

ACCESSORIES

2010 LG Air Conditioner

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Brief History

Establishment

- 1947 Establishment of the LG Group
- 1958 Establishment of LG Electronics Inc.
- 1962 Establishment of Digital Appliance Company

Growth

- 1968 Manufactured Korea's first air conditioners
- 1985 Introduced Korea's first Inverter air conditioners
- 1986 Exported Korea's first window type air conditioners

Expansion

- 1995 Establishment of LGETA in china
- 1997 Establishment of LGEIL in India
- 1999 Establishment of LGEAT in Turkey
- 1999 Establishment of LGEMH in Vietnam
- 2001 Establishment of LGEAZ in Brazil
- 2002 Establishment of LGETH in Thailand
- 2002 Establishment of LGEIN in Indonesia
- 2004 Turnover of US\$1.4 Billion dollars

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Global Air Conditioning Academies



Changwon in Korea Pyeongtaek in Korea Moscow



Thailand England France Australia Saudi Arabia Singapore



Spain Italy Dubai China Kazakhstan



Mexico Panama Indonesia Iran Turkey Vietnam

V-NET

V-net, LG Network Solution provide comfortable environment and energy saving by optimum control of Air -conditioning system.

V-NET Line up

Remote Controller	Wireless Remote Controller		PQWRH(C)DF0
	Wired Remote Controller	Simple Standard Deluxe	PQRCUCS0C (Simple) PQRCFC50C (Simple for Hotel) PQRNC0 (Simple for operation with Radiator)
			PQRCVSL0 PQRCVSL0QW
			PZRCUSB0 PVRCUSZ0
Central Controller			PQRCUDS0 (White) PQRCUDSOB (Blue) PQRCUDSOS (Silver)
	Simple Central Controller		PQCSB101S0 PQCSB101S0+PQCSC101S0 PQCSB101S0+PQCSD130A0
	AC Smart II, Option Kit & 128 Unit Expansion Kit		PQCSW320A1E
	AC Smart II & Option Kit		PQCSE341A0 PQCSE342A0
Expansion Kit			PQCSE440U0
	ACP & AC Manager		PQCPA11A1E (Without IO) PQCPB11A1E (With IO) PQCSS520A0E (AC Manager)
	BNU		PQNFB16A1 (LonWORKS®) PQNFB17B0 (BACnet)
	AHU Control kit & EEV kit		PRCKA0 PRLK048A0
PI 485 & DO Kit			PMNFP14A1 / PMNFP14A0 PHNFP14A0 / PSNFP14A0 PQNFP00T0
			
Electronic Accessory	Dry Contact, Cool/Heat Selector, Zone Controller, Electronic Thermostat CTI, Low Ambient Kit, Remote Temperature Sensor, PDI, Telecom Shelter Controller		

V-NET

Remote controller



V-NET

Remote controller

Our air conditioning system can be controlled by various types of remote controllers providing general control to unique function.

Remote Controller Line up

Function	PQRCFC0	PQRCUCA0	PQRCUSA0	PQRCVSA0 PQRCVSZ0QW	PQRCUDS0(B,S)	PQWRHDF0
On / Off	✓	✓	✓	✓	✓	✓
Fan speed	✓	✓	✓	✓	✓	✓
Temperature setting	✓	✓	✓	✓	✓	✓
Mode change		✓	✓	✓	✓	✓
Auto swing	✓	✓	✓	✓	✓	
Vane control			✓	✓	✓	
E.S.P function			✓	✓	✓	
Reservation			✓	✓	✓	
Timer Function			✓	✓	✓	✓
Electric failure compensation			✓	✓		
Child lock	✓	✓	✓	✓	✓	

08



Standard Wired Remote Controller

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Deluxe Wired Remote Controller

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Simple Wired Remote Controller

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Wireless Remote Controller

Standard Wired Remote Controller

The standard remote controller can be used by various means.
It can control an indoor units or group of indoor units.

PQRCVSL0 *NEW*
PQRCVSL0QW *NEW*
PVRCUSZ0



PQRCVSL0



PQRCVSL0QW

For Air conditioner FEATURES



PQRCVSL0



PQRCVSL0QW

	PQRCVSL0 / PQRCVSL0QW
Operating mode	On_Off / Fan speed / Mode / Temp.
On / Off LED	✓
Room temp.	✓
Fan / Plasma / Swirl / Heater	✓
Vane control / Auto swing / Fan auto	✓
E.S.P function	✓
Reservation	Weekly / Simple
Timer function	✓
Child lock	✓
Electric failure compensation	Max 3 hours
Wireless remocon receiver	✓
Main/Sub setting of indoor units (For override function)	★
ΔT setting (For Auto Changeover)	MULTI V SYNC II
2 Controllers to 1 indoor units	★
Group and central control at the same time	★
Ventilation mode setting	✓
Rapid ventilation	✓
Power saving ventilation	✓
Size(mm)	120 x 120 x 15
Backlight Unit	★★

★ Applicable for only MULTI V II series (MULTI V PLUS II, MULTI V SYNC II, MULTI V SPACE II , MULTI V MINI & '08 new indoor units)
※ Refer to each model PDB for applicable models.

For *ecoV™* (0 series only) FEATURES



PZRCUSB0

	PZRCUSB0
On / Off LED	✓
Ventilation mode setting	✓
Rapid ventilation	✓
Power saving ventilation	✓
Reservation	Weekly / Simple
Electric failure compensation	Max 2 hours
Child lock	✓
Optional function	Plasma / Heater / Humidifier / Operating air volume

For Syncro – Convertible FEATURES



PVRCUSZ0

	PVRCUSZ0
Operating mode	On_Off / Fan speed / Mode / Temp.
On / Off LED	✓
Room temp.	✓
Fan	✓
Auto swing	✓
Fan auto	•
Reservation	Weekly / Simple
Timer function	✓
Child lock	✓
Electric failure compensation	Max 2 hours

Deluxe Wired Remote Controller

With the future-oriented design more suitable for the high-end interior,
the deluxe wired remote controller makes a perfect match with interior.

PQRCUDS0
PQRCUDS0B
PQRCUDS0S



PQRCUDS0
(White)



PQRCUDS0B
(Blue)



PQRCUDS0S
(Silver)

FEATURES

	PQRCUDS0, PQRCUDS0B, PQRCUDS0S
Operating mode	On_Off / Fan speed / Mode / Temp.
Touch screen / LCD back_light	✓
Room temp	✓
Fan / Plasma / Swirl / Heater	✓
Vane control / Auto swing	✓
E.S.P function	✓
Reservation	Weekly / Simple
Timer function	✓
Child lock	✓

※ Refer to each model PDB for applicable models.

Simple Wired Remote Controller

The simple wired remote controller with handy design is suitable for hotel or office applications because user can control air conditioner easily.

PQRCUCS0C
PQRCFCS0C
PQRNC0



PQRCUCS0C
(Simple)



PQRCFCS0C
(Simple for Hotel)



PQRNC0
(Simple for operation with radiator)

FEATURES

	PQRCUCS0C	PQRCFCS0C	PQRNC0
Operation mode	On_Off / Fan speed / Mode / Temp.	On_Off / Fan speed / Temp.	On_Off / Fan speed / Mode / Temp.
Mode change	Cooling / Heating / Fan	Impossible	Auto change over
Room temp	✓	✓	-
Plasma	✓	✓	✓
Auto swing	✓	✓	✓
Child lock	✓	✓	-
Parts included			 PCB  Case  Cable

※ Refer to each model PDB for applicable models.

COMBINATION



Wireless Remote Controller

The wireless remote controller allows the operation air conditioner from any corner of the room.

PQWRH(C)DF0



PQWRH(C)DF0

FEATURES

	PQWRH(C)DF0
Operating mode	On_Off / Fan speed / Mode / Temp
Room temperature checking	✓
Chaos swing / Jet cool	✓
On_Off timer	✓
Sleep mode auto	✓
Main / Sub setting of indoor units (For override function)	★
ΔT setting (for Auto Changeover)	MULTI V SYNC II

★ Applicable for only MULTI V II series (MULTI V PLUS II, MULTI V SYNC II, MULTI V SPACE II , MULTI V MINI & '08 new indoor units)
※ Refer to each model PDB for applicable models.

MODEL NAME & APPLICABLE MODELS

	Type	CST, SRAC, CVT, Duct, Floor Standing	PAC
PQWRHDF0	H/P	✓	
PQWRCDF0	C/O	✓	

V-NET

Central Controller

Central Controller Line up

Function	PQCSB101S0	PQCSB101S0+ PQCSC101S0	PQCSB101S0+ PQCSD130A0	PQCSW320A0E	PQCPA11A0E PQCPB11A0E	PQCPB11A0E+ PQCSS520A0E
On / Off	✓	✓	✓	✓	✓	✓
Max. no. of indoor units	16	16	16	64(128)	256	4,096
Mode change	✓	✓	✓	✓	✓	✓
Control of each room	✓	✓	✓	✓	✓	✓
Total lock	✓	✓	✓	✓	✓	✓
Error check	LED	LCD display	LCD display	Self-diagnosis	Self-diagnosis	Self-diagnosis
Fan speed / Temperature control		✓	✓	✓	✓	✓
Schedule			Weekly	Weekly / Yearly	Weekly / Yearly	Weekly / Yearly
Ventilation control				✓	✓	✓
PDI Monitoring					✓	✓
Web access				✓	✓	✓
Set temp. range restriction				✓		✓
Auto Changeover				✓		✓
Temperature limit control				✓		✓
Histoy				✓		✓
Interlocking function						✓
Multi language				✓		✓



V-NET

Central Controller

The central controller offers more comfortable and convenient life by automatic control such as cooling, heating, ventilating, monitoring, scheduling, peak control, etc.

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Simple Central Controller

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Function Controller & Scheduler

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AC Smart II, Option Kit & 128 Unit Expansion Kit

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ACP & AC Manager

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BNU(LONWORKS®)

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BNU(BACnet)

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AHU Control kit & EEV kit

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AHU Kit
[Control /Expansion Kit]

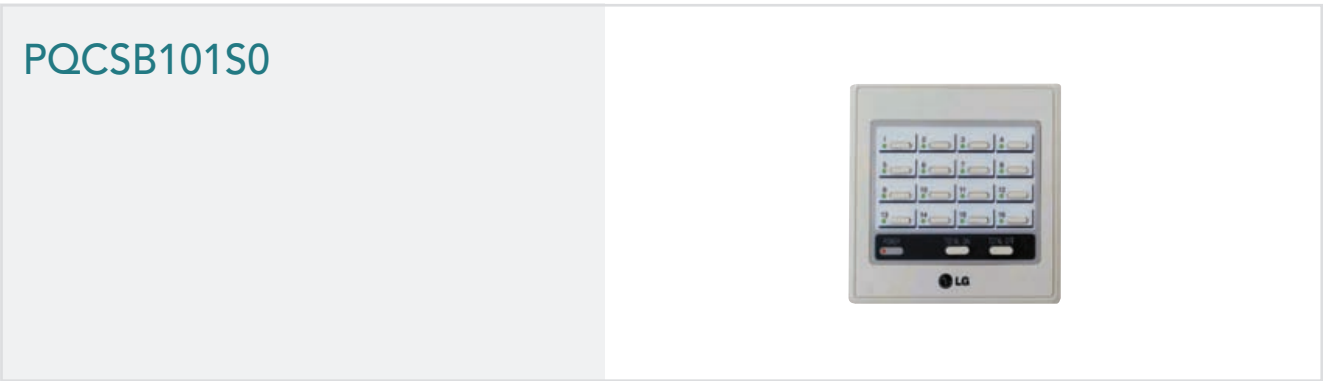
28



PI 485 / DO Kit

Simple Central Controller

Simple and easy central control for 16 indoor units is made by this controller, a distinctive product.

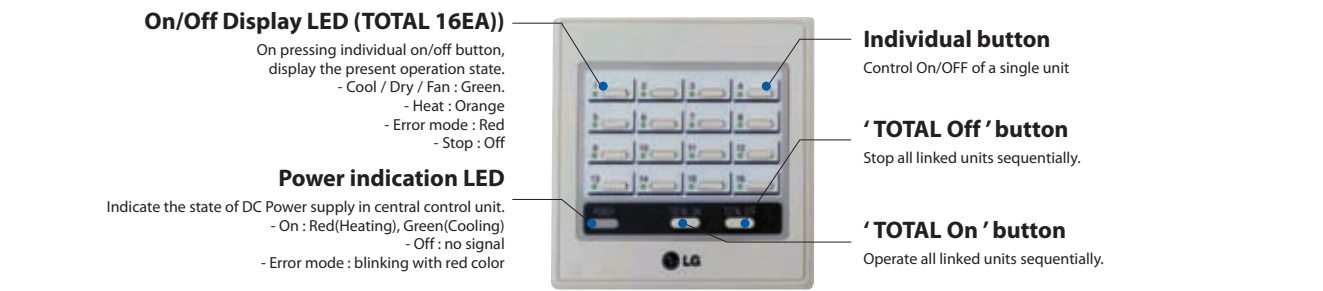


For LGAP applied models

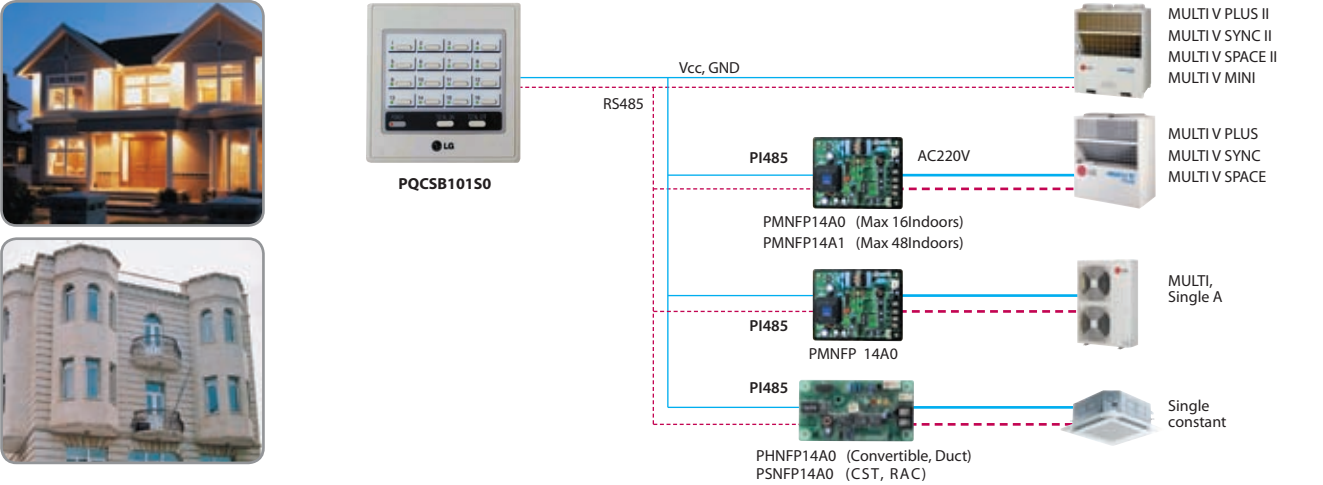
FEATURES

	PQCSB101S0
Max. no. of indoor units	16 indoor units
Individual control	On_Off control
Lock function	Total / Individual
Mode change	Cooling / Heating
Malfunction indicator	LED lamp
Dimension(mm)	120x120x20
Power(V)	DC 10V

NAME AND DESCRIPTION OF THE SYSTEM



COMBINATION



※ No need of PI 485, when use MULTI V II series outdoor with '08 new indoor units.

Function Controller & Scheduler

Apart from on/off control, operation mode, fan speed, schedule, additional functions can be displayed and easily controlled.



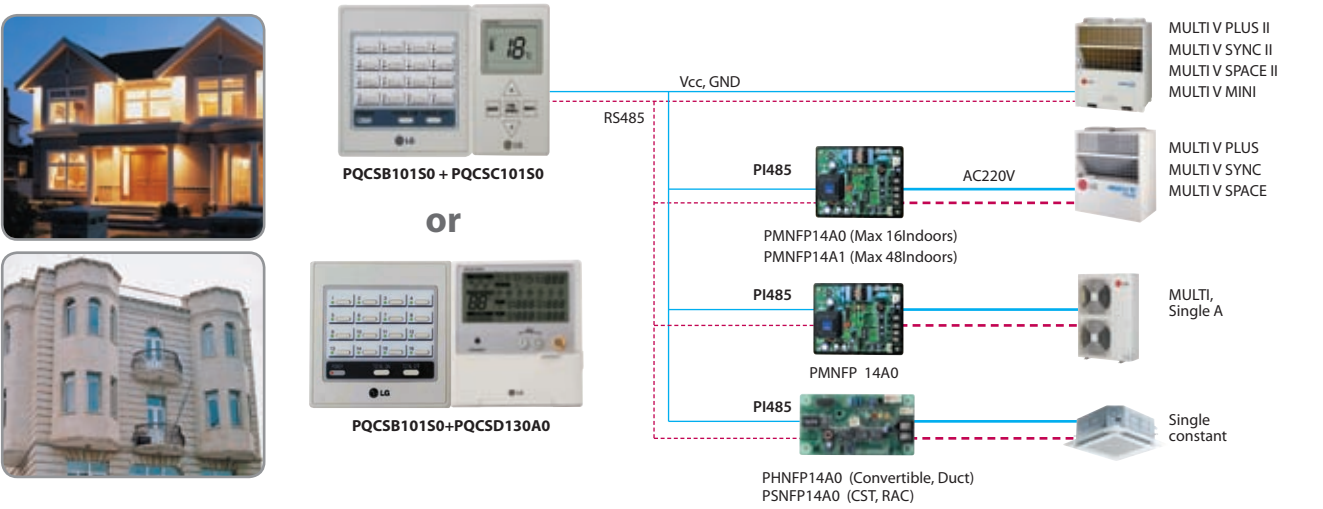
For LGAP applied models

FEATURES

	PQCSB101S0+PQCSC101S0	PQCSB101S0+PQCSD130A0
Max. no. of indoor units	16 indoor units	16 indoor units
Individual control	On_Off / Fan speed / Mode / Temp.	On_Off / Fan speed / Mode / Temp.
Lock function	Total / Individual	Total / Individual
Mode change	Cooling / Heating / Fan	Cooling / Heating / Fan
Malfunction indicator	Error display on LCD	Error display on LCD
Schedule	-	Weekly
Dimension(mm)	(120x120x20)+(70x120x14)	(120x120x20)+(120x133x20)
Power(V)	DC 10V	DC 10V

※ 1 function controller or scheduler can be combined with 8 simple central controllers.

COMBINATION



※ No need of PI 485, when use MULTI V II series outdoor with '08 new indoor units.

AC Smart II, Option Kit & 128 Unit Expansion Kit

For the mid sized buildings up to 64 or 128 indoor units can be controlled and monitored by touch screen central controller. It's possible to control and monitor the air conditioning system through web access, anywhere with PC.

