

**CONTROL SOLUTION & ACCESSORIES** 

2016

# **CONTROL SOLUTION** & ACCESSORIES 2016



### LG Electronics

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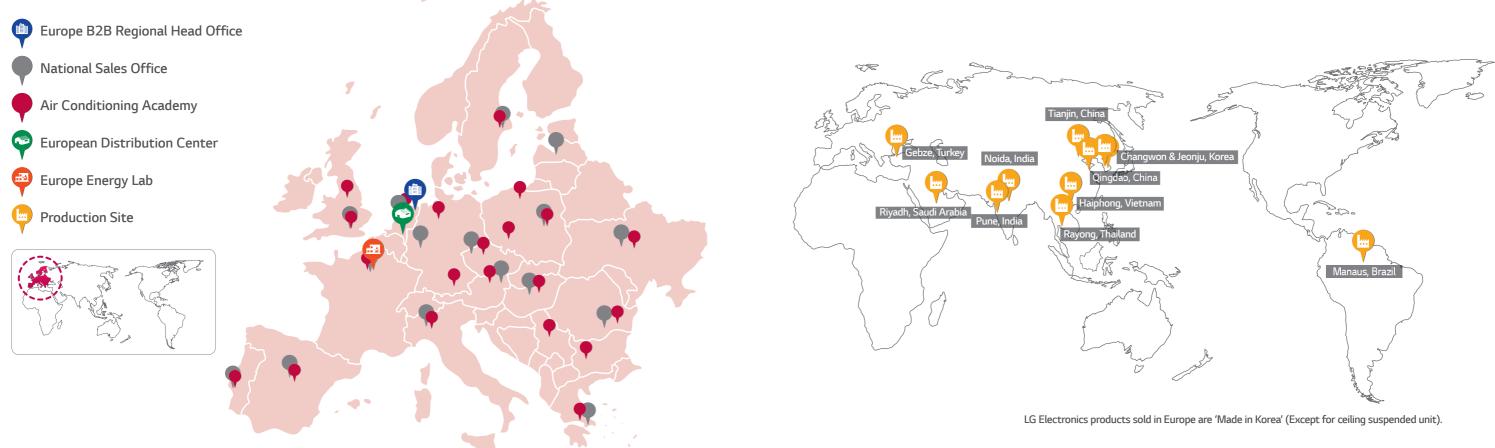
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# LG HVAC SOLUTION

# EUROPE SALES INFRASTRUCTURE

# **GLOBAL PRODUCTION SITE**





### LG Energy Labs in Europe

Committed to to meet all requirements regarding energy efficiency and environmental demands, LG has been running Energy Lab. LG Energy Lab is an innovative site dedicated to commercial and residential products in heating, ventilation and the latest energy efficient air conditioning solutions. Also as a showcase, LG Energy Lab is equipped with complete monitoring and control systems. The performance of all products will be tracked and analyzed by a team of Research and Development engineers based in France, Finland and Korea, ensuring efficiency and reliability during the whole product lifecycle.



### **European Air Conditioning Distribution Center**

LG's European Air Conditioning Distribution Center is located in Oosterhout, the Netherlands. Supplying and delivering products all over Europe, this distribution hub has contributed to smooth and rapid delivery, direct shipping for smaller orders and delivery tailored to air conditioners. The hub tries to manage inventory efficiency by taking advantage of LG EU's established inventory pool.

# TOTAL HVAC SOLUTION PROVIDER

Ever since manufacturing Korea's first home grown air conditioner in 1968, LG has remained at the forefront of air conditioning innovation. LG has been the world's top selling manufacturer of residential air conditioning solutions. In 2008, LG achieved to sell the total of more than 100 million air conditioners. Building on its success and technological leadership in the residential air conditioning sector, LG has moved into system air conditioning as well.

The company's range of high performance system air conditioning products provides effective temperature control to large-scale buildings and facilities. Overtime, LG has evolved into the total HVAC and energy solution provider, investing in new technologies adding chillers, VRF systems and BMS (building management system) into its comprehensive product portfolio. Along with a wide range of innovative solutions, LG delivers unrivalled customer service.

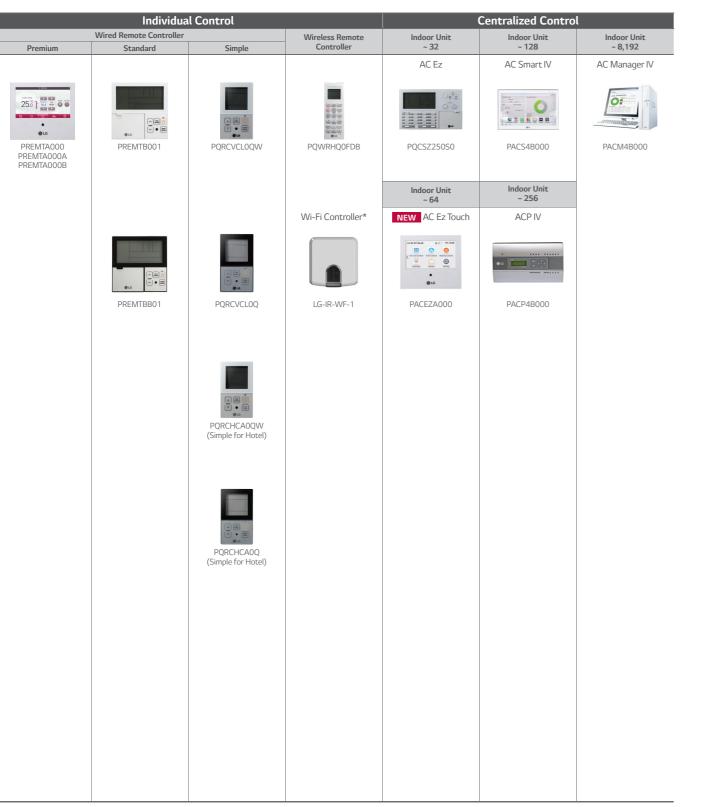
The company produces top-notch air conditioning professionals at its academies, of which there are nearly 80 worldwide. These centers of excellence provide workshops and training programs that offer valuable hands-on experience. LG also provides useful tools for HVAC system engineers and installers, including its time saving LG Air Conditioner Technical Solution (LATS) software. Additionally, LG operates several state-of-the-art R&D facilities all across the planet.

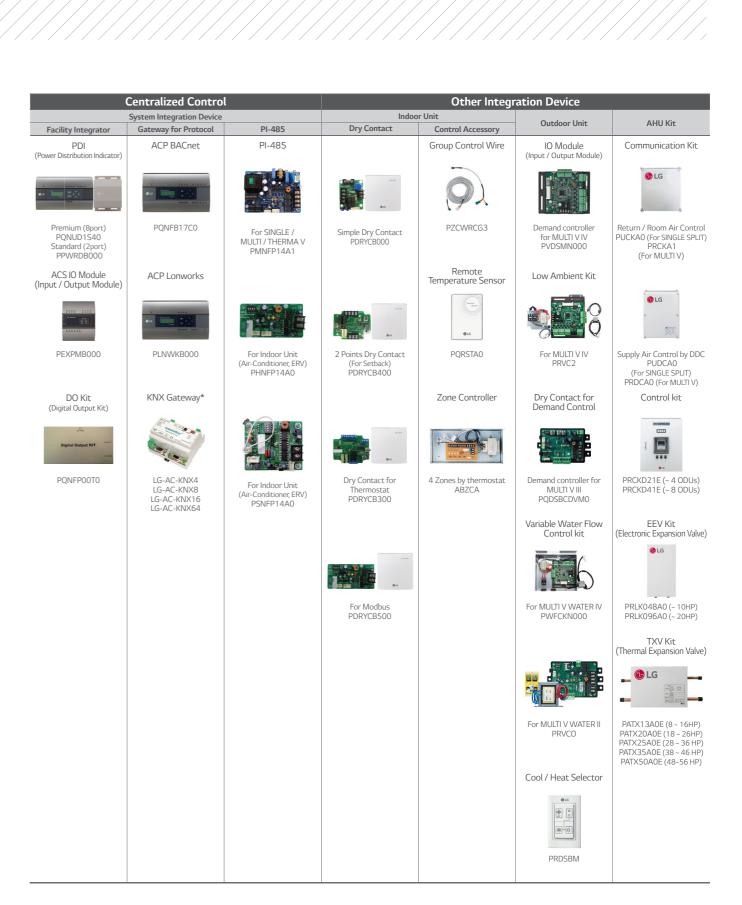
One such facility is the Energy Lab, a purpose-built R&D and testing center in northern France. Helping to keep the company ahead of the competition, the scientists and engineers at the Energy Lab study the effects of different environmental conditions on LG's products. This in-depth research and analysis enables LG to tailor its solutions to the specific environmental demands of each individual market. Combining the best technologies with the best ideas, LG's high quality products are now enjoyed by customers in over 100 countries.

# LG HVAC CONTROL

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# LINE-UP





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# INDIVIDUAL CONTROL



# INDIVIDUAL CONTROL



### Remote Controller Line Up

Model Name	PREMTA000 PREMTA000A PREMTA000B	PREMTBO01 PREMTBB01	PQRCVCLOQW PQRCVCLOQW PQRCVCLOQ PQRCHCA0QW PQRCHCA0Q	PQWRHQ0FDB	LG-IR-WF-1 <sup>1)</sup>
On / Off	•	٠	٠	٠	٠
Fan Speed Control	•	•	•	•	•
Temperature Setting	•	•	•	•	•
Mode Change	•	•	•*	٠	•
Additional Mode Setting	•	٠	٠	٠	-
Auto Swing	•	•	•*	٠	٠
Vane Control (Louver Direction)	•	•	۰×	٠	-
E.S.P (External Static Pressure)	•	•	•	-	-
Reservation	Weekly / Yearly	Weekly	-	Sleep, On / Off	-
Child Lock	•	•	•	-	-
Electric Failure Compensation	•	•	•*	-	-
Time Display	•	•	-	•	-
Filter Sign	•	•	-	-	-
Energy Management**	•	-	-	-	-
Home Leave	2 Set Points Control	-	-	-	-

\* PQRCHCA0QW / PQRCHCA0Q doesn't offer this function \*\* Centralized control (PACS4B000 / PACP4B000 / PQNFB17C0 / PLNWKB000) and PDI (PQNUD1S40 / PPWRDB000) should be installed for this function 1) User and product registration are necessary to use functions with internet accessibility. Providing functions can be changed according to the manufacturer.











Indivisual Control

# PREMIUM WIRED **REMOTE CONTROLLER**

5 inch full touch screen with a premium design

### PREMTA000<sup>1)</sup> PREMTA000A<sup>2)</sup> PREMTA000B<sup>3)</sup>





### Features<sup>4)</sup>

#### Self-Management for Energy Saving

- Time limit operation / Power consumption monitoring
- Weekly / Monthly / Yearly trend tracking
- Target alert alarm
- Temperature range setting

#### Design with user's Convenience

- Full touch / Intuitive GUI (Graphic User Interface)
- Main display simple mode / Touch buzzer

Model Name	PREMTA000 / PREMTA000A / PREMTA000B
On / Off	•
Fan Speed Control	•
Temperature Setting	0
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
Additional Mode Setting*	Plasma Purification / Energy-Saving Cooling / Robot Cleaning / Heater / Humidification
Auto Swing	•
Vane Control (Louver Direction)	•
E.S.P (External Static Pressure)**	•
Reservation	Simple / Sleep / On / Off / Weekly / Yearly / Holiday
Time Display	•
Electric Failure Compensation	•
Child Lock	•
Filter Sign	• (Remain time + Alarm)
Energy Management	Check Energy Usage*** / Check Operation Time / Target Setting (Energy, Operation Time) / Time Limit Operation / Alarm Popup / Initialization Usage Data
Operation Status LED	•
Indoor Temperature Display	•
Wireless Remote Controller Receiver	0 <sup>****</sup>
Display	5 Inch TFT color LCD (480 x 272)
Size (W x H x D, mm)	137 x 121 x 16.5
Black Light for Screen Saver	0
Home Leave	2 Set Points Control

\* It might not be indicated or operated at the partial product

\*\* This function is available for certain indoor unit type \*\*\* Centralized control (PACS4B000 / PACP4B000 / PQNFB17C0 / PLNWKB000) and PDI (PQNUD1S40 / PPWRDB000) should be installed for this function

\*\*\*\* For ceiling type duct

4) Indoor unit should have functions requested by the controller

5) 2 set points control works normally with MULTI V Heat Recovery and Single Heat Pump. But in case of MULTI V Heat Pump, It is not working in 2 set points control of indoor unit

#### Improved Scheduling

- Timer / Daily / Weekly / Yearly / Holiday
- 2 Set Points Control 5)

### **Energy Management**



### Self Energy Management

After it gathers information about usage time or electricity usage\*, offer periodical history data to users as visual information. By using various setting mode (operation hour / electricity usage etc.), you can manage on your own.

\* Centralized control (PACS4B000 / PACP4B000 / PQNFB17C

### **User Friendly Design**



### Intuitive UI & GUI Design

It is more easy to use and control various functions.

Standard Mode

### **Enhanced Schedule Function**



#### Yearly / Weekly Schedule Function

If you set the schedule all at once, you will be able to effectively manage for various lengths of time. It provides 5 kinds of reservation functions. (Timer, Daily, Weekly, Yearly, Holiday)



Weekly Schedule

\_\_\_\_

27.0°C

-----

### 2 Set Points Control



\_\_\_\_

-

Ambient indoor temperature is guaranteed by setting two-point temperature for cooling and heating. New premium remote automatically changes from heating to cooling (and vice versa) depending on temperature.

#### Home Leave







Weekly / Monthly / Yearly Trend & Target Setting Control

Premium remote controller provides convenient trend & target graph for different period.

20 / PLNWKB000)	and PDI (PQNUD1S40 /	PPWRDB000)	) should be installed	for this function

	12:30 PM	?
Ċ	×	<mark>18.0</mark> ℃
Oper.	Mode	Temp.
Low	$\langle \Rightarrow \rangle$	>
Fan Speed	Air Flow	View Change

Display Configuration

Users can use of five buttons as shortcuts for frequently used features

Simple Mode

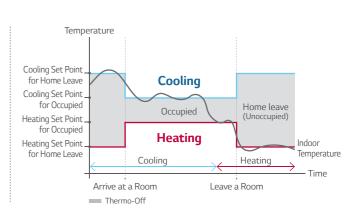
Home	W	eekly sched	lule	Edit
VACA	TION			
AUTU	MN			
Empty				
Empty				
Timer	Dely	7-days	Yearly	Holday

Weekly Schedule Pattern

### Easy Pattern Schedule

It is possible to embody various schedules as pattern setting.

\* Available to save up to a maximum of 20 error histories, 20 holiday reservations and 5 daily event on week



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# **STANDARD WIRED REMOTE CONTROLLER**

Providing easy control of one or a group of indoor units with various functions

#### Standard II

PREMTB001 (White) PREMTBB01 (Black)



### Features<sup>1)</sup>

Model Name	PREMTB001 / PREMTBB01
On / Off	0
Fan Speed Control	0
Temperature Setting	0
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
Additional Mode Setting	Plasma Purification / Energy-Saving Cooling / Robot Cleaning / Heater / Humidification
Auto Swing	0
Vane Control (Louver Direction)	0
E.S.P (External Static Pressure)	0
Reservation	Simple / Sleep / On / Off / Weekly / Holiday
Time Display	0
Electric Failure Compensation	0
Child Lock	0
Filter Sign	• (Remain time + Alarm)
Operation Status LED	0
Indoor Temperature Display	0
Wireless Remote Controller Receiver	0 <sup>+</sup>
Size (W x H x D, mm)	120 x 121 x 16
Blacklight	0
Power Consumption Monitoring	0 <sup>**</sup>
Check Model Information	•

\* For Ceiling Concealed Duct type

\*\* Centralized control (PACS4B000 / PACP4B000 / PONFB17C0 / PLNWKB000) and PDI (PONUD1S40 / PPWRDB000) should be installed for this function 1) Indoor unit should have functions requested by the controller

# SIMPLE WIRED REMOTE CONTROLLER A simple way to control office or hotel systems in a compact design

Simple PQRCVCL0QW (White) PQRCVCLOQ (Black)

Simple for Hotel PQRCHCA0QW (White) PQRCHCA0Q (Black)



### Features<sup>1)</sup>

Model Name	PQRCVCL0QW / PQRCVCL0Q	PQRCHCA0QW / PQRCHCA0Q
On / Off	•	•
Fan Speed Control	•	•
Temperature Setting	•	٠
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan	Only Changeable by Central Controller
Auto Swing	•	-
Vane Control (Louver Direction)	•	-
E.S.P (External Static Pressure)	•	٠
Electric Failure Compensation	•	-
Child Lock	•	•
Indoor Temperature Display	•	٠
Wireless Remote Controller Receiver	•*	•*
Size (W x H x D, mm)	70 x 121 x 16	70 x 121 x 16
Blacklight	•	٠

\* For Ceiling Concealed Duct type

1) Indoor unit should have functions requested by the controller





Simple for Hotel

Indivisual Control

CONTROL SOLUTION

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# WIRELESS **REMOTE CONTROLLER**

### PQWRHQ0FDB



### Features

Model Name	PQWRHQ0FDB
On / Off	•
Fan Speed Control	•
Temperature Setting	•
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
Additional Mode Setting	Plasma Purification / Energy-Saving Cooling / Robot Cleaning / Auto Dry
Auto Swing	•
Vane Control (Louver Direction)	•
Reservation	Sleep / On / Off
Indoor Temperature Display	•
Sleep Mode Auto	Max. 7 hours
Size (W x H x D, mm)	51.4 x 153 x 26

