Low temperature | |
| Heat output | 12.00 kW | |
| El input | 2.59 kW | |
| СОР | 4.63 | |

| EN 14511-4 | |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |



CEN heat pump KEYMARK

| EN 12102-1 | |
|---------------------------|-----------------|
| | Low temperature |
| Sound power level indoor | 44 dB(A) |
| Sound power level outdoor | 64 dB(A) |

| EN 14825 | | |
|------------------------|-----------------|--|
| | Low temperature | |
| η_{s} | 122 % | |
| Prated | 12.50 kW | |
| SCOP | | |
| Tbiv | -7 °C | |
| TOL | -10 °C | |
| Pdh Tj = -7°C | 11.10 kW | |
| COP Tj = -7°C | 2.09 | |
| Cdh Tj = -7 °C | 0.900 | |
| Pdh Tj = +2°C | 6.70 kW | |
| $COP Tj = +2^{\circ}C$ | 2.98 | |
| Cdh Tj = +2 °C | 0.900 | |
| Pdh Tj = +7°C | 4.30 kW | |
| $COP Tj = +7^{\circ}C$ | 4.06 | |
| Cdh Tj = +7 °C | 0.900 | |
| | | |





| Pdh Tj = 12°C | 4.00 kW |
|---|-------------|
| COP Tj = 12°C | 4.94 |
| Cdh Tj = +12 °C | 0.900 |
| Pdh Tj = Tbiv | 11.10 kW |
| COP Tj = Tbiv | 2.09 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.50 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 1.64 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.900 |
| WTOL | °C |
| Poff | 22 W |
| PTO | 22 W |
| PSB | 22 W |
| PCK | W |
| Supplementary Heater: Type of energy input | Electricity |
| Supplementary Heater: PSUP | 1.00 kW |
| Annual energy consumption Qhe | 5844 kWh |



Model: AE160ANYDGH/EU + AE120AXEDGH/EU

| Configure model | | |
|-------------------------------------|---------------------------------|--|
| Model name | AE160ANYDGH/EU + AE120AXEDGH/EU | |
| Application | Heating (low temp) | |
| Units | Indoor + Outdoor | |
| Climate Zone | n/a | |
| Reversibility | Yes | |
| Cooling mode application (optional) | n/a | |

| General Data | | |
|--------------|-------------|--|
| Power supply | 3x400V 50Hz | |

Heating

| EN 14511-2 | | |
|-------------|-----------------|--|
| | Low temperature | |
| Heat output | 12.00 kW | |
| El input | 2.59 kW | |
| СОР | 4.63 | |

| EN 14511-4 | |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |



| EN 12102-1 | |
|---------------------------|-----------------|
| | Low temperature |
| Sound power level indoor | 44 dB(A) |
| Sound power level outdoor | 64 dB(A) |

| EN 14825 | |
|------------------------|-----------------|
| | Low temperature |
| η_{s} | 122 % |
| Prated | 12.50 kW |
| SCOP | |
| Tbiv | -7 °C |
| TOL | -10 °C |
| Pdh Tj = -7°C | 11.10 kW |
| COP Tj = -7°C | 2.09 |
| Cdh Tj = -7 °C | 0.900 |
| Pdh Tj = +2°C | 6.70 kW |
| COP Tj = +2°C | 2.98 |
| Cdh Tj = +2 °C | 0.900 |
| Pdh Tj = +7°C | 4.30 kW |
| $COP Tj = +7^{\circ}C$ | 4.06 |
| Cdh Tj = +7 °C | 0.900 |
| | , |





| Pdh Tj = 12°C | 4.00 kW |
|---|-------------|
| COP Tj = 12°C | 4.94 |
| Cdh Tj = +12 °C | 0.900 |
| Pdh Tj = Tbiv | 11.10 kW |
| COP Tj = Tbiv | 2.09 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 11.50 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 1.64 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.900 |
| WTOL | °C |
| Poff | 22 W |
| РТО | 22 W |
| PSB | 22 W |
| PCK | W |
| Supplementary Heater: Type of energy input | Electricity |
| Supplementary Heater: PSUP | 1.00 kW |
| Annual energy consumption Qhe | 5844 kWh |



