

1. List of functions

◆ Basic functions of Outdoor Unit

Category	Functions	Z3UW18GFA0 [MU3R19 UE0] Z3UW21GFA0 [MU3R21 UE0] Z4UW24GFA0 [MU4R25 U40] Z4UW27GFA0 [MU4R27 U40] Z5UW30GFA0 [MU5R30 U40]
Reliability	Defrost / Deicing	O
	High pressure switch	O
	Low pressure switch	X
	Phase protection	X
	Restart delay (3-minutes)	O
	Self diagnosis	O
	Soft start	O
Convenience	Test function	O
	Night Silent Operation	O
	Wiring Error Check	O
	Peak Control	O
	Mode Lock	O
	Forced Cooling Operation (Outdoor Unit)	O
	SLC (Smart Load Control)	O
Network function	Network solution(LGAP)	O
ODU Dry Contact (On/off control only)		X
Note 1. O : Applied, X : Not applied Accessory model name : Installed at field, ordered and purchased separately by the corresponding model name, supplied with separate package.		

◆ Accessory Compatibility List

Category		Product	Etc	Z3UW18GFA0 [MU3R19 UE0] Z3UW21GFA0 [MU3R21 UE0] Z4UW24GFA0 [MU4R25 U40] Z4UW27GFA0 [MU4R27 U40] Z5UW30GFA0 [MU5R30 U40]
Central Controller	Simple	PQCSZ250S0	AC EZ	O
	AC Ez Touch	PACEZA000	AC Ez Touch	O
	AC Smart	PACS4B000	AC Smart IV	O
	ACP	PACP4B000	ACP IV	O
	AC Manager ²⁾	PACM4B000	AC Manager IV	O
		PACM5A000	AC Manager 5	O
Gateway	ODU PI485	PMNFP14A1	PI 485 Gateway	O
		PMNFP14A0	PI 485 Gateway	O
		PV485N000	PI 485 Gateway	X
	Low Ambient Kit	AQLA	-	X
		PRVC2	From MULTI V 4 series	X
	AHU Comm. Kit	PAHCMR000	Return Air Temperature Control	X
		PAHCMS000	Discharge Air Temperature Control	X
	BACnet	PQNFB17C0	ACP BACnet	O
	Lonworks	PLNWKB000	ACP Lonworks	O
ETC	Lon Translator	PLNTRN000	Lon Translator	X
	PDI	PPWRDB000	PDI Standard	O
		PQNUD1S40	PDI Premium	O
	ACS IO Module	PEXPMB000	-	X
Note 1. O: Possible, X: Impossible, -: Not applicable 2. *: Some advanced functions controlled by individual controller cannot be operated. 3. ²⁾ : ACP IV, AC Smart IV, ACP BACnet or ACP Lonworks is needed. 4. Compatibility of individual controller(wireless/wired remote controller) could be found with function list on Indoor Unit's PDB. 5. If you need more detail, please refer to the BECON PDB or the manual of product. (http://partner.lge.com/global : Home> Download> Manuals)				

