

MULTI SPLIT



Control several indoor units
with one outdoor unit.
Build the optimum system you desire.

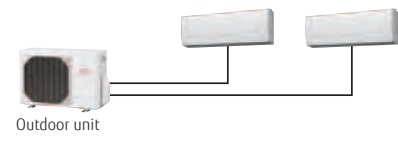
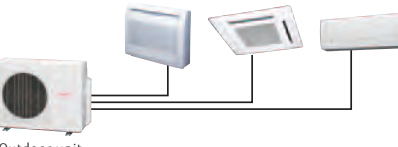
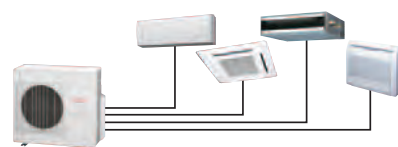
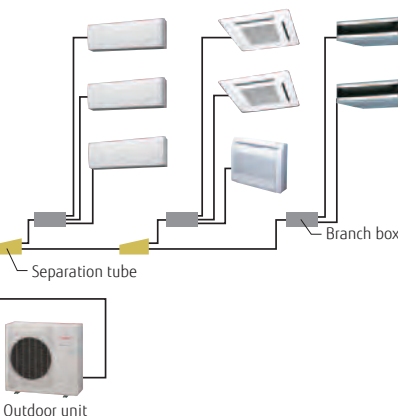
If you want to keep a large floor as well as many rooms comfortable, we recommend you use Multi Split to build a simple system using one outdoor unit. Choose from a large lineup of indoor units that best matches your rooms. You can mix and match them at will. Build the system that is just right for you.

Multi Split provides comfort in
a variety of situations

from home to
office and store.














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2-8 Rooms Multi Type Lineup

		Indoor unit					
Model No.		14	18	24	30	45	
Cooling rated capacity(kW)		4	5	5.4	6.8	8	14
2 Rooms Multi Up to 2 units		● AOYG14LAC2	● AOYG18LAC2				
	Outdoor unit						
3 Rooms Multi Up to 3 units			● AOYG18LAT3	● AOYG24LAT3			
	Outdoor unit						
4 Rooms Multi Up to 4 units						● AOYG30LAT4	
	Outdoor unit						
8 Rooms Multi Up to 8 units							● AOYG45LBT8
	Outdoor unit						

- Note : 1. 2 Rooms Multi : Connectable indoor units are 2 units.
 AOYG14LAC2: Total capacity of indoor units connected must be between 4.0 kW and 6.2 kW.
 AOYG18LAC2: Total capacity of indoor units connected must be between 4.0 kW and 7.0 kW.
2. 3 Rooms Multi : Connectable indoor units are 2 to 3 units.
 AOYG18LAT3: Total capacity of indoor units connected must be between 4.0 kW and 8.5 kW.
 AOYG24LAT3: Total capacity of indoor units connected must be between 4.0 kW and 10.5 kW.
3. 4 Rooms Multi : Connectable indoor units are 3 to 4 units.
 AOYG30LAT4: Total capacity of indoor units connected must be between 7.9 kW and 14.4 kW.
4. 8 Rooms Multi : Connectable indoor units are 2 to 8 units.
 AOYG45LBT8: Total capacity of indoor units connected must be between 11.2 kW and 18.2 kW.

Connectable Indoor unit line-up

Outdoor Unit	Type	2 Rooms		3 Rooms		4 Rooms	8 Rooms
	Model name	AOYG14LAC2	AOYG18LAC2	AOYG18LAT3	AOYG24LAT3	AOYG30LAT4	AOYG45LBT8
							
Capacity (kW)	Heating	4.0	5.0	5.4	6.8	8.0	14.0
	Cooling	4.4	5.6	6.8	8.0	9.6	16.0
Indoor Unit	BTU	kW Class					
	7000	2.0	●	●	●	●	●
	9000	2.5	●	●	●	●	●
	12000	3.5	●	●	●	●	●
	14000	4.0	—	●	●	●	●
	18000	5.0	—	—	—	●	●
	24000	7.0	—	—	—	●	●
	9000	2.5	—	●	●	●	●
	12000	3.5	—	●	●	●	●
	14000	4.0	—	—	●	●	●
	7000	2.0	—	●	●	●	●
	9000	2.5	—	●	●	●	●
	12000	3.5	—	●	●	●	●
	14000	4.0	—	—	●	●	●
	14000	4.0	—	—	●	●	●
	18000	5.0	—	—	—	●	●
	7000	2.0	—	●	●	●	●
	9000	2.5	—	●	●	●	●
	12000	3.5	—	●	●	●	●
	14000	4.0	—	—	●	●	●
	18000	5.0	—	—	—	●	●

Indoor unit features

	Economy	Powerful	HEAT	10°C	Auto	Up/Down	Deodor	Adjust	Restart	Dust	Intake	Sleep	Program	Weekly	+Senba	Fiber	ION	AF	Wash
ASYG07/09/12/14LM	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●
ASYG07/09/12/14LU	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●
ASYG18/24LF	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●
AGYG09/12/14LV	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●
AUYG07/09/12/14/18LV	●	●	●	●	●	●	●	●	●	○	○	●	●	●	○	●	●	●	●
ABYG14/18LV	●	●	●	●	●	●	●	●	●	○	○	●	●	●	○	●	●	●	●
ARYG07/09/12/14/18LL	●	○	●	○	●	●	●	●	●	○	○	○	○	○	●	●	●	●	●

○: Optional function

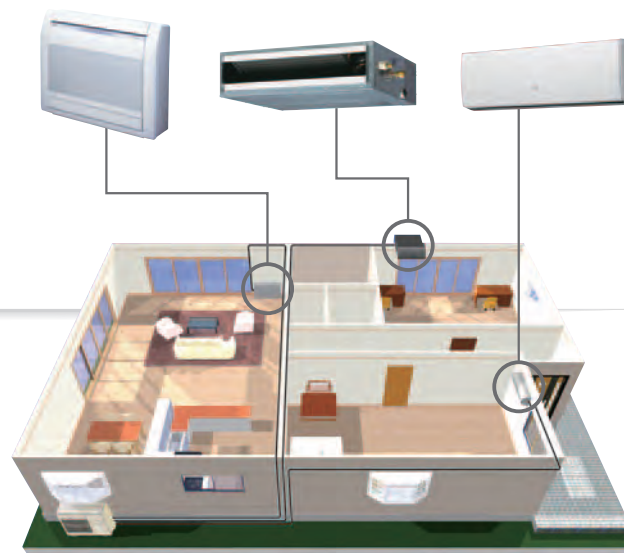
2 & 3-4 Rooms Multi



Features

Wide range of indoor units with various models

7 types 25 models are lined up in the capacity range from 2 kW to 7 kW class. Wide range of needs can be met from rooms of private homes to large shops and hotels.



Space-saving installation

Multiple indoor units can be connected to 1 outdoor unit, and long piping connection is also possible. Compared with single type, the outdoor unit can be installed in various places to realize the space-saving installation.

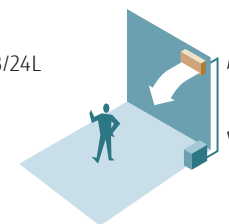
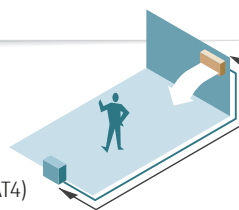
Flexible installation

Up to max. piping length of 70 m (AOYG30LAT4), max. height difference of 15 m can be supported. Multi type can be installed at large-size residence or buildings with multiple floors.

Max. Piping Length (Each Unit):
 20 m (AOYG14LAC2 / 18LAC2),
 25 m (AOYG18LAT3 / 24LAT3 / 30LAT4)

Max. Height:
 15 m (AOYG14LAC2/18LAC2/18LAT3/24LAT3/30LAT4)

Total Piping Length:
 30 m (AOYG14LAC2 / 18LAC2),
 50 m (AOYG18LAT3 / 24LAT3),
 70 m (AOYG30LAT4)



2 Rooms: A0YG14LAC2 / A0YG18LAC2
 3 Rooms: A0YG18LAT3 / A0YG24LAT3
 4 Rooms: A0YG30LAT4



Specifications (2 ROOMS, 3 ROOMS, 4 ROOMS)

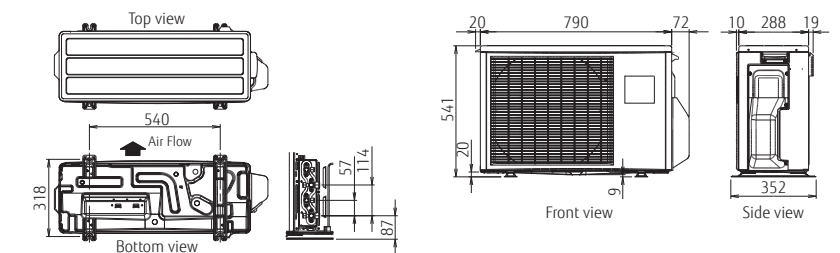
Model No.	Outdoor unit	A0YG14LAC2	A0YG18LAC2	A0YG18LAT3	A0YG24LAT3	A0YG30LAT4
Power Source		Single-phase, ~230V, 50Hz				
Rated Capacity (min-max)	Cooling	4.0 (1.4-4.4)	5.0 (1.7-5.6)	5.4 (1.8-6.8)	6.8 (1.8-8.5)	8.0 (3.5-10.1)
	Heating	4.4 (1.1-5.4)	5.6 (1.8-6.1)	6.8 (2.0-8.0)	8.0 (2.0-8.8)	9.6 (3.7-12.0)
EER	Cooling	3.67	3.21	4.00	3.51	3.60
	Heating	4.27	3.97	4.20	4.00	4.00
Sound Pressure Level (High)	Cooling	47	50	46	48	50
	Heating	49	51	47	49	51
Sound Power Level (High)	Cooling	61	63	65	68	68
	Heating	63	64	67	70	70
Net Dimensions H × W × D	mm	540×790×290	540×790×290	700×900×330	700×900×330	830×900×330
Weight	kg(lbs)	37 (82)	38 (84)	55 (121)	55 (121)	68 (150)
Connection Pipe Diameter	Liquid	6.35×2	6.35×2	6.35×3	6.35×3	6.35×4 (*6.35×3, 9.52)
	Gas	9.52 × 2	9.52 × 2 *(9.52, 12.7)	9.52 × 2, 12.7 *(9.52 × 3)	9.52 × 2, 12.7 *(9.52 × 3)	9.52 × 2, 12.7 × 2 *(9.52 × 3, 12.7) *(9.52 × 2, 12.7, 15.88)
Max. Pipe Length	Total / Each	30 / 20	30 / 20	50 / 25	50 / 25	70 / 25
	Between Outdoor Unit and Each Indoor Units.	15	15	15	15	15
Max. Height Difference	Between Outdoor Unit and Each Indoor Units.	10	10	10	10	10
	Between Indoor Units.	10	10	10	10	10
Operation Range	Cooling	10 to 46	10 to 46	-10 to 46	-10 to 46	0 to 46
	Heating	-15 to 24	-15 to 24	-15 to 24	-15 to 24	-10 to 24
Refrigerant	Type (Global Warming Potential)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)	R410A (2,088)
	Charge	g	1,250	1,300	2,200	2,200

* Connect to connection valve by the adapter.

