

AIR CONDITIONER

Duct type

SERVICE MANUAL

INDOOR



ARXG09KLLAP
ARXG12KLLAP
ARXG14KLLAP



ARXG18KLLAP

OUTDOOR



AOYG09KATA
AOYG12KATA



AOYG14KATA
AOYG18KATA

FUJITSU GENERAL LIMITED

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1. GENERAL INFORMATION

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1. GENERAL INFORMATION

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1. Specifications

1-1. Models: ARXG09KLLAP, ARXG12KLLAP, ARXG14KLLAP, and ARXG18KLLAP

Type				Duct				
				Inverter heat pump				
Model name				ARXG09KLLAP	ARXG12KLLAP	ARXG14KLLAP	ARXG18KLLAP	
Power supply				230 V ~ 50 Hz				
Power supply intake				Outdoor unit				
Available voltage range				198—264 V				
Capacity	Cooling	Rated	kW	2.5	3.5	4.3	5.2	
			Btu/h	8,500	11,900	14,700	17,700	
		Min.—Max.	kW	0.90—2.70	0.90—3.70	0.90—4.50	0.90—5.40	
			Btu/h	3,100—9,200	3,100—12,600	3,100—15,300	3,100—18,400	
	Heating	Rated	kW	3.2	4.1	5.0	6.0	
			Btu/h	10,900	14,000	17,000	20,500	
		Min.—Max.	kW	0.90—3.90	0.90—4.40	0.90—5.30	0.90—6.30	
			Btu/h	3,100—13,300	3,100—15,000	3,100—18,000	3,100—21,400	
Input power	Cooling	Rated	kW	0.69	1.09	1.37	1.66	
		Max.		1.59	1.78	2.12	2.33	
	Heating	Rated		0.88	1.17	1.42	1.71	
		Max.		1.59	1.78	2.12	2.33	
Current	Cooling	Rated	A	3.4	5.2	6.4	7.6	
	Heating		4.4	5.8	6.6	7.9		
Power factor	Cooling		%	88.2	91.1	93.1	95.0	
	Heating		87.0	87.7	93.5	94.1		
EER	Cooling	kW/kW		3.62	3.21	3.14	3.13	
COP	Heating			3.64	3.50	3.52	3.51	
Moisture removal			L/h (pints/h)	0.7 (1.2)	1.3 (2.3)	1.5 (2.6)	2.0 (3.5)	
Maximum operating current *1			Cooling	A	6.9	7.7	9.2	10.1
			Heating		6.9	7.7	9.2	10.1
Fan	Airflow rate	Cooling	m ³ /h	HIGH	600	650	800	940
				MED	550	600	700	880
				LOW	500	550	600	820
				QUIET	450		480	750
		Heating	HIGH	600	650	800	940	
			MED	550	600	700	880	
			LOW	500	550	600	820	
			QUIET	450		480	750	
	Type × Q'ty			Sirocco fan × 2				Sirocco fan × 3
	Motor output			W	81			
Recommended static pressure range			Pa	0 to 90				
Sound pressure level *2			Cooling	dB (A)	HIGH	28	29	32
					MED	27	28	30
					LOW	26	28	29
					QUIET	25	26	27
			Heating	HIGH	28	29	32	
				MED	26	28	30	
				LOW	25	26	29	
				QUIET	24	25	27	
Heat exchanger type			Dimensions (H × W × D)	294 × 500 × 39.9				294 × 700 × 39.9
			Fin pitch	1.3				
			Rows × Stages	3 × 14				
			Pipe type	Copper tube				
Enclosure			Material	Steel sheet				
			Color	—				
Dimensions (H × W × D)			Net	198 × 700 × 620				198 × 900 × 620
			Gross	276 × 968 × 772				276 × 1,168 × 772
Weight			Net	17				20
			Gross	22				26
Connection pipe			Size	Liquid	Ø 6.35 (Ø 1/4)			
					Gas	Ø 9.52 (Ø 3/8)		
Drain hose			Method	Flare				
				Material	PVC			
Operation range			Size	mm	Ø 25 (I.D.), Ø 32 (O.D.)			
					Cooling	°C	18 to 32	
Remote control (Option)			Heating	°C	80 or less			
					16 to 30			
Remote control (Option)				Wired remote controller, Wireless remote controller, Mobile app*3 (FGLair™)				
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. Standard static pressure: 25 Pa 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		ARXG09KLLAP	ARXG12KLLAP	ARXG14KLLAP	ARXG18KLLAP		
Energy efficiency class	Cooling	A ⁺					
	Heating (Average)	A					
Pdesign	Cooling	2.5 (35°C)	3.5 (35°C)	4.3 (35°C)	5.2 (35°C)		
	Heating (Average)	2.3 (-10°C)	2.8 (-10°C)	3.2 (-10°C)	3.8 (-10°C)		
SEER	Cooling	kWh/kWh	5.90	5.80	5.60	5.80	
SCOP	Heating (Average)		3.80				
Annual energy consumption	QCE	kWh/a	148	211	269	313	
	QHE (Average)		847	1,031	1,177	1,398	
Sound power level	Cooling	HIGH	dB (A)	57	58	60	58
	Heating			57	58	60	58