2. Specifications

Global Model Names [Europe Model Names]				Z3UW18GFA0 [MU3R19 UE0]	Z3UW21GFA0 [MU3R21 UE0]
Combination Limit	Sum of Indoor Units Capacity		kBtu/h	30	33
	Number of Indoor Units		EA	3	3
	Number of BD Units		EA	-	-
Cooling Capacity*	Min.~Rated~Max.		kW	1.06 ~ 5.28 ~ 6.33	1.06 ~ 6.15 ~ 7.33
	Min.~Rated~Max.		Btu/h	3,600 ~ 18,000 ~ 21,600	3,600 ~ 21,000 ~ 25,000
Heating Capacity*	Min.~Rated~Max.		kW	1.17 ~ 6.33 ~ 7.27	1.17 ~ 7.03 ~ 7.77
	Min.~Rated~Max.		Btu/h	4,000 ~ 21,600 ~ 24,840	4,000 ~ 24,000 ~ 26,500
Power Input	Cooling*	Min.~Rated~Max.	kW	0.24 ~ 1.15 ~ 1.76	0.24 ~ 1.44 ~ 2.07
	Heating*	Min.~Rated~Max.	kW	0.25 ~ 1.37 ~ 2.03	0.25 ~ 1.59 ~ 2.30
SEER / SCOP			Wh/Wh	8.50 / 4.21	8.50 / 4.21
Seasonal Energy Label (A+++ to D Scale)		Cooling / Heating	-	A+++ / A+	A+++ / A+
Annual Energy Consumption		Cooling / Heating	kWh	217 / 1,629	253 / 1,629
Power Supply			V, Ø, Hz	220-240, 1, 50	220-240, 1, 50
Running Current	Cooling*	Min.~Rated~Max.	A	1.1 ~ 5.3 ~ 8.1	1.1 ~ 6.7 ~ 9.6
	Heating*	Min.~Rated~Max.	A	1.1 ~ 6.3 ~ 9.4	1.1 ~ 7.4 ~ 10.6
Power Factor			Rated	0.94	0.94
Power Supply Cable (included Earth)			No. x mm ²	3C x 2.5	3C x 2.5
Casing Color			-	Warm Gray	Warm Gray
Dimensions	Net	W x H x D	mm	870 x 655 x 320	870 x 655 x 320
	Shipping	W x H x D	mm	1,022 x 716 x 437	1,022 x 716 x 437
Weight	Net		kg	43.8	43.8
	Shipping		kg	48.6	48.6
Compressor	Type		-	Twin Rotary	Twin Rotary
	Model	Model x No.		DAT156MA x 1	DAT156MA x 1
	Motor type		-	BLDC	BLDC
	Motor Output	W x No.		1,500 (at 60Hz) x 1	1,500 (at 60Hz) x 1
Refrigerant	Type		-	R32	R32
	GWP (Global Warming Potential)		-	675	675
	Precharged Amount		g	1,400	1,400
	t-CO ₂ eq.		-	0.95	0.95
	Control		-	Electronic Expansion Valve	Electronic Expansion Valve
	Chargeless-Pipe Length		m	22.5	22.5
	Additional Charging Volume		g/m	20	20
Refrigerant Oil	Type		-	FW68D	FW68D
	Charged volume	cc x No.		400 x 1	400 x 1
Heat Exchanger	(Row x Column x Fins per inch) x No.		-	(2 x 28 x 14) x 1	(2 x 28 x 14) x 1
Fan	Type		-	Propeller	Propeller
	Air Flow Rate		m ³ /min x No.	50 x 1	50 x 1
Fan Motor	Type		-	BLDC	BLDC
	Output	W x No.		85.4 x 1	85.4 x 1
Sound Pressure Level	Cooling/Heating (Rated)		dB(A)	49 / 54	50 / 54
Sound Power Level	Cooling (Rated)		dB(A)	63	64
Piping Connections	Liquid	Outer Dia. x No.	mm(inch)	Ø 6.35 (1/4) x 3	Ø 6.35 (1/4) x 3
	Gas	Outer Dia. x No.	mm(inch)	Ø 9.52 (3/8) x 3	Ø 9.52 (3/8) x 3
Piping Length	Total Piping	Max.	m	50	50
	Each Branch	Standard	m	7.5	7.5
		Max.	m	25	25
Maximum Height Difference	ODU~IDU	Max.	m	15	15
	IDU~IDU	Max.	m	7.5	7.5

