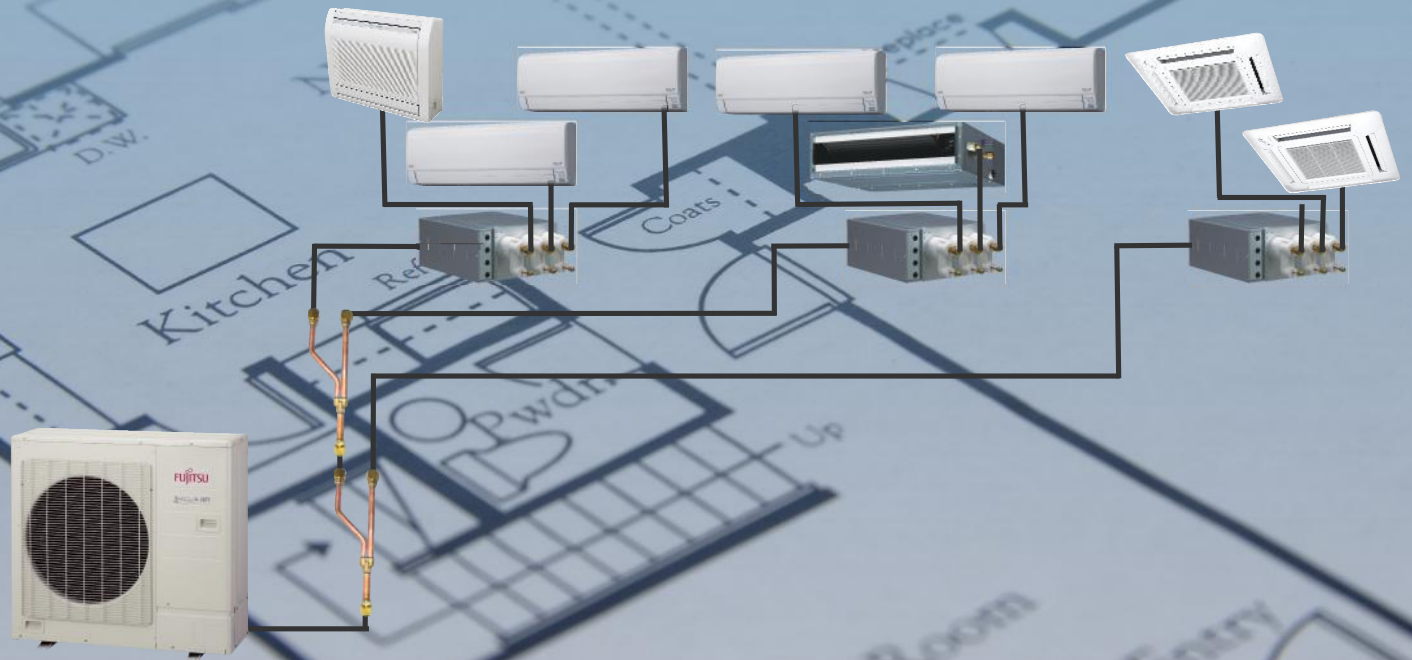




FUJITSU

Halcyon HFI
Hybrid Flex Inverter



Hybrid Flex Inverter Systems
48,000 BTU 8-Zone Mix & Match Flexibility
AOU48RLXFZ1

MULTI ZONE MINI-SPLIT SYSTEMS

*Revolutionary Halcyon
HFI systems are changing
the way we define comfort*



- Operate as few as one indoor unit or all indoor units
- Choose from 4 indoor unit styles - wall mount including new RLF1 models and Designer Series RLS2 models, slim duct, compact cassette, and floor mount
- Create over 56,000 combinations based on indoor type and BTU
- Connect 2 to 8 indoor units
- Connect 39,000 to 62,000 BTU
- 80 to 130% connectable capacity
- Branch boxes and separation tubes required



What is a Hybrid?

The blending of a complex VRF system with the simplicity of a multi-zone system to create a new hybrid solution that shares the best of both systems.

Why Flex?

The ability to create the right combinations, the right quantity (up to 8-zones), the right style indoor units, and the right capacity. It's the right choice for your home or business.

Why Inverter?

An Inverter is a system that controls the rotational speed (not just an ON/OFF signal) of an electric motor by adjusting the frequency and voltage of the electrical power supplied to the motor. The inverter constantly regulates the compressor speed to its optimum energy usage, producing higher refrigerant performance with less power consumption.

130% Connectable Capacity (AOU48RLXFZ1 Only)

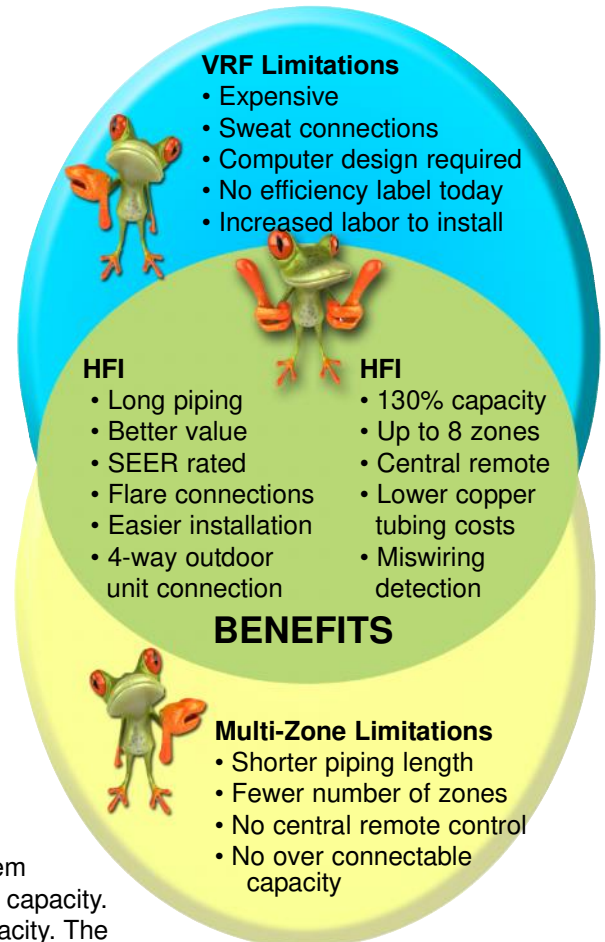
The HFI system is rated at 48,000 BTUs but you can connect up to 130%, or 62,000 BTUs of rated indoor unit capacity to the AOU48RLXFZ1. Connectable capacity allows you to connect indoor units that can exceed outdoor unit capacity. However, if you connect indoor units that exceed 100% of the outdoor unit's capacity there are limitations.

If all indoor units are cooling or heating at the same time, the system will limit their capacity so that their total matches the outdoor unit's capacity. When a zone meets a desired set temperature it requires less capacity. The unused capacity is then distributed to the remaining indoor units, increasing their capacity.

For Example: The load on a small 2-story office building with a business downstairs and worker apartments upstairs is 62,000 BTUs (38,000 BTUs downstairs and 24,000 BTUs upstairs) but the workers aren't upstairs and downstairs at the same time, therefore not all units will be running simultaneously allowing 100% heating or cooling to occupied spaces.

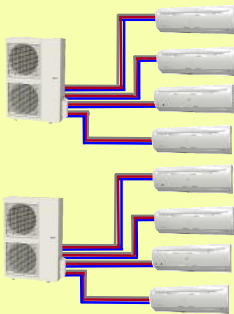
HFI vs. Multi vs. VRF

AHRI defines VRF as having three main features: (1) a variable speed compressor, (2) a computerized control individual zoning system and (3) optimized refrigerant path of installation.



TYPICAL INVERTER MULTI-ZONE

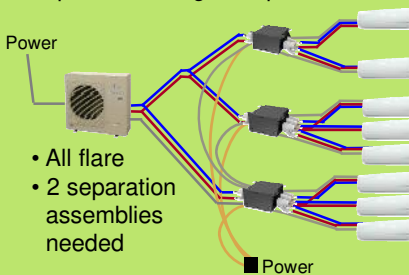
- Variable speed compressor
- Computerized zone control
- With the expansion valves mounted in the outdoor unit, it does not have an optimized refrigerant path.



- 2 outdoor units needed
- No separation tube assemblies needed

Halcyon Hybrid Flex Inverter

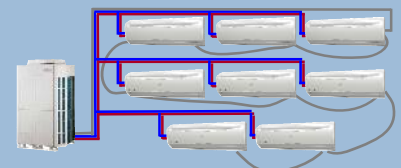
- Variable speed compressor
- Computerized zone control
- Remotes expansion valves from the outdoor unit to mid-stream in the refrigerant piping, creating a semi-optimized refrigerant path.