Model: AE160ANYDEH/EU + AE160AXEDEH/EU

| Configure model | | |
|-------------------------------------|---------------------------------|--|
| Model name | AE160ANYDEH/EU + AE160AXEDEH/EU | |
| Application | Heating (low temp) | |
| Units | Indoor + Outdoor | |
| Climate Zone | n/a | |
| Reversibility | Yes | |
| Cooling mode application (optional) | n/a | |

| General Data | | |
|--------------|-------------|--|
| Power supply | 1x230V 50Hz | |

Heating

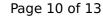
| EN 14511-2 | | |
|-------------|-----------------|--|
| | Low temperature | |
| Heat output | 16.00 kW | |
| El input | 3.76 kW | |
| СОР | 4.26 | |

| EN 14511-4 | |
|--|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure | passed |
| Defrost test | passed |
| Starting and operating test | passed |



| EN 12102-1 | |
|---------------------------|-----------------|
| | Low temperature |
| Sound power level indoor | 44 dB(A) |
| Sound power level outdoor | 66 dB(A) |

| EN 14825 | |
|----------------|-----------------|
| | Low temperature |
| η_{s} | 121 % |
| Prated | 14.00 kW |
| SCOP | |
| Tbiv | -7 °C |
| TOL | -10 °C |
| Pdh Tj = -7°C | 12.40 kW |
| COP Tj = -7°C | 1.88 |
| Cdh Tj = -7 °C | 0.900 |
| Pdh Tj = +2°C | 7.50 kW |
| COP Tj = +2°C | 2.88 |
| Cdh Tj = +2 °C | 0.900 |
| Pdh Tj = +7°C | 4.80 kW |
| COP Tj = +7°C | 4.29 |
| Cdh Tj = +7 °C | 0.900 |





| Pdh Tj = 12°C | 4.30 kW |
|---|-------------|
| COP Tj = 12°C | 6.14 |
| Cdh Tj = +12 °C | 0.900 |
| Pdh Tj = Tbiv | 12.40 kW |
| COP Tj = Tbiv | 1.88 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.00 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 1.74 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.900 |
| WTOL | °C |
| Poff | 22 W |
| PTO | 22 W |
| PSB | 22 W |
| PCK | W |
| Supplementary Heater: Type of energy input | Electricity |
| Supplementary Heater: PSUP | 2.00 kW |
| Annual energy consumption Qhe | 5844 kWh |

Model: AE160ANYDGH/EU + AE160AXEDGH/EU

| Configure model | | |
|-------------------------------------|---------------------------------|--|
| Model name | AE160ANYDGH/EU + AE160AXEDGH/EU | |
| Application | Heating (low temp) | |
| Units | Indoor + Outdoor | |
| Climate Zone | n/a | |
| Reversibility | Yes | |
| Cooling mode application (optional) | n/a | |

| General Data | | |
|--------------|-------------|--|
| Power supply | 3x400V 50Hz | |

Heating

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| Heat output | 16.00 kW | |
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| COP Tj = -7°C | 1.88 | |
| Cdh Tj = -7 °C | 0.900 | |
| Pdh Tj = +2°C | 7.50 kW | |
| COP Tj = +2°C | 2.88 | |
| Cdh Tj = +2 °C | 0.900 | |
| Pdh Tj = +7°C | 4.80 kW | |
| $COP Tj = +7^{\circ}C$ | 4.29 | |
| Cdh Tj = +7 °C | 0.900 | |
| | | |





| This information was generated by the Hill KETT | |
|---|-------------|
| Pdh Tj = 12°C | 4.30 kW |
| COP Tj = 12°C | 6.14 |
| Cdh Tj = +12 °C | 0.900 |
| Pdh Tj = Tbiv | 12.40 kW |
| COP Tj = Tbiv | 1.88 |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.00 kW |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 1.74 |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.900 |
| WTOL | °C |
| Poff | 22 W |
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| PSB | 22 W |
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| Supplementary Heater: Type of energy input | Electricity |
| Supplementary Heater: PSUP | 2.00 kW |
| Annual energy consumption Qhe | 5844 kWh |