1-2. Models: AOYG09KATA, AOYG12KATA, AOYG14KATA, and AOYG18KATA

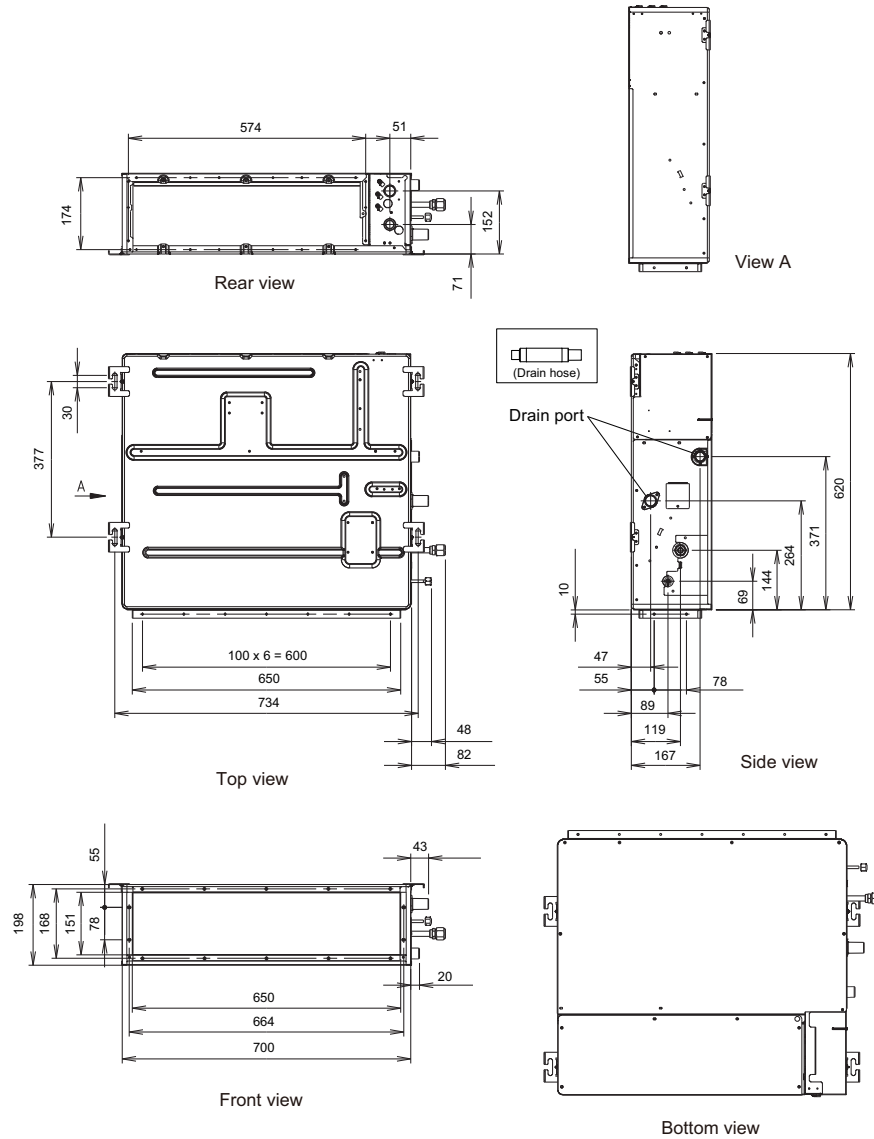
Type			Inverter heat pump			
Model name			AOYG09KATA	AOYG12KATA	AOYG14KATA	AOYG18KATA
Power supply			230 V ~ 50 Hz			
Available voltage range			198—264 V			
Starting current			4.4	5.8	6.6	7.9
Fan	Airflow rate	Cooling	1,610	1,630	1,670	1,710
		Heating	1,550	1,410	1,580	1,840
	Type × Qty	Propeller fan × 1				
Motor output		W	23			
Sound pressure level *1	Cooling	dB (A)	47	49	50	51
			Heating	48	50	51
Sound power level	Cooling	dB (A)	60	62	63	
			Heating	60	62	63
Heat exchanger type	Dimensions (H × W × D)	mm	504 × 650 × 18.19	Main 1: 504 × 630 × 18.19 Main 2: 504 × 630 × 18.19	Main 1: 504 × 881 × 18.19 Main 2: 504 × 851 × 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 tube			
	Fin type	Type (Material)	Aluminum			
		Surface treatment	PC fin			
Compressor	Type × Qty	W		DC rotary × 1		
	Motor output		550		900	
Refrigerant	Type (Global warming potential)		R32 (675)			
	Charge	g	600	700	850	900
Refrigerant oil	Type		RB74AF		RB68A	
	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	32	33
	Gross		27	29	36	
Connection pipe	Size	Liquid	Ø 6.35 (Ø 1/4)			
		Gas	Ø 9.52 (Ø 3/8)		Ø 12.70 (Ø 1/2)	
	Method		Flare			
	Pre-charge length		15			
	Max. length		15		20	
Max. height difference		15				
Operation range	Cooling	°C	-10 to 46			
			Heating	-15 to 24		
Drain hose	Material		PP			
	Size		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