- All flare
- 2 separation assemblies needed

TYPICAL INVERTER VRF SYSTEM

- Variable speed compressor
- Computerized zone control
- Expansion valves are mounted either within or near the indoor unit, and engineered piping maximizes compressor efficiency to create an optimized refrigerant path.



- All sweat connections
- 7 separation assemblies needed

Individual Zoning: Personalized Whole Home Comfort

Halcyon HFI Systems are some of today's most advanced forms of heating and air conditioning. Multi-zone outdoor units can operate from 2 to 8 indoor units simultaneously. Fujitsu's HFI Systems are super quiet as well as highly energy efficient. Choose from 4 indoor unit styles.

Wall Mounted

They mount high on a wall, out of sight and do not require ductwork, increasing energy efficiency.

- Quiet operation
- Easy maintenance
- High delivered efficiency means lower utility bills



Slim Duct

Mounted in a ceiling or in a framed enclosure below a ceiling. They use minimal ductwork and remain very energy efficient.

- Concealed and out of sight
- Look of central air with the efficiency of a mini-split
- Less ducts = higher efficiency

Compact Cassette

Cassettes are extremely discreet, with only the grille showing in the ceiling. They use the latest fan technology to distribute the conditioned air evenly.

- Wired remote control (wireless is optional)
- Powerful turbo fan operation
- Fits into a standard 2' x 2' ceiling grid



Floor Mounted

Floor mount systems are ideal for residential radiator replacements or any room with limited upper wall space, like a kitchen or sunroom.

- Compact size fits easily under a standard window
- Features twin airflow for improved heat delivery
- Designer wireless remote control

Mix and Match Flexibility



The ability to create the *right* combinations, the *right* quantity (up to 8-zones), the *right* style indoor units, and the *right* capacity.

It's the *RIGHT* choice for your home or business.



Wall Mounts



ASU7, 9, 12RLF1



ASU9, 12RLS2



ASU15RLS2

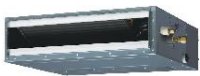


ASU18RLF

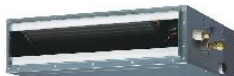


ASU24RLF

Slim Ducts



ARU7, 9, 12RLF



ARU18RLF



ARU24RLF

Floor Mounts



AGU9, 12RLF



AGU15RLF

Separation Tubes, Branch Boxes



UTP-SX248A



UTP-PU03A, UTP-PU03B

Compact Cassettes



AAU7, 9, 12RLF



AAU18RLF



Wall Mounted 7, 9, 12, 18 and 24,000 BTUs

ASU7RLF1, ASU9RLF1, ASU9RLS2, ASU12RLF1, ASU12RLS2, ASU15RLS2, ASU18RLF, ASU24RLF

NEW!



ASU7, 9, 12RLF1



ASU18, 24RLF



ASU9, 12, 15RLS2

Designer Series

	ASU7RLF1	ASU9RLF1	ASU12RLF1	ASU18RLF	ASU24RLF	ASU9RLS2	ASU12RLS2	ASU15RLS2	
	Heat Pump NEW!	Heat Pump NEW!	Heat Pump NEW!	Heat Pump	Heat Pump	Heat Pump*	Heat Pump*	Heat Pump*	
Nominal Cooling BTU/h	7,000	9,000	12,000	18,000	24,000	9,000	12,000	14,000	
Nominal Heating BTU/h	8,100	10,200	13,500	20,000	27,000	10,200	13,500	16,300	
Voltage/Frequency/Phase	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1	
Air Circ. C.F.M. (m ³ /h): Hi	Clg 330 (560) Htg 330 (560)	Clg 353 (600) Htg 353 (600)	Clg 388 (660) Htg 388 (660)	Clg 542 (920) Htg 542 (920)	Clg 659 (1,120) Htg 647 (1,100)	Clg 353 (600) Htg 353 (600)	Clg 388 (660) Htg 388 (660)	Clg 418 (710) Htg 418 (710)	
	Medium	Clg 294 (500) Htg 294 (500)	Clg 306 (520) Htg 306 (520)	Clg 330 (560) Htg 330 (560)	Clg 436 (740) Htg 436 (740)	Clg 324 (550) Htg 324 (550)	Clg 353 (600) Htg 353 (600)	Clg 377 (640) Htg 377 (640)	
	Low	Clg 253 (430) Htg 253 (430)	Clg 253 (430) Htg 253 (430)	Clg 265 (450) Htg 277 (470)	Clg 365 (620) Htg 365 (620)	Clg 436 (740) Htg 436 (740)	Clg 277 (470) Htg 277 (470)	Clg 312 (530) Htg 312 (530)	Clg 336 (570) Htg 347 (590)
	Quiet	Clg 182 (310) Htg 194 (330)	Clg 182 (310) Htg 194 (330)	Clg 182 (310) Htg 194 (330)	Clg 324 (550) Htg 324 (550)	Clg 365 (620) Htg 365 (620)	Clg 194 (330) Htg 194 (330)	Clg 194 (330) Htg 194 (330)	Clg 230 (390) Htg 253 (430)
Noise Level dB(A) (Clg/Htg): Hi	36/36	37/37	40/40	43/44	49/48	36/36	37/37	41/41	
	Medium	32/32	33/33	36/36	37/37	32/32	34/34	36/36	
	Low	29/29	29/29	30/31	33/33	37/37	28/28	31/31	33/34
	Quiet	21/22	21/22	21/22	31/31	33/33	21/21	21/21	25/27
Running Current Rated (A): Cooling	0.13	0.15	0.19	0.32	0.53	0.14	0.17	0.20	
	Heating	0.13	0.15	0.19	0.32	0.53	0.14	0.17	0.20
Power Use Rated (w): Clg	15	17	22	41	69	16	19	23	
	Htg	15	17	22	41	69	16	19	23
Fan Speeds Stage	4+auto	4+auto	4+auto	4+auto	4+auto	4+auto	4+auto	4+auto	
Air Direction: Horizontal	Manual	Manual	Manual	Auto	Auto	Manual	Manual	Manual	
	Vertical	Auto	Auto	Auto	Auto	Auto	Auto	Auto	
Primary Air Filter	Washable	Washable	Washable	Washable	Washable	Washable	Washable	Washable	
Ion Deodorizing Filter	Disposable	Disposable	Disposable	Disposable	Disposable	Disposable	Disposable	Disposable	
Apple-Catechin Filter	Disposable	Disposable	Disposable	Disposable	Disposable	Disposable	Disposable	Disposable	
Connection Method	Flare	Flare	Flare	Flare	Flare	Flare	Flare	Flare	
Conn. Pipe Diameter Inch	suc 3/8 dis 1/4	suc 3/8 dis 1/4	suc 3/8 dis 1/4	suc 1/2 dis 1/4	suc 5/8 dis 1/4	suc 3/8 dis 1/4	suc 3/8 dis 1/4	suc 1/2 dis 1/4	
Net Weight lbs. (kg)	19 (8.5)	19 (8.5)	19 (8.5)	31 (14)	31 (14)	21 (9.5)	21 (9.5)	21 (9.5)	
Dims: Height Inch (mm)	10-1/2 (268)	10-1/2 (268)	10-1/2 (268)	12-5/8 (320)	12-5/8 (320)	11-1/8 (282) 13-1/4* (337*)	11-1/8 (282) 13-1/4* (337*)	11-1/8 (282) 13-1/4* (337*)	
	Width Inch (mm)	33-1/16 (840)	33-1/16 (840)	33-1/16 (840)	39-1/4 (998)	39-1/4 (998)	34-1/4 (870)	34-1/4 (870)	34-1/4 (870)
Depth Inch (mm)	8 (203)	8 (203)	8 (203)	9 (228)	9 (228)	7-1/4 (185)	7-1/4 (185)	7-1/4 (185)	
Refrigerant	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	

* ESP feature not compatible in multi-zone configurations. *Height when front panel is open.

Standard Features

- Wireless Remote Control*
- Apple Catechin Filter
- Ion Deodorizing Filter
- Sleep Timer
- 24-Hour Timer
- Dry Mode
- Auto Louver: 4-Way**
- Auto Mode
- Minimum Heat Mode
- Auto Restart/Reset
- Power Diffuser**

Built In Filtration



Long-life+ Ion Deodorization Filter

The filter deodorizes by powerfully decomposing absorbed odors using the oxidizing and reducing effects of ions generated by the ultra-fine-particle ceramic.

+ The filter can be used for approximately 3 years if it is washed with water when dirty to restore its surface action.



Apple-Catechin Filter

Dust, mold spores and micro-organisms are absorbed onto the filter by static electricity and growth is inhibited and deactivated.

* Features vary by model and therefore standard wireless remote controls should be used with the models they are associated with.

