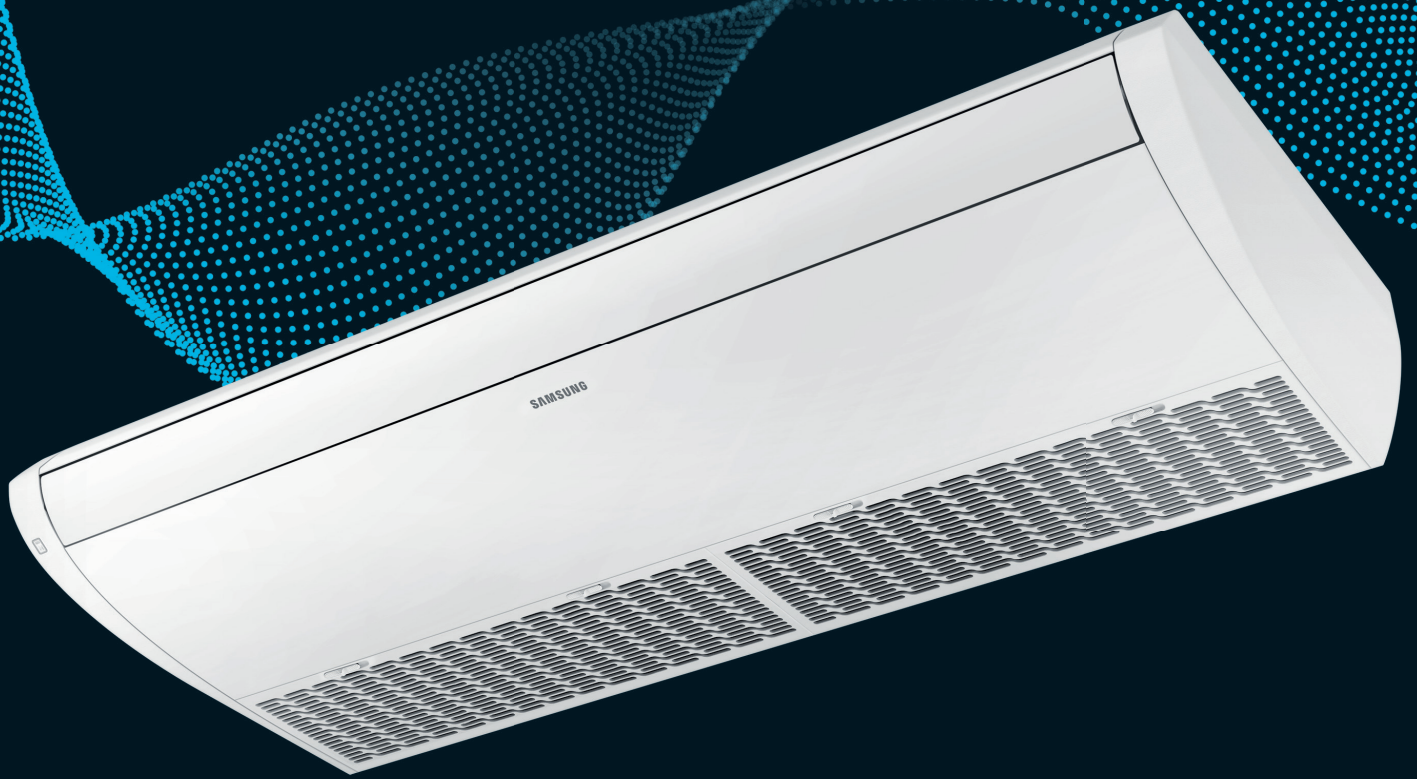


**SAMSUNG**  
Climate Solutions



**Large Ceiling Suspended**

# Large Ceiling Suspended

- Horizontal installation.
- Air supply by means of one adjustable blade.
- Long-life washable HD 40 permanent filter is included.
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).



