

AIR CONDITIONER

Cassette type

SERVICE MANUAL



INDOOR

AUXG09KVLA
AUXG12KVLA
AUXG14KVLA
AUXG18KVLA
AUXG22KVLA



OUTDOOR

AOYG09KATA
AOYG12KATA



AOYG14KATA
AOYG18KATA



AOYG22KATA

FUJITSU GENERAL LIMITED

Notices:

- Product specifications and design are subject to change without notice for future improvement.
- For further details, please check with our authorized dealer.

Trademarks

The following term and logo are trademarks of Fujitsu General Limited in the United States, other countries or both:

FGLair™



Android and Google Play are trademarks of Google Inc.

App Store is a service mark of Apple Inc., registered in the U.S. and other countries.

IOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.

CONTENTS

1. GENERAL INFORMATION

2. TECHNICAL DATA AND PARTS LIST

1. GENERAL INFORMATION

CONTENTS

1. GENERAL INFORMATION

1. Specifications	01-1
1-1. Indoor unit	01-1
1-2. Outdoor unit.....	01-5
2. Dimensions	01-7
2-1. Indoor unit	01-7
2-2. Outdoor unit.....	01-9

1. Specifications

1-1. Indoor unit

Type				Cassette			
				Inverter heat pump			
Model name				AUXG09KVLA	AUXG12KVLA	AUXG14KVLA	
Power supply				230 V ~ 50 Hz			
Power supply intake				Outdoor unit			
Available voltage range				198—264 V			
Capacity	Cooling	Rated	kW	2.50	3.50	4.30	
			Btu/h	8,500	11,900	14,700	
		Min.—Max.	kW	0.90—2.70	0.90—3.70	0.90—4.50	
	Btu/h		3,100—9,200	3,100—12,600	3,100—15,300		
	Heating	Rated	kW	3.20	4.10	5.00	
			Btu/h	10,900	13,400	17,000	
Min.—Max.		kW	0.90—3.90	0.90—4.40	0.90—5.30		
	Btu/h	3,100—13,300	3,100—15,000	3,100—18,000			
Input power	Cooling	Rated	kW	0.68	1.09	1.37	
				Max.	1.59	1.78	2.12
	Heating	Rated	kW	0.88	1.17	1.42	
				Max.	1.59	1.78	2.12
Current	Cooling	Rated	A	3.4	5.2	6.4	
	Heating			4.4	5.8	6.6	
Power factor	Cooling			87.0	91.1	93.1	
	Heating			87.0	87.7	93.5	
EER	Cooling			3.68	3.21	3.14	
COP	Heating			3.64	3.50	3.52	
Moisture removal				L/h (pints/h)	0.6 (1.1)	1.2 (2.1)	1.5 (2.6)
Maximum operating current *1		Cooling			6.9	7.7	9.2
		Heating			6.9	7.7	9.2
Fan	Airflow rate	Cooling	m ³ /h	HIGH	540	600	680
				MED	490	530	580
				LOW	440	470	490
				QUIET	390	410	410
		Heating	HIGH	540	600	800	
			MED	490	530	680	
			LOW	440	470	580	
			QUIET	390	410	450	
	Type × Q'ty				Turbo × 1		
	Motor output				54		
Sound pressure level *2		Cooling	dB (A)	HIGH	33	37	38
				MED	31	34	34
				LOW	29	30	30
				QUIET	27	27	27
		Heating	HIGH	34	37	43	
			MED	32	34	38	
			LOW	29	31	34	
			QUIET	27	29	30	
Heat exchanger type		Dimensions (H × W × D)		Main 1: 210 × 1,310 × 13.3 Main 2: 210 × 1,250 × 13.3			
		Fin pitch		Main 1: 1.2 Main 2: 1.2			
		Rows × Stages		Main 1: 1 × 10 Main 2: 1 × 10			
		Pipe type		Copper tube			
		Fin type		Aluminum			
Dimensions (H × W × D)		Net	mm	245 × 570 × 570			
		Gross		265 × 730 × 625			
Weight		Net	kg	15			
		Gross		19			
Connection pipe		Size	Liquid	Ø 6.35 (Ø 1/4)			
			Gas	Ø 9.52 (Ø 3/8)			
		Method	Flare				
Operation range		Cooling	°C	18 to 32			
		Heating	%RH	80 or less			
			°C	16 to 30			
Cassette grille (Grid type: Option)		Material		Polystyrene			
		Color		White			
		Approximate color of Munsell 9PB 9.1/0.2					
		Dimensions (H × W × D)	Net	mm	49 × 620 × 620		
			Gross		120 × 765 × 755		
Weight	Net	kg	2.3				
	Gross		4.5				
Remote control (Option)				Wired remote controller, Wireless remote controller, Mobile app*3 (FGLair™)			
Drain hose		Material		PVC			
		Size		VP25 [Ø 25 (I.D.), Ø 32 (O.D.)]			