Note

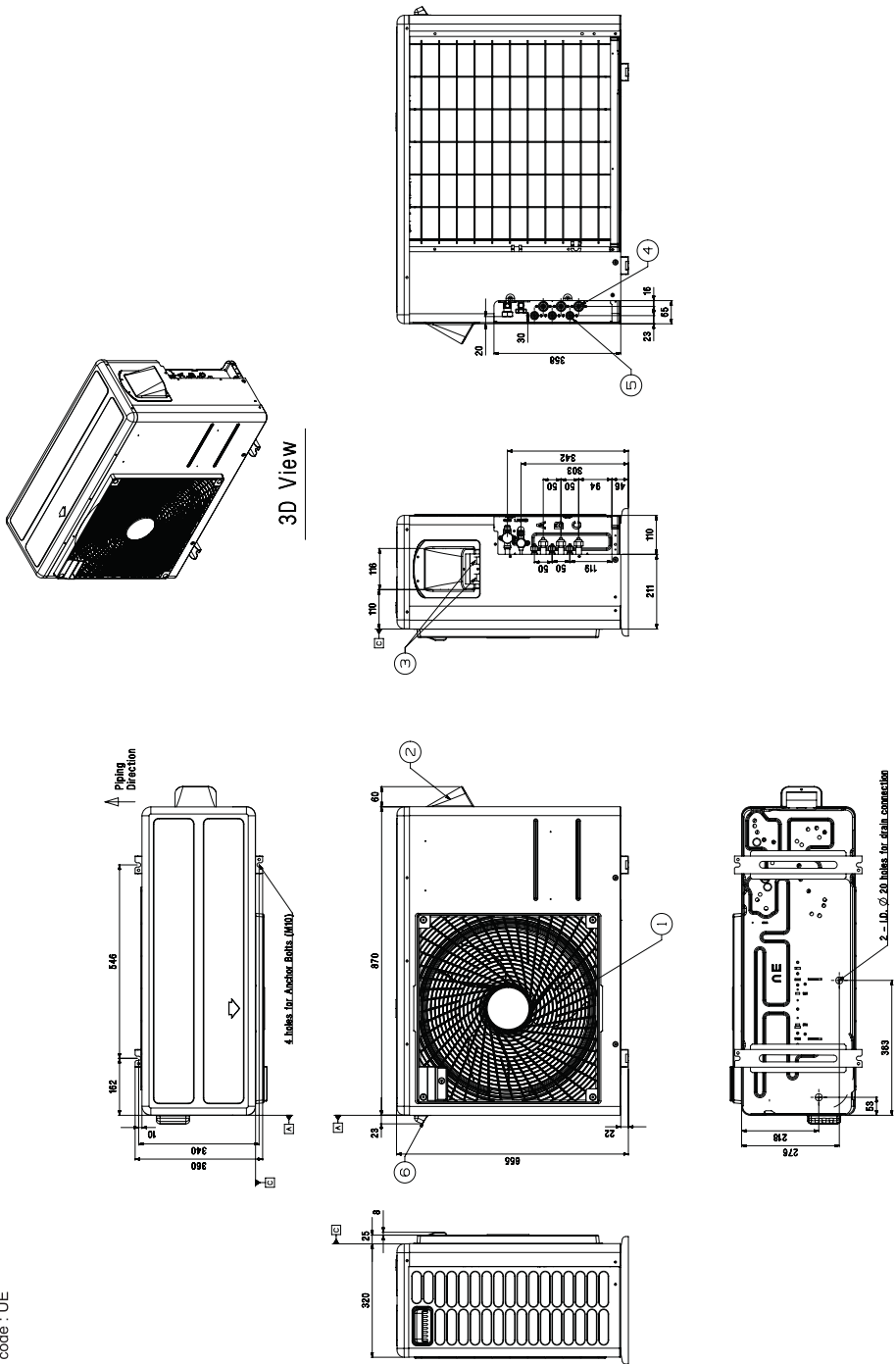
- Due to our policy of innovation some specifications may be changed without notification.
- Wiring cable size must comply with the applicable local and national codes. And "Electric characteristics" chapter should be considered for electrical work and design. Especially the power cable and circuit breaker should be selected in accordance with that.
- Power factor could vary less than ±1% according to the operating conditions.
- Sound pressure level is measured on the rated condition in the anechoic rooms by ISO 3745 standard.
Sound power level indoors is measured on the rated condition in the reverberation rooms by ISO 3741 standard.
Therefore, these values can be increased owing to ambient conditions during operation.
- Performances are based on the following conditions :
 - *Cooling : Indoor Ambient Temp. 27°CDB / 19°CWB, Outdoor Ambient Temp. 35°CDB / 24°CWB
 - *Heating : Indoor Ambient Temp. 20°CDB / 15°CWB, Outdoor Ambient Temp. 7°CDB / 6°CWB
 - Interconnected Pipe is standard length and difference of Elevation (Outdoor ~ Indoor Unit) is Zero.
- This product contains Fluorinated greenhouse gases.

