

**SAMSUNG**  
Climate Solutions



**High Efficiency 360 Cassette**

# High Efficiency 360 Cassette

- 360 degree air supply.
- Bladeless discharge. 3x Booster fans can be individually controlled, allowing for completely horizontal flow discharge. Coandă effect is created even without ceiling.
- Built-in condensation drain pump.
- Predisposition of the air inlet to let fresh air in.
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).
- Circular or square cassette panel. Available in white and black.
- Air Purification Panel and Auto elevation panel available in circular white panel versions.
- Wide Operation Range.
- Smart Outdoor unit with inverter PBA Self-Diagnosis.
- Enhanced Performance of 100% Heating Capacity at -15°C for models up to 12kW (-10°C for 14kW models).



## Specifications

Model		Outdoor Indoor	AC052BXAPKG/EU AC052BN6PKG/EU	AC071BXAPKG/EU AC071BN6PKG/EU	AC071BXAPNG/EU AC071BN6PKG/EU	AC100BXAPKG/EU AC100BN6PKG/EU
<b>Electrical</b>						
Power Supply	Outdoor	Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 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	1Φ, 2, 220-240 V, 50 Hz
MCA	System (Outdoor/Indoor)	A	17.5 (16.0 / 1.5)	21.5 (20.0 / 1.5)	17.6 (16.1 / 1.5)	29.5 (28.0 / 1.5)
MFA	System	A	20.0	25.0	20.0	35.0
Minimum SSC value	Outdoor	MVA	Not Applicable	Not Applicable	1.4	Not Applicable
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	5.0 (3.8)	7.1 (5.6)	7.1 (5.6)	10.0 (7.9)
UK Cooling Capacity	Total Cooling (Sensible Cooling)	kW	5.1 (3.7)	7.3 (5.4)	7.3 (5.4)	9.9 (7.8)
Nominal Heating Capacity		kW	6.0	8.0	8.0	11.2
Operating Temperature Range	Cooling	°C	-20.0 - 52.0 °C	-20.0 - 52.0 °C	-20.0 - 52.0 °C	-20.0 - 52.0 °C
	Heating	°C	-25.0 - 24.0 °C	-25.0 - 24.0 °C	-25.0 - 24.0 °C	-25.0 - 24.0 °C
<b>Energy Efficiency<sup>2</sup></b>						
Rated Efficiency	EER (Nominal Cooling)	W/W	4.10	4.15	4.15	4.13
	COP (Nominal Heating)	W/W	3.70	4.08	4.08	4.07
Seasonal Efficiency	SEER / Energy Label	W/W	8.3 / <b>A++</b>	7.8 / <b>A++</b>	7.8 / <b>A++</b>	7.6 / <b>A++</b>
	SCOP / Energy Label	W/W	4.6 / <b>A++</b>	4.6 / <b>A++</b>	4.6 / <b>A++</b>	4.6 / <b>A++</b>
<b>Air Flow Rate</b>						
Indoor Unit Airflow Rate	H/M/L	l/s	258 / 243 / 227	352 / 297 / 260	352 / 297 / 260	557 / 445 / 335
Outdoor Unit Airflow Rate		l/s	917	1,200	1,200	2,083
<b>Piping Connections</b>						
Liquid Pipe		ø, mm (inch)	6.35 (1/4)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
Gas Pipe		ø, mm (inch)	12.7 (1/2)	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)	VP-25(OD32, ID25)
Max Piping Length (Height)		m	50 (30)	55 (30)	55 (30)	85 (30)
<b>Refrigerant</b>						
Type			R32 (Fluorinated greenhouse gas, GWP=675)			
Factory Charging		kg	1.7	2.7	2.7	3.5
		tCO <sub>2</sub> e	1.15	1.82	1.82	2.36
Precharge to		m	20	30	30	30
Additional Charge		g/m	30	45	45	45
<b>Sound</b>						
Indoor Sound Pressure Level	H/M/L	dB(A)	33 / 31 / 29	35 / 32 / 29	35 / 32 / 29	44 / 39 / 33
Indoor Sound Power Level		dB(A)	49	52	52	61
Outdoor Sound Pressure Level	Cooling / Heating	dB(A)	47 / 48	47 / 49	47 / 49	47 / 50
Outdoor Sound Power Level		dB(A)	63	64	64	66
<b>Dimensions</b>						
Net Weight	Indoor Unit/Outdoor Unit	kg	20.2 / 50.0	25.5 / 75.0	25.5 / 74.0	25.5 / 100.0
Indoor Unit Net Dimensions	W x H x D	mm	947 x 281 x 947	947 x 365 x 947	947 x 365 x 947	947 x 365 x 947
Outdoor Unit Net Dimensions	W x H x D	mm	880 x 798 x 310	940 x 998 x 330	940 x 998 x 330	940 x 1,420 x 330
<b>Drain Pump</b>						
Max Lifting Height / Displacement		mm / litres/h	750 / 24	750 / 24	750 / 24	750 / 24
<b>Default Panel (PC4NUNMAN)</b>						
Net Weight		kg	2.7	2.7	2.7	2.7
Net Dimensions	W x H x D	mm	1,050 x 66 x 1,050	1,050 x 66 x 1,050	1,050 x 66 x 1,050	1,050 x 66 x 1,050
Colour / Shape		-	White / Round	White / Round	White / Round	White / Round