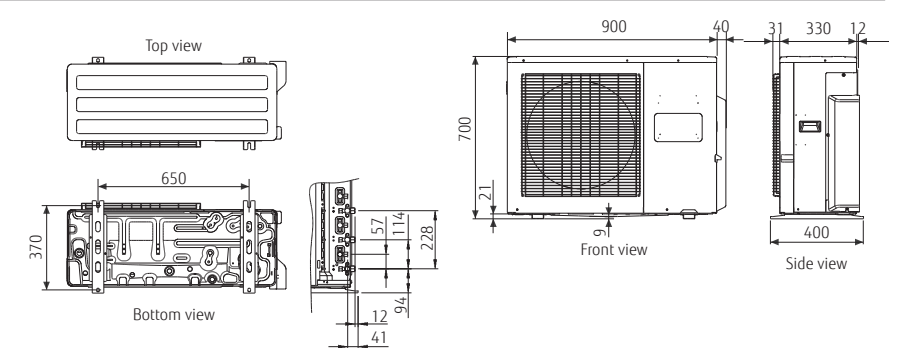
Dimensions

(Unit : mm)

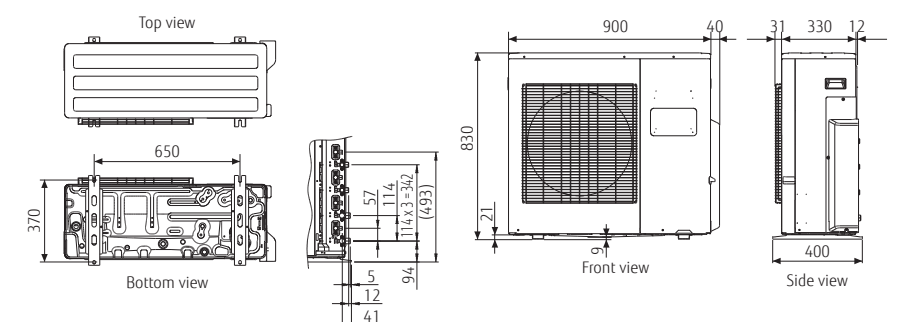
2 Rooms:
A0YG14LAC2/A0YG18LAC2



3 Rooms:
A0YG18LAT3/A0YG24LAT3



4 Rooms:
A0YG30LAT4



8 Rooms Multi

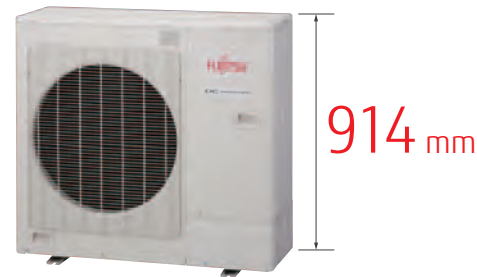


ALL DC

Features

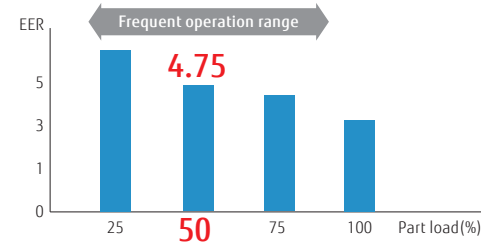
Compact outdoor unit

The compact design outdoor unit allows to be installed below a window and in a narrow space.



High seasonal efficiency

The actual performance is conducted under various outside temperatures depending on weather and seasons, furthermore, especially for multi system, not all the rooms are operated all the time. So over 90% of actual operation time, air conditioners are operated at partial capacity instead of rated capacity. Considering these, we focused on energy-saving performance which is based on actual use. Efficiency of part load performance was drastically improved by developing ALL DC and our own inverter system.



Innovated technology

High efficiency large fan: New high efficiency fan is mounted.

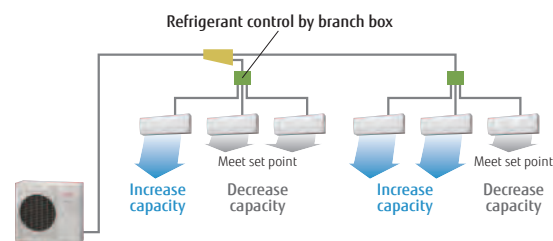
DC fan motor: High performance and high efficiency has been realized by using a small DC fan motor.

Heat exchanger: Reduced compact size and energy saving has been realized by utilizing high density piping design and 3-Row heat exchanger.

High efficiency DC twin rotary compressor: A high performance, low noise, large capacity DC twin rotary compressor is used.

Quick comfort by optimized refrigerant control

Every room meets the set point most quickly and comfortably by optimized refrigerant control.

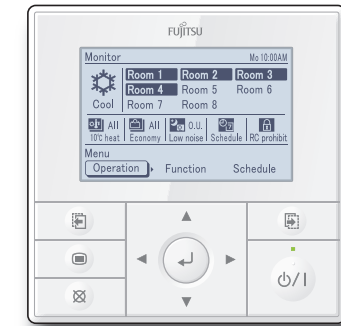


Central Remote Controller Option

Max. Controllable
1 multi system

Max. Controllable
8 indoor units

Central remote controller developed for residential applications. All indoor units can be batched controlled using simple operations. Schedule management and other functions can be used to achieve even greater energy savings.



Central & Individual Control

Batched control of up to 8 indoor units. The temperature, airflow volume, and remote control prohibition settings of all indoor units can be batched.

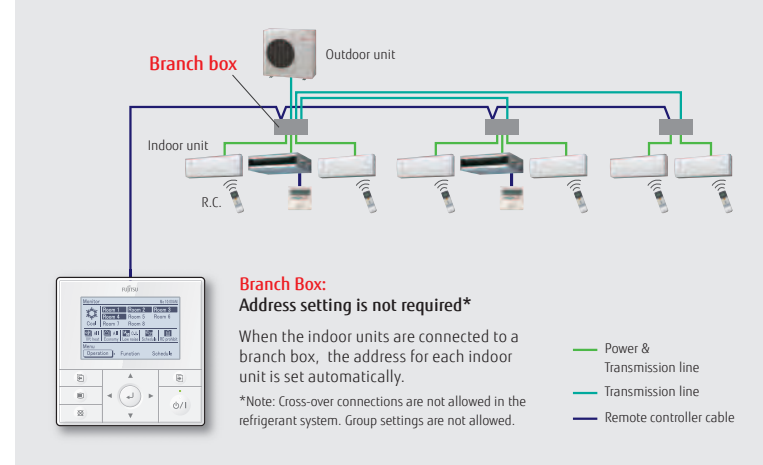
Multiple language support

Corresponds to 9 different languages (English, German, French, Spanish, Russian, Portuguese, Italian, Greek, and Turkish)

Easy-To-Use operation

- Large backlight LED screen
- Large easy-to-see operation panel

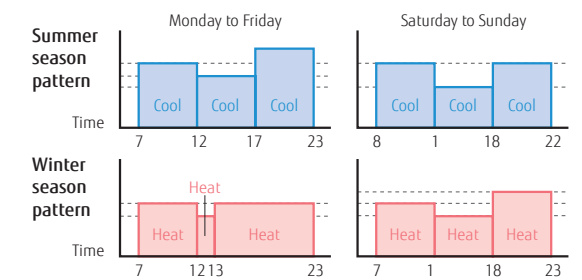
System configuration



Central Remote Controller Functions

Weekly schedule timer

The ON/OFF setting can be set for 4 times a day. Two weekly patterns can be set to match the cooling and heating seasons.



Low noise operation

Users can choose from 4 low noise levels, depending on the installation environment. The operation time can be set using the timer.

10°C heat operation

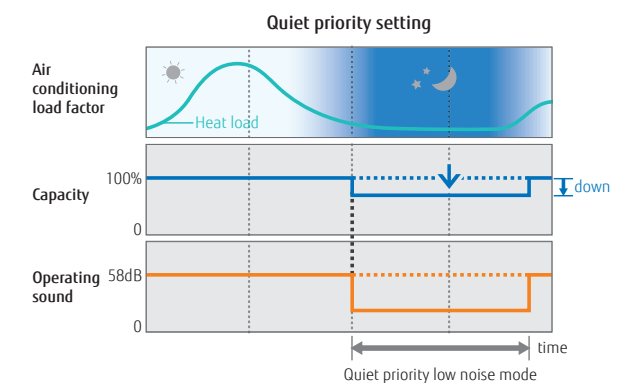
When you leave, minimum heating operation is performed to maintain the room temperature (maintain at 10°C).

Economy operation

Economy operation is energy saving, as the set temperature of indoor unit is shifted by 1°C and the maximum electric value of the outdoor unit is suppressed.

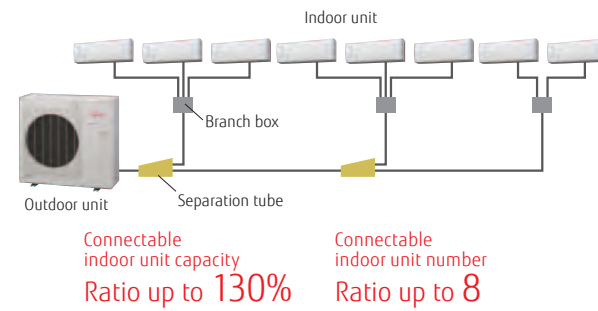
Prohibited Settings

The remote controller operation of all indoor units comes with a lock function to prevent unapproved operations in the various rooms. The central remote controller also has a key lock function to prevent children from playing with it, etc



Large capacity connection

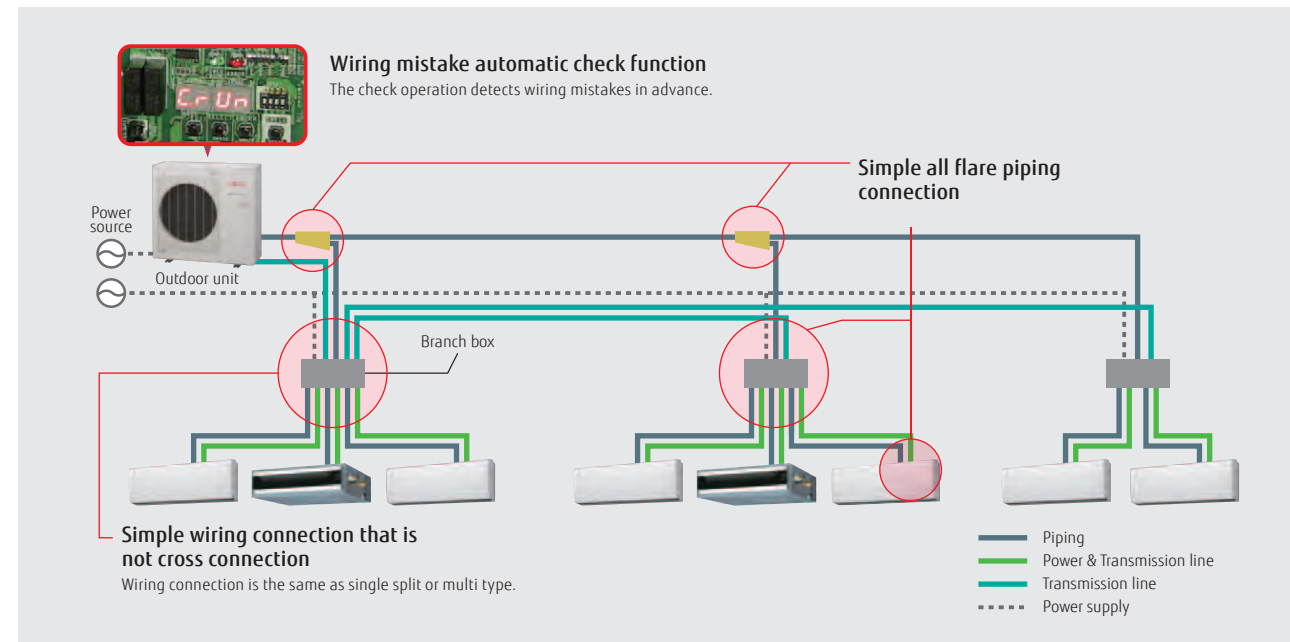
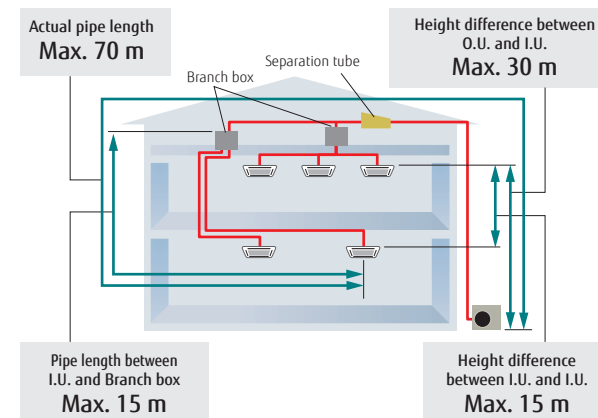
Up to 8 indoor units can be connected to one outdoor unit.
A maximum of 130% indoor unit connectable capacity.
Match any room layout.



Long piping design

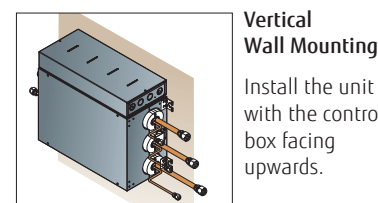
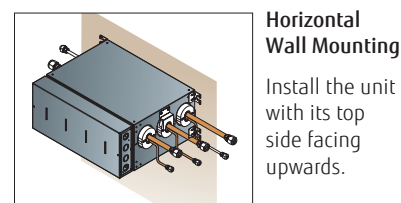
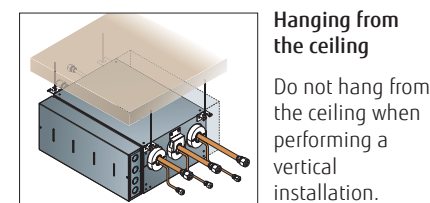
Can be installed in high rise condominiums or commercial buildings.