3. Dimensions

Z3UW18GFA0 [MU3R19 UE0] / Z3UW21GFA0 [MU3R21 UE0]

[Unit: mm]

Chassis code : UE



Symbols

- Piping Direction
- Datum line

Note

- Unit should be installed in compliance with the installation manual in the product box.
- Unit should be grounded in accordance with the local regulations or applicable national codes.
- All electrical components and materials to be supplied from the site must comply with the local regulations or international codes.
- Electrical characteristics chapter should be considered for electrical work and design. Especially the power cable and circuit breaker should be selected in accordance with that.

No.	Part Name	Description
6	Handle	-
5	Liquid Pipe Connection	Flare joint
4	Gas Pipe Connection	Flare joint
3	Power and communication Cable Hole	-
2	Control Cover	-
1	Air Outlet	-

4. Combination Table

4.3 Z3UW18GFA0 [MU3R19 UE0]

◆ Cooling

Cooling [-18G-]

Combination (Capacity index, kBtu/h)						Cooling								
						Total Capacity						Input (W)		
						Min		Rated		Max				
Unit-A	Unit-B	Unit-C	Unit-D	Unit-E	Total	Btu/h	kW	Btu/h	kW	Btu/h	kW	Min	Rated	Max
1 Unit Operation														
5	-	-	-	-	5	3,600	1.06	5,000	1.47	6,000	1.76	235	356	527
7	-	-	-	-	7	4,200	1.23	7,000	2.05	8,400	2.46	257	462	623
9	-	-	-	-	9	5,400	1.58	9,000	2.64	10,800	3.17	346	580	814
12	-	-	-	-	12	7,200	2.11	12,000	3.52	14,400	4.22	462	802	1,101
15	-	-	-	-	15	8,520	2.50	14,200	4.16	17,040	4.99	556	983	1,276
18	-	-	-	-	18	10,800	3.17	18,000	5.28	21,600	6.33	727	1,282	1,806
2 Units Operation														
5	5	-	-	-	10	6,000	1.76	10,000	2.93	12,000	3.52	373	620	854
5	7	-	-	-	12	7,200	2.11	12,000	3.52	14,400	4.22	439	762	1,046
5	9	-	-	-	14	8,400	2.46	14,000	4.10	16,800	4.92	528	909	1,246
7	7	-	-	-	14	8,400	2.46	14,000	4.10	16,800	4.92	528	909	1,246
7	9	-	-	-	16	9,600	2.81	16,000	4.69	19,200	5.63	597	1,061	1,504
5	12	-	-	-	17	10,200	2.99	17,000	4.98	20,400	5.98	644	1,139	1,644
9	9	-	-	-	18	10,800	3.17	18,000	5.28	21,600	6.33	691	1,218	1,761
7	12	-	-	-	19	10,800	3.17	18,000	5.28	21,600	6.33	691	1,218	1,761
5	15	-	-	-	20	10,800	3.17	18,000	5.28	21,600	6.33	691	1,218	1,761
9	12	-	-	-	21	10,800	3.17	18,000	5.28	21,600	6.33	691	1,218	1,761
7	15	-	-	-	22	10,800	3.17	18,000	5.28	21,600	6.33	691	1,218	1,761
5	18	-	-	-	23	10,800	3.17	18,000	5.28	21,600	6.33	691	1,218	1,761
9	15	-	-	-	24	10,800	3.17	18,000	5.28	21,600	6.33	691	1,218	1,761
12	12	-	-	-	24	10,800	3.17	18,000	5.28	21,600	6.33	691	1,218	1,761
7	18	-	-	-	25	10,800	3.17	18,000	5.28	21,600	6.33	691	1,218	1,761
9	18	-	-	-	27	10,800	3.17	18,000	5.28	21,600	6.33	691	1,218	1,761
12	15	-	-	-	27	10,800	3.17	18,000	5.28	21,600	6.33	691	1,218	1,761
12	18	-	-	-	30	10,800	3.17	18,000	5.28	21,600	6.33	691	1,218	1,761
15	15	-	-	-	30	10,800	3.17	18,000	5.28	21,600	6.33	691	1,218	1,761
3 Units Operation														
5	5	5	-	-	15	9,000	2.64	15,000	4.40	18,000	5.28	524	935	1,289
5	5	7	-	-	17	10,200	2.99	17,000	4.98	20,400	5.98	611	1,082	1,562
5	5	9	-	-	19	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
5	7	7	-	-	19	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
5	7	9	-	-	21	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
7	7	7	-	-	21	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
5	5	12	-	-	22	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
5	9	9	-	-	23	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
7	7	9	-	-	23	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
5	7	12	-	-	24	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
5	5	15	-	-	25	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
7	9	9	-	-	25	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
5	9	12	-	-	26	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
7	7	12	-	-	26	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
5	7	15	-	-	27	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
9	9	9	-	-	27	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
7	9	12	-	-	28	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
5	9	15	-	-	29	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
5	12	12	-	-	29	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
7	7	15	-	-	29	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668
9	9	12	-	-	30	10,800	3.17	18,000	5.28	21,600	6.33	656	1,151	1,668

