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# AIRSTAGE

**Variable Refrigerant Flow System** 

Multi Air Conditioning System for Buildings

The Intelligent Choice in Comfort





FUJITSU GENERAL LIMITED

# High-performance air conditioning system

The compact VRF System provides economical and comfortable air conditioning for wide range of applications from living space to business space.

# Compact VRF System for use in apartments, homes, shops, offices



# **Apartments**

The common areas and individual room spaces in apartment blocks have differing air conditioning needs. What is required is an air conditioning system that provides comfortable conditions and is economical and surroundings conscious.

# Homes

Homes need individual air conditioning control for specific rooms that can also be easily switched to standby mode if the occupants have to go out at short



# A range which allows an unlimited combination of indoor and outdoor units accord

# **Outdoor units** Cooling Only R4

# Indoor units

A	Compact Cassette	Cassette	Comp	Compact Duct Low Static Pressure		Duct
	AU7 / AU9 / AU12 / AU14 / AU18	Slim Type AU20 / AU25 / AU30 AU36 / AU45 / AU54	AR7/AR9	AR12 / AR14 / AR18 / AR22	Silent Model ARXB25 / ARXB30	AR25 / AR30 / AR36 / AR45
	P14	P15		P16	P17	P17



# Piping material

- Use the correct refrigerant piping and materials for R410A.
- For the pipe wall thickness, see the table below.

Copper pipe outside diameter(Ø)	Ø 6.35	Ø19.05					
Material	Copper JIS H3300 C1220T-O or equivalent 1)						
Copper pipe 2) wall thickness (mm)	0.8	0.8	0.8	1.0	1.2		

Note: Always observe and follow the necessary local regulations when installing refrigerant piping. 1) Allowable tensile stress ≥ 33 (N/mm²); 2) Design pressure 4.2MPa.

### **Tools**

• R410A work requires a number of special tools (\* symbol). Since tools used in R22 work cannot be used, provide the tools separately.

	Tool name	Process a	nd application		
	Pipe cutter	Pipe cutting			
*	Flaring tool	Pipe flaring work			
*	Torque wrench (1/2, 5/8)	Flare nut connection	Refrigerant piping work		
	Expander	Expansion at pipe connection			
	Pipe bender	Pipe bending work			
	Nitrogen gas	Pipe interior oxidation prevention	A in tightness toot		
	Welder	Pipe brazing	Air tightness test		
*	Gauge manifold	Vacuum evacuation and refrigerant	Air tightness test ~		
*	Charging hose	charging operation check	Refrigerant additional charging		
*	Vacuum pump(with adaptor)		Vacuum drying		
	Electronic scale for refrigerant charging		Pofrigorant additional pharaina		
	Gas leak tester	Gas leakage test	Refrigerant additional charging		

# Work precautions

Refrigerant check

Before work, check the refrigerant used and prepare materials matched to the refrigerant.

Refrigerant piping work Observe the basics (dry, clean) of refrigerant piping and carry out work so that problems will not occur. Moreover, when performing welding work, seal in nitrogen gas and perform work so that an oxide film is not produced.





Conduct a pressure test sufficiently and make sure there is no refrigerant leakage. Leak pressure test

If the vacuum pump does not have a reverse flow check mechanism, use the pump together Vacuum drying with a reverse flow check adapter.

Charge only the amount of R410A refrigerant calculated in the additional refrigerant charge Additional refrigerant calculation. This refrigerant should onl be charged in a liquid form.

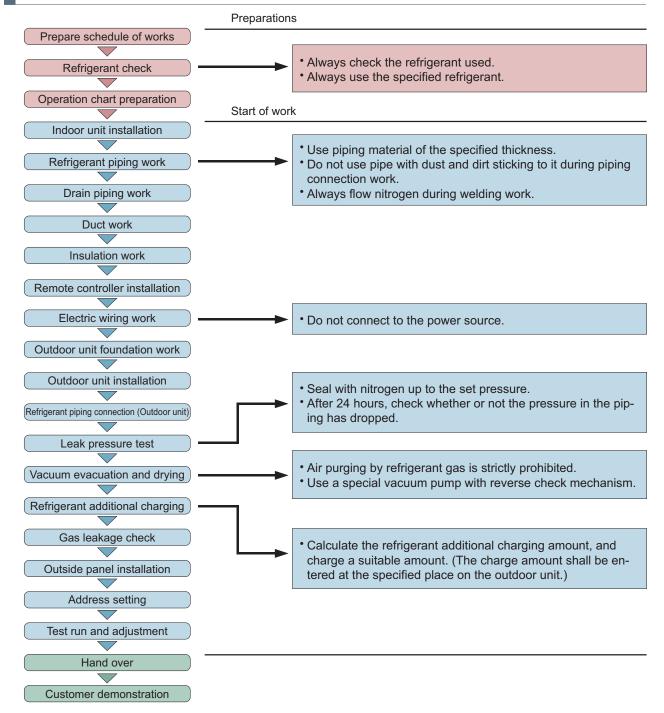
# **R410A Work Notes**

# R410A

The working pressure of R410A is approximately 1.6 times higher than that of R22. As the oil type is also different, be sure not to mix them.

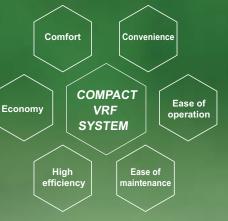
Refrigerant	R410A	R407C	R22
Oil	POE oil	POE oil	Mineral oil
Pressure ratio	Approx. 1.6	Approx. 1.1	1

# Work flow



# A compact VRF System that responds to the needs of each building

Backed by advanced air conditioning technology, this compact VRF System was developed to meet six key requirements: high efficiency, economy, comfort, convenience, ease of operation, and easy maintenance. This VRF System delivers a comfortable and economical environment.



# and a broad range of other applications



# **Shops**

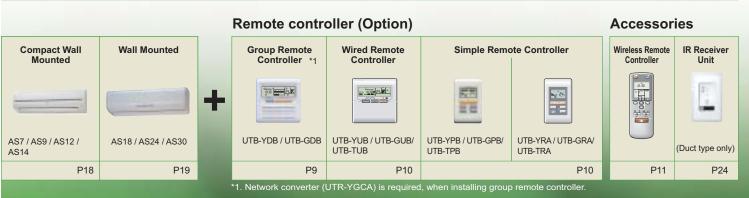
As shop premises are regularly upgraded and the operating conditions for each can vary so much, large-scale air conditioning management is very difficult. Consequently, a VRF air conditioning system matched to each shop is an ideal solution.