AC Smart II :

PQCSW320A1E

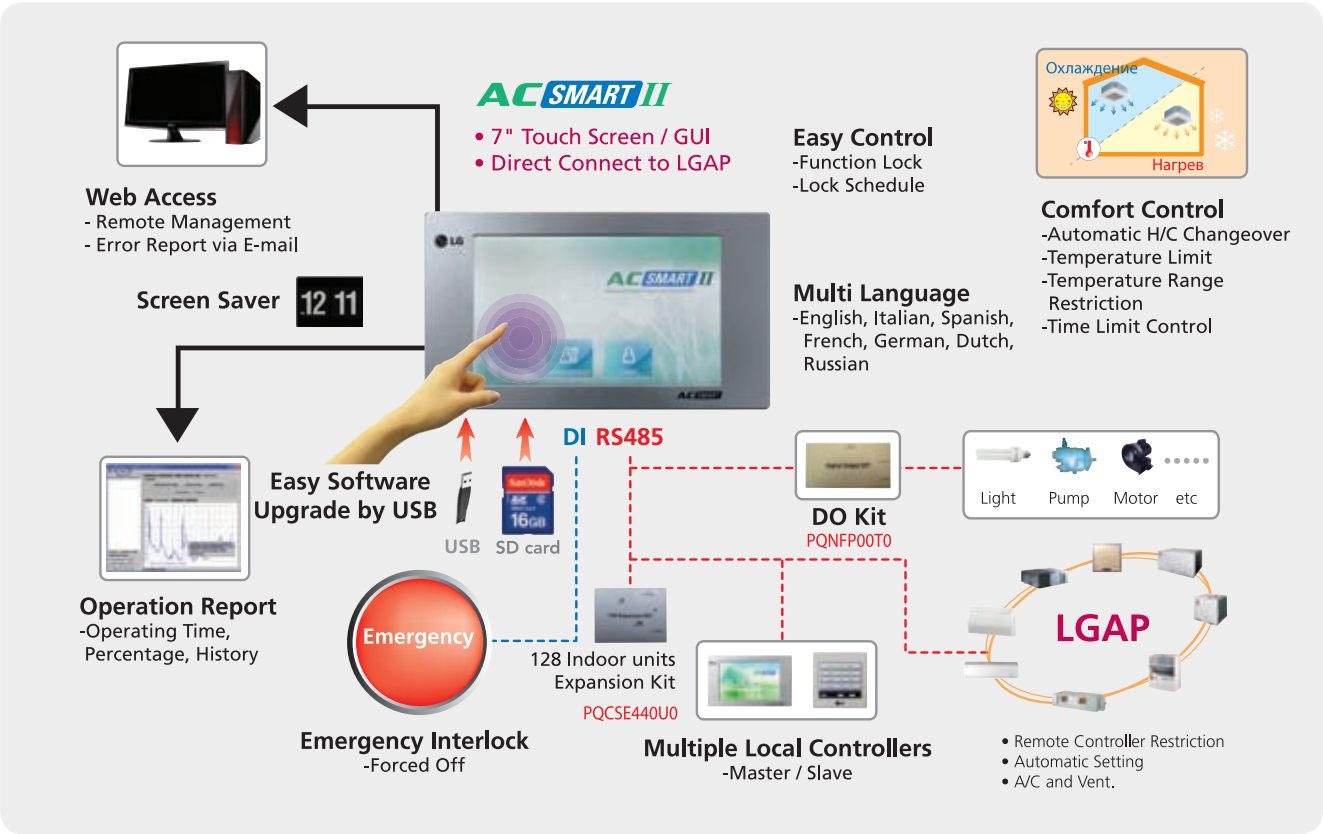
Option Kit :

PQCSE341A0

PQCSE342A0



For LGAP applied models



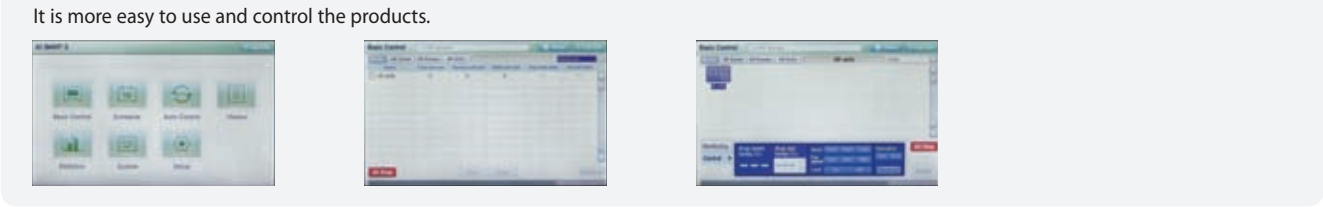
FEATURES

Schedule Wizard Function

Schedule pattern wizard is the process of configuring the operation of the unit in weekly or daily pattern. The pattern created through the schedule pattern wizard can be applied to the Group as a schedule through schedule wizard to be described in the next section.

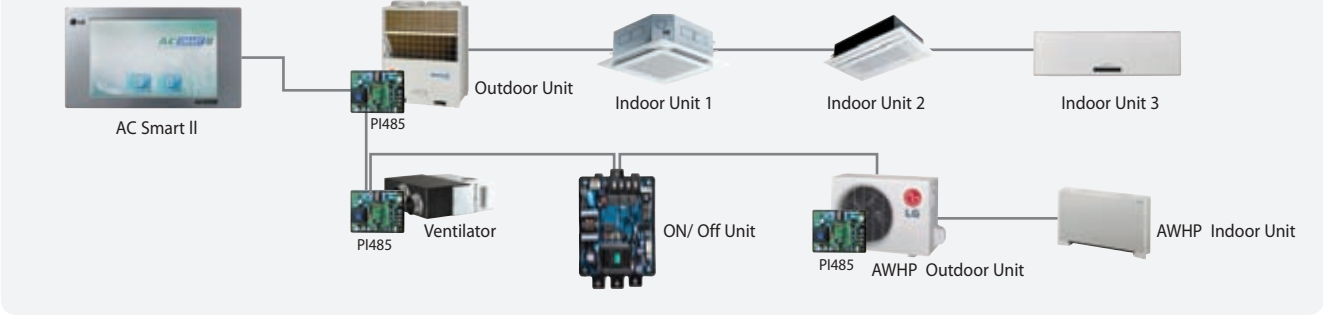


New GUI



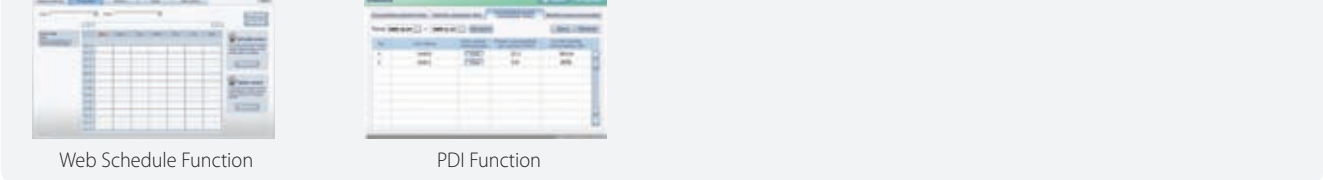
AWHP / DX-HRV unit control

It is possible to control the unit (Indoor unit, ventilator, On/Off, AWHP, DX-HRV) and register the units.



Option Kit control

AC Smart II additionally provides various convenient option functions for the users to sue. (You must purchase Option Kit separately.)



AC Smart II option Kit Model name : PQCSE341A0 / PQCSE342A0

Description

AC Smart II additionally provides various convenient option functions for the users to sue. These additional functions are provided in SD card format. When the user inserts the SD card to the main unit of the AC Smart II, the option function can be activated and used.

Option Function

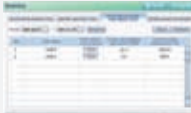
- Web schedule + Power consumption statistics function (PQCSE342A0)
- Web schedule function (PQCSE341A0)

Web based schedule setting function

By using the web server function of AC SMART II, you can set and apply the schedule of AC SMART II even from remote locations. The administrator can manage the schedule of AC SMART II through the network free from where he or she is and reduce any unnecessary operations of the unit by using the schedule functions.

Power consumption statistics function

You can view the power consumption information of the air conditioner. The power consumption is provided in various methods including total usage, usage by period, monthly/daily usage etc. By using the statistics information, the administrator can effectively analyze and manage the energy usage. To use the power consumption statistics function, the PDI and watt-meter to measure the power consumption must be connected to AC SMART II.



ACP

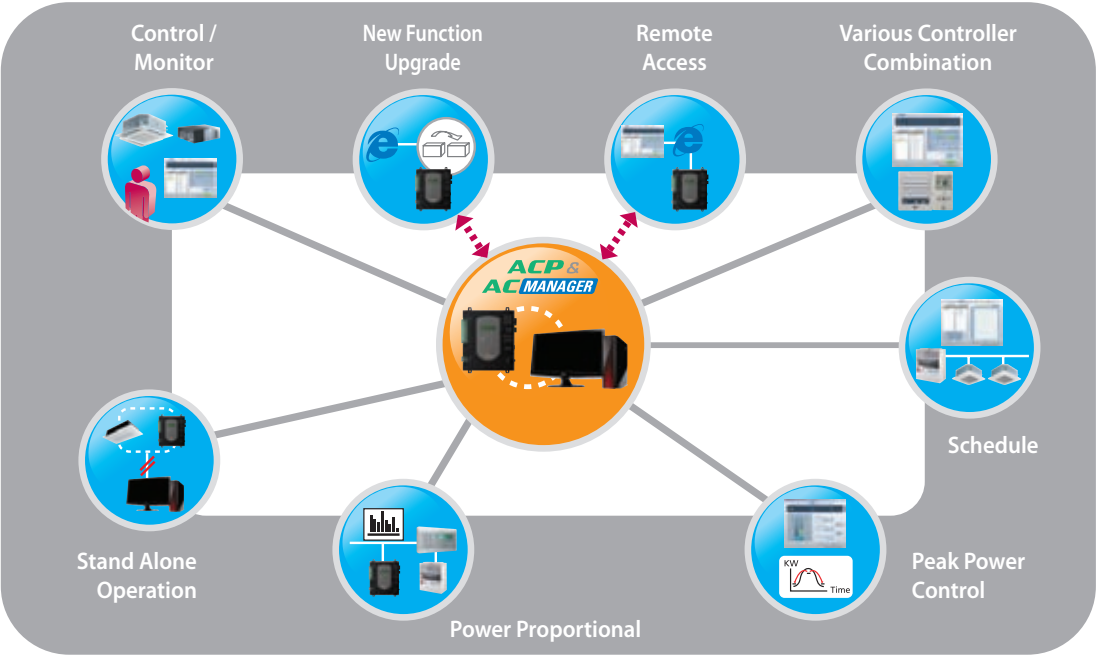
Through embedded web control function in ACP one can control and monitor various functions of air-conditioner such as temperature setting, schedule, peak power control, etc.

PQCPA11A1E (Without IO)
PQCPB11A1E (With IO)



For LGAP applied models

ACP



FEATURES

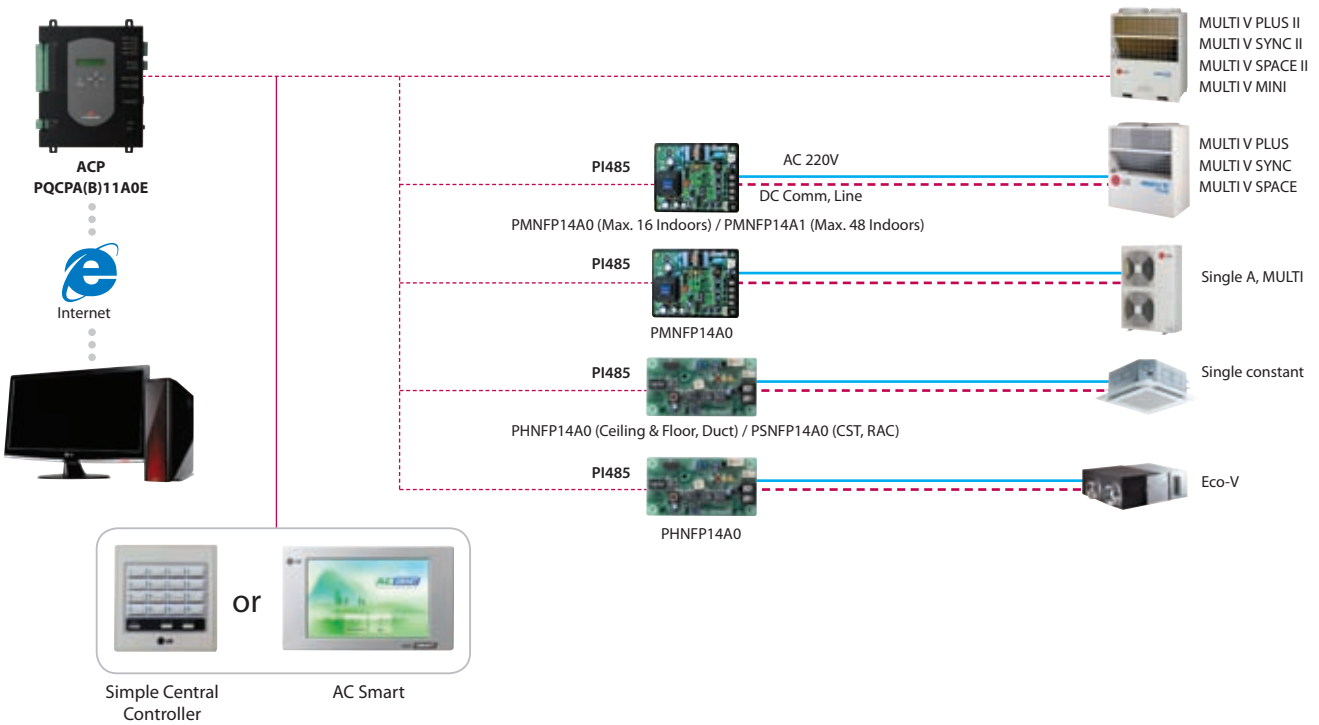
	PQCPA(B)11A1E
Max.no. of indoor units	256 indoor units
Control / Monitoring	✓
Schedule management	✓
Lock function	Temperature
Temperature range restriction	✓
Temperature limit function	-
Auto Changeover function	-
History function	Monitoring
Peak control	✓
PDI monitoring	Need of PDI
Interlocking function	-
Printing function	-
Auto Address Setting Function	✓
Statistics function	✓
Time limit function	✓
DX-HRV Control	✓
Peak Priority funtion	✓
Cycle Data Monitoring	✓

Improve function

1. Improved Web GUI
 2. Improved Peak/Demand function (Priority control, Sequence control)
 3. Convenient Schedule setting (Table based -> Event based)
 4. Cycle Data Display (by Outdoor Unit)
 5. Compatible with Eco V and DX-HRV
 6. Auto Address Searching
 7. Temperature Range Setting
8. Compatible with V-Net TMS (Monitoring and Emergency Control)
 9. Compatible with AC manager II
 10. Operation Time Calculation
 11. Compatible with AHU(Schedule) - only with ACManager
 12. Database Backup
 13. Time Limit Control

COMBINATION

ACP



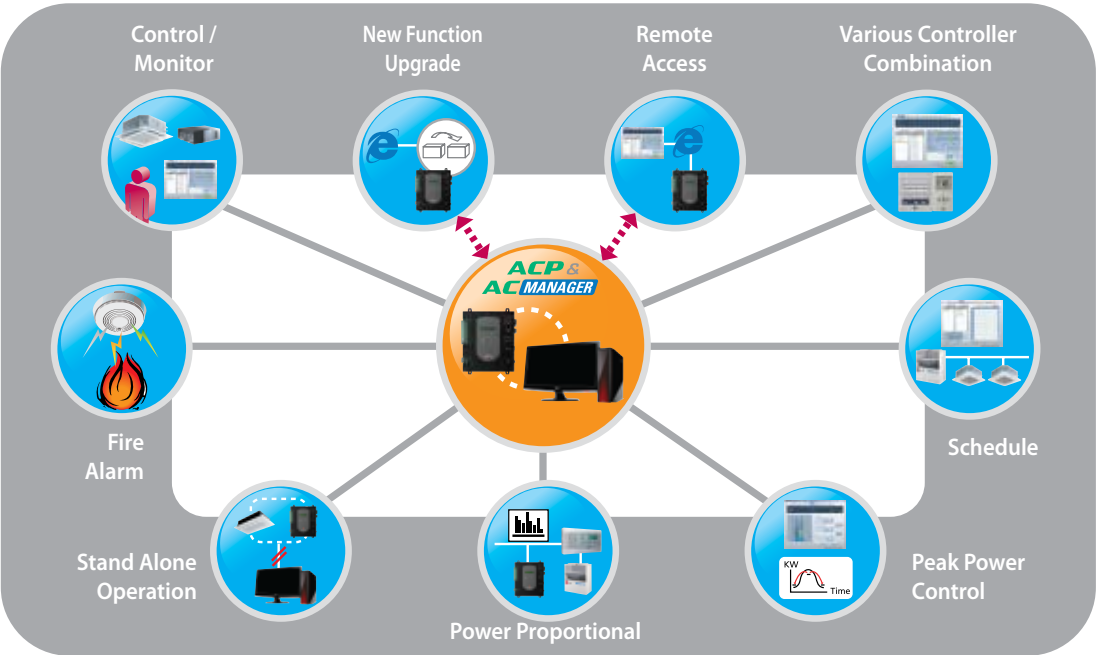
AC Manager

Through embedded web control function in ACP one can control and monitor various functions of air-conditioner such as temperature setting, schedule, peak power control, etc.