Note

- Capacities are based on the following conditions :
 - Cooling : Indoor Ambient Temp. 27°CDB/19°CWB, Outdoor Ambient Temp. 35°CDB/24°CWB
 - Heating : Indoor Ambient Temp. 20°CDB / 15°CWB, Outdoor Ambient Temp. 7°CDB / 6°CWB
 - Interconnected piping is standard length and difference of Elevation (Outdoor ~ Indoor Unit) is Zero.
- At least two indoor units should be connected. And minimum limit of combination ratio is 40% for rated capacity of outdoor unit.
- Recommended maximum combination ratio is 130% approximately. Don't exceed the maximum connectable indoor units number, it can be found in Specifications or combination table of outdoor unit model.

4. Combination Table

◆ Heating

Heating [-18G-]

Combination (Capacity index, kBtu/h)						Heating								
						Total Capacity						Input (W)		
						Min		Rated		Max				
Unit-A	Unit-B	Unit-C	Unit-D	Unit-E	Total	Btu/h	kW	Btu/h	kW	Btu/h	kW	Min	Rated	Max
1 Unit Operation														
5	-	-	-	-	5	4,000	1.17	5,500	1.61	6,325	1.85	248	368	539
7	-	-	-	-	7	5,040	1.48	8,400	2.46	9,660	2.83	313	537	680
9	-	-	-	-	9	6,480	1.90	10,800	3.17	12,420	3.64	401	702	896
12	-	-	-	-	12	7,920	2.32	13,200	3.87	15,180	4.45	491	874	1,121
15	-	-	-	-	15	9,900	2.90	16,500	4.84	18,975	5.56	631	1,105	1,479
18	-	-	-	-	18	11,880	3.48	19,800	5.80	22,770	6.67	775	1,376	1,829
2 Units Operation														
5	5	-	-	-	10	7,200	2.11	12,000	3.52	13,800	4.04	424	736	957
5	7	-	-	-	12	8,640	2.53	14,400	4.22	16,560	4.85	511	903	1,204
5	9	-	-	-	14	10,080	2.95	16,800	4.92	19,320	5.66	622	1,075	1,435
7	7	-	-	-	14	10,080	2.95	16,800	4.92	19,320	5.66	622	1,075	1,435
7	9	-	-	-	16	11,520	3.38	19,200	5.63	22,080	6.47	713	1,255	1,676
5	12	-	-	-	17	12,240	3.59	20,400	5.98	23,460	6.88	760	1,361	1,801
9	9	-	-	-	18	12,960	3.80	21,600	6.33	24,840	7.28	807	1,442	2,028
7	12	-	-	-	19	12,960	3.80	21,600	6.33	24,840	7.28	807	1,442	2,028
5	15	-	-	-	20	12,960	3.80	21,600	6.33	24,840	7.28	807	1,442	2,028
9	12	-	-	-	21	12,960	3.80	21,600	6.33	24,840	7.28	807	1,442	2,028
7	15	-	-	-	22	12,960	3.80	21,600	6.33	24,840	7.28	807	1,442	2,028
5	18	-	-	-	23	12,960	3.80	21,600	6.33	24,840	7.28	807	1,442	2,028
9	15	-	-	-	24	12,960	3.80	21,600	6.33	24,840	7.28	807	1,442	2,028
12	12	-	-	-	24	12,960	3.80	21,600	6.33	24,840	7.28	807	1,442	2,028
7	18	-	-	-	25	12,960	3.80	21,600	6.33	24,840	7.28	807	1,442	2,028
