

# 1. List of functions

## ◆ Basic functions of Outdoor Unit

Category	Functions	Z2UW14GFA0 [MU2R15 UL0] Z2UW16GFA0 [MU2R17 UL0]
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)	X
Network function	Network solution(LGAP)	X
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	Z2UW14GFA0 [MU2R15 UL0] Z2UW16GFA0 [MU2R17 UL0]
Central Controller	Simple	PQCSZ250S0	X
	AC Ez Touch	PACEZA000	X
	AC Smart	PACS4B000	X
	ACP	PACP4B000	X
	AC Manager <sup>2)</sup>	PACM4B000	X
		PACM5A000	X
Gateway	ODU PI485	PMNFP14A1	X
		PMNFP14A0	X
		PV485N000	X
	Low Ambient Kit	AQLA	X
		PRVC2	From MULTI V 4 series
	AHU Comm. Kit	PAHCMR000	Return Air Temperature Control
		PAHCMS000	Discharge Air Temperature Control
	BACnet	PQNFB17C0	ACP BACnet
	Lonworks	PLNWKB000	ACP Lonworks
	Lon Translator	PLNTRN000	Lon Translator
ETC	PDI	PPWRDB000	PDI Standard
		PQNUD1S40	PDI Premium
	ACS IO Module	PEXPMB000	-

### Note

1. O: Possible, X: Impossible, - : Not applicable

2. \* : Some advanced functions controlled by individual controller cannot be operated.