Total pipe length
Max. **115 m**



Branch Box can be mounted flexibly.

Allowed Branch Box Mounting Direction



8 Rooms: AOYG45LBT8



Specifications

Model Name			AOYG45LBT8
Maximum Connectable Indoor Unit			8
Indoor Unit Connectable Capacity	Cooling	kW	11.2 - 18.2
Power source			Single-phase, ~230V, 50Hz
Rated Capacity	Cooling	kW	14.0
	Heating	kW	16.0
Input Power	Cooling	kW	5.20
	Heating	kW	5.07
Airflow rate	Cooling	m ³ /h	4,650
	Heating	m ³ /h	4,800
Sound Pressure Level	Cooling	dB(A)	56
	Heating	dB(A)	58
Heat Exchanger Fin			Plate fin coil
Net Dimensions H × W × D		mm	914 × 970 × 370
Weight		kg(lbs)	98 (217)
Connection Pipe Diameter (Liquid / Gas)			9.52/15.88
Max Pipe Length			115 (Total)
Max Height Difference (O.U. ~ I.U.)			30
Operating Range	Cooling	°CDB	-5 to 46
	Heating	°CDB	-15 to 24
Refrigerant	Type (Global Warming Potential)		R410A (2,088)
	Charge	g	3,450

Model Name			UTP-PY03A	UTP-PY02A
Connectable Indoor Unit			1 to 3 Units	1 to 2 Units
Power source			Single-phase, ~230V, 50Hz	Single-phase, ~230V, 50Hz
Available Voltage Range			198-264V	198-264V
Power Consumption		W	10	10
Running Current		A	0.05	0.05
Net Dimensions H × W × D			195 × 433 × 370	195 × 433 × 370
Weight			9 (20)	9 (20)
Connection pipe diameter	Liquid	°CDB	Main: 9.52×1, Branch: 6.35×3	Main: 9.52×1, Branch: 6.35×2
	Gas	°CDB	Main: 15.88×1, Branch: 12.7×3	Main: 15.88×1, Branch: 12.7×2
		Method	Flare	Flare

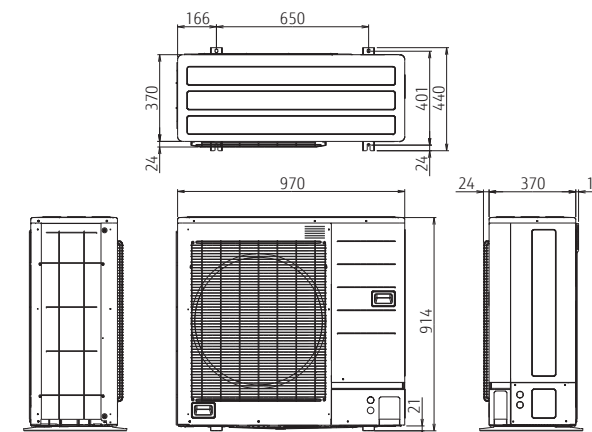
Note: Specifications are based on the following conditions.

- In case of connecting two indoor units (7 kW class).
- These are the measured values in the manufacturer's anechoic chamber.
- Cooling: Indoor temp. of 27°CDB/19°CWB, outdoor temp. of 35°CDB/24°CWB Heating: Indoor temp. of 20°CDB/15°CWB, outdoor temp. of 7°CDB/6°CWB
- Pipe length: 5m (Outdoor unit - Branch box), 3m (Branch box - Indoor unit) Height difference: 0m

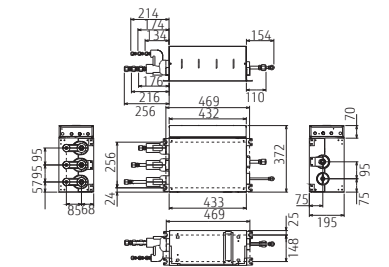
Dimensions

(Unit : mm)

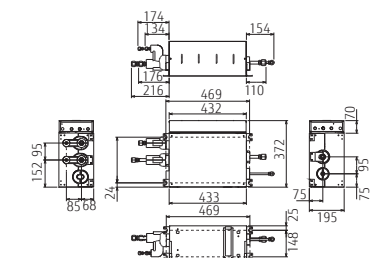
Outdoor Unit: AOYG45LBT8



Branch Box : UTP-PY03A (3 branches type)



Branch Box : UTP-PY02A (2 branches type)



Specifications of All Indoor Units

Compact wall mounted



Model No.	Indoor unit		ASYG07LUCA	ASYG09LUCA	ASYG12LUCA	ASYG14LUCA	
kW Class	kW		2.0	2.5	3.5	4.0	
Power Source	Single-phase, ~230V, 50Hz						
Sound Pressure Level	Cooling	H/M/L/Q	dB(A)	35/30/28/21	36/32/28/21	37/34/31/21	41/36/33/25
	Heating			35/30/28/21	36/32/28/21	37/34/31/21	41/36/34/27
Sound Power Level	Cooling	H	dB(A)	53	54	55	59
	Heating			53	54	55	59
Airflow Rate	Cooling	H/M/L/Q	m³/h	570/520/470/330	600/550/470/330	660/600/530/330	710/640/570/390
	Heating			570/520/470/330	600/550/470/330	660/600/530/330	710/640/590/430
Net Dimensions			mm	282×870×185	282×870×185	282×870×185	282×870×185
Weight			kg(lbs)	9.5 (21)	9.5 (21)	9.5 (21)	9.5 (21)
Connection Pipe Diameter	Liquid/Gas	mm		6.35/9.52	6.35/9.52	6.35/9.52	6.35/12.7

Floor ceiling



Model No.	Indoor unit		ABYG14LVTA	ABYG18LVTB	
kW Class	kW		4.0	5.0	
Power Source	Single-phase, ~230V, 50Hz				
Sound Pressure Level	Cooling	H/M/L/Q	dB(A)	36/34/33/29 (Under ceiling) 39/37/36/32 (Floor console)	41/38/34/32 (Under ceiling) 44/41/37/35 (Floor console)
	Heating			36/34/33/29 (Under ceiling) 39/37/36/32 (Floor console)	41/38/34/32 (Under ceiling) 44/41/37/35 (Floor console)
Sound Power Level	Cooling	H	dB(A)	51	55
	Heating			51	55
Airflow Rate	Cooling	H/M/L/Q	m³/h	640/590/540/480	780/700/560/500
	Heating			640/590/540/480	780/700/560/500
Net Dimensions			mm	199×990×655	199×990×655
Weight			kg(lbs)	27 (60)	27 (60)
Connection Pipe Diameter	Liquid/Gas	mm		6.35/12.7	6.35/12.7

Wall mounted



Model No.	Indoor unit		ASYG07LMCA	ASYG09LMCA	ASYG12LMCA	ASYG14LMCA	ASYG18LFCA	ASYG24LFCC	
kW Class	kW		2.0	2.5	3.5	4.0	5.0	7.0	
Power Source	Single-phase, ~230V, 50Hz								
Sound Pressure Level	Cooling	H/M/L/Q	dB(A)	36/32/29/21	37/33/29/21	40/36/30/21	42/38/33/25	43/37/33/26	49/42/37/33
	Heating			36/32/29/22	37/33/29/22	40/36/31/22	42/38/35/27	42/37/33/25	48/42/37/33
Sound Power Level	Cooling	H	dB(A)	51	52	54	56	58	64
	Heating			51	52	55	57	58	64
Airflow Rate	Cooling	H/M/L/Q	m³/h	560/500/430/310	600/520/430/310	660/560/450/310	730/600/530/360	900/740/620/550	1120/900/740/620
	Heating			560/500/430/330	600/520/430/330	660/560/470/330	730/615/560/375	900/740/620/550	1100/900/740/620
Net Dimensions			mm	268×840×203	268×840×203	268×840×203	268×840×203	320×998×238	320×998×238
Weight			kg(lbs)	8.5 (19)	8.5 (19)	8.5 (19)	8.5 (19)	14 (30.8)	14 (30.8)
Connection Pipe Diameter	Liquid/Gas	mm		6.35/9.52	6.35/9.52	6.35/9.52	6.35/12.7	6.35/12.7	Ø6.35/Ø15.88

Compact cassette



Model No.	Indoor unit		AUYG07LVLA	AUYG09LVLA	AUYG12LVLB	AUYG14LVLB	AUYG18LVLB	
kW Class	kW		2.0	2.5	3.5	4.0	5.0	
Power Source	Single-phase, ~230V, 50Hz							
Sound Pressure Level	Cooling	H/M/L/Q	dB(A)	33/31/29/27	33/31/29/27	37/33/31/28	40/35/32/29	42/37/33/29
	Heating			34/32/29/27	34/32/29/27	37/33/31/28	40/37/34/29	44/40/37/30
Sound Power Level	Cooling	H	dB(A)	46	46	49	52	54
	Heating			47	47	49	52	56
Airflow Rate	Cooling	H/M/L/Q	m³/h	540/490/440/390	540/490/440/390	610/530/470/410	680/580/490/410	750/610/520/410
	Heating			540/490/440/390	540/490/440/390	610/530/470/410	700/620/550/430	800/710/600/450
Net Dimensions			mm	245×570×570	245×570×570	245×570×570	245×570×570	245×570×570
Weight			kg(lbs)	15 (33.1)	15 (33.1)	15 (33.1)	15 (33.1)	15 (33.1)
Panel	UTG-UFYD-W							
Connection Pipe Diameter	Liquid/Gas	mm		6.35/9.52	6.35/9.52	6.35/9.52	6.35/12.7	6.35/12.7

Floor



Model No.	Indoor unit		AGYG09LVCA	AGYG12LVCA	AGYG14LVCA	
kW Class	kW		2.5	3.5	4.0	
Power Source	Single-phase, ~230V, 50Hz					
Sound Pressure Level	Cooling	H/M/L/Q	dB(A)	39/34/28/22	42/36/30/22	44/38/31/22
	Heating			39/35/30/22	42/38/32/22	44/39/33/22
Sound Power Level	Cooling	H	dB(A)	52	55	56
	Heating			52	55	56
Airflow Rate	Cooling	H/M/L/Q	m³/h	530/440/360/270	600/490/380/270	650/520/400/270
	Heating			530/460/380/270	600/510/410/270	650/540/430/270
Net Dimensions			mm	600×740×200	600×740×200	600×740×200
Weight			kg(lbs)	14 (30.7)	14 (30.7)	14 (30.7)
Connection Pipe Diameter	Liquid/Gas	mm		6.35/9.52	6.35/9.52	6.35/12.7

Slim duct



Model No.	Indoor unit		ARYG07LLTA	ARYG09LLTA	ARYG12LLTB	ARYG14LLTB	ARYG18LLTB	
kW Class	kW		2.0	2.5	3.5	4.0	5.0	
Power Source	Single-phase, ~230V, 50Hz							
Sound Pressure Level	Cooling	H/M/L/Q	dB(A)	28/26/25/24	28/27/26/25	29/28/27/26	32/30/28/26	32/31/30/29
	Heating			28/26/25/24	28/26/25/24	29/28/27/24	33/30/28/25	33/32/31/29
Sound Power Level	Cooling	H	dB(A)	57	57	58	60	58
	Heating			57	57	58	61	59
Airflow Rate	Cooling	H/M/L/Q	m³/h	550/490/470/440	600/550/500/450	650/600/550/480	800/700/600/480	940/880/820/750
	Heating			550/490/470/440	600/550/500/450	650/600/550/480	800/700/600/480	940/880/820/750
Net Dimensions			mm	198×700×620	198×700×620	198×700×620	198×700×620	198×900×620
Weight			kg(lbs)	17 (37.5)	19 (41.8)	19 (41.8)	19 (41.8)	23 (50.6)
Connection Pipe Diameter	Liquid/Gas	mm		6.35/9.52	6.35/9.52	6.35/9.52	6.35/12.7	6.35/12.7
External static pressure	0 to 90							
Drain pump	Standard							

NEW

Simultaneous Multi Twin / Triple



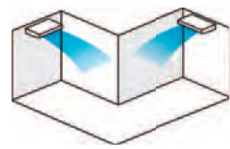
ALL DC

Features

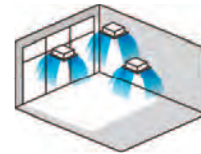
Can support various installation scenes from office to commercial space by same place multi connection of up to 3 units.

Indoor units distributed layout according to the shape and number of people and lighting conditions of the room even on wide floors and atypical floors. Ideal comfortable air flow distribution can be realized.