# WI-FI CONTROLLER<sup>1)</sup>

### LG-IR-WF-1

### **Models Applied**

- Connectable with the indoor unit having IR receiver
- Power supply includes EU-UK-US-AU heads
- On / Off status and mode indicated by LED light
- Additional internet service has to be available and registration user account in Intesis Home cloud to use Wi-fi controller is mandatory
- Intesis Home cloud app is available for android phone or iOS phone \* Internet access is necessary

## **Specifications**

Model Name	LG-IR-WF-1
Enclosure	ABS (V-O, 5VB) 2,1 mm thickness PC (V-2) 1mm thickness
Dimensions (mm)	81 × 78 × 28
Weight (g)	76
Color	White
Power Supply	5VDC 0,2 A NEC Class 2 or Limited Power Source (LPS) and SELV Rated Power supply
Mounting	Wall
LED Indicators	1 × Device Status
Operating Temperature	From 0°C to 40°C
Operating Humidity	<93% HR, no Condensation
Stock Humidity	<93% HR, no Condensation
RoHS Conformity	Compliant with RoHS Directive (2002 / 95 / CE)
Certifications	Compliant with RoHS Directive (2002 / 95 / CE) CE Conformity to EMC Directive (2004 /108 / EC) and Low-voltage Directive (2006 / 95 / EC) EN 60950-1 / EN 301489-1 v1.8.1 / EN 300328

### **Overview**

Case 1. Connection with Indoor Units with IR Receiver







Indivisua Control



 Control and monitor · Easy to install : Wall or desktop mounted Automatic firmware Updates\*

Model Name	LG-IR-WF-1
Start / Stop Operation	٠
Operation Mode	Cool / Heat / Auto / Fan / Dry
Set Point	•
Ambient Temperature	•
Fan Speed	٠

### Case 2. Connection with Duct Type Indoor Units



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# CENTRALIZED CONTROL



16	AC Ez Touch	LACE to ALL WITH ALL WITH
18	AC Smart IV	
20	AC Ez	

### Central Controller Line Up

Model Name	Although Alt				
	NEW PACEZA000	PQCSZ250S0	PACS4B000	PACP4B000	PACM4B000*
Maximum Number of Units	64	32	128	256	8,192
Individual / Group Control (On & Off, Mode, Set Point, Fan Speed)	٠	٠	•	٠	٠
Ventilation Control	•	•	•	•	•
Individual Controller Lock	•	•	•	•	•
Error Check	•	•	•	•	•
Schedule	•	•	•	•	•
Operation History	•	-	•	•	•
Visual Navigation	-	-	•	•	•
Operation Time Limit	-	-	•	•	•
Temperature Limit	•	-	•	•	•
Web Access 1)	Web	-	Web	Web	Remote Access by Client S/W
Auto Changeover / Setback	•	-	•	•	•
Power Consumption Monitoring (with PDI)	٥	-	۰	٠	٠
Interlock Control	-	-	•	•	•
Virtual Group Control	-	-	•	۰	•
Emergency Alarm Display	•	-	•	•	•
ACS IO Module Interlocking	-	-	•	٠	•

\* S/W program 1) Assignment of public IP address is required to access central controller through internet.



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21 ACP IV



22 AC Manager IV



Centralized Control

# AC EZ TOUCH

Smart management with 5 inch touch screen for small site





# Features



Web Access

Users can control each space efficiently through web access. (Web access : Network configuration is locally necessary)

rcon C	ontrol		) Control	e
on units oup (0)	ON 2 units Group (1)	23.0° FAN AC_03	23.0° HEAT AC_04	^
23.0° HEAT	23.0° AUTO AC_06	23.0° FAN AC_07	23.0° FAN AC_08	1/2
23.0° FAN AC_09	23.0° HEAT AC_0A	23.0° OFF AC_0B	23.0° dry AC_0E	$\sim$

• Energy Mode

Gr

When using energy mode function, operation mode changes from cooling to fan or heating to off mode by force. (It is available only air conditioner and 'on' mode indoor unit)

	Schedule	
Alarm		
🛕 Error		<u>32</u> >
🛕 Oil Chang	<u>0</u> >	
🔥 Filter Cha	<u>0</u> >	
	^	

Alarm Indicator

It works when there are some errors or it's time to change the oil or filter. Users can respond immediately according to alarm indicator therefore HVAC system is monitored consistently.

### Features

Model Name	PACEZA000		
Maximum Number of Indoor Units	64		
Individual / Group Control (On & Off, Mode, Set Point, Fan Speed)	•		
Individual Controller Lock	• (Temperature / Mode / Fan / All)		
Error Check	Self diagnosis		
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan		
Slave Mode (Interlocking with Higher Level Controller)	0		
Schedule	Daily / Weekly / Monthly / Yearly / Exception day		
Operation History	0		
Temperature Limit	0		
Web Access 1)	0		
Auto Changeover / Setback	•		
Power Consumption Monitoring (with PDI)	0		
Emergency Alarm Display	0		
External IO Port No.	DI 1		
Compatible Model	MULTI V / ERV / ERV DX / THERMA V / HYDRO KIT		
Size (W x H x D, mm)	137 x 25 x 121		

1) Assignment of public IP address is required to access central controller through internet please contact regional office to have detailed Internet connection configuration

### **Installation Scene**



• Appropriate PI 485 should be used according to PDB

# CONTROL SOLUTION

Energy 👻					
< 2016. 2.	8 ~ 2016. 3. 19	Today Week	Month		
Name	Usage(kWh)	Accumulated(kV	/h)		
Group1	110	3021	_		
Group2	150	6186	1		
Group3	130	4267	3		
Group4	120	7614	$\sim$		

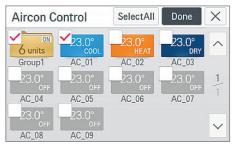
### • Energy Statistics (with PQNUD1S40 or PPWRDB000)

Statistics of operational status (time, power consumption) are provided to help make intelligent system operation decisions.

Sch	edule_l	Month	•			$\oplus$	Add
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
28	29	1	2	3	4	5	$^{\sim}$
6	7	8	9	10	11	12	
13	14	15	16	17	18	19	<sup>2016</sup>
20	21	22	23	24	25	26	03
27	28	29	30	31	1	2	
3	4	5	6	7	8	9	$\sim$

### • Schedule

Schedule control allows user to set the events in advance to maximize system performance. Also, by blocking unnecessary operation, it prevents a waste of energy.



### • Group / Individual Control

According to the situation, it can be controlled by group or each indoor unit. It is useful to monitor or control for the best fit of request.

# AC SMART IV

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Large 10.2 inch touch screen with intuitive GUI (Graphic User Interface) allows easy control

### PACS4B000

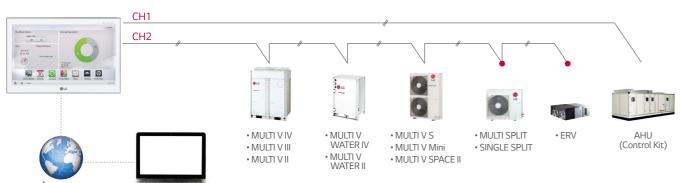


### Features

Model Name	PACS4B000
Maximum Number of Indoor Units	128
Individual / Group Control (On & Off, Mode, Set Point, Fan Speed)	•
Individual Controller Lock	• (Temperature / Mode / Fan / All)
Error Check	Self diagnosis
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
Schedule	Daily / Weekly / Monthly / Yearly / Exception day
Operation History	•
Visual Navigation	•
Operation Time Limit	•
Temperature Limit	•
Web Access 1)	0
Auto Changeover / Setback	•
Power Consumption Monitoring (with PDI)	•
Interlock Control	•
Virtual Group Control	•
Emergency Alarm Display	•
ACS IO Module Interlocking	•
External IO Port No.	DI 2 / DO 2
Interfaceable Products	MULTI V / ERV / ERV DX / THERMA V / HYDRO KIT / AHU (Control Kit)

1) Assignment of public IP address is required to access central controller through internet please contact regional office to have detailed Internet connection configuration

### **Installation Scene**



• Appropriate PI 485 should be used according to PDB

### Features



#### Schedule

Schedule control allows user to set the events in advance to maximize system performance. Also, by blocking unnecessary operation, it prevents a waste of energy.



• Energy Statistics (with PQNUD1S40 or PPWRDB000)

Statistics of operational status (time, power consumption) are provided to help make intelligent system operation decisions.



• Interlocking Allows interlocked operation of devices or between digital inputs and outputs on the AC Smart IV.

# CONTROL SOLUTION



### Visual Navigation

Current operation status on floor plan is checked at one view.

Repo	rt			Total	Control Error 2014,03,26 ~ 2014,	06,26
<	Date	Time	UnitName	Code	Detail Information	
1	2014-06-26	14:15:50	Room 303	🦷 S	COOL/18.0 C/OFF by NONE	4
1	2014-06-26	14:15:43	Room 302	🦷 S	COOL/18.0 C/OFF by NONE	1
/	2014-06-26	14:15:43	Room 203	🧃 S	COOL/18.0 C/OFF by NONE	
1	2014-06-26	14:15:42	Room 101	🦷 S	COOL/18.0 C/OFF by NONE	1
1	2014-06-26	14:15:42	Room 105	🦷 S	COOL/18.0 C/OFF by NONE	1
1	2014-06-26	14:14:03	Room 303	🧃 S	COOL/18.0 C/ON by U_system_admin	1
1	2014-06-26	14:14:00	Room 302	🧃 S	COOL/18.0 C/ON by U_system_admin	1
1	2014-06-26	14:13:56	Room 203	🦡 S	COOL/18.0 C/ON by U_system_admin	
						-

#### Operation Report

Report including control status and other information is provided so that operation history can be reviewed easily. Data can be sent by E-mail or stored on USB or external HDD.



### Emergency Display

Red alert takes up the whole display upon any urgency situation and all other control signals are blocked to prevent any possible accident.

# AC EZ

Easy to manage up to 32 indoor unit, including ERV with simple interface

### PQCSZ250S0

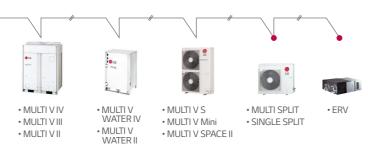


### Features

Model Name	PQCSZ250S0
Maximum Number of Indoor Units	32
Individual / Group Control (On & Off, Mode, Set Point, Fan Speed)	•
Ventilation Control	•
Individual Controller Lock	•
Error Check	LED / LCD Display
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
Master / Slave Setting	•
Display	Operation Status, Set Temperature, Room Temperature, Schedule
Size (W x H x D, mm)	190 x 120 x 17
Power	DC 12V

### **Installation Scene**





**ACP IV** 

ACP IV can be integrated to the web system that allows user can access the control system online anytime, anywhere without access to PC or specific application

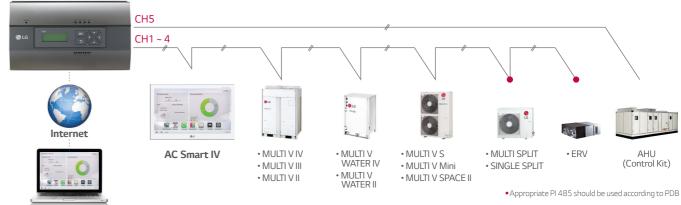
### PACP4B000

### Features

Model Name	PACP4B000
Maximum Number of Indoor Units	256
Individual / Group Control	2JU
(On & Off, Mode, Set Point, Fan Speed)	0
Individual Controller Lock	• (Temperature / Mode / Fan / All)
Error Check	Self Diagnosis
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan
Schedule	Daily / Weekly / Repetition / Exception day
Operation History	•
Visual Navigation	0
Operation Time Limit	0
Temperature Limit	0
Web Access 1)	•
Auto Changeover / Setback	0
Power Consumption Monitoring (with PDI)	0
Interlock Control	0
Virtual Group Control	0
Emergency Alarm Display	0
ACS IO Module Interlocking	•
External IO Port No.	DI 10 / DO 4
Interfaceable Products	MULTI V / ERV / ERV DX / THERMA V / HYDRO KIT / AHU (Control Kit)

1) Assignment of public IP address is required to access central controller through internet.

### **Installation Scene**



• Appropriate PI 485 should be used according to PDB



Centralized Control



# AC MANAGER IV

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Up to 32 ACP IV can be connected so that 8,192 indoor units can be controlled and monitored

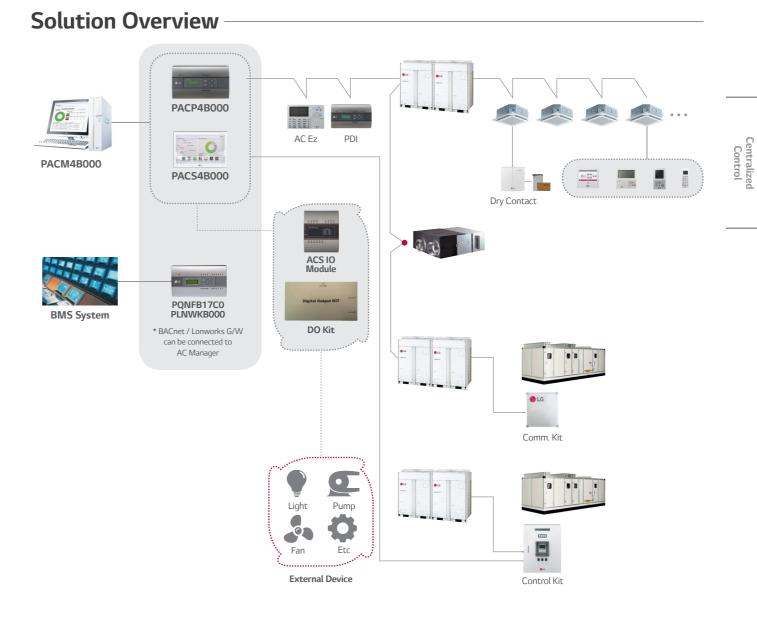
### PACM4B000



### Features

Model Name	PACM4B000		
Maximum Number of Indoor Units	8,192 (supports 32 ACP IV)		
Individual / Group Control (On & Off, Mode, Set Point, Fan Speed)	•		
Individual Controller Lock	• (Temperature / Mode / Fan / All)		
Error Check	Self diagnosis		
Mode Change	Cooling / Heating / Auto / Dehumidification / Fan		
Schedule	Daily / Weekly / Repetition / Exception day		
Operation History	0		
Visual Navigation	0		
Operation Time Limit	0		
Temperature Limit	0		
Web Access 1)	0		
Auto Changeover / Setback	0		
Power Consumption Monitoring (with PDI)	0		
Interlock Control	0		
Virtual Group Control	•		
Emergency Alarm Display	0		
ACS IO Module Interlocking	0		

1) Assignment of public IP address is required to access central controller through internet.



Combination: we recommend you to connect separated wattmeter for Indoor units and Outdoor units to have correct power distribution value
 Appropriate PI 485 should be used according to PDB



# SYSTEM **INTEGRATION DEVICE**

Facility Integrator	Gateway for Protocol	PI-485
PDI (Power Distribution Indicator)	ACP BACnet (Modbus)	
Premium (8 port) PQNUD1S40 Standard (2 port) PPWRDB000	PQNFB17C0	For Outdoor Unit (SINGLE / MULTI / THERMA V) PMNFP14A1
ACS IO Module	ACP Lonworks	
PEXPMB000	PLNWKB000	For Indoor Unit (Air-Conditioner, ERV) PHNFP14A0
DO Kit (Digital Output Kit)	KNX Gateway	
PQNFP00T0	LG-AC-KNX4 LG-AC-KNX8 LG-AC-KNX64	For Indoor Unit (Air-Conditioner, ERV) PSNFP14A0

# PDI POWER DISTRIBUTION INDICATOR

PDI shows power consumption of up to 128 indoor units

Premium

PQNUD1S40 (8 port)

Standard PPWRDB000 (2 port)

### Features

• Data is backed up so that correct consumption can be checked when power outage occurred

• Connector can be separated for convenient installation · Linkable with pulse type power meter

### **Installation Scene** Power Monitoring Watt Meter Power In Pulse Signa Single Phase 50Hz / 60Hz 220V 120

—// Communication Cable (2 Wire Shielded Cable) ····//···· Pulse Signal Wire

\* This value could be different with measured power consumption by power meter Combination : we recommend you to connect separated watt meter for Indoor units and Outdoor units to have correct power distribution value

CONTROL SOLUTION

Centralized Control

Power In 3 Phase 4 Wire 50Hz / 60Hz 380V RS485 (LGAP) PACP4B000 PACS4B000 or PLNWKB000







# ACS 10 MODULE

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The module can be connected with PACS4B000 or PACP4B000 if additional control points are needed not only DVI DO but also AI I AO port. These central controller can control 3rd party device as pump, security, lighting and so on through DI/ DO and AI / AO

Interface Type

Analog Input

Analog Output

Digital Input

Digital Output

NTC 10k

PT 1000

Ni 1000

DC (Voltage)

DC (Current)

Binary Input

Normal open

(Dry Contact)

### PEXPMB000



Min.

 $0.68 \mathrm{k}\,\Omega$ 

803 Ω

871.7 Ω

0V

0mA

0V

Max.

