

## Subtype Samsung EHS R410a Split 12kW &amp; 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 AE160ANYDEH/EU + AE120AXEDEH/EU

Model name	AE160ANYDEH/EU + AE120AXEDEH/EU
Application	Heating (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 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 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	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°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

Model name	AE160ANYDGH/EU + AE120AXEDGH/EU
Application	Heating (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 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 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	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°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 $T_j = T_{biv}$	2.09
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	11.50 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	1.64
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.900
WTOL	°C
P <sub>off</sub>	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 Q <sub>he</sub>	5844 kWh

## Model AE160ANYDEH/EU + AE160AXEDEH/EU

Model name	AE160ANYDEH/EU + AE160AXEDEH/EU
Application	Heating (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 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 12102-1 | Average Climate

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

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	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

Model name	AE160ANYDGH/EU + AE160AXEDGH/EU
Application	Heating (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 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 12102-1 | Average Climate

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

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	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