# **Offices**

The spaces within office premises can all have different air conditioning requirements. Energy saving and economic operation are major issues and what is needed is an air conditioning system which can be accurately matched to each space and centrally controlled.



# ing to the building and application





# High-performance outdoor unit delivering com

# AIRSTAGE SERIES



Heat Pump AJ\*A54LCLR AO\*54UJBMR

Cooling Only AJ\*A54JCLR AO\*54FJBMR

\*\* AJ\*A: AJYA (FUJITSU) AJ\*A: AJGA (GENERAL) AO\* : AO (FUJITSU) AO\* : AOG (GENERAL)





# Powerful operation with low electricity consumption

 Excellent COPs are attainable as shown in the table below.

Cooling COP	3.20 <sup>*</sup>
Heating COP	3.40*

- \* "COP" is the coefficient of performance
- (= capacity (kW) ÷ input power (kW)).

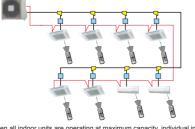
  \*\* COP values are base on our own testing method.
- Uses a high-performance DC inverter scroll compressor with variable capacity according to the load during cooling and heating.



# High-capacity connection possible

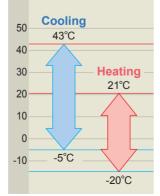
One outdoor unit can connect to up to 8 indoor units.
 Connectable capacity is 150% of the outdoor unit rating and can cope with a range of operating modes.





# Operating outside air temperature range

 Outdoor unit operates over an ambient temperature range of -5°C to 43°C for cooling and -20°C to 21°C for heating.



# **Optional Parts**

# UTR-EV2AXL UTR-EV3XL • EV kit is available for installation as necessary. Model code < 30 : UTR-EV2AXL Model code ≥ 30 : UTR-EV3XL

# Separation tube UTR-BP054X / UTR-BP54U

Separation tubes are available for installation as necessary.



# Grille kit

# UTG-UDYD-W UTG-UDGD-W

 Grille for compact cassette type indoor unit.



# Header

## UTR-HD546U

Headers are available for installation as necessary.



# Remote sensor unit

### UTD-RS100

 Thermo sensor for sensing the temperature of an arbitrary place in the room



# Drain pump unit

### UTZ-PX1BBA

For compact duct type



# Flange (Square)

# UTD-SF045T

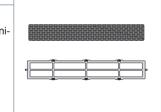
•For duct type 205 x 1,063, L=40 (mm)



# Air clean filter

# UTR-FA08

For wall mounted type
 Air clean filter assembly for initial setting.



# Flange (Round)

## UTD-RF204

• For duct type Ø195 (Ø205), L=85 (mm)

Long-life filter



# Air clean filter

# UTR-FB03

•Replacement filter for UTR-FA08



# UTD-LF270 • For duct type



# Accessories

# Wireless remote controller

· Supplied with each indoor unit



# IR receiver unit

• IR receiver unit is connected for each duct type indoor unit.



# **Optional Parts**

# Group remote controller

### UTB-YDB / UTB-GDB

- Up to 8indoor units can be controlled by a single control-
- When air conditioner ON/OFF and temperature setting are preset automatically by using a weekly timer, operation can be started and stopped automatically.



# Network converter

### UTR-YGCA

 Network converter is required to connect Group Remote Controller to an VRF system.



# Wired remote controller

### UTB-YUB / UTB-GUB UTB-TUB

- Wired remote controller capable of controlling each indoor unit individually.
- Can be used together with wireless remote controller.



# Simple remote controller

### UTB-YPB / UTB-GPB UTB-TPB

 Concentrates on basic operations such as On/Off, Fan Control, Master Control and Temperature Setting.



# Simple remote controller

### UTB-YRA / UTB-GRA UTB-TRA

 Concentrates on basic operations such as On/Off, Fan Control and Temperature Setting.



# External switch controller

### UTR-YESA

 Switching of the air conditioner can be controlled by connecting other sensor switches.

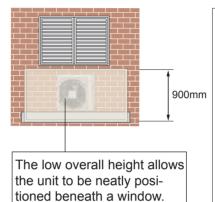


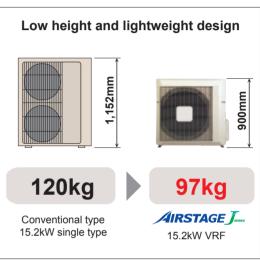
# fort and economy

# Lightweight and compact design

Small, compact casing can be easily concealed.







# **Noise reduction**

 Newly designed larger fan and double casing bell mouth construction reduce noise emissions.

### Large fan

Low-speed design suppresses noise by using a larger fan.



# Blue fin heat exchanger mounted

 Corrosion-resistance of the heat exchanger even in coastal areas has been improved by blue fin treatment of the outdoor unit heat exchanger.

# Blue fin heat exchanger



\*Cobalt blue protection (Blue Fin) is a standard specification of AJ\*A54LCLR, AJ\*A54JCLR.

# Double casing bell mouth

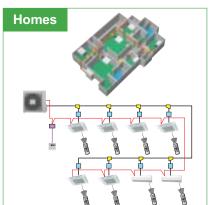
Double casing bell mouth helps to reduce noise.

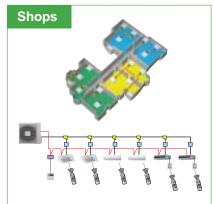


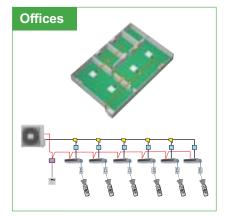
# Compact VRF System allows design flexib

# Flexible design Superior design flexibility allows individual air conditioning of multiple rooms.

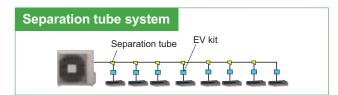
System that allows individual air conditioning of multiple rooms

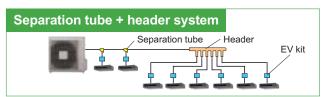






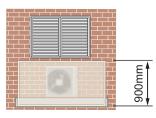
# Piping connection examples





# Easier outdoor unit installation

Discreet installation



	Height	900
	Width	900
	Depth	370
۰		Unit: mm

The compact dimensions allow the outdoor unit to be installed below a window.