 $177 \mathrm{k}\,\Omega$ 

1,573Ω

1,675.2 Ω

10V

20mA

10V

30VAC / 30VDC, 2A

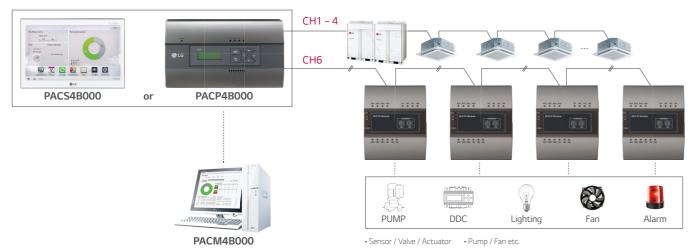
### **Features**

Model Name		PEXPMB000
Linkable Products		PACS4B000 PACP4B000 PACM4B000
Communication	RS-485	1
	Digital Input	3
1/0	Digital Output	3
1/0	Universal Input	4
	Analog Output	4

	PACS4B000	PACP4B000	PACM4B000
Number of Indoor Units	64~128	128~256	8,192
Max. I/O Points	130	224	1,260
Maximum Number of Node	9	16	-

Maximum number of Indoor units may be reduced by increasing the number of I/O points.

## **Installation Scene**



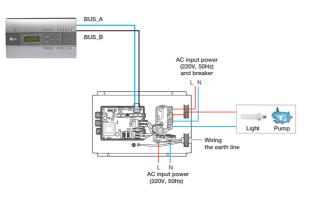
\* DI: Digital Input, DO: Digital Output, UI: Universal Input, AO: Analog Output / Please contact our regional office to have connectable relay specification for analog output

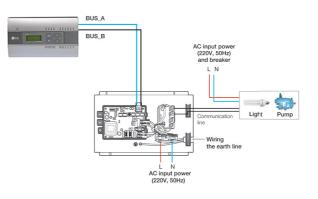
# DO KIT DIGITAL OUTPUT KIT

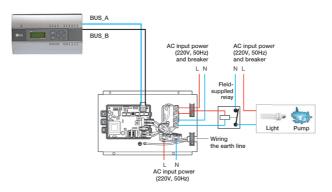
Connected between centralized controllers of LG and external devices, which can switch On / Off devices such as light, pump, motor, etc

### **PQNFP00T0**

### Features







\* Please contact our regional office to have connectable relay specification for digital output





#### • When the product input is less than equal to 25A (The device is controlled by turning On / Off the power supply line of the product.)

- 1. Pull out the power or shut down the breaker.
- 2. Connect the power line from the breaker to the additional relay cable.
- 3. Connect the device power line to the additional relay cable.
- 4. Finish the connected area with the insulating tape.

#### • When the product input is greater than equal to 25A (The device is controlled by turning On / Off the Indoor / Outdoor communication line.)

- 1. Pull out the power or shut down the breaker.
- 2. Cut the communication line.
- 3. Connect the cut communication line to the additional relay cable.
- 4. Finish the connected area with the insulating tape.

#### • When the product input is greater than or equal to 25A (The device is controlled by turning On / Off the power supply line of the product through a fieldsupplied relay)

- 1. Pull out the power or shut down the breaker.
- 2. Connect the power line from the breaker to the additional relay cable.
- 3. Connect the field-supply relay power line to the additional relay cable.
- 4. Connect the device power line to the field-supply relay.
- 5. Finish the connected area with the insulating tape.

CONTROL SOLUTION

# ACP BACNET GATEWAY

### PQNFB17C0



Monitoring Items

On / Off Status

Operation Mode Status

Fan Speed Status

Lock Status

Air Flow Setting

Set Temperature Status

Current Space Temperature Status

Error Status

User Mode Status (for only ERV)

Accumulator Power Distribution Status

Upper Limit Temperature Status

• Appropriate PI 485 should be used according to PDB

#### \* Please refer PDRYCB500 for Modbus RTU

Controlling

On / Off Command

Operation Mode Setting

Fan Speed Setting

Lock Setting

Air Flow Setting

Set Temperature Setting

User Mode Setting (for only ERV)

Upper Limit Temp. Setting

### Features

#### Process Ability

- EHP Type : 256 units (Indoor / ERV / ERV DX / Hydro Kit / THERMA V) - AHU Control kit : Maximum 16 units

28

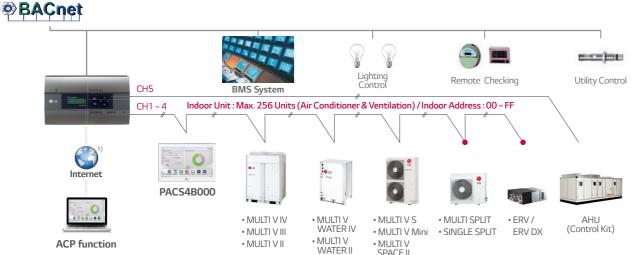
• Self installation verification function using internet (Web Server Included)

- Setting gateway

- Diagnosis of communication status on LG Air-conditioner network
- Modbus TCP Protocol Support
- BTL Certified (B-ASC)
- It offers a variety of functions as ACP which allows the customer to efficiently control various types of equipment from the customer's own PC.

\* In case of using Modbus, the compatibility is different from BACnet. Refer to manual in detail.

### **Installation Scene**



Low Limit Temp. Setting	Low Limit Temperature Status
Mode Lock Setting	Mode Lock Status
AC Operation Mode Setting (ERV DX only)	Air Conditioner Operation Mode Status (ERV DX only)
AC On / Off Command (ERV DX only)	Air Conditioner On / Off Status (ERV DX only)
	-

# ACP LONWORKS GATEWAY

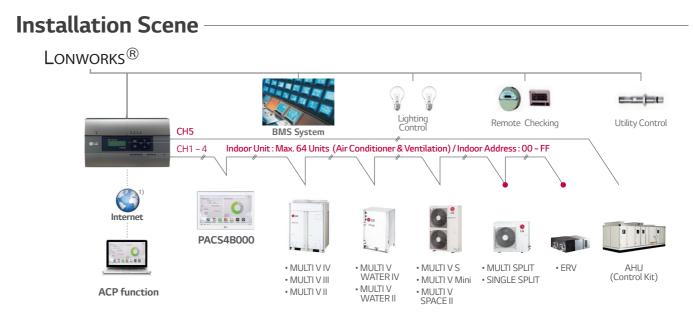
### PLNWKB000

### Features

### Process Ability

- EHP Type : 64 units (Indoor / ERV / Hydro Kit / THERMA V) - AHU Control kit : Maximum 16 units

- Connect to use Lonworks<sup>®</sup> protocol and LG air conditioner protocol.
- Self installation verification function using internet (Web Server Included)
- Setting gateway
- Diagnosis of communication status on LG Air-conditioner network
- It offers a variety of functions as ACP which allows the customer to efficiently control various types of equipment from the customer's own PC.



1) Assignment of public IP address is required to access central controller through internet.





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Controlling	Monitoring Items
On / Off Command	On / Off Status
Operation Mode Setting	Operation Mode Setting
Fan Speed Setting	Fan Speed Status
Lock Setting	Lock Status
Air Flow Setting	Air Flow Setting
Set Temperature Setting	Set Temperature Status
-	Current Space Temperature Status
-	Error Status
-	Accumulator Power Distribution Status
Upper Limit Temperature Setting	Accumulator Power Distribution Status
Low Limit Temperature Setting	Low Limit Temperature Setting
Mode Lock Setting	Mode Lock Status
Peak Operation Ratio Setting	Peak Operation Ratio Setting
All On / Off Setting	-
-	Total Accumulate Power Status

• Appropriate PI 485 should be used according to PDB

# KNX GATEWAY<sup>1)</sup>

30

Specially designed to allow monitoring and bidirectional control of all the parameters and functionality of LG air conditioners from KNX installations

### LG-AC-KNX4 LG-AC-KNX8 LG-AC-KNX16 LG-AC-KNX64



- · Easy installation, direct connection to all outdoor units (Communication interface PMNFP14A1, when needed) and Heat recovering units (Communication interface PHNFP14A0, when needed) throungh the RS485 Bus
- Great integration flexibility. Using the supplied software LinkBoxEIB, a complete set of communication objects can be accessed.
- Direct connection to KNX bus
- Independent management of communications
- Power supply : 9 to 24V DC or 24V AC
- Standard DIN-Rail 6 modules enclosure
- Maximum connection unit

Model Name	Max. Connection Units
LG-AC-KNX4	4
LG-AC-KNX8	8
LG-AC-KNX16	16
LG-AC-KNX64	64

### Link BoxEIB Configuration Software for IntesisBox<sup>®</sup> KNX Serious

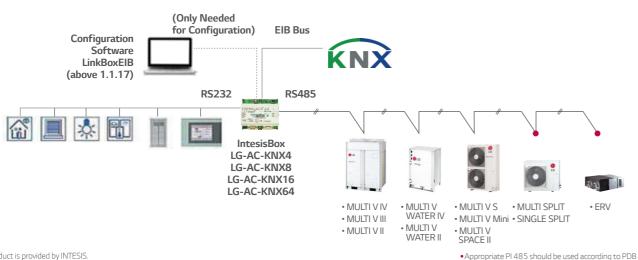
Easy to use tool for the configuration of intesisBox, in a fast and effective way.

It offers the maximum integration possibilities with a minimal knowledge required on the system to be integrated.



- Only needed during configuration.
- One single tool for the configuration of the whole range of IntesisBox KNX series gateways. - Supplied with IntesisBox with no additional cost.
- Configuration examples for all systems that can be integrated.
- Mapping table editable using excel, allowing a simple and fast association of KNX Group Addresses, exported from ETS, to IntesisBox's datapoints.
- Includes powerful and useful features for configuration, setup and troubleshooting.

## Installation Scene



PI 485

PI 485 converts the air conditioner's protocol to the RS485 protocol for the central controller

PMNFP14A1 PHNFP14A0 PSNFP14A0

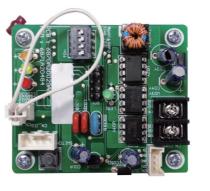
### **Features**



- Model Name : PMNFP14A1
- SINGLE SPILIT - MULTI SPLIT - THERMA V



• 1 for Each Indoor Unit - Indoor Unit (Air-Conditioner, ERV)



 Model Name : PSNFP14A0 • 1 for Each Indoor Unit - Indoor Unit (Air-Conditioner, ERV)

\* MULTI V PLUS II & MULTI V III & MULTI V IV series do not require any other PI 485 since these series have PI 485 in its outdoor unit PCB.

1) This product is provided by INTESIS





# Power : Single Phase AC 220V 50/60Hz • 1 for Each Outdoor Unit (Max 64 Indoor Units)

- MULTI V MINI (ARUN40GS2A / ARUV40GS2A Only needs PI485)

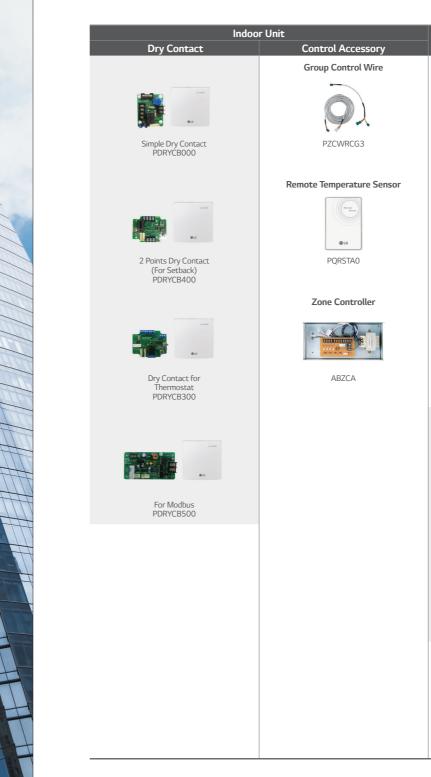
• Model Name : PHNFP14A0 Power : Connected with the Indoor Units

Power : Connected with the Indoor Units

\* Provided with a case to be installed on the exterior

# OTHER INTEGRATION CONTROL

# OTHER INTEGRATION DEVICE LINE-UP





Outdoor Unit	AHU Kit	
IO Module (Input / Output Module)	Communication Kit	
PVDSMIN000	PUCKA0 PRCKA1	
Low Ambient Kit		
PRVC2	PUDCA0 PRDCA0	Other Integration Device
Dry Contact for Demand Control	Control Kit	
PQDSBCDVM0	PRCKD41E	
Variable Water Flow Control Kit	EEV Kit (Electronic Expansion Valve)	
PWFCKN000	e LG PRLKO48A0 / PRLKO96A0	
	TXV Kit (Thermal Expansion Valve)	
PRVCO	PATX13A0E / PATX20A0E PATX25A0E / PATX25A0E PATX50A0E	
Cool / Heat Selector		

34

Connection between an indoor unit and external devices to control various functions

## PDRYCB000 PDRYCB400



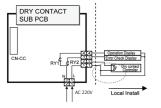
### Features

Model Name	PDRYCB000	PDRYCB400
Contact Point	1 Contact Point	2 Contact Point
Power Input	AC 220V	From Indoor Unit
Voltage / Non Voltage Input	-	•
On / Off Control	•	•
Rotary Switch 1	-	Operating Set Temperature Selection
Rotary Switch 2	-	Operating Logic Selection
Error Monitoring	•	•
Operation Monitoring	•	•
Size (W x H, mm)	120 x 120	120 x 120

\* Refer to each models PDB for applicable models. \* Maximum operation AC : 3A

\* 4th generation indoor unit has 1 contact point function for On / Off control. But in case of using more function of Dry Contact besides On / Off control, Dry Contact is needed.

### PDRYCB000



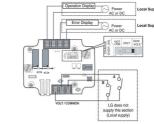
**Installation Scene** 

To Apply Power Source through PCB

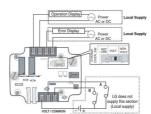
# 

To Apply Power Source Directly to External Source

#### PDRYCB400



In Case Non Voltage Signal



In Case Voltage Signal

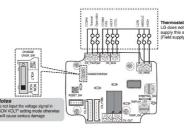


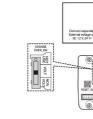
### PDRYCB300

### Features

Model Name	PDRYCB300
On / Off Control	•
Mode Control	• (Cool, Heat, Fan)
Fan Speed Setting	• (Low, Middle, High)
Thermo Off	•
Error Monitoring	•
Operation Monitoring	•
Rotary Switch 1	Operating Set Temperature Selection
Rotary Switch 2	Operating Logic Selection
Size (W x H, mm)	120 x 120

#### PDRYCB300





For no Power Contact Point Signal Input

For Power Contact Point Signal Input

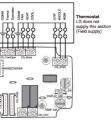
### **Installation Scene**

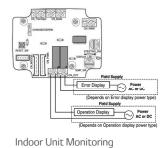


\* Please contact our regional office to have full compatible room controller list

CONTROL SOLUTION







Control Module

Other Integration Device

# **DRY CONTACT**

36

Connection between an indoor unit and external devices to control various functions

### PDRYCB500



### Features

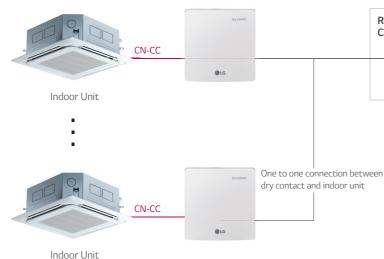
#### Function

- MODBUS communicate with MODBUS master controller
- MODBUS RTU slave / 2 wire RS485 / 9,600bps
- MAX. 8 IDUs can be connected with one MODBUS master controller
- Size (W x H x D): 120mm x 120mm x 36.5mm

#### Memory map

Register (hexa)	Name	Range	Notes
00001	Operation	0 … 1	0 : Stop, 1 : Run
30003	Indoor Temperature	100 390	Degrees C x 100
30100	Error Alarm	0 … 1	0 : No Error, 1 : Error
40001	Set Run Mode	0 … 4	0 : Cooling, 2 : Fan, 4 : Heating
40002	Set Temperature	180 300	Degrees C x 100
40015	Set Fan Speed	0 3	0 : Low, 1 : Middle, 2 : High, 3 : Auto

### **Installation Scene**



<Modbus Communication Function>

### Room **Control Master** .... RCU\* Controller \* RCU : Room Control Unit. Max. 8 IDUs

# **GROUP CONTROL WIRE**

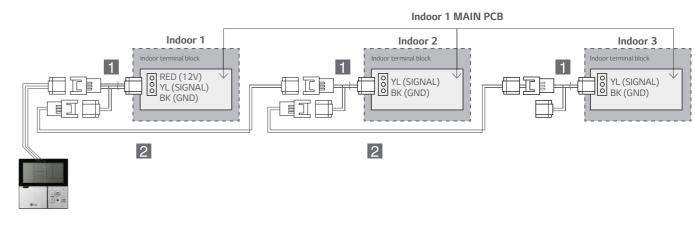
Cables used to connect a wired remote controller up to 16 indoor units

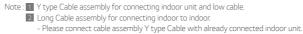
### PZCWRCG3

### Features

Model Name	
Y-type Cable	
Long Cable	

### **Installation Scene**





\* Please contact our regional office to have full compatible room controller list





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PZCWRCG3		
0.25m Length		
9.6m Length		

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# REMOTE TEMPERATURE SENSOR

Sensor for detecting the room temperature

38

### **PQRSTA0**



### **Features**

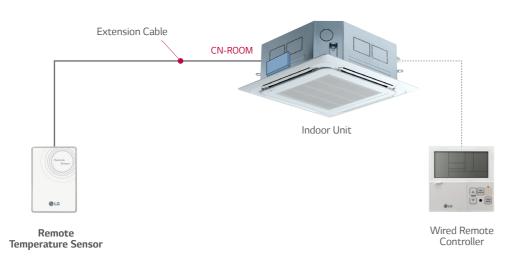
• It can help to detect the exact room temperature instead of indoor unit's air temperature sensor

· Applied to Ceiling Mounted Cassette, Ceiling Concealed Duct, THERMA V and HYDRO KIT

• Extension cable (15m) is included

### **Installation Scene**

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 by external thermostat

ABZCA

### Features

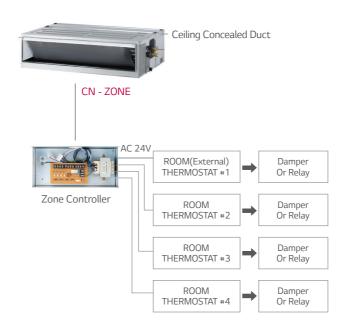
• Controls different zones (Up to 4 zones) by external thermostat (AC 24V)

- Maintain proper air volume of each zone
- Auto variation of dampers
- Auto control of fan speed and On / Off operation

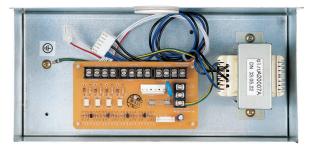
### **Models Applied**

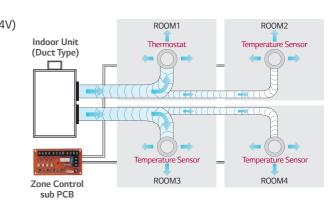
• Ceiling Concealed Duct (refer to PDB for applicable models)

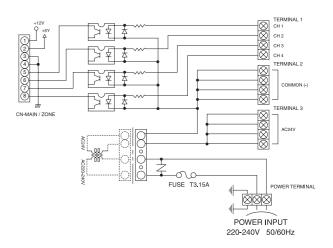
### Wiring Diagram











Other ration Do

CONTROL SOLUTION

39

# IO MODULE MODULE

40

Interface module between system air conditioner and external device

### **PVDSMN000**

**Features** 

- Demand control

- Low noise operation

- Output error status Description

Note : IO Module is not compatible for MULTI V III

**Models Applied** 

Input\_LNO : Low Noise Operation

control by LG Central controller.)

