

## Subtype Samsung EHS R290 Mono 5kW (space heating/ 200L)

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 5kW (space heating/ 200L)
Registration number	011-1W0686
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.63 kg
Certification Date	26.09.2023
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 12 (as of 2023-03)

## Model AE050CXYDEK/EU &amp; MIM-E03EN

Model name	AE050CXYDEK/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	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	5.00 kW	5.00 kW
El input	0.98 kW	1.61 kW
COP	5.10	3.10

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	55 dB(A)	55 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	201 %	141 %
Prated	5.50 kW	5.50 kW
SCOP	5.10	3.60
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.87 kW	4.87 kW
COP Tj = -7°C	3.06	2.15
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	2.96 kW	2.96 kW
COP Tj = +2°C	5.08	3.56
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	1.90 kW	1.90 kW

COP Tj = +7°C	6.85	4.85
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	1.85 kW	1.70 kW
COP Tj = 12°C	8.40	5.80
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	4.87 kW	4.87 kW
COP Tj = Tbiv	3.06	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	1.90
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	0.60 kW	0.70 kW
Annual energy consumption Qhe	2221 kWh	3148 kWh

## Model AE050CXYDEK/EU & AE200CNWMEG/EU

Model name	AE050CXYDEK/EU & AE200CNWMEG/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 $\eta_{DHW}$	115 %
COP	2.65
Heating up time	2:20 h:min
Standby power input	75.0 W
Reference hot water temperature	52.1 °C
Mixed water at 40°C	210 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	5.00 kW	5.00 kW
El input	0.98 kW	1.61 kW
COP	5.10	3.10

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	201 %	141 %

Prated	5.50 kW	5.50 kW
SCOP	5.10	3.60
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.87 kW	4.90 kW
COP Tj = -7°C	3.06	2.15
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	2.96 kW	2.96 kW
COP Tj = +2°C	5.08	3.56
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	1.90 kW	1.90 kW
COP Tj = +7°C	6.85	4.85
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	1.85 kW	1.70 kW
COP Tj = 12°C	8.40	5.80
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	4.87 kW	4.90 kW
COP Tj = Tbiv	3.06	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	1.90
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	0.60 kW	0.70 kW
Annual energy consumption Qhe	2221 kWh	3148 kWh

## Model AE050CXYBEK/EU

Model name	AE050CXYBEK/EU
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	5.00 kW	5.00 kW
El input	0.98 kW	1.61 kW
COP	5.10	3.10

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	55 dB(A)	55 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	201 %	141 %
Prated	5.50 kW	5.50 kW
SCOP	5.10	3.60
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.87 kW	4.90 kW
COP Tj = -7°C	3.06	2.15
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	2.96 kW	2.96 kW
COP Tj = +2°C	5.08	3.56
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	1.90 kW	1.90 kW

COP Tj = +7°C	6.85	4.85
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	1.85 kW	1.70 kW
COP Tj = 12°C	8.40	5.80
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	4.87 kW	4.90 kW
COP Tj = Tbiv	3.06	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	1.90
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	0.60 kW	0.70 kW
Annual energy consumption Qhe	2221 kWh	3148 kWh

## Model AE050CXYDEK/EU &amp; AE200RNWMEG/EU

Model name	AE050CXYDEK/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 $\eta_{DHW}$	115 %
COP	2.65
Heating up time	2:20 h:min
Standby power input	75.0 W
Reference hot water temperature	52.1 °C
Mixed water at 40°C	210 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	5.00 kW	5.00 kW
El input	0.98 kW	1.61 kW
COP	5.10	3.10

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	201 %	141 %



Prated	5.50 kW	5.50 kW
SCOP	5.10	3.60
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.87 kW	4.87 kW
COP Tj = -7°C	3.06	2.15
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	2.96 kW	2.96 kW
COP Tj = +2°C	5.08	3.56
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	1.90 kW	1.90 kW
COP Tj = +7°C	6.85	4.85
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	1.85 kW	1.70 kW
COP Tj = 12°C	8.40	5.80
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	4.87 kW	4.87 kW
COP Tj = Tbiv	3.06	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.90 kW	4.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	1.90
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	0.60 kW	0.70 kW
Annual energy consumption Qhe	2221 kWh	3148 kWh