# Large capacity connectable

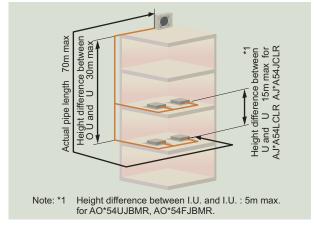
 Up to 8 indoor units can be connected to 1 outdoor unit. Furthermore, the indoor unit connection capacity can be up to 150% of the outdoor unit rating. This increases design flexibility.

Max 8
Indoor units
connectable

150% Connectable capacity

# Long piping length

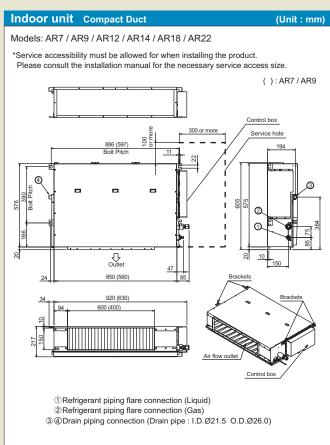
• The maximum piping length is 70m, and can cope with a wide range of applications from homes to offices.

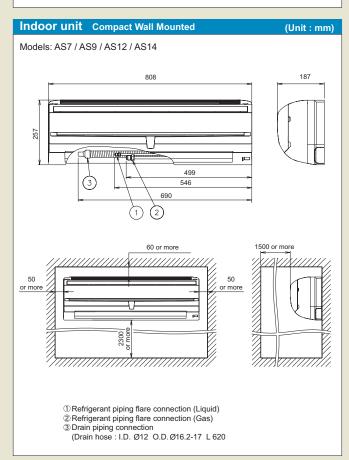


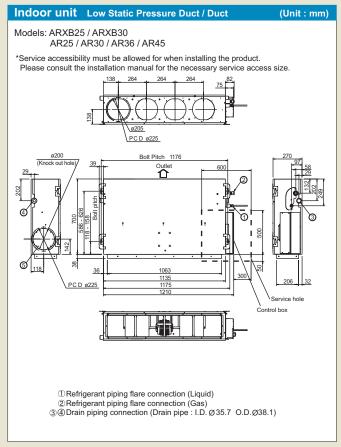
# All indoor units are supplied with a remote controller

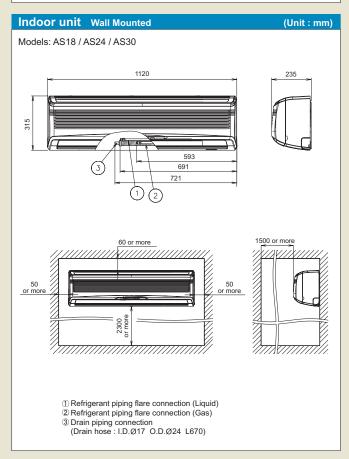
 All indoor units come with a wireless remote controller.

Note: IR receiver unit is available for duct type indoor unit.



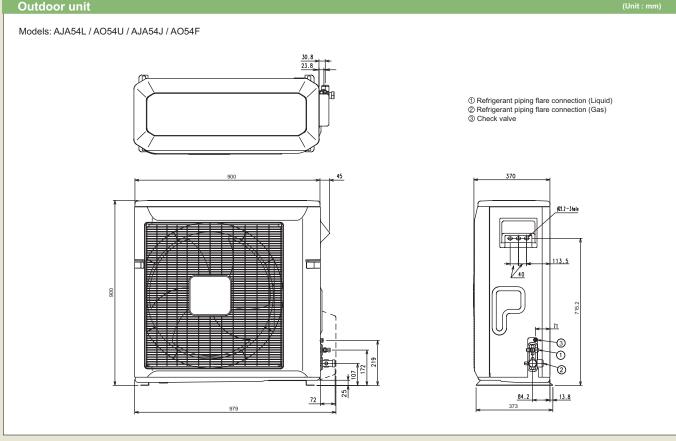


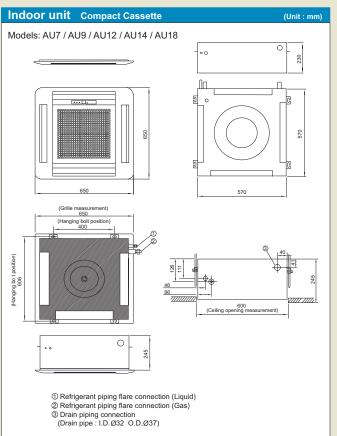


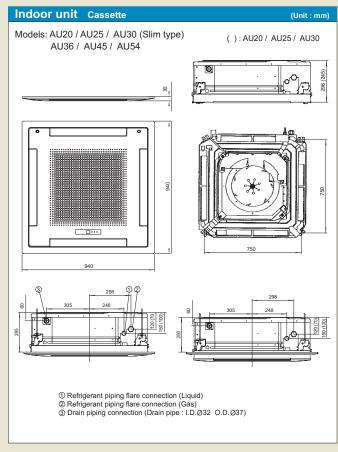




# **Dimensions**





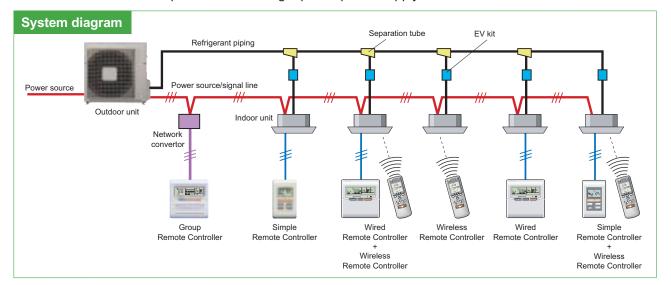


# ility and efficient operation

# Easy installation Quick and easy to install.

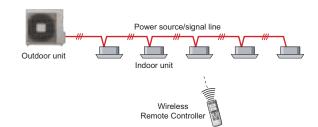
# Easy to understand piping and wiring installation

- The wiring work is simple in the connection wiring system one by one.
- The dedicated communication line is unnecessary.
- The electrical work is simple because of single-phase power supply.



# System addressing

• During installation work, system addressing can be performed using the wireless remote controller, thus eliminating manual switch setting.