** Feature of models ASU18, 24RLF only.

Slim Duct 7, 9, 12, 18 and 24,000 BTUs

ARU7RLF, ARU9RLF, ARU12RLF, ARU18RLF, ARU24RLF



	ARU7RLF	ARU9RLF	ARU12RLF	ARU18RLF	ARU24RLF
	Heat Pump	Heat Pump	Heat Pump	Heat Pump	Heat Pump
	NEW!				
Nominal Cooling BTU/h	7,000	9,000	12,000	18,000	24,000
Nominal Heating BTU/h	8,100	10,200	13,500	20,000	27,000
Voltage/Frequency/Phase	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1
Recommended Static Pressure In. W. C.	0 ~ 0.36	0 ~ 0.36	0 ~ 0.36	0 ~ 0.36	0 ~ 0.20
Air Circ. C.F.M. (m ³ /h) Clg/Htg: Hi	323 (550)	353 (600)	383 (650)	554 (940)	783 (1,330)
Medium	288 (490)	324 (550)	353 (600)	518 (880)	730 (1,240)
Low	276 (470)	294 (500)	324 (550)	483 (820)	648 (1,100)
Quiet	259 (440)	265 (450)	283 (480)	442 (750)	607 (1,030)
Noise Level dB(A) (Clg/Htg): Hi	28/28	28/28	29/29	32/33	33/35
Medium	26/26	27/26	28/28	31/32	32/34
Low	25/25	26/25	27/27	30/31	30/32
Quiet	24/24	25/24	26/24	29/29	29/29
Running Current Rated (A): Cooling	0.30	0.30	0.35	0.44	0.66
Heating	0.30	0.30	0.35	0.44	0.66
Power Use Rated (W): Cooling	33	49	58	73	111
Heating	33	49	58	73	111
Fan Speeds Stage	4 + Auto	4 + Auto	4 + Auto	4 + Auto	4 + Auto
Air Filter	Washable	Washable	Washable	Washable	Washable
Connection Method	Flare	Flare	Flare	Flare	Flare
Conn. Pipe Diameter Inch	suc 3/8 dis 1/4	suc 3/8 dis 1/4	suc 3/8 dis 1/4	suc 1/2 dis 1/4	suc 5/8 dis 1/4
Net Weight lbs. (kg)	37 (17)	41 (19)	41 (19)	50 (23)	59 (27)
Dimensions: Height Inch (mm)	7-25/32 (198)	7-25/32 (198)	7-25/32 (198)	7-25/32 (198)	7-25/32 (198)
Width Inch (mm)	27-9/16 (700)	27-9/16 (700)	27-9/16 (700)	35-7/16 (900)	43-5/16 (1,100)
Depth Inch (mm)	24-13/32 (620)	24-13/32 (620)	24-13/32 (620)	24-13/32 (620)	24-13/32 (620)
Supply Duct Flange	5-15/16 (151)	5-15/16 (151)	5-15/16 (151)	5-15/16 (151)	5-15/16 (151)
Dimensions: Height Inch (mm)	25-19/32 (650)	25-19/32 (650)	25-19/32 (650)	33-15/32 (850)	41-11/32 (1,050)
Width Inch (mm)	3/4 (19)	3/4 (19)	3/4 (19)	3/4 (19)	3/4 (19)
Depth Inch (mm)	6 (152)	6 (152)	6 (152)	6 (152)	6 (152)
Dimensions: Height Inch (mm)	22 (559)	22 (559)	22 (559)	30 (762)	37-3/4 (959)
Width Inch (mm)	3/4 (19) (Flat)	3/4 (19) (Flat)	3/4 (19) (Flat)	3/4 (19) (Flat)	3/4 (19) (Flat)
Depth Inch (mm)	R410A	R410A	R410A	R410A	R410A
Refrigerant					

Slim Duct

Adaptable when ceiling cavity is small and there is no slope for drain.

Traditional

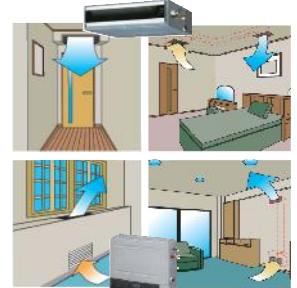


Slim Duct



Flexible Installation

Horizontal or vertical*.



*Internal drain pump will not operate when the unit is mounted in a vertical configuration.

Standard Features

- Dry Mode
- Weekly Timer
- Sleep Timer*
- 24-Hour Timer*
- Minimum Heat Mode*
- Auto Mode
- Quiet Mode
- Auto Restart/Reset
- Auto Changeover
- Condensate Pump
- Fresh Air Intake

*Available only with optional wireless remote control.



Field Supplied Filters

Filters are sized to keep velocities and static pressure loss low. This will insure sufficient static pressure is available for ductwork, fittings and supply and return grilles. Alternative filter sizes with equivalent face areas can be used.

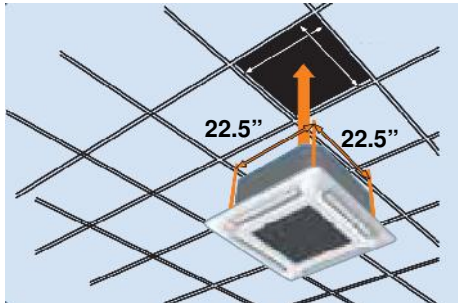
	CFM	ARU 7RLF	ARU 9RLF	ARU 12RLF	ARU 18RLF	ARU 24RLF
Typical Filter Size		12 x 20	12 x 20	12 x 20	14 x 25	18 x 30
Velocity, FPM		194	212	230	228	209
Unit External SP, in. W.C.		0.36	0.36	0.36	0.36	0.20
1" Fiberglass Filter						
SP Loss, in. W.C.		0.04	0.04	0.05	0.04	0.04
Available Static Pressure		0.32	0.32	0.31	0.32	0.16
1" MERV 8 Pleated Filter						
SP Loss, in. W.C.		0.10	0.12	0.14	0.14	0.12
Available Static Pressure		0.26	0.24	0.22	0.22	0.08
2" MERV 8 Pleated Filter						
SP Loss, in. W.C.		0.06	0.07	0.08	0.08	0.07
Available Static Pressure		0.30	0.29	0.28	0.28	0.13

Compact Cassettes 7, 9, 12, and 18,000 BTUs

AUU7RLF, AUU9RLF, AUU12RLF, AUU18RLF

Easy Installation

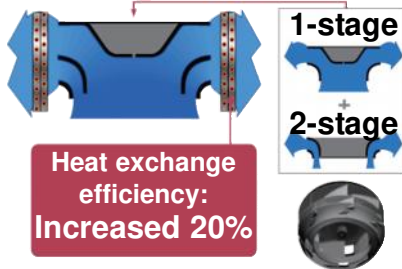
Fits into a standard ceiling tile*.
Compact cassette and compact duct models can be networked.



*Dimensions of outer grille are 27-9/16" x 27-9/16" and may overlap adjacent tiles.

2-Stage Turbo Fan

Air distribution is evenly spread across the heat exchanger by the new 2 stage turbo fan which produces two separate airflow streams.



Standard Features

- Sleep Timer
- Dry Mode
- Auto Louver: Up/ Down
- Quiet Mode
- Auto Restart/Reset
- Auto Changeover
- Remote Temperature Sensor
- High Ceiling Mode
- Condensate Pump
- 2-Stage Turbo Fan
- Minimum Heat Mode+
- Fresh Air Intake**

+ Available only with optional wireless remote control.

**Requires Fujitsu's Optional Fresh Air Kit part #UTZ-VXAA. Allows for a 4-inch flex duct connection and a field supplied duct booster fan. Fresh air maximum is 10% of unit High fan CFM. See UTZ-VXAA Design and Technical Manual for fan static pressure requirements at Fresh Air Kit. Add hood, filter and duct losses for fan total static pressure requirements. Will add 4" to the height of the indoor unit.

* Compact Cassette Grille UTG-CCGF sold separately. Must order one with each compact cassette.