NOTES:

- Specifications are based on the following conditions:
 - Cooling: Indoor temperature of 27 °CDB/19 °CWB, and outdoor temperature of 35 °CDB/24 °CWB.
 - Heating: Indoor temperature of 20 °CDB/15 °CWB, and outdoor temperature of 7 °CDB/6 °CWB.
 - Pipe length: 5.0 m, Height difference: 0 m. (Between outdoor unit and indoor unit.)
- Protective function might work when using it outside the operation range.
- *1: Maximum operating current is the total current of the indoor unit and the outdoor unit.
- *2: Sound pressure level:
 - Measured values in manufacturer's anechoic chamber.
 - Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here.
- *3: Available on Google Play™ store or on App Store®. Optional WLAN adapter is also required. For details, refer to the setting manual.

Specifications for ErP Lot10						
Model name		AUXG09KVLA		AUXG12KVLA	AUXG14KVLA	
Energy efficiency class	Cooling	A ⁺⁺				
	Heating (Average)	A ⁺				
Pdesign	Cooling	kW	2.5 (35°C)	3.5 (35°C)	4.3 (35°C)	
	Heating (Average)		2.3 (-10°C)	2.8 (-10°C)	3.2 (-10°C)	
SEER	Cooling	kWh/kWh	6.20	6.10	6.10	
SCOP	Heating (Average)		4.00	4.00	4.00	
Annual energy consumption	QCE	kWh/a	141	201	247	
	QHE (Average)		804	979	1,120	
Sound power level	Cooling	HIGH	dB (A)	46	49	50
	Heating			47	49	55

