

**SAMSUNG**

**FJM**

# Technical Data Book

**Free Joint Multi for Europe  
(R32, 50Hz, HP)**

**AVANT**



Model : Outdoor unit (AJ\*\*\*TXJ\*KG/EU)

Indoor unit (Wall-mounted, Wind-Free 1Way Cassette, Wind-Free 4Way Cassette(600x600), Duct, Console)

# Nomenclature

## Indoor Unit

### Wall Mounted Type

Model Name

<b>AR</b>	<b>09</b>	<b>T</b>	<b>X</b>	<b>F</b>	<b>C</b>	<b>A</b>	<b>WK</b>	<b>N</b>	<b>EU</b>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	Buyer

#### (1) Classification

<b>AR</b>	RAC
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#### (2) Capacity

x1000 Btu/h
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#### (3) Year

<b>T</b>	2020
<b>A</b>	2021
<b>B</b>	2022
<b>C</b>	2023

#### (4) Product Type

<b>X</b>	INVERTER HP R32
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#### (5) Characteristics

<b>C</b>	Motion Detect Sensor +Wi-Fi + Tri-care Filter
<b>E</b>	Wi-Fi + Tri-care Filter
<b>F</b>	Wi-Fi
<b>H</b>	-

#### (6) Design Segment

<b>A</b>	Wind-Free GEO
<b>C</b>	Wind-Free AIRISE
<b>Y</b>	GEO
<b>Z</b>	AIRISE

#### (7) Version

A-Z (1 digit)
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#### (8) Color







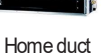
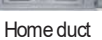
<b>WK</b>	DA White
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#### (9) Set

<b>N</b>	Indoor Unit
<b>X</b>	Outdoor Unit
<b>/</b>	Set

# 1. Line-up

## 1-3. Combination Table (Outdoor-Indoor)

Indoor Unit		Outdoor Unit		Model		Model		Model		Model	
		Model	Capacity (kW)	AJ040TXJ2KG/EU	AJ050TXJ2KG/EU	AJ052TXJ3KG/EU	AJ068TXJ3KG/EU	AJ080TXJ4KG/EU	AJ100TXJ5KG/EU		
 AR4500 (AIRSE)	AR07/09/ 12/ 18/ 24TXHZAWKNEU	2.0	●	●	●	●	●	●	●		
		2.5	●	●	●	●	●	●	●		
		3.5	●	●	●	●	●	●	●		
		5.0		●	●	●	●	●	●		
		6.5						●	●		
 AR5500 (GEO)	AR07/09/ 12/ 18/ 24TXFYAWKNEU	2.0	●	●	●	●	●	●	●		
		2.5	●	●	●	●	●	●	●		
		3.5	●	●	●	●	●	●	●		
		5.0		●	●	●	●	●	●		
		6.5						●	●		
 AR9500 (Wind-Free AIRSE)	AR07/09/ 12/ 18/ 24TXFCAWKNEU	2.0	●	●	●	●	●	●	●		
		2.5	●	●	●	●	●	●	●		
		3.5	●	●	●	●	●	●	●		
		5.0		●	●	●	●	●	●		
		6.5						●	●		
 AR9500 (Wind-Free GEO)	AR07/09/ 12/ 18/ 24TXEAAWKNEU	2.0	●	●	●	●	●	●	●		
		2.5	●	●	●	●	●	●	●		
		3.5	●	●	●	●	●	●	●		
		5.0		●	●	●	●	●	●		
		6.5						●	●		
	AR07/09/ 12TXCAAWKNEU	2.0	●	●	●	●	●	●	●		
		2.5	●	●	●	●	●	●	●		
		3.5	●	●	●	●	●	●	●		
	AR07/09/ 12CXCAAWKNEU	2.0	●	●	●	●	●	●	●		
		2.5	●	●	●	●	●	●	●		
3.5		●	●	●	●	●	●	●			
 Wind-Free 1Way CASSETTE	AJ026/035TN1DKG/EU	2.6	●	●	●	●	●	●			
		3.5	●	●	●	●	●	●			
 Wind-Free 4Way CASSETTE (600x600)	AJ016/020/026/035/052TNNDKG/EU	1.6		●	●	●	●	●			
		2.0		●	●	●	●	●			
		2.6		●	●	●	●	●			
		3.5		●	●	●	●	●			
		5.2					●	●	●		
 Home duct	AJ026/035TNL*EG/EU	2.6		●	●	●	●	●			
		3.5		●	●	●	●	●			
 Home duct	AJ052BNMDEG/EU	5.2				●	●	●			
		AJ052TNMDEG/EU	5.2				●	●	●		