	AUU7RLF Heat Pump NEW!	AUU9RLF Heat Pump	AUU12RLF Heat Pump	AUU18RLF Heat Pump
Nominal Cooling <i>BTU/h</i>	7,000	9,000	12,000	18,000
Nominal Heating <i>BTU/h</i>	8,100	10,200	13,500	20,000
Voltage/Frequency/Phase	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1
Air Circ. <i>C.F.M. (m³/h)</i> : Hi	318 (540) Clg or Htg	318 (540) Clg or Htg	359 (610) Clg or Htg	441 (750) Clg 471 (800) Htg
Medium	288 (490) Clg or Htg	288 (490) Clg or Htg	312 (530) Clg or Htg	359 (610) Clg 418 (710) Htg
Low	259 (440) Clg or Htg	259 (440) Clg or Htg	277 (470) Clg or Htg	306 (520) Clg 353 (600) Htg
Quiet	230 (390) Clg or Htg	230 (390) Clg or Htg	241 (410) Clg or Htg	241 (410) Clg 265 (450) Htg
Noise Level <i>dB(A) Clg/Htg</i> : Hi	33/34	33/34	37/37	42/44
Medium	31/32	31/32	33/33	37/40
Low	29/29	29/29	31/31	33/37
Quiet	27/27	27/27	28/28	29/30
Running Current <i>Rated (A)</i> : Cooling	0.15	0.15	0.19	0.30
Heating	0.15	0.15	0.19	0.30
Power Use <i>Rated/Max (W)</i> : Clg	18	18	23	39
Heating	18	18	23	39
Fan Speeds <i>Stage</i>	4+auto	4+auto	4+auto	4+auto
Air Direction: Vertical	Automatic	Automatic	Automatic	Automatic
Air Filter	Washable	Washable	Washable	Washable
Front Grille	UTG-CCGF*	UTG-CCGF*	UTG-CCGF*	UTG-CCGF*
Connection Method	Flare	Flare	Flare	Flare
Conn. Pipe Diameter <i>Inch</i>	suc 3/8 dis 1/4	suc 3/8 dis 1/4	suc 3/8 dis 1/4	suc 1/2 dis 1/4
Net Weight <i>lbs. (kg)</i>	33 (15)	33 (15)	33 (15)	33 (15)
Chassis Dim: Height <i>Inch (mm)</i>	9-11/16 (245)	9-11/16 (245)	9-11/16 (245)	9-11/16 (245)
Width <i>Inch (mm)</i>	22-7/16 (570)	22-7/16 (570)	22-7/16 (570)	22-7/16 (570)
Depth <i>Inch (mm)</i>	22-7/16 (570)	22-7/16 (570)	22-7/16 (570)	22-7/16 (570)
Grille Dim: Height <i>Inch (mm)</i>	1-15/16 (49)	1-15/16 (49)	1-15/16 (49)	1-15/16 (49)
Width <i>Inch (mm)</i>	27-9/16 (700)	27-9/16 (700)	27-9/16 (700)	27-9/16 (700)
Depth <i>Inch (mm)</i>	27-9/16 (700)	27-9/16 (700)	27-9/16 (700)	27-9/16 (700)
Refrigerant	R410A	R410A	R410A	R410A



Fresh Air Kit** UTZ-VXAA

Mixes room air then passes through the heat exchanger.

NEW!

Floor Mounted 9, 12, and 15,000 BTUs

AGU9RLF, AGU12RLF, AGU15RLF

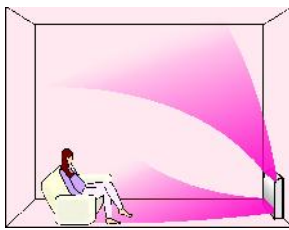


At less than 24" high and 30" wide, floor mount models fit easily under a standard window and can replace a radiator twice its size while producing more capacity.

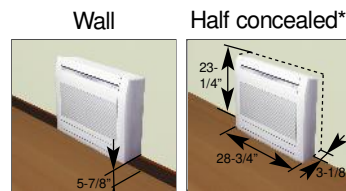
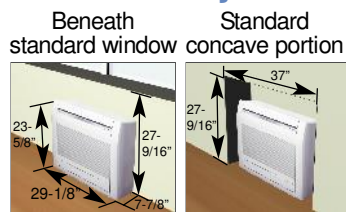


2-Fan and Wide Airflow

Having both upper and lower airflow quickly warms or cools the entire room. Floor mount can be set in "Upward Airflow Only" when occupants wish not to have feet warmed or cooled.



Flexible and Easy Installation



*Field supplied parts required

Standard Features

- Wireless Remote Control
- Apple Catechin Filter
- Ion Deodorizing Filter
- Sleep Timer
- 24-Hour Timer
- Auto Louver: Up/Down
- Auto Mode
- Minimum Heat Mode
- Economy Mode
- Auto Restart/Reset
- Auto Changeover
- Powerful Mode



Designer wireless remote control

	AGU9RLF Heat Pump NEW!	AGU12RLF Heat Pump NEW!	AGU15RLF Heat Pump NEW!
Nominal Cooling BTU/h	9,000	12,000	14,200
Nominal Heating BTU/h	12,000	16,000	18,000
Voltage/Frequency/Phase	208-230/60/1	208-230/60/1	208-230/60/1
Air Circ. C.F.M. (m ³ /h): Hi	312 (530)	353 (600)	383 (650)
Medium	259 (440)	288 (490)	306 (520)
Low	212 (360)	224 (380)	235 (400)
Quiet	159 (270)	159 (270)	159 (270)
Noise Level dB(A)Clg/Htg: Hi	39/39	42/42	44/44
Medium	34/34	36/38	38/39
Low	28/28	30/32	31/33
Quiet	22/22	22/22	22/22
Running Current Rated (A): Cooling	0.15	0.18	0.20
Heating	0.15	0.18	0.20
Power Use Rated (W): Cooling	16	18	23
Heating	16	18	23
Fan Speeds Stage	4+Auto	4+Auto	4+Auto
Air Direction: <i>Horizontal</i>	Manual	Manual	Manual
<i>Vertical</i>	Auto	Auto	Auto
Air Filter	Washable	Washable	Washable
Apple Catechin Filter	Yes	Yes	Yes
Ion Deodorizing Filter	Yes	Yes	Yes
Connection Method	Flare	Flare	Flare
Conn. Pipe Diameter <i>Inch</i>	Suc. 3/8 Dis. 1/4	Suc. 3/8 Dis. 1/4	Suc. 1/2 Dis. 1/4
Net Weight <i>lbs. (kg)</i>	31 (14)	31 (14)	31 (14)
Dimensions: Height <i>Inch</i>	23-5/8	23-5/8	23-5/8
<i>mm</i>	600	600	600
Width <i>Inch</i>	29-1/8	29-1/8	29-1/8
<i>mm</i>	740	740	740
Depth <i>Inch</i>	7-7/8	7-7/8	7-7/8
<i>mm</i>	200	200	200
Refrigerant	R410A	R410A	R410A



Flex-Zone Outdoor Unit 48,000 BTUs

AOU48RLXFZ1



- Connect 2 to 8 indoor units
- 80 to 130% connectable capacity
- Connect 39,000 to 62,000 BTU

2 Indoor Units

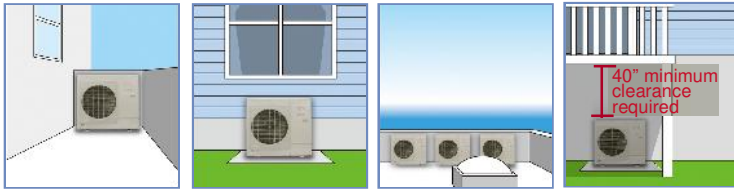
18k BTU/h + 24 k BTU/h = 42k BTU/h OK
 12k BTU/h + 24 k BTU/h = 36k BTU/h Not Allowed (below 80%)

8 Indoor Units

7k BTU/h x 8 units = 56k BTU OK
 9k BTU/h x 8 units = 72k BTU Not Allowed (over 130%)

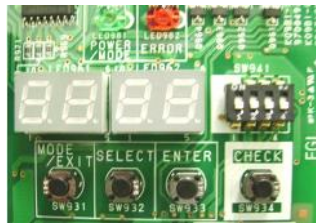
Compact Size

The compact size of outdoor unit AOU48RLXFZ1 allows for many installation opportunities.



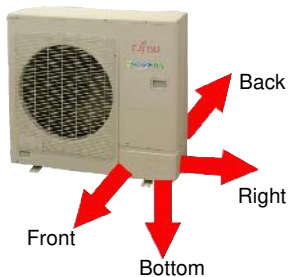
Self Diagnostic Feature

This printed circuit board provides three modes of diagnostics - setting, monitoring and function mode, as well as error codes. It also provides a pre-commissioning check function. Setting mode allows optional functions to be selected. Monitoring mode provides temperature for each thermistor, compressor operation and other functions. Function mode provides cooling test run, heating test run and pump down operation.



Piping Flexibility

Contractors can choose the best direction for piping from the outdoor unit.



DC Twin Rotary Compressor

A high performance, low noise, large capacity DC twin rotary compressor is used. Includes Quiet Mode for night operation.