Type				Cassette		
				Inverter heat pump		
Model name				AUXG18KVLA	AUXG22KVLA	
Power supply				230 V ~ 50 Hz		
Power supply intake				Outdoor unit		
Available voltage range				198—264 V		
Capacity	Cooling	Rated	kW	5.20	6.00	
			Btu/h	17,700	20,500	
		Min.—Max.	kW	0.90—5.40	0.90—6.30	
		Btu/h	3,100—18,400	3,100—21,400		
	Heating	Rated	kW	6.00	7.00	
			Btu/h	20,500	23,900	
Min.—Max.		kW	0.90—6.30	0.90—7.40		
	Btu/h	3,100—21,400	3,100—25,200			
Input power	Cooling	Rated	kW	1.69	1.95	
		Max.		2.33	2.67	
	Heating	Rated		1.72	2.00	
		Max.		2.33	2.67	
Current	Cooling	Rated	A	7.8	8.6	
	Heating			7.9	8.8	
Power factor	Cooling			94.2	98.6	
	Heating			94.7	98.8	
EER	Cooling			3.08	3.08	
COP	Heating			3.49	3.50	
Moisture removal			L/h (pints/h)	2.2 (3.9)	2.6 (4.6)	
Maximum operating current *1		Cooling	A	10.1	11.6	
		Heating		10.1	11.6	
Fan	Airflow rate	Cooling	HIGH	m ³ /h	680	830
			MED		580	740
			LOW		490	600
			QUIET		410	450
		Heating	HIGH		800	860
			MED		680	760
			LOW		580	700
			QUIET		450	530
	Type × Q'ty				Turbo × 1	
	Motor output		W		54	
Sound pressure level *2	Cooling	HIGH	dB (A)	38	44	
		MED		34	42	
		LOW		30	36	
		QUIET		26	30	
	Heating	HIGH		43	45	
		MED		38	43	
		LOW		34	40	
		QUIET		30	33	
Heat exchanger type	Dimensions (H × W × D)		mm	Main 1: 210 × 1,310 × 13.3 Main 2: 210 × 1,250 × 13.3	Main 1: 210 × 1,360 × 13.3 Main 2: 210 × 1,295 × 13.3 Main 3: 210 × 1,235 × 13.3	
	Fin pitch			Main 1: 1.2 Main 2: 1.2	Main 1: 1.45 Main 2: 1.45 Main 3: 1.45	
	Rows × Stages			Main 1: 1 × 10 Main 2: 1 × 10	Main 1: 1 × 10 Main 2: 1 × 10 Main 3: 1 × 10	
	Pipe type			Copper tube		
Fin type		Aluminum				
Dimensions (H × W × D)	Net		mm	245 × 570 × 570		
	Gross			265 × 730 × 625		
Weight	Net		kg	15	16	
	Gross			19	20	
Connection pipe	Size	Liquid	mm (in)	Ø 6.35 (Ø 1/4)		
		Gas		Ø 12.70 (Ø 1/2)		
	Method		Flare			
Operation range	Cooling	°C		18 to 32		
		%RH		80 or less		
	Heating	°C		16 to 30		
Cassette grille (Grid type: Option)	Material		Polystyrene			
	Color		White			
			Approximate color of Munsell 9PB 9.1/0.2			
	Dimensions (H × W × D)	Net	mm	49 × 620 × 620		
		Gross		120 × 765 × 755		
Weight	Net	kg	2.3			
	Gross		4.5			
Remote control (Option)				Wired remote controller, Wireless remote controller, Mobile app*3 (FGLair™)		
Drain hose	Material		PVC			
	Size		mm			
				VP25 [Ø 25(I.D.), Ø 32(O.D.)]		
NOTES:						
<ul style="list-style-type: none"> Specifications are based on the following conditions: <ul style="list-style-type: none"> Cooling: Indoor temperature of 27 °CDB/19 °CWB, and outdoor temperature of 35 °CDB/24 °CWB. Heating: Indoor temperature of 20 °CDB/15 °CWB, and outdoor temperature of 7 °CDB/6 °CWB. Pipe length: 5.0 m, Height difference: 0 m. (Between outdoor unit and indoor unit.) Protective function might work when using it outside the operation range. *1: Maximum operating current is the total current of the indoor unit and the outdoor unit. *2: Sound pressure level: <ul style="list-style-type: none"> Measured values in manufacturer's anechoic chamber. Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here. *3: Available on Google Play™ store or on App Store®. Optional WLAN adapter is also required. For details, refer to the setting manual. 						

Specifications for ErP Lot10				
Model name			AUXG18KVLA	AUXG22KVLA
Energy efficiency class	Cooling		A ⁺⁺	
	Heating (Average)		A	
Pdesign	Cooling	kW	5.2 (35°C)	6.0 (35°C)
	Heating (Average)		3.8 (-10°C)	4.4 (-10°C)
SEER	Cooling	kWh/kWh	6.10	6.10
SCOP	Heating (Average)		3.90	3.90
Annual energy consumption	QCE		298	344
	QHE (Average)		1,362	1,578
Sound power level	Cooling	HIGH	dB (A)	50
	Heating			55