<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.

Accessories

Wireless Remote Controller	Touch Wired Controller	Premium Wired Controller	Wi-Fi Kit
AR-KH04E	MWR-SH11N	MWR-WG00JN	MIM-H04EN
External Room Sensor	Panel (Square White)	Panel (Square Black)	Panel (Round Black)
MRW-TA	PC4NUDMAN	PC4NBDMAN	PC4NBNMAN
Air Purification Panel	Auto Elevation Panel	Motion Detect Sensor for PC4NUDMAN Panel	
PC6EUCMAN	PC6EUXMAN	MCR-SME	



# Specifications

Model		Outdoor Indoor	AC100BXAPNG/EU AC100BN6PKG/EU	AC120BXAPNG/EU AC120BN6PKG/EU	AC140BXAPNG/EU AC140BN6PKG/EU
<b>Electrical</b>					
Power Supply	Outdoor	Φ, #, V, Hz	3Φ, 4, 380-415 V, 50 Hz	3Φ, 4, 380-415 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	17.6 (16.1 / 1.5)	17.6 (16.1 / 1.5)	17.6 (16.1 / 1.5)
MFA	System	A	20.0	20.0	20.0
Minimum SSC value	Outdoor	MVA	1.6	1.6	1.6
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 (7.9)	12.1 (9.0)	13.4 (9.7)
UK Cooling Capacity	Total Cooling (Sensible Cooling)	kW	9.9 (7.8)	12.0 (8.8)	13.2 (9.5)
Nominal Heating Capacity		kW	11.2	13.2	15.5
Operating Temperature Range	Cooling	°C	-20.0 - 52.0 °C	-20.0 - 52.0 °C	-20.0 - 52.0 °C
	Heating	°C	-25.0 - 24.0 °C	-25.0 - 24.0 °C	-25.0 - 24.0 °C
<b>Energy Efficiency<sup>2</sup></b>					
Rated Efficiency	EER (Nominal Cooling)	W/W	4.13	3.90	3.67
	COP (Nominal Heating)	W/W	4.07	3.77	3.41
Seasonal Efficiency	SEER / Energy Label	W/W	7.6 / A++	7.3	7.1
	SCOP / Energy Label	W/W	4.6 / A++	4.4	4.4
<b>Air Flow Rate</b>					
Indoor Unit Airflow Rate	H/M/L	l/s	557 / 445 / 335	575 / 463 / 352	593 / 483 / 388
Outdoor Unit Airflow Rate		l/s	2,083	2,083	2,083
<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	85 (30)	85 (30)	85 (30)
<b>Refrigerant</b>					
Type			R32 (Fluorinated greenhouse gas, GWP=675)		
Factory Charging		kg	3.5	3.5	3.5
		tCO <sub>2e</sub>	2.36	2.36	2.36
Precharge to		m	30	30	30
Additional Charge		g/m	45	45	45
<b>Sound</b>					
Indoor Sound Pressure Level	H/M/L	dB(A)	44 / 39 / 33	45 / 40 / 35	45 / 41 / 37
Indoor Sound Power Level		dB(A)	61	61	62
Outdoor Sound Pressure Level	Cooling / Heating	dB(A)	47 / 50	49 / 52	50 / 52
Outdoor Sound Power Level		dB(A)	66	69	70
<b>Dimensions</b>					
Net Weight	Indoor Unit/Outdoor Unit	kg	25.5 / 100.0	25.5 / 100.0	25.5 / 100.0
Indoor Unit Net Dimensions	W x H x D	mm	947 x 365 x 947	947 x 365 x 947	947 x 365 x 947
Outdoor Unit Net Dimensions	W x H x D	mm	940 x 1,420 x 330	940 x 1,420 x 330	940 x 1,420 x 330
<b>Drain Pump</b>					
Max Lifting Height / Displacement		mm / litres/h	750 / 24	750 / 24	750 / 24
<b>Default Panel (PC4NUNMAN)</b>					
Net Weight		kg	2.7	2.7	2.7
Net Dimensions	W x H x D	mm	1,050 x 66 x 1,050	1,050 x 66 x 1,050	1,050 x 66 x 1,050
Colour / Shape		-	White / Round	White / Round	White / Round