# 2. Specification

## 2-2. Indoor units

AR9500

Type				AR9500	AR9500	AR9500
Model Name				AR07TXEAAWKNEU	AR09TXEAAWKNEU	AR12TXEAAWKNEU
Power Supply			Ø, #, V, Hz	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
Mode			-	HP	HP	HP
Performance	Capacity	Cooling	kW	2.0	2.5	3.5
			Btu/h	6,800	8,500	11,900
		Heating	kW	2.2	3.2	4.0
			Btu/h	7,500	10,900	13,600
Power	Power Input	Cooling	W	40	40	40
		Heating	W	40	40	40
	Current Input	Cooling	A	0.4	0.4	0.4
		Heating	A	0.4	0.4	0.4
Heat Exchanger	Type		-	Fin & Tube	Fin & Tube	Fin & Tube
	Material	Fin	-	Al	Al	Al
		Tube	-	Cu	Cu	Cu
	Fin Treatment		-	Green Hydrophile	Green Hydrophile	Green Hydrophile
Fan	Type		-	Cross Flow	Cross Flow	Cross Flow
	Quantity		EA	1	1	1
	Air Flow Rate	Cooling (T/H/W/L)	m <sup>3</sup> /min	9.2 / 8.6 / 8.6 / 7.1	9.5 / 9.0 / 8.5 / 7.4	10.5 / 10.0 / 9.0 / 7.9
			l/s	153 / 144 / 143 / 118	158 / 150 / 142 / 123	175 / 167 / 150 / 132
		Heating (T/H/W/L)	m <sup>3</sup> /min	10.7 / 10.1 / 10.0 / 9.0	11.1 / 10.5 / 10.0 / 9.0	12.1 / 11.6 / 10.5 / 9.5
			l/s	178 / 168 / 166 / 150	185 / 175 / 167 / 150	202 / 193 / 175 / 158
Fan Motor	Type		-	BLDC	BLDC	BLDC
	Output		W x n	27 x 1	27 x 1	27 x 1
Piping Connections	Liquid Pipe	Type		Flare connection	Flare connection	Flare connection
		Φ, mm (inch)		6.35 (1/4)	6.35 (1/4)	6.35 (1/4)
	Gas Pipe	Type		Flare connection	Flare connection	Flare connection
		Φ, mm (inch)		9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
	Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes
Drain Pipe		Φ, mm	16.3, 550	16.3, 550	16.3, 550	
Wiring connections	Communication	Min.	mm <sup>2</sup>	0.75	0.75	0.75
		Remark	-	F1, F2	F1, F2	F1, F2
Refrigerant	Type		-	R32	R32	R32
	Electronic Expansion Valve		-	EEV NOT INCLUDED	EEV NOT INCLUDED	EEV NOT INCLUDED
Sound	Sound Pressure Level	H/ Silent	dB(A)	37 / 19	38 / 19	40 / 19
	Sound Power Level		dB(A)	54	54	57

## 2. Specification

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Type			AR9500	AR9500	AR9500
Model Name			AR07TXEAAWKNEU	AR09TXEAAWKNEU	AR12TXEAAWKNEU
External Dimension	Net Weight	kg	9.9	9.9	9.9
	Shipping Weight	kg	12.0	12.0	12.0
	Net Dimensions (WxHxD)	mm	889 x 299 x 215	889 x 299 x 215	889 x 299 x 215
	Shipping Dimensions (WxHxD)	mm	950 x 290 x 375	950 x 290 x 375	950 x 290 x 375
Casing	Material	-	HIPS	HIPS	HIPS

### NOTE

- Specifications may be subject to change without prior notice.
- 1)\* Capacities are based on (Equivalent refrigerant piping : 5m, Level differences : 0m)
  - Cooling : Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, 24°C WB
  - Heating : Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB
- 2)\* Select wire size based on the value of MCA
- 3)\* Sound pressure level is obtained in an anechoic room.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound pressure level may differ depending on operation condition.
  - dBA = A-weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20uPa
- 4)\* Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level
  - Reference power : 1pW
  - Measured according to ISO 3741
- 5)\* These products contain R32 (GWP=675) which is fluorinated greenhouse gas.