For LGAP applied models

ACP & AC MANAGER

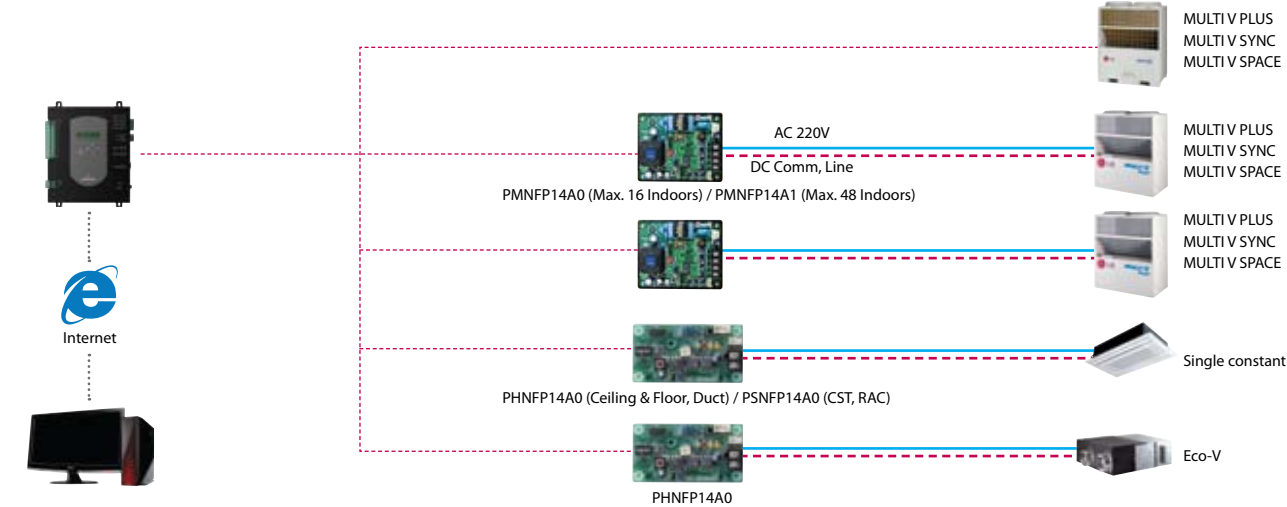


FEATURES

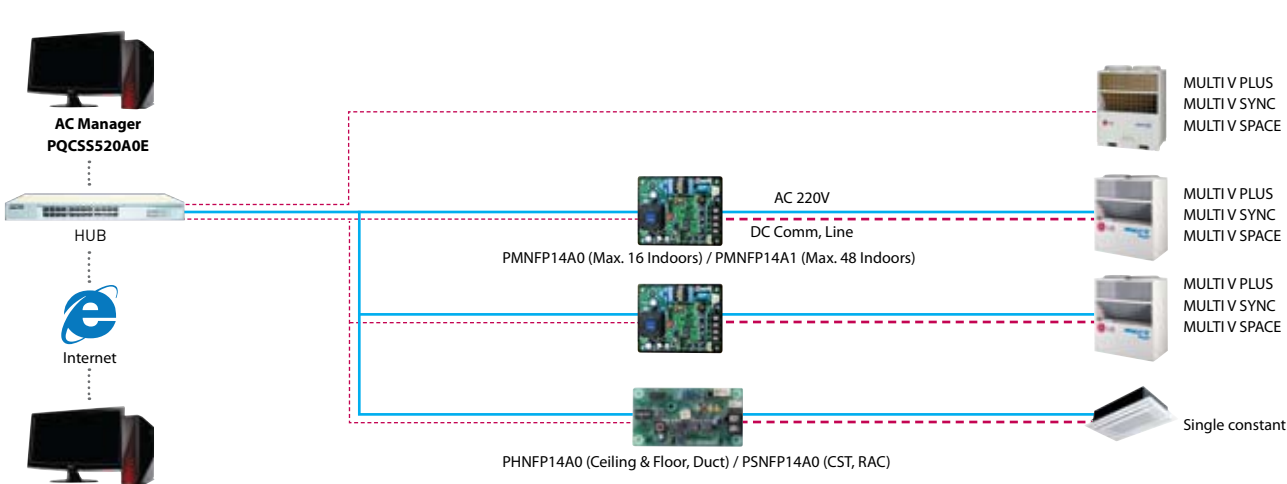
	PQCPA(B)11A1E+PQCSS520A0E
Max.no. of indoor units	4,096 indoor units(16 ACP)
Control / Monitoring	✓
Schedule management	✓
Lock function	Mode/Temp/Fan speed/Total
Temperature range restriction	✓
Temperature limit function	✓
Auto Changeover function	✓
History function	Monitoring & Error history
Peak control	✓
PDI monitoring	Need of PDI
Printing function	✓
Statistics function	✓
Time limit function	✓
DX-HRV Control	-
Peak Priority function	-
Cycle Data Monitoring	-
Interlocking function	Only PQCPB11A0E
AHU Control Function	-
AWHP	-
DO Kit	-

COMBINATION

► AC MANAGER (Installation Without AC Manager)



► AC MANAGER (Installation With AC Manager)



ACP & AC MANAGER APPLICATION

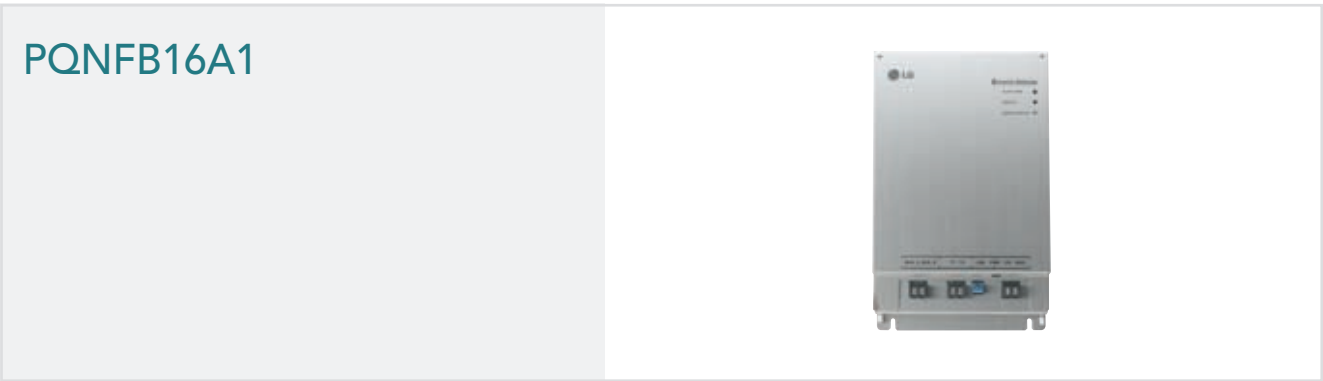


BNU-LW Gateway

(Building Network Unit- LONWORKS®)

Easy interface between BMS and LG Air-conditioner

- Independence of BMS under the standard BMS
- Operation system based on LNS(LONWORKS® Network Service)



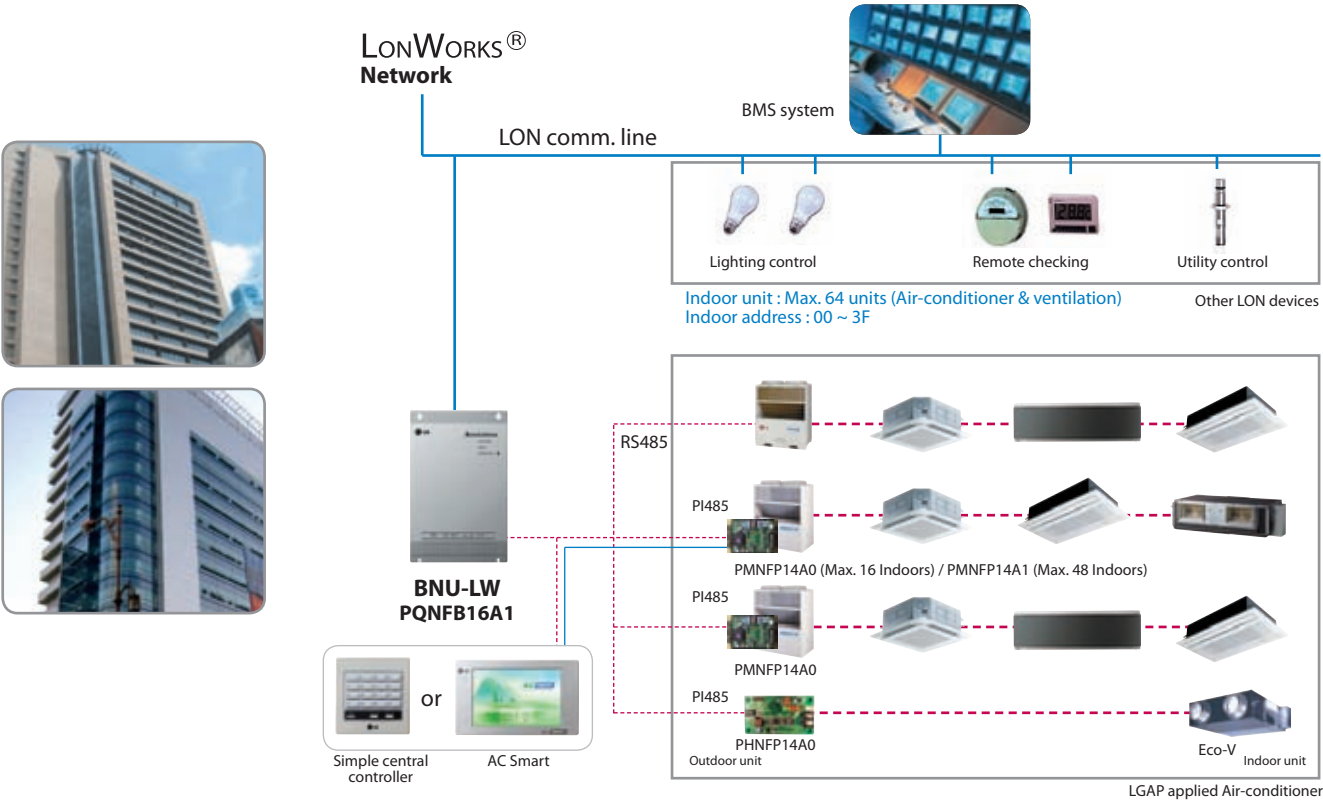
For LGAP applied models

FEATURES

- Connection to LONWORKS® using LONTALK protocol and LG Air-conditioner protocol
- Process ability
 - 64 units(including indoors and ventilators)
 - Valid address for each unit : 0x00 ~ 0x3F
- Self installation verification function using internet (Web server included)
 - Setting gateway
 - Diagnosis of communication status on LG Air-conditioner network
- Connection to remote total management system (LG system)

Controlling	Monitoring items
On/Off command	On/Off status report
Operation mode setting	Operation mode status report
Fan Speed setting	Fan Speed status report
Lock setting	Lock status report
Air flow setting	Air flow status report
Set temp. setting	Set temp. status report
User mode setting (for only ventilator)	Current Space temp. status report
	Error status report
	User mode status report (for only ventilator)

COMBINATION



BNU-BN Gateway

(Building Network Unit- BACnet)

Easy interface between BMS and LG Air-conditioner

- Independence of BMS under the standard BMS.
- Operation system based on BACnet Service.



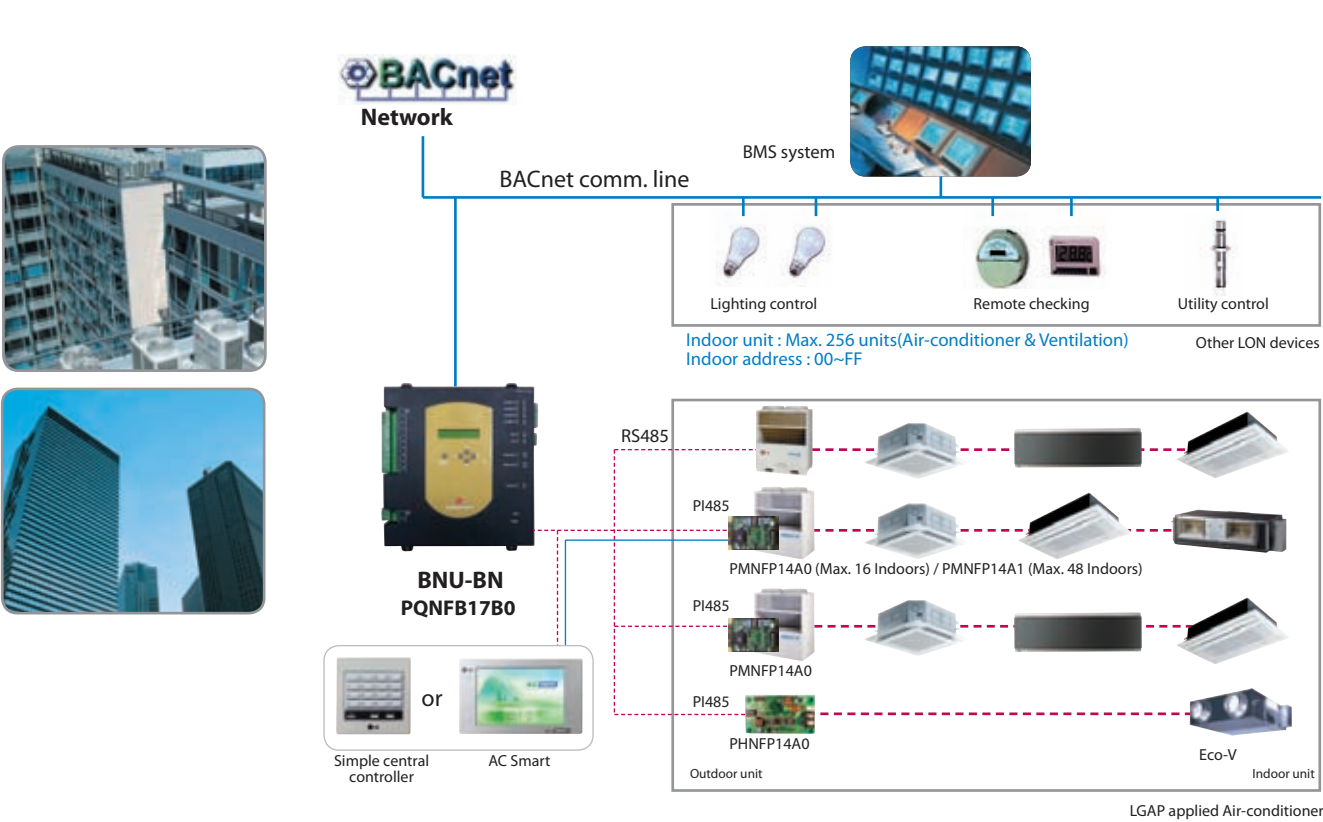
For LGAP applied models

FEATURES

- Through embedded web control function in BACnet one can access the airconditioner and external devices through internet.
- It can control 256 indoor units. (A/C or Ventilator)
- External devices such as fire alarm, motion detector can be connected to gateway and their function can be interlinked with airconditioner operation.

Controlling	Monitoring items
On/Off command	On/Off status report
Operation mode setting	Operation mode status report
Fan Speed setting	Fan Speed status report
Lock setting	Lock status report
Air flow setting	Air flow status report
Set temp. setting	Set temp. status report
User mode setting (for only ventilator)	Current Space temp. status report
	Error status report
	User mode status report (for only ventilator)

COMBINATION



AHU Control kit

To connect air handling unit for mid & large space and supply fresh air.
Connectable capacity is from 18 kbtu/h ~60kbtu/h.

PUCKA0

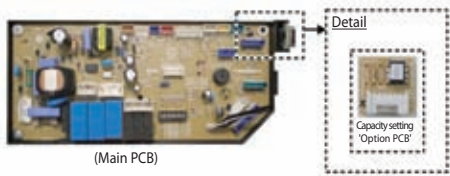


SPECIFICATION

	Model Name	Weight(kg)		Dimension(mm)			POWER
		NET	Gross	W	H	D	
Control Kit	PRCKA0	2.5	4	280	135	280	220~240V, 50/60Hz, 1Ph

SELECTION OF EVAPORATOR

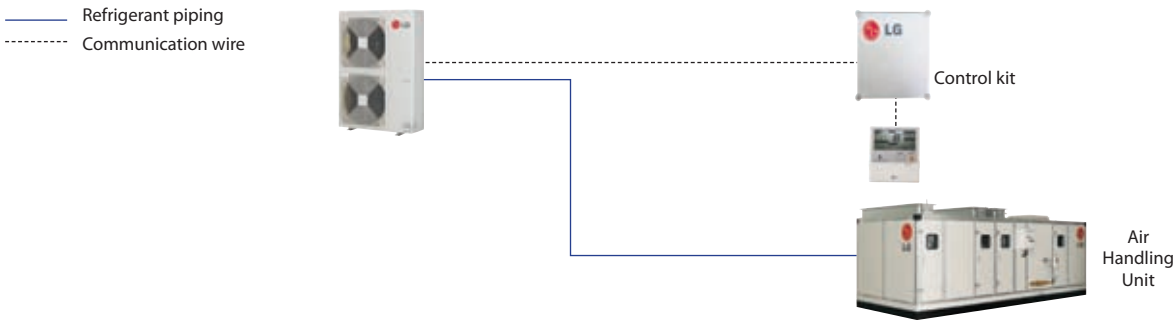
- When selecting evaporator, Change 'Option PCB' in Control kit according to below table
(Basic 'Option PCB' is for 24k Btu/h)



option PCB P/No	Capacity (Btu/h)	Allowed heat exchanger Volume (dm³)	Allowed heat exchanger capacity (kW)	Air flow rate (CMM)	outdoor Unit Model Name
EBR65102902	18K	0.76~0.94	5~6	18~21	AUUh186D / AUUW186D
EBR65102903	24K	0.88~1.08	6~7	20~23	AUUh246D / AUUW246D
EBR65102904	30K	0.88~1.08	7~9	22~26	AUUh306D / AUUh306D / AUUW306D2
EBR65102905	36K	0.88~1.08	9~11	25~32	AUUh366D / AUUh368D / AUUW366D / AUUW368D
EBR65102906	42K	0.88~1.08	11~13	31~35	AUUh426D / AUUW428D
EBR65102907	48K	1.23~1.51	13~16	33~45	AUUh488D / AUUW486D / AUUW488D
EBR65102908	60K	1.93~2.35	20~24	42~55	AUUh608D / AUUW606D / AUUW608D

* Saturated Suction Temperature (SST) = 6°C, SH (Superheat)=5k, Air Temperature = 27°C DB / 19°C WB

WIRING DIAGRAM



AHU Control kit & EEV kit

To connect air handling unit for mid & large space and supply fresh air.
Connectable capacity is from 28 kbtu/h ~96kbtu/h.

PRCKA0
PRLK048A0



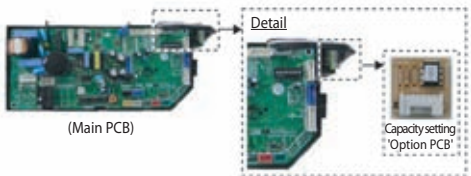
SPECIFICATION

	Model Name	Weight(kg)		Dimension(mm)			POWER
		NET	Gross	W	H	D	
Control Kit	PRCKA0	2.2	3.6	280	135	280	220~240V, 50/60Hz, 1Ph
EEV Kit	PRLK048A0	3.1	3.6	404	83	217	

SELECTION OF EVAPORATOR

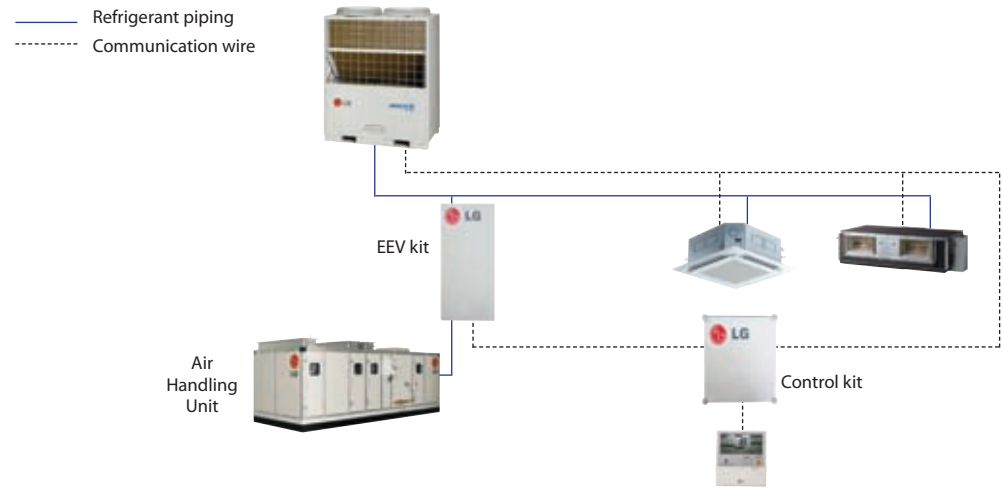
- When selecting evaporator, Change 'Option PCB' in Control kit according to below table
(Basic 'Option PCB' is for 36k Btu/h)

Option PCB P/No	Capacity (Btu/h)	Allowed heat exchanger Volume (dm³)	Allowed heat exchanger capacity (kW)	Air flow rate (CMM)
EBR52358907	28k	0.88~1.08	7~9	22 ~ 26
EBR52358908	36k	0.88~1.08	9~11	25~32
EBR52358909	42k	0.88~1.08	11~13	31~35
EBR52358910	48k	1.23~1.51	13~16	33~45
EBR52358911	76k	1.93~2.35	20~24	50~64
EBR52358912	96k	1.93~2.35	25~31	64~72



Saturated Suction Temperature (SST) = 6°C, SH (Superheat) = 5K, Air Temperature = 27°C DB / 19°C WB.

WIRING DIAGRAM



AHU Kit [Control Kit]

AHU have functions like cooling, heating, humidification, Air cleaning &ventilation ; providing Multi-solution to the consumer.