# Easier installation of the outdoor unit

Compact size and lightweight

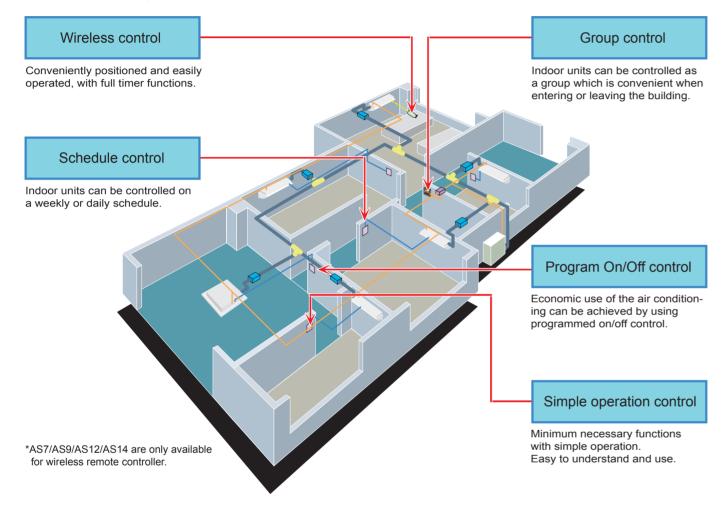


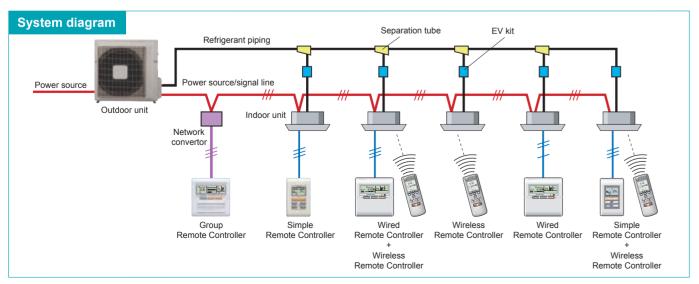
The outdoor units is light and compact and easy to handle during installation.



# Control system that always provides a pleasant air conditioned environment

Five types of controllers are available to meet the varied needs of the building and the user. Tighter control over the air conditioned environment can be achieved by combining group remote controller which can operate all the indoor units at the same time, a wired remote controller with a weekly or daily schedule, a wireless remote controller and a simple remote controller.





Indoor unit				Compact Duct						Low	Static re Duct	Du	ıct		
Model cod	е			AR7	AR9	AR12	AR14	AR18	AR22	ARXB25	ARXB30	AR25	AR30	AR36	AR45
Model nan	ne			ARXA07 LALR	ARXA09 LALR	ARXA12 LALR	ARXA14 LALR	ARXA18 LBLR	ARXA22 LBLR	ARXB25 LATR	ARXB30 LATR	ARY25 UFAAR	ARY30 UFAAR	ARY36 UFAAR	ARY45 UFAAR
Power sou	irce				220-240V, 50Hz										
			kW	2.15	2.80	3 50	4 00	5.30	6.00	7.05	8.80	7.05	8.80	10.5	12.7
Cooling ca	pacity		BTU/h	7,300	9,600	11,900	13,700	18,100	21,100	24,100	30,000	24,100	30,000	36,000	43,500
			kW	2.45	3.10	4.10	4 80	5.60	6.30	7.85	9.10	7.85	9.10	10.7	13.7
Heating ca	apacity		BTU/h	8,400	10,600	14,000	16,400	19,100	21,500	26,800	31,000	26,800	31,000	36,500	47,000
Input powe	er		W	3	2	4	9	103	77	15	55	1	55	31	15
Current			Α	0.:	20	0 2	24	0.45	0.36	0.	70	0.	68	1.4	14
Maximum	current		A	0.:	24	0 2	29	0.54	0.40	0.	84	0.	84	1 8	34
Heat exch	anger							Plate 1	fin coil						
		High		420		62	20	950	890	1,3	40	1,200		2,200	
Air circulat	tion	Med	m³ / h	39	90	550		790	780	1,090		1,100		2,000	
		Low		36	60	470		620	670	970		1,000		1,800	
Recommen	d static pre	ssure	Pa			0 to	40			0 to	80	30 to 160		30 to 180	
Fan type x	number			Sirocco x 1						Siroco	0 x 2				
Fan motor	output		W	1	0	14		52	36	47		77		275	
		High		3	4	3	3	40	42	3:	3	44		49	
Noise leve (sound pre		Med	dB (A)	3	2	2	9	35	38	2	9	42		47	
(Souria pro	Josuic)	Low		3	1	27		30	34	2	3	40		4	5
Air filter				PP	monofilam	ent net (An	tibacterial	/ Deodoriza	ation)	Filter: UTD-LF270 (Option) PP honeycomb net, Fungicide Type					
Dimension	ıs	Net		217 x 66	63 x 595		217 x 95	53 x 595				270 x 1,2	210 x 700		
(H x W x D	- 1	Gross	mm	324 x 78	85 x 686		324 x 1,0	75 x 686				300 x 1,3	320 x 790		
		Net		18	3		2	5			4	3		4	5
Weight		Gross	kg	22	2		2	9			5	3		5	5
	Diameter	Liquid				Ø6	.35			Ø 6.35	Ø9.52	Ø 6.35		Ø9.52	
Pipe size	Diamiciel	Gas	mm	Ø9.	52	Ø12	2.70			Ø15.88 Ø19 0			9 05		
	Connecti	on met	hod		Flare										
Drain pipe material Dia. (mm) ABS/Outer diameter 26mm / Inner diameter 21.5mm						5mm	Steel/Outer diameter 38.1mm / Inner diameter 35.7mm								

Cooling: Indoor temperature 27°CDB//19°CWB, and outdoor temperature 35°CDB/(24°CWB). Heating: Indoor temperature of 20°CDB/(15°CWB), and outdoor temperature 7°CDB/6°CWB. Standard static pressure: 0Pa (AR7 to AR22, ARXB25, ARXB30), 100Pa (AR25 to AR45).