3. <sup>2)</sup> : 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

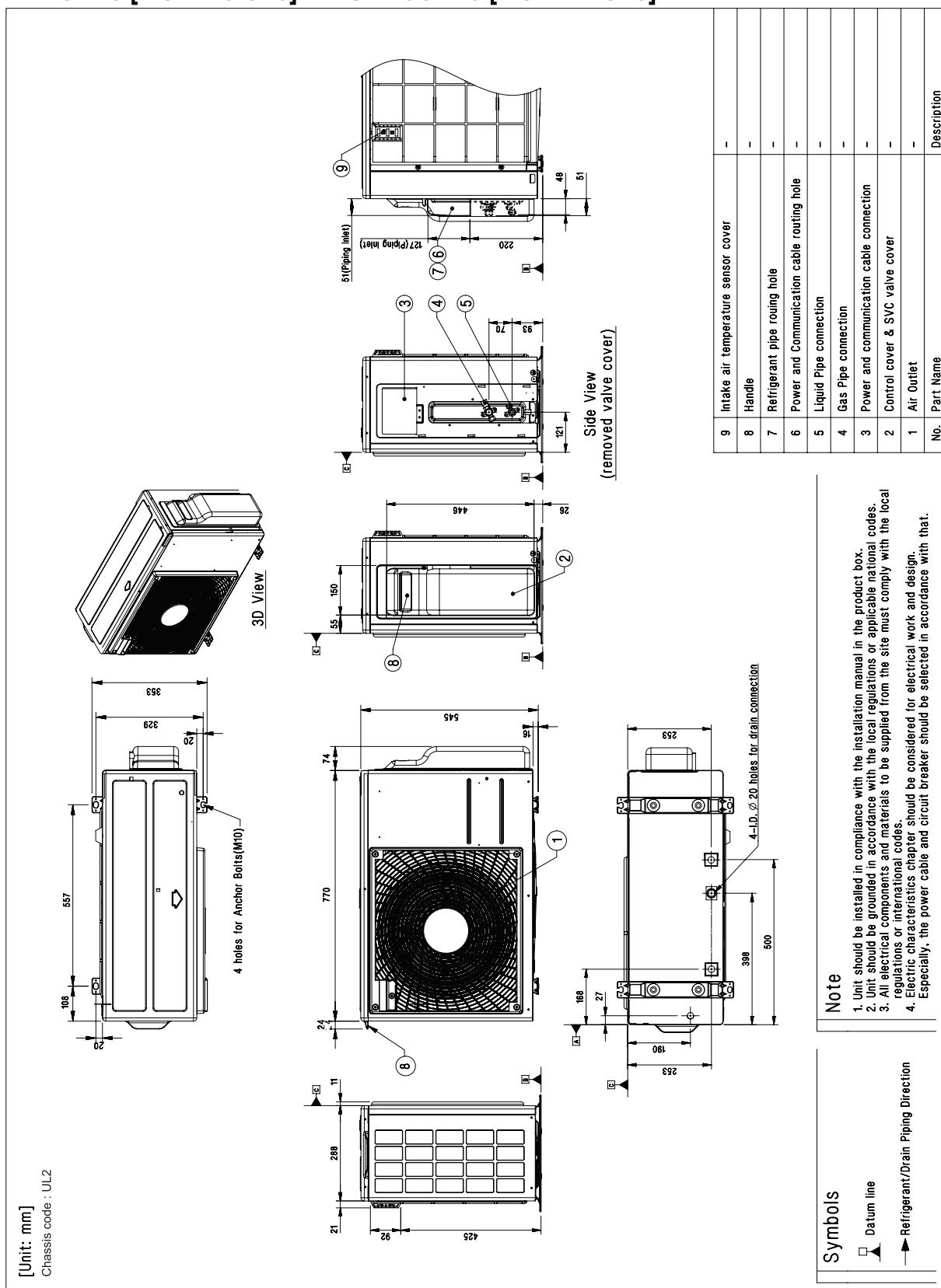
Global Model Names [Europe Model Names]			Z2UW14GFA0 [MU2R15 UL0]	Z2UW16GFA0 [MU2R17 UL0]
Combination Limit	Sum of Indoor Units Capacity	kBtu/h	21	24
	Number of Indoor Units	EA	2	2
	Number of BD Units	EA	-	-
Cooling Capacity*	Min.~Rated~Max.	kW	0.88 ~ 4.10 ~ 4.72	0.88 ~ 4.69 ~ 5.39
	Min.~Rated~Max.	Btu/h	3,000 ~ 14,000 ~ 16,100	3,000 ~ 16,000 ~ 18,400
Heating Capacity*	Min.~Rated~Max.	kW	0.97 ~ 4.69 ~ 5.39	0.97 ~ 5.28 ~ 5.69
	Min.~Rated~Max.	Btu/h	3,300 ~ 16,000 ~ 18,400	3,300 ~ 18,000 ~ 19,400
Power Input	Cooling*	Min.~Rated~Max.	kW	0.23 ~ 0.99 ~ 1.38
	Heating*	Min.~Rated~Max.	kW	0.24 ~ 1.07 ~ 1.43
SEER / SCOP		Wh/Wh	8.50 / 4.20	7.80 / 4.20
Seasonal Energy Label (A+++ to D Scale)		Cooling / Heating	-	A+++ / A+
Annual Energy Consumption		Cooling / Heating	kWh	169 / 1,367
Power Supply		V, Ø, Hz	220-240, 1, 50	220-240, 1, 50
Running Current	Cooling*	Min.~Rated~Max.	A	1.1 ~ 4.6 ~ 6.4
	Heating*	Min.~Rated~Max.	A	1.1 ~ 4.9 ~ 6.6
Power Factor		Rated	-	0.94
Power Supply Cable (included Earth)		No. × mm <sup>2</sup>	3C × 2.5	3C × 2.5
Casing Color		-	Pigeon Gray	Pigeon Gray
Dimensions	Net	W × H × D	mm	770 × 545 × 288
	Shipping	W × H × D	mm	920 × 585 × 388
Weight	Net	-	kg	35.9
	Shipping	-	kg	39.2
Compressor	Type	-	Twin Rotary	Twin Rotary
	Model	Model × No.	DAT156MA × 1	DAT156MA × 1
	Motor type	-	BLDC	BLDC
	Motor Output	W × No.	1,500 (at 60Hz) × 1	1,500 (at 60Hz) × 1
Refrigerant	Type	-	R32	R32
	GWP (Global Warming Potential)	-	675	675
	Precharged Amount	g	1,100	1,100
	t-CO <sub>2</sub> eq.	-	0.74	0.74
	Control	-	Electronic Expansion Valve	Electronic Expansion Valve
Refrigerant Oil	Chargeless-Pipe Length	m	15	15
	Additional Charging Volume	g/m	20	20
	Type	-	FW68D	FW68D
Heat Exchanger	Charged volume	cc × No.	400 × 1	400 × 1
	(Row×Column×Fins per inch) × No.	-	(2 × 24 × 14) × 1	(2 × 24 × 14) × 1
Fan	Type	-	Propeller	Propeller
	Air Flow Rate	Rated	m <sup>3</sup> /min × No.	28.2 × 1
Fan Motor	Type	-	BLDC	BLDC
	Output	W × No.	43 × 1	43 × 1
Sound Pressure Level	Cooling/Heating (Rated)	dB(A)	48 / 51	48 / 51
Sound Power Level	Cooling (Rated)	dBA(A)	61	63
Piping Connections	Liquid	Outer Dia. × No.	mm(inch)	Ø 6.35(1/4) × 2
	Gas	Outer Dia. × No.	mm(inch)	Ø 9.52(3/8) × 2
Piping Length	Total Piping	Max.	m	30
	Each Branch	Standard	m	7.5
		Max.	m	20
Maximum Height Difference	ODU~IDU	Max.	m	15
	IDU~IDU	Max.	m	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 levIndoor 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

