

**Subtype Samsung EHS R410a Split 12kW & 16kW**

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 R410a Split 12kW & 16kW
Registration number	011-1W0523
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	2.98 kg
Certification Date	29.04.2022
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 9 (as of 2021-03)

**Model AE120AXEDEH/EU+AE160ANYDEH/EU**

Model name	AE120AXEDEH/EU+AE160ANYDEH/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	12.00 kW	11.00 kW
El input	2.59 kW	3.81 kW
COP	4.63	2.89

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	181 %	122 %
Prated	13.00 kW	12.50 kW
SCOP	4.59	3.12
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7 °C	11.50 kW	11.10 kW
COP Tj = -7 °C	2.91	2.09
Cdh Tj = -7 °C		
Pdh Tj = +2 °C	7.00 kW	6.70 kW
COP Tj = +2 °C	4.24	2.98
Cdh Tj = +2 °C		

Pdh Tj = +7°C	4.50 kW	4.30 kW
COP Tj = +7°C	6.62	4.06
Cdh Tj = +7 °C		
Pdh Tj = 12°C	4.75 kW	4.00 kW
COP Tj = 12°C	7.79	4.94
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	11.50 kW	11.10 kW
COP Tj = Tbiv	2.91	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.80 kW	11.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.37	1.64
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	°C	°C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	W	W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.20 kW	1.00 kW
Annual energy consumption Qhe	5844 kWh	8274 kWh

**Model AE120AXEDGH/EU+AE160ANYDGH/EU**

Model name	AE120AXEDGH/EU+AE160ANYDGH/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	12.00 kW	11.00 kW
El input	2.59 kW	3.81 kW
COP	4.63	2.89

**EN 12102-1 | Average Climate**

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COP Tj = -7 °C	2.91	2.09
Cdh Tj = -7 °C		
Pdh Tj = +2 °C	7.00 kW	6.70 kW
COP Tj = +2 °C	4.24	2.98
Cdh Tj = +2 °C		

Pdh Tj = +7°C	4.50 kW	4.30 kW
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COP Tj = Tbiv	2.91	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.80 kW	11.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.37	1.64
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	°C	°C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	W	W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.20 kW	1.00 kW
Annual energy consumption Qhe	5844 kWh	8274 kWh

**Model AE160AXEDEH/EU+AE160ANYDEH/EU**

Model name	AE160AXEDEH/EU+AE160ANYDEH/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	16.00 kW	14.60 kW
El input	3.76 kW	5.33 kW
COP	4.26	2.74

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	175 %	121 %
Prated	14.00 kW	14.00 kW
SCOP	4.46	3.09
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7 °C	12.40 kW	12.40 kW
COP Tj = -7 °C	2.41	1.88
Cdh Tj = -7 °C		
Pdh Tj = +2 °C	7.50 kW	7.50 kW
COP Tj = +2 °C	4.31	2.88
Cdh Tj = +2 °C		

Pdh Tj = +7°C	4.80 kW	4.80 kW
COP Tj = +7°C	6.58	4.29
Cdh Tj = +7 °C		
Pdh Tj = 12°C	4.40 kW	4.30 kW
COP Tj = 12°C	7.86	6.14
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	12.40 kW	12.40 kW
COP Tj = Tbiv	2.41	1.88
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.00 kW	12.00 kW
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WTOL	°C	°C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	W	W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	2.00 kW
Annual energy consumption Qhe	6478 kWh	9356 kWh

**Model AE160AXEDGH/EU+AE160ANYDGH/EU**

Model name	AE160AXEDGH/EU+AE160ANYDGH/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

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Off-peak product	n/a

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Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	°C	°C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	W	W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	2.00 kW
Annual energy consumption Qhe	6478 kWh	9356 kWh