AS\* : AS (FUJITSU), ASG (GENERAL)

Indoor unit					Compact W	Wall Mounted						
Model code	е			AS7	AS9	AS12	AS14	AS18	AS24	AS30		
Model nam	ie			AS*7 UFADR	AS*9 UFADR	AS*12 UFADR	AS*14 UFADR	AS*18 UFAJR	AS*24 UFAJR	AS*30 UFAJR		
Power soul	rce				220-240V, 50Hz							
Caalina aa	nacity.		kW	2.15	2.80	3 50	3 80	5.40	6 90	8 00		
Cooling cap	pacity		BTU/h	7,400	9,600	11,900	13,000	18,400	23,600	27,300		
Heating ca	nacit.		kW	2.45	3.10	4.10	4 50	5.60	7.80	8 80		
nealing ca	pacity		BTU/h	8,400	10,600	14,000	15,400	19,100	26,600	30,000		
Input powe	r		W	26	33	40	)	38	50	60		
Current			A	0.15	0.17	0 2	21	0.18	0.24	0.28		
Maximum o	current		_ ^	0.18	0.21	0.2	24	0.22	0.29	0.34		
Heat excha	anger						Plate fin coil					
		High		410	500	54	0	840	950	1,050		
Air circulati	ion	Med	m³/h	370	450	51	0	700	800	940		
		Low		350	410	48	0	600	670	780		
Fan type x	number			Cross flow x 1								
Fan motor	output		W		1	3		38				
		High		30	36	39	39		45	48		
Noise level (sound pre		Med	dB (A)	27	33	37	7	39	41	45		
(ocaiia pio	000.07	Low		26	30	34	1	35	37	41		
Air filter				PP ho	neycomb (Antibad	cterial and Mold pro	oofing)	PP monofilam	ent net (Deodorization	n, Anti-mold)		
Casing colo	or				W	hite			White			
Dimension	s	Net	mm		257 x 8	08 x 187		;	320 x 1,120 x 220			
(H x W x D	)	Gross	'''''		270 x 8	50 x 310		:	348 x 1,240 x 427			
Maiabt		Net	l.a			8			16			
Weight		Gross	kg			10			22			
	Diameter	Liquid	mm				Ø 6.35			Ø9 52		
Pipe	D.umotti	Gas	'''''	Ø 9.52	2	Ø12.70	)		Ø15.88			
	Connecti	on met	hod		Flare							
Drain pipe material Diameter (mm)					20mm drain hose, 6.2-17mm / Inner	PVC / Outer diame diameter 12mm	eter	With 670mm drain hose, PVC / Outer diameter 24mm / Inner diameter 17mm				

Note: Specifications are based on the following conditions.

Cooling: Indoor temperature 27°CDB/19°CWB, and outdoor temperature 35°CDB/(24°CWB). Heating: Indoor temperature of 20°CDB/(15°CWB), and outdoor temperature 7°CDB/6°CWB.

AS7 / AS9 / AS12 AS14

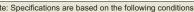
AS18 / AS24 / AS30



# **Specifications**

AJ\*A: AJYA (FUJITSU), AJ\*A: AJGA (GENERAL) AO\*: AO (FUJITSU), AOG (GENERAL)

Outdoor unit						AO . AO (F031130),	AOG (GENERAL)			
- Gatagor unit										
Model name				AJ*A54LCLR	AJ*A54JCLR	AO*54UJBMR	AO*54FJBMR			
Power source				Single-phase, 220-240V, 50Hz						
Capacity	Cooling			15.2						
Оараску	Heati	Heating		16.6		16.6				
Input power	Cooli	ng	kW		4	.75				
input power	Heati	ng		4.88		4.88				
Maximum current			Α	30, 25	i, 20, 15 (The ranges can b	e selected by setting DIP s	switch)			
COP	Cooli	ng		3.:	20	3.	20			
COF	Heating			3.40		3.40				
Heat exchanger fin				Corrosion-resis	tance (Blue fin)	Hydrophi	lic coating			
Air circulation m³ / h					5,:	250				
Fan type x Number					Prope	ller x 1				
Fan motor output W				150						
Noise level			dB(A)	56						
(sound pressure)			ub(A)			51				
	Туре				S	croll				
Compressor	Drivin	g method			DC i	nverter				
	Motor	output	W	3,000						
Refrigerant				R410A						
Refrigerant oil				Synthetic oil (POE oil)						
Casing color				Beige						
B:	, Net				900 x	900 x 370				
Dimensions (H x W	(D) Gross		mm		1,021 x	1,026 x 436				
	Net					97				
Weight	Gross	i	kg		,	112				
Safety devices				Fan moto	or thermal protector, High p	ressure switch, Low pressu	ire switch, Fuse			
·	Coolin	ng				to 43	·			
Operation range	Heatir	ng	°C	-20 to 21	_	-20 to 21				
Diamete	er Liquid	I / Gas	mm		Ø 9.52	/Ø 19.05	1			
Pipe Max Ien	gth / Max hei	ght difference	m	70 / 30						
	nnection met			Flare						
Connectable indoor units				Maximum 8						
Connectable indoor unit capacity				50% to 150%						
lote: Specifications ar		ne following co	onditions							



Cooling: Indoor temperature 27°CDB/19°CWB, and outdoor temperature 35°CDB/(24°CWB). Heating: Indoor temperature of 20°CDB/(15°CWB), and outdoor temperature 7°CDB/6°CWB. Voltage: 230 [V]

