








































LG HVAC CONTROL

| Individual Control | | | Centralized Control | | | |
|--|--|---|---|--|--|--|
| Wired Remote Controller | | | Wireless Remote Controller | Indoor Unit ~ 32 | Indoor Unit ~ 128 | Indoor Unit ~ 8,192 |
| Premium | Standard | Simple | | AC Ez | AC Smart IV | AC Manager IV |
|  <p>PREMTA000 PREMTA00A PREMTA00B</p> |  <p>PREMTB001</p> |  <p>PQRCVCL0QW</p> |  <p>PQWRHQFDB</p> |  <p>PQCSZ250S0</p> |  <p>PACS4B000</p> |  <p>PACM4B000</p> |
| |  <p>PREMTB001</p> |  <p>PQRCVCL0Q</p> | <p>Wi-Fi Controller *</p>  <p>LG-IR-WF-1</p> | <p>NEW AC Ez Touch</p>  <p>PACEZA000</p> | <p>ACP IV</p>  <p>PACP4B000</p> | |
| | |  <p>PQRCHCA0QW (Simple for Hotel)</p> | | | | |
| | |  <p>PQRCHCA0Q (Simple for Hotel)</p> | | | | |

* This product is provided by IITE3S.






LINE-UP

| Centralized Control | | | Other integration device | | | |
|---|--|---|--|--|---|---|
| System Integration Device | | | Indoor Unit | | Outdoor Unit | AHU Kit |
| Facility Integrator | Gateway for Protocol | PI-485 | Dry Contact | Control Accessory | IO Module (Input / Output Module) | Communication Kit |
| <p>PDI (Power Distribution Indicator)</p>  <p>Premium (3port) PQNUD1540 Standard (2port) PPWRDB000</p> | <p>ACP BACnet</p>  <p>PQNF17C0</p> |  <p>For Indoor Unit (Air-Conditioner, ERV) PHNFP14A0</p> |  <p>Simple Dry Contact PDRYCB000</p> |  <p>PZCWRCG3</p> |  <p>Demand controller for MULTI V IV PVDSMN000</p> |  <p>Return / Room Air Control PRCKA1</p> |
| <p>ACSIO Module (Input / Output Module)</p>  <p>PEXPMB000</p> | <p>ACP Lonworks</p>  <p>PLNWK8000</p> |  <p>For Indoor Unit (Air-Conditioner, ERV) PSNFP14A0</p> |  <p>2 Points Dry Contact (For Substack) PDRYCB400</p> | <p>Remote Temperature Sensor</p>  <p>PQRSTA0</p> | <p>Low Ambient Kit</p>  <p>For MULTI V IV PRVC2</p> |  <p>Supply Air Control PRDCA0</p> |
| <p>DO Kit (Digital Output Kit)</p>  <p>PQNF00T0</p> | <p>KNX Gateway*</p>  <p>LG-AC-KNX4 LG-AC-KNX8 LG-AC-KNX16 LG-AC-KNX64</p> | |  <p>Dry Contact for Thermostat PDRYCB300</p> | <p>Zone Controller</p>  <p>4 Zones by thermostat ABZCA</p> | <p>Dry Contact for Demand Control</p>  <p>Demand controller for MULTI V III PQDSBCDVM0</p> | <p>Control kit</p>  <p>PRCKD21E (- 4 ODU's) PRCKD41E (- 8 ODU's)</p> |
| | | |  <p>For Modbus PDRYCB500</p> | <p>Variable Water Flow Control kit</p>  <p>For MULTI V WATER IV PWFCKN000</p> | <p>EEV Kit (Electronic Expansion Valve)</p>  <p>PRLK048A0 (- 10HP) PRLK096A0 (- 20HP)</p> | |
| | | | | <p>Cool / Heat Selector</p>  <p>PRDSBM</p> | <p>TXV Kit (Thermal Expansion Valve)</p>  <p>For MULTI V WATER II PRVCO</p> <p>PATX13A0E (8 - 15HP) PATX20A0E (18 - 26HP) PATX25A0E (28 - 36HP) PATX35A0E (38 - 46HP) PATX50A0E (48-56 HP)</p> | |

INDIVIDUAL CONTROL



INDIVIDUAL CONTROL

| | |
|--|--|
| <p>164 Premium Wired Remote Controller</p>  | <p>168 Wireless Remote Controller</p>  |
| <p>166 Standard Wired Remote Controller</p>  | <p>169 Wi-Fi Controller</p>  |
| <p>167 Simple Wired Remote Controller</p>  | |

ACCESSORIES

Control Solution

Remote Controller Line Up

| Model Name | PREMTA000 PREMTA000A PREMTA000B | PREMTB001 PREMTB01 | PQRCVCL0QW PQRCVCL0Q PQRCHCA0QW PQRCHCA0Q | PQWRHQ0FB | LG-IR-WR-1 ¹⁾ |
|----------------------------------|---------------------------------------|-----------------------|--|-----------------|--------------------------|
| On / Off | • | • | • | • | • |
| Fan speed control | • | • | • | • | • |
| Temperature setting | • | • | • | • | • |
| Mode change | • | • | •* | • | • |
| Additional mode setting | • | • | • | • | - |
| Auto swing | • | • | •* | • | • |
| Vane control (Lower direction) | • | • | •* | • | - |
| 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 / PQNFB17CO / PLNWX/B000) and PDI (PQNUJ1540 / PPVWDB000) 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.

PREMIUM WIRED REMOTE CONTROLLER

5 inch full touch screen with a premium design

- PREMTA000 ¹⁾
- PREMTA000A ²⁾
- PREMTA000B ³⁾

1) English / Portuguese / Spanish / French
 2) English / Italian / Russian / Chinese
 3) English / German / Polish / Czech



Features ⁴⁾

• Self-management for energy saving

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

• Improved scheduling

- Timer / Daily / Weekly / Yearly / Holiday

• 2 Set Points Control ⁵⁾

• 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 | • |
| Mode change | Cooling / Heating / Auto / Dehumidification / Fan |
| Additional mode setting* | Plasma Purification / Energy-Saving Cooling / Robot Cleaning / Heater / Humidification |
| Auto swing | • |
| Vane control (Lower 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 | •**** |
| 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 | • |
| 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

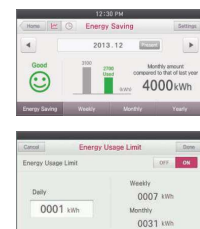
*** Centralized control (PACS4B000 / PACP4B000 / PQNFB17CO / PLNWKB000) and PDI (PQNUJ1S40 / PPWRDB000) should be installed for this function

**** 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

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.



• Weekly / Monthly / Yearly Trend & Target Setting Control

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

* Centralized control (PACS4B000 / PACP4B000 / PQNFB17CO / PLNWKB000) and PDI (PQNUJ1S40 / PPWRDB000) should be installed for this function

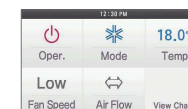
User Friendly Design



Standard Mode

• Intuitive UI & GUI Design

It is more easy to use and control various functions.

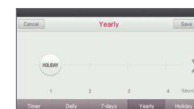


Simple Mode

• Display Configuration

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

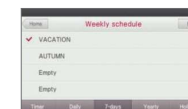
Enhanced Schedule Function



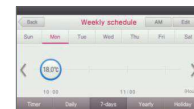
Yearly Schedule

• 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 Pattern



Weekly Schedule

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

2 Set Points Control

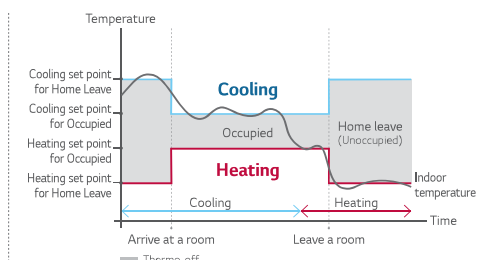


• 2 Set Points Control

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

Changeable setting for occupied / unoccupied status



STANDARD WIRED REMOTE CONTROLLER

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

Standard II

PREMTB001 (White)
PREMTBB01 (Black)



Features¹⁾

| Model Name | PREMTB001 / PREMTBB01 |
|-------------------------------------|--|
| On / Off | • |
| Fan speed control | • |
| Temperature setting | • |
| 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 / Holiday |
| Time display | • |
| Electric failure compensation | • |
| Child lock | • |
| Filter sign | • (Remain time + Alarm) |
| Operation Status LED | • |
| Indoor Temperature Display | • |
| Wireless Remote Controller Receiver | •* |
| Size (W x H x D, mm) | 120 x 121 x 16 |
| Backlight | • |
| Power Consumption Monitoring | •** |
| Check Model Information | • |

* For Ceiling Concealed Duct type
** Centralized control (PACS4B000 / PACP4B000 / PQ/IFB17C0 / PUJ/W/B000) and POJ (PQ/ILD1540 / 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

PQRCVCLOQW (White)
PQRCVCLOQ (Black)

Simple for Hotel

PQRCHCA0QW (White)
PQRCHCA0Q (Black)



Simple

Simple for Hotel

Features¹⁾

| Model Name | PQRCVCLOQW / PQRCVCLOQ | PQRCHCA0QW / PQRCHCA0Q |
|-------------------------------------|---|---------------------------------------|
| On / Off | • | • |
| Fan speed control | • | • |
| Temperature setting | • | • |
| Mode change | Cooling / Heating / Auto / Dehumidification / Fan | Only Changeable by Central Controller |
| Auto swing | • | - |
| Vane control (Louver direction) | • | - |
| E.S.P (External Static Pressure) | • | • |
| Electric failure compensation | • | - |
| Child lock | • | • |
| Indoor Temperature Display | • | • |
| Wireless Remote Controller Receiver | •* | •* |
| Size (W x H x D, mm) | 70 x 121 x 16 | 70 x 121 x 16 |
| Backlight | • | • |

* For Ceiling Concealed Duct type
1) Indoor unit should have functions requested by the controller

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 CONTROLLER¹⁾

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

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

Specifications

| Model Name | LG-IR-WF-1 |
|-----------------------|--|
| Enclosure | ABS (W-0, 5VB) 2,1 mm thickness PC (V-2) 1mm thickness |
| Dimensions (mm) | 81 x 78 x 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 x 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




Case 2. Connection with duct type indoor units





¹⁾ This product is provided by INTESIS.


CENTRALIZED CONTROL


CENTRALIZED CONTROL

172 AC Ez Touch 

174 AC Smart IV 

176 AC Ez 






177 ACPIV 

178 AC Manager IV 

ACCESSORIES

Control Solution

Central Controller Line Up

| Model Name |  |  |  |  |  |
|---|---|---|---|---|---|
| | 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) | ● | ● | ● | ● | ● |
| 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) | ● | - | - | ● | ● |
| Interlock control | - | - | ● | ● | ● |
| Virtual group control | - | - | ● | ● | ● |
| Emergency alarm display | ● | - | ● | ● | ● |
| ACS IO Module interlocking | - | - | ● | ● | ● |

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

AC EZ TOUCH

Smart management with 5 inch touch screen for small site

NEW

PACEZA000

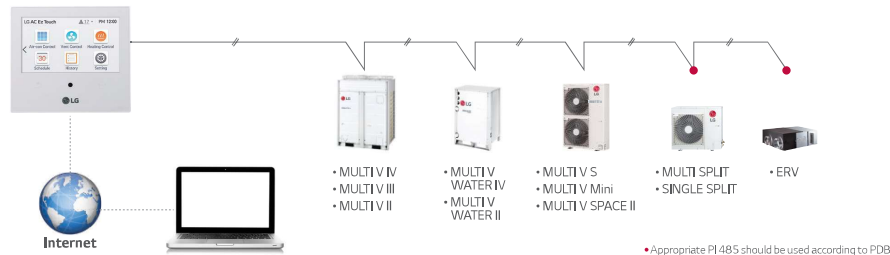


Features

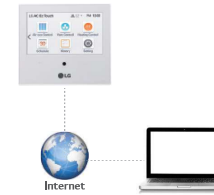
| Model Name | PACEZA000 |
|---|---|
| Maximum number of indoor units | 64 |
| Individual / Group control (On & Off, Mode, set point, fan speed) | • |
| Individual controller Lock | • (Temperature / Mode / Fan / All) |
| Error check | Self diagnosis |
| Mode change | Cooling / Heating / Auto / Dehumidification / Fan |
| Slave mode (Interlocking with higher level controller) | • |
| Schedule | Daily / Weekly / Monthly / Yearly / Exception day |
| Operation history | • |
| Temperature limit | • |
| Web access ¹⁾ | • |
| Auto changeover / Setback | • |
| Power consumption monitoring (with PDI) | • |
| Emergency alarm display | • |
| 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



Features



• Web access

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



• Energy mode

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)

| Energy | | |
|--------------------------|------------|------------------|
| 2016. 2. 8 ~ 2016. 3. 19 | | |
| Today Week Month | | |
| Name | Usage(kWh) | Accumulated(kWh) |
| Group1 | 110 | 3021 |
| Group2 | 150 | 6186 |
| Group3 | 130 | 4267 |
| Group4 | 120 | 7614 |

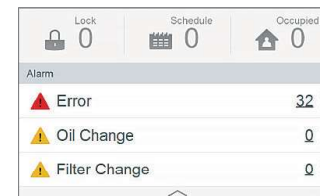
• Energy Statistics (with PQNUD1S40 or PPWRDB000)

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

| Schedule_Month | | | | | | |
|----------------|-----|-----|-----|-----|-----|-----|
| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| 28 | 29 | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |

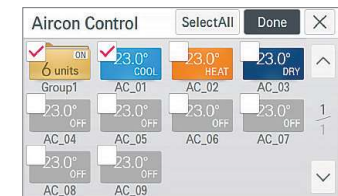
• Schedule

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.