1-2. Outdoor unit

Type			Inverter heat pump		
Model name			AOYG09KATA	AOYG12KATA	AOYG14KATA
Power supply			230 V ~ 50 Hz		
Available voltage range			198—264 V		
Starting current			A	4.4	5.8
Fan	Airflow rate	Cooling	m ³ /h	1,610	1,630
		Heating		1,550	1,410
	Type × Q'ty	Propeller fan × 1			
Motor output			W	23	
Sound pressure level *1	Cooling	Heating	dB (A)	47	49
				48	50
Sound power level	Cooling	Heating	dB (A)	60	62
				60	62
Heat exchanger type	Dimensions (H × W × D)		mm	504 × 650 × 18.19	Main 1: 504 × 630 × 18.19 Main 2: 504 × 630 × 18.19
	Fin pitch			1.3	Main 1: 1.3 Main 2: 1.3
	Rows × Stages		1 × 24	Main 1: 1 × 24 Main 2: 1 × 24	
	Pipe type		Copper		
	Fin type		Type (Material)	Aluminum	
			Surface treatment		
			PC fin		
Compressor	Type × Q'ty	DC rotary × 1			
	Motor output		W	550	900
Refrigerant	Type (Global warming potential)		R32 (675)		
	Charge		g	600	700
Refrigerant oil	Type		RB74AF		
	Amount		cm ³	240	340
Enclosure	Material		Steel sheet		
	Color		Beige Approximate color of Munsell 10YR 7.5/1.0		
Dimensions (H × W × D)	Net		mm	541 × 663 × 290	542 × 799 × 290
	Gross			602 × 804 × 375	602 × 940 × 375
Weight	Net		kg	23	25
	Gross			27	29
Connection pipe	Size	Liquid	mm (in)	Ø 6.35 (Ø 1/4)	
		Gas		Ø 9.52 (Ø 3/8)	
	Method		Flare		
	Pre-charge length		m	15	
	Max. length			15	20
Max. height difference		15			
Operation range	Cooling	Heating	°C	-10 to 46	
				-15 to 24	
Drain hose	Material		PP		
	Size		mm	Ø 13.0 (I. D.), Ø 16.0 to Ø 16.8 (O. D.)	

NOTES:

- Specifications are based on the following conditions:
 - Cooling: Indoor temperature of 27 °CDB/19 °CWB, and outdoor temperature of 35 °CDB/24 °CWB.
 - Heating: Indoor temperature of 20 °CDB/15 °CWB, and outdoor temperature of 7 °CDB/6 °CWB.
 - Pipe length: 5.0 m, Height difference: 0 m.
- Protective function might work when using it outside the operation range.
- *1: Sound pressure level
 - Measured values in manufacturer's anechoic chamber.
 - Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here.