AOU48RLXFZ1 Heat Pump

Connectable Indoor Unit Number	2 to 8
Connectable Indoor Unit Capacity	80 to 130% Nominal (39,000 - 62,000 BTU)
Connectable Branch Box Number	1 to 3
Nominal Cooling BTU/h	48,000
Max Cooling BTU/h	51,100
Nominal Heating BTU/h	54,000
Low Temp. Heating 17°F BTU/h	40,000
Max Heating BTU/h	57,000
Clg. Operating Range °F(°C)	23-115 (-5-46)
Htg. Operating Range °F(°C)	5-75 (-15-24)
Input Power: Cooling Rated kW*	5.52 / 5.19 / 5.35
Input Power: Heating Rated kW*	5.02 / 4.89 / 4.96
Voltage/Frequency/Phase	208-230/60/1
Current: Clg Outdoor Max. (A)	24.5 / 23.0 / 23.7
Current: Htg Outdoor Max. (A)	22.3 / 21.7 / 22.0
Recommended Fuse Size (A)	40
Outdoor Fan Speed RPM (Clg/Htg)	890/910
Fan: Type x Quantity	Propeller x 1
Fan Motor Output W	111
Sound Pressure Level Cooling dB(A)	56
Sound Pressure Level Heating dB(A)	58
Max. Pipe Length Total Ft (m)	377 (115)
Max. Pipe Length Between Box & Farthest Indoor Unit Ft (m)	49 (15)
Max. Pipe Height Difference Between Outdoor Unit & Branch Box Ft (m)	98 (30)
Max. Pipe Height Difference Between Indoor Units Ft (m)	98 (30)
Max. Pipe Height Difference Between Outdoor Unit & Farthest Indoor Ft (m)	98 (30)
Connection Method	Flare
Conn. Pipe Diameter Inch	3/8 (Liq.) 5/8 (Suc.)
Net Weight lbs. (kg)	216 (98)
Dimensions: Height Inch	36
mm	914
Width Inch	38-1/4
mm	970
Depth Inch	14-5/8
mm	370
Refrigerant	R410A

*Ducted / Non-Ducted / Mixed

	SEER	HSPF	EER**
Ducted	14.7	9.3	8.7
Non-Ducted	17.0	9.8	9.25
Mixed	15.8	9.5	8.97

**Cooling

Optional Accessories

Central Remote Controller

UTY-DMMUM



Controls up to 8 individual indoor units. Set temperatures on timers to best meet individuals' needs. Includes a large backlit LCD and 4-way navigation pad. Remote connects in daisy chain to branch boxes.



Wired Remote Controller*

UTY-RNNUM[^]



Its unique lock function and sleek design provides full feature access to property managers, building owners, and facility maintenance, as well as providing basic comfort features to tenants, employees, and teachers.



Simple Remote Controller

UTY-RSNUM*



Suitable when only basic operations are required for hotels, offices and other places where there is frequent arrival and departure of occupants.



Wireless Remote Controller

UTY-LNHUM



For spaces where there is just no place to mount the wired remote.



Dry Contact Wire Kit*

UTY-XWZX / UTY-XWZXZ5



Turns system on or off using a normally closed circuit, for example in home automation or BMS integration of only On/Off operation, occupancy sensor or key card switch or lead-lag control of other heating/cooling.



Interface Kit

UTY-TWBXF1**



Required to connect the ASU9RLS2, ASU12RLS2 and ASU15RLS2 to Wired Remote UTY-RNNUM, Dry Contact Wire Kit UTY-XWZXZ5, and Simple Remote Control UTY-RSNUM.



Interface Kit

UTY-XCBXZ2**



Required to connect ASU7RLF1, 9RLF1, 12RLF1 to Wired Remote UTY-RNNUM, Dry Contact Wire Kit UTY-XWZX, and Simple Remote Control UTY-RSNUM.



High Humidity Insulation Kit

UTZ-KXGC



Additional insulation for compact cassette units, which may be needed when they are installed in high humidity areas.



Fresh Air Intake Kit

UTZ-VXAA



Mixes room air then passes it through a heat exchanger.



Air Outlet Shutter Plate

UTR-YDZB



In a 3-way air flow configuration an Air Outlet Shutter Plate kit is required.



Receiver Unit

UTY-LRHUM



Includes a wireless remote control.



Remote Sensor

UTY-XSZX



Wall mounted temperature sensor for slim duct models.



Slim Duct Connector Kit

UTD-ECS5A



Comes with 5 sets of wires. Can be used to turn unit on/off, wire in float switch, AUX heater, turn on an external device (Fan), or show if the unit is running.



Outdoor Unit Input/Output Connector

UTY-XWZXZ3



Gives the ability to limit the noise of the unit*, stop the outdoor unit, limit power consumption*, control the operating mode (Htg/Clg), or use output status to see if the compressor is running. You will need to order a kit for each option. *Will reduce capacity.



Outdoor Unit Base Heater Connector

UTY-XWZXZ4



Used to hook up an AUX base pan heater to the outdoor unit. Heater will stop ice from forming in the outdoor unit. Base heater will operate when outdoor temperature is below 36°F. Heater is field supply. Heaters greater than 25W can't be fed directly from the board, but have to be powered from another source.



Compatibility:



Small Wall Mount
7, 9, 12k BTU / RLF1 Series



Designer Wall Mount
9, 12, 15k BTU / RLS2 Series



Large Wall Mount
18, 24k BTU



Compact Cassette
7, 9, 12, 18k BTU



Slim Duct
7, 9, 12, 18, 24k BTU



Floor Mount
9, 12, 15k BTU

[^] Minimum Heat, Sleep Timer functions will be lost when the wired remote controller is installed.

* Wall mounted ASU7, 9, and 12RLF1 require accessory interface kit (Part UTY-XCBXZ2) in order to connect this device to them. Wall mounted ASU9, 12, and 15RLS2 require accessory interface kit (Part UTY-TWBXF1) in order to connect this device to them.

** Internal thermosensor function in Wired Remote UTY-RNNUM is disabled when using this interface kit.

Allowable Combinations

AOU48RLXFZ1 offers over 250 combinations of systems based on BTU/h. When both indoor type and BTU/h are considered, there are over 56,000 combinations of systems! For a full listing of combinations, please visit: www.fujitsugeneral.com/combinations.pdf.



Branch Boxes

UTP-PU03A, UTP-PU03B



	UTP-PU03A Primary	UTP-PU03B Secondary
Connectable Indoor Unit	1 ~ 3	1 ~ 3
Max. Combination <i>BTU/h</i>	62,000 Nom.*	62,000 Nom.*
Min. Combination <i>BTU/h</i>	7,000 Nom.*	7,000 Nom.*
Clg. Operating Range °F(°C)	25-115 (-5-46)	25-115 (-5-46)
Htg. Operating Range °F(°C)	5-75 (-15-24)	5-75 (-15-24)
%RH	80 or less	80 or less
Voltage/Frequency/Phase	208-230/60/1	208-230/60/1
Maximum Current Ampacity (A)	15	15
Running Current <i>Rated (A)</i> : Cooling	0.050	0.050
Heating	0.050	0.050
Power Use <i>Rated (W)</i> : Cooling	10	10
Heating	10	10

*As long as the total system nominal capacity is between 39,000 and 62,000 BTUs.

	UTP-PU03A Primary	UTP-PU03B Secondary
Dimensions: Gross (Flare to Flare):		
Height x Width x Depth <i>Inch</i>	7-5/8 x 33 x 14-5/8	7-5/8 x 33 x 14-5/8
Height x Width x Depth <i>mm</i>	195 x 838 x 370	195 x 838 x 370
Dimensions: Net (Metal Box Only):		
Height x Width x Depth <i>Inch</i>	7-5/8 x 17 x 14-5/8	7-5/8 x 17 x 14-5/8
Height x Width x Depth <i>mm</i>	195 x 433 x 370	195 x 433 x 370
Net Weight <i>lbs. (kg)</i>	20 (9)	20 (9)
Conn. Pipe Diameter - Main <i>Inch</i>	(3/8 Liq. x 5/8 Suc.)	(3/8 Liq. x 5/8 Suc.)
Conn. Pipe Diameter - Branch <i>Inch</i>	(1/4 Liq. x 1/2 Suc.)	(1/4 Liq. x 1/2 Suc.)
Connection Method	Flare	Flare
Connection Adapter Included <i>Inch</i>	(1/2MF x 3/8FF) x 3 (1/2MF x 5/8FF) x 3 No adapter needed for 18k BTU	(1/2MF x 3/8FF) x 3 (1/2MF x 5/8FF) x 3 No adapter needed for 18k BTU

Dimensions: Gross (Flare to Flare):

Height x Width x Depth *Inch*

Height x Width x Depth *mm*

Dimensions: Net (Metal Box Only):

Height x Width x Depth *Inch*

Height x Width x Depth *mm*

Net Weight *lbs. (kg)*

Conn. Pipe Diameter - Main *Inch*

Conn. Pipe Diameter - Branch *Inch*

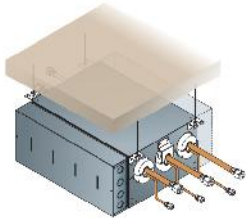
Connection Method

Connection Adapter Included *Inch*

Warning: Branch boxes are not weather tight enclosures and cannot be mounted outdoors or in damp environments exceeding 80% relative humidity, unless using the Branch Box Outdoor Enclosure, Part #UTP-PX-A. See Page 39 for more information.