• 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.



• 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

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

PACS4B000

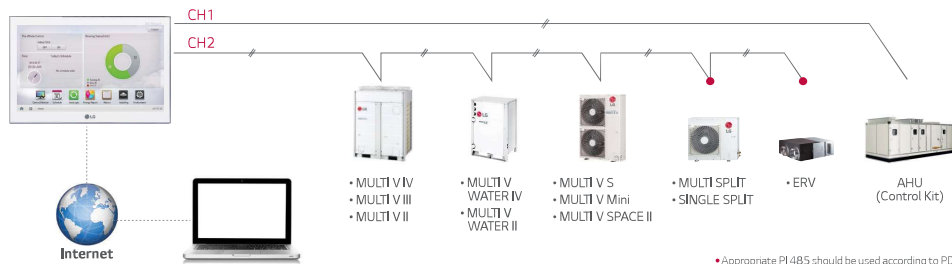


Features

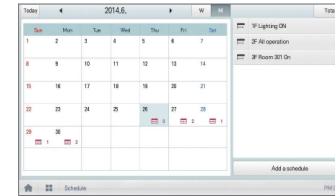
| Model Name | PACS4B000 |
|---|---|
| Maximum number of indoor units | 128 |
| Individual / Group control (On & Off, Mode, set point, fan speed) | • |
| Individual controller Lock | • (Temperature / Mode / Fan / All) |
| Error check | Self diagnosis |
| Mode change | Cooling / Heating / Auto / Dehumidification / Fan |
| Schedule | Daily / Weekly / Monthly / Yearly / Exception day |
| Operation history | • |
| Visual navigation | • |
| Operation time limit | • |
| Temperature limit | • |
| Web Access ¹⁾ | • |
| 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



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.



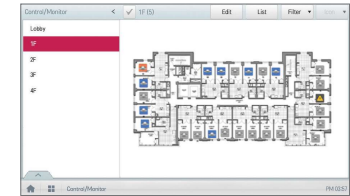
• Energy Statistics (with PQNUD1S40 or PPWRDB000)

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.



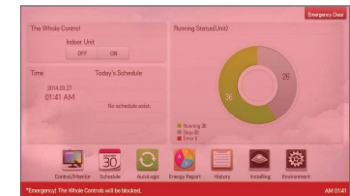
• Visual Navigation

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

| Report | Date | Time | System | Total | Control | Error | 2014.03.25 | 2014.03.25 |
|--------|------------|----------|----------|-------|---------|-------|------------------------|------------|
| ✓ | 2014-03-25 | 14:15:50 | Room 203 | 0 | 0 | 0 | COOL/FIBS/COFF by NONE | |
| ✓ | 2014-03-25 | 14:15:43 | Room 202 | 0 | 0 | 0 | COOL/FIBS/COFF by NONE | |
| ✓ | 2014-03-25 | 14:15:43 | Room 203 | 0 | 0 | 0 | COOL/FIBS/COFF by NONE | |
| ✓ | 2014-03-25 | 14:15:43 | Room 202 | 0 | 0 | 0 | COOL/FIBS/COFF by NONE | |
| ✓ | 2014-03-25 | 14:15:43 | Room 203 | 0 | 0 | 0 | COOL/FIBS/COFF by NONE | |
| ✓ | 2014-03-25 | 14:15:43 | Room 202 | 0 | 0 | 0 | COOL/FIBS/COFF by NONE | |
| ✓ | 2014-03-25 | 14:15:43 | Room 203 | 0 | 0 | 0 | COOL/FIBS/COFF by NONE | |
| ✓ | 2014-03-25 | 14:15:43 | Room 202 | 0 | 0 | 0 | COOL/FIBS/COFF by NONE | |
| ✓ | 2014-03-25 | 14:15:43 | Room 203 | 0 | 0 | 0 | COOL/FIBS/COFF by NONE | |

• 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

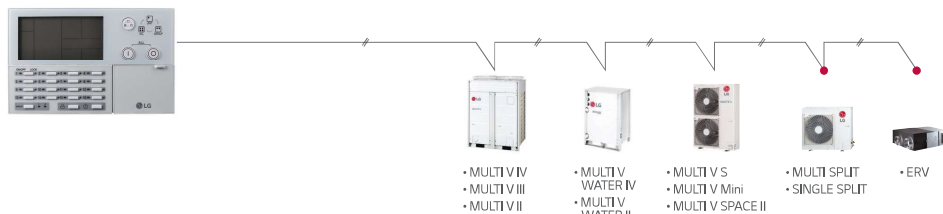
PQCSZ250S0



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



• Appropriate P1485 should be used according to PDB

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

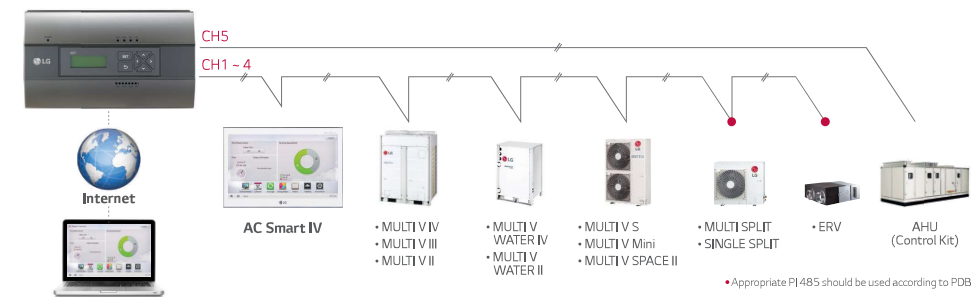


Features

| Model Name | PACP4B000 |
|---|---|
| Maximum number of indoor units | 256 |
| Individual / Group control (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 | • |
| Visual navigation | • |
| Operation time limit | • |
| Temperature limit | • |
| Web Access ¹⁾ | • |
| 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 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 P1485 should be used according to PDB

AC MANAGER IV

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

PACM4B000

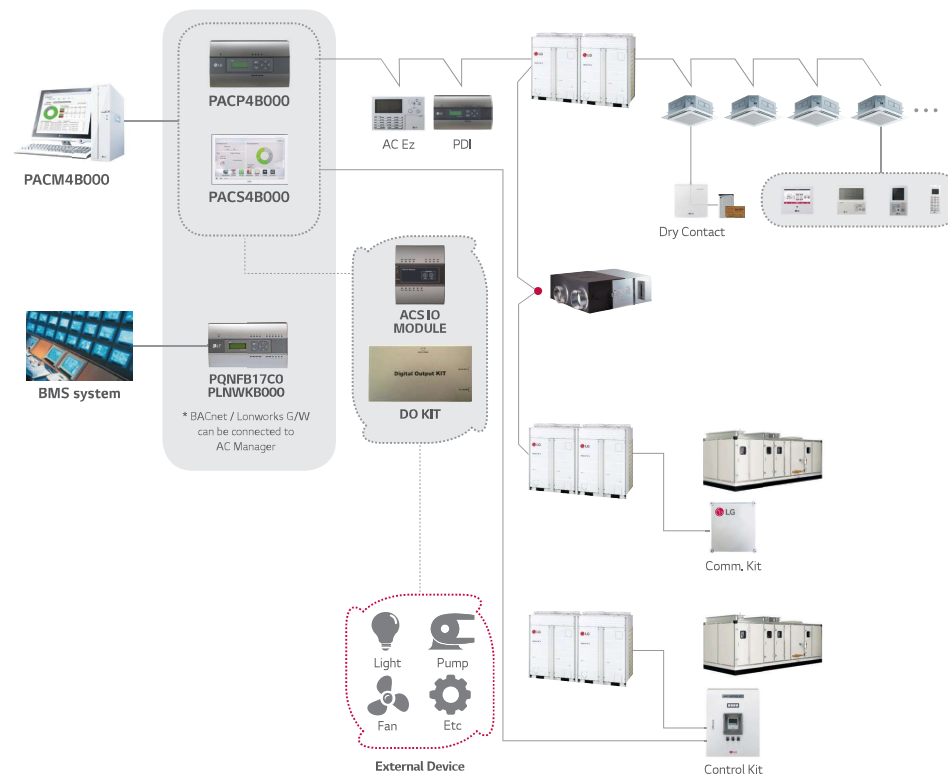


Features

| Model Name | PACM4B000 |
|---|---|
| Maximum number of indoor units | 8,192 (supports 32 ACP IV) |
| Individual / Group control (On & Off, Mode, set point, fan speed) | • |
| Ventilation control | • |
| 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 | • |
| Operation time limit | • |
| Temperature limit | • |
| Web Access ¹⁾ | • |
| Auto changeover / Setback | • |
| Power consumption monitoring (with PDI) | • |
| Interlock control | • |
| Virtual group control | • |
| Emergency alarm display | • |
| ACS IO Module interlocking | • |



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

Solution Overview



* Combination: we recommend you to connect separated wattmeter for Indoor units and Outdoor units to have correct power distribution value
 • Appropriate P1485 should be used according to PDB

SYSTEM INTEGRATION DEVICE

| Facility Integrator | Gateway for Protocol | PI-485 |
|--|--|---|
| <p>PDI (Power Distribution Indicator)</p>  <p>Premium (8 port) PQNUD1S40 Standard (2 port) PPWRDB000</p> | <p>ACP BACnet (Modbus)</p>  <p>PQNFB17C0</p> |  <p>For Indoor Unit (Air-Conditioner, ERV) PHNFP14A0</p> |
| <p>ACS IO Module</p>  <p>PEXPMB000</p> | <p>ACP Lonworks</p>  <p>PLNWKB000</p> |  <p>For Indoor Unit (Air-Conditioner, ERV) PSNFP14A0</p> |
| <p>DO Kit (Digital Output Kit)</p>  <p>PQNF000T0</p> | <p>KNX Gateway</p>  <p>LG-AC-KNX4 LG-AC-KNX9 LG-AC-KNX16 LG-AC-KNX64</p> | |

PDI POWER DISTRIBUTION INDICATOR

PDI shows power consumption of up to 128 indoor units

Premium
PQNUD1S40 (8 port)

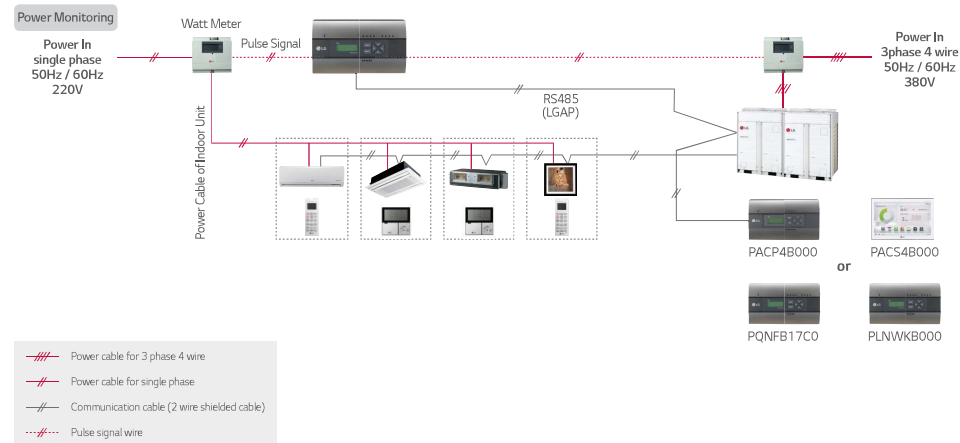
Standard
PPWRDB000 (2 port)