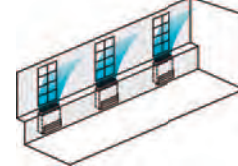
Installation according to floor layout



Installation according to lighting conditions

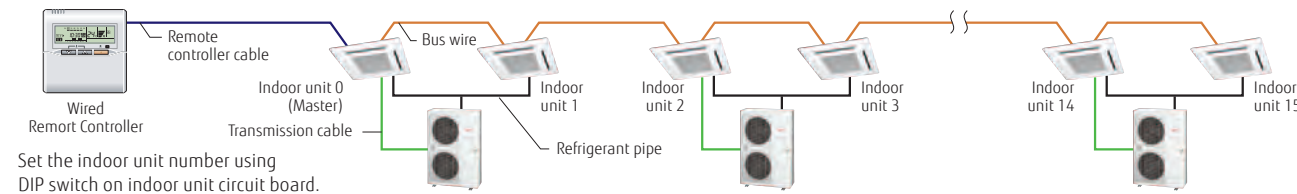


Installation according to layout and lighting conditions



Simultaneous control

Max 16 indoor units are simultaneously controlled with a wired remote controller.



Set the indoor unit number using DIP switch on indoor unit circuit board.

Simultaneous Operation Multi type Indoor Unit Line up

	Twin			Triple
	18x2	22x2	24x2	18x3
Cassette	AUYG18LV×2	AUYG22LV×2	AUYG24LV×2	AUYG18LV×3
Duct	ARYG18LL×2	ARYG22LM×2	ARYG24LM×2	ARYG18LL×3
Ceiling	ABYG18LV×2	ABYG22LV×2	ABYG24LV×2	ABYG18LV×3
Outdoor unit	AOYG36LBTB / AOYG36LATT	AOYG45LBTB / AOYG45LATT	AOYG54LBTB / AOYG54LATT	

Model : AOYG36LBTB / AOYG45LBTB / AOYG54LBTB **NEW**
 AOYG36LATT [3phase] / AOYG45LATT [3phase] / AOYG54LATT [3phase]



Specifications

Model No.	Indoor unit	Compact Cassette		
		AUYG18LVLB	AUYG22LVLA	AUYG24LVLA
Power Source		Single-phase, ~230V, 50Hz		
Airflow Rate (High)	Cooling H/M/L/Q	m ³ /h	680/580/490/410	930/830/600/450
Net Dimension H × W × D		mm	245×570×570	245×570×570
Weight		kg(lbs)	15 (33)	16 (35)
Cassette Grille			UTG-UFYD-W	UTG-UFYD-W

Model No.	Indoor unit	Duct			Floor/Ceiling Universal		
		ARYG18LLTB	ARYG22LMMLA	ARYG24LMMLA	ABYG18LVTB	ABYG22LVTVA	ABYG24LVTVA
Power Source		Single-phase, ~230V, 50Hz			Single-phase, ~230V, 50Hz		
Airflow Rate (High)	Cooling H/M/L/Q	m ³ /h	940/880/820/750	1100/910/750/580	780/700/560/500	980/820/680/540	
Net Dimension H × W × D		mm	198 × 900 × 620	270 × 1135 × 700	199 × 990 × 655	199 × 990 × 655	
Weight		kg(lbs)	23 (51)	38 (84)	27 (60)	27 (60)	

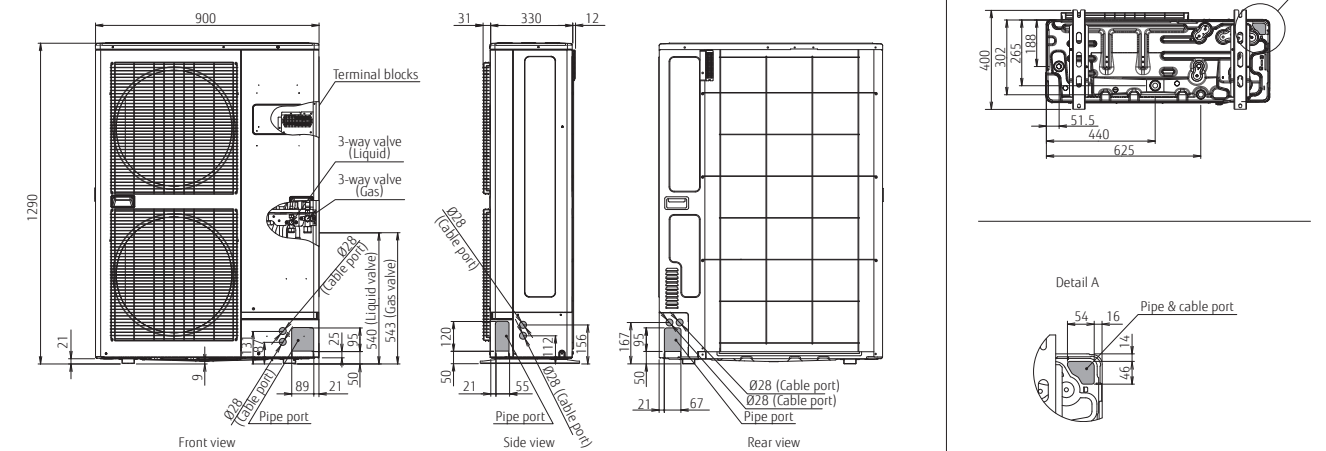
Model No.	Outdoor unit	AOYG36LBTB	AOYG45LBTB	AOYG54LBTB	AOYG36LATT	AOYG45LATT	AOYG54LATT
		Capacity	Cooling Heating	10.0 11.2	12.1 14.0	13.3 15.0	10.0 11.2
Power Source		Single-phase, ~230V, 50Hz			3-phase, ~400V, 50Hz		
Pdesign	Cooling Heating (-10°C)	10.0 10.0	- -	- -	10.0 10.0	- -	- -
SEER	Cooling	5.56	-	-	6.00	-	-
SCOP	Heating	3.90	-	-	4.00	-	-
Annual Energy Consumption	Cooling Heating	629 3588	- -	- -	583 3499	- -	- -
Energy Efficiency Class	Cooling Heating	A A	- -	- -	A+ A+	- -	- -
Sound Pressure Level (High)	Cooling	52	54	55	51	54	55
Sound Power Level (High)	Heating	69	70	72	69	69	71
Net Dimension H × W × D		mm	1290×900×330	1290×900×330	1290×900×330	1290×900×330	1290×900×330
Weight		kg(lbs)	93(205)	93(205)	93(205)	104 (229)	104 (229)
Connection Pipe Diameter (Liquid / Gas)		mm	9.52/15.88	9.52/15.88	9.52/15.88	9.52/15.88	9.52/15.88
Max Pipe Length (Pre-Charge)		m	75(30)	75(30)	75(30)	75(30)	75(30)
Height Difference		m	30	30	30	30	30
Operation Range	Cooling Heating	°CDB	-15 to 46 -15 to 24	-15 to 46 -15 to 24	-15 to 46 -15 to 24	-15 to 46 -15 to 24	-15 to 46 -15 to 24
Refrigerant	Type (Global Warming Potential) Charge	g	R410A (2,088) 3,450	R410A (2,088) 3,450	R410A (2,088) 3,450	R410A (2,088) 3,450	R410A (2,088) 3,450
Separation tube			UTP-SX236A(Twin)	UTP-SX254A(Twin)	UTP-SX254A(Twin)/ UTP-SX354A(Triple)	UTP-SX236A (Twin)	UTP-SX254A (Twin) UTP-SX254A (Twin) / UTP-SX354A

*Different type and capacity indoor units can not be connected.
 *The above table is the value for connecting with cassette type.

Dimensions

(Unit : mm)

Outdoor Unit: AOYG36LBTB / AOYG36LATT / AOYG45LBTB / AOYG45LATT /
 AOYG54LBTB / AOYG54LATT



Multi Combination Table

2 Rooms Multi cooling

AOYG14LAC2	Combination of Indoor Unit		COOLING OPERATION							Seasonal Data			
			Cooling Capacity			Input Power (min-max)	EER	Pdesign	SEER				Energy efficiency class
			Room 1	Room 2	Total Capacity (min-max)								
			kW	kW	kW	kW							
2 Room	7	7	2.00	2.00	4.00 (1.4-4.4)	1.09 (0.35-1.40)	3.67	4.0	6.7	A++			
	7	9	1.95	2.05	4.00 (1.4-4.4)	1.09 (0.35-1.40)	3.67	4.0	6.6	A++			
	7	12	1.65	2.35	4.00 (1.4-4.6)	1.05 (0.35-1.47)	3.81	4.0	6.5	A++			
	9	9	2.00	2.00	4.00 (1.4-4.5)	1.09 (0.35-1.43)	3.67	4.0	6.6	A++			
	9	12	1.70	2.30	4.00 (1.4-4.7)	1.05 (0.35-1.47)	3.81	4.0	6.5	A++			

Note: *7:7000Btu/h / 9:9000Btu/h / 12:12000Btu/h models
 •The above is the value for connecting with Wall Mounted type.
 •2 or more indoor units should be connected.
 •Cooling capacity is based on 27°CDB/19°CWB (indoor temperature), 35°CDB (outdoor temperature).
 •Pipe Length: 5 m, Height difference: 0 m (Outdoor unit to Indoor unit)
 •The Total ability of connected a indoor unit is up to 21000Btu from 14000Btu.

AOYG18LAC2	Combination of Indoor Unit		COOLING OPERATION							Seasonal Data			
			Cooling Capacity			Input Power (min-max)	EER	Pdesign	SEER				Energy efficiency class
			Room 1	Room 2	Total Capacity (min-max)								
			kW	kW	kW	kW							
2 Room	7	7	2.10	2.10	4.20 (1.7-5.2)	1.24 (0.35-1.68)	3.39	4.2	7.0	A++			
	7	9	2.10	2.50	4.60 (1.7-5.3)	1.26 (0.35-1.79)	3.65	4.6	6.8	A++			
	7	12	1.90	3.10	5.00 (1.7-5.6)	1.55 (0.35-1.95)	3.23	5.0	6.5	A++			
	7	14	1.80	3.20	5.00 (1.8-5.7)	1.55 (0.40-1.99)	3.23	5.0	6.5	A++			
	9	9	2.50	2.50	5.00 (1.7-5.6)	1.56 (0.35-1.95)	3.21	5.0	6.6	A++			
	9	12	2.10	2.90	5.00 (1.7-5.7)	1.55 (0.35-1.95)	3.23	5.0	6.5	A++			
	9	14	2.00	3.00	5.00 (1.8-5.8)	1.55 (0.40-1.99)	3.23	5.0	6.4	A++			
	12	12	2.50	2.50	5.00 (1.7-5.8)	1.56 (0.35-1.99)	3.21	5.0	6.4	A++			

Note: *7:7000Btu/h / 9:9000Btu/h / 12:12000Btu/h / 14:14000Btu/h models
 •The above is the value for connecting with Wall Mounted type.
 •2 or more indoor units should be connected.
 •Cooling capacity is based on 27°CDB/19°CWB (indoor temperature), 35°CDB (outdoor temperature).
 •Pipe Length: 5 m, Height difference: 0 m (Outdoor unit to Indoor unit)
 •The Total ability of connected a indoor unit is up to 24000Btu from 14000Btu.
 •Where "14" means "wall mounted type" only models. Other types of indoor units can not be connected.

