

Subtype Samsung EHS R32 Mono 12kW & 16kW (space heating/ 200L)

Certificate Holder	Samsung Electronics Air Conditioner Europe B.V.
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Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Samsung EHS R32 Mono 12kW & 16kW (space heating/ 200L)
Registration number	011-1W0446
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

Model name	AE120RXYDEG/EU & AE200RNWMEG/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	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	206 l

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	11.30 kW
El input	2.65 kW	3.73 kW
COP	4.53	3.03

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
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
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

Model AE120RXYDEG/EU & MIM-E03CN

Model name	AE120RXYDEG/EU & MIM-E03CN
Application	Heating (medium temp)
Units	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	11.30 kW
El input	2.65 kW	3.73 kW
COP	4.53	3.03

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
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
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

Model name	AE160RXYDEG/EU & AE200RNWMEG/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	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	206 l

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	15.00 kW
El input	3.62 kW	5.18 kW
COP	4.42	2.90

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
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
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

Model AE160RXYDEG/EU & MIM-E03CN

Model name	AE160RXYDEG/EU & MIM-E03CN
Application	Heating (medium temp)
Units	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

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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
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

Model AE120RXYDEG/EU + AE200CNWMEG/EU

Model name	AE120RXYDEG/EU + AE200CNWMEG/EU
Application	Heating + DHW + low temp
Units	n/a
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	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	206 l

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COP Tj = -7°C	2.71	2.16

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COP Tj = +2°C	4.48	3.45
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Pdh Tj = +7°C	5.60 kW	4.20 kW
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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
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
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	5 kWh	7 kWh

Model AE160RXYDEG/EU + AE200CNWMEG/EU

Model name	AE160RXYDEG/EU + AE200CNWMEG/EU
Application	Heating + DHW + low temp
Units	n/a
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

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TOL	-10 °C	-10 °C
Pdh Tj = -7°C	14.15 kW	14.20 kW
COP Tj = -7°C	2.65	2.06

Cdh Tj = -7 °C		
Pdh Tj = +2°C	8.62 kW	8.62 kW
COP Tj = +2°C	4.11	3.31
Cdh Tj = +2 °C		
Pdh Tj = +7°C	5.54 kW	5.50 kW
COP Tj = +7°C	6.86	5.23
Cdh Tj = +7 °C		
Pdh Tj = 12°C	5.20 kW	4.50 kW
COP Tj = 12°C	8.81	6.35
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	14.15 kW	14.20 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
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.600	
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	7 kWh	9 kWh