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



* 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

ACS IO MODULE

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

PEXPMB000



Features

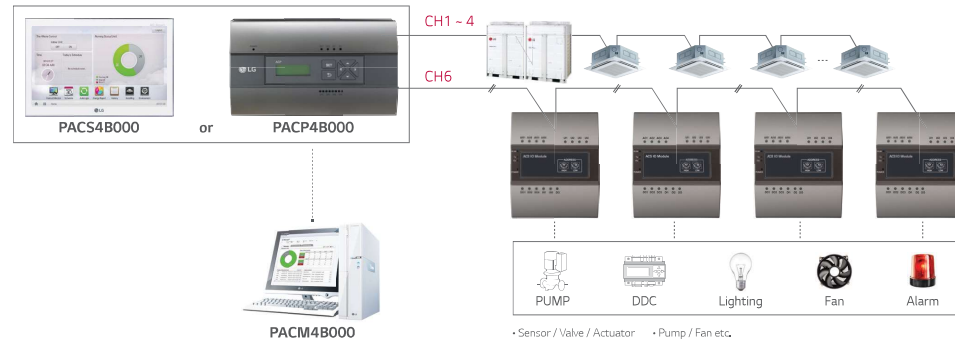
| Model Name | PEXPMB000 | |
|-------------------|-------------------------------------|---|
| Linkable Products | PACS4B000 PACP4B000 PACM4B000 | |
| Communication | RS-485 | 1 |
| I/O | Digital Input | 3 |
| | Digital Output | 3 |
| | Universal Input | 4 |
| | Analog Output | 4 |

| Interface Type | Min. | Max. | |
|----------------|----------------------------|--------|-------------------|
| Analog Input | NTC 10k | 0,68kΩ | 177kΩ |
| | PT 1000 | 803Ω | 1,573Ω |
| | Ni 1000 | 871,7Ω | 1,675,2Ω |
| | DC (Voltage) | 0V | 10V |
| Analog Output | DC (Current) | 0mA | 20mA |
| | - | 0V | 10V |
| Digital Input | Binary Input (Dry Contact) | - | - |
| Digital Output | Normal open | - | 30VAC / 30VDC, 2A |

| | 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

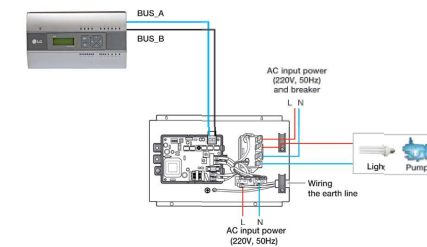
DO KIT DIGITAL OUTPUT KIT

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

PQNF00T0

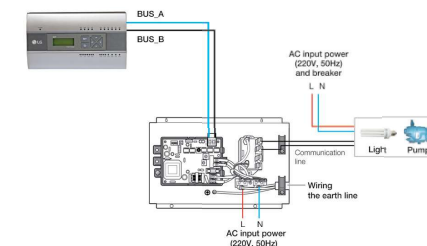


Features



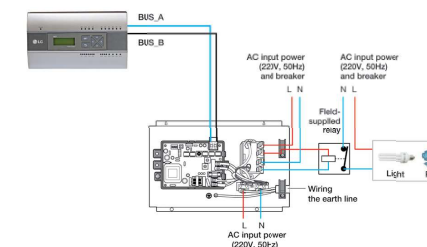
• When the product input is less than equal to 25A (The device is controlled by turning On / Off the power supply line of the product.)

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 field-supplied 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.

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

ACP BACNET GATEWAY

PQNFB17C0



* Please refer PDRYCB500 for Modbus RTU

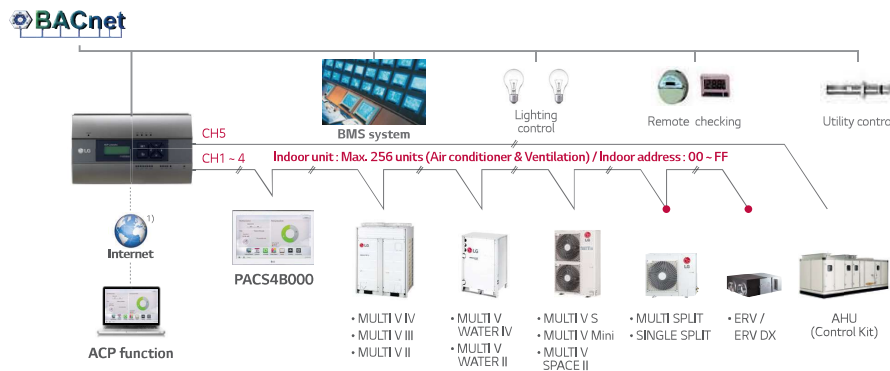
Features

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

| Controlling | Monitoring Items |
|---|---|
| On / Off Command | On / Off Status |
| Operation Mode Setting | Operation Mode Status |
| 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 |
| User Mode Setting (for only ERV) | User Mode Status (for only ERV) |
| - | Accumulator Power Distribution Status |
| Upper Limit Temp. Setting | Upper Limit Temperature Status |
| 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) |

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

Installation Scene



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

• Appropriate PI 485 should be used according to PDB

ACP LONWORKS GATEWAY

PLNWKB000

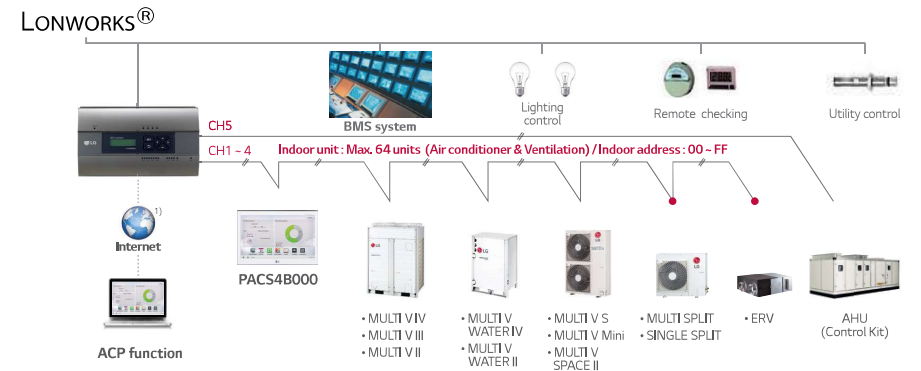


Features

- **Process ability**
 - EHP Type : 64 units (Indoor / ERV / Hydro Kit / THERMA V)
 - AHU Control kit : Maximum 16 units
- **Connect to use Lonworks® 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.**

| 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 |

Installation Scene



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

• Appropriate PI 485 should be used according to PDB

KNX GATEWAY¹⁾

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

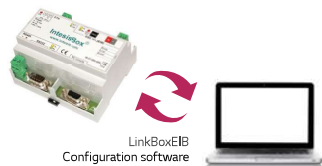
- Easy installation, direct connection to all outdoor units (communication interface PMNFP14A1, when needed) and Heat recovering units (communication interface PHNFP14A0, when needed) through the RS485 Bus.
- Great integration flexibility. Using the supplied software LinkBoxEIB, a complete set of communication 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 |

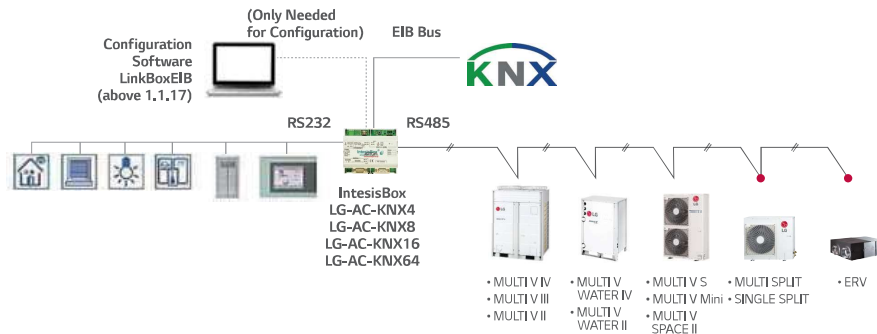
Link BoxEIB Configuration Software for IntesisBox® KNX series

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



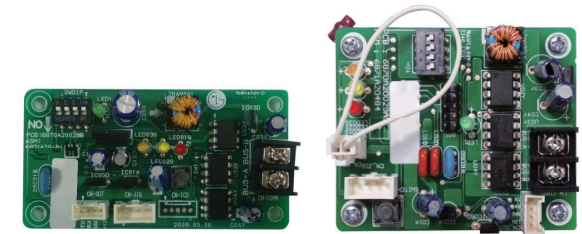
¹⁾ This product is provided by INTESIS.

• Appropriate PI485 should be used according to PDB

PI 485

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

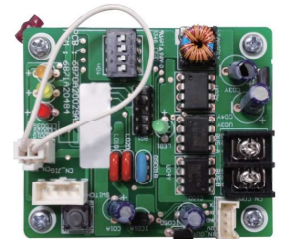
- PHNFP14A0
- PSNFP14A0



Features



- **Model Name : PHNFP14A0**
- **Power : Connected with the Indoor Units**
- **1 for Each Indoor Unit**
- Indoor Unit (Air-Conditioner, ERV)





















- **Model Name : PSNFP14A0**
- **Power : Connected with the Indoor Units**
- **1 for Each Indoor Unit**
- Indoor Unit (Air-Conditioner, ERV)

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

* MULTI V PLUS II & MULTI V III & MULTI V IV series do not require any other PI485 since these series have PI485 in its outdoor unit PCB.

OTHER INTEGRATION CONTROL

OTHER INTEGRATION DEVICE LINE-UP

| Indoor Unit | | Outdoor Unit | AHU Kit |
|---|--|---|--|
| Dry Contact | Control Accessory | IO Module (Input / Output Module) | Communication Kit |
|  <p>Simple Dry Contact PDRYCB000</p> | <p>Group Control Wire</p>  <p>PZCWRCG3</p> |  <p>PVDSMN000</p> |  <p>PRCKA1</p> |
|  <p>2 Points Dry Contact (For Setback) PDRYCB400</p> | <p>Remote Temperature Sensor</p>  <p>PQRSTA0</p> | <p>Low Ambient Kit</p>  <p>PRVC2</p> |  <p>PRDCA0</p> |
|  <p>Dry Contact for Thermostat PDRYCB300</p> | <p>Zone Controller</p>  <p>ABZCA</p> | <p>Dry Contact for Demand Control</p>  <p>PQD5BCDVM0</p> | <p>Control Kit</p>  <p>PRCKD21E PRCKD41E</p> |
|  <p>For Modbus PDRYCB500</p> | | <p>Variable Water Flow Control Kit</p>  <p>PWFCKN000</p> | <p>EEV Kit (Electronic Expansion Valve)</p>  <p>PRLK048A0 / PRLK096A0</p> |
| | |  <p>PRVCO</p> | <p>TXV Kit (Thermal Expansion Valve)</p>  <p>PATX13A0E / PATX20A0E PATX25A0E / PATX35A0E PATX50A0E</p> |
| | | <p>Cool / Heat Selector</p>  <p>PRDSBM</p> | |

DRY CONTACT

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

PDRYCB000
PDRYCB400

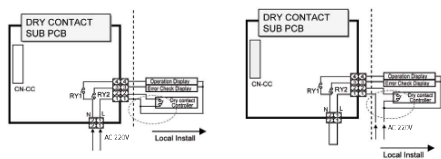


Features

| 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 model's 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.

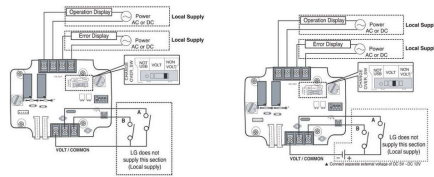
• PDRYCB000



To Apply Power Source through PCB

To Apply Power Source Directly to External Source

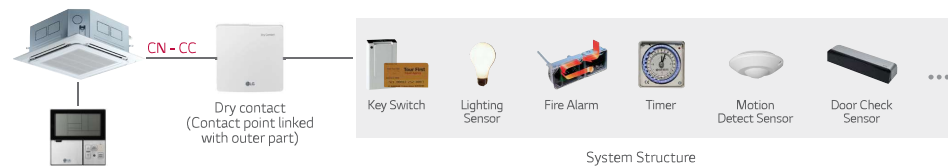
• PDRYCB400



In Case Non Voltage Signal

In Case Voltage Signal

Installation Scene



System Structure

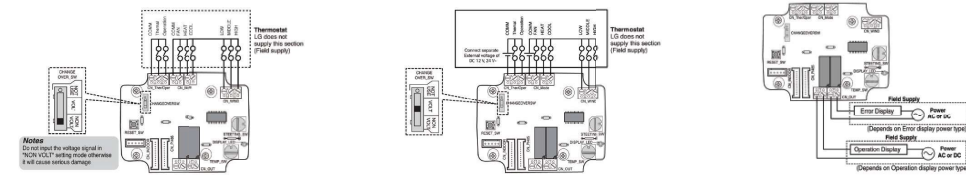
PDRYCB300



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

Indoor Unit Monitoring

Installation Scene



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

DRY CONTACT

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

PDRYCB500



Features

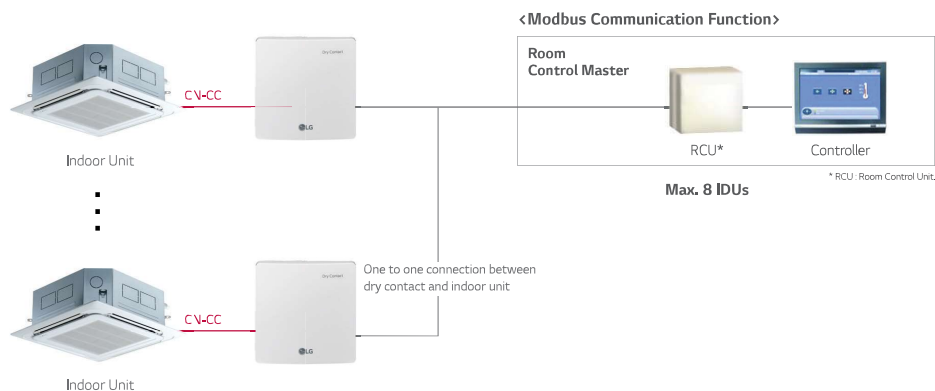
• Function

- 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



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

GROUP CONTROL WIRE

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

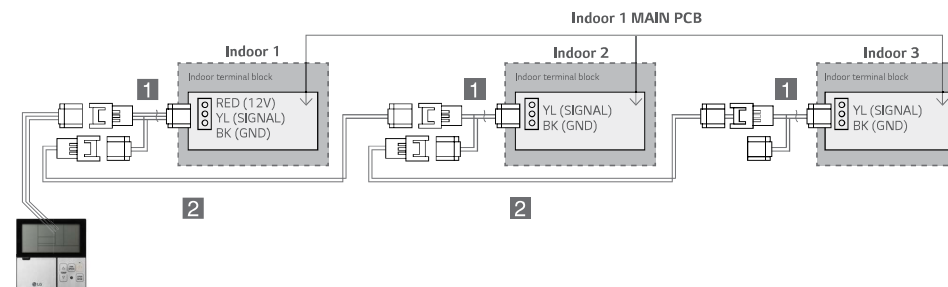
PZCWRCG3



Features

| Model Name | PZCWRCG3 |
|--------------|--------------|
| Y-type Cable | 0,25m Length |
| Long Cable | 9,6m Length |

Installation Scene



- Note:
- 1 Y type Cable assembly for connecting indoor unit and low cable.
 - 2 Long Cable assembly for connecting indoor to indoor.
 - Please connect cable assembly Y type Cable with already connected indoor unit.