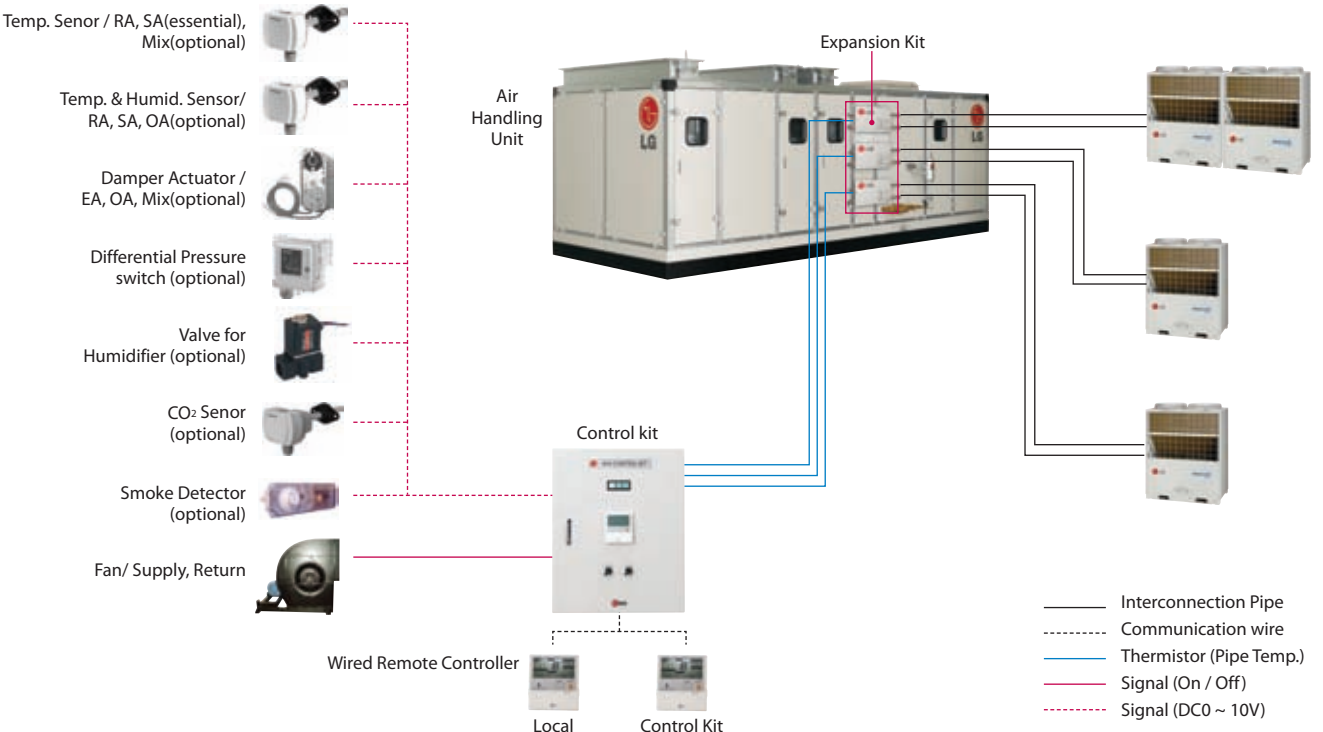
PRCKD20E
PRCKD40E



SPECIFICATION

	Model Name	Weight(kg)		Dimension(mm)			POWER	Model Feature	
		NET	Gross	W	H	D			
Control Kit	PRCKD20E	43.5	48	600	750	285	220~240V, 50/ 60Hz, 1Ph	• AHU Controller • ODU Comm. PCB • Sensor Power Supply	1~4 Set ODU Combine
	PRCKD40E								5~8 Set ODU Combine

1.4 SYSTEM LAYOUT



AHU Kit [Expansion Kit]

AHU have functions like cooling, heating, humidification, Air cleaning &ventilation ; providing Multi-solution to the consumer.

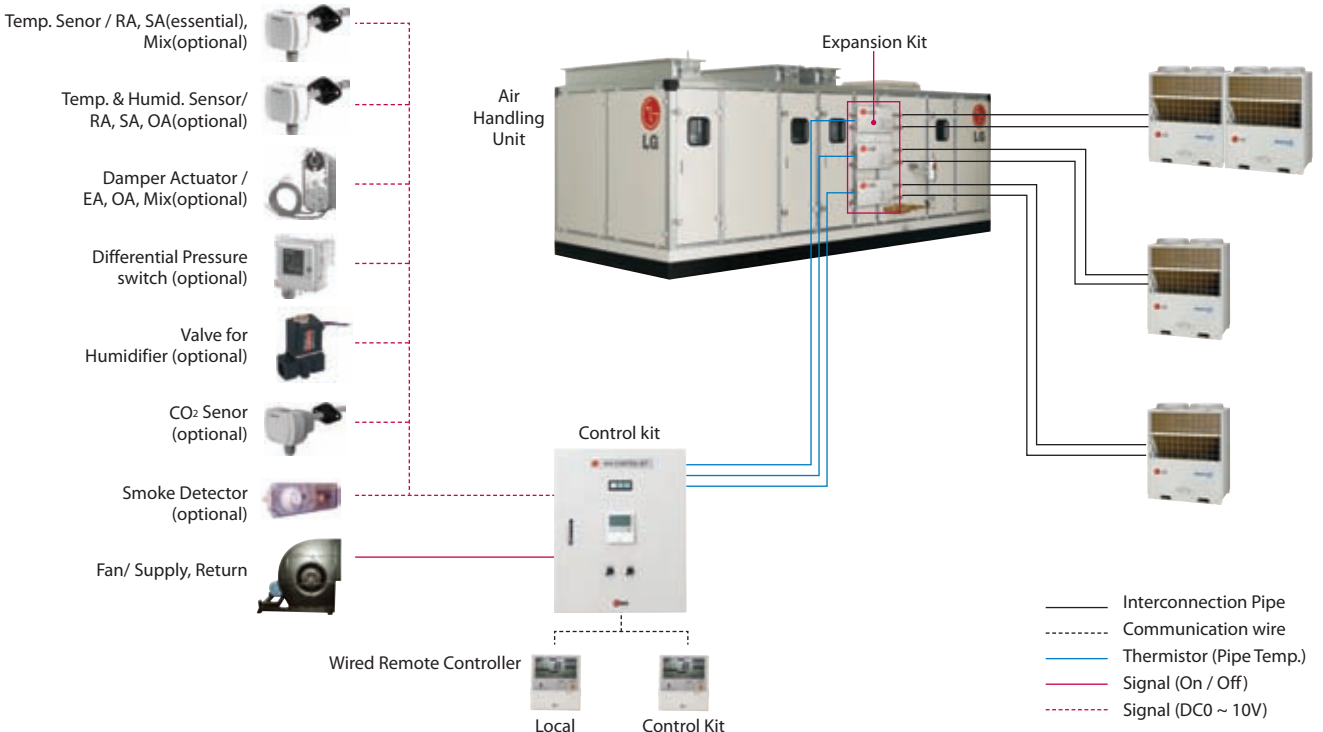
PATX13A0E
PATX20A0E
PATX25A0E
PATX35A0E



SPECIFICATION

	Model Name	Weight(kg)		Dimension(mm)			Model Feature
		NET	Gross	W	H	D	
Expansion Kit	PATX13A0E	5.6	6.9	238	169	491	• ODU Capacity : 8~16HP
	PATX20A0E	5.8	7.1				• ODU Capacity : 18~26HP
	PATX25A0E	6.0	7.3				• ODU Capacity : 28~36HP
	PATX35A0E	6.2	7.5				• ODU Capacity : 38~42HP

1.4 SYSTEM LAYOUT



PI 485

PI 485 convert the protocol of air conditioner to the RS 485 protocol for central controller.

PMNFP14A1 / PMNFP14A0
PHNFP14A0 / PSNFP14A0



PI-485 LINE-UP



- Model name : PMNFP14A0
- Power : Single phase AC 220V 50/60Hz
- Max. no of the indoor units that can be connected : 16 units
- Model applied : MULTI V, MULTI, Single A



- Model name : PMNFP14A1
- Power : Single phase AC 220V 50/60Hz
- Max. no of the indoor units that can be connected : 48 units
- Model applied : MULTI V



- Model name : PHNFP14A0
- Power : Connected with the indoor units
- Max. no of the indoor units that can be connected : 1 units
- Model applied : Single (Duct, CVT) , Eco V



- Model name : PSNFP14A0
- Power : Connected with the indoor units
- Max. no of the indoor units that can be connected : 1 units
- Model applied : Single (RAC, PAC, CST)

※ MULTI V II Series don't need any other PI 485 because MULTI V II series have PI 485 in its outdoor unit PCB.

(MULTI V PLUS, MULTI V SYNC, MULTI V SPACE, MULTI V MINI)

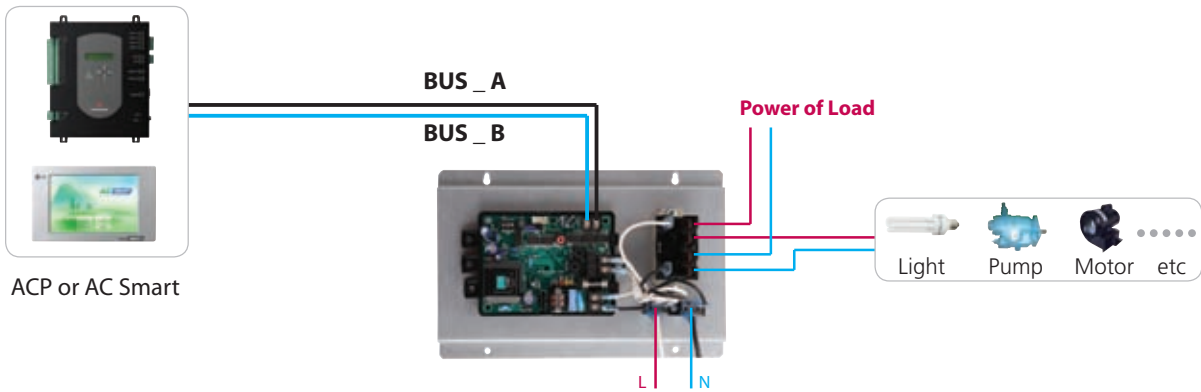
DO Kit

Do Kit is connected between ACP (AC Smart) and external devices.
So ACP(AC Smart) can start and stop external devices such as light, pump, motor, etc.

PQNFP00T0



WIRING DIAGRAM



V-NET

Electronic Accessory



V-NET

Electronic Accessory

A wide range of electronic accessories help to use our air conditioning system more conveniently.

32



PDI

34



Dry Contact

35



Cool/Heat Selector

36



Remote Temperature
Sensor

37



Zone Controller

38



Electronic
Thermostat

39



CTI

40



Low Ambient Kit

41



Telecom Shelter
Controller

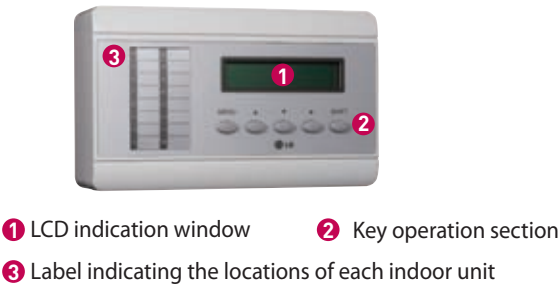
PDI

For the multi indoor units connected to an outdoor unit, the individual unit's and total system power consumption can be displayed on the device. This system can also be connected to a remote metering system.



POWER INDICATOR OVERVIEW

- This device displays the power consumed for each indoor air conditioner unit that shares an outdoor unit.
- The power consumed by each indoor unit connected with the joint power line is indicated on the device.
- The information of the power distributed can be sent on a real-time basis through the remote metering system.



FEATURES

- Accumulated total power consumption indicated
- Accumulated/Current power consumption of each indoor unit indicated.
- Accumulated power consumption by month indicated
- Max. connectable no. of indoor units : 64 indoor units
- 1 PDI per 1 outdoor unit
- Power failure-proof function : Data back up on EEPROM even if power turns off
- Connectable to PC based central controller
- Simple connection with the remote metering system (RS485 approach)
- Power distribution indication formula

Power used per room

=

Total power consumed for an external unit

×

weight by room total weight

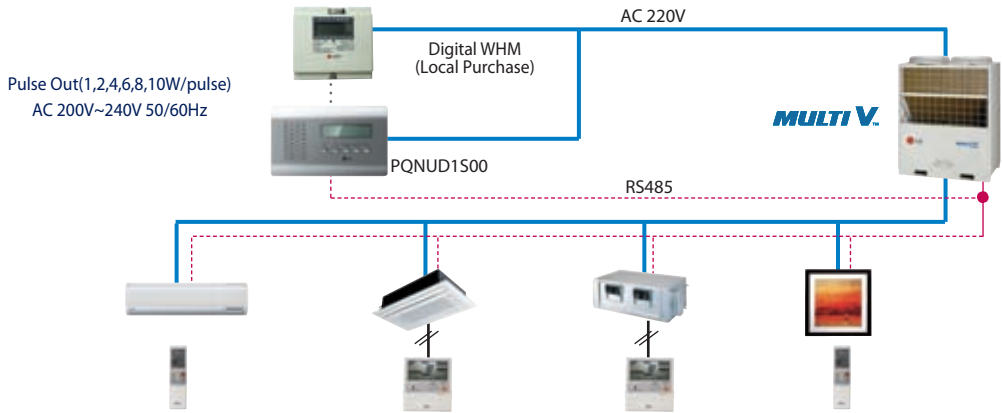
* Weight by room: Weight calculated based on the temperature set by room, mode and operating time.

COMBINATION

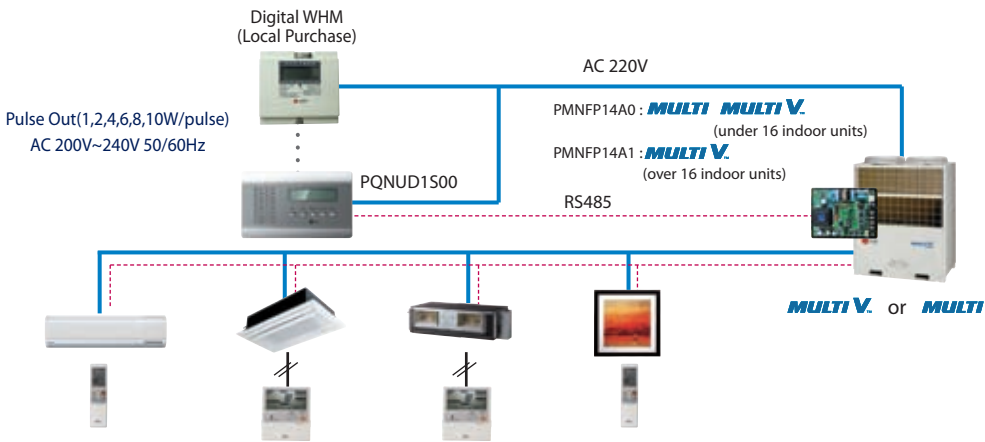
[Installation without Central controller]

► **MULTI V™**
(under 16 indoor units)

* In the case of **MULTI V™ SERIES** , don't need PI-485
(**MULTI V™ PLUS** , **MULTI V™ SYNC** , **MULTI V™ SPACE** , **MULTI V™ MINI**)

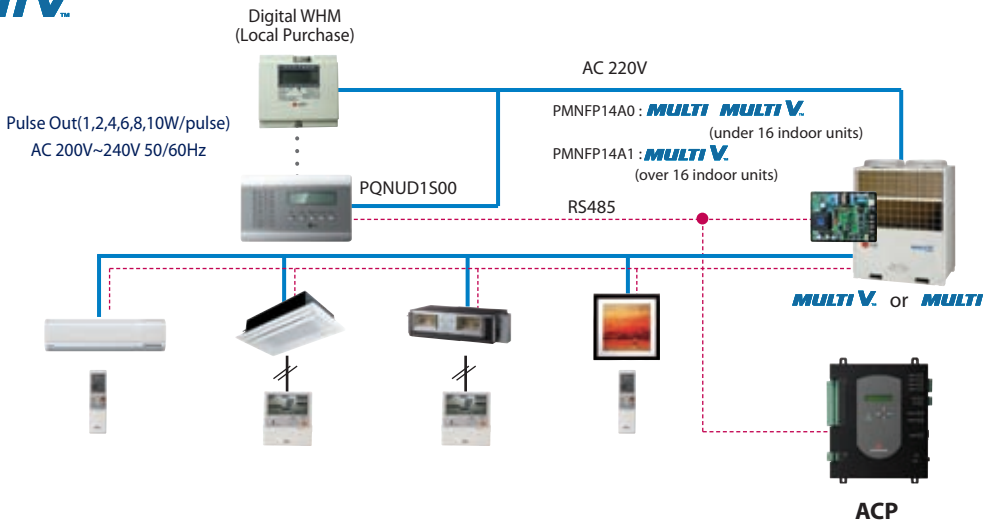


► **MULTI , MULTI V™**
(Over 16 Indoor units)



[Installation withCentral controller]

► **MULTI , MULTI V™**



Dry Contact

It is connected between indoor units and external device, so it can be used for various purpose

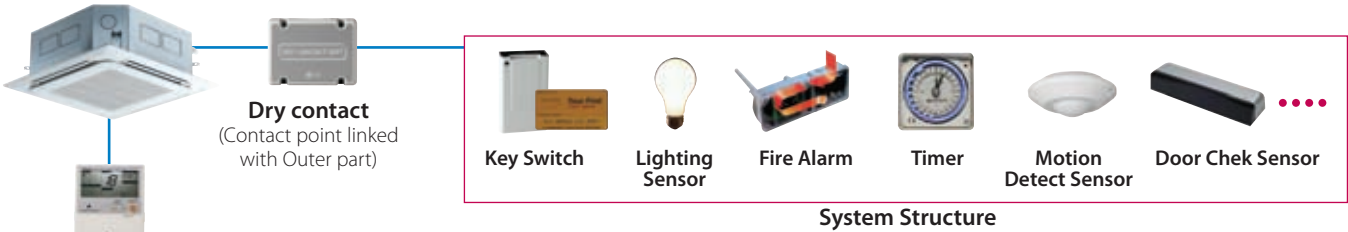
PQDSA(1)
PQDSB(1)
PQDSBC



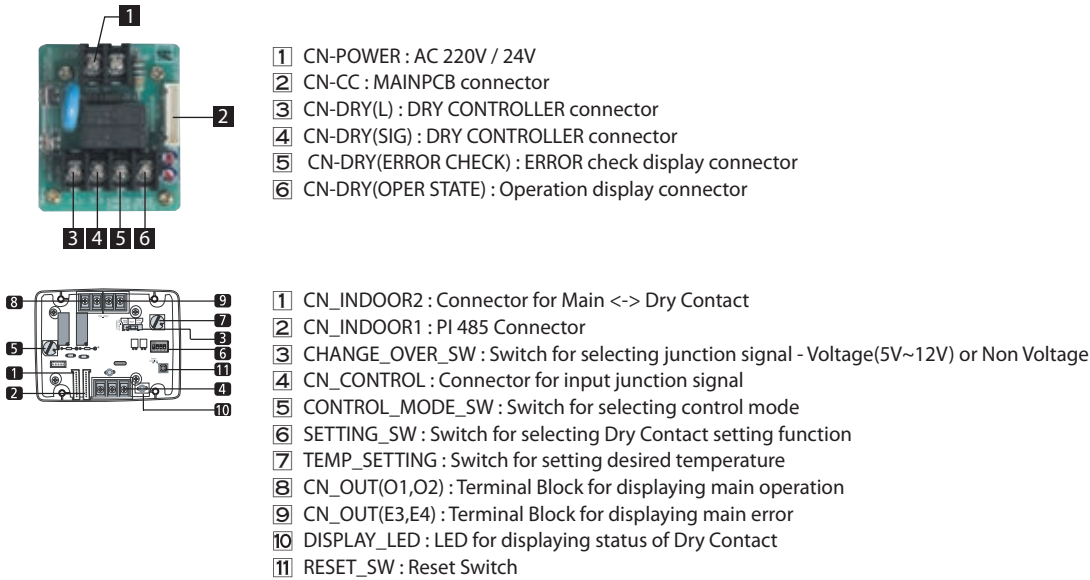
FEATURES

	PQDSA/ PQDSB	PQDSA1/ PQDSB1	PQDSBC
Contact point	1 Control point	1 Control point	2 Control points
Power input	AC 220V from outside power source	AC 24V from outside power source	DC 5V&12V from indoor unit PCB
Voltage / Non voltage input	-	-	✓
On_Off control	✓	✓	✓
Lock / Unlock	-	-	✓
Fan speed setting	-	-	✓
Thermo off	-	-	✓
Energy saving	-	-	✓
Temperature setting	-	-	✓
Error monitoring	✓	✓	✓
Operation monitoring	✓	✓	✓

※ Refer to each model PDB for applicable models.
※ With case model : PQDSB(1), PQDSBC Without case model : PQDSA(1)



PARTS DESCRIPTION



Cool/Heat Selector

This switch enables selection of heating, cooling or fan mode. So it can prevent that cooling & heating mixing error occurs during the change of season.