<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 (LOT 10) Ecodesign requirements for air conditioners.  
 For units with capacity up to 12kW: Energy labels as shown are according to EU No 626/2011 (LOT 10) 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 Z1) Ecodesign requirements for heat pumps/air conditioners.

# 360 Cassette

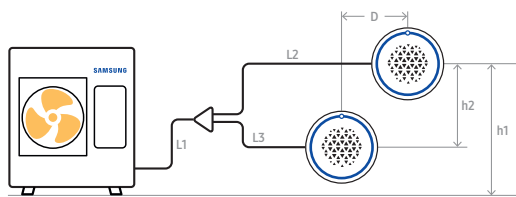
## Multi-Unit Operation (DPM)

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		10kW Twin DPM Single Phase	10kW Twin DPM Three Phase	12kW Triple DPM Three Phase	14kW Twin DPM Three Phase	14kW Triple DPM Three Phase
<b>System Composition</b>						
Outdoor Unit		AC100BXAPKG/EU	AC100BXAPNG/EU	AC120BXAPNG/EU	AC140BXAPNG/EU	AC140BXAPNG/EU
Indoor Unit		AC052BN6PKG/EU X2	AC052BN6PKG/EU X2	AC052BN6PKG/EU X3	AC071BN6PKG/EU X2	AC052BN6PKG/EU X3
Branch Pipe Kit		MXJ-2D2509K	MXJ-2D2509K	MXJ-3D2509K	MXJ-2D2509K	MXJ-3D2509K
<b>Outdoor Unit Details</b>						
Power Supply	Φ, #, V, Hz	1Φ, 2, 220–240 V, 50 Hz	3Φ, 4, 380–415 V, 50 Hz	3Φ, 4, 380–415 V, 50 Hz	3Φ, 4, 380–415 V, 50 Hz	3Φ, 4, 380–415 V, 50 Hz
MCA	A	28.0	16.1	16.1	16.1	16.1
MFA	A	35.0	20.0	20.0	20.0	20.0
Minimum SSC value	MVA	Not Applicable	1.6	1.6	1.6	1.6
Airflow Rate	l/s	2,083	2,083	2,083	2,083	2,083
Sound Pressure Level	Cooling / Heating dB(A)	47 / 50	47 / 50	49 / 52	50 / 52	50 / 52
Sound Power Level	dB(A)	66	66	69	70	70
Net Weight	kg	100.0	100.0	100.0	100.0	100.0
Net Dimensions	WxHxD	mm	940 x 1,420 x 330	940 x 1,420 x 330	940 x 1,420 x 330	940 x 1,420 x 330
<b>Piping Connections</b>						
Total Pipe Length (all lengths combined)	m	85	85	85	85	85
Max Main Pipe Length	L1+a+b	55	55	55	55	55
Max Individual Pipe Length After Branch	L2, L3, L4, L5	15	15	15	15	15
Max Pipe Length Difference Between Indoor Units	e.g. L2-L3, (a+L3)-(b+L5)	5	5	5	5	5
Max Distance Between Indoor Units	D	10	10	10	10	10
Max Height Between Indoors And Outdoor	h1	30	30	30	30	30
Max Height Difference Between Indoors	h2	0.5	0.5	0.5	0.5	0.5
Main Pipe (L1+a+b)	Liquid	ø, mm (inch)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
	Gas	ø, mm (inch)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)	15.88 (5/8)
Individual Liquid Pipe After Branch (L2, L3, L4, L5)	Liquid	ø, mm (inch)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)	6.35 (1/4)
	Gas	ø, mm (inch)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)
<b>Refrigerant*</b>						
Type		R32 (Fluorinated greenhouse gas, GWP=675)				

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

### Twin DPM



### Triple DPM