REMOTE TEMPERATURE SENSOR

Sensor for detecting the room temperature

PQRSTAO

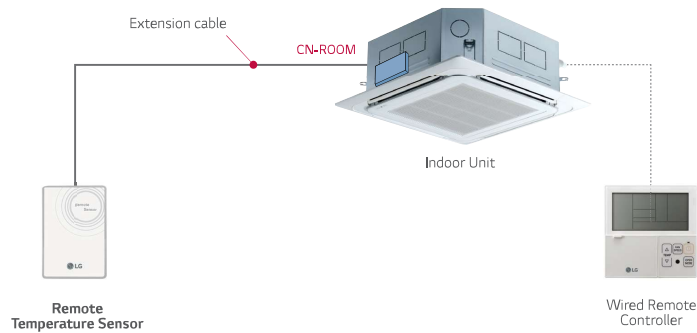


Features

- 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

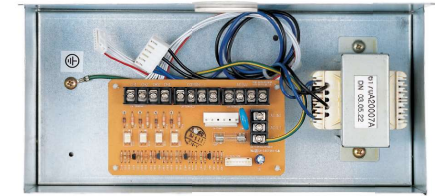
1. Wire to the control box in the indoor unit by removing the existing thermistor and connect the extension cable its place.
2. Cut the extension cable to the appropriate length and connect the screw terminal of the remote sensor,



ZONE CONTROLLER

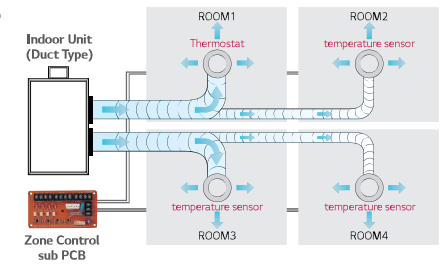
Controls air conditioning in up to 4 zones by external thermostat

ABZCA



Features

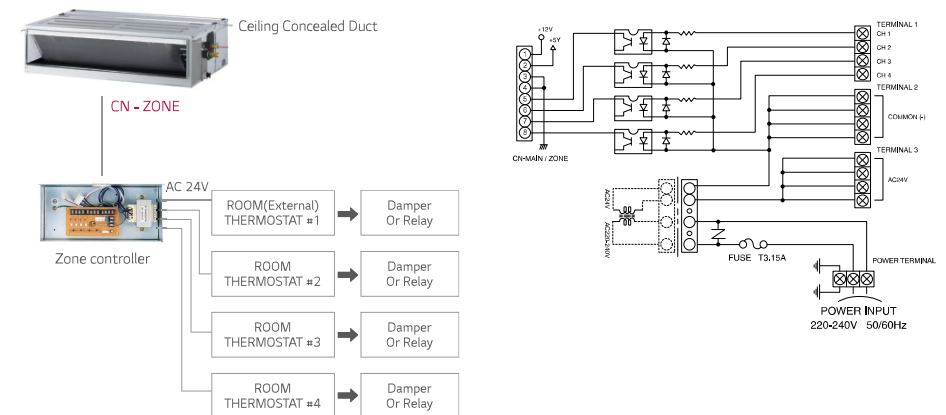
- Controls different zones (up to 4 zones) by external thermostat (AC 24V)
- Maintain proper air volume of each zone
- Auto variation of dampers
- Auto control of fan speed and On / Off operation



Models Applied

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

Wiring Diagram



IO MODULE INPUT / OUTPUT MODULE

Interface module between system air conditioner and external device

PVDSMN000



Features

- **Function**
 - Demand control
 - Low noise operation
 - Output outdoor or indoor unit operation status
 - Output error status

- **Description**
 - IO Module is communication interface module for connection between MULTI V IV and external IO (Input / Output Module) devices.

Note : IO Module is not compatible for MULTI V III

Models Applied

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

Wiring

1) Dry Contact Input Part

- Input_1, 2, 3 : Demand control by contact input (3 Step)
- Input_LNO : Low Noise Operation
- Priority Setting
Using priority setting contact signal the priority of command. (Capacity control for external command from DDC vs. peak control by LG Central controller.)
- Close : Central controller has priority to external signal
- Open : External signal has priority to central controller (Default setting)

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

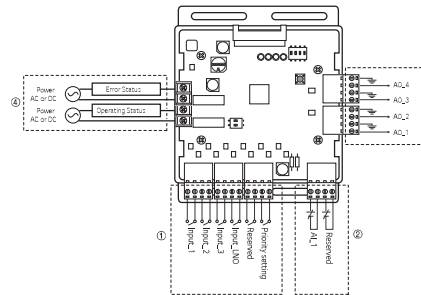
- AI_1 : Demand control by analog input (10 Step)

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

- Low ambient operation (AO_1 ~ 3)
- IO Module communication error display

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

- Output error status
- Output operation status

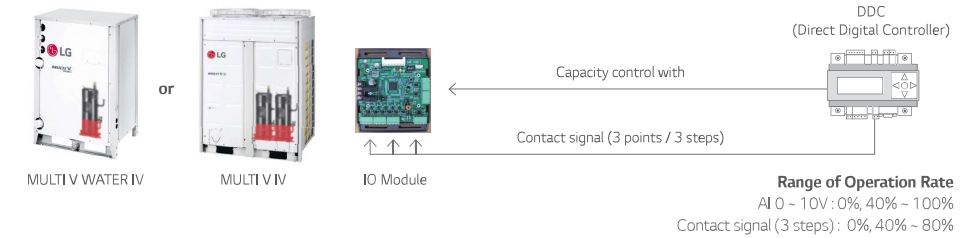


AI : Analog Input (DC0~10V)
AO : Analog Output (DC0~10V, Max 20mA)
Input_LNO : Low Noise Operation

Installation Scene

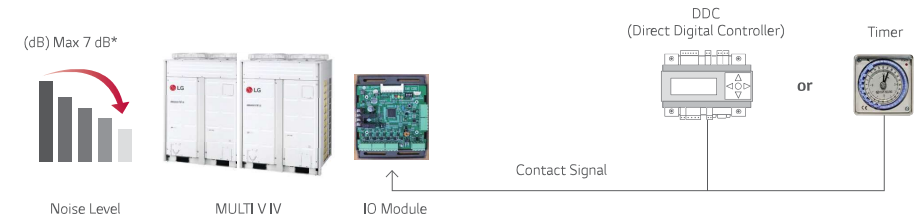
• Demand Control

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).



• Low Noise Operation

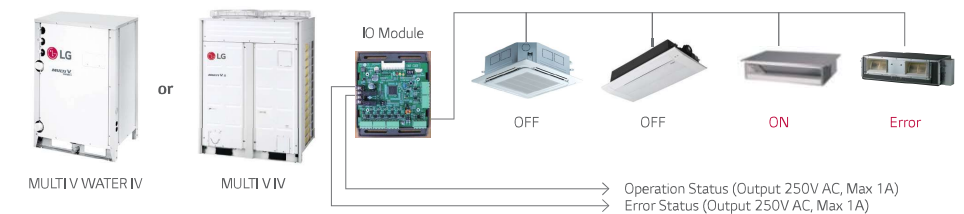
To reduce noise level, control outdoor unit's fan speed by dry contact input.



* 8 HP model, Sound power level can be changed by outdoor unit operation status and low noise operation input signal.

• 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.

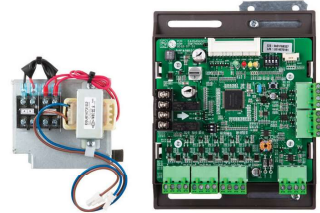


Operation Status (Output 250V AC, Max 1A)
Error Status (Output 250V AC, Max 1A)

LOW AMBIENT KIT

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

PRVC2

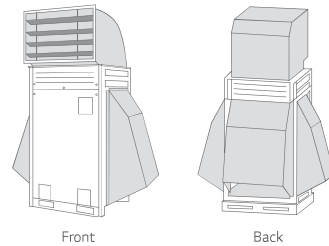


Features

- 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.

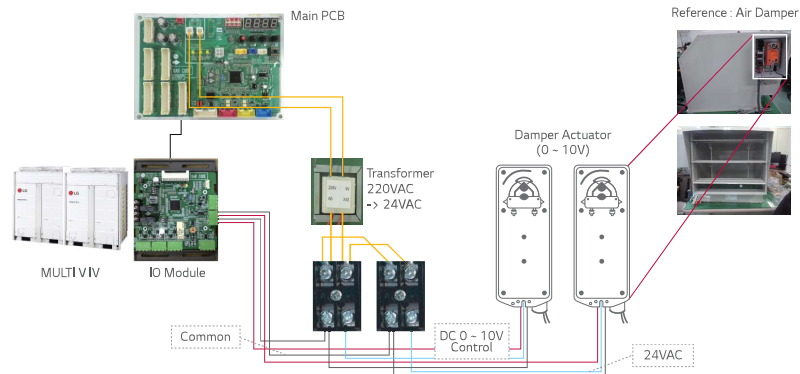


Field Supply item

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

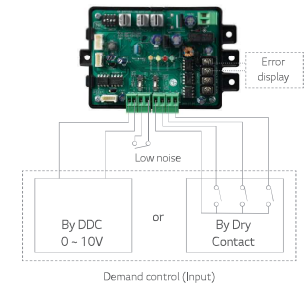
PQDSBCDVM0



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)

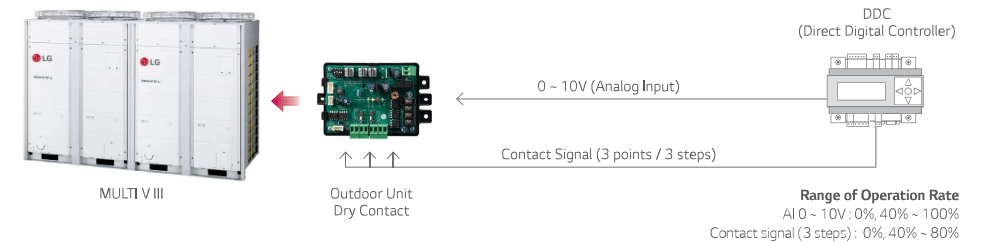
- Description**
 - The product is especially designed for demand control.



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



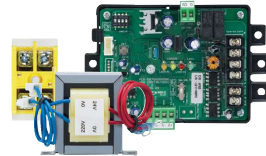
VARIABLE WATER FLOW CONTROL KIT

Accessory developed for controlling the water flow

PWFCKN000 (MULTI V WATER IV)



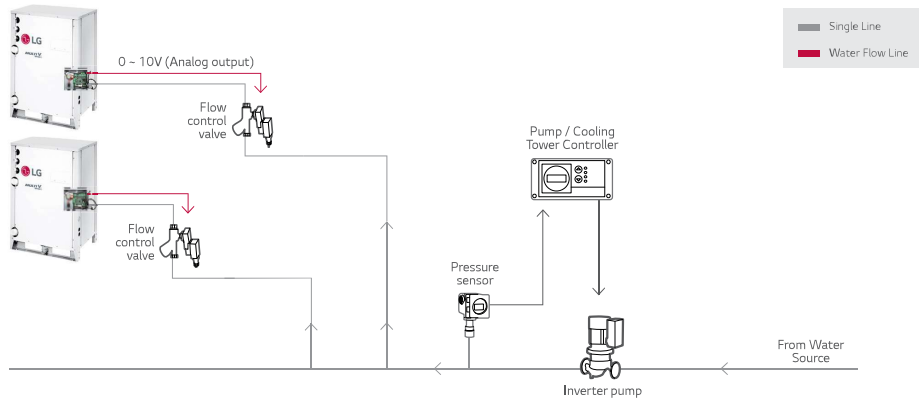
PRVCO (MULTI V WATER II)



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

Wiring Diagram



* 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.