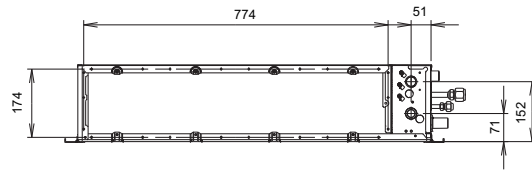
■ Models: ARXG09KLLAP, ARXG12KLLAP, and ARXG14KLLAP

Unit: mm



Model: ARXG18KLLAP

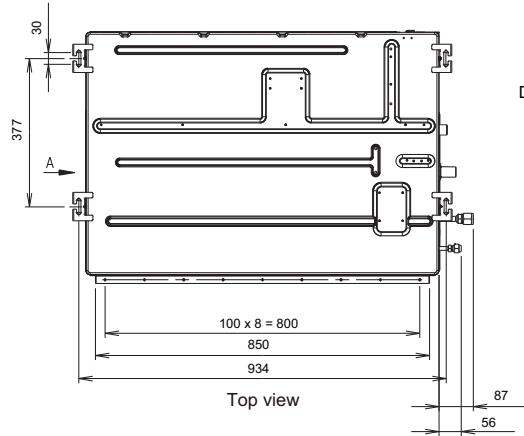
Unit: mm



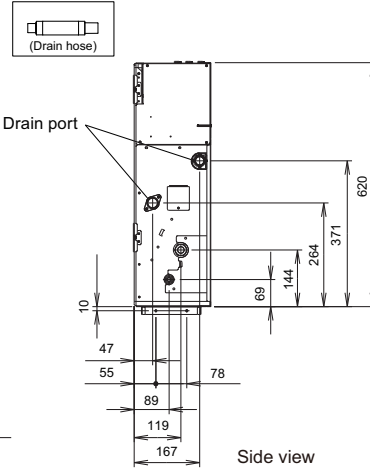
Rear view



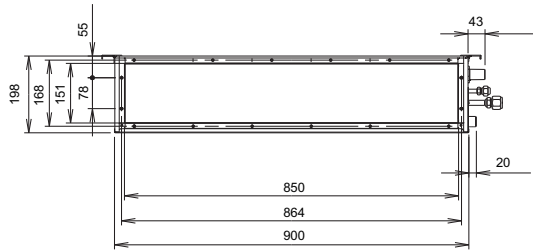
View A



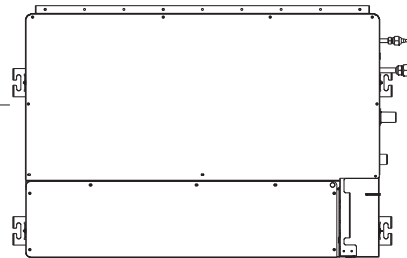
Top view



Side view



Front view

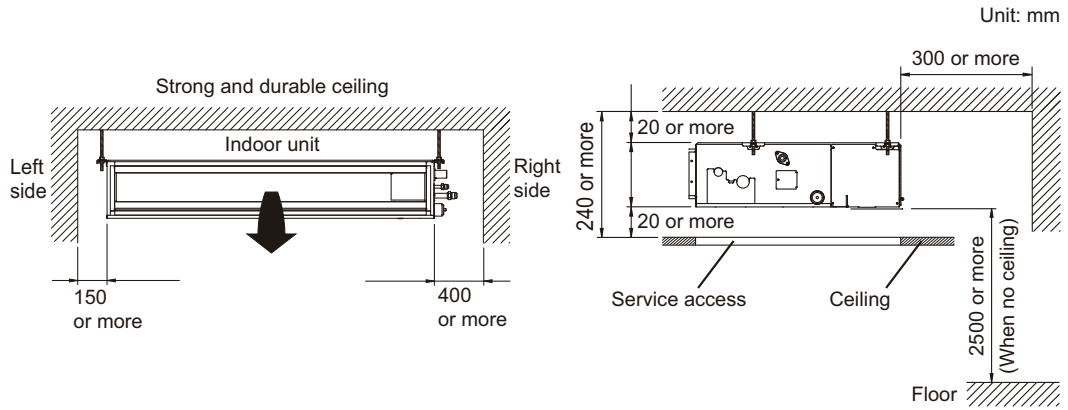


Bottom view