## Specifications

Model		Outdoor Indoor	AC100RXADKG/EU AC100RNCDKG/EU	AC100RXADNG/EU AC100RNCDKG/EU	AC120RXADKG/EU AC120RNCDKG/EU
<b>Electrical</b>					
Power Supply	Outdoor	Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	3Φ, 4, 380-415 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz
	Indoor	Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz
MCA	System (Outdoor/Indoor)	A	26.5 (24.0 / 2.5)	18.6 (16.1 / 2.5)	26.5 (24.0 / 2.5)
MFA	System	A	30.0	20.0	30.0
Minimum SSC value	Outdoor	MVA	1.4	2.5	1.9
Interconnecting Communication Cable		mm <sup>2</sup>	Screened 0.75-1.5mm <sup>2</sup> , 2 Core, F1 F2 Connection		
<b>Performance<sup>1</sup></b>					
Nominal Cooling Capacity	Total Cooling (Sensible Cooling)	kW	10.0 (7.4)	10.0 (7.4)	12.0 (8.5)
UK Cooling Capacity	Total Cooling (Sensible Cooling)	kW	9.5 (7.1)	9.5 (7.1)	11.4 (8.1)
Nominal Heating Capacity		kW	11.2	11.2	13.2
Operating Temperature Range	Cooling	°C	-15.0 - 50.0 °C	-15.0 - 50.0 °C	-15.0 - 50.0 °C
	Heating	°C	-20.0 - 24.0 °C	-20.0 - 24.0 °C	-20.0 - 24.0 °C
<b>Energy Efficiency<sup>2</sup></b>					
Rated Efficiency	EER (Nominal Cooling)	W/W	3.05	3.17	2.76
	COP (Nominal Heating)	W/W	3.44	3.5	3.44
Seasonal Efficiency	SEER / Energy Label	W/W	6.1 / <b>A++</b>	6.1 / <b>A++</b>	5.9 / <b>A+</b>
	SCOP / Energy Label	W/W	4.0 / <b>A+</b>	4.0 / <b>A+</b>	4.0 / <b>A+</b>
<b>Air Flow Rate</b>					
Indoor Unit Airflow Rate	H/M/L	l/s	433 / 383 / 317	433 / 383 / 317	500 / 400 / 333
Outdoor Unit Airflow Rate		l/s	1,200	1,200	1,200
<b>Piping Connections</b>					
Liquid Pipe		ø, mm (inch)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
Gas Pipe		ø, mm (inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
Drain Pipe		ø, mm	VP-25(OD32, ID25)	VP-25(OD32, ID25)	VP-25(OD32, ID25)
Max Piping Length (Height)		m	50 (30)	50 (30)	50 (30)
<b>Refrigerant</b>					
Type			R32 (Fluorinated greenhouse gas, GWP=675)		
Factory Charging		kg	2.7	2.7	2.7
		tCO <sub>2</sub> e	1.82	1.82	1.82
Precharge to		m	30	30	30
Additional Charge		g/m	50	50	50
<b>Sound</b>					
Indoor Sound Pressure Level	H/M/L	dB(A)	42 / 38 / 34	42 / 38 / 34	44 / 41 / 37
Indoor Sound Power Level		dB(A)	60	60	62
Outdoor Sound Pressure Level	Cooling / Heating	dB(A)	52 / 54	52 / 54	54 / 56
Outdoor Sound Power Level		dB(A)	69	69	70
<b>Dimensions</b>					
Net Weight	Indoor Unit/Outdoor Unit	kg	42.0 / 75.0	42.0 / 74.0	41.5/ 81.0
Indoor Unit Net Dimensions	W x H x D	mm	1,650 x 235 x 675	1,650 x 235 x 675	1,650 x 235 x 675
Outdoor Unit Net Dimensions	W x H x D	mm	940 x 998 x 330	940 x 998 x 330	940 x 998 x 330

### Accessories

Wireless Remote Controller	Touch Wired Controller	Premium Wired Controller	Wi-Fi Kit	External Room Sensor
AR-EH03E	MWR-SH11N	MWR-WG00JN	MIM-H04EN	MRW-TA

<sup>1</sup> Performances are based on the following design conditions:

- Nominal Cooling Capacity: Indoor temperature 27°C DB, 19°C WB, Outdoor temperature 35°C DB  
 - Nominal Heating Capacity: Indoor temperature 20°C DB, Outdoor temperature 7°C DB, 6°C WB  
 - UK Cooling Capacity: Indoor temperature 23°C DB, 16°C WB, Outdoor temperature 30°C DB

<sup>2</sup> For units with capacity up to 12kW: Efficiencies as shown are according to EU No 206/2012 (LOT10) Ecodesign requirements for air conditioners.