COOL / HEAT SELECTOR

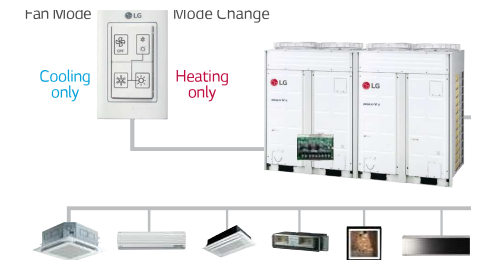
Cooling, heating, or fan mode can be selected to prevent cooling and heating mixing errors during seasonal changes

PRDSBM



Features

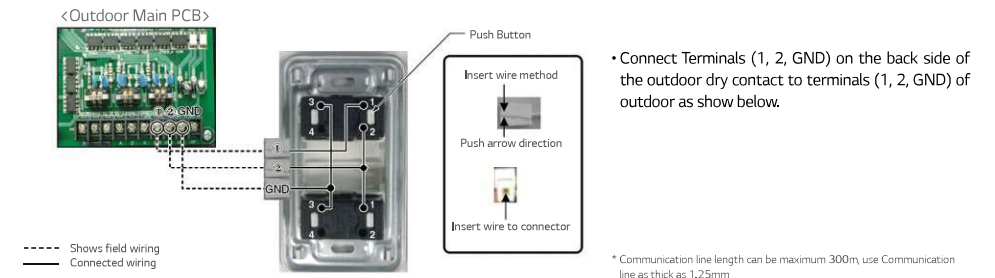
- Indoor unit mode control without central controller
- Select operation mode: Cooling, Heating, Fan mode
- Mode lock for cooling & heating mixing error-proof during the change of season



Models Applied

- MULTI V IV
- MULTI V S
- MULTI V WATER IV
- MULTI V WATER S
- MULTI V PLUS II, MULTI V PLUS
- MULTI V MINI
- MULTI V WATER II
- MULTI V SPACE II

Wiring Diagram



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

* Communication line length can be maximum 300m, use Communication line as thick as 1,25mm

AHU KITS AIR HANDLING UNIT KITS

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



Specifications

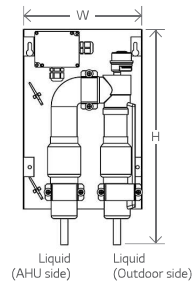
• Communication & Control Kit

| Type | Model | Combination | | | | Description | Dimensions (mm) | | |
|-------------------|----------|--------------|---------|---------|------------------------|---|-----------------|-----|-----|
| | | Outdoor unit | EEV Kit | TXV Kit | Centralized Controller | | W | H | D |
| Communication Kit | PRCKA1 | MULTI V | • | • | • | Return / room air control by remote controller or dry contact | 280 | 280 | 135 |
| | PRDCA0 | MULTI V | • | • | - | Return / room air or supply air (capacity) control by DDC | 330 | 430 | 180 |
| Control Kit | PRCKD21E | MULTI V | - | • | • | Max capacity 1 ~ 4 master outdoor unit | 600 | 750 | 285 |
| | PRCKD41E | MULTI V | - | • | • | Max capacity 5 ~ 8 master outdoor unit | 600 | 750 | 285 |

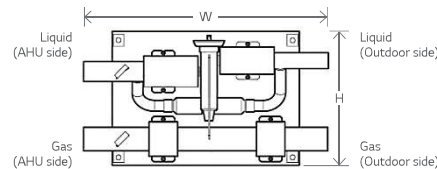
• Expansion valves

| Type | Model | Outdoor unit combination (Capacity Range) | Pipe diameter (mm) | | | | Dimensions (mm) | | |
|--------------------------------------|-----------|---|--------------------|--------------|-----------|-----------|-----------------|-----|-----|
| | | | Liquid (ODU) | Liquid (AHU) | Gas (ODU) | Gas (AHU) | W | H | D |
| EEV Kit (Electronic Expansion Valve) | PRLK048A0 | 4 ~ 10HP | 12,7 | 12,7 | - | - | 217 | 404 | 83 |
| | 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 |

• EEV Kit



• TXV Kit



Features

• Communication Kit

PRCKA1

| 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 | Cooling 18 ~ 30°C, Heating 16 ~ 30°C |

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

Accessories for PRCKA1

| Wired remote controller | | Dry contact | | | | IO Module |
|-------------------------|------------------|-------------|-----------|------------|-----------|--|
| Standard II | | Simple | 2 point | Thermostat | Modbus | (for outdoor capacity control) |
| PREMTB001 (White) | PREMTB01 (Black) | PDRYCB000 | PDRYCB400 | PDRYCB300 | PDRYCB500 | PVDSMN000 (MULTI V IV) PWFKCN000 (MULTI V WATER IV) |

PRDCA0

| List | Description | Type | Min | Max | |
|--------------|--|--|---------------------------|-----|-----|
| Controlling | Communication Kit operation | On / Off | - | - | |
| | Mode change | Fan only / Heating / Cooling | - | - | |
| | Fan step signal output | High / Mid / Low (3 steps) | - | - | |
| | Room temperature control | Cooling 18 ~ 30°C, Heating 16 ~ 30°C | Analog input | 0V | 10V |
| | Supply air temperature control (by outdoor capacity control) | Compressor Off, Compressor Off & Fan Off, 40 ~ 100% capacity control | Analog input | 0V | 10V |
| Monitoring | Outdoor unit operation | On / Off | Max : AC 250V, DC 30V, 1A | | |
| | Communication Kit operation | On / Off | Max : AC 250V, DC 30V, 1A | | |
| | Mode | Fan / Defrost / Cooling / Heating | Max : AC 250V, DC 30V, 1A | | |
| | Fan mode | High / Mid / Low (3 steps) | Max : AC 250V, DC 30V, 1A | | |
| Error status | No error / Error occurred | Digital output (Non-voltage) | Max : AC 250V, 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

| Wired remote controller | |
|-------------------------------|------------------|
| Standard II (Monitoring only) | |
| PREMTB001 (White) | PREMTB01 (Black) |

AHU KITS

AIR HANDLING UNIT KITS

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

Features

• Control Kit

| List | Required item |
|-----------------------------------|--|
| Heating / Cooling | SA / RA temperature sensor (or SA / RA temperature & humidity sensor) |
| Automatic ventilation | SA/RA temperature, CO ₂ sensor; Damper actuator (OA, EA, Mix) |
| Energy saving (Cooling mode only) | SA temperature, OA / RA temp&humidity sensor, Damper actuator (OA, EA, Mix) |
| 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

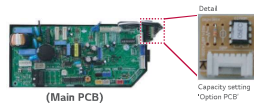
| List | Required specification | Apply location |
|---|---|---|
| Temperature sensor | - Power: AC 24V, Output signal: DC 0 ~ 10V - Temperature boundary: -50 ~ 50°C | - Apply to MA, SA, RA |
| Temperature & Humidity sensor | - Power: AC 24V, Output signal: DC 0 ~ 10V - Temperature boundary: -40 ~ 70°C - Humidity boundary: 0 ~ 95% RH | - Apply to SA, RA, OA - Can not be applied to MA |
| Damper actuator | - Power: AC 24V, 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 ₂ 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 MULTI V

- 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.



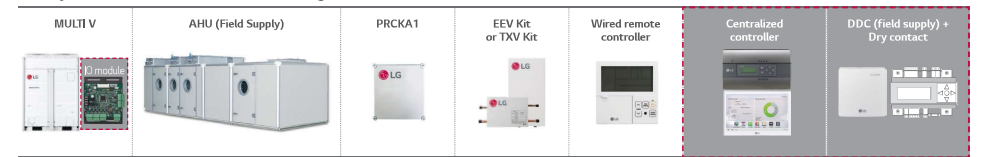
| Option PCB P / No | Capacity Index (Btu/h) | Recommended Heat Exchanger Volume (10 ⁻² x m ³) | Maximum Heat Exchanger Capacity (kW) | Air Flow Rate (CMH) |
|-------------------|------------------------|--|--------------------------------------|---------------------|
| EBR52358907 | 28k | 2,7 | 8,6 | 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 WBET

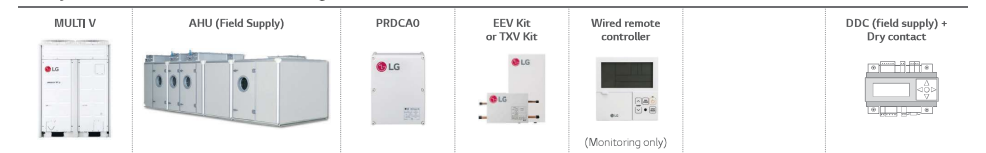
* Heat exchanger volume (m³): Pipe cross-section x Tube length + Pipe cross-section (m³) = π x D² / 4 * Tube length (m) = Tube length of 1 pipe x Tube step x Tube row

Installation Scene

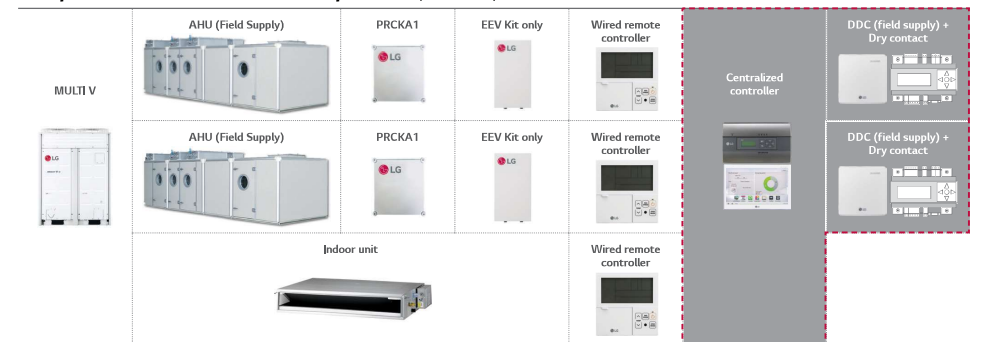
• Simple control with PRCKA1 – Single AHU



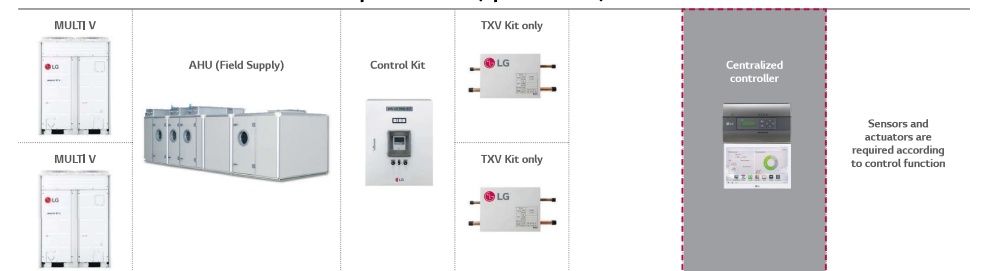
• Simple control with PRDCA0 – Single AHU



• Simple control with PRCKA1 – Multiple AHUs(DX coils)



• Various control with control Kit – Multiple MULTI Vs (up to 8 ODU)



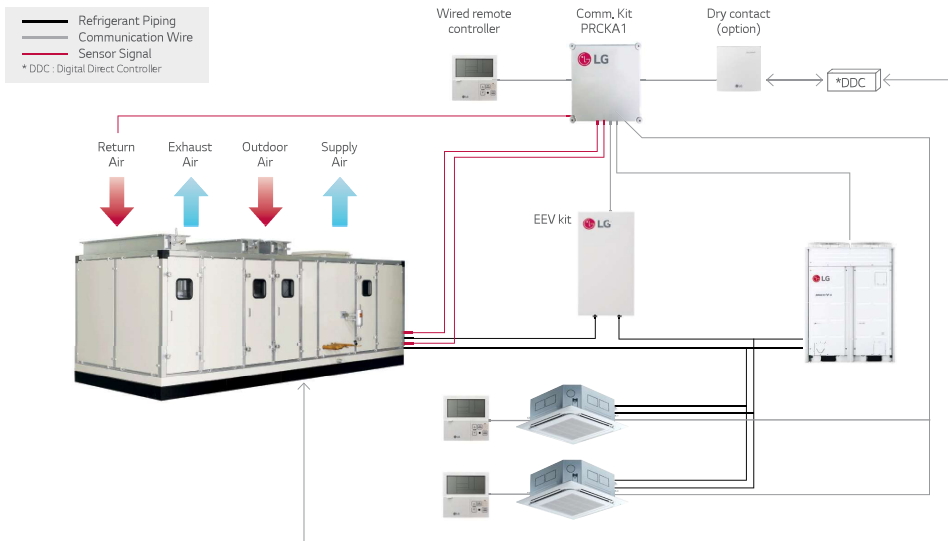
AHU KITS

AIR HANDLING UNIT KITS

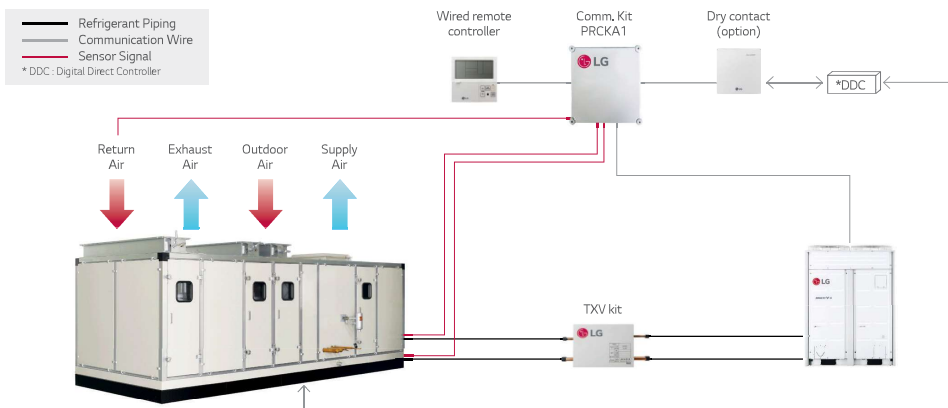
Solution to connect LG outdoor unit on the DX coil of an air handling unit, with LG's high efficient products for maximum cost saving