2) Analog Input Part (AI : DC 0 ~ 10V)

• Low ambient operation (AO\_1 ~ 3)

Output error status

• Output operation status

• IO Module communication error display

4) Digital Output (DO : 250VAC, Max 1A)

• AI\_1 : Demand ontrol by analog input (10 Step)

1) Dry Contact Input Part

Priority Setting

- Output outdoor or indoor unit operation status

- IO Module is communication interface module for connection

• MULTI V IV, MULTI V WATER IV, MULTI V S

Input\_1, 2, 3 : Demand control by contact input (3 Step)

Using priority setting contact signal the priority of command.

- Open : External signal has priority to central controller (Default setting)

(Capacity control for external command from DDC vs. peak

- Close : Central controller has priority to external signal

3) Analog Output Part(AO : DC 0 ~ 10V, Max 20 mA)

between MULTI V IV and external IO (Input / Output Module) devices.

Function

Wiring



0000

IO

npu npu

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Error

AI : Analog Input (DC0~10V) AO : Analog Output ( DCO~10V, Max 20mA)

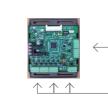
Input\_LNO : Low Noise Operatio

### Installation Scene

#### Demand Control

Provides variable setting for demand control according to input method to reduce power consumption. This function supports 2 types of input signal : AI (0 ~ 10V, 10 Step) and contact signal (3 Step).





MULTI V WATER IV

MULTI V IV

IO Module

#### Low Noise Operation

To reduce noise level, control outdoor unit's fan speed by dry contact input.



Output Operation and Error Status

This function displays outdoor or indoor unit's operation and error status. Depends on dip switch setting, either outdoor or indoor unit operation status is reflected through output signal. Additionally, either outside or indoor unit has an error, IO Module display error signal by another replay.





#### MULTI V WATER IV









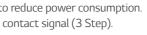


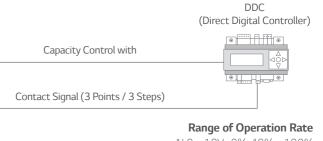






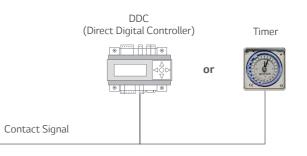






Al 0 ~ 10V : 0%, 40% ~ 100% Contact signal (3 steps): 0%, 40% ~ 80%









Operation Status (Output 250V AC, Max 1A) Error Status (Output 250V AC, Max 1A)

# LOW AMBIENT KIT

42

External integration module for cooling operation with -25°C low ambient temperature.

### PRVC2



### Features

#### Function

- 25°C Low ambient cooling operation by Low ambient kit and hood with damper
- (Analog output 0 ~ 10V)
- Demand control
- Low noise operation
- Output outdoor or indoor unit operation status (250VAC, Max 1A)
- Output error status (250VAC, Max 1A)

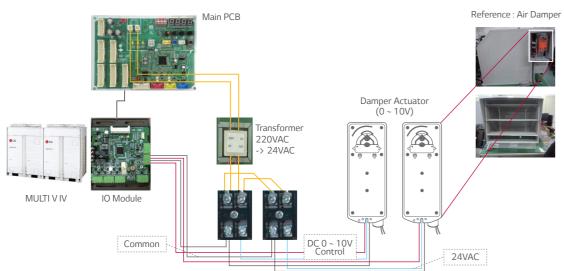
#### Description

- Low ambient kit supports -25°C cooling operation by making stable condensing pressure with reducing air flow rate from hood and damper control given 0 ~ 10V proportional to condensing pressure.
- Low ambient kit provides IO Module function
- External snow hood and air damper are required for this item.\*
- Transformer and terminal block are included.
- \* Before apply this accessory, please contact regional sales office

# **Models Applied**

• MULTI V IV

# Installation Scene



Note : The IO Module can control maximum three actuators. Please, review damper actuator's installation manual.

# OUTDOOR UNIT DRY CONTACT Dry contact for demand control

## **PQDSBCDVM0**

### Features

### Function

- Demand control (3 Contact signal)
- Demand control (Co-work with DDC)
- Outdoor unit fan low speed control (Night low noise operation)
- All Off
- Error output (Display)

#### Description

The product is especially designed for demand control.

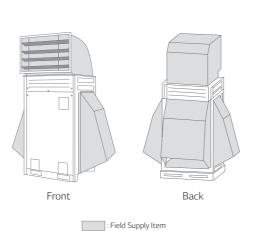
# **Models Applied**

• MULTI V S, MULTI V III, MULTI V MINI, MULTI V SPACE II, MULTI V WATER II, MULTI V WATER S

### Installation Scene



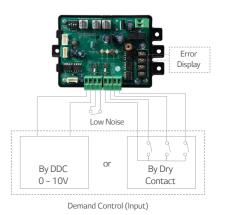


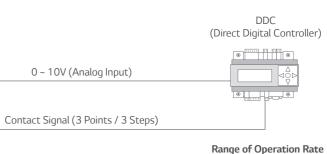












AI 0 ~ 10V: 0%, 40% ~ 100% Contact Signal (3 Steps): 0%, 40% ~ 80%

# VARIABLE WATER FLOW CONTROL KIT

Accessory developed for controlling the water flow

44

### PWFCKN000 (MULTI V WATER IV)



### **Features**

#### Function

- Water pump or valve control (0 ~ 10V)
- Minimum output voltage setting available
- Operation, error output (250VAC, Max 1A)
- Dry contact input and analog output for demand control
- Digital output for operation, error status (250VAC, Max 1A)

#### Advantage

- Water flow consumption reduction
- Pump electricity consumption reduction
- Including IO Module (Dry contact input, Analog input / output, Digital output)
- : Using Dry contact and variable water flow control function simultaneously





# COOL / HEAT SELECTOR

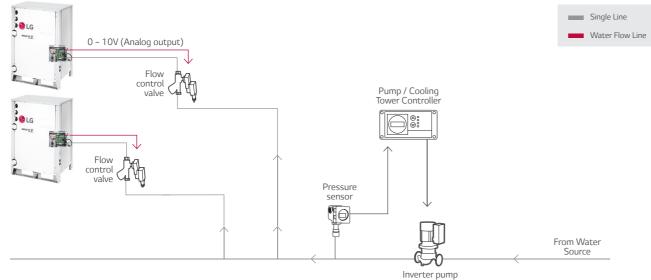
Cooling, heating, or fan mode can be selected to prevent cooling and heating mixing errors during seasonal changes

PRDSBM

### **Features**

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





• Flow control valve : Regulates the flow or pressure of a fluid, normally responding to signals generated by independent devices.

• Flow Meter : Measures mass flow rate of a fluid traveling through a tube. (The mass flow rate is the mass of the fluid traveling past a fixed point per unit time.) • Pressure Sensor : Measures the pressure.

### **Models Applied**

- MULTI V IV • MULTI V S
- MULTI V WATER IV
- MULTI V WATER S

## Wiring Diagram



#### 45

Fan Mode

Cooling

only

€LG

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• MULTI V PLUS II, MULTI V PLUS	

- MULTI V MINI
- MULTI V WATER II
- MULTI V SPACE II

- · 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 1.25mm



GLG

\*

Other ration De





Wode Change

Heating

only

46

Solution to connect LG outdoor unit on the DX coil of an air handing unit, with LG's high efficient products for maximum cost saving





PRCKD21E

PRCKD41E

**Communication Kit PUCKA0** PUDCA0 PRCKA1 PRDCA0

**Control Kit** 



🔁 LG

EEV Kit (Electronic Expansion Valve) PRLK048A0 PRLK096A0

TXV Kit (Thermal Expansion Valve) PATX13A0E PATX25A0E PATX20A0E PATX35A0E PATX50A0E

## Specifications

### Communication & Control Kit

		Combination						Dimensions (mm)		
Туре	Model	Outdoor Unit	EEV Kit	TXV Kit	Centralized Controller	Description		н	D	
Communication	PRCKA1	MULTI V	۰	٠	٠	Return / Room air control by remote controller or dry contact	280	280	135	
	PRDCA0	MULTI V	۰	٠	-	Return / Room air or supply air (Capacity) control by DDC		430	180	
Kit	PUCKA0	Single Split	-	-	•	Return / Room air or supply air (Capacity) control by DDC	280	280	135	
	PUDCA0	Single Split	-	-	-	Return / Room air or supply air (Capacity) control by DDC This unit is connected with outdoor unit1:1	330	430	180	
0	PRCKD21E	MULTI V	-	٠	•	Max capacity 1 ~ 4 master outdoor unit	600	750	285	
Control Kit	PRCKD41E	MULTI V	-	•	•	Max capacity 5 ~ 8 master outdoor unit	600	750	285	

#### Expansion Valves

		Outdoor Unit Combination		Pipe Diameter (mm)					(mm)
Туре	Model	(Capacity Range)	Liquid (ODU)	Liquid (AHU)	Gas (ODU)	Gas (AHU)	w	н	D
EEV Kit	PRLK048A0	4 ~ 10HP	12.7	12.7	-	-	217	404	83
(Electronic Expansion Valve)	PRLK096A0	12 ~ 20HP	12.7	12.7	-	-	217	404	83
TXV Kit (Thermal Expansion Valve)	PATX13A0E	8 ~ 16HP	15.88	15.88	22.2	22.2	491	331	174
	PATX20A0E	18 ~ 26HP	15.88	22.2	28.58	28.58	491	331	174
	PATX25A0E	28 ~ 36HP	22.2	28.58	34.92	34.92	491	331	174
	PATX35A0E	38 ~ 46HP	28.58	34.92	41.3	41.3	491	331	174
	PATX50A0E	48 ~ 56HP	28.58	34.92	41.3	41.3	561	331	192

### Features

### Communication Kit

PRCKA1 & PUCKA0	
List	Description
Communication Kit Operation	On / Off
Mode Change	Cooling / Heating / Fan
Return Air (or Room) Temperature Setting	Cooling 18 ~ 30°C, Heating 16 ~ 30°C
Fan Speed Signal Output	3 steps fan signal output (220V)
Reservation	On / Off, Weekly
Return Air (or Room) Temperature Display	For MULTI V - Stand alone

Note : PRCKA1 is controlled by LG wired remote controller or LG centralized controller

#### Accessories for PRCKA1 & PUCKA0

Wired Remo	te Controller		Dry C	ontact	IO Module	
Stan	Simple	2 point	Thermostat	Modbus	(for Outdoor Capacity Control)	
PREMTB001 (White)	PREMTBB01 (Black)	PDRYCB000	PDRYCB400	PDRYCB300	PDRYCB500	PVDSMN000 (MULTI V IV) PWFCKN000 (MULTI V WATER IV)

#### PRDCA0 & PUDCA0

	List	Description	Туре	Min	Max
	Communication Kit Operation	On / Off	Digital input* (Non voltage)	-	-
бu	Mode Change	Fan only / Heating / Cooling	Digital input (Non voltage)	-	-
Controlling	Fan Step Signal Output	High / Mid / Low (3 steps)	Voltage output (220V ~ 230V)	-	-
ŭ	Room Temperature Control	Cooling 18 ~ 30°C, Heating 16 ~ 30°C	Analog input	OV	10V
	Supply Air Temperature Control (by Outdoor Capacity Control)	Compressor Off, Compressor Off & Fan Off, 40 ~ 100% capacity control	Analog input	OV	10V
	Outdoor Unit Operation	On / Off	Digital output* (Non voltage)	Max : AC 250V, DC 30V, 1A	
бu	Communication Kit Operation	On / Off	Digital output (Non voltage)	Max : AC 250V, DC 30V, 1A	
Monitoring	Mode	Fan / Defrost / Cooling / Heating	Digital output (Non voltage)	Max : AC 250V, DC 30V, 1A	
	Fan Mode	High / Mid / Low (3 steps)	Digital output (Non voltage)	Max : AC 250V, DC 30V, 1A	
	Error Status	No error / Error occurred	Digital output (Non voltage)	Max : AC 250	IV, DC 30V, 1A

\* Binary input and output (Open and short). DO is normal open, for more detail please refer to installation manual Note : DDC or thermostat (filed supplied item) is required to control PRDCA0

#### Accessories for PRDCA0 & PUDCA0

Wired Remote Controller						
Standard II (Monitoring Only)						
PREMTB001 (White)	PREMTBB01 (Black)					



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Solution to connect LG outdoor unit on the DX coil of an air handing unit, with LG's high efficient products for maximum cost saving

### Features

<ul> <li>Control Kit</li> </ul>	t
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List	Required Item					
Heating / Cooling	SA / RA temperature sensor (or SA / RA temperature & humidity sensor)					
Automatic Ventilation         SA / RA temperature, CO <sub>2</sub> sensor, Damper actuator (OA, EA, MA)						
Energy Saving (Cooling Mode Only)	SA temperature, OA / RA temp&humidity sensor, Damper actuator (OA, EA, MA)					
Humidification	SA temperature, RA temperature & humidity sensor, Humidifier					
Inverter Fan Control	SA / RA temperature, Static pressure sensor, Inverter driver for fan control					
Filter Alarm	Difference pressure sensor					
Smoke Detecting	Smoke detection sensor					

RA : Return Air, EA : Exhaust Air, OA : Outdoor Air, SA : Supply Air, MA : Mix air (RA + OA)

#### Field Supplied Item

List	Required Specification	Apply Location
Temperature Sensor	- Power : AC 24V, Output signal : DC 0 ~ 10V - Temperature boundary : -50 ~ 50°C	- Apply to MA, SA, RA
Temperature & Humidity Sensor	- Power : AC 24V, Output signal : DC 0 ~ 10V - Temperature boundary : -40 ~ 70°C - Humidity boundary : 0 ~ 95% RH	- Apply to SA, RA, OA - Can not be applied to MA
Damper Actuator	- Power : AC 24V, In/Output signal : DC 0 ~ 10V - Torque : 15 Nm, Operation time : 150sec. - Rotation angle : 90°	- Apply to OA, EA, MA damper
Difference Pressure Sensor (for Filter)	- Power : AC 24V, Output signal : DC 0 ~ 10V - Boundary : 0 ~ 1000Pa * Switch type : Relay Open / Close	- Apply to filter
Static Pressure Sensor	- Power : AC 24V, Output signal : DC 0 ~ 10V - Boundary : 0 ~ 1000pa	- Apply to SA (for inverter control)
CO <sub>2</sub> Sensor	- Power : AC 24V, Output signal : DC 0 ~ 10V - Boundary : 0 ~ 2000ppm	- Apply to RA duct
Smoke Detection Sensor	- Power : AC 24V, From : Contact point type	- Apply to RA duct

Note : Boundary of specification can be changed through LGAV software. However, please make a specification referring to the above table

## **Capacity Selection**

#### • For Communication Kit with SINGLE SPLIT

- When selecting evaporator, change 'Option PCB' in Communication Kit according to below table (Basic 'Option PCB' is for 24k Btu/h)

	Outdoor Unit Capacity		Recommended Heat	Maximum Heat		Applicable Outdoor Units			
Option PCB 12kBTU	kBTU	kW	Exchanger Volume (10 <sup>-3</sup> x m <sup>3</sup> )	Exchanger Capacity (kW)	Air Flow Rate (CMM)	PUC H-Inverter	KAO Standard Inverter	PUDCA0 Standard Inverter	
EBR65102901	12	3.5	2.2	3.5	9~10	-	٠	-	
EBR65102902	18	5.0	2.4	5.0	13~16.5	-	٠	•*	
EBR65102903	24	7.1	2.6	7.1	14~18	•	•	•*	
EBR65102904	30	8.0	2.9	8.0	20~26.5	•	٠	•*	
EBR65102905	36	10.0	3.1	10.0	26.5 ~ 32	•	٠	-	
EBR65102906	42	12.5	3.4	12.5	28 ~ 36	•	٠	-	
EBR65102907	48	14.0	4.0	14.0	30 ~ 40	•	٠	-	
EBR65102908	60	15.0	4.7	15.0	40 ~ 50	-	٠	-	
EBR77627409	70	19.0	5.2	20.0	60 ~ 70	-	٠	•	
EBR77627406	85	23.0	5.9	23.0	64 ~ 80	-	٠	•	

1) Evaporator Saturated Temperature = 6oC, Air Temperature = 27oC DBT / 19oC WBT 2) Combination allowed only for air-to-air system. \* UU18W:UE4 / UU24W:U44 / UU30W:U44 Available

#### For Communication Kit with MULTI V

- When selecting evaporator, change 'Option PCB' in Communication kit according to below table (Basic 'Option PCB' is for 36k Btu/h)
- After checking the need capacity, remove the 36k Option PCB equipped in the main PCB, and set up the Option PCB fitted the need capacity in the main PCB.