3 Rooms Multi cooling

AOYG18LAT3	Combination of Indoor Unit		COOLING OPERATION							Seasonal Data			
			Cooling Capacity			Input Power (min-max)	EER	Pdesign	SEER				Energy efficiency class
			Room 1	Room 2	Room 3								
			kW	kW	kW	kW							
2 Room	7	7	-	2.30	2.30	-	4.60 (1.8-5.0)	1.22 (0.50-1.43)	3.77	4.6	6.3	A++	
	7	9	-	2.30	2.70	-	5.00 (1.8-5.7)	1.35 (0.50-1.81)	3.70	5.0	6.2	A++	
	7	12	-	1.98	3.02	-	5.00 (1.8-6.1)	1.34 (0.50-2.06)	3.73	5.0	6.2	A++	
	7	14	-	1.88	3.42	-	5.30 (1.8-6.6)	1.34 (0.50-2.06)	3.96	5.3	6.1	A++	
	9	9	-	2.50	2.50	-	5.00 (1.8-6.2)	1.35 (0.50-2.06)	3.70	5.0	6.2	A++	
	9	12	-	2.18	2.82	-	5.00 (1.8-6.3)	1.35 (0.50-2.06)	3.70	5.0	6.2	A++	
	9	14	-	2.07	3.23	-	5.30 (1.8-6.7)	1.35 (0.50-2.06)	3.93	5.3	6.1	A++	
	12	12	-	2.55	2.55	-	5.10 (1.8-6.3)	1.35 (0.50-2.06)	3.78	5.1	6.1	A++	
	12	14	-	2.41	2.89	-	5.30 (1.8-6.7)	1.35 (0.50-2.06)	3.93	5.3	6.1	A++	
	3 Room	7	7	7	1.80	1.80	1.80	5.40 (1.8-6.8)	1.35 (0.50-2.06)	4.00	5.4	6.9	A++
		7	7	9	1.70	1.70	2.00	5.40 (1.8-6.8)	1.35 (0.50-2.06)	4.00	5.4	6.9	A++
		7	7	12	1.53	1.53	2.33	5.40 (1.8-6.8)	1.35 (0.50-2.06)	4.00	5.4	6.7	A++
7		7	14	1.41	1.41	2.58	5.40 (2.0-6.8)	1.35 (0.60-2.06)	4.00	5.4	6.7	A++	
7		9	9	1.61	1.89	1.89	5.40 (1.8-6.8)	1.35 (0.50-2.06)	4.00	5.4	6.8	A++	
7		9	12	1.46	1.72	2.22	5.40 (1.8-6.8)	1.35 (0.50-2.06)	4.00	5.4	6.7	A++	
7		9	14	1.35	1.58	2.47	5.40 (2.0-6.8)	1.35 (0.60-2.06)	4.00	5.4	6.7	A++	
9		9	9	1.80	1.80	1.80	5.40 (1.8-6.8)	1.35 (0.50-2.06)	4.00	5.4	6.8	A++	
9		9	12	1.64	1.64	2.12	5.40 (1.8-6.8)	1.35 (0.50-2.06)	4.00	5.4	6.7	A++	

AOYG24LAT3	Combination of Indoor Unit		COOLING OPERATION							Seasonal Data			
			Cooling Capacity			Input Power (min-max)	EER	Pdesign	SEER				Energy efficiency class
			Room 1	Room 2	Room 3								
			kW	kW	kW	kW							
2 Room	7	7	-	2.30	2.30	-	4.60 (1.8-5.0)	1.20 (0.50-1.40)	3.83	4.6	6.3	A++	
	7	9	-	2.30	2.70	-	5.00 (1.8-5.7)	1.36 (0.50-1.78)	3.68	5.0	6.2	A++	
	7	12	-	2.38	3.42	-	5.80 (1.8-6.1)	1.70 (0.50-1.97)	3.41	5.8	6.1	A++	
	7	14	-	2.37	4.13	-	6.50 (1.8-7.2)	1.91 (0.50-2.46)	3.40	6.5	6.0	A+	
	7	18	-	2.08	4.52	-	6.60 (1.8-7.8)	1.91 (0.50-2.87)	3.46	6.6	5.9	A+	
	9	9	-	2.75	2.75	-	5.30 (1.8-6.2)	1.35 (0.50-2.06)	3.55	5.3	6.1	A++	
	9	12	-	2.79	3.41	-	6.20 (1.8-6.8)	1.90 (0.50-2.45)	3.26	6.2	5.9	A+	
	9	14	-	2.66	3.94	-	6.60 (1.8-7.7)	1.91 (0.50-2.77)	3.46	6.6	6.0	A+	
	9	18	-	2.35	4.35	-	6.70 (1.8-7.9)	1.91 (0.50-2.87)	3.51	6.7	5.9	A+	
	12	12	-	3.15	3.15	-	6.30 (1.8-7.2)	1.90 (0.50-2.74)	3.32	6.3	5.9	A+	
	12	14	-	3.03	3.67	-	6.70 (1.8-7.8)	1.91 (0.50-2.87)	3.51	6.7	5.9	A+	
	12	18	-	2.66	4.04	-	6.70 (1.8-7.9)	1.92 (0.50-2.87)	3.49	6.7	5.8	A+	
	3 Room	7	7	7	2.23	2.23	2.23	6.70 (1.8-7.4)	1.89 (0.50-2.37)	3.54	6.7	6.4	A++
		7	7	9	2.14	2.14	2.52	6.80 (1.8-7.8)	1.94 (0.60-2.87)	3.51	6.8	6.4	A++
		7	7	12	1.98	1.98	2.84	6.80 (1.8-8.1)	1.93 (0.50-2.87)	3.52	6.8	6.3	A++
		7	7	14	1.82	1.82	3.16	6.80 (2.0-8.4)	1.94 (0.60-2.87)	3.51	6.8	6.2	A++
		7	7	18	1.63	1.63	3.54	6.80 (2.0-8.5)	1.94 (0.60-2.87)	3.51	6.8	6.1	A++
		7	9	9	2.03	2.38	2.38	6.80 (1.8-8.2)	1.93 (0.50-2.87)	3.52	6.8	6.4	A++
7		9	12	1.88	2.21	2.70	6.80 (1.8-8.2)	1.93 (0.50-2.87)	3.52	6.8	6.2	A++	
7		9	14	1.74	2.04	3.02	6.80 (2.0-8.4)	1.94 (0.60-2.87)	3.51	6.8	6.2	A++	
7		9	18	1.56	1.84	3.40	6.80 (2.0-8.5)	1.94 (0.60-2.87)	3.51	6.8	6.1	A++	
7		12	12	1.76	2.52	2.52	6.80 (1.8-8.2)	1.94 (0.50-2.87)	3.51	6.8	6.2	A++	
7		12	14	1.63	2.34	2.83	6.80 (2.0-8.5)	1.94 (0.60-2.87)	3.51	6.8	6.2	A++	
9		9	9	2.27	2.27	2.27	6.80 (1.8-8.2)	1.94 (0.50-2.87)	3.51	6.8	6.4	A++	
9		9	12	2.11	2.11	2.58	6.80 (1.8-8.3)	1.94 (0.50-2.87)	3.51	6.8	6.2	A++	
9		9	14	1.95	1.95	2.89	6.80 (2.0-8.5)	1.94 (0.60-2.87)	3.51	6.8	6.2	A++	
9		9	18*	1.77	1.77	3.27	6.80 (2.0-8.5)	1.94 (0.60-2.87)	3.51	6.8	6.1	A++	
9		12	12	1.97	2.41	2.41	6.80 (1.8-8.3)	1.94 (0.50-2.87)	3.51	6.8	6.2	A++	
9		12	14	1.84	2.24	2.72	6.80 (2.0-8.5)	1.94 (0.60-2.87)	3.51	6.8	6.2	A++	
12		12	12	2.27	2.27	2.27	6.80 (1.8-8.3)	1.94 (0.50-2.87)	3.51	6.8	6.1	A++	

Note: *7:7000Btu/h / 9:9000Btu/h / 12:12000Btu/h / 14:14000Btu/h / 18:18000Btu/h models
 •The above is the value for connecting with Wall Mounted type.
 •2 or more indoor units should be connected.
 •Cooling capacity is based on 27°CDB/19°CWB (indoor temperature), 35°CDB (outdoor temperature).
 •Pipe Length: 5 m, Height difference: 0 m (Outdoor unit to Indoor unit)
 •The total ability of connectable indoor units is up to 36000Btu from 14000Btu.
 *1: When ASYG18L is connected, connect at least 1 wall mounted type of 9000Btu.

2 Rooms Multi heating

AOYG14LAC2	Combination of Indoor Unit		HEATING OPERATION							Seasonal Data			
			Heating Capacity			Input Power (min-max)	EER	Pdesign	SEER				Energy efficiency class
			Room 1	Room 2	Total Capacity (min-max)								
			kW	kW	kW	kW							
2 Room	7	7	2.20	2.20	4.40 (1.1-5.4)	1.03 (0.25-1.78)	4.27	3.8	4.1	A+			
	7	9	2.15	2.25	4.40 (1.1-5.4)	1.03 (0.25-1.78)	4.27	3.8	4.1	A+			
	7	12	1.95	2.45	4.40 (1.1-5.5)	1.02 (0.25-1.76)	4.31	3.8	4.0	A+			
	9	9	2.20	2.20	4.40 (1.1-5.4)	1.03 (0.25-1.78)	4.27	3.8	4.0	A+			
	9	12	2.00	2.40	4.40 (1.1-5.5)	1.02 (0.25-1.76)	4.31	3.8	4.0	A+			

Note: *7:7000Btu/h / 9:9000Btu/h / 12:12000Btu/h models
 •The above is the value for connecting with Wall Mounted type.
 •2 or more indoor units should be connected.
 •Heating capacity is based on 20°CDB (indoor temperature), 7°CDB/6°CWB (outdoor temperature).
 •Pipe Length: 5 m, Height difference: 0 m (Outdoor unit to Indoor unit)
 •The Total ability of connected a indoor unit is up to 21000Btu from 14000Btu.

AOYG18LAC2	Combination of Indoor Unit		HEATING OPERATION							Seasonal Data			
			Heating Capacity			Input Power (min-max)	EER	Pdesign	SEER				Energy efficiency class
			Room 1	Room 2	Total Capacity (min-max)								
			kW	kW	kW	kW							
2 Room	7	7	2.70	2.70	5.40 (1.8-6.0)	1.24 (0.50-1.61)	4.37	3.8	4.1	A+			
	7	9	2.50	3.00	5.50 (1.8-6.0)	1.36 (0.50-1.87)	4.04	4.0	4.1	A+			
	7	12	2.30	3.30	5.60 (1.8-6.1)	1.38 (0.50-1.88)	4.06	4.2	4.0	A+			
	7	14	2.25	3.35	5.60 (1.9-6.2)	1.35 (0.55-1.86)	4.15	4.2	4.0	A+			
	9	9	2.80	2.80	5.60 (1.8-6.1)	1.41 (0.50-1.90)	3.97	4.2	4.1	A+			
	9	12	2.45	3.15	5.60 (1.8-6.2)	1.38 (0.50-1.88)	4.07	4.2	4.0	A+			
	9	14	2.35	3.25	5.60 (1.9-6.3)	1.35 (0.55-1.86)	4.15	4.2	4.0	A+			
	12	12	2.80	2.80	5.60 (1.8-6.3)	1.34 (0.50-1.84)	4.18	4.2	4.0	A+			

Note: *7:7000Btu/h / 9:9000Btu/h / 12:12000Btu/h / 14:14000Btu/h models
 •The above is the value for connecting with Wall Mounted type.
 •2 or more indoor units should be connected.
 •Heating capacity is based on 20°CDB (indoor temperature), 7°CDB/6°CWB (outdoor temperature).
 •Pipe Length: 5 m, Height difference: 0 m (Outdoor unit to Indoor unit)
 •The Total ability of connected a indoor unit is up to 24000Btu from 14000Btu.
 •Where "14" means "wall mounted type" only models. Other types of indoor units can not be connected.

3 Rooms Multi heating

AOYG18LAT3	Combination of Indoor Unit		HEATING OPERATION							Seasonal Data		
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4 Rooms Multi cooling