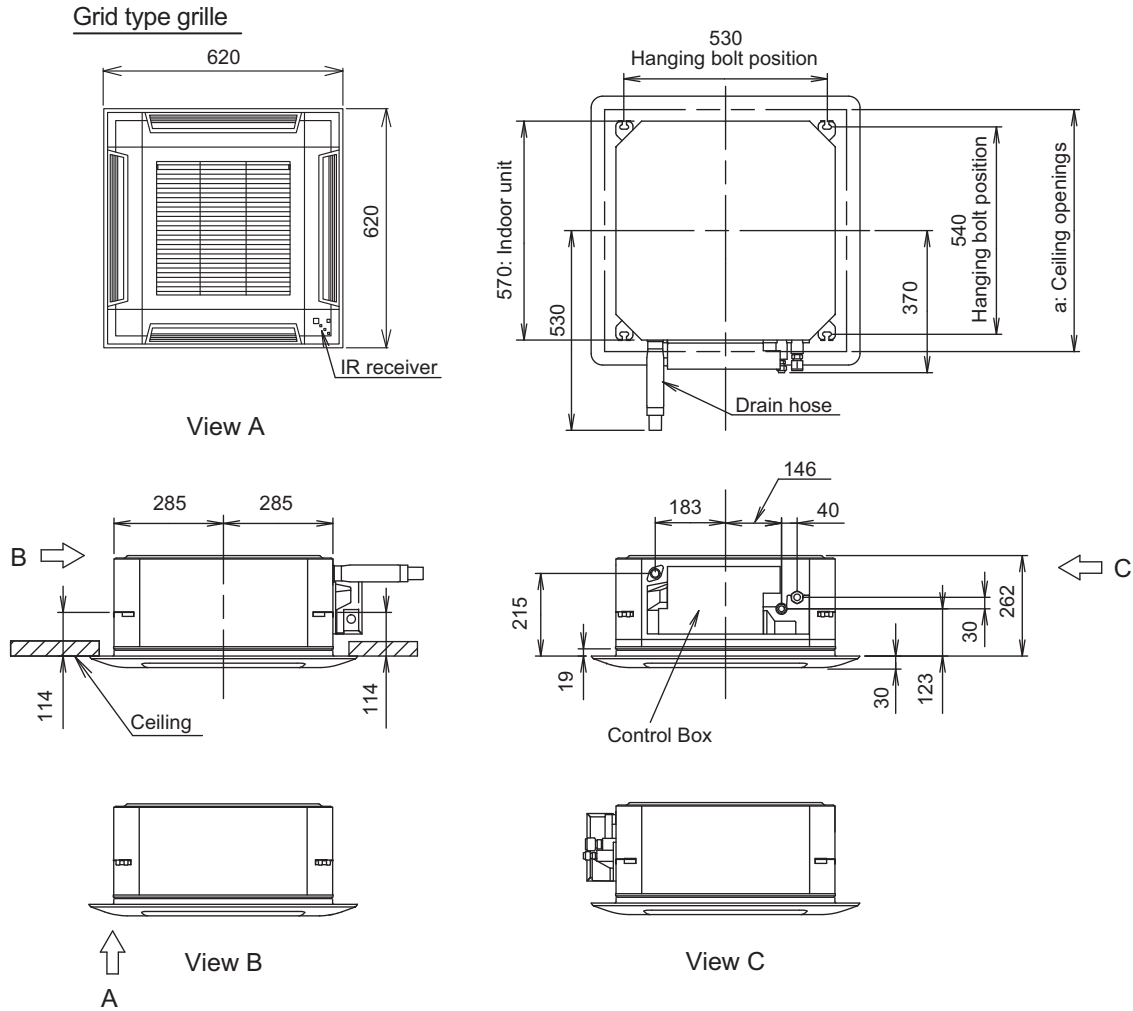
Type			Inverter heat pump		
Model name			AOYG18KATA	AOYG22KATA	
Power supply			230 V ~ 50 Hz		
Available voltage range			198—264 V		
Starting current			A		
			7.9	8.8	
Fan	Airflow rate	Cooling	m ³ /h	1,710	2,240
		Heating		1,840	2,240
	Type × Q'ty	Propeller fan × 1			
Motor output			W		
			23	49	
Sound pressure level *1		Cooling	dB (A)	51	52
		Heating		52	53
Sound power level		Cooling	dB (A)	63	64
		Heating		64	65
Heat exchanger type		Dimensions (H × W × D)	mm	Main 1: 504 × 881 × 18.19 Main 2: 504 × 851 × 18.19	Main 1: 588 × 881 × 18.19 Main 2: 588 × 851 × 18.19
		Fin pitch		Main 1: 1.3 Main 2: 1.3	
		Rows × Stages	Main 1: 1 × 24 Main 2: 1 × 24		Main 1: 1 × 28 Main 2: 1 × 28
		Pipe type	Copper		
		Fin type	Type (Material)	Aluminum	
			Surface treatment		
			PC fin		
Compressor	Type × Q'ty	DC rotary × 1			DC twin rotary × 1
	Motor output	W	900		
Refrigerant		Type (Global warming potential)	R32 (675)		
		Charge	g	900	1,100
Refrigerant oil		Type	RB68A		
		Amount	cm ³	340	350
Enclosure		Material	Steel sheet		
		Color	Beige		
		Approximate color of Munsell 10YR 7.5/1.0			
Dimensions (H × W × D)	Net	mm	542 × 799 × 290	632 × 799 × 290	
	Gross		602 × 940 × 375	692 × 940 × 375	
Weight	Net	kg	33	36	
	Gross		36	40	
Connection pipe	Size	Liquid	mm (in)	Ø 6.35 (Ø 1/4)	
		Gas		Ø 12.70 (Ø 1/2)	
	Method	Flare			
	Pre-charge length	m	15		
	Max. length		20	25	
Max. height difference	15		20		
Operation range		Cooling	°C	-10 to 46	
		Heating		-15 to 24	
Drain hose		Material	PP		
		Size	mm	Ø 13.0 (I. D.), Ø 16.0 to Ø 16.8 (O. D.)	
NOTES:					
<ul style="list-style-type: none"> • Specifications are based on the following conditions: <ul style="list-style-type: none"> – Cooling: Indoor temperature of 27 °CDB/19 °CWB, and outdoor temperature of 35 °CDB/24 °CWB. – Heating: Indoor temperature of 20 °CDB/15 °CWB, and outdoor temperature of 7 °CDB/6 °CWB. – Pipe length: 5.0 m, Height difference: 0 m (Between outdoor unit and indoor unit.). • Protective function might work when using it outside the operation range. • *1: Sound pressure level <ul style="list-style-type: none"> – Measured values in manufacturer's anechoic chamber. – Because of the surrounding sound environment, the sound levels measured in actual installation conditions might be higher than the specified values here. 					