Option PCB P/No	Capacity Index (Btu/h)	Recommended Heat Exchanger Volume (10 <sup>-3</sup> x m <sup>3</sup> )	Maximum Heat Exchanger Capacity (kW)	Air Flow Rate (CMM)
EBR52358907	28k	2.7	8.6	22 ~ 26
EBR52358908	36k	3.1	11.0	25 ~ 32
EBR52358909	42k	3.4	13.8	31 ~ 35
EBR52358910	48k	4.0	15.4	33 ~ 45
EBR52358911	76k	5.4	22.2	50 ~ 64
EBR52358912	96k	6.3	28.1	64 ~ 72
EBR52358914	115k	7.3	33.7	72 ~ 88
EBR52358915	134k	8.5	39.3	88 ~ 103
EBR52358916	153k	9.5	45.4	103~116
EBR52358917	172k	10.5	50.4	114 ~ 129
EBR52358913	192k	11.2	56.2	121 ~ 137

\* Evaporator Saturated Temperature = 6°C, Air Temperature = 27°C DBT / 19°C WBT \* Heat exchanger volume (m<sup>3</sup>): Pipe cross-section x Tube length - Pipe cross-section (m<sup>3</sup>) =  $\overline{\omega} \times ID^2 / 4$ - Tube length (m) = Tube length of 1 pipe x Tube step x Tube row

CONTROL SOLUTION

Other ration Do

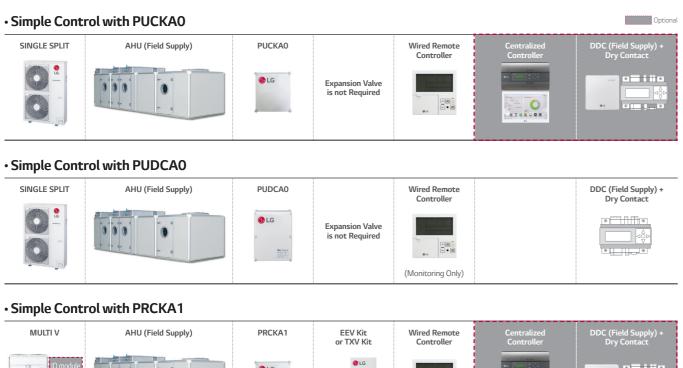
(Main PCB)

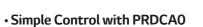
(Main PCB)

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Solution to connect LG outdoor unit on the DX coil of an air handing unit, with LG's high efficient products for maximum cost saving

### Installation Scene





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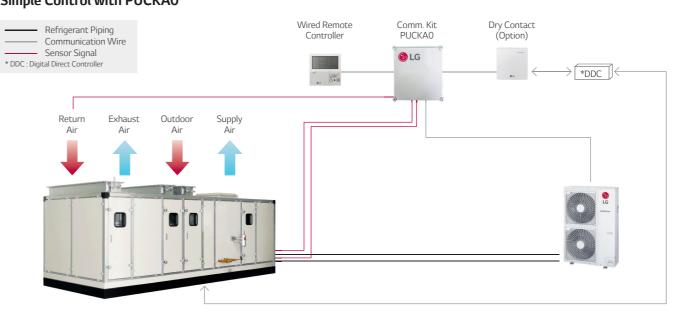
\_\_ 😢 LG

CLG

### Various Control with Control Kit



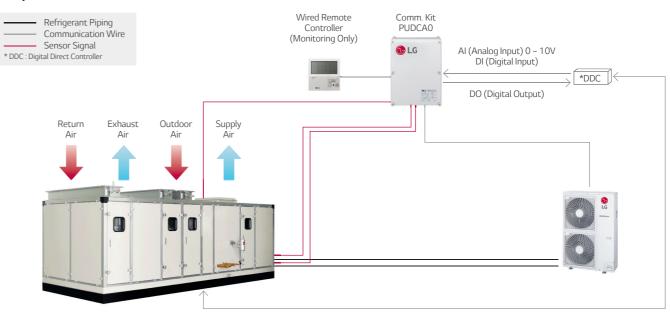
### Application Simple Control with PUCKA0



#### • Simple Control with PUDCA0

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Other Jration Device

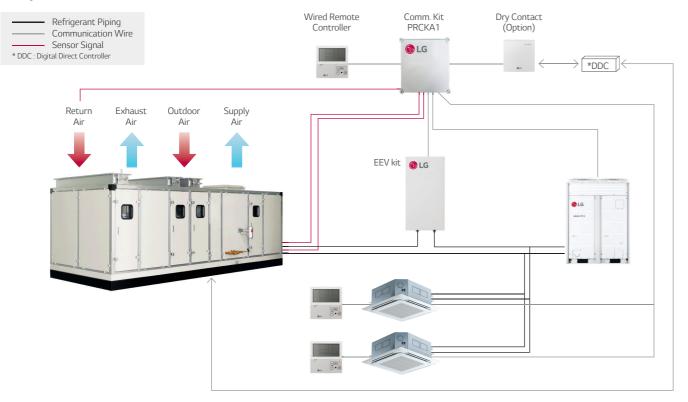


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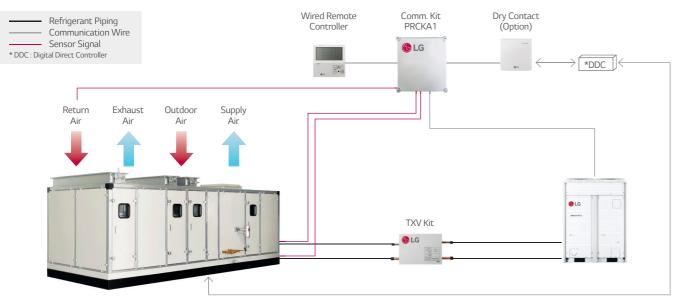
Solution to connect LG outdoor unit on the DX coil of an air handing unit, with LG's high efficient products for maximum cost saving

### Application

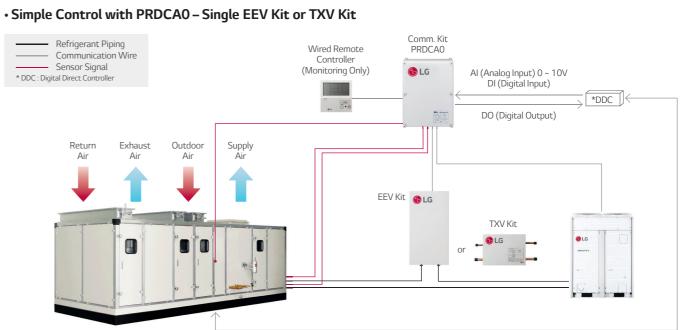
### • Simple Control with PRCKA1 – EEV Kits + Indoor Units



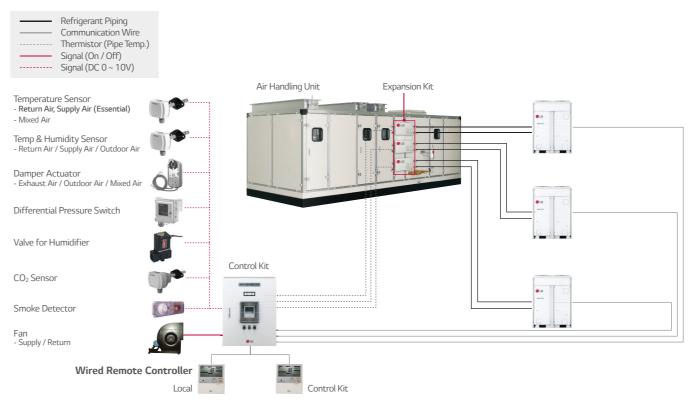
### • Simple Control with PRCKA1 – Single TXV Kit (without Indoor Unit)



### Application



#### Various Control with Control kit - Multiple MULTI Vs + TXV Kits









Other Jration Device

# MECHANICAL **ACCESSORIES LINE-UP**

# **AUTO ELEVATION GRILLE**

Easy filter cleaning with the elevation grille

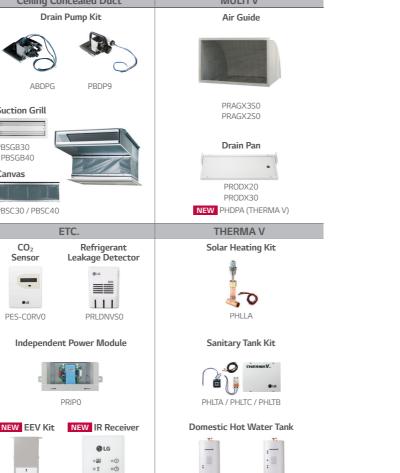
Outdo **Ceiling Mounted Cassette** Ceiling Concealed Duct **MULTI V** Auto Elevation Grille Cassette Cover Drain Pump Kit Air Guide ACCOUNTS 1000000-ARDPG PRDP9 PTDCM PRAGX3S0 **PTEGM0** Suction Grill PTDCQ PRAGX2S0 -Cassette Panel Plasma Kit PBSGB30 Drain Pan / PBSGB40 Canvas PRODX20 PRODX30 PBSC30 / PBSC40 NEW PHDPA (THERMA V) **PTPKM0** NEW 4 Way Cassette PTPK00 THERMA V ETC. (Compact panel) PT-OCHW0 Refrigerant Leakage Detector Ventilation Kit  $CO_2$ Solar Heating Kit Senso OLG -50 .... III PES-CORVO PHLLA **PRLDNVSO** 4 Way Cassette PT-UOC / PT-UMC1 Independent Power Module Sanitary Tank Kit 2 Way Cassette PTVK420 PTVK430 PT-HLC O THERMAV. 1 Way Cassette á) 🚆 (Grill Type) PHLTA / PHLTC / PHLTB PRIPO PT-UUC / PT-UUC1 / PT-UTC (Panel Type) NEW EEV Kit NEW IR Receiver Domestic Hot Water Tank PT-UUD / PT-UTD BLG

### **Mechanical Accessories Line up and Application**

Туре 1	Туре 2	SINGLE SPLIT	MULTI	MULTI V	THERMA V	Remark
	Auto Elevation Grille	•	-	•	-	4-Way Cassette
	Cassette Panel	•	٠	•	-	4-Way / 2-Way / 1-Way Cassette
	Cassette Cover	•	•	•	-	4-Way Cassette
	Ventilation Kit	•	٠	•	-	4-Way Cassette
	Plasma Kit	•	•	•	-	4-Way Cassette
INDOOR Suction Grille / Canva Drain Pump Kit	Suction Grille / Canvas	-	-	•	-	Ceiling Concealed Duct (Built-in)
	Drain Pump Kit	•	٠	-	-	Ceiling Concealed Duct
	Refrigerant Leakage Detection Kit	-	-	•	-	MULTI V 4 <sup>th</sup> Generation Indoors
	Independent Power Module	-	-	•	-	MULTI V Indoor
	CO <sub>2</sub> Sensor	-	-	•	-	Energy Recovery Ventilator
	EEV Kit	-	-	•	-	MULTI V Indoors
-	IR Receiver	•	٠	•	-	Ceiling Concealed Duct
	Air Guide	-	-	•	-	MULTI V Outdoor
OUTDOOR	Drain Pan	-	-	•	•	MULTI V Outdoor / THERMA V

- - -PRGK024A0

\* Only for chassis TM, TN, TP



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LGRTV200E (198 LITERS)

LGRTV300E (198 LITERS)

ONOFF

PWLRVN000

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LGRTV200VE (198 LITERS)

LGRTV300VE (198 LITERS)

### Features

**PTEGMO** 

#### • Easy Filter Cleaning with Elevation Grill

- Installation inside main body
- Auto horizontal control
- 4 points support structure



Operating with wired remote co \* PREMTB001, PREMTBB01 oller\* and wireless remote controller included in PTEGMC

## Models Applied

• 4 Way Cassette : Refer to PDB for applicable models

### **Parts Included**

• Inlet Grille (1EA)

• Auto Elevation Grille Kit (1EA)

• Wireless Remote Controller (1EA)

### Application





Auto elevation grille kit

 Install the kit inside indoor unit

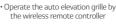
 Install the front panel and the Inlet grille



- Memory for user's level
- Max 4.5m length
- Model : PTEGMO (for chassis TM, TN, TP)

- Screws (4EA)
- Installation Manual (1EA)





Easy maintenance

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# CASSETTE PANEL

Stylish designed panels make more unique space by various applications



1 Way Cassette (Grill Type) PT-UUC / PT-UUC1 / PT-UTC (Panel Type) PT-UUD / PT-UTD



# CASSETTE COVER / PLASMA KIT

Air purifying filter to prevent dust and allergens

PTDCM PTDCQ



### Features -

• Independent vane operation uses separate motors, making it Possible to control all four vanes independently.

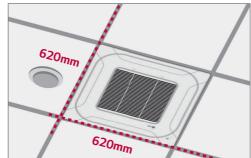
• The detachable corner design makes it easy to adjust the hanger during installation and to check for leakages in the drain connection pipe.

# Compact and Stylish Design

• New 4 way cassette panel adapted unibody shape and matching with into the ceiling • Panel size is fit into the ceiling tile







### Specifications

B.B		Suction	Color	<b>C</b> 1	Weight	Dim	ension (r	nm)		Applied model	
Model name		Туре	(RAL)	Gloss	(kg)	w	н	D	SINGLE SPLIT	MULTI SPLIT	MULTI V
	PT-QCHW0	Horizontal Grill	Morning Fog (RAL 120-4)	Х	3.0	620	20	620	-	-	1.5 ~ 5.0kw
4-Way	PT-UQC	Horizontal Grill	Morning Fog (RAL 120-4)	Х	3.0	700	22	700	2.5 ~ 5.0kw	1.5 ~ 5.0kw	1.5 ~ 5.0kw
	PT-UMC1	Horizontal Grill	Morning Fog (RAL 120-4)	Х	5.6	950	25	950	7.1 ~ 15.0kw	7.1kw	7.1 ~ 14.0kw
2-Way	PT-HLC	Grill	Morning Fog (RAL 120-4)	Х	4.0	1,050	28	640	-	-	5.0 ~ 7.1kw
	PT-UUC	Grill	Noble White (RAL 110-1)	0	4.6	1,100	34	500	-	-	2.1 ~ 3.5kw
	PT-UUC1	Grill	Morning Fog (RAL 120-4)	Х	4.4	1,100	34	500		2.5 ~ 3.5kw	2.5 ~ 3.5kw
1-Way	PT-UTC	Grill	Noble White (RAL 110-1)	0	5.5	1,420	34	500	-	-	5.0 ~ 7.1kw
	PT-UUD	Panel	Noble White (RAL 110-1)	0	4.6	1,100	34	500	-	-	2.1 ~ 3.5kw
	PT-UTD	Panel	Noble White (RAL 110-1)	0	5.5	1,420	34	500	-	-	5.0 ~ 7.1kw

### Features

- Specially designed for indoor unit
- Covers the side area of cassette
- Gives elegant looks
- Light weight

## **Models Applied**

• 4 Way Cassette (for chassis TP, TN, TM, TQ, TR)

### **Parts Included**

• Cover A (4EA), Cover B (4EA)

• Cover C (4EA), Cover D (4EA)

Screws

Installation Manual (1EA)

### Accessory Model Name

Madal	Front Panel		Weight (kg)		Dimensions (mm)		
Model			NET	Gross	w	н	D
DTD CH	PT-UMC /	TP / TN	5.9	8.8	1,157	1,157	268
PTDCM	PT-UMC1	TM	5.9	8.8	1,157	1,157	310
PTDCO	-	TR	5.0	7.2	907	907	268
PIDCQ	-	TQ	5.0	7.2	907	907	310

### Air purifying filter to repel dust and allergens

### PTPKM0 PTPKQ0



### Features

- It can remove microscopic contaminants such as dust and pollen to help reduce allergies.
- \* Plasma kit and Auto Elevation Grille are not applicable at the same time

# **Models Applied**

Туре	SINGLE SPLIT	MULTI SPLIT	MULTI V
4 Way Cassette	Option (2.5 / 3.5 / 5.0kw : PTPKQ0) (7.1kw ~ 15.0kw : PTPKM0)	Option (1.5 / 2.1kw : PTPKQ0)	Built-in
2 Way Cassette	-	-	Built-in
1 Way Cassette	-	Built-in	Built-in

# **Parts Included**

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

MECHANICAL

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# **VENTILATION KIT**

Fresh air can be supplied from outside through this ventilation kit

### **PTVK410 PTVK420** PTVK430





PTVK410

PTVK430

PTVK420

### Features

• The ventilation kit can be supplied air from outside.