AOYG30LAT4	Combination of Indoor Unit		COOLING OPERATION											
			Cooling Capacity					Input Power (min-max)	EER	Seasonal Data				
			Room 1	Room 2	Room 3	Room 4	Total Capacity (min-max)			Pdesign	SEER	Energy efficiency class		
			kW	kW	kW	kW	kW	kW						
7	7	14	-	1.96	1.96	3.27	-	7.20 (1.6-8.9)	2.22 (0.68-3.43)	3.24	5.9	7.2	5.9	A+
7	7	18	-	1.81	1.81	4.08	-	7.70 (2.8-10.0)	2.22 (0.98-3.55)	3.47	7.7	5.8	A+	
7	7	24	-	1.61	1.61	4.57	-	7.80 (2.8-10.1)	2.19 (0.98-3.53)	3.56	7.8	5.8	A+	
7	9	12	-	2.08	2.34	2.78	-	7.20 (1.6-8.9)	2.22 (0.68-3.41)	3.24	7.2	5.9	A+	
7	9	14	-	1.90	2.14	3.16	-	7.20 (2.8-9.1)	2.22 (0.98-3.56)	3.24	7.2	5.9	A+	
7	9	18	-	1.76	1.98	3.96	-	7.70 (2.8-9.9)	2.22 (0.98-3.56)	3.47	7.7	5.8	A+	
7	9	24	-	1.57	1.77	4.46	-	7.80 (2.8-10.1)	2.19 (0.98-3.53)	3.56	7.8	5.8	A+	
7	12	12	-	1.96	2.62	2.62	-	7.20 (1.6-8.9)	2.22 (0.68-3.54)	3.24	7.2	5.9	A+	
7	12	14	-	1.83	2.43	3.04	-	7.30 (2.8-9.2)	2.22 (0.98-3.56)	3.29	7.3	5.9	A+	
7	12	18	-	1.68	2.24	3.78	-	7.70 (2.8-9.9)	2.22 (0.98-3.56)	3.47	7.7	5.8	A+	
7	12	24	-	1.51	2.01	4.28	-	7.80 (2.8-10.1)	2.19 (0.98-3.56)	3.56	7.8	5.8	A+	
7	14	14	-	1.68	2.81	2.81	-	7.30 (2.8-9.3)	2.22 (0.98-3.58)	3.29	7.3	5.9	A+	
7	14	18	-	1.57	2.61	3.52	-	7.70 (3.5-10.0)	2.22 (1.17-3.58)	3.47	7.7	5.8	A+	
7	14	24	-	1.44	2.39	4.07	-	7.90 (3.5-10.1)	2.20 (1.17-3.58)	3.59	7.9	5.8	A+	
7	18	18	-	1.42	3.19	3.19	-	7.80 (3.5-10.1)	2.22 (1.17-3.58)	3.51	7.8	5.7	A+	
7	18	24	-	1.30	2.92	3.68	-	7.90 (4.7-10.1)	2.22 (1.27-3.58)	3.56	7.9	5.7	A+	
9	9	9	-	2.40	2.40	2.40	-	7.20 (2.8-8.9)	2.22 (0.98-3.42)	3.24	7.2	5.9	A+	
9	9	12	-	2.26	2.26	2.68	-	7.20 (2.8-9.1)	2.22 (0.98-3.54)	3.24	7.2	5.9	A+	
9	9	14	-	2.10	2.10	3.11	-	7.30 (2.8-9.2)	2.22 (0.98-3.57)	3.29	7.3	5.9	A+	
9	9	18	-	1.93	1.93	3.85	-	7.70 (2.8-9.9)	2.22 (0.98-3.56)	3.47	7.7	5.8	A+	
9	9	24	-	1.73	1.73	4.35	-	7.80 (2.8-10.1)	2.20 (1.17-3.54)	3.55	7.8	5.8	A+	
9	12	12	-	2.14	2.53	2.53	-	7.20 (2.8-9.1)	2.22 (0.98-3.54)	3.24	7.2	5.9	A+	
9	12	14	-	1.99	2.36	2.95	-	7.30 (2.8-9.2)	2.22 (0.98-3.57)	3.29	7.3	5.9	A+	
9	12	18	-	1.84	2.18	3.68	-	7.70 (2.8-9.9)	2.22 (0.98-3.56)	3.47	7.7	5.8	A+	
9	12	24	-	1.66	1.97	4.78	-	7.80 (2.8-10.1)	2.19 (0.98-3.56)	3.56	7.8	5.8	A+	
9	14	14	-	1.84	2.73	2.73	-	7.30 (3.5-9.3)	2.22 (1.17-3.58)	3.29	7.3	5.9	A+	
9	14	18	-	1.74	2.58	3.48	-	7.80 (3.5-10.0)	2.22 (1.17-3.58)	3.51	7.8	5.8	A+	
9	14	24	-	1.58	2.34	3.98	-	7.90 (3.5-10.1)	2.22 (1.27-3.56)	3.56	7.9	5.8	A+	
9	18	18	-	1.56	3.12	3.12	-	7.80 (4.7-10.1)	2.22 (1.27-3.58)	3.51	7.8	5.7	A+	
12	12	12	-	2.43	2.43	2.43	-	7.30 (2.8-9.2)	2.22 (0.98-3.55)	3.29	7.3	5.9	A+	
12	12	14	-	2.28	2.28	2.85	-	7.40 (2.8-9.3)	2.22 (0.98-3.58)	3.33	7.4	5.9	A+	
12	12	18	-	2.12	2.12	3.57	-	7.80 (3.5-10.0)	2.22 (1.17-3.57)	3.51	7.8	5.8	A+	
12	12	24	-	1.92	1.92	4.07	-	7.90 (3.5-10.1)	2.20 (1.17-3.54)	3.59	7.9	5.8	A+	
12	14	14	-	2.11	2.64	2.64	-	7.40 (3.5-9.4)	2.22 (1.17-3.58)	3.33	7.4	5.9	A+	
12	14	18	-	1.98	2.48	3.34	-	7.80 (3.5-10.1)	2.22 (1.17-3.58)	3.51	7.8	5.8	A+	
12	18	18	-	1.81	3.05	3.05	-	7.90 (4.7-10.1)	2.22 (1.27-3.58)	3.56	7.9	5.7	A+	
7	7	7	7	1.93	1.93	1.93	1.93	7.70 (1.6-9.6)	2.20 (0.68-3.41)	3.50	7.7	6.2	A++	
7	7	7	9	1.89	1.89	1.89	2.13	7.80 (1.6-9.8)	2.22 (0.68-3.54)	3.51	7.8	6.2	A++	
7	7	7	12	1.83	1.83	1.83	2.41	7.90 (1.6-9.9)	2.22 (0.68-3.54)	3.56	7.9	6.1	A++	
7	7	7	14	1.70	1.70	1.70	2.80	7.90 (2.8-9.9)	2.22 (0.98-3.56)	3.56	7.9	6.1	A++	
7	7	7	18	1.52	1.52	1.52	3.43	8.00 (2.8-10.1)	2.20 (0.98-3.55)	3.64	8.0	6.0	A++	
7	7	9	9	1.86	1.86	2.09	2.09	7.90 (2.8-9.7)	2.22 (0.98-3.42)	3.56	7.9	6.2	A++	
7	7	9	12	1.78	1.78	1.99	2.35	7.90 (2.8-9.9)	2.22 (0.98-3.55)	3.56	7.9	6.1	A++	
7	7	9	14	1.68	1.68	1.88	2.76	8.00 (2.8-10.0)	2.22 (0.98-3.57)	3.60	8.0	6.1	A++	
7	7	9	18	1.49	1.49	1.67	3.35	8.00 (3.5-10.1)	2.20 (1.17-3.55)	3.64	8.0	6.0	A++	
7	7	12	12	1.72	1.72	2.28	2.28	8.00 (2.8-10.0)	2.22 (0.98-3.55)	3.60	8.0	6.1	A++	
7	7	12	14	1.61	1.61	2.13	2.65	8.00 (2.8-10.0)	2.22 (0.98-3.57)	3.60	8.0	6.1	A++	
7	7	12	18	1.43	1.43	1.91	3.22	8.00 (3.5-10.1)	2.20 (1.17-3.56)	3.64	8.0	6.0	A++	
7	7	14	14	1.50	1.50	2.50	2.50	8.00 (3.5-10.1)	2.22 (1.17-3.58)	3.60	8.0	6.0	A++	
7	7	14	18	1.35	1.35	2.25	3.04	8.00 (3.5-10.1)	2.22 (1.17-3.58)	3.60	8.0	6.0	A++	
7	9	9	9	1.81	2.03	2.03	2.03	7.90 (2.8-9.9)	2.22 (0.98-3.56)	3.56	7.9	6.2	A++	
7	9	9	12	1.76	1.96	1.96	2.32	8.00 (2.8-10.0)	2.22 (0.98-3.56)	3.60	8.0	6.1	A++	
7	9	9	14	1.64	1.83	1.83	2.70	8.00 (3.5-10.1)	2.22 (1.17-3.58)	3.60	8.0	6.1	A++	
7	9	9	18	1.45	1.64	1.64	3.27	8.00 (3.5-10.1)	2.22 (1.17-3.56)	3.60	8.0	6.0	A++	
7	9	12	12	1.68	1.88	2.22	2.22	8.00 (2.8-10.0)	2.22 (0.98-3.56)	3.60	8.0	6.1	A++	
7	9	12	14	1.57	1.76	2.08	2.59	8.00 (3.5-10.1)	2.22 (1.17-3.58)	3.60	8.0	6.0	A++	
7	9	12	18	1.40	1.58	1.87	3.15	8.00 (3.5-10.1)	2.22 (1.17-3.56)	3.60	8.0	6.0	A++	
7	9	14	14	1.48	1.66	2.43	2.43	8.00 (3.5-10.1)	2.22 (1.17-3.58)	3.60	8.0	6.0	A++	
7	9	14	18	1.32	1.49	2.21	2.98	8.00 (4.7-10.1)	2.22 (1.27-3.57)	3.60	8.0	6.0	A++	
7	12	12	12	1.61	2.13	2.13	2.13	8.00 (2.8-10.1)	2.22 (0.98-3.56)	3.60	8.0	6.0	A++	
7	12	12	14	1.51	2.00	2.00	2.49	8.00 (3.5-10.1)	2.22 (1.17-3.58)	3.60	8.0	6.0	A++	
7	12	12	18	1.35	1.80	1.80	3.04	8.00 (3.5-10.1)	2.22 (1.17-3.56)	3.60	8.0	6.0	A++	
7	12	14	14	1.41	1.89	2.35	2.35	8.00 (3.5-10.1)	2.22 (1.17-3.58)	3.60	8.0	6.0	A++	
9	9	9	9	2.00	2.00	2.00	2.00	8.00 (3.5-10.0)	2.22 (1.17-3.56)	3.60	8.0	6.2	A++	
9	9	9	12	1.91	1.91	1.91	2.27	8.00 (3.5-10.0)	2.22 (1.17-3.56)	3.60	8.0	6.1	A++	
9	9	9	14	1.79	1.79	1.79	2.63	8.00 (3.5-10.0)	2.22 (1.17-3.56)	3.60	8.0	6.0	A++	
9	9	9	18**	1.60	1.60	1.60	3.20	8.00 (4.7-10.0)	2.22 (1.17-3.56)	3.60	8.0	6.0	A++	
9	9	12	12	1.83	1.83	2.17	2.17	8.00 (3.5-10.0)	2.22 (1.17-3.56)	3.60	8.0	6.0	A++	
9	9	12	14	1.72	1.72	2.03	2.53	8.00 (3.5-10.0)	2.22 (1.17-3.56)	3.60	8.0	6.0	A++	
9	9	12	18**	1.54	1.54	1.83	3.09	8.00 (4.7-10.0)	2.22 (1.17-3.56)	3.60	8.0	6.0	A++	
9	9	14	14	1.62	1.62	2.38	2.38	8.00 (4.7-10.0)	2.22 (1.17-3.56)	3.60	8.0	6.0	A++	
9	12	12	12	1.76	2.08	2.08	2.08	8.00 (3.5-10.0)	2.22 (1.17-3.56)	3.60	8.0	6.0	A++	
9	12	12	14	1.66	1.95	1.95	2.44	8.00 (3.5-10.0)	2.22 (1.17-3.56)	3.60	8.0	6.0	A++	
9	12	14	14	1.55	1.85	2.30	2.30	8.00 (4.7-10.0)	2.22 (1.17-3.56)	3.60	8.0	6.0	A++	
12	12	12	12	2.00	2.00	2.00	2.00	8.00 (3.5-10.0)	2.22 (1.17-3.56)	3.60	8.0	6.0	A++	

Note: *7:7000Btu/h / 9:9000Btu/h / 12:12000Btu/h / 14:14000Btu/h / 18:18000Btu/h / 24:24000Btu/h models
 •The above is the value for connecting with Wall Mounted type.
 •3 or more indoor units should be connected.
 •Cooling capacity is based on 27°CDB/19°CWB (indoor temperature), 35°CDB (outdoor temperature).
 •Pipe Length: 5 m, Height difference: 0 m (Outdoor unit to Indoor unit)
 •The Total ability of connected a indoor unit is up to 49000Btu from 27000Btu.
 *1: Connection of ASYG18L + ARYG09L + ARYG09L + ARYG09L is not available. All types other than this combination can be connected.
 *2: Connection of ASYG18L + ARYG12L + ARYG09L + ARYG09L is not available. All types other than this combination can be connected.