2. Dimensions

2-1. Indoor unit

- Models: AUXG09KVLA, AUXG12KVLA, AUXG14KVLA, AUXG18KVLA, and AUXG22KVLA

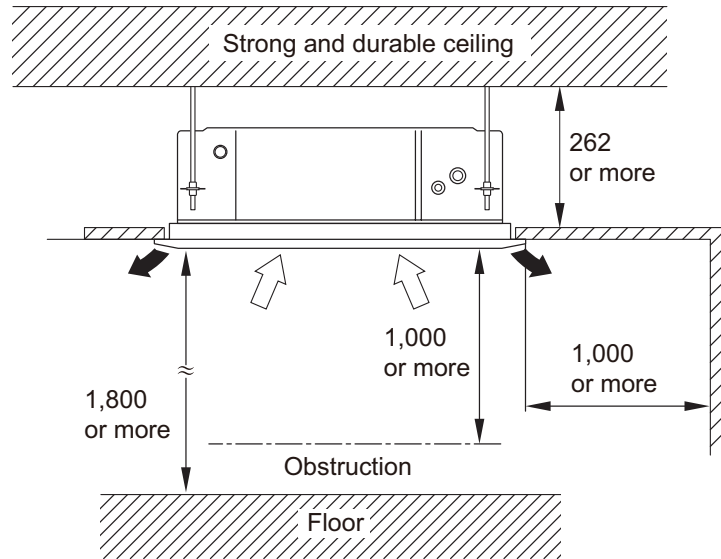
Unit: mm



a: Ceiling openings		
Cassette grille (Option [Grid type])	mm	580 to 610

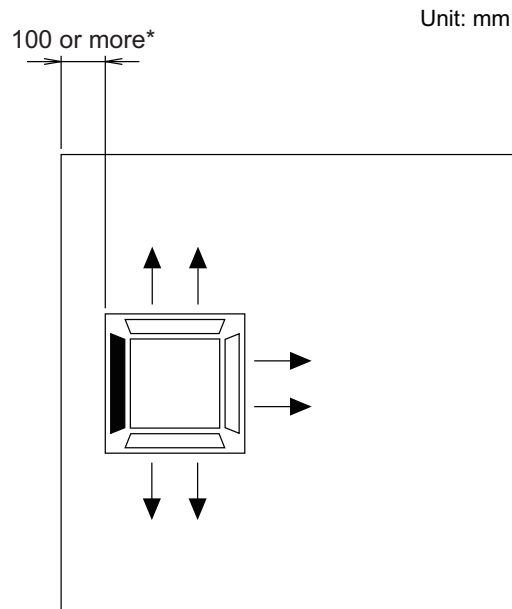
■ Installation space requirement

Unit: mm



Maximum height from floor to ceiling (Unit: mm)	
Standard	2,700
High ceiling	3,000

3-way direction setting:



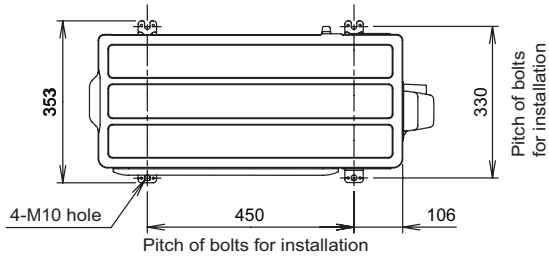
NOTES:

- To set "3-direction", optional Air outlet shutter plate (UTR-YDZB) must be installed, and the "outlet-direction" need to be switched to "3-way" by remote controller.
*When installing the indoor unit, be careful about the maintenance space.
- The ceiling height cannot be set in the 3-way outlet mode. Therefore, ceiling height setting change by function setting 20 is prohibited. For details, refer to "Contents of function setting" on page 1.