Z2UW14GFA0 [MU2R15 UL0] / Z2UW16GFA0 [MU2R17 UL0]



## 4. Combination Table

The individual indoor unit capacity can be calculated as follow depending on the total connected capacity of all indoor units.

$$[ Q_{\text{idu(combi)}} ] = [ Q_{\text{odu(rated)}} ] \times [ Q_{\text{idu(rated,each)}} ] / [ Q_{\text{idu(rated,total)}} ]$$

$Q_{\text{idu(combi)}}$  : Individual indoor unit combinational capacity

$Q_{\text{odu(rated)}}$  : Outdoor unit rated capacity

$Q_{\text{idu(rated,each)}}$  : Capacity of individual indoor unit

$Q_{\text{idu(rated,total)}}$  : Total sum of capacity for connected indoor units

### Important

In case that the connected indoor units include high static duct type, capacity index of high static duct indoor unit should be multiplied by 1.3 times when calculate the 'Combination Ratio'.

## 4.1 Z2UW14GFA0 [MU2R15 UL0]

### ◆ Cooling

Cooling [-14G-]

Combination (Capacity index, kBtu/h)						Cooling						Input (W)				
						Total Capacity										
						Min	Rated	Max	Btu/h	kW	Btu/h	kW	Btu/h	kW	Min	
Unit-A	Unit-B	Unit-C	Unit-D	Unit-E	Total										Rated	Max
1 Unit Operation																
5	-	-	-	-	5	3,000	0.88	5,000	1.47	5,750	1.69	226	381	477		
7	-	-	-	-	7	4,200	1.23	7,000	2.05	8,050	2.36	303	540	683		
9	-	-	-	-	9	5,400	1.58	9,000	2.64	10,350	3.03	408	676	864		
12	-	-	-	-	12	7,200	2.11	12,000	3.52	13,800	4.04	540	926	1,176		
2 Units Operation																
5	5	-	-	-	10	6,000	1.76	10,000	2.93	11,500	3.37	414	682	889		
5	7	-	-	-	12	7,200	2.11	12,000	3.52	13,800	4.04	486	833	1,106		
5	9	-	-	-	14	8,400	2.46	14,000	4.10	16,100	4.72	583	988	1,376		
7	7	-	-	-	14	8,400	2.46	14,000	4.10	16,100	4.72	583	988	1,376		
7	9	-	-	-	16	8,400	2.46	14,000	4.10	16,100	4.72	583	988	1,376		
5	12	-	-	-	17	8,400	2.46	14,000	4.10	16,100	4.72	583	988	1,376		
9	9	-	-	-	18	8,400	2.46	14,000	4.10	16,100	4.72	583	988	1,376		
7	12	-	-	-	19	8,400	2.46	14,000	4.10	16,100	4.72	583	988	1,376		
9	12	-	-	-	21	8,400	2.46	14,000	4.10	16,100	4.72	583	988	1,376		

#### 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 [-14G-]

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
<b>1 Unit Operation</b>														
5	-	-	-	-	5	3,300	0.97	5,500	1.61	6,050	1.77	235	380	472
7	-	-	-	-	7	5,040	1.48	8,400	2.46	9,240	2.71	355	604	721
9	-	-	-	-	9	6,480	1.90	10,800	3.17	11,880	3.48	454	784	949
12	-	-	-	-	12	7,920	2.32	13,200	3.87	14,520	4.26	554	969	1,185
<b>2 Units Operation</b>														
5	5	-	-	-	10	6,600	1.93	11,000	3.22	12,100	3.55	408	706	854
5	7	-	-	-	12	7,920	2.32	13,200	3.87	14,520	4.26	498	872	1,066
5	9	-	-	-	14	9,600	2.81	16,000	4.69	18,400	5.39	613	1,068	1,433
7	7	-	-	-	14	9,600	2.81	16,000	4.69	18,400	5.39	613	1,068	1,433
7	9	-	-	-	16	9,600	2.81	16,000	4.69	18,400	5.39	613	1,068	1,433
5	12	-	-	-	17	9,600	2.81	16,000	4.69	18,400	5.39	613	1,068	1,433
9	9	-	-	-	18	9,600	2.81	16,000	4.69	18,400	5.39	613	1,068	1,433
7	12	-	-	-	19	9,600	2.81	16,000	4.69	18,400	5.39	613	1,068	1,433
9	12	-	-	-	21	9,600	2.81	16,000	4.69	18,400	5.39	613	1,068	1,433

**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.