### AU\*: AU (FUJITSU), AUG (GENERAL)

Indoor	r unit				Com	pact Cass	ette				Cas	sette		
Model cod	de			AU7	AU9	AU12	AU14	AU18	AU20	AU25	AU30	AU36	AU45	AU54
Model name		AU7 UFAAR	AU9 UFAAR	AU12 UFAAR	AU14 UFAAR	AU18 UFAAR	AU*20 UFARR	AU*25 UFARR	AU*30 UFARR	AU*36 UFASR	AU*45 UFASR	AU*54 UFASR		
Power soi	urce				•			22	20-240V, 50	Hz				
0 1			kW	2.15	2.80	3.60	4.00	5.00	5.70	7.05	8.80	10.5	12.7	14.1
Cooling ca	apacity		BTU/h	7,400	9,600	12,300	13,700	17,100	19,500	24,100	30,000	35,800	43,400	48,100
I I a a time as a			kW	2.45	3.10	4.10	4.50	5.45	5.80	7.85	9.10	10.7	13.7	15.8
Heating ca	apacity		BTU/h	8,400	10,600	14,000	15,400	18,600	19,800	26,800	31,100	36,500	46,800	53,900
Input pow	/er		W	2	28	5	2	50	117	129	142	175	190	219
Current			A	0.	13	0.2	23	0.22	0.76	0.80	0.84	0.92	0.94	0.95
Maximum	current		] ^	0.	15	0.2	27	0.26	0.91	0.96	1.00	1.10	1.12	1.14
Heat exch	nanger							-	Plate fin coil					
		High		5	30	58	30	640	1,030	1,170	1,270	1,500	1,650	1,780
Air circula	ation	Med	m³ / h	4	80	520		540	850	970	1,070	1,300	1,450	1,550
		Low		4	10	46	30	470	680	770	880	1,100	1,200	1,300
Fan type	x number				Turbo x 1									
Fan motor	r output		W		9 10		0	15	15 42			90		
		High		3	38 41		1	44	42		45	48	49	52
Noise leve (sound pre		Med	dB (A)	3	35	3	7	3	38 40		42	44	47	49
(count pr	0000.0)	Low	]	3	31	3	4	35	37	39	39	41	43	45
Air filter		•	•		PP honeycomb net (Anti-mold)									
FUJITSU	grille color				White (UT	G-UDYD-W	Option)		White					
GENERAL	L grille col	or			White (UT	G-UDGD-W	: Option)				VVI	iite		
Dimension	ns	Net			23	0 x 570 x 5	70		24	6 x 830 x 8	30	29	96 x 830 x 8	30
(H x W x I	D)	Gross	mm		28	0 x 710 x 75	50		385	x 1,045 x 1	,015	435	x 1,045 x 1	,015
		Net				18				34			40	
Weight		Gross	kg			23				45			53	
	Diameter	Liquid					Ø 6.35					Q	9.52	
Pipe size	Diameter	Gas	mm	Ø	9.52	Ø 1:	2.70		Ø15	5.88			Ø 19.05	
	Connect	Connection method							Flare					
Drain pipe	material	Dia. (	mm)	Р	S / Outer dia	meter 37mm	/ Inner diam	eter 32mm	ABS / Outer diameter 37mm / Inner diameter 32mm					





AU7 / AU9 / AU12

AU14 / AU18

AU20 / AU25 / AU30 Slim Type AU36 / AU45 / AU54

# **Group remote controller** which can operate all the indoor units

# **Group Remote Controller**

UTB-YDB / UTB-GDB [Option]

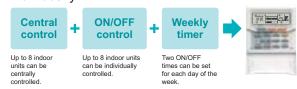
Group control of indoor units with simple operation

- Up to 8 indoor units can be controlled with a single controller.
- Network Convertor (UTR-YGCA) is required to connect Group Remote Controllers to an VRF system.



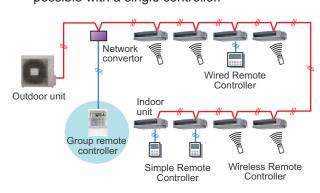
# High performance and compact size

ON/OFF, master control, set temperature and air flow can be controlled / monitored centrally or individually.



# System configuration

Group/individual control of up to 8 units is possible with a single controller.



# **Built-in weekly timers**

The weekly timer is provided as a standard

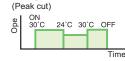
- 1. The timer can be set up for up to 4 times per day. (On / Off, master control, set temperature)
- 2. Allows separate settings for each day of the week.

### **ON/OFF** switching



Air conditioning ON/OFF setting corresponding to air conditioning specification needs is possible.

# **Temperature switching**



Since peak power cut is performed in a planned way, setting which changes the room temperature

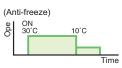
# Switching between the

HEAT

**Cooling / Heating** 

switching

cooling mode and heating mode can be set by time.



Low temperature heating operation can be set to prevent freezing in cold regions at night, etc.

# Stop setting



Indoor unit start/stop matched to the air conditioning operation end time is possible.

# **Specifications**

Madal		Group Remote Controller	Network Convertor		
Model		UTB-YDB/UTB-GDB	UTR-YGCA [Option]		
Power Supply		DC 12V	220-240V 50-60Hz		
Dimension	Height	120	86		
(mm)	Width	120	313		
(11111)	Depth	17	216		
Weight (g)		200	1,900		



# A controller can be chosen according to user

# comfortable, easily adjustable air flow

# **Wired Remote Controller**

UTB-YUB / UTB-GUB / UTB-TUB [Option]

Weekly timer and timer function are easily operated.

Dimensions (H x W x D)

120 x 120 x 17

# Powerful features and compact size

Wired remote controller, Weekly timer and Setback timer functions are combined in one compact unit.





# Simple installation

Components are compatible with standard switch boxes. Flat back construction allows equipment to be installed wherever it is needed.

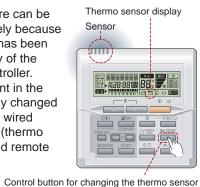
JIS built-in box

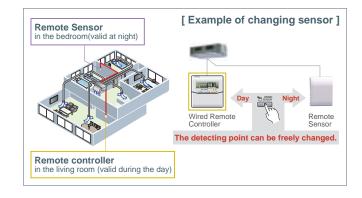


# Accurate and Comfortable

Indoor temperature can be detected accurately because a thermo sensor has been added in the body of the wired remote controller.

The detecting point in the room can be freely changed with the new type wired remote controller (thermo sensor added) and remote sensor (Option).



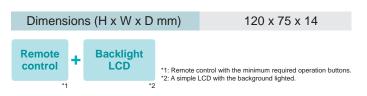


# Control button for changing the thermo sense

# **Simple Remote Controller**

UTB-YPB / UTB-GPB / UTB-TPB [Option]
UTB-YRA / UTB-GRA / UTB-TRA [Option]

Simple remote controller concentrating on basic operations.



# Simple operation

- A large Start/Stop button is provided in the centre of the remote controller unit for easy operation.
- The backlight is lit during button operations, and for 10 seconds longer in the operation mode and 5 seconds longer in the stop mode.







