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Summary of	Samsung EHS R32 Mono 12kW & 16kW (space heating/ 200L)		Reg. No.	011-1W0446
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 R32 Mono 12kW & 16kW (space heating/ 200L)			
Heat Pump Type	Outdoor Air/Water			
Refrigerant	R32			
Mass of Refrigerant	2.2 kg			
Certification Date	26.01.2021			
Testing basis	HP KEYMARK certification scheme rules V7			

Model: AE120RXYDEG/EU & AE200RNWMEG/EU

Configure model	
Model name	AE120RXYDEG/EU & AE200RNWMEG/EU
Application	Heating + DHW + 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	Medium temperature
Heat output	12.00 kW	11.30 kW
El input	2.65 kW	3.73 kW
COP	4.53	3.03

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

Average Climate

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EN 12102-1

	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

	Low temperature	Medium temperature
η_s	185 %	138 %
Prated	13.00 kW	12.00 kW
SCOP	4.69	3.51
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.50 kW	10.60 kW
COP Tj = -7°C	2.71	2.16
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	7.00 kW	6.50 kW
COP Tj = +2°C	4.48	3.45
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.60 kW	4.20 kW
COP Tj = +7°C	6.86	4.57
Cdh Tj = +7 °C	0.90	0.90

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Pdh Tj = 12°C	4.80 kW	4.40 kW
COP Tj = 12°C	8.95	6.12
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	11.50 kW	10.60 kW
COP Tj = Tbiv	2.71	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.37	1.96
WTOL	65 °C	65 °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	5725 kWh	7051 kWh

Domestic Hot Water (DHW)

Average Climate

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EN 16147	
Declared load profile	L
Efficiency η_{DHW}	110 %
COP	2.72
Heating up time	1:30 h:min
Standby power input	62.0 W
Reference hot water temperature	52.1 °C
Mixed water at 40°C	225 l

Model: AE120RXYDEG/EU & MIM-E03CN

Configure model	
Model name	AE120RXYDEG/EU & MIM-E03CN
Application	Heating (medium temp)
Units	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	Medium temperature
Heat output	12.00 kW	11.30 kW
El input	2.65 kW	3.73 kW
COP	4.53	3.03

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

Average Climate

EN 12102-1

	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

	Low temperature	Medium temperature
η_s	185 %	138 %
Prated	13.00 kW	12.00 kW
SCOP	4.69	3.51
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.50 kW	10.62 kW
COP Tj = -7°C	2.71	2.16
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	7.00 kW	6.46 kW
COP Tj = +2°C	4.48	3.45
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.60 kW	4.15 kW
COP Tj = +7°C	6.86	4.57
Cdh Tj = +7 °C	0.90	0.90

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Pdh Tj = 12°C	4.80 kW	4.40 kW
COP Tj = 12°C	8.95	6.12
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	11.50 kW	10.62 kW
COP Tj = Tbiv	2.71	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.37	1.96
WTOL	65 °C	65 °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	5725 kWh	7051 kWh

Model: AE160RXYDEG/EU & AE200RNWMEG/EU

Configure model	
Model name	AE160RXYDEG/EU & AE200RNWMEG/EU
Application	Heating + DHW + 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	Medium temperature
Heat output	16.00 kW	15.00 kW
El input	3.62 kW	5.18 kW
COP	4.42	2.90

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

Average Climate

EN 12102-1

	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

	Low temperature	Medium temperature
η_s	176 %	138 %
Prated	16.00 kW	16.00 kW
SCOP	4.48	3.53
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	14.15 kW	14.15 kW
COP Tj = -7°C	2.65	2.06
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	8.62 kW	8.62 kW
COP Tj = +2°C	4.11	3.31
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.54 kW	5.54 kW
COP Tj = +7°C	6.86	5.23
Cdh Tj = +7 °C	0.90	0.90

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Pdh Tj = 12°C	5.20 kW	4.49 kW
COP Tj = 12°C	8.81	6.35
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	14.15 kW	14.15 kW
COP Tj = Tbiv	2.65	2.06
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.80 kW	14.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.37	1.82
WTOL	65 °C	65 °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	2.20 kW	2.00 kW
Annual energy consumption Qhe	7385 kWh	9379 kWh

Domestic Hot Water (DHW)

Average Climate

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Declared load profile	L
Efficiency η_{DHW}	110 %
COP	2.72
Heating up time	1:30 h:min
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Reference hot water temperature	52.1 °C
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