Application

• Simple control with PRCKA1 – EEV Kits + Indoor units

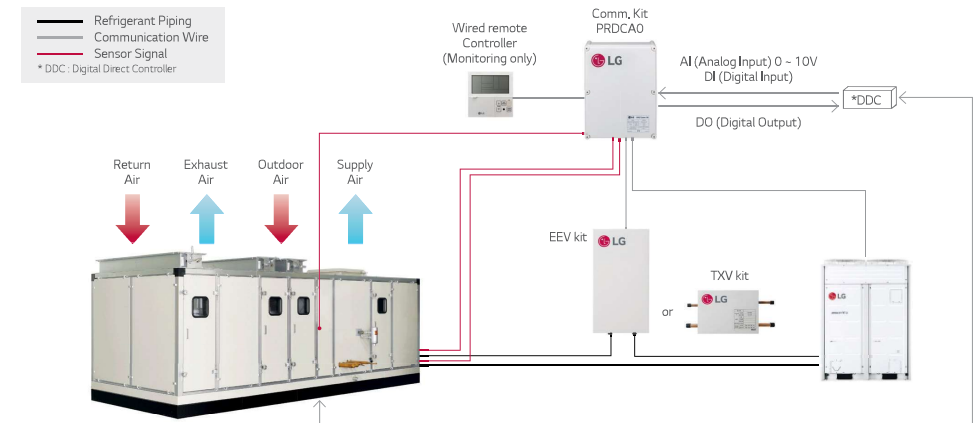


• Simple control with PRCKA1 – Single TXV Kit (without indoor unit)

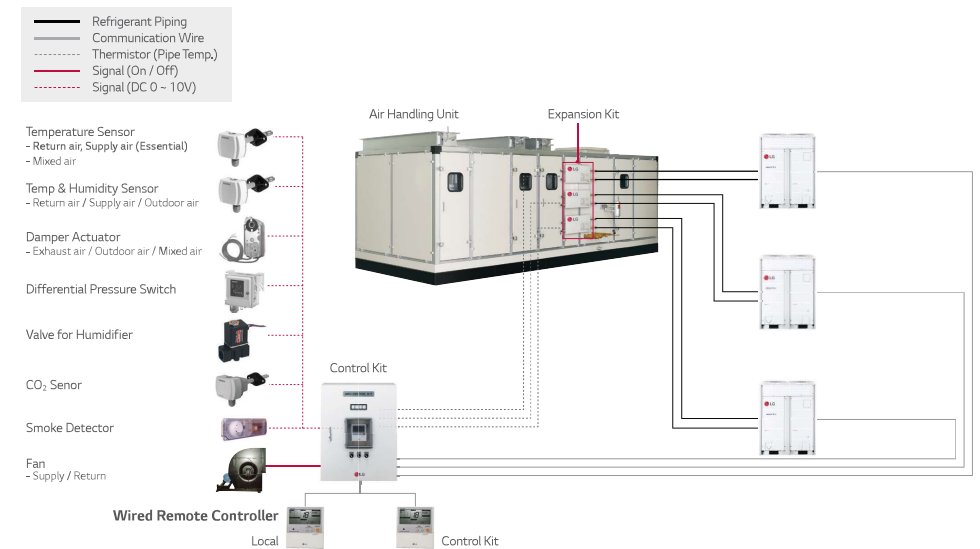


Application















• Simple control with PRDCA0 – Single EEV Kit or TXV Kit



• Various control with control kit – Multiple MULTI Vs + TXV Kits



MECHANICAL ACCESSORIES LINE-UP

| Indoor | | Outdoor | |
|---|---|--|---|
| Ceiling Mounted Cassette | Ceiling Concealed Duct | MULTI V | Air Guide |
| Auto Elevation Grille  PTEGM0 | Cassette Cover  PTDCM PTDCQ | Suction Grille  PB5GB30 / PB5GB40 Canvas  PB5C30 / PB5C40 |  PRAGX350 PRAGX250 |
| Cassette Panel  NEW 4 Way Cassette (Compact panel) PT-QCHW0 | Ventilation Kit  PTVK410  PTVK420 PTVK430 | ETC. CO₂ Sensor  PES-CORV0 | Drain Pan  PRODX20 PRODX30 |
| 4 Way Cassette PT-UQC / PT-UJC1 2 Way Cassette PT-HLC 1 Way Cassette (Grill Type) PT-UUC / PT-UUC1 / PT-UTC (Panel Type) PT-UUD / PT-UTD | Refrigerant Leakage Detector  PRLDNV50 | Independent Power Module  PRIP0 | |
| | NEW EEV Kit NEW IR Receiver  PRGK024A0  PWLFRV000 | | |

Mechanical Accessories Line up and Application

| Type 1 | Type 2 | Remark |
|---------|-----------------------------------|--|
| | Auto Elevation Grille | 4-way cassette |
| | Cassette Panel | 4-way / 2-way / 1-way cassette |
| | Cassette Cover | 4-way cassette |
| | Ventilation Kit | 4-way cassette |
| | Suction Grille / Canvas | Ceiling concealed duct (Built-in) |
| | Refrigerant Leakage Detection Kit | MULTI V 4 th generation indoors |
| | Independent Power Module | Indoor |
| | CO ₂ SENSOR | Energy Recovery Ventilator |
| | EEV Kit | Indoor |
| | IR Receiver | Ceiling concealed duct |
| OUTDOOR | Air Guide | Outdoor |
| | Drain Pan | Outdoor |

AUTO ELEVATION GRILLE

Easy filter cleaning with the elevation grille

PTEGM0

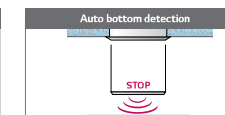
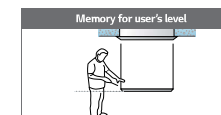
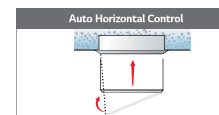
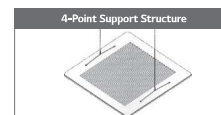


Features

• Easy filter cleaning with elevation grill

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

- Memory for user's level
- Max 4.5m length
- Model : PTEGM0 (for chassis TM, TN, TP)



Operating with wired remote controller* and wireless remote controller included in PTEGM0.
 * PREMTB001, PREMTB01

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

Application



- Auto elevation grille kit
- Install the kit inside indoor unit
- Install the front panel and the Inlet grille
- Operate the auto elevation grille by the wireless remote controller
- Easy maintenance

CASSETTE PANEL

Stylish designed panels make more unique space by various applications

4 Way Cassette
PT-QCHW0

NEW



PT-UQC /
PT-UMC1



2 Way Cassette
PT-HLC



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

(Panel Type)
PT-UUD / PT-UTD

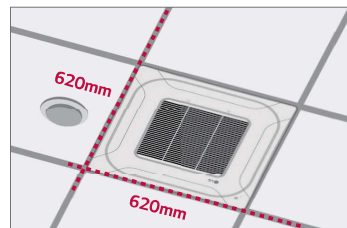
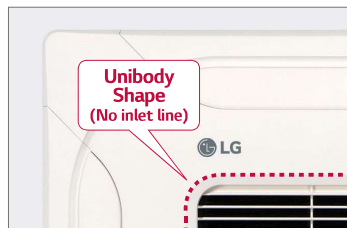


Features

- 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

| Model name | Suction Type | Color (RAL) | Gloss | Weight (kg) | Dimension (mm) | | | Applied model MULTI V | |
|------------|--------------|------------------|-------------------------|-------------|----------------|-------|----|--------------------------|--------------|
| | | | | | W | H | D | | |
| 4-way | PT-QCHW0 | Horizontal Grill | Morning Fog (RAL 120-4) | X | 3,0 | 620 | 20 | 620 | 1,5 - 5,0kw |
| | PT-UQC | Horizontal Grill | Morning Fog (RAL 120-4) | X | 3,0 | 700 | 22 | 700 | 1,5 - 5,0kw |
| | PT-UMC1 | Horizontal Grill | Morning Fog (RAL 120-4) | X | 5,6 | 950 | 25 | 950 | 7,1 - 14,0kw |
| 2-way | PT-HLC | Grill | Morning Fog (RAL 120-4) | X | 4,0 | 1,050 | 28 | 640 | 5,0 - 7,1kw |
| | PT-UUC | Grill | Noble White (RAL 110-1) | O | 4,6 | 1,100 | 34 | 500 | 2,1 - 3,5kw |
| | PT-UUC1 | Grill | Morning Fog (RAL 120-4) | X | 4,4 | 1,100 | 34 | 500 | 2,5 - 3,5kw |
| 1-way | PT-UTC | Grill | Noble White (RAL 110-1) | O | 5,5 | 1,420 | 34 | 500 | 5,0 - 7,1kw |
| | PT-UUD | Panel | Noble White (RAL 110-1) | O | 4,6 | 1,100 | 34 | 500 | 2,1 - 3,5kw |
| | PT-UTD | Panel | Noble White (RAL 110-1) | O | 5,5 | 1,420 | 34 | 500 | 5,0 - 7,1kw |

CASSETTE COVER

Air purifying filter to prevent dust and allergens

PTDCM
PTDCQ



Features

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

Models Applied

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

Parts Included

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

Accessory Model Name

| Model | Front Panel | Weight (kg) | | Dimensions (mm) | | | |
|-------|------------------|-------------|-------|-----------------|-------|-------|-----|
| | | NET | Gross | W | H | D | |
| PTDCM | PT-UQC / PT-UMC1 | TP / TN | 5,9 | 8,8 | 1,157 | 1,157 | 268 |
| | | TM | 5,9 | 8,8 | 1,157 | 1,157 | 310 |
| PTDCQ | - | TR | 5,0 | 7,2 | 907 | 907 | 268 |
| | | TQ | 5,0 | 7,2 | 907 | 907 | 310 |

VENTILATION KIT

Fresh air can be supplied from outside through this ventilation kit

PTVK410
PTVK420
PTVK430



Features

- The ventilation kit can be supplied air from outside.

Models Applied

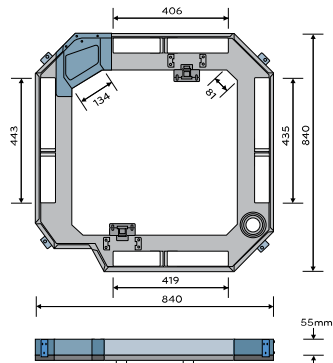
- **There are 2 solutions for fresh air**
 - PTVK410+PTVK420 (for chassis TP, TN, TM)
 - PTVK430 (for chassis TR, TQ, TP, TN, TM)

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

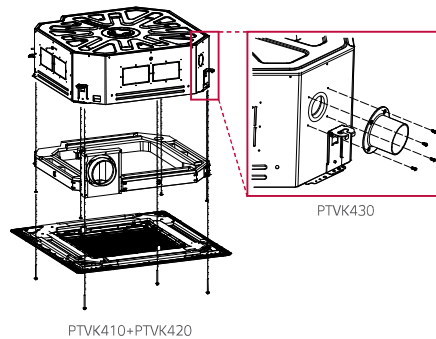
Parts Included

- PTVK410 : 1 Ventilation Kit, 8 Bolts, 1 Insulation
- PTVK420 : 1 Flange, 7 Screws
- PTVK430 : 1 Flange, 4 Screws, 1 Insulation

Dimensions



Assembly Diagram



SUCTION GRILLE / CANVAS

High flexibility for a wide variety of applications

PBSGB30
PBSGB40
PBSC30
PBSC40



Features

- 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) | | | | | |
|----------|------------|------------------|-------------|-------------|-------------|-------------|-------------|
| | | ARNU07GB3G2 | ARNU09GB3G2 | ARNU12GB3G2 | ARNU15GB3G2 | ARNU18GB4G2 | ARNU24GB4G2 |
| Grille | PBSGB30 | 0 | 0 | 0 | 0 | - | - |
| | PBSGB40 | - | - | - | - | 0 | 0 |
| Canvas | PBSC30 | 0 | 0 | 0 | 0 | - | - |
| | PBSC40 | - | - | - | - | 0 | 0 |

SUCTION GRILLE / CANVAS

High flexibility for a wide variety of applications

Parts Included

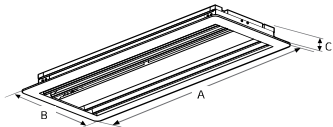
• For the suction grille :

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

• For the suction canvas :

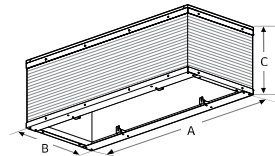
- Air suction canvas (1EA)
- Screws for air suction canvas (4EA)
- Adjusting chain (4EA)
- Screws for adjusting chain (8EA)
- Installation manual (1EA)

Dimensions



(Unit : mm)

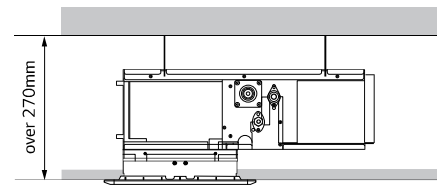
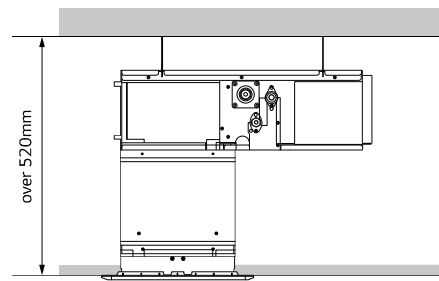
| Model Name | A | B | C |
|------------|-------|-----|----|
| PBSGB30 | 910 | 359 | 56 |
| PBSGB40 | 1,188 | 359 | 56 |



(Unit : mm)

| Model Name | A | B | C |
|------------|-------|-----|----------|
| PBSC30 | 821 | 274 | 42 - 250 |
| PBSC40 | 1,100 | 274 | 42 - 250 |

Application



CO₂ SENSOR

CO₂ sensor in ventilation system.