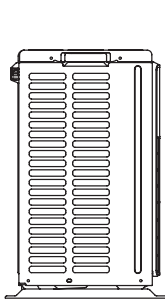
2-2. Outdoor unit

■ Models: AOYG09KATA and AOYG12KATA

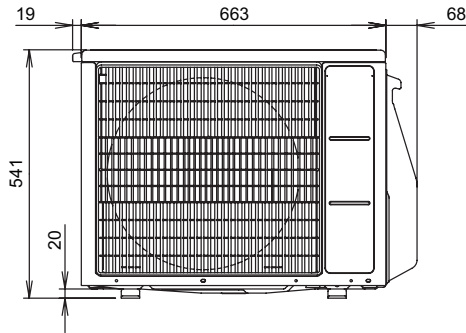
Unit: mm



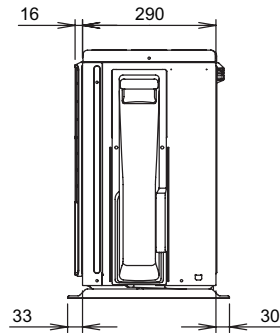
Top view



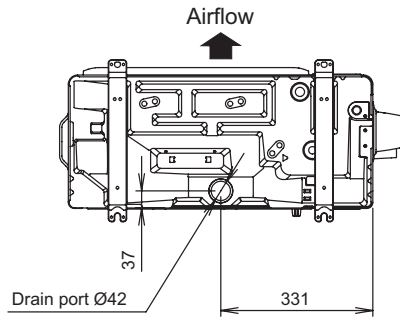
Side view



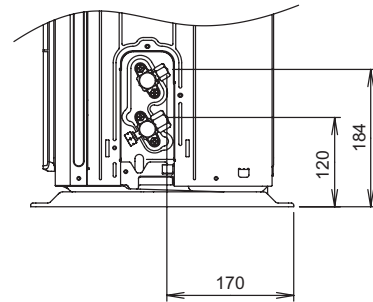
Front view



Side view



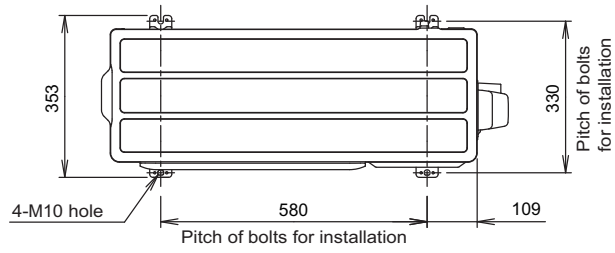
Bottom view



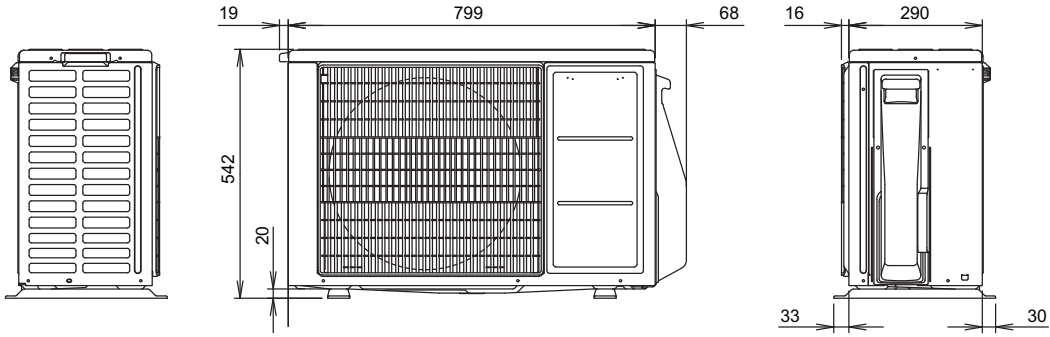
Side view (Valve part)