# **Models Applied**

#### • There are 2 Solutions for Fresh Air

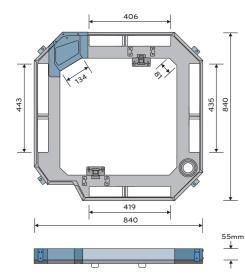
- PTVK410+PTVK420 (for chassis TP, TN, TM) - PTVK430 (for chassis TR, TQ, TP, TN, TM)

\* Users can purchase and use PTVK430 in addition to PTVK410+PTVK420 in need to phase in larger outdoor air volume.

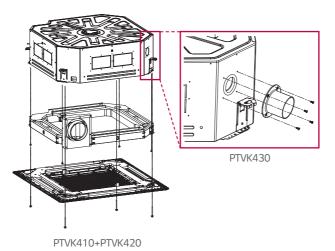
### **Parts Included**

• PTVK410 : 1 Ventilation Kit, 8 Bolts, 1 Insulation • PTVK420 : 1 Flange, 7 Screws • PTVK420 : 1 Flange, 4 Screws, 1 Insulation

### **Dimensions**



### **Assembly Diagram**



# **DRAIN PUMP KIT**

Drains away condensed water

ABDPG PBDP9



### Features

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

### **Models Applied**

• Ceiling Concealed Duct (Refer to PDB for applicable models)

### Accessory Model Name

• Ceiling Concealed Duct (Refer to PDB for applicable models)

-			
Product	M	odel	Drain Pump
	12.3kg		Included
		CB**L	Included
SINGLE / MULTI SPLIT	Standard Inverter	CM** / UM**	ABDPG
		UB70 / UB85	PBDP9
	Econo Inverter		ABDPG
MULTI V			Included

### Application

- High head drain pump automatically drains water up to 700mm of drain-head height. It provides perfect solution for water drainage.
- **High Head Drain Pump**



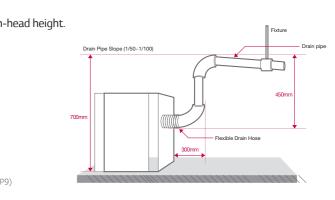
\* Included in H-Inverter \* Supplied as accessory for Standard Inverter (ABDPG/ PBDP9)

### Parts Included

#### ABDPG / PBDP9

- 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

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PBSGB30 PBSGB40 PBSC30 PBSC40

Features



SUCTION GRILLE - PBSGB30 / PBSGB40



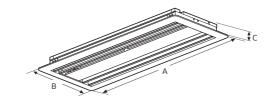
CANVAS - PBSC30 / PBSC40



- Installation manual (1EA)

**Parts Included** 

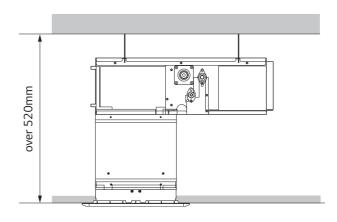
### Dimensions



(Llni	+ •	mm)	
(Uni	ι:	mm)	

Model Name	А	В	С
PBSGB30	910	359	56
PBSGB40	1,188	359	56

### Application





- ${\boldsymbol{\cdot}}$  High external static pressure facilitates unit use with flexible ducts of varying lengths
- When using suction grille, unit requires only 270mm of ceiling space

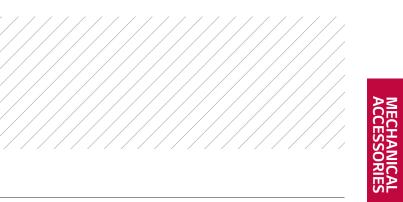
• Blends unobtrusively with any interior decoration

## **Models Applied**

Ceiling Concealed Duct \_ Built-in type

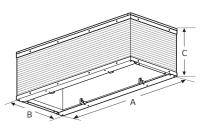
### Accessory Model Name

Category Model Name		Capacity (Btu/h)						
Category	wodel Name	ARNU07GB3G2	ARNU09GB3G2	ARNU12GB3G2	ARNU15GB3G2	ARNU18GB4G2	ARNU24GB4G2	
Crille	PBSGB30	0	0	0	0	-	-	
Grille	PBSGB40	-	-	-	-	0	0	
Comme	PBSC30	0	0	0	0	-	-	
Canvas	PBSC40	-	-	-	-	0	0	



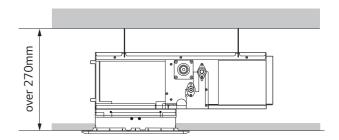
#### • For the Suction canvas :

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



(Unit:mm)

Model Name	A	В	С	
PBSC30	821	274	42~250	
PBSC40	1,100	274	42~250	



Indooi

# **CO<sub>2</sub> SENSOR**

 $CO_2$  sensor in ventilation system.

### **PES-CORVO**



**ERV Fan Operation** 

Low Speed

High Speed

Super High Speed

Operation Table

CO<sub>2</sub> Sensor Reading

< 500ppm

500 ~ 700ppm

700 ~ 900ppm

>900ppm

### Features

#### 1) Model name : PES-CORVO

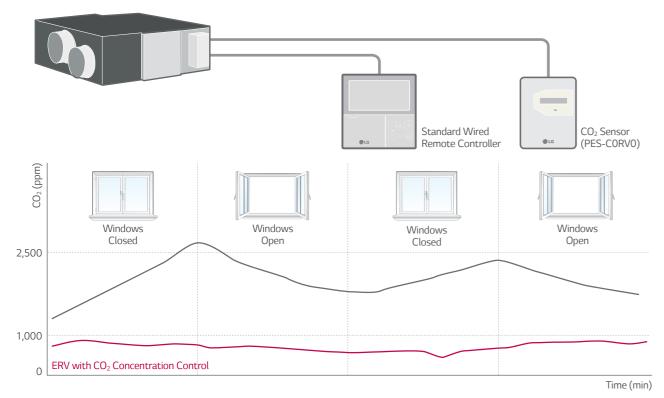
#### 2) Specification

- Applied Model : ERV, ERV DX
- Function
- Supply Vottage : DV 12V ± 5%
- Output : 0 ~ 5V (Linear output, 1 ~ 2,000ppm CO<sub>2</sub>)
- Accuracy : 30 ppm  $\pm$  5% of reading

#### 3) Description

• The product is especially designed to detect CO<sub>2</sub> concentration in ERV system.

### Installation Scene



# REFRIGERANT LEAKAGE DETE R410A refrigerant leakage detector makes our space

### **PRLDNVSO**

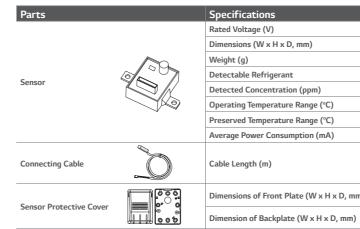
### Features

- This detector senses refrigerant leakage and when the refrigerant concentration exceeds 6,000ppm not only it will stop indoor unit operation
- but also it will give an alarm using buzzer and sensor LED. (The green and red LED lights blink simultaneously.) • Alarm is "ON" over 6,000ppm has been maintained 5 seconds, and on the contrary to this, Alarm is "OFF" under 6,000ppm has been
- maintained 5 seconds.
- When the alarm of the refrigerant leak detector is switched on the user must ventilate until the alarm is disabled.
- The detector has to be installed inside the room and it can be installed 300 ~ 500mm from floor.

### **Models Applied**

- New 4<sup>th</sup> generation indoor units only
- More detailed information refer to the "MULTI V INDOOR UNIT LINE UP & FEATURES OVERVIEW". (Page 96 ~ 97)

### **Specifications**



### Application



ECTOR safer	



LG

	DC 5.0 ± 5%
	31 x 44 x 20
	22
	R410A
	0 / 6,000 Alarm Off / On
	-10 ~ 50
	- 40 ~ 60
	35
	10
n)	80 x 110 x 44.6
	80 x 110 x 6.5

MECHANICAL

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#### NEW

# EEV KIT

MULTIVEEV KIT is specially designed to reduce noise and make comfort environment

### PRGK024A0



### Features

• Decreasing noise level of Multi V Indoor units Easy installation

Wird

Indoor Unit

Refrigerant flow(Cooling)

Refrigerant flow(Heating)

C/Box

Indoor unit

Electronic Expansion Valve

### **Models Applied**

- Ceiling Cassette (up to 15kBtu)
- Ceiling Concealed Duct (up to 18kBtu)
- Wall Mounted (up to 24kBtu) \* Fresh Air intake Unit is not able to connect this Kit

Application

• Console (up to 15kBtu)

EEV

KIT

EEV Kit

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• Floor Standing Unit (with Case / without Case) (up to 15kBtu)

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Fan M

Heat exchanger

Convertible (up to 12kBtu, Ceiling Suspended Type is not able to connect this Kit)

Outdoor Unit

Outdoor unit

СОМР

# NEW **IR RECEIVER**

IR RECEIVER can be connected to CCD where the customer wants to control by wireless remote controller

### **PWLRVN000**

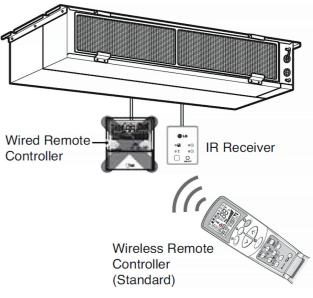
### Features

Designed for wireless control to operate Ceiling concealed duct Operation of Indication lamp (3 colors) Self-diagnosis function

### **Models Applied**

MULTI V Indoors (Ceiling Concealed Duct, Floor Standing Units)

### Application



Note : If you don't use EEV of same specification, Cooling (Heating) capacity may decrease.

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Note : Do not install both the IR Receiver and Wired Remote Controller. This may cause malfunctions.



# INDEPENDENT POWER MODULE

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EEV full close function in case of power cut

### **PRIPO**

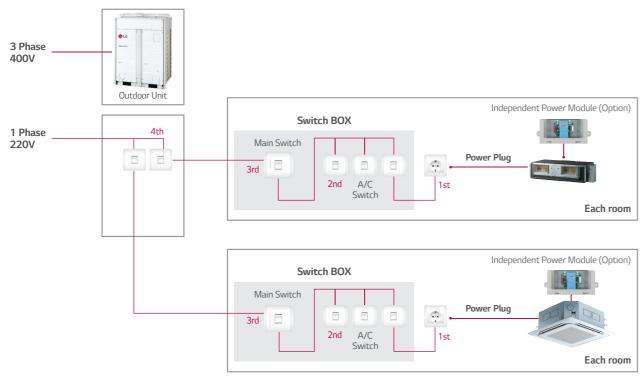


### Features

• Independent Power Module is specially designed to close the Indoor EEV at power cut-Off. - Supply Voltage : DC 12V ±50%

## **Models Applied**

### MULTI V Indoors



# **AIR GUIDE**

Air discharge in difficult to access areas

### PRAGX\*S0



PRAGX2S0 (14 / 16 / 18 / 20HP)

### Features

Converts vertical discharge into horizontal discharge
Designed for outdoor discharge air

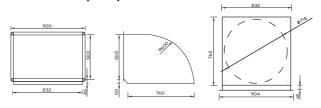
## **Models Applied**

MULTI V IV (UX2, UX3)
 \* In case of UX3, must purchase 2 units of PRAGX3S0.

### **Dimensions** -

Model Name	Gross W
PRAGX2S0	22.5k
PRAGX3S0	17kg

• MULTI V IV (UX2)



# Application

### • MULTI V IV (UX2)

- ARU\*080LTE4 - ARU\*100LTE4
- ARU\*120LTE4

\* N : Heat Pump / B : Heat Recovery



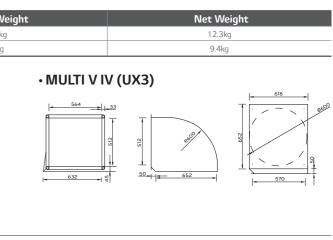






PRAGX3S0 (8 / 10 / 12HP)

• Direction of air discharge can be changed by simple installation • Installation flexibility



• MULTI V IV (UX3) - ARU\*140LTE4 - ARU\*160LTE4

- ARU\*180LTE4 - ARU\*200LTE4
- ARU"200LIE4

\* N : Heat Pump / B : Heat Recovery



Outdoor

# **DRAIN PAN**

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Easy drain installation

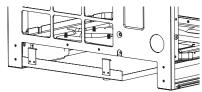
### PRODX20 / PRODX30



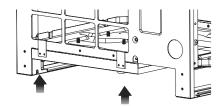
### Features

• This unit can be applied for outdoor unit's drain.

### Installation



\* Tuck drain pan below base pan



\* Push drain pan in the direction of the arrow. Brackets can be fixed on the side panel.

### Accessory Model Name

Model Name	Width x Length	Remark
PRODX20	920mm x 466mm	UX2
PRODX30	1.240mm x 466mm	UX3
PHDPA (AWHP)	478mm x 190mm	

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Service Valv

\* In case of the installation of drain pan, drain pipe should be located below the SVC valve.

• This unit does not cover water drops of the outside product.

• Connect drain hose to drain pipe for drain condensate.

# PHDPA (AWHP)



# SOLARS HEATING KIT

PHLLA

### Features

• Interface for solar-thermal system with split-type THERMA V and double coil sanitary tank

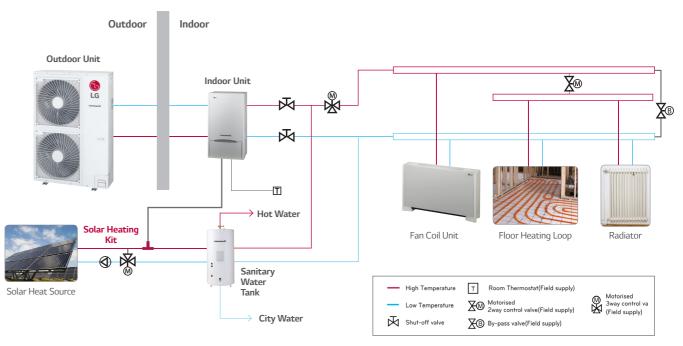
• Installed at the water pipe, between sanitary tank and solar-thermal system

• Dimensions (H x W x D, mm) : 110 x 55 x 22

· According to solar system's water temperature, THERMA V controls 3 way valve's direction

## Installation Scene

• Components : THERMA V system, PHLTA, PHLTC, and field-supplied items.





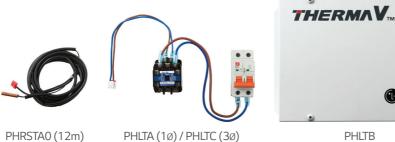




# SANITARY TANK KIT

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### PHLTA (1Ø, Spilt) PHLTC (3Ø, Spilt) PHLTB (Monobloc)



PHRSTA0 (12m)

PHLTB

\* The sensor (PHRSTA0) can be purchased separately in case of using other brand's sanitary tank. PHRSTA0 is included in PHLTA, PHLTC, PHLTB.

### Features

### [Spilt]

• PHLTA (1ø) / PHLTC (3ø)

To control sanitary tank temperature and sanitary tank electric heater for split models. This unit will be installed inside indoor unit.

### [ Monobloc ]

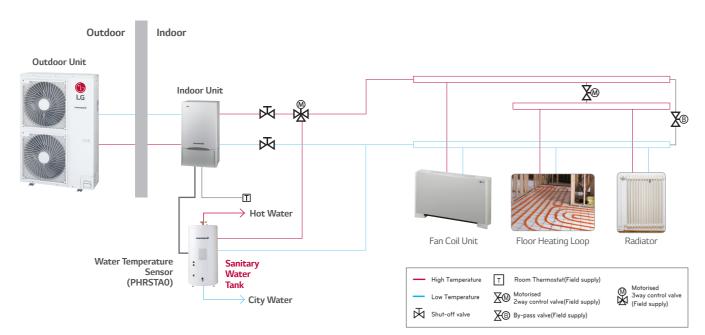
#### PHLTB

- · Easy to install sanitary water tank for monobloc.
- There is a MCCB (Mold Case Current Breaker) to protect the product.
- Dimensions (H x W x D, mm) : 250 x 170 x 110
- Weight (kg) : 2.1

This unit will be installed outdoor.

### Installation Scene

• Components : THERMA V system, PHLTA, PHLTC, and field-supplied items.