PES-CORVO



Features

1) Model name : PES-CORVO

2) Specification

- Applied Model : ERV, ERV DX
- Function
 - Supply Voltage : DV 12V ± 5%
 - Output : 0 ~ 5V (Linear output, 1 ~ 2,000ppm CO₂)
 - Accuracy : 30ppm ± 5% of reading

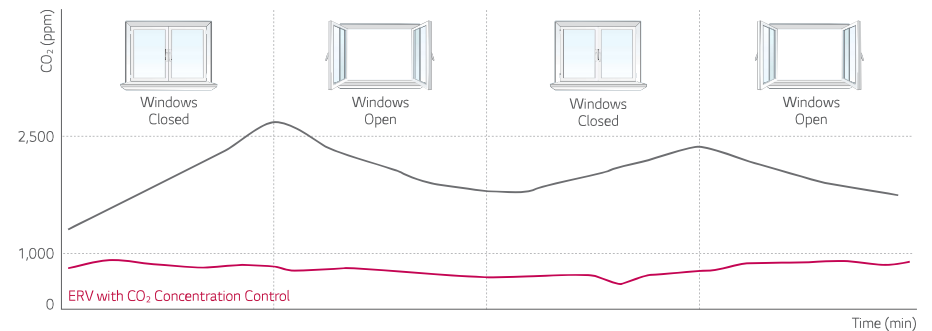
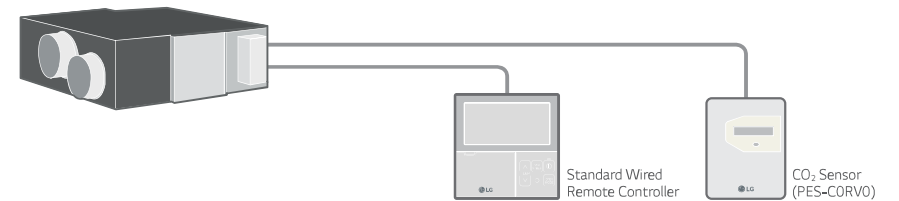
3) Description

- The product is especially designed to detect CO₂ concentration in ERV system.

• Operation Table

| CO ₂ Sensor Reading | ERV Fan Operation |
|--------------------------------|-------------------|
| < 500ppm | Off |
| 500 ~ 700ppm | Low Speed |
| 700 ~ 900ppm | High Speed |
| > 900ppm | Super High Speed |

Installation Scene



REFRIGERANT LEAKAGE DETECTOR

R410A refrigerant leakage detector makes more safe 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.

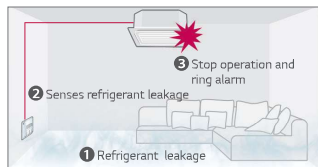
Models Applied

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

Specifications

| Parts | Specifications | |
|---|--|--|
|  Sensor | Rated Voltage (V) | DC 5.0 ± 5% |
| | Dimensions (W x H x D, mm) | 31 x 44 x 20 |
| | Weight (g) | 22 |
| | Detectable Refrigerant | R410A |
| | Detected concentration (ppm) | 0 / 6,000 Alarm Off / On |
| | Operating temperature range (°C) | -10 ~ 50 |
| | Preserved temperature range (°C) | -40 ~ 60 |
| | Average power consumption (mA) | 35 |
|  Connecting cable | Cable length (m) | 10 |
| |  Sensor protective cover | Dimensions of Front Plate (W x H x D, mm) |
| Dimension of Backplate (W x H x D, mm) | | 80 x 110 x 6,5 |

Application



NEW

EEV KIT

MULTI V EEV KIT is specially designed to reduce noise and make comfort environment

PRGK024A0



Features

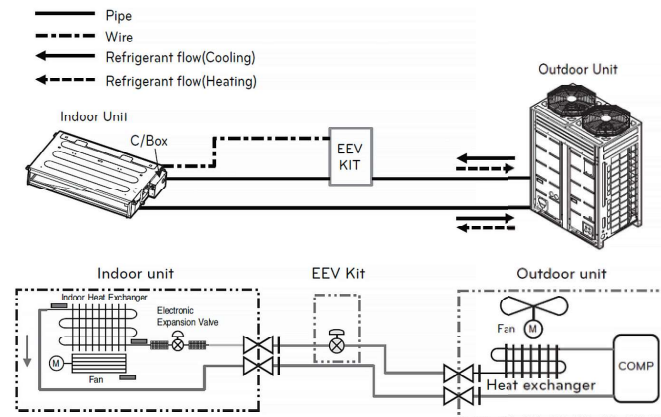
- Decreasing noise level of Multi V Indoor units Easy installation

Models Applied

- Ceiling Cassette (up to 15kBtu)
- Ceiling concealed duct (up to 18kBtu)
- Wall mounted (up to 24kBtu)
- Console (up to 15kBtu)
- Floor Standing Unit (with case / without case) (up to 15kBtu)
- Convertible (up to 12kBtu, Ceiling Suspended Type is not able to connect this Kit)

* Fresh Air intake Unit is not able to connect this Kit

Application



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

NEW

IR RECEIVER

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

PWLRVN000



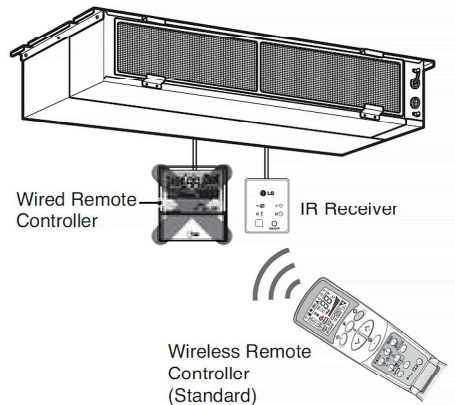
Features

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

INDEPENDENT POWER MODULE

EEV full close function in case of power cut

PRIP0

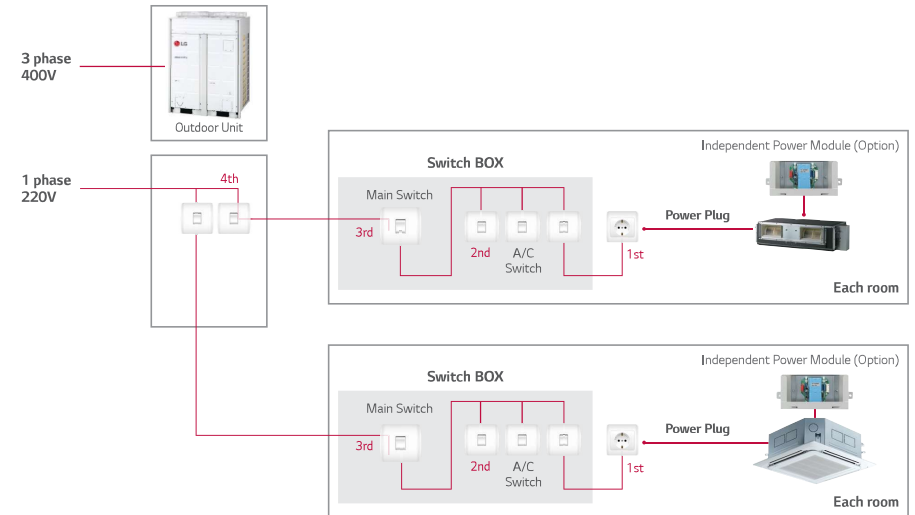


Features

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

Models Applied

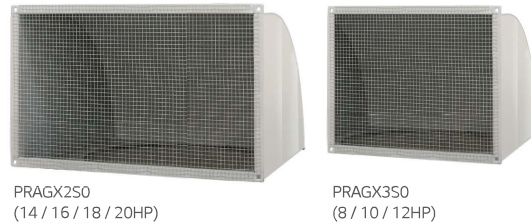
- **MULTI V Indoors**



AIR GUIDE

Air discharge in difficult to access areas

PRAGX*S0



PRAGX2S0
(14 / 16 / 18 / 20HP)

PRAGX3S0
(8 / 10 / 12HP)

Features

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

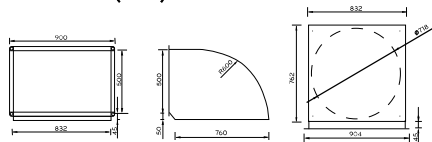
Models Applied

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

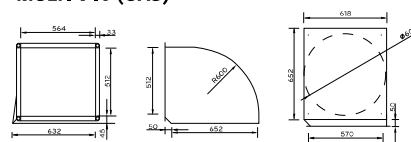
Dimensions

| Model Name | Gross Weight | Net Weight |
|------------|--------------|------------|
| PRAGX2S0 | 22,5kg | 12,3kg |
| PRAGX3S0 | 17kg | 9,4kg |

• MULTI V IV (UX2)



• MULTI V IV (UX3)



Application

• MULTI V IV (UX2)

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



* N: Heat pump / B: Heat recovery

• MULTI V IV (UX3)

- ARU*140LTE4
- ARU*160LTE4
- ARU*180LTE4
- ARU*200LTE4



* N: Heat pump / B: Heat recovery

DRAIN PAN

Easy drain installation

PRODX20 / PRODX30



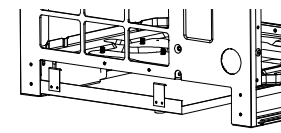
PRODX20

PRODX30

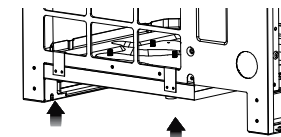
Features

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

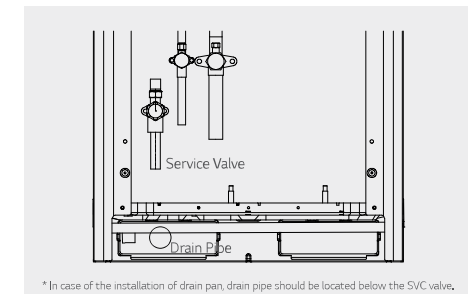
Installation



* Tuck drain pan below base pan



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







* 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.