PRDSBM



FEATURES

- Indoor unit control without central controller
- Select operation mode : Cooling, Heating, Fan mode
- Mode lock for cooling & heating mixing error-proof during the change of season.

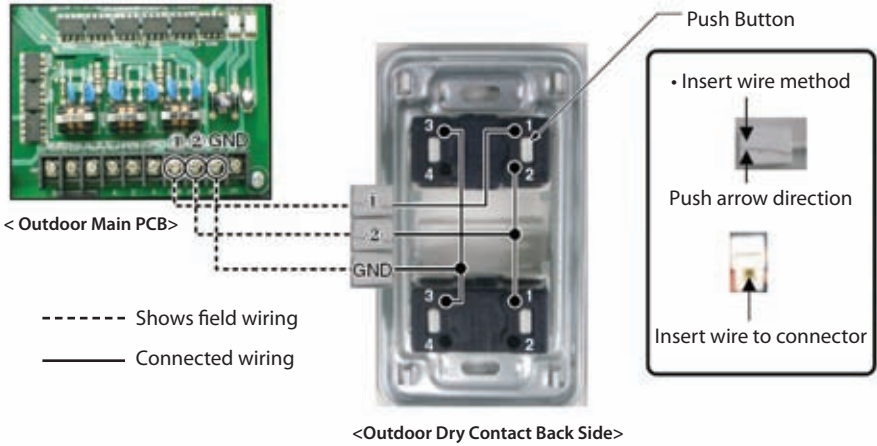


MODELS APPLIED



WIRING DIAGRAM

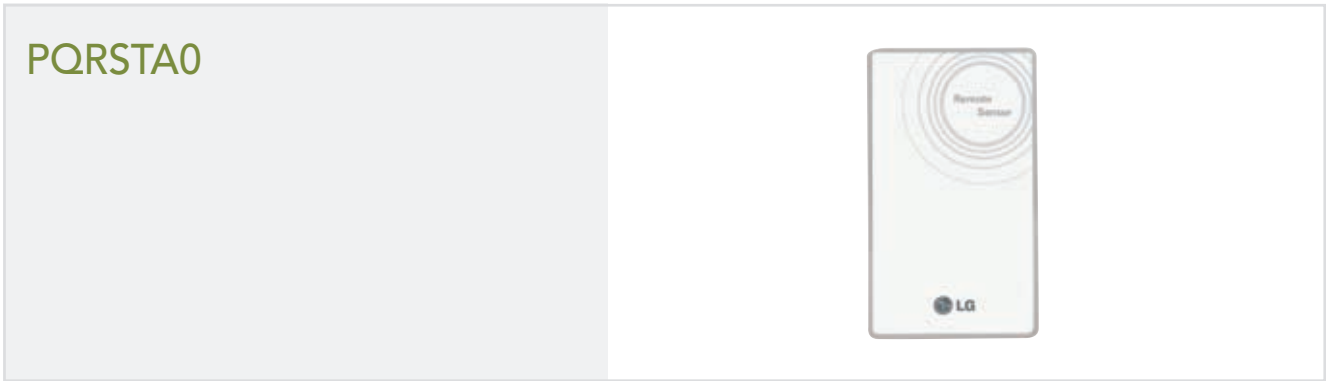
- Connect terminals (①, ②, GND) on the back side of the outdoor dry contact to terminals (①, ②, GND) of outdoor as show below.



※ Communication line length can be maximum 300m, use communication line as thick as 1.25mm².

Remote Temperature Sensor

Sensor for detecting the room temperature.



FEATURES

- It can help to detect the exact room temperature at the optimal position.

MODELS APLLIED

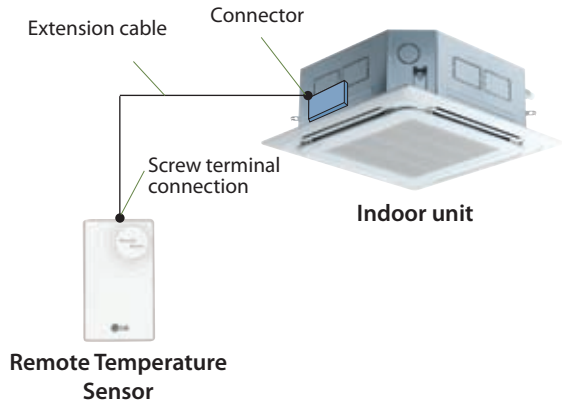
- Ceiling cassette type
- Ceiling concealed duct type

PARTS INCLUDED

- Remote temperature sensor
- Extension cable (15m)
- Manual

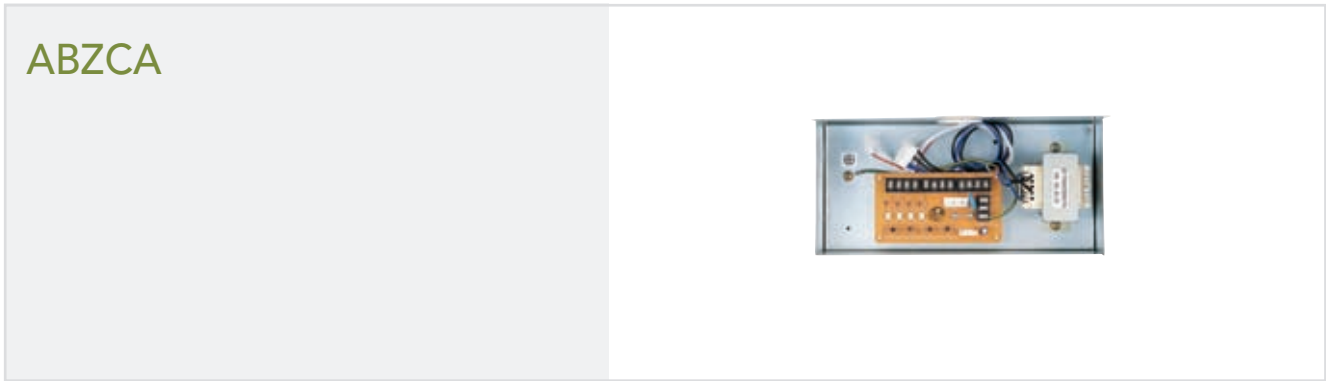
WIRING DIAGRAM

1. Wire to the control box in the indoor unit by removing the existing thermistor and connect the extension cable its place.
2. Cut the extension cable to the appropriate length and connect the screw terminal of the remote sensor.



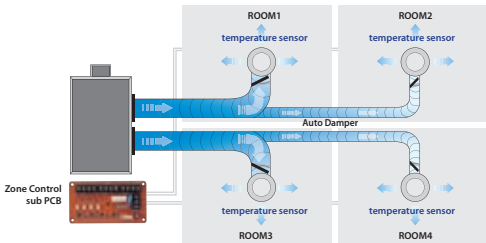
Zone Controller

Controls air conditioning in up to 4 zones.



FEATURES

- Controls different zones (up to 4 zones)
- Maintain proper temperature of each zone
- Auto variation of dampers
- Auto control of fan speed



MODELS APPLIED

- Ceiling Concealed Duct (High Static Pressure)

※ Refer to each model PDB for applicable modes

PARTS INCLUDED

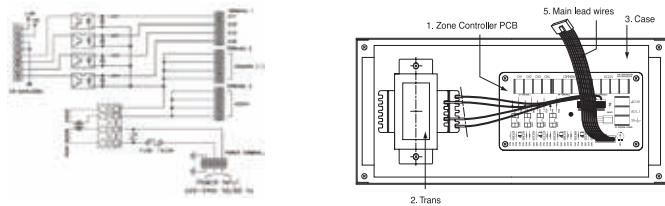
Factory supplied :

- | | | | |
|-----------------------------|---------------------|----------------|-----------------------------|
| • Zone controller PCB (1EA) | • Transformer (1EA) | • Case (1EA) | • Cover (1EA) |
| • Main lead wires (1EA) | • Screws (1EA) | • Holder (4EA) | • Installation manual (1EA) |

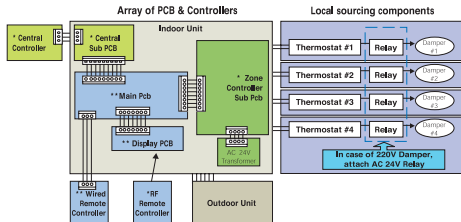
Purchased locally (reference siemens, honneywell)

- | | | |
|----------------|--------------|----------|
| • Damper Motor | • Thermostat | • Damper |
|----------------|--------------|----------|

WIRING DIAGRAM



COMPONENTS



Electronic Thermostat

Simple and easy control of system.



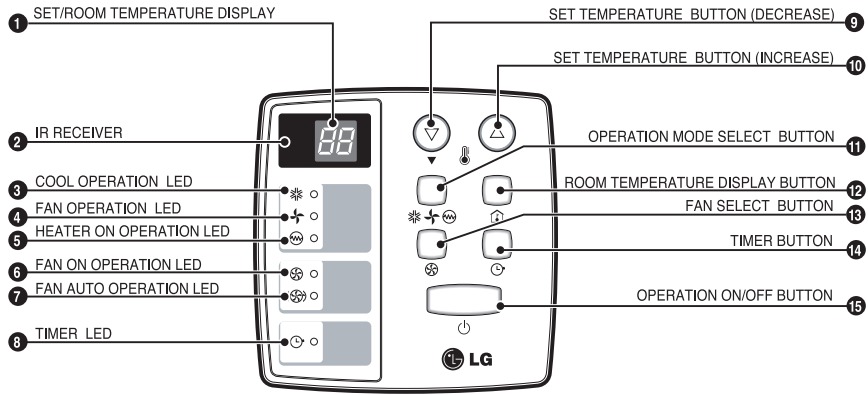
FEATURES

- Less complicated in operation (simple controls).
- Built in thermister for better control.

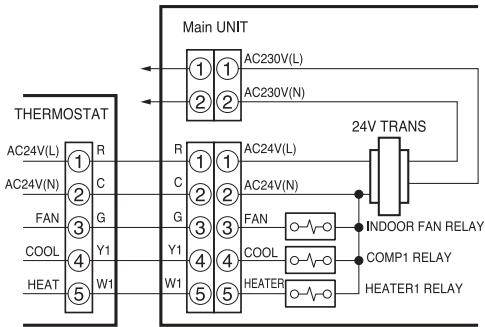
MODELS APPLIED

- Ducted Split (3~5RT) / Single Package (3~ 5RT)
- ※ Refer to each model PDB for applicable models

NAME AND DESCRIPTION OF THE SYSTEM

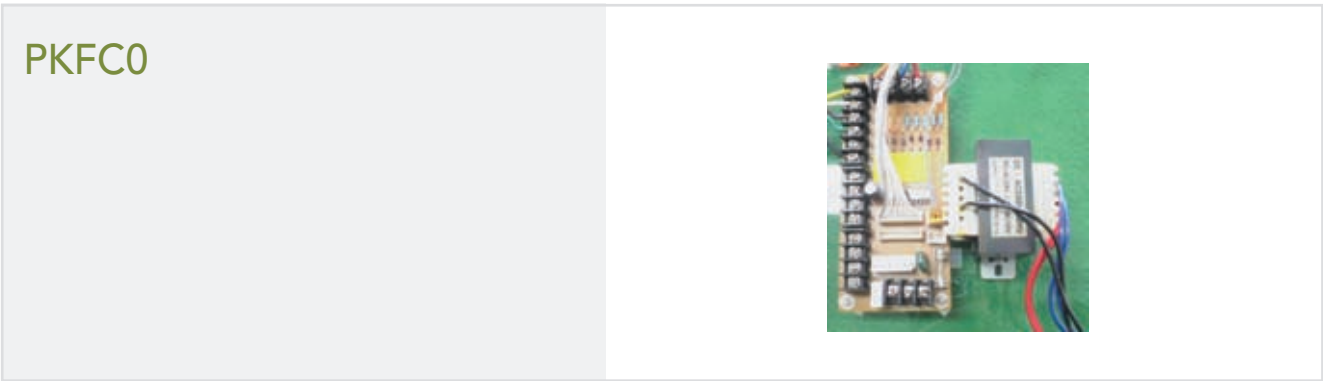


WIRING DIAGRAM



CTI

Communicate with other Mechanical Thermostat and Unitary product



FEATURES

- Transfer each local contact signal from Thermostat to Unitary product

MODELS APPLIED

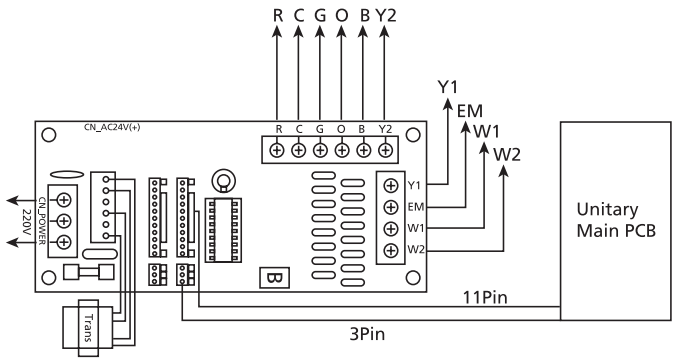
- Unitary

PARTS INCLUDED

- CTI PCB(1EA)
- Transformer
- Manual
- 11Pin Cable(to connect with Unitary PCB)
- 3Pin Cable(to connect with Unitary PCB)

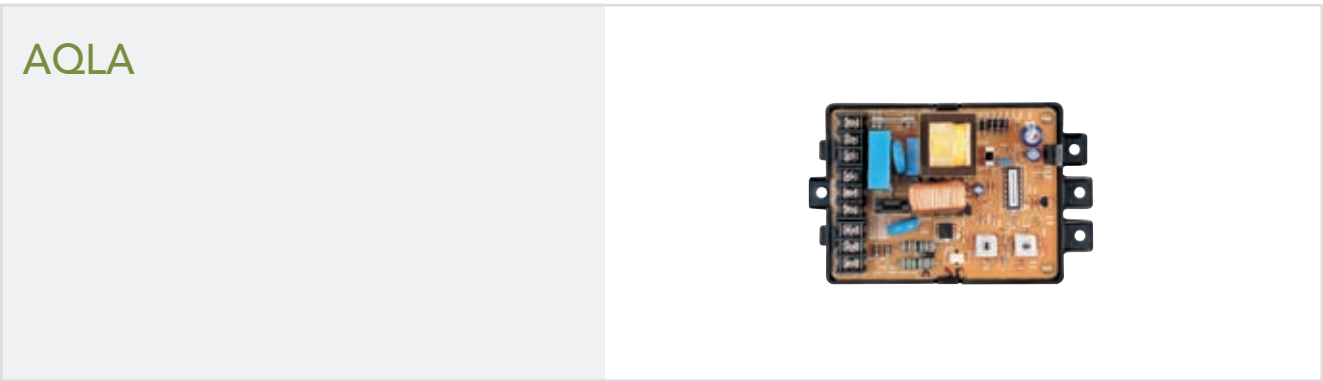
WIRING DIAGRAM

- R : 24V(+)
- C : 24V(-)
- G : Fan
- Y1 : Cooling changeover
- W1 : Heating changeover
- Y1 : Comp1
- Y2 : Comp2
- EM : Emergency
- W1 : Heater1
- W2 : Heater2



Low Ambient Kit

To cool you even in winter.



FEATURES

- Depending on the condensing temperature, speed of outdoor fan is varied automatically while compressor is ON.
- Maintains cooling function for very low ambient temperature such as (-5°C).
- Specific installation requirements
 - Gymnasium, Control rooms, Machine rooms, Computer rooms
- Simple and easy to install
- Used only for cooling mode

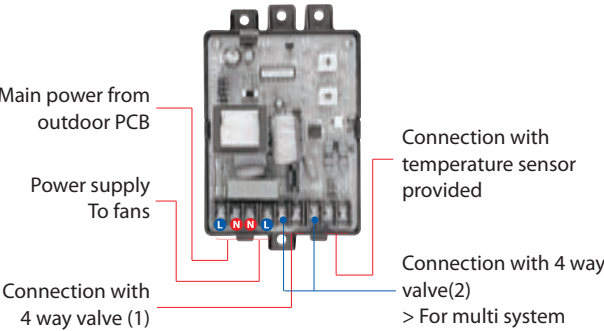
MODELS APPLIED TO

- Convertible, Ceiling Concealed Duct
- Single split
- Ceiling Cassette (Refer to each model PDB for applicable models)
- Multi Split(Specific models)

PARTS INCLUDED

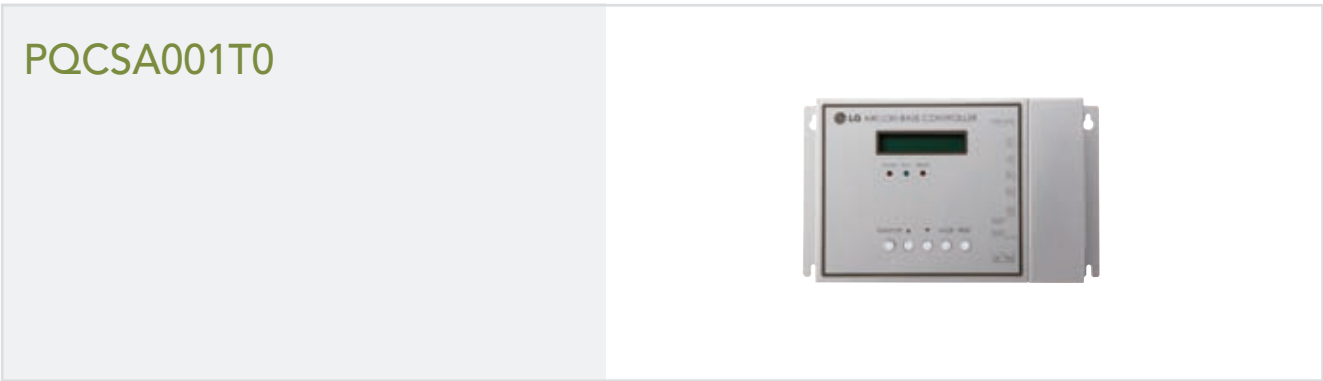
- | | |
|------------------------------------|-----|
| • AQLA fan speed controller | 1EA |
| • Sensor assembly | 1EA |
| • Buckle-clip | 3EA |
| • Adhesive insulation, 20mm x 80mm | 1EA |
| • Tie wrap,100mm | 2EA |
| • Instruction manual | 1EA |
| • Screw | 3EA |

WIRING DIAGRAM



Telecom Shelter Controller

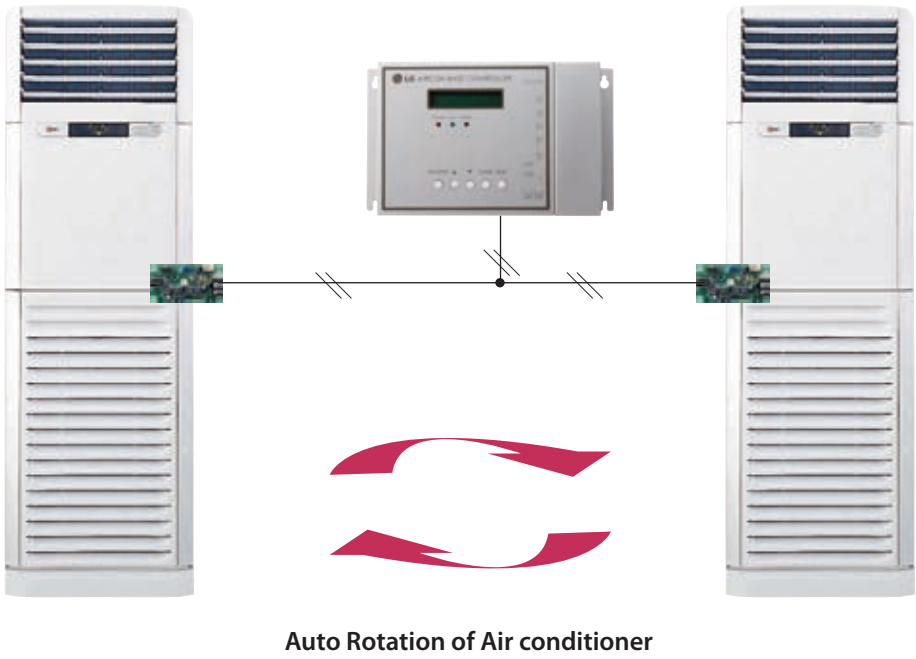
This controller is suitable for telecom shelter. It can control and monitor air conditioner in telecom shelter.