For units with capacity up to 12kW: Energy labels as shown are according to EU No 626/2011 (LOT10) label classification 2019, on a scale from D to A+++.

For units with capacity greater than 12kW: Efficiencies as shown are according to EU No 2016/2281 (LOT 21) Ecodesign requirements for heat pumps/air conditioners.

# Large Ceiling Suspended

- Horizontal installation.
- Air supply by means of one adjustable blade.
- Long-life washable HD 40 permanent filter is included.
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).



## Specifications

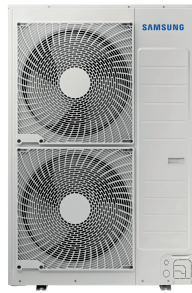
Model		Outdoor Indoor	AC120RXADNG/EU AC120RNCDKG/EU	AC140RXADKG/EU AC140RNCDKG/EU	AC140RXADNG/EU AC140RNCDKG/EU
<b>Electrical</b>					
Power Supply	Outdoor	Φ, #, V, Hz	3Φ, 4, 380-415 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	3Φ, 4, 380-415 V, 50 Hz
	Indoor	Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz
MCA	System (Outdoor/Indoor)	A	18.6 (16.1 / 2.5)	34.5 (32.0 / 2.5)	18.6 (16.1 / 2.5)
MFA	System	A	20.0	40.0	20.0
Minimum SSC value	Outdoor	MVA	2.7	1.9	2.5
Interconnecting Communication Cable		mm <sup>2</sup>	Screened 0.75-1.5mm <sup>2</sup> ; 2 Core, F1 F2 Connection		
<b>Performance<sup>1</sup></b>					
Nominal Cooling Capacity	Total Cooling (Sensible Cooling)	kW	12.0 (8.5)	13.4 (9.4)	13.4 (9.4)
UK Cooling Capacity	Total Cooling (Sensible Cooling)	kW	11.4 (8.1)	12.7 (9.0)	12.7 (9.0)
Nominal Heating Capacity		kW	13.2	15.5	15.5
Operating Temperature Range	Cooling	°C	-15.0 - 50.0 °C	-15.0 - 50.0 °C	-15.0 - 50.0 °C
	Heating	°C	-20.0 - 24.0 °C	-20.0 - 24.0 °C	-20.0 - 24.0 °C
<b>Energy Efficiency<sup>2</sup></b>					
Rated Efficiency	EER (Nominal Cooling)	W/W	2.89	2.97	2.97
	COP (Nominal Heating)	W/W	3.47	3.41	3.41
Seasonal Efficiency	SEER / Energy Label	W/W	5.9 / <span style="color: green;">A+</span>	6.1	6.1
	SCOP / Energy Label	W/W	4.0 / <span style="color: green;">A+</span>	4.0	4.0
<b>Air Flow Rate</b>					
Indoor Unit Airflow Rate	H/M/L	l/s	500 / 400 / 333	567 / 450 / 383	567 / 450 / 383
Outdoor Unit Airflow Rate		l/s	1,200	1,833	1,833
<b>Piping Connections</b>					
Liquid Pipe		ø, mm (inch)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
Gas Pipe		ø, mm (inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
Drain Pipe		ø, mm	VP-25(OD32, ID25)	VP-25(OD32, ID25)	VP-25(OD32, ID25)
Max Piping Length (Height)		m	50 (30)	75 (30)	75 (30)
<b>Refrigerant</b>					
Type			R32 (Fluorinated greenhouse gas, GWP=675)		
Factory Charging		kg	2.7	2.9	2.9
		tCO <sub>2</sub> e	1.82	1.96	1.96
Precharge to		m	30	30	30
Additional Charge		g/m	50	50	50
<b>Sound</b>					
Indoor Sound Pressure Level	H/M/L	dB(A)	44 / 41 / 37	46 / 42 / 38	46 / 42 / 38
Indoor Sound Power Level		dB(A)	62	64	64
Outdoor Sound Pressure Level	Cooling / Heating	dB(A)	54 / 56	53 / 54	53 / 54
Outdoor Sound Power Level		dB(A)	70	69	69
<b>Dimensions</b>					
Net Weight	Indoor Unit/Outdoor Unit	kg	41.5/ 80.0	41.5/ 91.5	41.5/ 90.5
Indoor Unit Net Dimensions	W x H x D	mm	1,650 x 235 x 675	1,650 x 235 x 675	1,650 x 235 x 675
Outdoor Unit Net Dimensions	W x H x D	mm	940 x 998 x 330	940 x 1,210 x 330	940 x 1,210 x 330