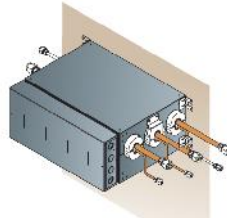
Allowed Branch Box Mounting Direction

Threaded Rod Mount



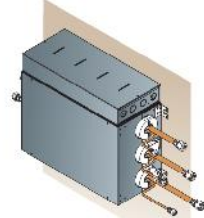
By reversing the electrical box position you can orient the inlet and outlet pipes into a left hand or right hand configuration.

Horizontal Wall Mount



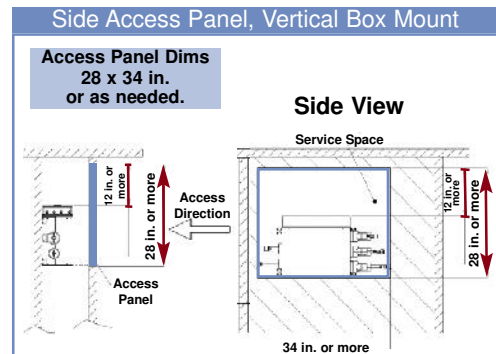
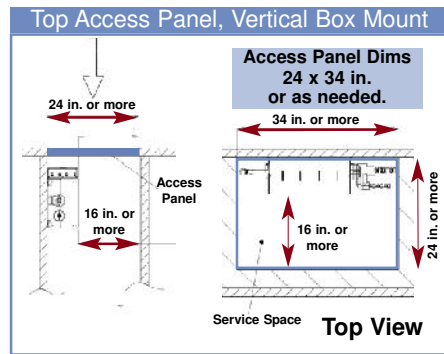
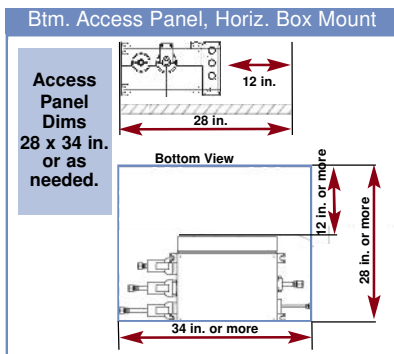
By reversing the electrical box position you can orient the inlet and outlet pipes into a left hand or right hand configuration.

Vertical Wall Mount

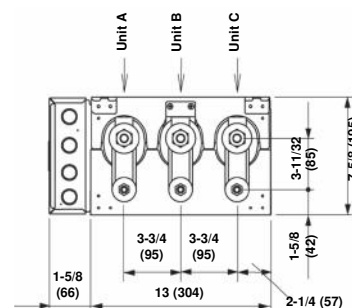
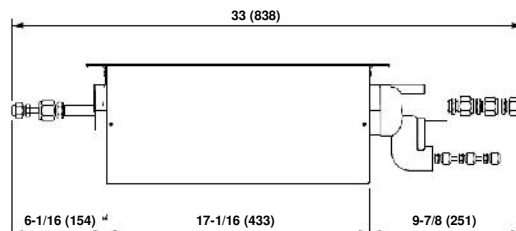
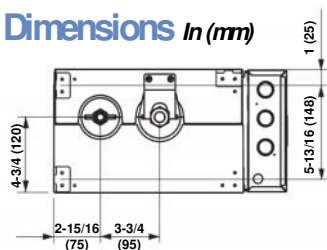


You cannot reverse the electrical box position when mounting the branch box vertically.

Clearances



Dimensions *In (mm)*



Branch Box Outdoor Enclosure

UTP-PX-A



The Branch Box Outdoor Enclosure is used to mount the indoor style Branch Box outdoors. The Branch Box Outdoor Enclosure is a painted metal cover to match the condensing unit. When Branch Box Outdoor Enclosure is not required, see Installation Manual for indoor mounting instructions.

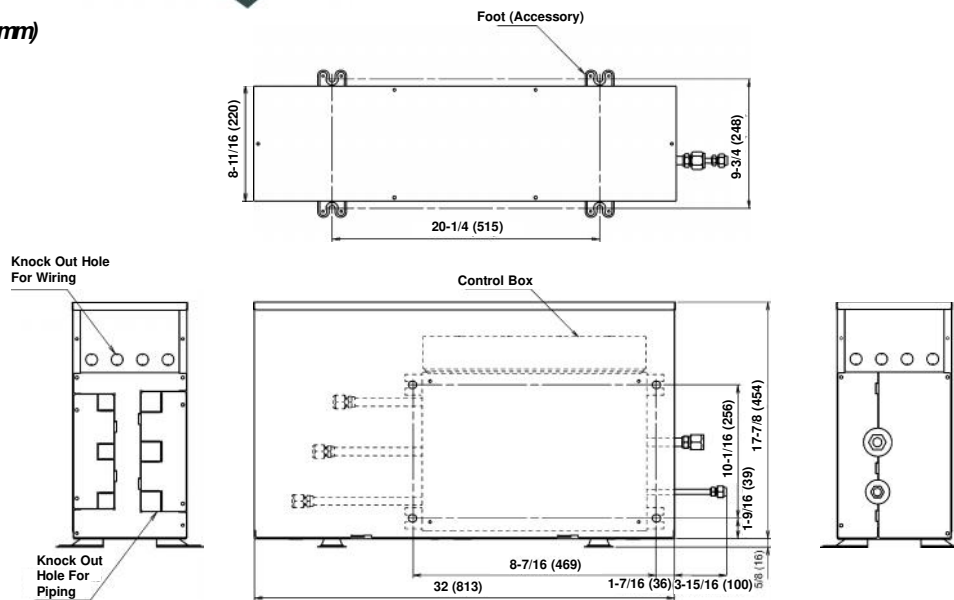
Allowed Mounting Positions



Dimensions in. (mm)	
Net (HxWxD)	8-11/16 x 32 x 17-7/8 (220 x 813 x 454)
Gross (HxWxD)	3-15/16 x 33-11/16 x 20-5/16 (100 x 880 x 515)
Weight lbs. (kg)	
Net Branch Box cover only	22 (10)
Net Branch Box + Cover	44.1 (20)
Gross	30.9 (14)



Dimensions In (mm)