FEATURES

- Automatically start and stop air conditioner by turns
- Display internal temperature of shelter on LCD
- Sense water leakage and humidity
- Control ventilation fan.
- Fire alarm function
- Error display
- Electric failure compensation

COMBINATION



Mechanical Accessory



Mechanical Accessory
For comfort and convenience.

Mechanical Accessory Line up and Application

Model	SINGLE TYPE	MULTI TYPE	MULTI V TYPE	REMARK
ARTCOOL Panel	✓	✓		ARTCOOL indoor unit
Electric Heater	✓			Single package / Ducted split
Drain Pump Kit	✓	✓		Ceiling concealed duct
Suction Grille / Canvas			✓	Ceiling concealed duct (Built-in)
Auto Elevation Grille	✓		✓	4 Way Cassette
Plasma Kit	✓		✓	4 Way Cassette
Cassette Cover	✓	✓	✓	4 Way Cassette
Air guide	✓	✓	✓	Outdoor unit

44



ARTCOOL Panel

46



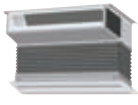
Electric Heater

48



Drain Pump Kit

49



Suction Grille / Canvas

50



Auto Elevation Grille

51



Plasma Kit

52



AWHP

53



Cassette Cover

54



Air Guide

55



Ventilation Kit (Fresh kit)
for New Cassette

Panel ARTCOOL

A unique blend of art and colors.

ARTCOOL Panel
ARTCOOL Wide
ARTCOOL Mirror
ARTCOOL SF Chassis

MODELS APPLIED TO

• All ARTCOOL models

ARTCOOL Panel Type

White wood

Blue

Wood

Metal

ARTCOOL Wide Type

White wood

Blue

Wood

Metal

ARTCOOL Mirror Type

White wood

Blue

Wood

Metal

Mirror

Cherry

Blue

Mirror

Silver

ARTCOOL SF Chassis

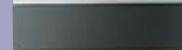
Silver

Red

Gold

White silver

ACCESSORY MODEL NAME

Type	ARTCOOL Panel	ARTCOOL Wide	ARTCOOL Mirror					ARTCOOL SF chassis
								
Chassis Color	SP2	SV2	SU	SZ	S3	SE	S8	SF
White wood	PSAPPCW10	PSAPVCW10	PSAPUCW10	PSAPZCW10	PSAP3CW10			
Blue	PSAPPCB10	PSAPVCB10	PSAPUCB10	PSAPZCB10	PSAP3CB10	PSAPECB10	PSAP8CB10	
Wood	PSAPPCD10	PSAPVCD10	PSAPUCD10	PSAPZCD10	PSAP3CD10			
Metal	PSAPPCM10	PSAPVCM10	PSAPUCM10	PSAPZCM10	PSAP3CM10			
Mirror			PSAPUCR10	PSAPZCR10	PSAP3CR10	PSAPECR10	PSAP8CR10	
Cherry			PSAPUCC10	PSAPZCC10	PSAP3CC10			
Silver						PSAPECV10	PSAP8CV10	PSAPFCV11
Red								PSAPFCE11
Gold								PSAPFCG11
White Silver								PSAPFCH11

DETAILS OF MODEL NAME

1 2 3 4 5 6 7 8 9

P S A P V C W 1 0

Serial no.

Number of panel

* Color

Chassis

ARTCOOL front panel

Single split wall

Mounted air conditioner

Parts

* Panel color

• CB : Blue

• CC : Cherry

• CD : Wood

• CE : Red

• CG : Gold

• CH : White Silver

• CM : Metal

• CR : Mirror

• CV : Silver

• CW : White Wood

Electric Heater

Gives heating to keep you warm.



FEATURES

- Provides quick and additional heating.

MODELS APPLIED TO

- Single package
- Ducted split (refer PDB for applicable models)

PARTS SUPPLIED

Single Package

- Electric heater (1EA)
- Installation manual (1EA)
- Heater control box (1EA)
- Screws

Ducted Split

- Electric heater (1EA)
- Hexagonal nut (6EA)
- Hexagonal bolt M6, L14 (16EA)
- Installation Manual (1EA)

ACCESSORY MODEL NAME AND ELECTRICAL DATA

50 / 60Hz

Single Package

Ton	Model Name	Heater Output(kW) Min/Max. Volts	Heater Rating (kW)	Control Stages	Voltage (V/ø)	Standard indoor fan motor			Over size indoor motor		
						M.C.A	M.F.S	M.C.B	M.C.A	M.F.S	M.C.B
3~5RT	LKAEH052	3.6/5.0	5	1	208~240/1	27.6/32.2	60/60	60/60	27.6/32.2	60/60	60/60
3~5RT	LKAEH102	7.2/10.0	10	1	208~240/1	47.7/55	60/60	60/60	47.7/55	60/60	60/60
6.25~17.5RT	LKAEH18B	15.6/18.0	18	1	208~240/3	56.2/64.8	60/60	60/60	56.2/64.8	60/60	60/60
15~17.5RT	LKAEH36B	31.2/36.0	18+18	2	208~240/3	97.1/112.1	125/125	125/125	97.1/112.1	125/125	125/125
20~25RT	LKAEH36BL	31.2/36.0	36	2	208~240/3	97.1/112.1	125/125	125/125	97.1/112.1	125/125	125/125
6.25~12.5RT	LKAEH098	7.5/9.0	9	1	380~415/3	26.0/27.2	60/60	60/60	31.0/32.2	60/60	60/60
7.5~17.5RT	LKAEH188	15.1/18.0	18	1	380~415/3	37.5/39.5	60/60	60/60	42.5/44.5	60/60	60/60
20~25RT	LKAEH368L	30.2/36.0	36	2	380~415/3	108.6/160.4	150/150	150/150	114.6/136.4	150/150	150/150

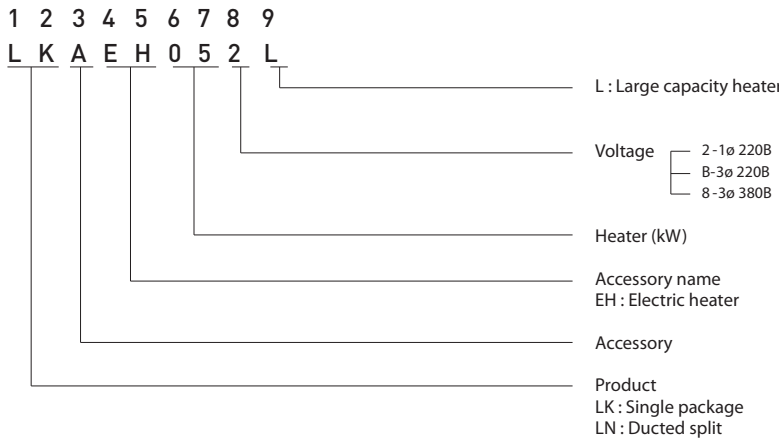
* MCA : Minimum current ampere / MFS : Maximum fuse size / MCB : Maximum circuit breaker

Ducted Split

Ton	Model Name	Heater Output(kW) Min/Max. Volts	Heater Rating (kW)	Control Stages	Voltage (V/ø)	Standard indoor fan motor			Over size indoor motor		
						M.C.A	M.F.S	M.C.B	M.C.A	M.F.S	M.C.B
3~5RT	ANEH0521A	3.6/5.0	5	1	208~240/1	27.6/32.2	60/60	60/60	27.6/32.2	60/60	60/60
3~5RT	ANEH1021A	7.2/10.0	10	1	208~240/1	47.4/55	60/60	60/60	47.7/55	60/60	60/60
6.25~12.5RT	ANEH09B1B	7.8/9.0	9	1	208~240/3	30.4/35.1	60/60	60/60	30.4/35.1	60/60	60/60
6.25~17.5RT	ANEH18B1B	15.6/18.0	18	1	208~240/3	50.9/58.7	70/70	70/70	50.9/58.7	70/70	70/70
15~20RT	ANEH18B1C	15.6/18.0	18	1	208~240/3	56.2/64.8	70/70	70/70	62.4/72.0	80/80	80/80
15~20RT	ANEH3682C	36.0	18+18	2	380~415/3	72/86.4	90	90	72/86.4	90/90	90/90

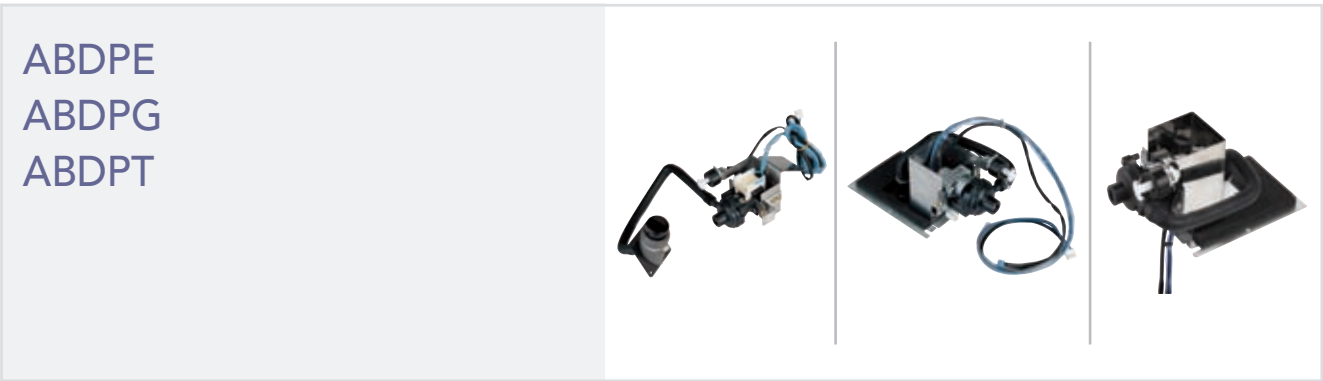
* MCA : Minimum current ampere / MFS : Maximum fuse size / MCB : Maximum circuit breaker

DETAILS OF MODEL NAME



Drain Pump Kit

Effectively drains out condensed water.



FEATURES

- In some places where natural drainage is not possible drain pump is very useful to pumps out condensed water from indoor unit.
- Drain pump assembly (AC 220~240V, 50/60Hz)

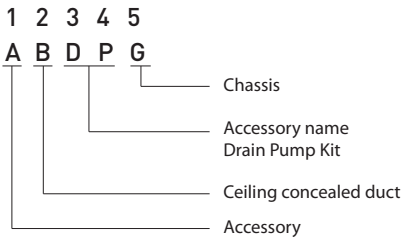
MODELS APPLIED TO

- Ceiling concealed duct (refer PDB for applicable models)

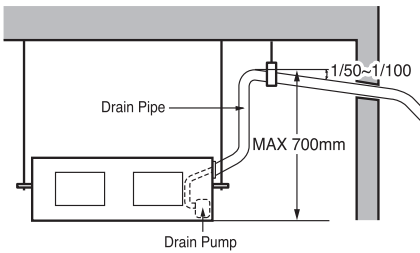
ACCESSORY MODEL NAME

Model Name	E Chassis	G/H/R Chassis	T Chassis
	ABDPE	ABDPG	ABDPT
Multi V Type	Default	Default	Default
Multi Type	✓	✓	✓
Single Type	✓	✓	

DETAILS OF MODEL NAME



APPLICATION



PARTS SUPPLIED

For E Chassis Models :

- Drain pump assembly(1EA)
(AC 220~240V,50/60Hz,400CMM)
 - Elbow (ø32)(1EA)
 - Tie wrap(2EA)
 - Rubber(1EA)
- Hose(1EA)
 - Screw(10EA)
 - Installation manual(1EA)

For G/H/R/T Chassis Models :

- Drain pump assembly(1EA)
(AC 220~240V,50/60Hz,400CMM)
- Screw(4EA)
- Cap(1EA)
- Installation manual(1EA)

Suction Grille / Canvas

High flexibility for a wide variety of applications



FEATURES

- High external static pressure facilitates unit use with flexible ducts of varying lengths.
- When using suction panel, unit requires only 270mm of ceiling space.
- Blends unobtrusively with any interior decoration.

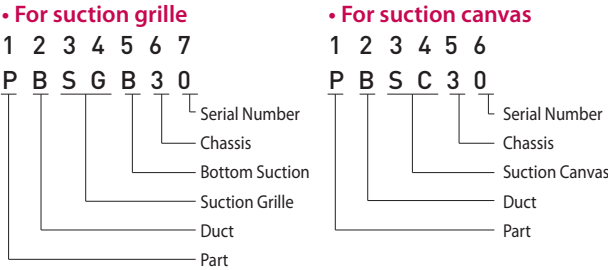
MODELS APPLIED TO

- Ceiling concealed duct _ Built-in type (refer PDB for applicable model)

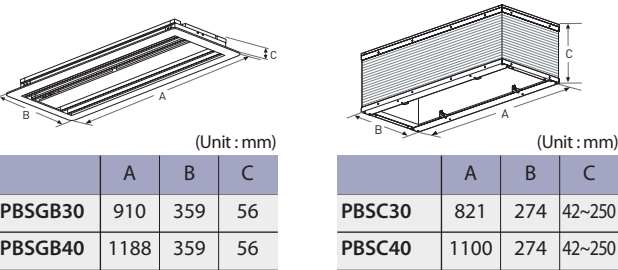
ACCESSORY MODEL NAME

Type	Model Name	Capacity (Btu/h)					
		7K	9K	12K	15K	18K	24K
Grille	PBSGB30	✓	✓	✓	✓		
	PBSGB40					✓	✓
Canvas	PBSC30	✓	✓	✓	✓		
	PBSC40					✓	✓

DETAILS OF MODEL NAME



DIMENSION



PARTS SUPPLIED

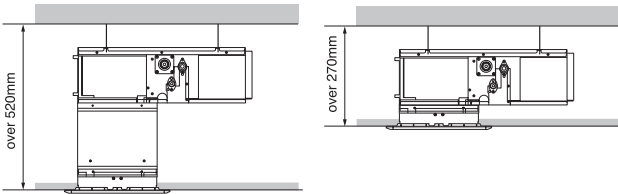
For the suction grille :

- Suction panel with air filter (1EA)
- Suction panel fix bolt M5x18 (4EA)
- Installation manual (1EA)

For the suction canvas :

- Air suction canvas (1EA)
- Screws for air suction canvas (4EA)
- Adjusting chain (4EA)
- Screws for adjusting chain (8EA)
- Installation manual (1EA)

APPLICATION



Auto Elevation Grille

asy filter cleaning with elevation grille



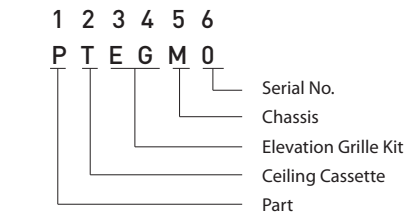
FEATURES

4-Point Support Structure	Auto Horizontal Control	Memory for user's level	Auto Bottom Detection

MODELS APPLIED TO

- 4 Way cassette_Single, Multi V II (refer PDB for applicable models)

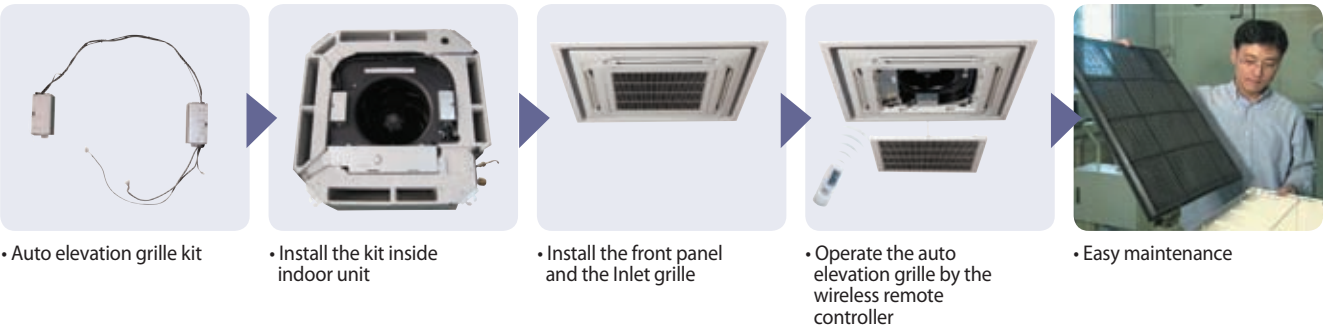
DETAILS OF MODEL NAME



PARTS SUPPLIED

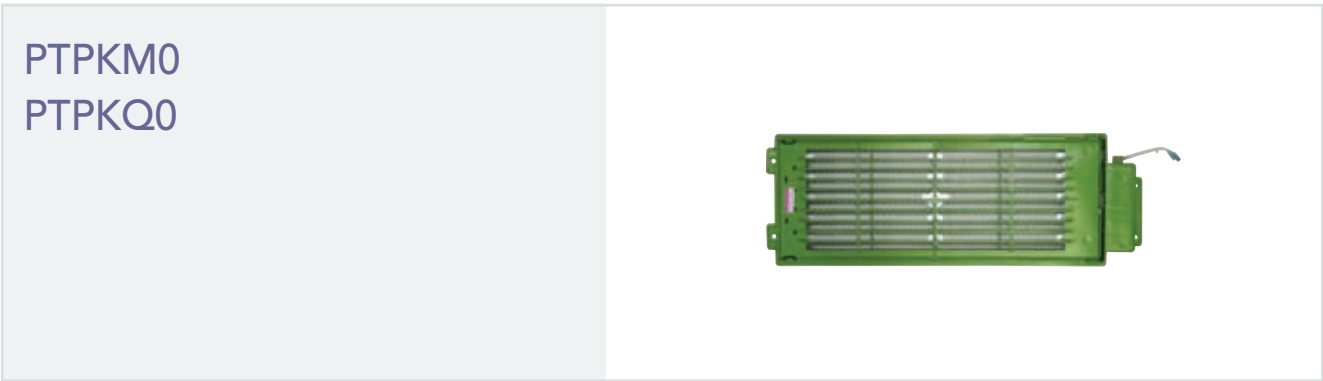
- Inlet Grille (1EA)
- Auto elevation grille kit (1EA)
- Wireless Remote Controller (1EA)
- Screws (4EA)
- Installation manual (1EA)

APPLICATION



Plasma Kit

Plasma air purifying system



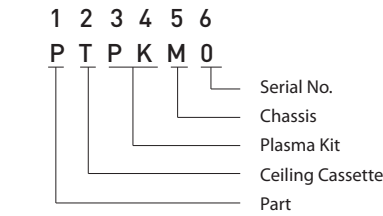
FEATURES

- It can remove microscopic contaminants and dust and house mites, pollen, pet fur to help prevent allergic diseases like asthma.