4 Rooms Multi heating

AOYG30LAT4	Combination of Indoor Unit		HEATING OPERATION										
			Heating Capacity					Input Power (min-max)	EER	Seasonal Data			
			Room 1	Room 2	Room 3	Room 4	Total Capacity (min-max)			Pdesign	SEER	Energy efficiency class	
			kW	kW	kW	kW	kW	kW					
7	7	14	-	2.42	2.42	4.15	-	9.00 (1.8-10.1)	2.66 (0.58-3.53)	3.38	5.8	3.8	A
7	7	18	-	2.27	2.27	4.86	-	9.40 (3.3-11.2)	2.46 (0.87-3.52)	3.82	5.8	3.8	A
7	7	24	-	2.03	2.03	5.44	-	9.50 (3.3-11.5)	2.47 (0.87-3.52)	3.85	5.8	3.8	A
7	9	12	-	2.49	2.94	3.56	-	9.00 (1.8-10.0)	2.69 (0.58-3.51)	3.35	5.8	3.8	A
7	9	14	-	2.33	2.75	4.00	-	9.10 (3.3-10.2)	2.64 (0.87-3.50)	3.45	5.8	3.8	A
7	9	18	-	2.17	2.56	4.66	-	9.40 (3.3-11.3)	2.45 (0.87-3.50)	3.84	5.8	3.8	A
7	9	24	-	1.98	2.33	5.29	-	9.60 (3.3-11.5)	2.46 (0.87-3.51)	3.90	5.8	3.8	A
7	12	12	-	2.33	3.33	3.33	-	9.00 (1.8-10.1)	2.66 (0.58-3.48)	3.38	5.8	3.8	A
7	12	14	-	2.22	3.17	3.80	-	9.20 (3.3-10.3)	2.62 (0.87-3.48)	3.51	5.8	3.8	A
7	12	18	-	2.08	2.97	4.45	-	9.50 (3.3-11.4)	2.44 (0.87-3.47)	3.89	5.8	3.8	A
7	12	24	-	1.88	2.69	5.03	-	9.60 (3.3-11.7)	2.45 (0.87-3.56)	3.92	5.8	3.8	A
7	14	14	-	2.10	3.60	3.60	-	9.30 (3.3-10.6)	2.59 (0.87-3.4				

8 Rooms Multi cooling

AOYG45LBT8	Combination of Indoor Unit		COOLING OPERATION																	
			Cooling Capacity														Input power			
			Room 1	Room 2	Room 3	Room 4	Room 5	Room 6	Room 7	Room 8	Total									
kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW			
6 Room	7	9	9	9	9	18	-	-	1.79	2.30	2.30	2.30	4.59	-	-	15.57	5.88			
	7	9	9	9	9	12	-	-	1.93	2.49	2.49	2.49	2.49	3.32	-	-	15.22	5.90		
	7	9	9	9	9	9	-	-	2.05	2.64	2.64	2.64	2.64	2.64	-	-	15.25	5.79		
	7	7	12	12	12	12	-	-	1.77	1.77	3.04	3.04	3.04	3.04	-	-	15.69	5.87		
	7	7	9	12	14	-	-	1.79	1.79	2.30	3.07	3.07	3.07	3.57	-	-	15.57	5.88		
	7	7	9	12	12	12	-	-	1.82	1.82	2.34	3.12	3.12	3.12	-	-	15.34	5.89		
	7	7	9	14	14	-	-	1.80	1.80	2.32	3.60	3.60	3.60	3.60	-	-	15.45	5.89		
	7	7	9	12	18	-	-	1.77	1.77	2.28	2.28	3.04	4.55	-	-	15.69	5.87			
	7	7	9	9	12	14	-	-	1.83	1.83	2.36	2.36	3.15	3.67	-	-	15.21	5.90		
	7	7	9	9	12	12	-	-	1.92	1.92	2.47	2.47	3.30	3.30	-	-	15.38	5.90		
	7	7	9	9	9	18	-	-	1.82	1.82	2.34	2.34	2.34	4.67	-	-	15.33	5.89		
	7	7	9	9	14	-	-	1.93	1.93	2.49	2.49	3.87	-	-	-	-	15.21	5.90		
	7	7	9	9	9	12	-	-	1.96	1.96	2.53	2.53	2.53	3.37	-	-	14.88	5.90		
	7	7	9	9	9	9	-	-	2.05	2.05	2.64	2.64	2.64	2.64	-	-	14.66	5.50		
	7	7	7	12	14	14	-	-	1.79	1.79	1.79	3.07	3.57	-	-	15.57	5.88			
	7	7	7	12	14	14	-	-	1.82	1.82	3.12	3.12	3.64	-	-	15.33	5.89			
	7	7	7	9	9	9	-	-	1.91	1.91	1.91	3.28	3.28	-	-	15.55	5.90			
	7	7	7	9	14	18	-	-	1.77	1.77	1.77	2.28	3.54	4.55	-	-	15.68	5.87		
	7	7	7	9	14	14	-	-	1.84	1.84	1.84	2.36	3.67	3.67	-	-	15.21	5.90		
	7	7	7	9	12	18	-	-	1.80	1.80	1.80	2.32	3.09	4.63	-	-	15.45	5.89		
	7	7	7	9	12	14	-	-	1.92	1.92	1.92	2.47	3.30	3.84	-	-	15.38	5.90		
	7	7	7	9	12	12	-	-	1.95	1.95	1.95	2.51	3.35	3.35	-	-	15.05	5.90		
	7	7	7	9	9	18	-	-	1.91	1.91	1.91	2.46	4.90	-	-	15.54	5.90			
	7	7	7	9	9	14	-	-	1.96	1.96	1.96	2.53	2.53	3.93	-	-	14.87	5.90		
7	7	7	9	9	12	-	-	2.05	2.05	2.05	2.64	2.64	3.52	-	-	14.95	5.65			
7	7	7	9	9	9	-	-	2.05	2.05	2.05	2.64	2.64	2.64	-	-	14.07	5.20			
7	7	7	7	14	18	-	-	1.80	1.80	1.80	1.80	3.60	4.63	-	-	15.45	5.89			
7	7	7	7	14	14	-	-	1.92	1.92	1.92	1.92	3.84	3.84	-	-	15.37	5.90			
7	7	7	7	12	18	-	-	1.84	1.84	1.84	1.84	3.15	4.72	-	-	15.21	5.90			
7	7	7	7	12	14	-	-	1.95	1.95	1.95	3.35	3.90	-	-	15.04	5.90				
7	7	7	7	12	12	-	-	2.05	2.05	2.05	2.05	3.52	3.52	-	-	15.24	5.79			
7	7	7	7	9	24	-	-	1.79	1.79	1.79	2.30	6.12	-	-	15.57	5.88				
7	7	7	7	9	18	-	-	1.93	1.93	1.93	2.49	4.97	-	-	15.21	5.90				
7	7	7	7	9	14	-	-	2.05	2.05	2.05	2.64	4.10	-	-	14.94	5.65				
7	7	7	7	9	12	-	-	2.05	2.05	2.05	2.64	3.52	-	-	14.36	5.35				
7	7	7	7	9	9	-	-	2.05	2.05	2.05	2.64	2.64	-	-	13.48	4.89				
7	7	7	7	7	24	-	-	1.82	1.82	1.82	1.82	6.24	-	-	15.33	5.89				
7	7	7	7	7	18	-	-	1.96	1.96	1.96	1.96	5.05	-	-	14.87	5.90				
7	7	7	7	7	14	-	-	2.05	2.05	2.05	2.05	4.10	-	-	14.35	5.35				
7	7	7	7	7	12	-	-	2.05	2.05	2.05	2.05	3.52	-	-	13.77	5.05				
7	7	7	7	7	9	-	-	2.05	2.05	2.05	2.05	2.64	-	-	12.89	4.57				
7	7	7	7	7	7	-	-	2.05	2.05	2.05	2.05	2.05	-	-	12.30	4.24				
7 Room	7	9	9	9	9	9	-	-	1.78	2.30	2.30	2.30	2.30	2.30	-	-	15.57	5.88		
	7	9	9	9	9	12	-	-	1.77	1.77	2.28	2.28	2.28	3.04	-	-	15.69	5.87		
	7	7	9	9	9	9	-	-	1.82	1.82	2.34	2.34	2.34	2.34	-	-	15.34	5.89		
	7	7	7	9	9	14	-	-	1.77	1.77	2.28	2.28	2.28	3.54	-	-	15.69	5.87		
	7	7	7	9	9	12	-	-	1.80	1.80	1.80	2.32	2.32	3.09	-	-	15.45	5.89		
	7	7	7	9	9	9	-	-	1.91	1.91	1.91	2.46	2.46	2.46	-	-	15.55	5.90		
	7	7	7	9	12	12	-	-	1.79	1.79	1.79	2.30	3.07	3.07	-	-	15.57	5.88		
	7	7	7	9	14	-	-	1.80	1.80	1.80	2.32	3.60	3.60	-	-	15.45	5.89			
	7	7	7	7	9	12	-	-	1.83	1.83	1.83	2.36	2.36	3.15	-	-	15.21	5.90		
	7	7	7	7	9	9	-	-	1.93	1.93	1.93	2.49	2.49	2.49	-	-	15.21	5.90		
	7	7	7	7	12	14	-	-	1.79	1.79	1.79	1.79	3.07	3.57	-	-	15.57	5.88		
	7	7	7	7	7	12	-	-	1.82	1.82	1.82	1.82	3.12	3.12	-	-	15.33	5.89		
	7	7	7	7	7	9	18	-	-	1.77	1.77	1.77	2.28	4.55	-	-	15.68	5.87		
	7	7	7	7	7	9	14	-	-	1.84	1.84	1.84	1.84	2.36	3.67	-	-	15.21	5.90	
	7	7	7	7	7	9	12	-	-	1.92	1.92	1.92	2.47	3.30	-	-	15.38	5.90		
	7	7	7	7	7	9	9	-	-	1.96	1.96	1.96	1.96	2.53	2.53	-	-	14.87	5.90	
	7	7	7	7	7	7	18	-	-	1.80	1.80	1.80	1.80	4.63	-	-	15.45	5.89		
	7	7	7	7	7	7	14	-	-	1.92	1.92	1.92	1.92	3.84	-	-	15.37	5.90		
	7	7	7	7	7	7	12	-	-	1.95	1.95	1.95	1.95	3.35	-	-	15.04	5.90		
	7	7	7	7	7	7	9	-	-	2.05	2.05	2.05	2.05	2.64	-	-	14.94	5.65		
	7	7	7	7	7	7	7	-	-	2.05	2.05	2.05	2.05	2.05	-	-	14.35	5.35		
	8 Room	7	7	7	7	7	9	9	9	1.77	1.77	1.77	1.77	2.28	2.28	-	-	15.69	5.87	
		7	7	7	7	7	9	9	9	1.80	1.80	1.80	1.80	2.32	2.32	-	-	15.45	5.89	
		7	7	7	7	7	7	12	-	-	1.79	1.79	1.79	1.79	3.07	3.07	-	-	15.57	5.88
7		7	7	7	7	7	9	-	-	1.84	1.84	1.84	1.84	2.36	2.36	-	-	15.21	5.90	
7		7	7	7	7	7	7	-	-	1.92	1.92	1.92	1.92	2.47	2.47	-	-	15.38	5.90	
7		7	7	7	7	7	18	-	-	1.96	1.96	1.96	1.96	2.53	2.53	-	-	14.87	5.90	
7		7	7	7	7	7	14	-	-	1.92	1.92	1.92	1.92	3.84	-	-	15.37	5.90		
7		7	7	7	7	7	12	-	-	1.95	1.95	1.95	1.95	3.35	-	-	15.04	5.90		
7		7	7	7	7	7	9	-	-	2.05	2.05	2.05	2.05	2.64	-	-	14.94	5.65		
7		7	7	7	7	7	7	-	-	2.05	2.05	2.05	2.05	2.05	-	-	14.35	5.35		
7		7	7	7	7	7	9	9	1.77	1.77	1.77	1.77	2.28	2.28	-	-	15.69	5.87		
7		7	7	7	7	7	9	9	1.80	1.80	1.80	1.80	2.32	2.32	-	-	15.45	5.89		
7		7	7	7	7	7	7	12	-	-	1.79	1.79	1.79	1.79	3.07	3.07	-	-	15.57	5.88
7		7	7	7	7	7	7	9	-	-	1.84	1.84	1.84	1.84	2.36	2.36	-	-	15.21	5.90
7		7	7	7	7	7	7	7	-	-	1.92	1.92	1.92	1.92	2.47	2.47	-	-	15.38	5.90

Note: •Cooling capacity is based on 27°CDB/19°CWB(indoor temperature),35°CDB(outdoor temperature)
 •Pipe Length: 5 m (Outdoor unit to Branch box), 3 m (Branch box to Indoor unit)
 •Height difference: 0 m (Outdoor unit to Indoor unit)
 •The values in this table should be used only as a guide. These values are calculated at standard conditions.
 To fix your selection of models, select them according to "Model Selection" in the D&T manual.