UTB-YPB / UTB-GPB / UTB-TPB

UTB-YRA / UTB-GRA / UTB-TRA Without master control

### Functions

unotione											
Model Operation	UTB-YPB UTB-GPB UTB-TPB	UTB-YRA UTB-GRA UTB-TRA									
On/Off	•	•									
Fan control	•	•									
Master control	•	_									
Temp. setting	•	•									

# **Wall Mounted**

AS\*18UFAJR AS\*24UFAJR AS\*30UFAJR



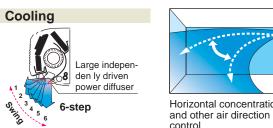


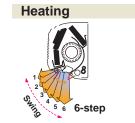
# **Features**

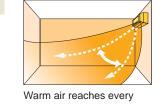
# Pleasant multi-air flow

Effective air flow within a room is achieved by the unique operation of the power diffuser. The angle of the louvre can be adjusted in six steps to give draught-free air flow.

Wide air flow realized by unique operation of the power diffuser







Step Swing

# Other functions

Other features include the functions of the existing wall mounted type.

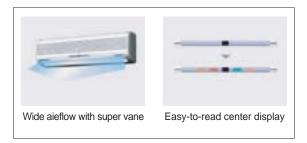
2-way draining routeDouble auto swing

# **Optional parts**

Air clean filter (UTR-FA08)

# Symmetrical design

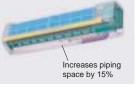






# Easy installation

Larger space at base of housing means an extra 15% of piping space.





10 : 30

° 54.c

**V** 

# Attractive wall-mounted unit that delivers a need

# **Compact Wall Mounted**

AS\*7UFADR AS\*9UFADR AS\*12UFADR AS\*14UFADR





### **Features**

\*AS7/AS9/AS12/AS14 are only available for wireless remote controller.

# Symmetrical design

Symmetrical, clean design that suits all interiors.

# Compact size

# Powerful output in spite of small size

Though the indoor unit is compact, it features a large, high pressure cross fan (90mm diameter) in a centre mounted configuration and a Lambda type heat exchanger to provide plenty of power.

Height	257
Width	808
Depth	187

Unit: mm



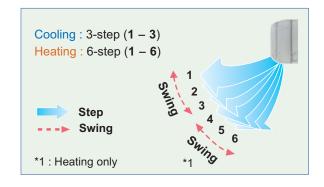
# Low noise

Fan speed HIGH	dB (A) <b>30</b>	
LOW	26	

<sup>\*</sup>AS7 model data

# Auto swing louvre

The Auto Swing Louvre function ensures that the air direction corresponds to the mode selected.



# Washable open panel

Cleaning the washable panel removes mould and dust.

A regular wipe with a dry cloth keeps the casing clean.







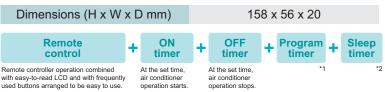
Since the panel is removed and easily washed, it is always clean. Filter cleaning is also simple.

# **Wireless Remote Controller**

# [Accessory]

### Four kinds of timers. Easy operation.

- Wireless remote controller is an accessory of all indoor units.
   An IR Receiver Unit peressary for operation by accessory.
- An IR Receiver Unit necessary for operation by accessory wireless remote controller is connected to Duct type indoor unit.



# **Built-in daily timer**

Select from 4 different timer programs: On / Off / Program / Sleep \*1: Program timer / The program timer operates the ON and OFF timer once within a 24 hour period.

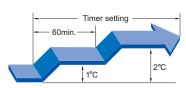
\*2: Sleep timer / The sleep timer function automatically corrects the set temperature according to the time setting to prevent excessive cooling or heating during sleep hours.

# Cooling operation / dry operation

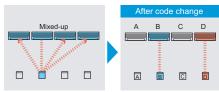
When the sleep timer is set, the set temperature automatically rises 1°C every hour. The set temperature can rise up to a maximum of 2°C.

### **Heating operation**

When the sleep timer is set, the set temperature automatically drops 1°C every 30 minutes. The set temperature can drop to a maximum of 4°C.



# Simple operation



• Code selector switch prevents units from being wrongly switched. (Up to 4 codes can be set.)



# **External Switch Controller**

### **UTR-YESA** [Option]

- On/Off, Temperature, Fan control, and Master control can be switched in combination equipped with the Card key switch or sensor switch.
- Switching of the air conditioner can be controlled by connecting other sensor switches.
   \*Card key and other sensor switches are available as field supplied parts.

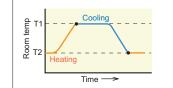
Dimensions (H x W x D mm)

120 x 75 x 30

# Installation example

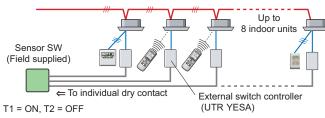
 Auto mode operation, which switches the cooling and the heating auto matically, is enabled by using the sensor switch and external switch controller.

In that case, all indoor units run in the same operation mode



Note 1.
Please choose a thermosensor switch which can be set up for T1 and T2.

Note 2. The remote controller's operation is prior to the auto mode operation.





# Select to match the capacity and type of the room very low ceilings

4.0

14

AU14UFAAR

ARXA12LALR | ARXA14LALR | ARXA18LBLR

AS\*14UFADR

AS\*18UFAJR

5.3

18

AU18UFAAR

5.7

20

Slim Type

AU\*20UFARR

**Low Static Pressure** ARXB25LATR ARXB30LATR Duct type Optimum model for hotels or bedrooms An ultra low-noise

\*Wireless remote controller and IR receiver unit is supplied with all duct type indoor units.

Duct Silent Model

# Duct

AR25UFAAR AR30UFAAR AR36UFAAR AR45UFAAR







IR Receiver Unit

### **Features**

# Low static pressure duct type

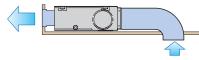


model that achieves a quiet interior. Perfect for hotels or bedrooms with limited air duct installation space.

Installation styles

Direct air flow installation can be performed. Air intake system can also be chosen.

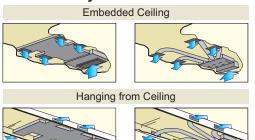


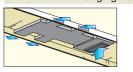


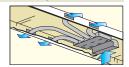
■ Powerful model with a flexible design

With a powerful motor, appropriate for a wide range of static pressure. Flexible air duct installation is possible in a large space

Installation styles





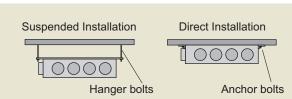


such as an office.