MODELS APPLIED TO

- 4Way cassette - Single MULTIV (refer PDB for applicable models)

DETAILS OF MODEL NAME



PARTS SUPPLIED

- Plasma Kit (1EA)
- Screws
- Installation Manual (1EA)

AWHP : THERMA V Sanitary Tank and Related Accessories

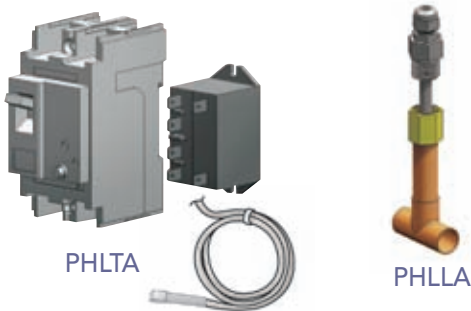
To generate domestic hot water with THERMA V sanitary tank is used. To interface sanitary tank with THERMA V or to utilize solar-thermal heat to sanitary tank, some accessories are provided.

Sanitary Tank Kit PHLTA

To control sanitary tank temperature and sanitary tank electric heater.

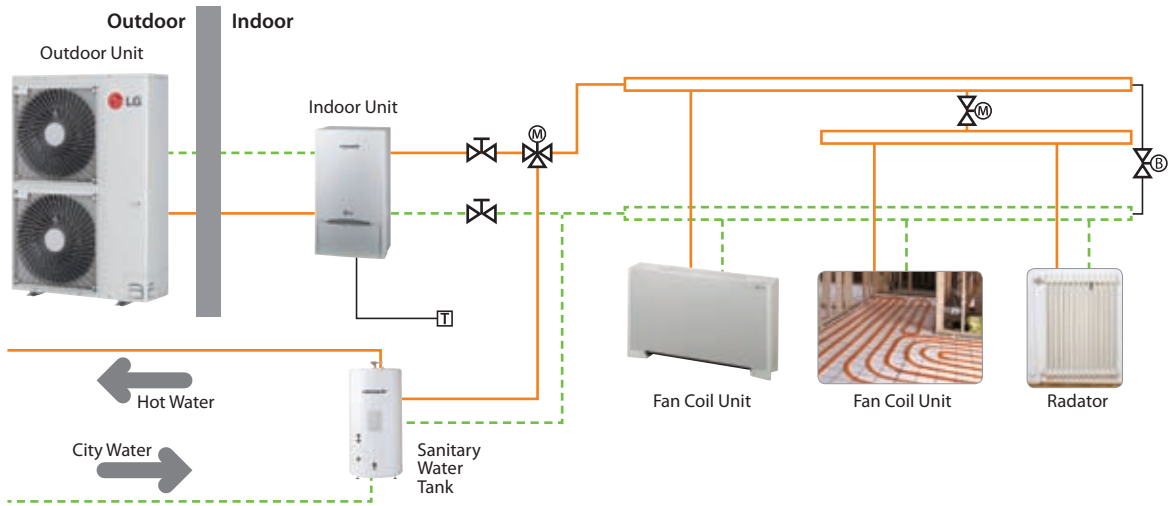
Solar Heating Kit PHLLA

To interface solar-thermal system with double coil sanitary tank.



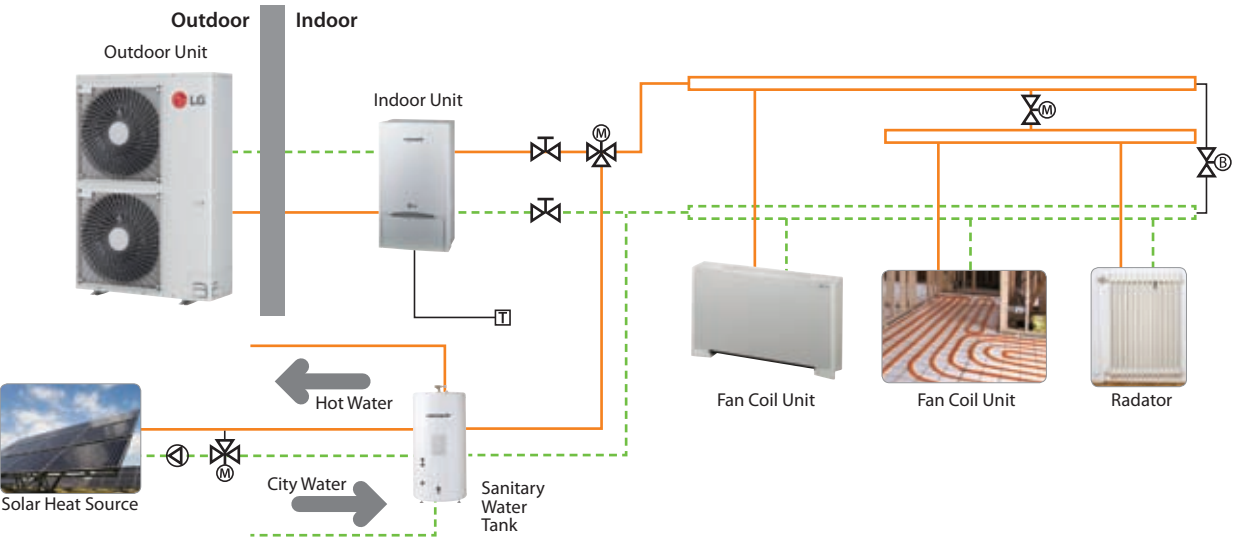
THERMA V with Sinlge Coil Sanitay Tank

Components : THERMA V System, PHS0x060310, PHLTA, and Field-supplied items.



THERMA V with Double Coil Sanitay Tank

Components : THERMA V System, PHS0x060320, PHLTA, PHLLA, and Field-supplied items.



Cassette Cover

Maintains the ceiling elegance.

PTDCD
PTDCD1
PTDCM
PTDCQ



FEATURES

- Specially designed for indoor unit.
- Covers the side area of cassette.
- Gives elegant looks.
- Light weight.
- Suitable when false ceiling is unavailable.

MODELS APPLIED TO

- Ceiling cassette - 4Way (TD, TD1, TH, TP, TN, TM, TQ, TR)

PARTS SUPPLIED

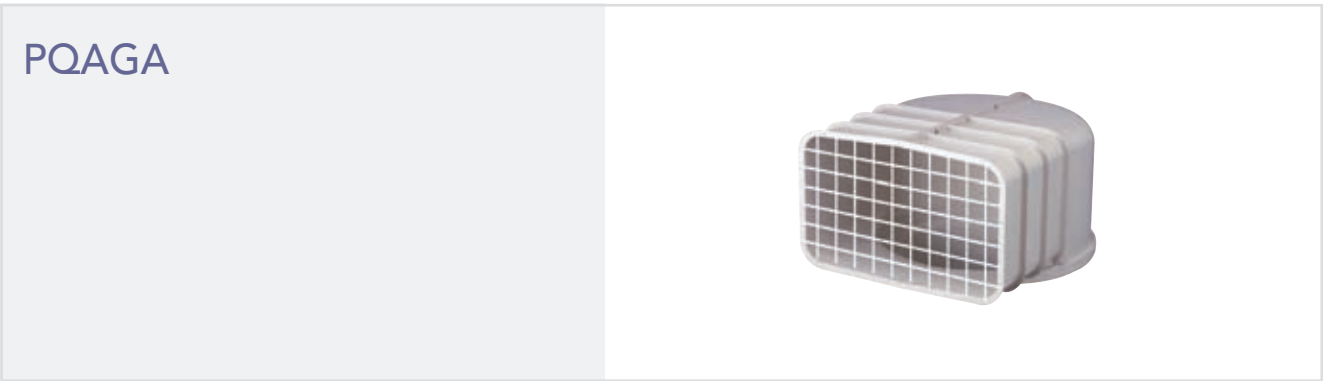
- Cover A (4EA), Cover B (4EA)
- Cover C (4EA), Cover D (4EA)
- Screws
- Installation Manual (1EA)

ACCESSORY MODEL NAME

Model Name	Front Panel
PTDCD	PT-CD0, PT-CD1, PT-HD0, PT-HD1
PTDCD1	PT-CDA1, PT-CDC1, PT-HDA1, PT-HDC1
PTDCM	PT-UMC
PTDCQ	PT-UQC

Air Guide

Easy air discharge at odd places.



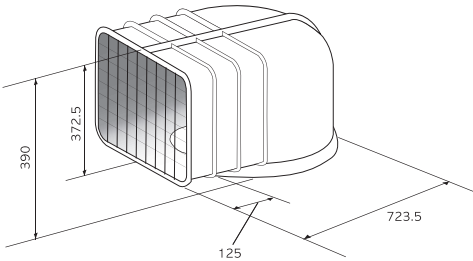
FEATURES

- Converts vertical discharge into horizontal discharge.
- Designed for outdoor discharge air.
- Direction of air discharge can be changed by simple installation.
- Installation flexibility
- Light weight

MODELS APPLIED TO

- MULTIV type, MULTIV II type, Single A (UY, UW Chassis)

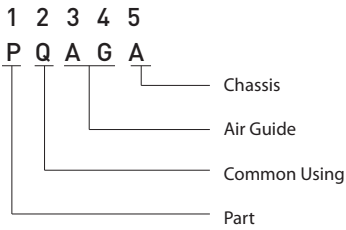
DIMENSION



APPLICATION



DETAILS OF MODEL NAME



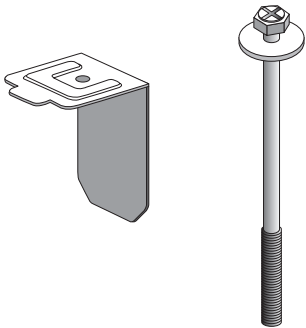
Ventilation Kit (Fresh Kit) for New Cassette

Ventilation kits (Fresh Kit) for New Cassette,
New multi V cassette and new Cassette for coming season.

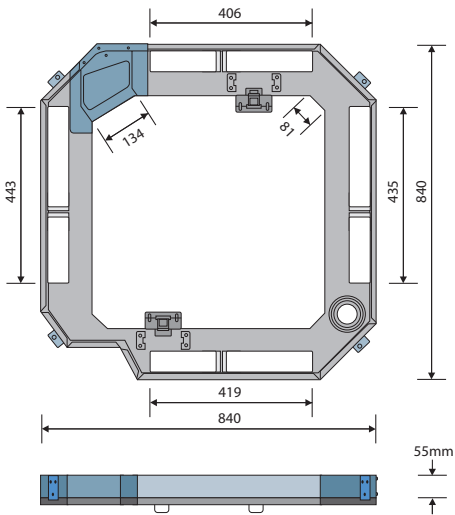


Accessory

- Installation Bracket
- Bolt
- Screw
- Installation manual



Dimension



Models applied to

- Ceiling Cassette - 4Way (TP,TN,TM)

Piping Accessory

Piping Accessory Line up and Application

Model	SYNCHRO	MULTI	MULTI V	REMARK
Y Branch and Header Branch(Synchro)	✓	✓		Synchro
Branch Distributor (Multi)				Multi Mdx / Multi Fdx
Heat Recovery Unit			✓	Multi V Sync
Y Branch and Branch Kit (Multi)		✓		Multi Fdx
Y Branch and Header Branch (Multi V)			✓	Multi V Plus / Multi V Sync Multi V Space / Multi V Mini



Piping Accessory

Global No.1 seller, LG Air Conditioner!
For comfort and convenience.

58



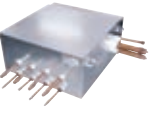
Y Branch & Header Branch (Synchro)

60



Branch Distributor6

62



Heat Recovery Unit

64



Coolant charging Kit

65



Y Branch & Branch Kit (Multi Fdx)

66



Y Branch & Header Branch (Multi V)

Y Branch and Header Branch

(Synchro)

Refrigerant distribution channel.

PMUB11A
(2units)

PMUB111A
(3units)

PMUB1111A
(4units)



Gas Pipe



Liquid Pipe

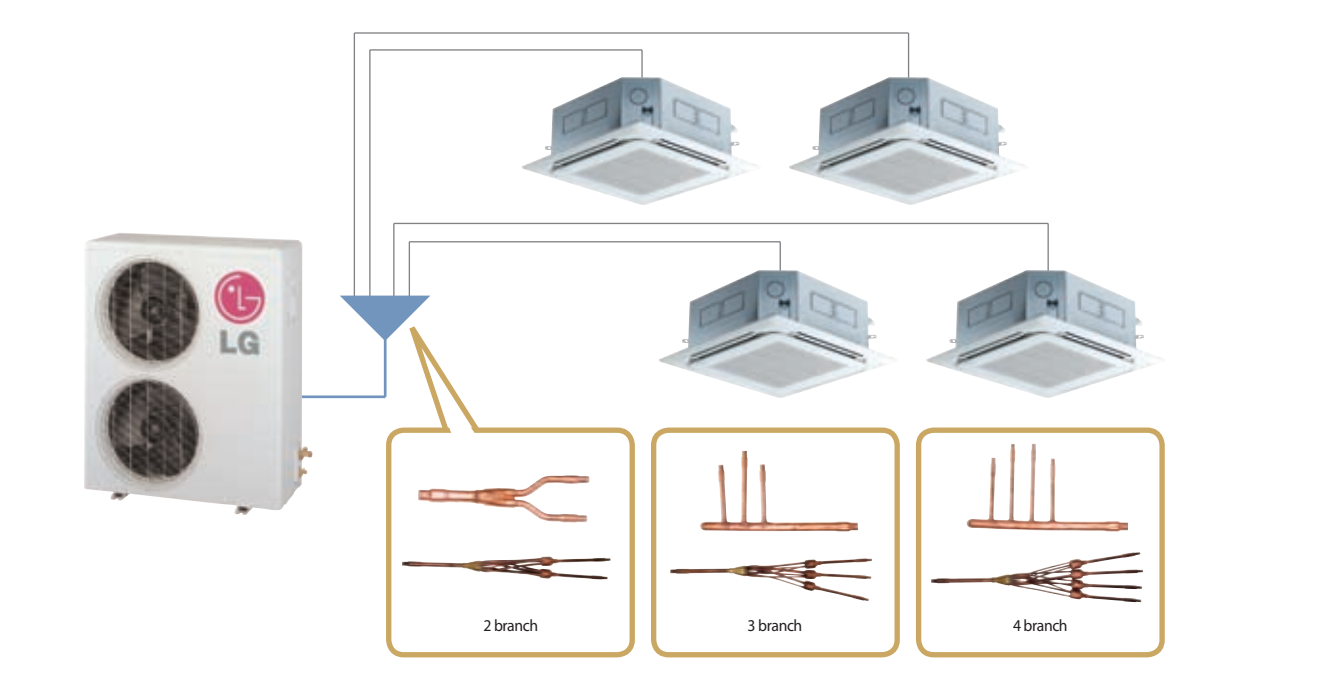
FEATURES

- Various Y-branch pipe of different capacities make **Synchro** installation much easier.
- Y-branch and header branch for both gas and liquid are provided.
- Insulation material is also provided for covering the branches.

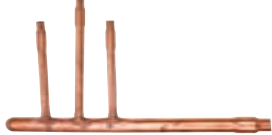
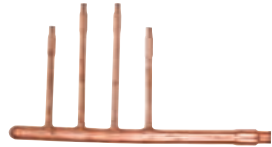
MODELS APPLIED TO

- **Synchro**

PIPING DIAGRAM



ACCESSORY MODEL NAME

Connectable of Indoor Units	Models	Gas Pipe	Liquid Pipe
2 Units	PMUB 11A	 (1:1)	 (1:1)
3 Units	PMUB 111A	 (1:1:1)	 (1:1:1)
4 Units	PMUB 1111A	 (1:1:1:1)	 (1:1:1:1)

Branch Distributor

Effective and unique way of refrigerant distribution.