# 2. Specification

## 2-2. Indoor units

AR9500

Type				AR9500	AR9500
Model Name				AR18TXEAAWKNEU	AR24TXEAAWKNEU
Power Supply			Ø, #, V, Hz	1,2,220-240,50	1,2,220-240,50
Mode			-	HP	HP
Performance	Capacity	Cooling	kW	5	6.5
			Btu/h	17100	22,200
		Heating	kW	6	7.4
			Btu/h	20500	25,300
Power	Power Input	Cooling	W	40	50
		Heating	W	40	50
	Current Input	Cooling	A	0.4	0.5
		Heating	A	0.4	0.5
Heat Exchanger	Type		-	Fin & Tube	Fin & Tube
	Material	Fin	-	Al	Al
		Tube	-	Cu	Cu
	Fin Treatment		-	Green Hydrophile	Green Hydrophile
Fan	Type		-	Cross Flow	Cross Flow
	Quantity		EA	1	1
	Air Flow Rate	Cooling (T/H/W/L)	m³/min	15.3 / 14.3 / 13.3 / 11.8	16.4 / 14.9 / 13.5 / 11.5
			l/s	256 / 239 / 222 / 197	274 / 249 / 225 / 192
		Heating (T/H/W/L)	m³/min	15.0 / 14.0 / 13.0 / 11.6	17.1 / 15.6 / 14.2 / 12.2
			l/s	250 / 234 / 217 / 193	286 / 261 / 236 / 203
Fan Motor	Type		-	BLDC	BLDC
	Output		W x n	27 x 1	27 x 1
Piping Connections	Liquid Pipe	Type		Flare connection	Flare connection
		Φ, mm (inch)		6.35 (1/4)	6.35 (1/4)
	Gas Pipe	Type		Flare connection	Flare connection
		Φ, mm (inch)		12.7 (1/2)	15.88 (5/8)
	Heat Insulation		-	Both liquid and gas pipes	Both liquid and gas pipes
Drain Pipe		Φ, mm	16.3, 550	16.3, 550	
Wiring connections	Communication	Min.	mm²	0.75	0.75
		Remark	-	F1, F2	F1, F2
Refrigerant	Type		-	R32	R32
	Electronic Expansion Valve		-	EEV NOT INCLUDED	EEV NOT INCLUDED
Sound	Sound Pressure Level	H/ Silent	dB(A)	41 / 28	45 / 29
	Sound Power Level		dB(A)	58	62

## 2. Specification

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Type			AR9500	AR9500
Model Name			AR18TXEAAMKNEU	AR24TXEAAMKNEU
External Dimension	Net Weight	kg	12.2	12.5
	Shipping Weight	kg	14.7	14.8
	Net Dimensions (WxHxD)	mm	1,055 x 299 x 215	1,055 x 299 x 215
	Shipping Dimensions (WxHxD)	mm	1,115 x 290 x 375	1,115 x 290 x 375
Casing	Material	-	HIPS	HIPS