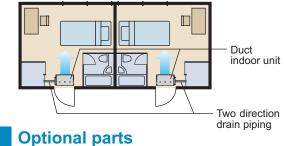
# Savings in space and easy installation

Slim compact design allows for easy installation in narrow ceiling space.





# Two-direction drain piping



UTD-SF045T Flange (square) UTD-RF204 Flange (round) Long-life filter UTD-LF270 Remote sensor unit UTD-RS100

AU*: AUY(FUJITSU), AUG(GENERAL) •AS*: ASY(FUJITSU), ASG(GENERAL	.)
---	----

**Indoor unit line up** 7 types 30 models, ranging from 2.15kW to 14.10kW.

Capacity range (kW)

**Compact Cassette** 

Cassette

**Compact Duct** 

**Low Static Pressure Duct** 

**Duct** 

**Compact Wall Mounted** 

**Wall Mounted** 

▼ Type

P14 <

P15 <

P16 <

P17 <

P17 <

P18 <

P19 <

Silent Model

Model code

2.15

AU7UFAAR

ARXA07LALR

AS\*7UFADR

2.8

AU9UFAAR

ARXA09LALR

AS\*9UFADR

AS\*12UFADR

3.6

12

AU12UFAAR



# Ultra-slim duct air conditioner for use with

\*Wireless remote controller and IR receiver unit is supplied with all duct type indoor units.

# **Compact Duct**

ARXA07LALR ARXA09LALR ARXA12LALR ARXA14LALR ARXA18LBLR ARXA22LBLR



## **Features**

# Compact and space-saving design

Ultra-slim unit simplifies installation.



# Easy installation (Universal type)

Slim and compact dimensions allow for ceiling installation or floor standing.





Perfectly housed in ceiling space. Perfectly housed in the space below a window.

# Installation example



# **Optional parts**

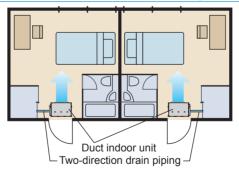
Remote sensor unit UTD-RS100 Drain pump unit UTZ-PX1BBA

# Low noise level

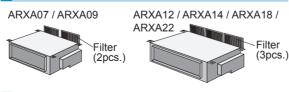
These compact duct type units are extremely quiet.

Model		7	9	12	14	18	22
Static pressure (standard/max)	Pa	0 / 40					
Air flow volume (high/low)	m <sup>3</sup> /h	420	420/360 620/470		/470	950/620	890/670
Noise level (Low speed)	dB(A)	3	1	2	7	30	34

# Two-direction drain piping



# Filter (Accessory)



# Others

- · Air intake from rear or bottom side
- Two direction drain piping

# **Accessories**

6.0 22	6.9 24	7.05 25	8.8 30	10.5 36	12.7 45	14.1 54	Wireless Remote Controller	IR Receiver Unit
							else of the second of the seco	
		Slim Type  AU*25UFARR	Slim Type  AU*30UFARR	AU*36UFASR	AU*45UFASR	AU*54UFASR		
ARXA22LBLR							1000 1000 1000 1000 1000 1000 1000 100	
		ARXB25LATR	ARXB30LATR				1000 1000 1000 1000 1000 1000 1000 100	11-1-1
		AR25UFAAR	AR30UFAAR	AR36UFAAR	AR45UFAAR			1
							000	
	AS*24UFAJR		AS*30UFAJR					

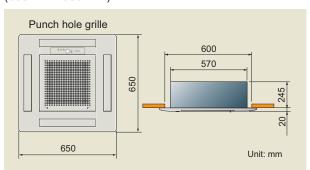


# Slim and compact cassette, designed for limited ceiling space

# Compact Cassette AU7UFAAR AU9UFAAR AU12UFAAR AU14UFAAR AU18UFAAR Wireless Remote Controller

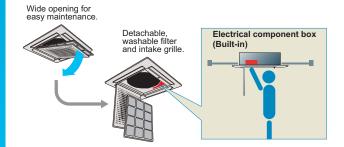
# Compact size

Compact grille fits European ceiling panel (600mm x 600 mm).



# Easy maintenance

Placing all the electrical components inside the unit ensures easy maintenance.

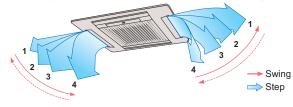


# Condensate pump lifts to 400mm



# Comfortable air flow

4-step swing: Auto air flow direction and auto swing



# 2-4 way air flow system:

Select 2-way, 3-way, or 4-way air flow to suit your needs.



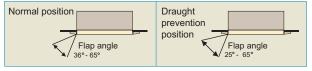
# Extremely quiet

Large air flow at reduced noise output achieved by incorporating a large diameter variable pitch turbo fan.



# Draught prevention

The angle of the flap can be changed during installation, thereby preventing uncomfortable draughts.



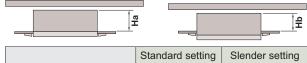
# Optional parts

Grille kit UTG-UDYD-W, UTG-UDGD-W



Compact body ensures space saving installation.

A slender fit option is available where ceiling void space is limited.

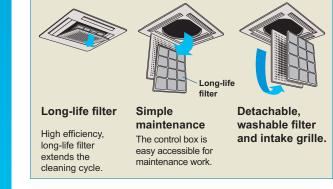


Slender setting

	Standard setting	Slender setting
	Ha	Hb
AU20 / AU25 / AU30	235	200
AU36 / AU45 / AU54	285	250

# Easy maintenance

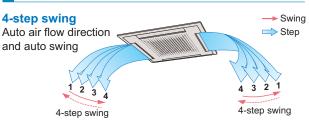
Standard setting



# Condensate pump lifts to 800mm



# Comfortable air flow



### 2~4 way air flow system

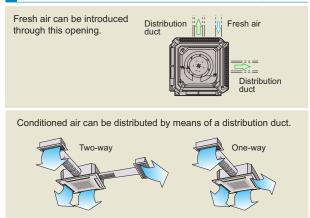
Select 2-way, 3-way or 4-way air flow to suit your needs.



### Wide air flow

Unit louvre distributes the outlet air flow further in the horizontal direction.

# Duct connection hole opening



# Improved noise level and air distribution

# Noise output has been dramatically lowered.

- Improved turbo fan shape (aerodynamic design)
- Expanded air distribution
   Low internal resistance
- Moulded fan motor

# **Draught prevention**

The angle of the flap can be changed during installation, thereby preventing uncomfortable draughts.