Installation space requirement

Provide sufficient installation space for product safety.

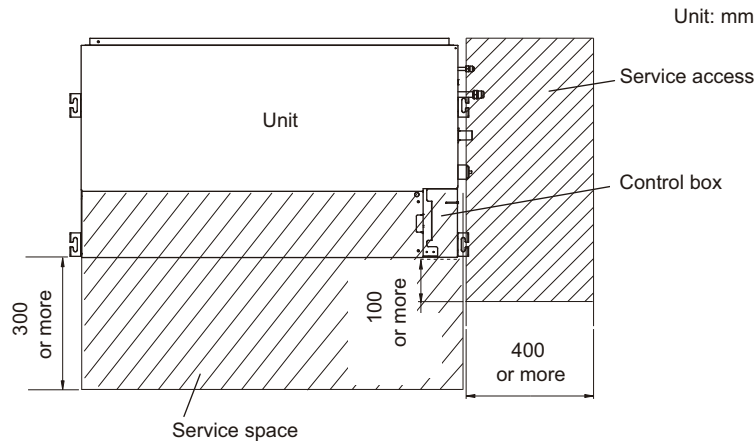
In ceiling-concealed installations:



Maintenance space requirement

For future maintenance and service access, provide sufficient maintenance space.

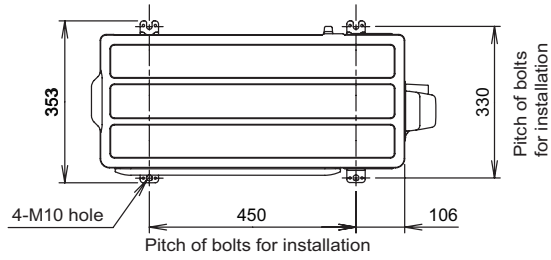
NOTE: Do not place any wiring or illumination in the maintenance space, as they will impede service.



