

Subtype Samsung EHS R290 Mono 12kW & 16kW (space heating/ 260L)

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 R290 Mono 12kW & 16kW (space heating/ 260L)
Registration number	011-1W0684
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.25 kg
Certification Date	26.09.2023
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 12 (as of 2023-03)

Model AE120CXYDGK/EU + MIM-E03EN

Model name	AE120CXYDGK/EU + MIM-E03EN
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	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 outdoor	60 dB(A)	60 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	193 %	143 %
Prated	12.00 kW	12.00 kW
SCOP	4.90	3.65
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.62 kW	10.60 kW
COP Tj = -7°C	2.95	2.15
Cdh Tj = -7 °C		
Pdh Tj = +2°C	6.46 kW	6.46 kW
COP Tj = +2°C	4.83	3.60
Cdh Tj = +2 °C		
Pdh Tj = +7°C	4.14 kW	4.20 kW
COP Tj = +7°C	6.50	4.88
Cdh Tj = +7 °C		
Pdh Tj = 12°C	4.15 kW	4.20 kW
COP Tj = 12°C	8.00	5.95
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	10.60 kW	10.60 kW
COP Tj = Tbiv	2.95	2.15

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.60 kW	11.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.46	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °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	0.40 kW	0.50 kW
Annual energy consumption Qhe	5 kWh	6 kWh

Model AE160CXYDGK/EU + MIM-E03EN

Model name	AE160CXYDGK/EU + MIM-E03EN
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	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 outdoor	65 dB(A)	65 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	185 %	139 %
Prated	15.50 kW	15.50 kW
SCOP	4.70	3.55
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	13.71 kW	13.71 kW
COP Tj = -7°C	2.50	1.95
Cdh Tj = -7 °C		
Pdh Tj = +2°C	8.35 kW	8.35 kW
COP Tj = +2°C	4.52	3.43
Cdh Tj = +2 °C		
Pdh Tj = +7°C	5.37 kW	5.40 kW
COP Tj = +7°C	7.10	5.18
Cdh Tj = +7 °C		
Pdh Tj = 12°C	4.20 kW	4.20 kW
COP Tj = 12°C	9.00	6.58
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	13.71 kW	13.70 kW
COP Tj = Tbiv	2.50	1.95

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.50 kW	13.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.31	1.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °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	2.00 kW	2.20 kW
Annual energy consumption Qhe	6 kWh	8 kWh

Model AE120CXYDEK/EU +AE260CNWMEG/EU

Model name	AE120CXYDEK/EU +AE260CNWMEG/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	XL
Efficiency η_{DHW}	103 %
COP	2.50
Heating up time	1:20 h:min
Standby power input	85.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	305 l

Model AE120CXYDGK/EU + AE260CNWMGG/EU

Model name	AE120CXYDGK/EU + AE260CNWMGG/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	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water**EN 16147 | Average Climate**

Declared load profile	XL
Efficiency η_{DHW}	103 %
COP	2.50
Heating up time	1:20 h:min
Standby power input	85.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	305 l

Model AE160CXYDEK/EU + AE260CNWMEG/EU

Model name	AE160CXYDEK/EU + AE260CNWMEG/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

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Model AE160CXYDGK/EU + AE260CNWMGG/EU

Model name	AE160CXYDGK/EU + AE260CNWMGG/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	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water**EN 16147 | Average Climate**

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