<sup>1</sup> Performances are based on the following design conditions:  
 - Nominal Cooling Capacity: Indoor temperature 27°C DB, 19°C WB, Outdoor temperature 35°C DB  
 - Nominal Heating Capacity: Indoor temperature 20°C DB, Outdoor temperature 7°C DB, 6°C WB  
 - UK Cooling Capacity: Indoor temperature 23°C DB, 16°C WB, Outdoor temperature 30°C DB

<sup>2</sup> For units with capacity up to 12kW: Efficiencies as shown are according to EU No 206/2012 (LOT10) Ecodesign requirements for air conditioners.  
 For units with capacity up to 12kW: Energy labels as shown are according to EU No 626/2011 (LOT10) Label classification 2019, on a scale from D to A+++.  
 For units with capacity greater than 12kW: Efficiencies as shown are according to EU No 2016/2281 (LOT 21) Ecodesign requirements for heat pumps/air conditioners.

# Large Ceiling Suspended

- Horizontal installation.
- Air supply by means of one adjustable blade.
- Long-life washable HD 40 permanent filter is included.
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).



## Specifications

Model		Outdoor Indoor	AC160JXADGH/EU AC160JNCDEH/EU
<b>Electrical</b>			
Power Supply	Outdoor	Φ, #, V, Hz	3Φ, 4, 380-415 V, 50 Hz
	Indoor	Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz
MCA	System (Outdoor/Indoor)	A	14.7 (12.0 / 2.7)
MFA	System	A	16.2
Minimum SSC value	Outdoor	MVA	0.725
Interconnecting Communication Cable		mm <sup>2</sup>	Screened 0.75-1.5mm <sup>2</sup> , 2 Core, F1 F2 Connection
<b>Performance<sup>1</sup></b>			
Nominal Cooling Capacity	Total Cooling (Sensible Cooling)	kW	15.0 (12.0)
UK Cooling Capacity	Total Cooling (Sensible Cooling)	kW	15.0 (12.0)
Nominal Heating Capacity		kW	17.5
Operating Temperature Range	Cooling	°C	-15.0 ~ 50.0 °C
	Heating	°C	-20.0 ~ 24.0 °C
<b>Energy Efficiency<sup>2</sup></b>			
Rated Efficiency	EER (Nominal Cooling)	W/W	2.84
	COP (Nominal Heating)	W/W	3.60
Seasonal Efficiency	SEER / Energy Label	W/W	5.4
	SCOP / Energy Label	W/W	3.8
<b>Air Flow Rate</b>			
Indoor Unit Airflow Rate	H/M/L	l/s	616.7 / 516.7 / 433.3
Outdoor Unit Airflow Rate		l/s	1,916.7
<b>Piping Connections</b>			
Liquid Pipe		ø, mm (inch)	9.52 (3/8)
Gas Pipe		ø, mm (inch)	15.88 (5/8)
Drain Pipe		ø, mm	VP-25(OD32, ID25)
Max Piping Length (Height)		m	75 (30)
<b>Refrigerant</b>			
Type			R410A (Fluorinated greenhouse gas, GWP=2088)
Factory Charging		kg	3.50
		tCO <sub>2</sub> e	7.31
Precharge to		m	30
Additional Charge		g/m	50
<b>Sound</b>			
Indoor Sound Pressure Level	H/M/L	dB(A)	51 / 47 / 44
Indoor Sound Power Level		dB(A)	68
Outdoor Sound Pressure Level	Cooling / Heating	dB(A)	56 / 58
Outdoor Sound Power Level		dB(A)	73
<b>Dimensions</b>			
Net Weight	Indoor Unit/Outdoor Unit	kg	42.0 / 96.0
Indoor Unit Net Dimensions	W x H x D	mm	1,650 x 235 x 675
Outdoor Unit Net Dimensions	W x H x D	mm	940 x 1,420 x 330