2-2. Outdoor unit

■ AOYG09KATA and AOYG12KATA

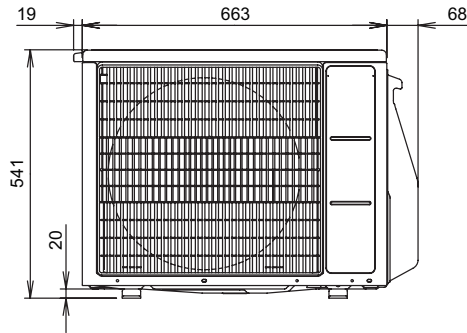
Unit: mm



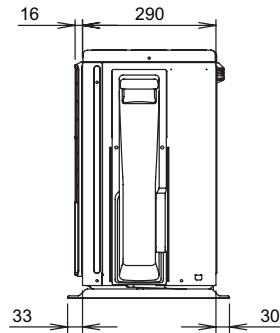
Top view



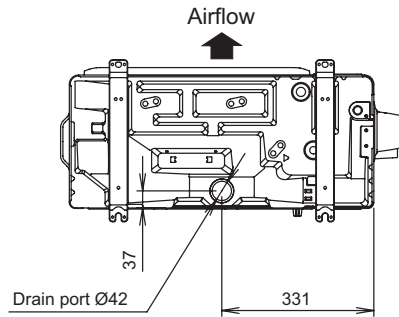
Side view



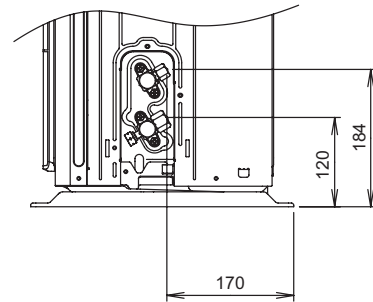
Front view



Side view



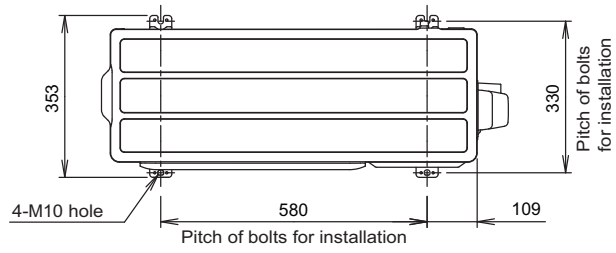
Bottom view



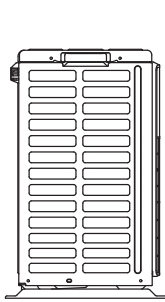
Side view (Valve part)

AOYG14KATA and AOYG18KATA

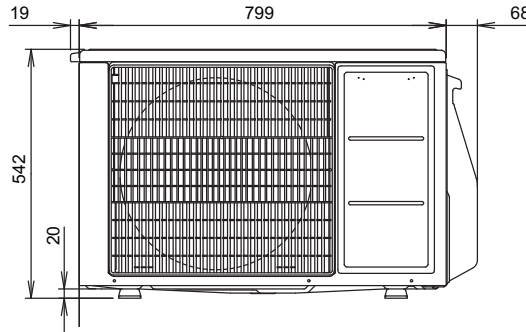
Unit: mm



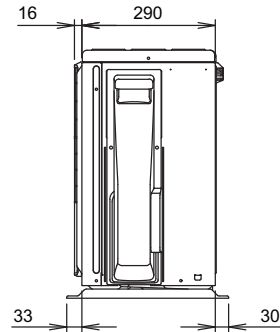
Top view



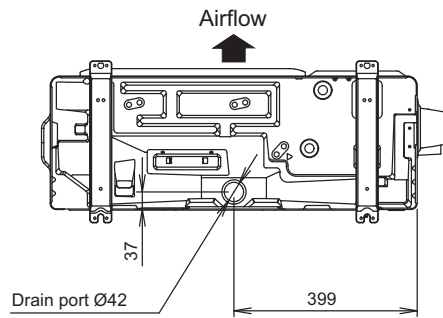
Side view



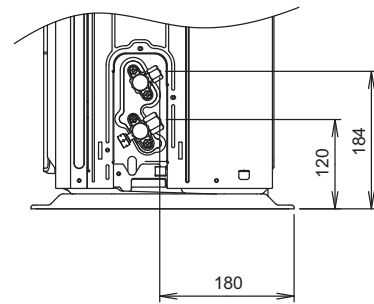
Front view



Side view



Bottom view



Side view (Valve part)