Accessory Model Name

| Model Name | Width x Length | Remark |
|------------|-----------------|--------|
| PRODX20 | 920mm x 466mm | UX2 |
| PRODX30 | 1,240mm x 466mm | UX3 |

PIPING ACCESSORIES LINE-UP

| MULTI V | |
|---|---|
| <p>Heat Recovery Unit</p>  <p>PRHR022 PRHR032 PRHR042</p> | <p>Y Branch and Header Branch</p>  |
| ETC | |
| <p>Stopper Valve</p>  <p>PRVT120 PRVT780 PRVT980</p> | <p>Drain Hose</p>  <p>PHDHA05T PHDHA07T PHDHA05B PHDHA07B</p> |

Mechanical Accessories Line up and Application

| Model name | Remark |
|----------------------------|--|
| Heat Recovery Unit | MULTI V Sync II / MULTI V III Heat Recovery / MULTI V IV Heat Recovery |
| Y Branch and Header Branch | Various type of MULTI V Series |

HEAT RECOVERY UNIT

PRHR022
PRHR032
PRHR042



PRHR022
(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 |
| Maximum Connectable Capacity of Indoor Units (Per branch/unit) | | kW | 16 / 32 | 16 / 48 |
| Maximum Number of Connectable Indoor units per Branch | | EA | 8 | 8 |
| Nominal Input | Cooling | kW | 0,026 | 0,040 |
| | Heating | kW | 0,026 | 0,040 |
| Net, Weight | | kg | 18 | 20 |
| Dimensions (W x H x D) | | mm | 801 x 218 x 617 | 801 x 218 x 617 |
| Piping connections | Indoor Unit | Liquid | mm (inch) | 9,52 (3/8) |
| | | Gas | mm (inch) | 15,88 (5/8) |
| | Outdoor Unit | Liquid | mm (inch) | 9,52 (3/8) |
| | | Low pressure | mm (inch) | 22,2 (7/8) |
| | | High Pressure | mm (inch) | 19,05 (3/4) |
| | | High Pressure | mm (inch) | 22,2 (7/8) |
| Power supply | | Ø / V / Hz | 1 / 220-240 / 50 | 1 / 220-240 / 50 |




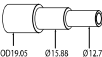
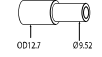
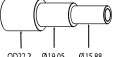
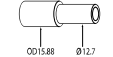
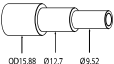

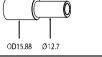
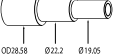

Parts Included

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

HEAT RECOVERY UNIT

Reducers for Indoor Unit and HR Unit

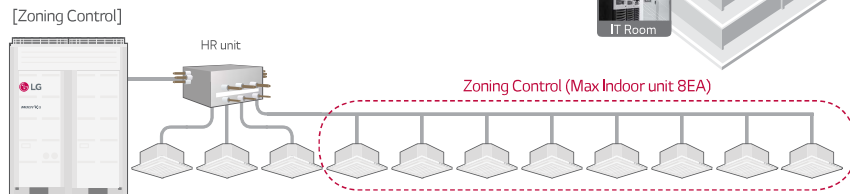
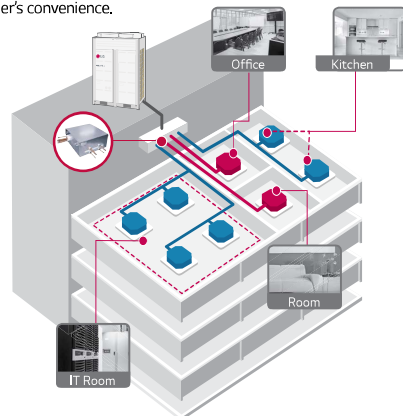
(Unit: mm)

| Model Name | | Liquid | High pressure | Low pressure |
|---------------------|-------------------|---|---|--|
| Indoor unit reducer | |  Ø9.52 Ø6.35 | |  Ø15.88 Ø12.7 |
| HR unit reducer | PRHR022 |  Ø9.52 Ø6.35 |  Ø19.05 Ø15.88 Ø12.7  Ø12.7 Ø9.52 |  Ø22.2 Ø19.05 Ø15.88  Ø15.88 Ø12.7 |
| | PRHR032 / PRHR042 |  Ø15.88 Ø12.7 Ø9.52 |  Ø22.2 Ø19.05 Ø15.88  Ø15.88 Ø12.7 |  Ø28.58 Ø22.2 Ø19.05  Ø19.05 Ø15.88 |

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 operational 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**



Y BRANCH AND HEADER BRANCH

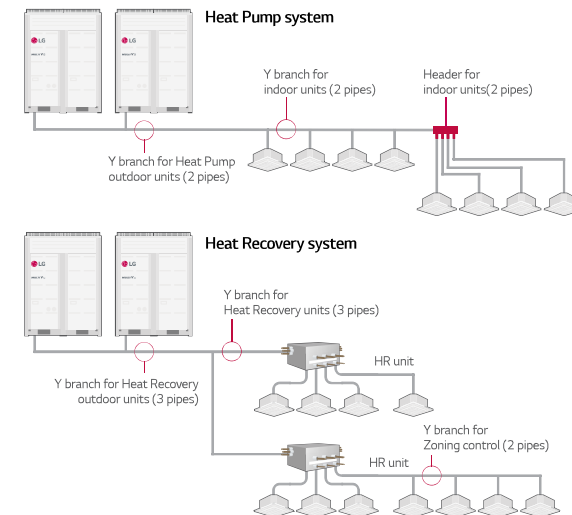
For refrigerant distribution of indoor units



Features

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

Piping Diagram



Models Applied

- 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

PIPING ACCESSORIES

Y Branch pipe for connection of outdoor units

[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

(Unit: mm)

| 2 Outdoor Units | | | |
|-----------------|-----------------------|-------------|------------------------|
| Model Name | Low Pressure Gas pipe | Liquid pipe | High Pressure Gas pipe |
| ARCNB21 | | | |

| 2 Outdoor Units | | | |
|-----------------|-----------------------|-------------|------------------------|
| Model Name | Low Pressure Gas pipe | Liquid pipe | High Pressure Gas pipe |
| ARCNB31 | | | |

| 4 Outdoor Units | | | |
|-----------------|-----------------------|-------------|------------------------|
| Model Name | Low Pressure Gas pipe | Liquid pipe | High Pressure Gas pipe |
| ARCNB41 | | | |

[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

(Unit: mm)

| Model Name | Gas pipe | Liquid pipe |
|------------|----------|-------------|
| ARBLN01621 | | |
| ARBLN03321 | | |

- **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 | | |
| ARBLN14521 | | |

PIPING ACCESSORIES

Y Branch pipe for connection of outdoor units

[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

(Unit : mm)

| Model Name | Low Pressure Gas pipe | Liquid pipe | High Pressure Gas pipe |
|------------|-----------------------|-------------|------------------------|
| ARBLB01621 | | | |
| ARBLB03321 | | | |
| 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

(Unit : mm)

| Model Name | Low Pressure Gas pipe | Liquid pipe | High Pressure Gas pipe |
|------------|-----------------------|-------------|------------------------|
| ARBLB23220 | | | |

STOPPER VALVES

Under 1 / 2 (inch)

PRVT120

Under 7 / 8 (inch)

PRVT780

Under 9 / 8 (inch)

PRVT980



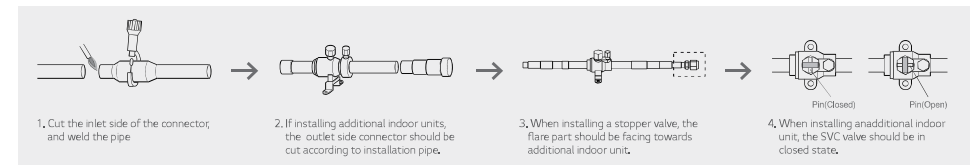
Features

| Model Name | Specification |
|------------|---------------|
| PRVT120 | |
| PRVT780 | |
| PRVT980 | |

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



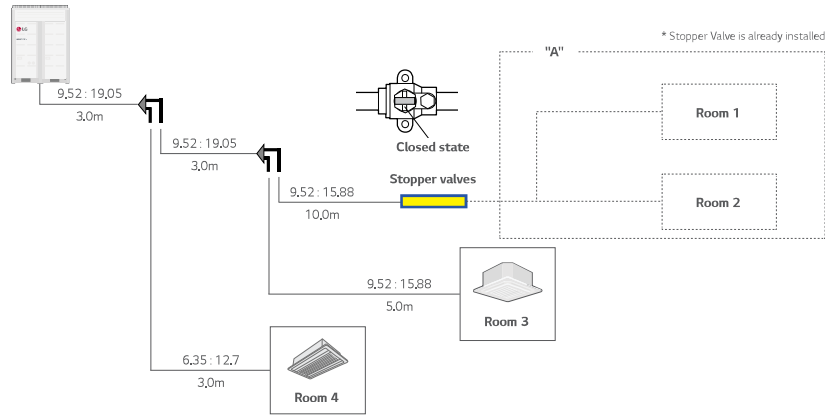
* When welding, service valve should be wrapped by wet cloth.

STOPPER VALVES

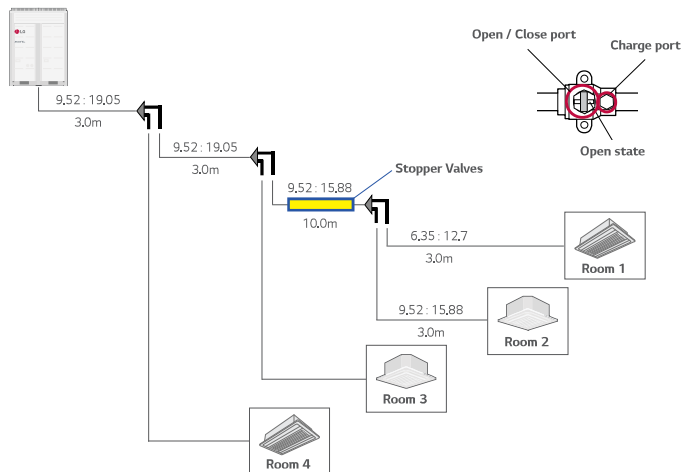
Details of Model Name

• Case 1

(Room 3 & 4 : in use / Room 1 & 2 : need to install indoor units)



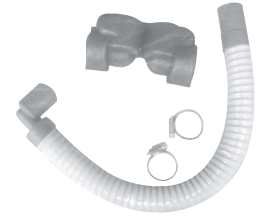
- In case of installation of additional indoor unit, refrigerant of used indoor unit must be discharged. (Room3 & Room4)
- If stopper valve is already installed, you can install additional indoor unit without refrigerant loss from the entire system.
- After installation of additional indoor unit, you just need refrigerant charging for "A" section.
- Then, open the Stopper Valve.



DRAIN HOSE

Easy drain installation

- PHDHA05T
- PHDHA07T
- PHDHA05B
- PHDHA07B

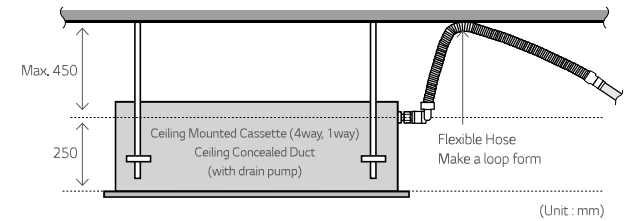


Features

- 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

MEMO

● Compatibility is available ▲ Wired remote controller is required ✕ Compatibility is unavailable ○ Compatibility is available but more detailed functions refer to "MULTI V INDOOR UNIT LINE UP & FEATURES OVERVIEW", (Page 96 ~ 97)

| Product | Controller | Premium | Standard II | Simple | Simple for Hotel | | Wireless | Dry Contact | | | Wi-Fi | | | |
|--------------------------------------|---|---------------------------------------|-------------|-----------|------------------|-----------|----------|-------------|-----------|--------------------------------|-----------------------------------|---|--------------------------|-----------|
| | | | | | | | | | | | | | | |
| | | PREM1A000 PREM1A000A PREM1A000B | PREM1B001 | PREM1B001 | PORCVCLDQ | PORCVCDQW | PORCHCAQ | PORCHEADQW | POWRHQDFB | Simple Dry Contact PORVCS00 | 2 points Dry Contact PORVCS400 | Dry Contact for Thermostat PORVCS300 | For Multius PORVCS500 | LG-R4WF-1 |
| Ceiling Mounted Cassette | 4 way | ARNU-C4 | ● | ○ | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | 2 way / 1 way | ARNU-C4 | ● | ○ | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Ceiling Concealed Duct | High Sensible | ARNU-A4 | ● | ○ | ● | ● | ● | ▲ | ● | ● | ● | ● | ● | ● |
| | High Statics Mid Statics | ARNU-A4 | ● | ○ | ● | ● | ● | ▲ | ● | ● | ● | ● | ● | ● |
| | Low Statics | ARNU-G4 | ● | ○ | ● | ● | ● | ▲ | ● | ● | ● | ● | ● | ● |
| | Built-in | ARNU-G4 | ● | ○ | ● | ● | ● | ▲ | ● | ● | ● | ● | ● | ● |
| FAU (Fresh Air Intake Unit) | FAU | ARNU-Z4 | ● | ● | ● | ● | ● | ▲ | ● | ● | ● | ● | ● | ● |
| Convertible & Ceiling Suspended Unit | Convertible | ARNU-A2 | ● | ○ | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Console | Console | ARNU-A4 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Floor Standing Unit | Floor Standing | ARNU-A4 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | Floor Standing | ARNU-U4 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Wall Mounted Unit | Wall Mounted | ARNU-A4 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | Wall Mounted | ARNU-A4 ¹⁾ | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | Wall Mounted | ARNU-L4 ARNU-A4 | ● | ○ | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| HYDRO KIT ²⁾ | HYDRO KIT | | | | | | | | ● | × | × | × | × | |
| Ventilation | Energy Recovery Ventilator | | ● | ● | × | × | × | ● | × | × | × | × | × | × |
| | Energy Recovery Ventilator with DX coil | | ● | ● | × | × | × | ● | ● | ● | ● | ● | × | × |
| AHU Communication kit | AHU Communication kit | | ● | ● | ● | ● | ● | ▲ | ● | ● | ● | ● | × | × |

1) Artcool Mirror : Mirror (R) / Silver (V) / White (W)
2) It has a separate remote controller

LG Electronics Introduction

LG Electronics is a total heating, ventilation and air conditioning (HVAC) and energy solution company, providing a full lineup of products including Residential Air Conditioning (RAC), System Air Conditioning (SAC), CHILLER, Building Management Systems (BMS) around the world.



Residential Air Conditioner



System Air Conditioner



Chiller

Company Milestone

LG's consistent efforts in innovation have made LG Air Conditioning and Energy Solution a true global leader in HVAC businesses.