■ Models: AOYG14KATA and AOYG18KATA

Unit: mm



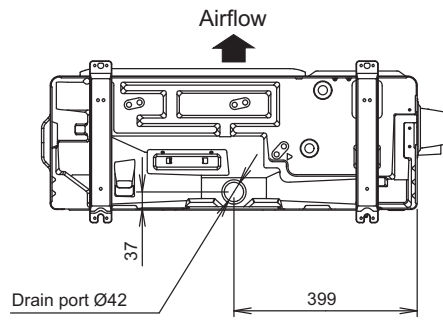
Top view



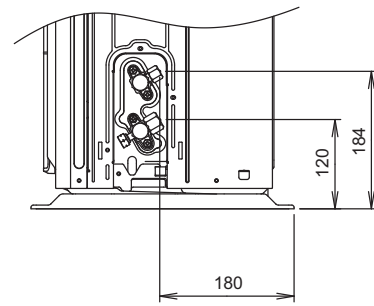
Side view

Front view

Side view



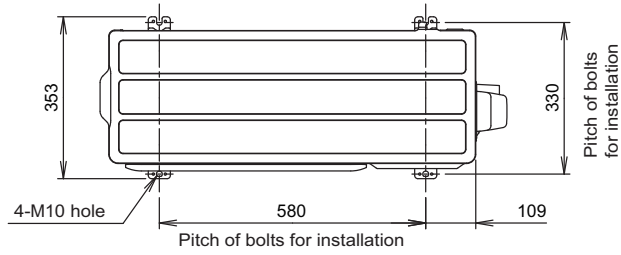
Bottom view



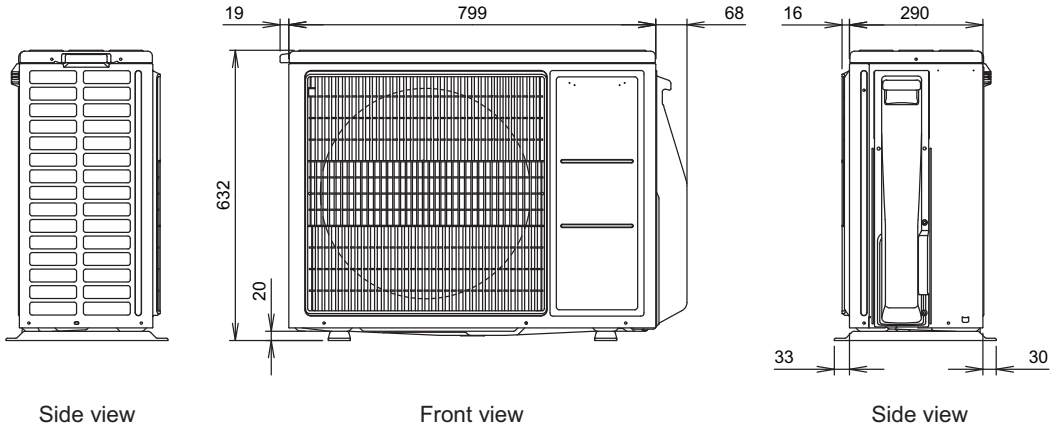
Side view (Valve part)

Model: AOYG22KATA

Unit: mm



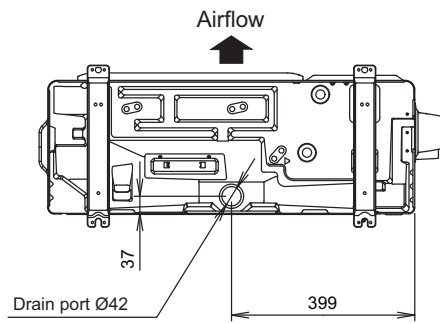
Top view



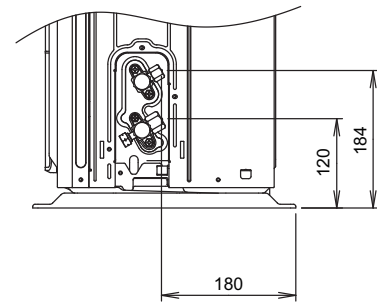
Side view

Front view

Side view



Bottom view



Side view (Valve part)