<sup>1</sup> Performances are based on the following design conditions:

- Nominal Cooling Capacity: Indoor temperature 27°C DB, 19°C WB, Outdoor temperature 35°C DB  
 - Nominal Heating Capacity: Indoor temperature 20°C DB, Outdoor temperature 7°C DB, 6°C WB  
 - UK Cooling Capacity: Indoor temperature 23°C DB, 16°C WB, Outdoor temperature 30°C DB

<sup>2</sup> For units with capacity up to 12kW: Efficiencies as shown are according to EU No 206/2012 (LOT10) Ecodesign requirements for air conditioners.

For units with capacity up to 12kW: Energy labels as shown are according to EU No 626/2011 (LOT10) Label classification 2019, on a scale from D to A+++.

For units with capacity greater than 12kW: Efficiencies as shown are according to EU No 2016/2281 (LOT 21) Ecodesign requirements for heat pumps/air conditioners.

# Large Ceiling Suspended

## Multi-Unit Operation (DPM)

Instead of connecting just one indoor unit, users can connect two, three or four indoor units with a single outdoor unit for more efficient cooling and heating. The indoor units operate and are controlled simultaneously as one cycle within the same mode via one remote controller. This system is ideal for spaces requiring multiple indoor units for better temperature and airflow distribution, such as open plan offices or shops.

Model			20kW Twin DPM Three Phase	25kW Twin DPM Three Phase
<b>System Composition</b>				
Outdoor Unit			AC200KXAPNH/EU	AC250KXAPNH/EU
Indoor Unit			AC100RNCCKG/EU X2	AC120RNCCKG/EU X2
Branch Pipe Kit			MXJ-2D2509K	MXJ-2D2509K
<b>Outdoor Unit Details</b>				
Power Supply		Φ, #, V, Hz	3Φ, 4, 380–415 V, 50 Hz	3Φ, 4, 380–415 V, 50 Hz
MCA		A	25.0	25.0
MFA		A	31.25	31.25
Minimum SSC value		MVA	2.459	4.139
Airflow Rate		l/s	3,333	3,333
Sound Pressure Level	Cooling / Heating	dB(A)	58 / 60	59 / 61
Sound Power Level		dB(A)	75	77
Net Weight		kg	154.0	154.0
Net Dimensions	WxHxD	mm	940 x 1,630 x 460	940 x 1,630 x 460
<b>Piping Connections</b>				
Total Pipe Length (all lengths combined)		m	75	75
Max Main Pipe Length	L1+a+b	m	75	75
Max Individual Pipe Length After Branch	L2, L3, L4, L5	m	15	15
Max Pipe Length Difference Between Indoor Units	e.g. L2-L3, (a+L3)-(b+L5)	m	5	5
Max Distance Between Indoor Units	D	m	10	10
Max Height Between Indoors And Outdoor	h1	m	30	30
Max Height Difference Between Indoors	h2	m	0.5	0.5
Main Pipe (L1+a+b)	Liquid	ø, mm (inch)	9.52 (3/8)	9.52 (3/8)
	Gas	ø, mm (inch)	19.05 (3/4)	22.22 (7/8)
Individual Liquid Pipe After Branch (L2, L3, L4, L5)	Liquid	ø, mm (inch)	9.52 (3/8)	9.52 (3/8)
	Gas	ø, mm (inch)	15.88 (5/8)	15.88 (5/8)
<b>Refrigerant*</b>				
Type			R410A (Fluorinated greenhouse gas, GWP=2088)	

\* Additional refrigerant charge for DPM systems is different than single CAC, please consult the relevant installation manual

## Twin DPM