8 Rooms Multi heating

AOYG45LBT8	Combination of Indoor Unit		HEATING OPERATION																
			Heating Capacity														Input power		
			Room 1	Room 2	Room 3	Room 4	Room 5	Room 6	Room 7	Room 8	Total								
kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW		
2 Room	24	24	-	-	-	-	-	-	7.91	7.91	-	-	-	-	-	-	-	15.82	5.07
	18	24	-	-	-	-	-	-	5.86	7.91	-	-	-	-	-	-	-	13.77	4.21
	18	18	24	-	-	-	-	-	5.32	5.32	7.18	-	-	-	-	-	-	17.82	5.98
	18	18	18	-	-	-	-	-	5.79	5.79	5.79	-	-	-	-	-	-	17.38	5.43
	14	24	24	-	-	-	-	-	4.26	7.02	7.02	-	-	-	-	-	-	18.31	5.98
	14	18	24	-	-	-	-	-	4.59	5.61	7.57	-	-	-	-	-	-	17.77	5.70
	14	18	18	-	-	-	-	-	4.78	5.84	5.84	-	-	-	-	-	-	16.46	5.11
	14	14	24	-	-	-	-	-	4.75	4.75	7.82	-	-	-	-	-	-	17.32	5.23
	14																		

8 Rooms Multi heating

AOYG45LBT8	Combination of Indoor Unit								HEATING OPERATION										
									Heating Capacity										Input power
									Room 1	Room 2	Room 3	Room 4	Room 5	Room 6	Room 7	Room 8	Total	kW	
								kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
4 Room	7	7	14	18	-	-	-	-	2.37	2.37	2.37	4.80	5.86	-	-	-	-	15.40	4.75
	7	7	14	14	-	-	-	-	2.37	2.37	4.80	4.80	-	-	-	-	-	14.34	4.21
	7	7	12	24	-	-	-	-	2.36	2.36	3.94	7.87	-	-	-	-	-	16.53	5.11
	7	7	12	18	-	-	-	-	2.37	2.37	3.96	5.86	-	-	-	-	-	14.56	4.46
	7	7	12	14	-	-	-	-	2.37	2.37	3.96	4.80	-	-	-	-	-	13.50	4.00
	7	7	9	24	-	-	-	-	2.37	2.37	2.99	7.91	-	-	-	-	-	15.64	4.91
	7	7	9	18	-	-	-	-	2.37	2.37	2.99	5.86	-	-	-	-	-	13.59	4.10
	7	7	9	14	-	-	-	-	2.37	2.37	2.99	4.80	-	-	-	-	-	15.02	4.60
	7	7	7	18	-	-	-	-	2.37	2.37	2.37	5.86	-	-	-	-	-	12.97	3.90
	7	7	12	12	14	-	-	-	3.51	3.51	3.51	3.51	4.26	-	-	-	-	18.32	5.98
	7	7	12	12	12	-	-	-	3.58	3.58	3.58	3.58	3.58	-	-	-	-	17.90	5.98
	7	7	12	14	14	-	-	-	2.66	3.52	3.52	4.27	4.27	-	-	-	-	18.26	5.98
7	7	12	12	14	-	-	-	2.71	3.59	3.59	3.59	4.35	-	-	-	-	17.84	5.98	
7	7	12	12	12	-	-	-	2.85	3.77	3.77	3.77	3.77	-	-	-	-	17.95	5.87	
7	7	14	14	14	-	-	-	2.67	2.67	4.28	4.28	4.28	-	-	-	-	18.19	5.98	
7	7	14	18	-	-	-	-	2.66	2.66	3.52	4.26	5.21	-	-	-	-	18.30	5.98	
7	7	12	14	14	-	-	-	2.72	2.72	3.60	4.37	4.37	-	-	-	-	17.77	5.98	
7	7	12	12	18	-	-	-	2.71	2.71	3.58	3.58	5.30	-	-	-	-	17.88	5.98	
7	7	12	12	14	-	-	-	2.86	2.86	3.78	3.78	4.58	-	-	-	-	17.86	5.70	
7	7	12	12	12	-	-	-	2.89	2.89	3.83	3.83	3.83	-	-	-	-	17.28	5.43	
7	7	9	14	18	-	-	-	2.71	2.71	2.71	4.36	5.32	-	-	-	-	17.82	5.98	
7	7	9	14	14	-	-	-	2.86	2.86	2.86	4.59	4.59	-	-	-	-	17.77	5.56	
7	7	9	12	18	-	-	-	2.85	2.85	2.85	3.78	5.59	-	-	-	-	17.92	5.87	
7	7	9	9	12	14	-	-	2.90	2.90	2.90	3.84	4.65	-	-	-	-	17.19	5.32	
7	7	9	9	12	14	-	-	2.97	2.97	2.97	3.93	3.93	-	-	-	-	16.78	5.16	
7	7	9	9	24	-	-	-	2.70	2.70	2.70	2.70	7.14	-	-	-	-	17.94	5.98	
7	7	9	9	9	18	-	-	2.89	2.89	2.89	2.89	5.67	-	-	-	-	17.25	5.43	
7	7	9	9	9	14	-	-	2.97	2.97	2.97	2.97	4.77	-	-	-	-	16.67	5.11	
7	7	9	9	9	12	-	-	2.99	2.99	2.99	2.99	3.96	-	-	-	-	15.92	5.07	
7	7	9	9	9	9	-	-	2.99	2.99	2.99	2.99	2.99	-	-	-	-	14.95	4.60	
7	7	12	14	14	14	-	-	2.10	3.51	4.25	4.25	4.25	-	-	-	-	18.37	5.98	
7	7	12	14	14	14	-	-	2.14	3.57	3.57	4.33	4.33	-	-	-	-	17.95	5.98	
7	7	12	12	18	-	-	-	2.13	3.56	3.56	3.56	5.26	-	-	-	-	18.06	5.98	
7	7	12	12	12	-	-	-	2.25	3.76	3.76	3.76	4.56	-	-	-	-	18.10	5.87	
7	7	12	12	12	-	-	-	2.28	3.81	3.81	3.81	3.81	-	-	-	-	17.52	5.56	
7	7	14	14	18	-	-	-	2.09	2.84	4.24	4.24	5.18	-	-	-	-	18.40	5.98	
7	7	14	14	14	-	-	-	2.14	2.71	4.34	4.34	4.34	-	-	-	-	17.88	5.98	
7	7	12	14	18	-	-	-	2.13	2.69	3.57	4.32	5.28	-	-	-	-	17.99	5.98	
7	7	12	14	14	-	-	-	2.26	2.85	3.77	4.57	5.28	-	-	-	-	18.01	5.70	
7	7	12	12	18	-	-	-	2.25	2.84	3.76	3.76	5.56	-	-	-	-	18.16	5.98	
7	7	12	12	14	-	-	-	2.28	2.88	3.82	3.82	4.63	-	-	-	-	17.43	5.43	
7	7	12	12	12	-	-	-	2.35	2.96	3.92	3.92	3.92	-	-	-	-	17.09	5.23	
7	7	9	18	18	-	-	-	2.13	2.69	2.69	5.27	5.27	-	-	-	-	18.04	5.98	
7	7	9	14	18	-	-	-	2.25	2.84	2.84	4.56	5.57	-	-	-	-	18.07	5.87	
7	7	9	14	14	-	-	-	2.29	2.89	2.89	4.64	4.64	-	-	-	-	17.34	5.32	
7	7	9	12	24	-	-	-	2.12	2.68	2.68	3.55	7.08	-	-	-	-	18.11	5.98	
7	7	9	12	18	-	-	-	2.28	2.88	2.88	3.81	5.64	-	-	-	-	17.49	5.56	
7	7	9	12	14	-	-	-	2.35	2.97	2.97	3.93	4.76	-	-	-	-	16.97	5.16	
7	7	9	12	12	-	-	-	2.37	2.98	2.98	3.95	3.95	-	-	-	-	16.24	5.08	
7	7	9	9	24	-	-	-	2.17	2.74	2.74	2.74	7.24	-	-	-	-	17.63	5.98	
7	7	9	9	9	18	-	-	2.35	2.96	2.96	2.96	5.81	-	-	-	-	17.05	5.23	
7	7	9	9	9	14	-	-	2.37	2.99	2.99	2.99	4.79	-	-	-	-	16.12	5.07	
7	7	9	9	12	-	-	-	2.37	2.99	2.99	2.99	3.96	-	-	-	-	15.30	4.75	
7	7	9	9	9	-	-	-	2.37	2.99	2.99	2.99	2.99	-	-	-	-	14.33	4.33	
7	7	14	14	18	-	-	-	2.12	2.12	4.30	5.25	5.25	-	-	-	-	18.10	5.98	
7	7	14	14	14	-	-	-	2.25	2.25	4.55	4.55	4.55	-	-	-	-	18.16	5.70	
7	7	12	18	18	-	-	-	2.11	2.11	3.53	5.23	5.23	-	-	-	-	18.21	5.98	
7	7	12	14	18	-	-	-	2.16	2.16	3.62	4.38	5.35	-	-	-	-	17.68	5.98	
7	7	12	14	14	-	-	-	2.28	2.28	3.80	4.61	4.61	-	-	-	-	17.58	5.43	
7	7	12	12	24	-	-	-	2.11	2.11	3.52	3.52	7.03	-	-	-	-	18.29	5.98	
7	7	12	12	14	-	-	-	2.35	2.35	3.92	3.92	4.75	-	-	-	-	17.28	5.23	
7	7	12	12	12	-	-	-	2.36	3.94	3.94	3.94	3.94	-	-	-	-	16.54	5.11	
7	7	9	18	18	-	-	-	2.16	2.16	2.72	5.34	5.34	-	-	-	-	17.73	5.98	
7	7	9	14	24	-	-	-	2.11	2.11	2.67	4.28	7.05	-	-	-	-	18.22	5.98	
7	7	9	14	18	-	-	-	2.27	2.27	2.87	4.61	5.62	-	-	-	-	17.64	5.56	
7	7	9	14	14	-	-	-	2.35	2.35	2.96	4.75	4.75	-	-	-	-	17.16	5.16	
7	7	9	12	24	-	-	-	2.15	2.15	2.72	3.60	7.18	-	-	-	-	17.80	5.98	
7	7	9	12	18	-	-	-	2.34	2.34	2.96	3.92	5.80	-	-	-	-	17.36	5.32	
7	7	9	12	14	-	-	-	2.36	2.36	2.98	3.95	4.78	-	-	-	-	16.43	5.08	
7	7	9	12	12	-	-	-	2.37	2.37	2.99	3.96	3.96	-	-	-	-	15.65	4.91	
7	7	9	12	24	-	-	-	2.27	2.27	2.86	2.86	7.56	-	-	-	-	17.81	5.70	
7	7	9	9	18	-	-	-	2.36	2.36	2.98	2.98	5.83	-	-	-	-	16.51	5.11	
7	7	9	9	14	-	-	-	2.37	2.37	2.99	2.99	4.80	-	-	-	-	15.52	4.75	
7	7	9	9	12	-	-	-	2.37	2.37	2.99	2.99	3.96	-	-	-	-	14.68	4.46	
7	7	9	9	9	-	-	-	2.37	2.37	2.99	2.99	2.99	-	-	-	-	13.71	4.10	
7	7	7	18	18	-	-	-	2.26	2.26	2.26	5.58	5.58	-	-	-	-	17.95	5.87	
7	7	7	14	24	-	-	-	2.14	2.14	2.14	4.34	7.15	-	-	-	-	17.91	5.98	
7	7	7	14	18	-	-	-	2.30	2.30	2.30	4.65	5.68	-	-	-	-	17.22	5.32	
7	7	7	14	14	-	-	-	2.36	2.36	2.36	4.77	4.77	-	-	-	-	16.62	5.08	
7	7	7	12	24	-	-	-	2.25	2.25	2.25	3.77	7.52	-	-	-	-	18.05	5.87	
7	7	7	12	18	-	-	-	2.35	2.35	2.35	3.93	5.82	-	-	-	-	16.81	5.16	
7	7	7	12	14	-	-	-	2.37	2.37	2.37	3.96	4.80	-	-	-	-	15.87	4.91	
7	7	7	12	12	-	-	-	2.37	2.37	2.37	3.96	3.96	-	-	-	-	15.03	4.60	
7	7	7	9	24	-	-	-	2.29	2.29	2.29	2.89	7.63	-	-	-	-	17.38	5.43	
7	7	7	9	18	-	-	-	2.37	2.37	2.37	2.99	5.86	-	-	-	-	15.96	5.07	
7	7	7	9	14	-	-	-	2.37	2.37	2.37	2.99	4.80	-	-	-	-	14.90	4.46	
7	7	7	9	12	-	-	-	2.37	2.37	2.37	2.99	3.96	-	-	-	-	14.06	4.21	
7	7	7	9	9	-	-	-	2.37	2.37	2.37	2.99	2.99	-	-	-	-	13.09	3.90	
7	7	7	9	24	-	-	-	2.35	2.35	2.35	2.35	7.							