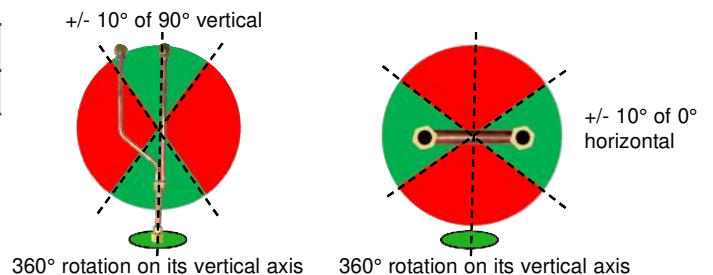


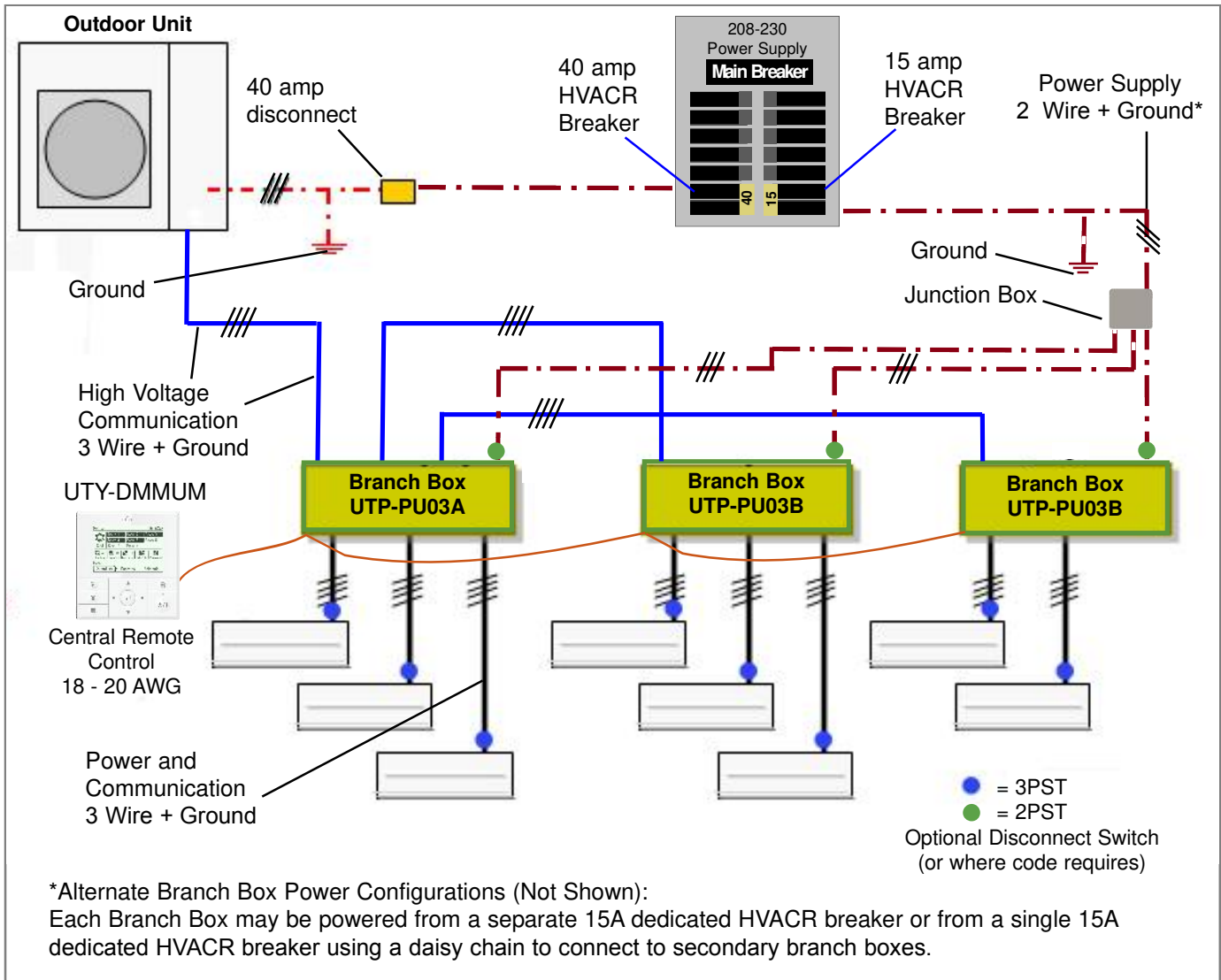
Separation Tube Assembly Kit

UTP-SX248A



Size	Liquid Inch	3/8 x 3/8 x 3/8
	Suction Inch	5/8 x 5/8 x 5/8



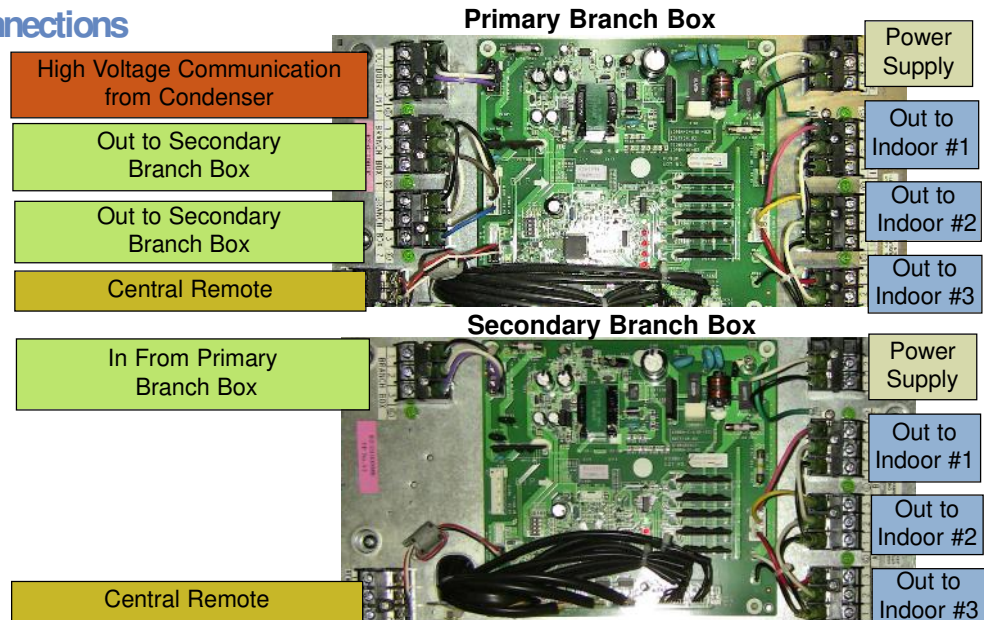


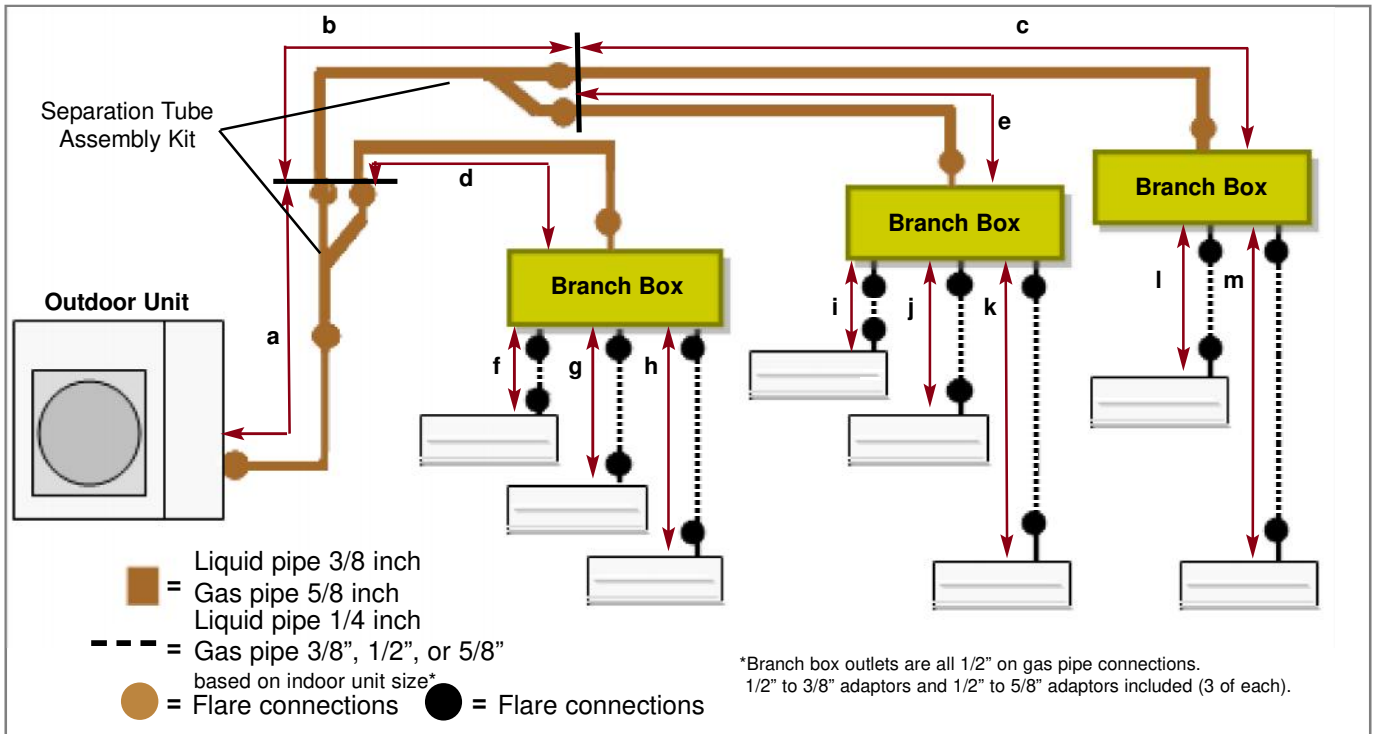
Branch Box Terminal Connections

Miswiring Detection

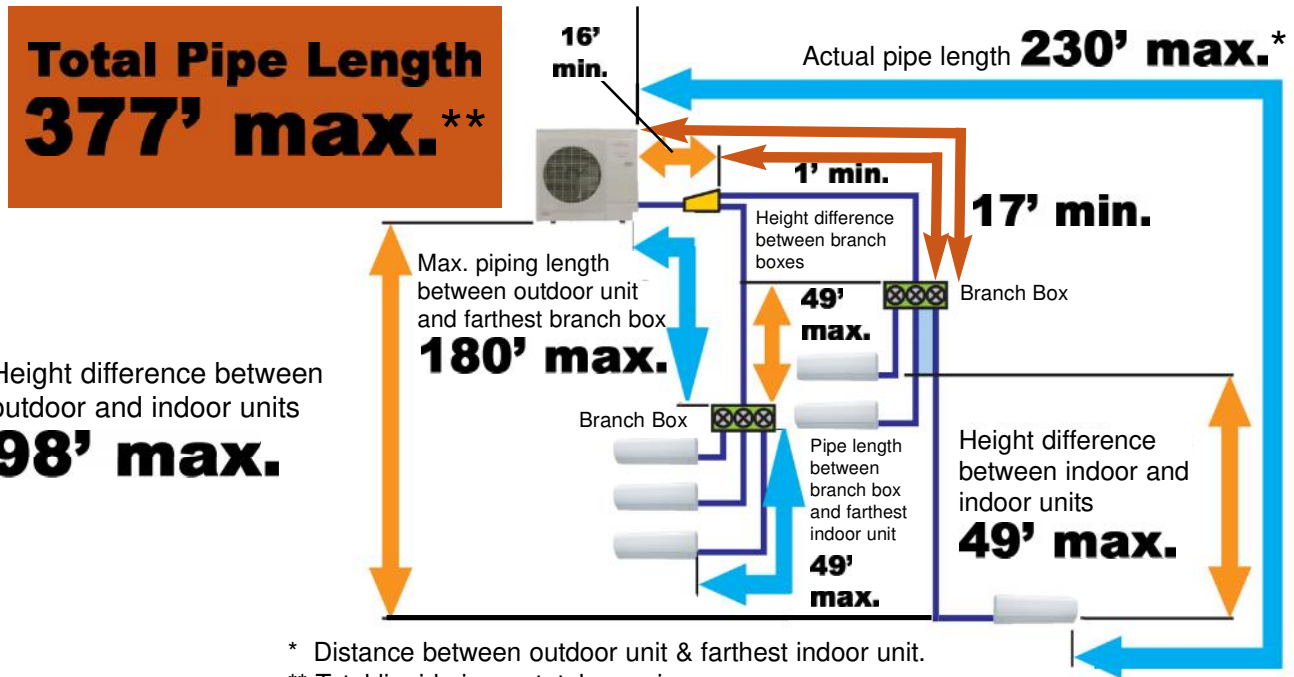
Errors Detected For...

- Miswired terminals
- Incorrect indoor unit
- Less than 2 or more than 8 indoor units
- Less than 39,000 or more than 62,000 BTUs





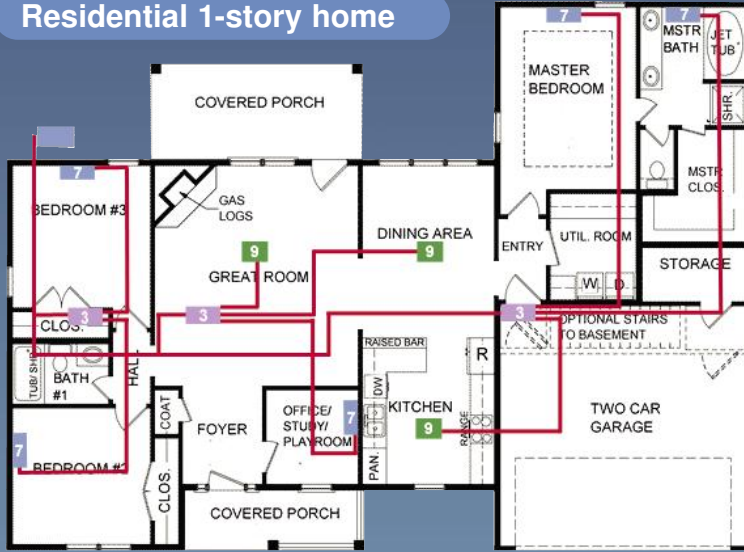
		Liquid pipe	Adaptor	Gas pipe
Branch Box to Indoor	7,000 BTU	1/4 inch	included	3/8 inch
	9,000 BTU		included	
	12,000 BTU		included	
	18,000 BTU		n/a	
	24,000 BTU		included	
Calculate Refrigerant Charge Factory Charge 7.6 lb (3.45 kg) Unit pre-charged to 0 feet	Pipe Diameter	Location		Additional Refrig.