PMBD3620 / PMBD5420L

PMBD3630

PMBD7230 / PMBD5430L

PMBD3640 / PMBD5440L



PMBD3620
PMBD5420L



PMBD3630
PMBD7230
PMBD5430L



PMBD3640
PMBD5440L

FEATURES



- Distribution of refrigerant to various indoor units.
- 3 models (2, 3, 4 indoor units)
- Consists of LEVs inside it
- Controlling PCB inside the unit
- Internally insulated (prevents any chances of drainage)
- Flare joints for easy and clean installation
- Compact design (low height)
- Flexible installation

MODELS APPLIED TO

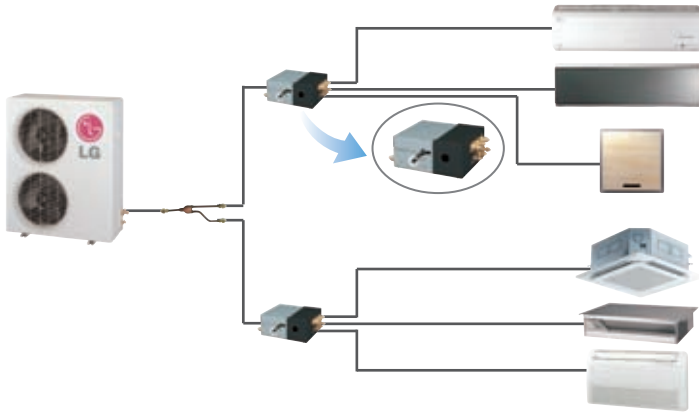
- MULTI M_{DX} systems
- MULTI F_{DX} systems
(refer PDB for applicable models)

INSTALLATION

- Position of branch distributor in the system
- PDB (Select) - Installation PDB

PARTS SUPPLIED

- BD(Banch Distributor) unit (1EA)
- Hanger metal (4EA)
- Screws (8EA)
- Installation Manual (1EA)

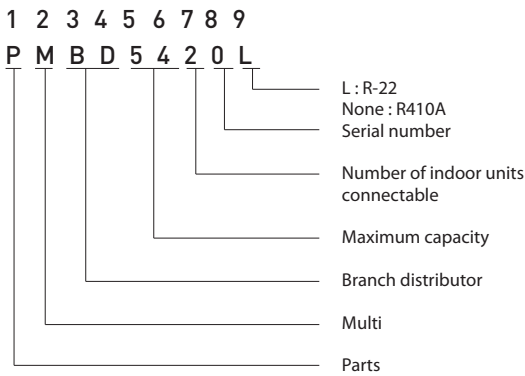


SPECIFICATION

MULTI F _{DX} (R410A)		PMBD3640	PMBD3630	PMBD3620	PMBD7230
Connectable	Number of Indoor unit	1~4	1~3	1~2	1~3
Capacity	(Btu/h)	7k/9k/12k/18k/24k	7k/9k/12k/18k/24k	7k/9k/12k/18k/24k	18k/24k/30k/36k
Casing color		Paintingless	Paintingless	Paintingless	Paintingless
Power source		1ø, 50/60Hz, 220~240/220B	1ø, 50/60Hz, 220~240/220B	1ø, 50/60Hz, 220~240/220B	1ø, 50/60Hz, 220~240/220B
Power consumption	(W)	10	10	10	10
Running current	(A)	0.05	0.05	0.05	0.05
Dimensions	(W x H x D) (mm)	302x143x252	302x143x252	302x143x252	302x143x252
Packing dimension	(W x H x D) (mm)	422x202x300	422x202x300	422x202x300	422x202x300
Net weight		5.0	4.9	4.8	5.0
Connecting cable	Indoor unit No. x mm2	4x0.75	4x0.75	4x0.75	4x0.75
	Outdoor unit No. x mm2	4x0.75	4x0.75	4x0.75	4x0.75
Piping connection (Outdoor unit)	liquid (mm)	9.52	9.52	9.52	9.52
	Gas (mm)	19.05	19.05	19.05	19.05
Piping connection (Indoor unit)	Liquid (mm)	6.35x4	6.35x3	6.35x2	6.35x3
	Gas (mm)	9.52x4	9.52x3	9.52x2	12.7, 15.88x2
Parts	Hanger (EA)	4	4	4	4
	Screw (EA)	8	8	8	8
	Manual (EA)	1	1	1	1

MULTI M _{DX} (R22)		PMBD5440L	PMBD5430L	PMBD5420L
Connectable	Number of Indoor unit	1~4	1~3	1~2
Capacity	(Btu/hr)	12,000~54,000	12,000~54,000	12,000~54,000
Casing color		Paintingless	Paintingless	Paintingless
Power source		1ø, 50/60Hz, 220~240/220B	1ø, 50/60Hz, 220~240/220B	1ø, 50/60Hz, 220~240/220B
Power consumption	(W)	10	10	10
Running current	(A)	0.05	0.05	0.05
Dimensions	(W x H x D) (mm)	302x143x252	302x143x252	302x143x252
Packing dimension	(W x H x D) (mm)	422x202x300	422x202x300	422x202x300
Net weight		5.0	4.9	4.8
Connecting cable	Indoor unit No. x mm2	4x0.75	4x0.75	4x0.75
	Outdoor unit No. x mm2	4x0.75	4x0.75	4x0.75
Piping connection (Outdoor unit)	liquid (mm)	9.52	9.52	9.52
	Gas (mm)	19.05	19.05	19.05
Piping connection (Indoor unit)	Liquid (mm)	6.35x4	6.35x3	6.35x2
	Gas (mm)	12.7x4	9.52x3	9.52x2
Parts	Hanger (EA)	4	4	4
	Screw (EA)	8	8	8
	Manual (EA)	1	1	1

DETAILS OF MODEL NAME



Model	Capacity (kBtu/h)	Connectable number of indoor units		
		2 Indoor units	3 Indoor units	4 Indoor units
MULTI F _{DX}	36	Ⓢ	Ⓢ	
	72		Ⓢ	
MULTI M _{DX}	54	Ⓢ	Ⓢ	

Heat Recovery Unit



- FEATURES
- Max. 4 indoor unit can be connected by module design.
 - Due to the automatic search algorithm for piping detection, easy installation
 - Subcooling cycle in HR unit makes the system efficiency maximum.

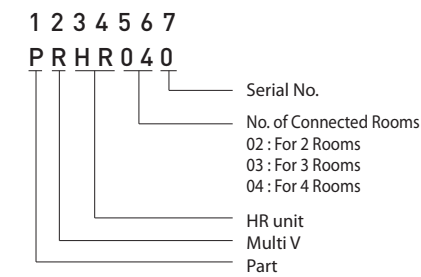
MODELS APPLIED TO



ACCESSORY MODEL NAME AND SPECIFICATION

		PRHR020		PRHR030		PRHR040	
Max. connectable number of indoor units		EA	2		3		4
Max. connectable capacity of indoor units(Per port/unit)		kW	14.1 / 47		14.1 / 47		14.1 / 47
Nominal Input	Cooling	kW	26		40		40
	Heating	kW	26		40		40
Net. Weight		kg	19		20		21
Dimensions(WxHxD)		mm	801x218x617		801x218x617		801x218x617
Piping connections	Indoor Unit	Liquid	mm(inch)	9.52(3/8)	9.52(3/8)	9.52(3/8)	
		Gas	mm(inch)	15.88(5/8)	15.88(5/8)	15.88(5/8)	
	Outdoor Unit	Liquid	mm(inch)	9.52(3/8)	12.7(1/2)	12.7(1/2)	
		Low pressure	mm(inch)	19.05(3/4)	28.58(11/8)	28.58(11/8)	
		High Pressure	mm(inch)	19.05(3/4)	22.2(7/8)	22.2(7/8)	
	Power Supply	ø /V/Hz	1 / 220~240 / 50		1 / 220~240 / 50		1 / 220~240 / 50

DETAILS OF MODEL NAME



DIMENSION

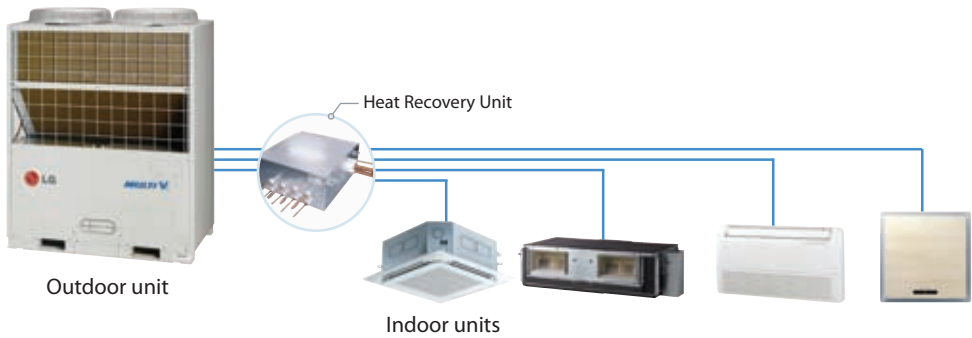
- HR unit (1EA)
- Hanging bolts M10 or M8 (4EA)
- Nut M8 or M10 (8EA)
- Flat washers M10 (8EA)
- Reducers

REDUCERS FOR INDOOR UNIT AND HR UNIT

(Unit : mm)

Models		Liquid pipe	High pressure	Low pressure
Indoor unit reducer		 OD9.52 OD6.35		 OD15.88 OD12.7
HR unit reducer	PRHR020	 OD9.52 OD6.35	 OD19.05 OD15.88 OD12.7 OD12.7 OD9.52	 OD22.2 OD19.05 OD15.88 OD15.88 OD12.7
	PRHR030/ PRHR040	 OD12.7 OD9.52	 OD28.58 OD22.2 OD19.25 OD19.05 OD15.88	 OD22.2 OD19.05 OD15.88 OD15.88 OD12.7

INSTALLATION



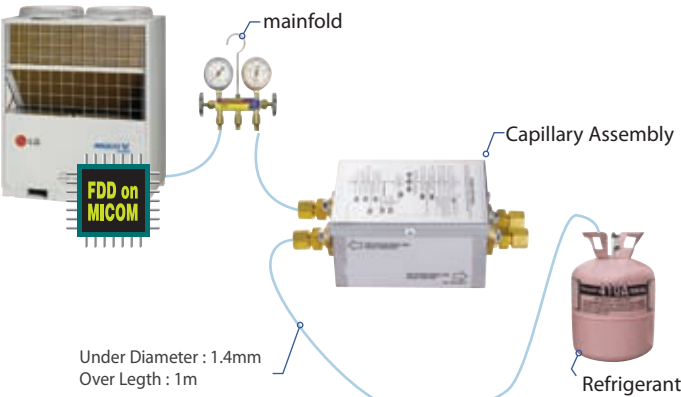
Refrigerant charging Kit



Procedure

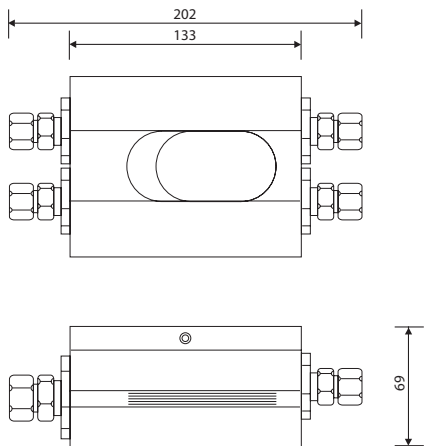
- Arrange manifold,capillary assembly, refrigerant vessel and scale
- Connect manifold to the gas pipe service valve of outdoor unit as shown in the figure.
- Connect manifold and Capillary tube. Use designated capillary assembly only.
If designated capillary assembly isn't used, the system may get damaged.
- Connect capillary and refrigerant vessel.
- Purge hose and manifold.
- After "568" is displayed, open the valve and charge the refrigerant

Application



* Fault Detect & Diagnosis

Dimension

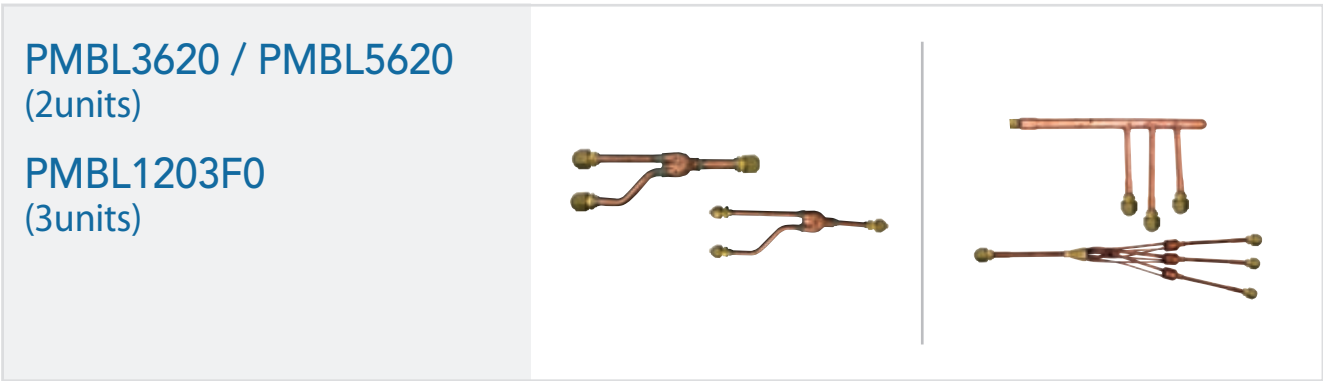


Error contents about auto refrigerant charging function

- "329" : Temperature Range Error (In case that indoor unit or outdoor unit is out of range)
- "339" : Low Pressure Descent Error (In case the system runs at low pressure limit for over 10 minutes)
- "349" : Rapid refrigerant inflow (In case the liquid refrigerant flows in because of not using designated capil-lary assembly)
- "359" : Instability Error (In case the high/low pressure target doesn't get satisfied for some time after the starting operation)

Y Branch and Branch Kit (MULTI F DX)

Refrigerant distribution channel



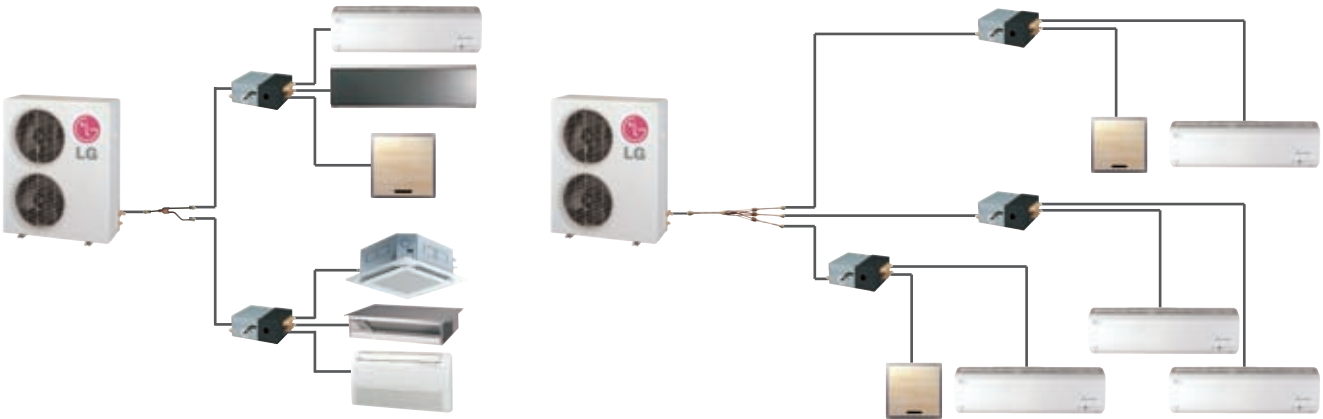
FEATURES

- Y Branch and Branch kit make Multi Fdx installation much easier.
- Y-Branch and Branch kit for both gas and liquid are provided.
- Insulation material is also provided for covering the branches.

MODELS APPLIED TO

- MULTI F DX 1ø, 3ø

APPLICATION



ACCESSORY MODEL NAME

Model Name	No. of BD units	Applicable Model	Specification	
			Gas	Liquid
PMBL3620	2 units	Only 3ø, 36k Btu/h		
PMBL5620	2 units	1ø, 3ø		
PMBL1203F0	3 units	1ø, 3ø		

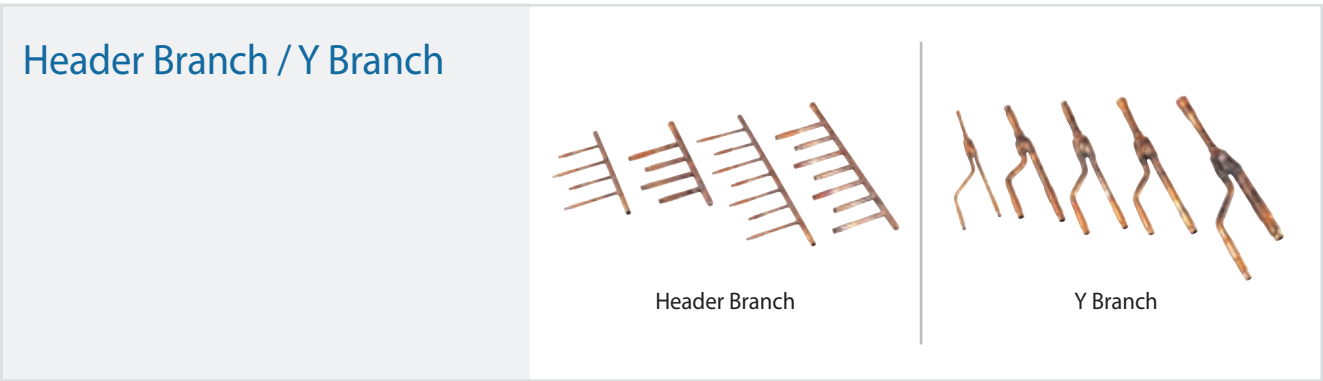
PARTS SUPPLIED

- Y Branch for Gas side and Liquid side (1 set)
- Installation manual (1EA)

Y Branch and Header Branch

(MULTI V™)

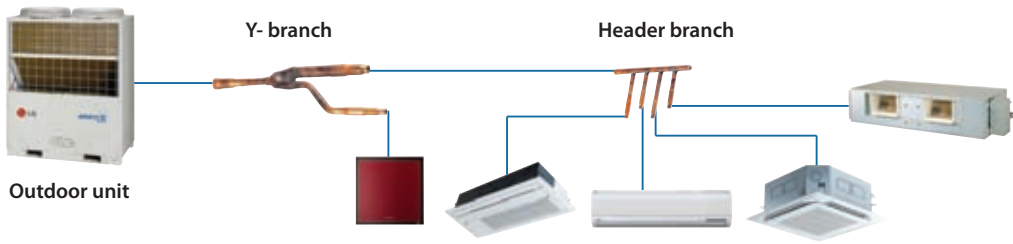
For refrigerant distribution in multi indoor units.



FEATURES

- Various Y-branch pipe of different capacities make MULTI V installation much easier.
- Y-branch and header branch for both gas and liquid are provided.
- Insulation material is also provided for covering the branches.

PIPING DIAGRAM



MODELS APPLIED TO

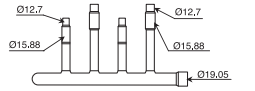
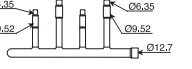
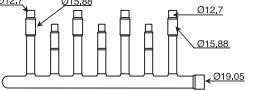
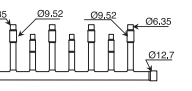
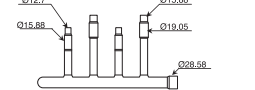
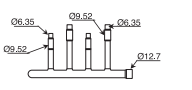
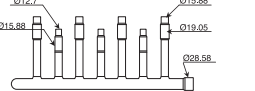
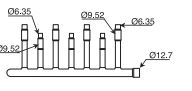
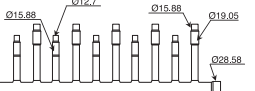
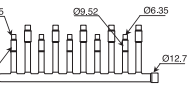
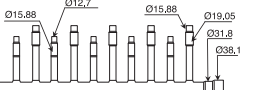
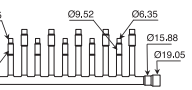
- MULTI V™ PLUS • MULTI V™ SPACE • MULTI V™ SYNC
- MULTI V™ PLUSIII • MULTI V™ SPACEIII • MULTI V™ SYNCIII • MULTI V™ MINI

ACCESSORY MODEL NAME

Header Branch

• R22 / R410A

(Unit : mm)

Models	Gas pipe		Liquid pipe	
4 branch/ ARBL054				
7 branch / ARBL057				
4 branch / ARBL104				
7 branch / ARBL107				
10 branch / ARBL1010				
10 branch / ARBL2010				

PIPING ACCESSORY

Y Branch Pipe for connection of outdoor units

• R22 / **MULTI V. PLUS**

2 Outdoor Units		
Models	Gas pipe	Liquid pipe
ARBL202C		

• R410A / **MULTI V. PLUS MULTI V. PLUS II**

2 Outdoor Units		
Models	Gas pipe	Liquid pipe
ARNCNN20		

• R410A / **MULTI V. SYNC MULTI V. SYNC II**

2 Outdoor Units			
Models	Low Pressure Gas pipe	Liquid pipe	High Pressure Gas pipe
ARCNB20			

(Unit : mm)

3 Outdoor Units		
Models	Gas pipe	Liquid pipe
ARBL202C		
ARBL302C		

(Unit : mm)

3 Outdoor Units		
Models	Gas pipe	Liquid pipe
ARNCNN20		
ARNCNN30		

(Unit : mm)

3 Outdoor Units			
Models	Low Pressure Gas pipe	Liquid pipe	High Pressure Gas pipe
ARCNB20			
ARCNB30			

PIPING ACCESSORY

Y Branch Pipe for connection of indoor units

• R22 / **MULTI V. PLUS MULTI V. SPACE**

Models	Gas pipe	Liquid pipe
ARBL052S		
ARBL052L		
ARBL102S		
ARBL102L		

• R410 / **MULTI V. PLUS MULTI V. SPACE MULTI V. MINI**

Models	Gas pipe	Liquid pipe
ARBLN01621		
ARBLN03321		

• R410A / **MULTI V. SYNC MULTI V. SYNC II**

Models	Low Pressure Gas pipe	Liquid pipe	High Pressure Gas pipe
ARBLB01621			
ARBLB03321			
ARBLB07121			
ARBLB14521			