# DOMESTIC HOT WATER TANK

### Single Coil LGRTV200E LGRTV300E

Double Coil LGRTV200VE LGRTV300VE

### Features

· Store and provide hot water for sanitation

### Installation Scene

#### • Domestic Hot Water Tank - Single Coil

	Water Volume	L	
	Diameter	mm	
	Height	mm	
General Characteristics	Empty Weight	kg	
	Tank - Materials		
	Outer Skin - Materials		
	Color - White RAL		
Characteristics of Electrical Back-up	Additional Electric Heater	kW	
	Adjustable Thermostat	°C	
	Exchanger Type		
Characteristics of Exchanger	Material Exchanger		
	Maximum Water Temperature	°C	
Hydraulic Connections	THERMA V Entry	mm	
- Heat Pump	THERMA V Exit mm		
Hydraulic Connections	City Water Entry	mm	
- Domestic Hot Water Tank	Hot Water Exit mm		
Electric Connection	Suppy	Ø/V/Hz	

MANDATORY OPTIONAL ACCESSORIES

Domestic Hot Water Tank Installation Kit

### Domestic Hot Water Tank - Double Coil

	Water Volume	L	
	Diameter	mm	
	Height	mm	
General Characteristics	Empty Weight	kg	
	Tank - Materials		
	Outer Skin - Materials		
	Color - White RAL		
Characteristics of Electrical Dealers	Additional Electric Heater	kW	
Characteristics of Electrical Back-up	Adjustable Thermostat	°C	
	Exchanger Type		
Characteristics of Exchanger	Material Exchanger		
	Maximum Water Temperature	°C	
Hydraulic Connections	THERMA V Entry	mm	
- Heat Pump	THERMA V Exit	mm	
Hydraulic Connections	City Water Entry	mm	
- Domestic Hot Water Tank	Hot Water Exit	mm	
Electric Connection	Suppy	Ø/V/Hz	

MANDATORY OPTIONAL ACCESSORIES Domestic Hot Water Tank Installation Kit





LGRTV200E (198 LITERS) LGRTV300E (198 LITERS)



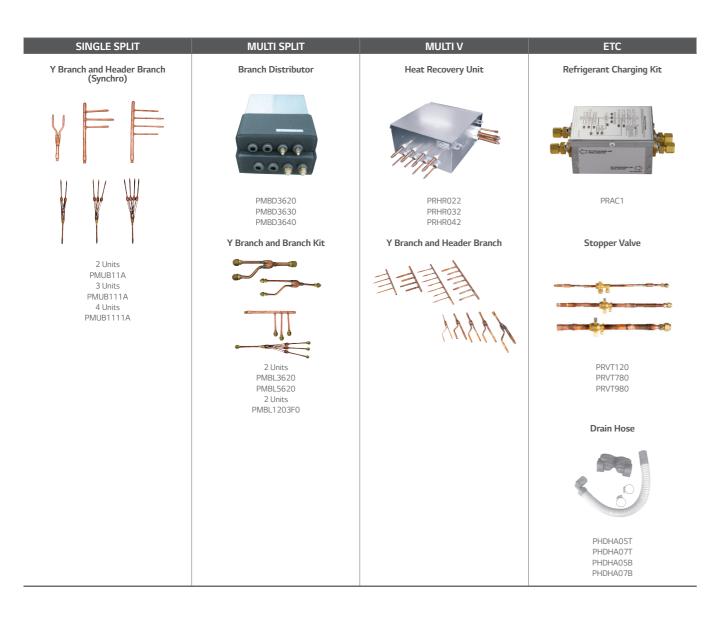
LGRTV200E	LGRTV300E		
198	287		
580	580		
1,230	1,680		
45	59		
Stainless steel	Stainless steel		
Paint Epoxy	Paint Epoxy		
White NC	White NC		
3	3		
60-90	60-90		
Single	Single		
LDX 2101 - Stainless Steel	LDX 2101 - Stainless Steel		
80	80		
25	25		
25	25		
22	22		
22	22		
1 / 220-240 / 50	1 / 220-240 / 50		
PHLTA	PHLTA		

LGRTV200VE	LGRTV300VE	
198	287	
580	580	
1,230	1,680	
49	64	
Stainless steel	Stainless steel	
Paint Epoxy	Paint Epoxy	
White NC	White NC	
3	3	
60-90	60-90	
Double	Double	
LDX 2101 - Stainless Steel	LDX 2101 - Stainless Steel	
80 (With an Heat Pump)	80 (With an Heat Pump)	
25	25	
25	25	
22	22	
22	22	
1/220-240/50	1 / 220-240 / 50	

PHLTA	PHLTA

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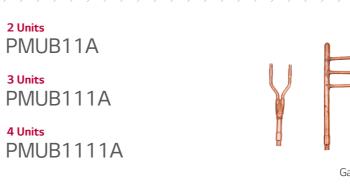
# **PIPING ACCESSORIES** LINE-UP



## **Mechanical Accessories Line up and Application**

Model name	SINGLE SPLIT	MULTI	MULTI V	Remark
Y Branch and Header Branch (Synchro)	0	-	-	-
Branch Distributor (MULTI)	-	0	-	MULTI F DX systems
Y Branch and Branch Kit (MULTI)	-	0	-	MULTI F DX systems
Heat Recovery Unit (MULTI V)	-	-	0	MULTI V Sync II / MULTI V III Heat Recovery / MULTI V IV Heat Recovery
Y Branch and Header Branch (MULTI V)	-	-	0	Various type of MULTI V Series

# **Y BRANCH AND** HEADER BRANCH Refrigerant distribution channel



### Features

2 Units

3 Units

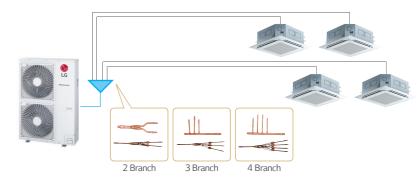
4 Units

- Various Y Branch pipes of different capacities make installation easier
- Y Branch and header branch for both gas and liquid are provided
- Insulation material is also provided for covering the branches

# **Models Applied**

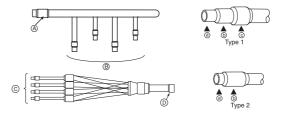
- H-inverter : 10.0 / 12.5 / 13.4kw
- Standard inverter : 12.5 / 14.0 / 15.0 / 20.0 / 25.0kw

### Application



### **Accessory Model Name**

Model name	SINGLE SPLIT	Remark
2 Units	PMUB11A	50:50 (1:1)
3 Units	PMUB111A	33:33:33 (1:1:1)
4 Units	PMUB1111A	25:25:25(1:1:1:1)





Liquid Pipe

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**PIPING** ACCESSORIES

Gas Pipe

	a	Ь	C	Туре
A	Ø15.88 (5/8)	Ø19.05 (3/4)	Ø25.4 (1)	1
B	Ø9.52 (3/8) Ø12.7 (1/2)	Ø12.7 (1/2) Ø15.88 (5/8)	-	2
C	Ø6.35 (1/4)	Ø9.52 (3/8)	-	2
D	Ø9.52 (3/8)	Ø12.7 (1/2)	-	2

# BRANCH DISTRIBUTOR DISTRIBUTOR

### Effective way of distributing refrigerant

# PMBD3620 PMBD3630 PMBD3640



PMBD3620





### 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)

PMBD3630

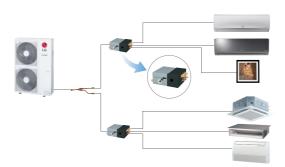
Flexible installation

# **Models Applied**

• MULTI F DX systems (Refer to PDB for applicable models)

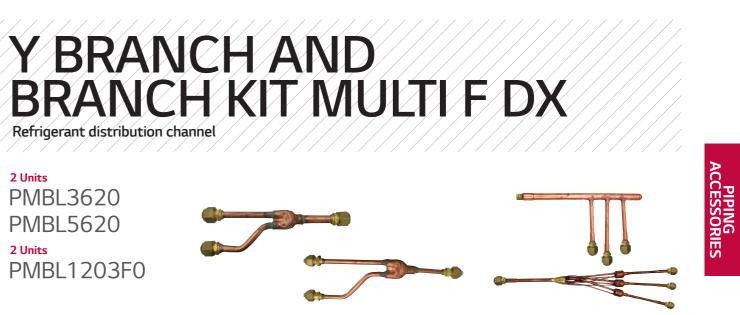
### Parts Included

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



# **Specifications**

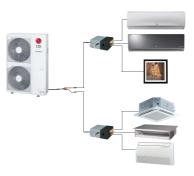
Model name			PMBD3620	PMBD3630	PMBD3640
Connectable Indoor Units	Number of Indo	or Units	1~2	1~3	1~4
Capacity	(Btu/hr)		5k / 7k / 9k / 12k / 18k / 24k	5k / 7k / 9k / 12k / 18k / 24k	5k / 7k/9k / 12k / 18k / 24k
Casing Colour			Paintingless	Paintingless	Paintingless
Power Source	Ø / V / Hz		1 / 220-240 / 50	1 / 200-240 / 50	1 / 200-240 / 50
Power Consumption	(W)		10	10	10
Running Current	(A)		0.05	0.05	0.05
Dimensions	(W x H x D)	(mm)	302 x 143 x 252	302 x 143 x 252	302 x 143 x 252
Packing Dimensions	(W x H x D)	(mm)	422 x 202 x 300	422 x 202 x 300	422 x 202 x 300
Net Weight		4.8	4.9	5.0	
Connection Coble	Indoor Unit No	x mm <sup>2</sup>	4 x 0.75	4 x 0.75	4 x 0.75
Connecting Cable	Outdoor Unit N	o. x mm <sup>2</sup>	4 x 0.75	4 x 0.75	4 x 0.75
Piping Connection	liquid	(mm)	9.52	9.52	9.52
(Outdoor Unit)	Gas	(mm)	19.05	19.05	19.05
Piping Connection	Liquid	(mm)	6.35 x 2	6.35 x 3	6.35 x 4
(Indoor Unit)	Gas	(mm)	9.52 x 2	9.52 x 3	9.52 x 4
	Hanger	(EA)	4	4	4
Parts	Screw	(EA)	8	8	8
	Manual	(EA)	1	1	1



### Features

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

## Application



### Parts Included

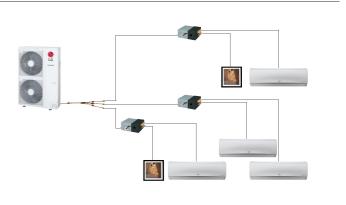
• Y Branch for gas side and liquid side (1set) Installation manual (1EA)

## Accessory Model Name

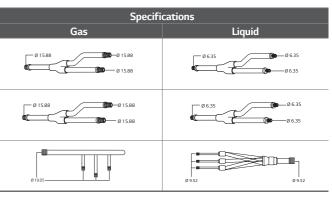
Model Name	No. of Branch Distribution Units	Applicable Model
PMBL3620	2 units	Only 3ø, 36k Btu/h
PMBL5620	2 units	1ø, 3ø
PMBL1203F0	3 units	1ø, 3ø

# **Models Applied**

• MULTI F DX systems (refer to PDB for applicable models)



(Unit : mm



# HEAT RECOVERY UNIT

### PRHR022 PRHR032 PRHR042



(2 Branch Unit)



PRHR032 (3 Branch Unit)



### PRHR042 (4 Branch Unit)

### Features

• Max. 32 indoor units can be connected (Max. 8 indoor units per branch)

• It is easy to install due to the automatic search algorithm for piping detection

• Subcooling cycle in HR unit makes the system efficiency maximum

### **Models Applied**

• MULTI V IV Heat Recovery

- MULTI V III Heat Recovery
- MULTI V SYNC II
- MULTI V SYNC

 MULTI V WATER IV Heat Recovery MULTI V WATER II Heat Recovery

## **Specifications**

Model name				PRHR022	PRHR032	PRHR042
Number of Branch		EA	2	3	4	
Maximum Connectable Capacity of Indoor Units (Per branch / unit)		kW	16/32	16/48	16 / 58	
Maximum Number of Connectable Indoor units per Branch		EA	8	8	8	
Nominal Input	Cooling	Cooling		0.026	0.040	0.040
	Heating	Heating		0.026	0.026 0.040	
Net. Weight		kg	18	20	22	
Dimensions (W x H x D)		mm	801 x 218 x 617	801 x 218 x 617	801 x 218 x 617	
	1.1	Liquid		9.52 (3/8)	9.52 (3/8)	9.52 (3/8)
	Indoor Unit	Gas	mm (inch)	15.88 (5/8)	422 x 202 x 300	422 x 202 x 300
Piping connections		Liquid	mm (inch)	9.52 (3/8)	15.88 (5/8)	15.88 (5/8)
connections	Outdoor Unit	Low pressure	mm (inch)	22.2 (7/8)	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

### **Parts Included**

• HR unit (1EA) • Hanging bolts M10 or M8 (4EA) • Nut M8 or M10 (8EA)

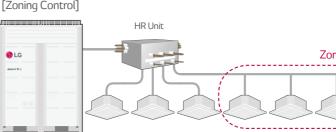
• Washers M10 (8EA) Reducers

# Reducers for Indoor Unit and HR Unit (Unit : mm) High pressure Low pressure

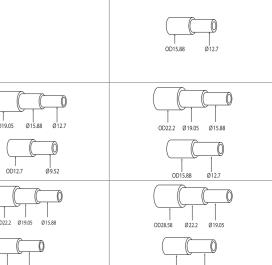
Model Name		Liquid
Indoor Unit Reducer		009.52 Ø6.35
	PRHR022	009.52 Ø6.35
HR Unit Reducer	PRHR032 / PRHR042	OD15.88 Ø12.7 Ø952

# **Convenient Free Zoning**

MULTI V IV Heat recovery provides flexible control over individual zones for the user's convenience. Individual Control - Perfect individual control over spaces ventilation needed Zone Control - Max. of 8 indoor units can be connected for one branch - Max. of 32 indoor units can be connected for one HR unit - Same opeational model can be operated by indoor units with zone control function installed • Combination of Individual and Zoning Installations - Flexible piping design Save Product and Installation Cost [Zoning Control] HR Unit Zoning Control (Max Indoor Unit 8EA) C LG



**PIPING** ACCESSORIES



# **Y BRANCH AND** HEADER BRANCH (MULTIN)

For refrigerant distribution of indoor units

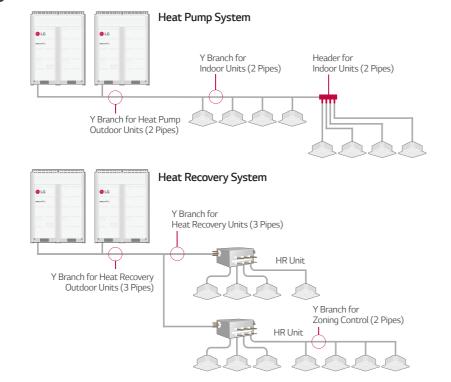
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### Features

- 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**



### **Details of Model Name** [Header Branch]

• R410A

Model Name	Gas Pipe	_
4 Branch / ARBL054	012.7 015.88 015.88 019.05	OD19.05 15.88 12.7
7 Branch / ARBL057	012.7 015.88 015.88 015.88 015.88 015.88	OD19.05 15.88 12.7
4 Branch / ARBL104	012.7 015.88 015.88 015.88 028.58 028.58	00228.58 22.2
7 Branch / ARBL107	012.7 015.88 015.88 019.05 028.58 028.58 028.58	0028.58 22.2
10 Branch / ARBL1010	<u>015.88</u> 012.7 015.88 015.88 028.58	0028.58 22.2
10 Branch / ARBL2010		OD38.1 34.9 28.58

## **Models Applied**

- MULTI V IV
- MULTI V S
- MULTI V WATER IV
- MULTI V WATER S

• MULTI V III, MULTI V PLUS II, MULTI V PLUS

- MULTI V MINI
- MULTI V WATER II
- MULTI V SPACE II



		(Unit : mm)
Liquid Pipe		
06.35 09.52 09.52 012.7	( 1 0D12.7 9.52	
06.35 09.52 09.52 09.52 09.52 09.52 09.52	OD12.7 9.52	
98.35 92.52 92.52 91.27 91.27	() odj12.7 9.52	
	OD12.7 9.52	
	OD12.7 9.52	
	OD19.05 15.88	

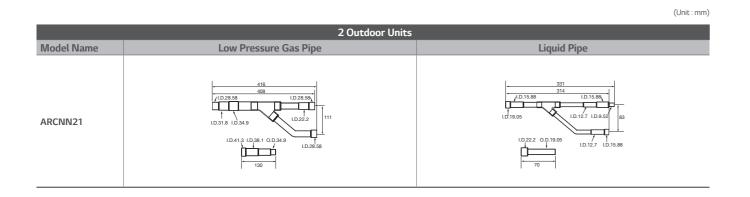
# **PIPING ACCESSORIES**

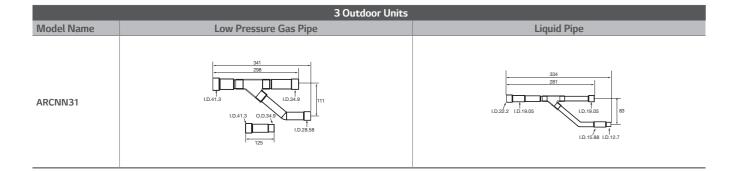
X Branch pipe for connection of outdoor units

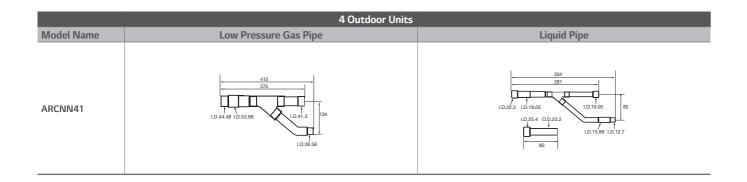
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### [Heat Pump]

• R410A MULTI V IV, MULTI V III, MULTI V WATER IV, MULTI V WATER II







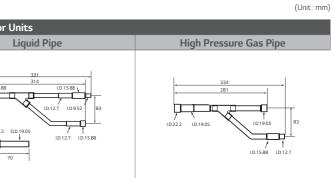
### [Heat Recovery] • R410A MULTI V IV Heat Recovery, MULTI V III Heat Recovery, MULTI V WATER IV Heat Recovery, MULTI V WATER II Heat Recovery

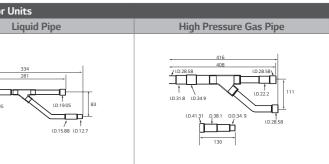
		2 Outdo
Model Name	Low Pressure Gas Pipe	
ARCNB21	416 408 10.2858 10.318 10.349 10.41.31 0.0349 10.2858 10.285	(D)1905