### NOTE

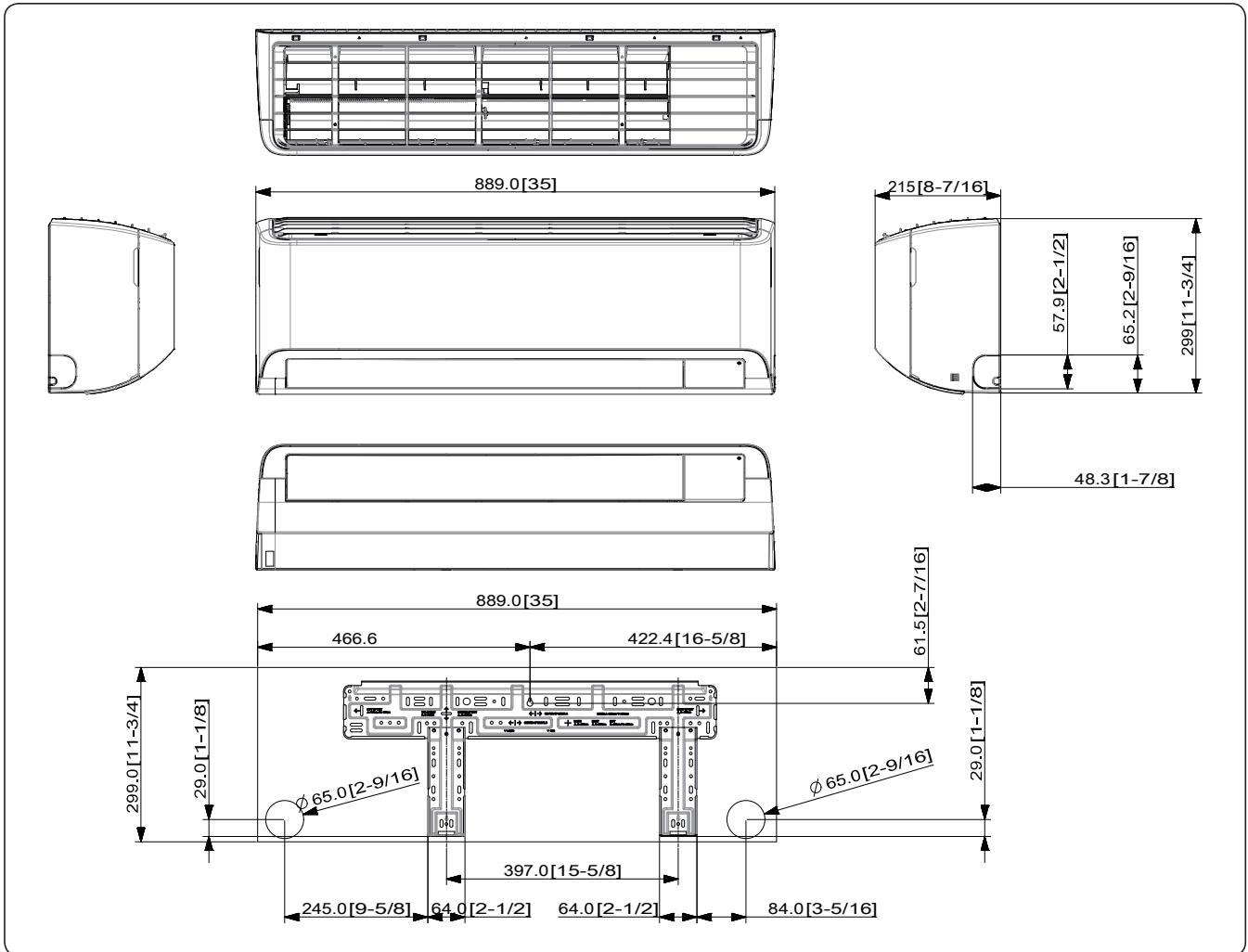
- Specifications may be subject to change without prior notice.
- 1)\* Capacities are based on (Equivalent refrigerant piping : 5m, Level differences : 0m)
  - Cooling : Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, 24°C WB
  - Heating : Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB
- 2)\* Select wire size based on the value of MCA
- 3)\* Sound pressure level is obtained in an anechoic room.
  - Sound pressure level is a relative value, depending on the distance and acoustic environment.
  - Sound pressure level may differ depending on operation condition.
  - dBA = A-weighted sound pressure level
  - Reference acoustic pressure 0 dB = 20uPa
- 4)\* Sound power level is an absolute value that a sound source generates.
  - dBA = A-weighted sound power level
  - Reference power : 1pW
  - Measured according to ISO 3741
- 5)\* These products contain R32 (GWP=675) which is fluorinated greenhouse gas.

# 5. Dimensional Drawing

## 5-2. Indoor unit

2 AR9500 : AR07TXEAAWKNEU, AR09TXEAAWKNEU, AR12TXEAAWKNEU  
 AR07TXCAAWKNEU, AR09TXCAAWKNEU, AR12TXCAAWKNEU  
 AR07CXCAAWKNEU, AR09CXCAAWKNEU, AR12CXCAAWKNEU

Units : mm [inches]



# 5. Dimensional Drawing

## 5-2. Indoor unit

- 3 AR4500 : AR18TXHZAWKNEU, AR24TXHZAWKNEU  
 AR5500 : AR18TXFYAWKNEU, AR24TXFYAWKNEU  
 AR9500 : AR18TXFCAWKNEU, AR24TXFCAWKNEU, AR18TXEAAWKNEU, AR24TXEAAWKNEU

Units : mm [inches]