	3/8"	Outdoor to Branch Box		0.624 oz./ft. or 58g/meter
	1/4"	Branch Box to Indoor Unit		0.224 oz./ft. or 21g/meter
$(\text{Total length of } 3/8" \text{ liquid line} \times 0.624 \text{ oz./ft. or } 58\text{g/meter}) + (\text{Total length of } 1/4" \text{ liquid line} \times 0.224 \text{ oz./ft. or } 21\text{g/meter})$ $(a+b+c+d+e) \times 0.624 \text{ oz./ft. or } 58\text{g/meter} + (f+g+h+i+j+k+l+m) \times 0.224 \text{ oz./ft. or } 21\text{g/meter} = \text{additional refrigerant}$				



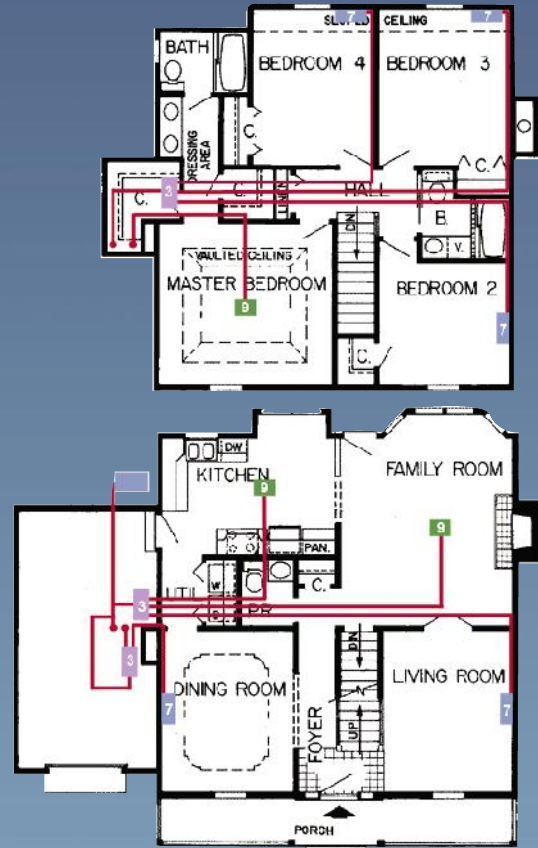
* Distance between outdoor unit & farthest indoor unit.
 ** Total liquid pipe or total gas pipe.

Examples

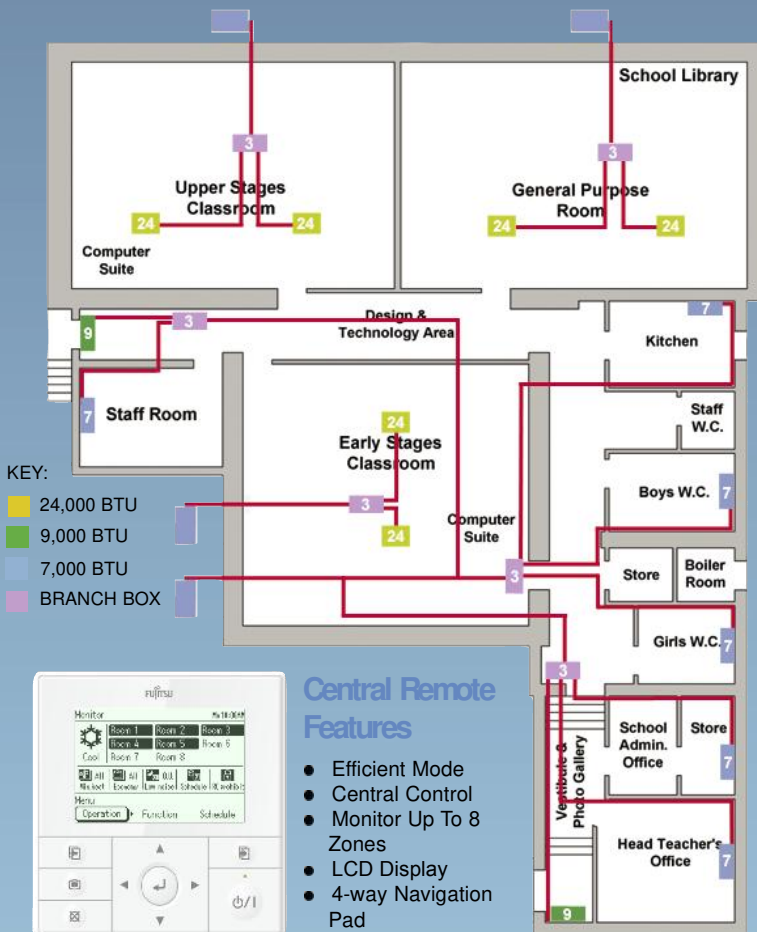
Residential 1-story home



Residential 2-story home



Church/School



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