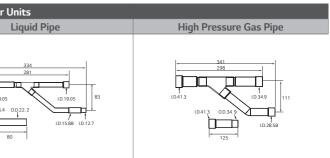
		2 Outdoor
Model Name	Low Pressure Gas Pipe	
ARCNB31	341 298 1D413 1D413 1D413 1D413 1D413 1D2349 1D2358	ID222 ID1905

		4 Outdoor
Model Name	Low Pressure Gas Pipe	
ARCNB41	415 375 ID4448 ID5398 ID5398 ID2858	









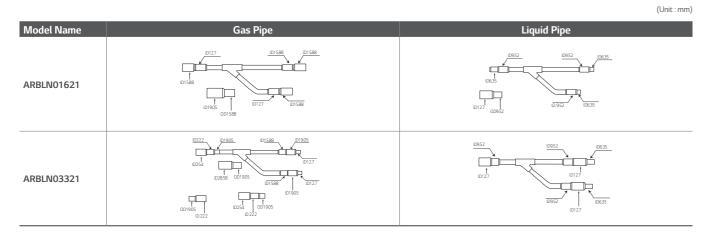
# **PIPING ACCESSORIES**

Y Branch pipe for connection of outdoor units

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#### [Heat Pump, Heat Recovery Zone Control]

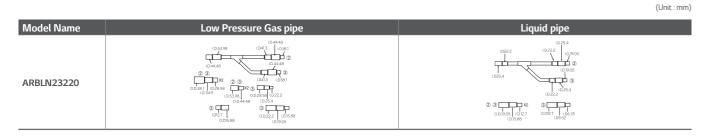
• R410A MULTI V IV, MULTI V III, MULTI V PLUS II, MULTI V PLUS, MULTI V S, MULTI V MINI, MULTI V SPACE II, MULTI V WATER IV, MULTI V WATER S, MULTI V WATER II



#### • R410A MULTI V IV, MULTI V III, MULTI V PLUS II, MULTI V PLUS, MULTI V S, MULTI V MINI, MULTI V SPACE II, MULTI V WATER IV, MULTI V WATER S, MULTI V WATER II

		(Unit : mm)
Model Name	Gas Pipe	Liquid Pipe
ARBLN07121		LD127 LD1588 LD128 LD128 LD1588 LD128 LD127 LD1588 LD127 LD127 LD1588 LD127 LD
ARBLN14521	10349 10349 10349 10341 10341 10341 10341 10349 10	

### • R410A MULTI V IV, MULTI V III, MULTI V PLUS II, MULTI V PLUS, MULTI V S, MULTI V MINI, MULTI V SPACE II, MULTI V WATER IV, MULTI V WATER S, MULTI V WATER II

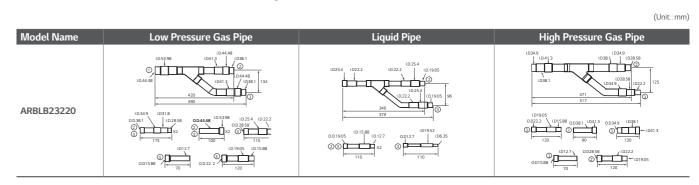


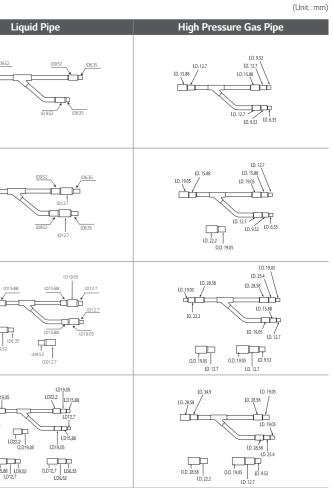
#### [Heat Recovery]

• R410A MULTI V IV Heat Recovery, MULTI V III Heat Recovery, MULTI V WATER IV Heat Recovery, **MULTI V WATER II Heat Recovery** 

Model Name	Low Pressure Gas Pipe	
ARBLB01621		
ARBLB03321		D952 0127
ARBLB07121		
ARBLB14521		

### • R410A MULTI V IV Heat Recovery, MULTI V III Heat Recovery, MULTI V WATER IV Heat Recovery, MULTI V WATER II Heat Recovery





# REFRIGERANT CHARGING KIT

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Recharging refrigerant after a pump down or when refrigerant is either insufficient or excessive

PRAC1

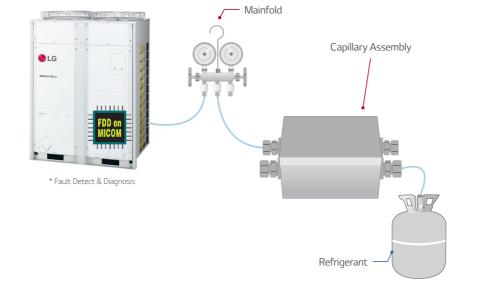


### Features

- Arrange manifold, capillary assembly, refrigerant vessel and scale
- Connect manifold to the gas pipe service valve of outdoor uint 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

### **Models Applied**

- MULTI V III Heat Pump
- MULTI V III Heat Recovery
- MULTI V PLUS II
- MULTI V SYNC II



# **STOPPER VALVES**

Under 1 / 2 (inch) PRVT120 Under 7 / 8 (inch) PRVT780 Under 9 / 8 (inch) PRVT980

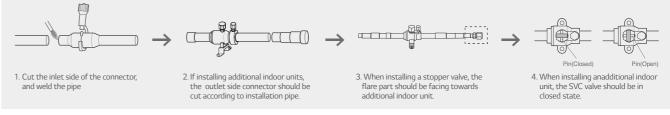
### Features

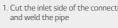
Model Name	
PRVT120	Input →
PRVT780	Input → 1015,58 1019,05
PRVT980	Input → ID28.58

### Usage

• This unit can be applied for the additional indoor unit's installation. • This unit can be applied for each indoor unit's service.

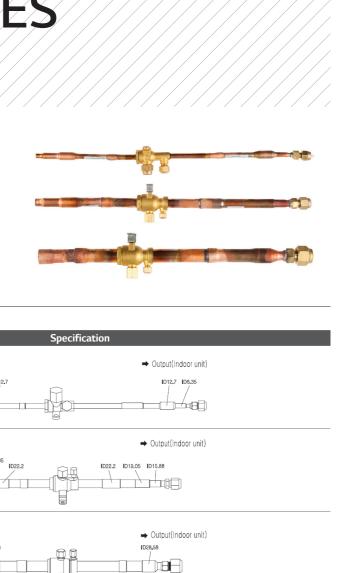
# Installation





\* When welding, service valve shoud be wrapped by wet cloth.

**PIPING** ACCESSORIES

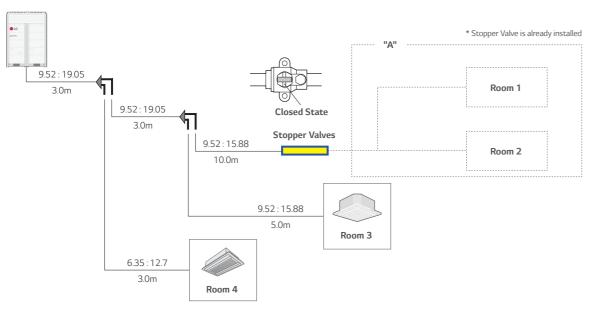


# **STOPPER VALVES**

### **Details of Model Name**

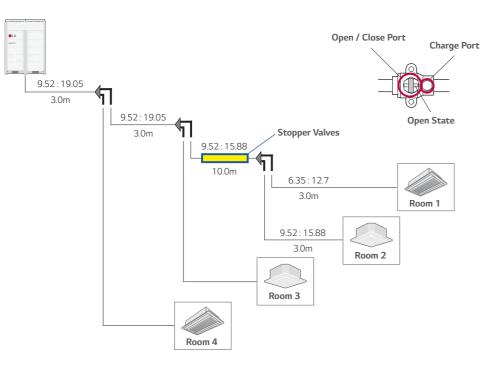
#### • Case1

(Room 3 & 4 : In use / Room 1 & 2 : Need to install indoor units)



• In case of installation of additional indoor unit, refrigerant of used indoor unit must be discharged. (Room 3 & Room 4) • If stopper valve is already installed, you can install additional indoor unit without refrigerant loss from the entire system.

- After installation of additional indoor unit, you just need refrigerant charging for "A" section.
- Then, open the Stopper Valve.



# **DRAIN HOSE**

Easy drain installation

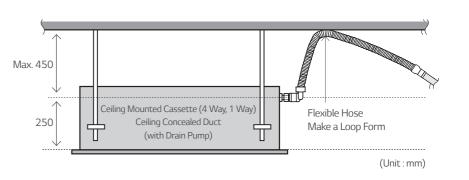
PHDHA05T PHDHA07T PHDHA05B PHDHA07B

### Features

• It reduces the installation time by over 40% with elbow-less drain hose. • Midget drain pump covers maximum 800mm high, featuring easy piping installation.

### **Models Applied**

 Ceiling Mounted Cassette and Ceiling Concealed Duct (refer to PDB for applicable model)



### Accessory Model Name

Model Name	Length	Quantity
PHDHA05T	500mm	30EA
PHDHA07T	700mm	30EA
PHDHA05B	500mm	5EA
PHDHA07B	700mm	5EA





# **COMPATIBILITY TABLE**

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	Contro	llor —	Premium	Stan	dard ll	Sir	nple	Sin for H	ıple Iotel	Wireless		Dry C	ontact		Wi-Fi
	Contro	ller	2012244									91			
Product			PREMTA000 PREMTA000A PREMTA000B	PREMTBB01	PREMTB001	PQRCVCLOQ	PQRCVC0QW			PQWRHQOFDB	Simple Dry Contact PDRYCB000	2 points Dry Contact PDRYCB400	Dry Contact for Thermostat PDRYCB300	For Modbus PDRYCB500	LG-IR-WF
Ceiling	ARNU-C4			•		•	•				•	•			
Mounted Cassette	2 Way / 1 Way	ARNU-C4	۲	(	۲		•		•	•	•	•	•	•	•
	High Sensible	ARNU-A4	۲	(	۲		•		•	•	•	•	•	•	•
Ceiling Concealed Duct	High Statics Mid Statics	ARNU-A4	۲	(	0	,	•		•	•	٠	•	•	•	•
	Low Statics	ARNU-G4	۲	(	۲		•		•		•	•	•	•	•
	Built-in	ARNU-G4	۲	(	٥		•		•		•	•	•	•	•
FAU (Fresh Air intake Unit)		ARNU-Z4	•		•		•		•	•	•	•	•	•	•
Convertible & Ceiling Suspended Unit		ARNU-A2	۲	٩	۲		•		•	•	•	•	•	•	•
Console		ARNU-A4	•		•		•		•	•	٠	•	•	•	•
Floor Standing Unit		ARNU-A4 ARNU-U4	•		•		•		•	•	٠	•	•	•	•
		ARNU-A4 ARNU-*4 <sup>1)</sup>	•		•		•		•	•	•	•	•	•	•
Wall Mounted Unit		ARNU-L4 ARNU-A4	•		•		•		•	•	•	•	•	•	•
HYDRO KIT <sup>2)</sup>		•••									٠	x	х	х	x
	Energy Recovery Ventilator	60	•		•		х	1	ĸ	x	٠	x	х	х	x
Ventilation	Energy Recovery Ventilator with DX coil		•		•		х	1	ĸ	x	٠	•	•	•	х
AHU Communio		ere ere	•		•		•		•		•	•	•	•	×

Contro Model Simple Standard ll Premium . . 2012000 Product REMTBB01 PREMTB001 PQRCVCLOQ PQRCVC Ceiling Mounted Cassette • • • Ceiling Concealed Duct • • • H-Inverter -Ceiling Suspended Unit • • • Ceiling Mounted • • • Cassette High 💷 • • • SINGLE SPLIT Ceiling Concealed Duct Mid • • • • • • Low Standard Inverter Ceiling Suspended Unit -٠ • • . ٠ • • Console Wall • • • Mounted Unit Floor Standing Unit ٠ • • 4 Way • • • Ceiling Mounted Cassette 1 1 Way • • • Mid • • • Ceiling Concealed **MULTI SPLIT** Duct • • • Low Convertible & Ceiling • • • Suspended Unit • • • Console -• • • Wall Mounted Unit • • • . . . . 0 Mid Temp. THERMA V Split 0 High Temp. 0 -Monobloc

▲ : Wired remote controller is required X : Compatibility is unavailable

ompatibility is available

1) Artcool Mirror : Mirror (R) / Silver (V) / White (W)

2) It has a separate remote controller

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х	y	
~	-	

r	

Single Dry 2 points Dry Dry Contact for		Simple for Hotel	Wireless		Dry Co	ontact		Wi-Fi
PORCESSO         PORCESSO         PORCESSO         PORCESSO         PORCESSO         PORCESSO         PORCESSO           Image: Strategy of the strateg								
Image: select	0QW	PQRCHCA0Q PQRCHCA0QW	PQWRHQ0FDB	Contact	Contact	Dry Contact for Thermostat PDRYCB300	For Modbus PDRYCB500	LG-IR-WF-1
Image: select		•	•	٠	•	•	•	•
Image: select of the selec		•	•	٠	•	•	•	٠
Image: select		•	•	٠	٠	•	٠	٠
Image: state stat		•	•	٠	٠	•	•	٠
Image: state stat		•	•	٠	٠	•	٠	•
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		•	•	٠	•	•	•	•
Image: state stat		•	•	٠	٠	•	٠	٠
Image: state stat		•		٠	•	•	•	•
Image: state stat		•		٠	٠	•	٠	٠
•     •     •     •     •     •     •       •     •     •     •     •     •     •       •     •     •     •     •     •       •     ×     ×     ×     ×     ×       •     ×     ×     ×     ×     ×		•	•	٠	٠	•	٠	•
Image: state stat		•	•	٠	٠	٠	٠	٠
Image: state		•	•	٠	٠	•	•	•
		•	•	٠	•	•	•	•
			•	х	х	х	х	х
• x x x x x			•	х	х	х	х	х
			•	х	х	х	х	х

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# INDOOR UNIT LINE-UP

# FEATURES OVERVIEW

kW			1.5	2.2	2.8	3.6	4.5	5.6	6.2	7.1	8.2	9.0	10.6	12.3	14.1	15.8	22.4	28.0
Туре		Btu / h	5k	7k	9k	12k	15k	1 <b>8</b> k	21k	24k	28k	30k	36k	42k	48k	54k	76k	96k
4 <sup>th</sup> Committee	ARTCOOL Gallery																	
Wall Mounted	ARTCOOL Mirror																	
Unit	Standard											NEW	NEW					
	4 Way Cassette (570 x 570)								NEW									
4th Generation         Wall         Mounted         Unit         4th Generation         Ceiling         Mounted         Cassette         4th Generation         Ceiling         Concealed         Duct         4th Generation         Ceiling & Floor         2nd Generation         Ceiling suspen         4th Generation         Ceiling Suspen         4th Generation         Ceiling Suspen         4th Generation         Console         4th Generation         Console         4th Generation         Floor         standing         Unit         2nd Generation         Floor         standing         Unit         2nd Generation         Energy         Recovery         Variation	4 Way Cassette (840 x 840)											NEW				NEW		
	2 Way Cassette																	
	1 Way Cassette																	
	Mid / High Statics																	
Ceiling	Low Statics																	
	1 Way Cassette     Mid /   High Statics     Built-in     High Sensible     Image: Contract of the sense of the sens																	
	High Sensible																	
	ake Units																	
	or Convertible Unit																	
	ended unit																	
	Floor Standing Unit with Case	-																
	Floor Standing Unit without Case																	
4th Generation         Ceiling         Mounted         Cassette         4th Generation         Ceiling         Concealed         Duct         4th Generation         Ceiling & Flood         2nd Generation         Ceiling & Flood         2nd Generation         Ceiling suspendent         4th Generation         Console         4th Generation         Floor         standing         Unit         2nd Generation         Energy	Low Temperature	€LG																
	High Temperature	elg																
Energy Recovery Ventilator	with Humidifier	00-11-																
	without Humidifier	0.0- 11-																

Energy Monitoring	2 Set point	Occupied / Unoccupied Scheduling Function	Group Control	Test Run (Cooling)	Test Run (Heating)	Model Information Monitoring	Auto Addressing	Refrigerant Leakage Detection	Thermo On / Off Range Setting (Cooling)	Thermo On / Off Range Setting (Heating)	Static Pressure 11 Step Control (Only for Ceiling Concealed Duct Type)	1 point External Input (On / Off control)	Filter Sign (Remaining Time)	Auto rersta function Disable / Enable
•	•	•	٠	•	•	•	٠	•	٠	•		٠	•	۰
۰	٠	•	٠	•	•	•	٠		٠	•		٠	•	۰
•	•	•	٠	•	•	•	•	•	•	•		٠	•	•
٠	٠	•	٠	•	•	•	٠	۰	٠	•		٠	•	۰
٠	٠	•	٠	•	•	•	٠	۰	٠	•		٠	•	۰
٠	•	•	٠	•	•	•	•	•	•	•		٠	•	۰
٠	•	•	٠	•	•	•	•	•	•	•		٠	•	٠
•	•	•	•	•	•	•	•	٠	•	•	•	•	•	•
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				•						•				
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				•	•				•	•				
				•	٠					•				

1) If 4<sup>th</sup> generation indoors are connected to MULTIV WATER S outdoor, some of function will not be activated. 2) If 4<sup>th</sup> generation indoors are combined to 2<sup>nd</sup> generation indoors, some of function will not be activated. → More detailed information, refer to the "MULTI V INDOOR COMPATIBILITY" (page 138-139)

COMPATIBILITY TABLE