9	18	-	-	-	27	12,960	3.80	21,600	6.33	24,840	7.28	807	1,442	2,028
12	15	-	-	-	27	12,960	3.80	21,600	6.33	24,840	7.28	807	1,442	2,028
12	18	-	-	-	30	12,960	3.80	21,600	6.33	24,840	7.28	807	1,442	2,028
15	15	-	-	-	30	12,960	3.80	21,600	6.33	24,840	7.28	807	1,442	2,028
3 Units Operation														
5	5	5	-	-	15	10,800	3.17	18,000	5.28	20,700	6.07	634	1,118	1,476
5	5	7	-	-	17	12,240	3.59	20,400	5.98	23,460	6.88	722	1,293	1,711
5	5	9	-	-	19	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
5	7	7	-	-	19	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
5	7	9	-	-	21	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
7	7	7	-	-	21	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
5	5	12	-	-	22	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
5	9	9	-	-	23	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
7	7	9	-	-	23	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
5	7	12	-	-	24	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
5	5	15	-	-	25	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
7	9	9	-	-	25	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
5	9	12	-	-	26	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
7	7	12	-	-	26	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
5	7	15	-	-	27	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
9	9	9	-	-	27	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
7	9	12	-	-	28	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
5	9	15	-	-	29	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
5	12	12	-	-	29	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
7	7	15	-	-	29	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944
9	9	12	-	-	30	12,960	3.80	21,600	6.33	24,840	7.28	766	1,370	1,944

Note

1. Capacities are based on the following conditions :

- Cooling : Indoor Ambient Temp. 27°CDB/19°CWB, Outdoor Ambient Temp. 35°CDB/24°CWB
- Heating : Indoor Ambient Temp. 20°CDB / 15°CWB, Outdoor Ambient Temp. 7°CDB / 6°CWB
- Interconnected piping is standard length and difference of Elevation (Outdoor ~ Indoor Unit) is Zero.

2. At least two indoor units should be connected. And minimum limit of combination ratio is 40% for rated capacity of outdoor unit.

3. Recommended maximum combination ratio is 130% approximately. Don't exceed the maximum connectable indoor units number, it can be found in Specifications or combination table of outdoor unit model.