Tag No: Job Name/Location:

| Date: | Fc | or: | File | Resubmit |
|------------|-------|-----|----------|----------|
| PO No.: | | | Approval | Other |
| Architect: | GC: | | | |
| Engr: | Mech: | | | |

1 LG

Rep:

(Project Manager)

KUMXB541A

R32 Multi F Max Outdoor Unit

Outdoor Unit (ODU) - KUMXB541A

Performance:

| Cooling Capacity (MinRated-Max., Btu/h) | 10,800~50,500~63,200 |
|---|----------------------|
| Heating Capacity (MinRated-Max., Btu/h) | 12,420~58,000~64,000 |
| Max. Heating Capacity at 17°F (Btu/h) | 48,000 |
| Max. Heating Capacity at 5°F (Btu/h) | 40,500 |
| Max. Heating Capacity at -4°F (Btu/h) | 35,200 |
| Cooling COP @95°F (Rated) | 3.69 |
| Heating COP @47°F (Rated) | 3.35 |

Cooling Nominal Test Conditions: Indoor: 80°F DB / 67°F WB Outdoor: 95°F DB / 75°F WB

Heating Nominal Test Conditions: Indoor: 70°F DB / 60°F WB Outdoor: 47°F DB / 43°F WB

Electrical:

| Power Supply (V/Hz/Ø) ^{1,2} | 208-230V, 60, 1 |
|--------------------------------------|-----------------|
| MOP (A) | 40 |
| MCA (A) | 33.3 |
| Cooling Rated Amps (A) | 24.3 |
| Heating Rated Amps (A) | 24.3 |
| Compressor (A) | 23 |
| Fan Motor (A) | 0.65 x 2 |
| Locked Rotor Amps (A) | 22 |
| | |

MOP - Maximum Overcurrent Protection

MCA - Minimum Circuit Ampacity

Piping:

| Refrigerant Charge (lbs.) | 7.5 |
|---|--------------|
| Liquid Line Connection (in., O.D.) | Ø3/8 x 1 |
| Vapor Line Connection (in., O.D.) | Ø3/4 x 1 |
| Maximum Total Piping ³ (ft.) | 475.7 |
| Min. / Max. ODU to IDU Piping ⁴ (ft.) | 32.8 / 229.6 |
| Piping Length⁵ (no add'l refrigerant, ft.) | 180.4 |
| Additional Refrigerant Charge Main Pipe (oz. / ft.) | 0.54 |
| Additional Refrigerant Charge Branch Pipe (oz. / ft.) | 0.22 |
| Maximum Elevation between ODU and IDU (ft.) | 98.4 |
| Maximum Elevation between IDU and IDU (ft.) | 49.2 |

ODU = Outdoor Unit

IDU = Indoor Unit

Features:

- · Scroll (variable speed) compressor
- Auto operation / Auto restart
- Integrated central control connection
 Low ambient cooling down to 14°F
- Self diagnosis
- Defrost / Deicing

- Restart delay (three [3] minutes)
- Soft start

□ 4-Port BD Units -

Computers - PRCTILO

(-4°F with Wind Baffle Kit)

PMBD3640ZR / PMBD3641ZR

☐ LG Monitoring View (LGMV) for

☐ Drain Pan Heater - PQSH1200

□ Low Ambient Wind Baffle Kit -

Required Accessories:6

- □ 2-Port BD Unit PMBD3620ZR
- ☐ 3-Port BD Unit PMBD3630ZR
- **Optional Accessories:**
- □ Power Distribution Indicator (PDI) Premium - PQNUD1S41 ☐ Mobile LGMV for Android® Smartphones / Tablets or for iOS®

Tablets - PLGMVW100
(Android is a registered trademark of Google LLC. iOS is a registered trademark of Cisco Systems, Inc.)

- **Controller Options:**
- ☐ MultiSITE Communication Mgr.
- □ AC Smart 5
- \square ACP 5

- □ ACP 5 BACnet® Gateway
- □ LonWorks® Gateway
 BACnet® is a registered trademark of ASHRAE. LonWorks is a registered trademark of Echelon Corp.

Operating Range:

| | , , | |
|------------|-------|-----------|
| Cooling (° | F DB) | 14 to 118 |
| Heating (° | FWB) | -4 to +64 |

Unit Data:

| Offic Data. | |
|--|----------------|
| Refrigerant Type | R32 |
| Refrigerant Control | EEV |
| Sound Pressure (Cool / Heat) ±1 dB(A) ⁷ | 53 / 55 |
| Net / Shipping Weight (lbs.) | 194 / 218.3 |
| Power Wiring: ODU→BDU, BDU→IDU (No x AWG) ² | 3 x 14, 3 x 14 |
| Comm. Wiring: ODU→BDU, BDU→IDU (No x AWG) ² | 2 x 18, 2 x 18 |
| Heat Exchanger Coating | Gold Fin™ |
| Minimum No. of Indoor Units | 2 |
| Maximum No. of Indoor Units | 8 |

Compressor:

| Туре | Scroll |
|------------|--------|
| Quantity | 1 |
| Oil / Type | PVE |

Fan:

| Туре | Propeller |
|-------------------------|---------------------------------------|
| Quantity | 2 |
| Motor / Drive | Brushless Digitally Controlled/Direct |
| Max. Airflow Rate (CFM) | 2,295 x 2 |

Notes:

- 1. Acceptable operating voltage: 187V 253V.
- 2. All power supply wiring to the outdoor unit is field supplied, solid or stranded. The power wiring and the communication wiring from the outdoor unit to the branch distribution unit, and from the branch distribution unit to the indoor unit is field supplied and must be stranded, shielded or unshielded (if shielded, it must be grounded to the chassis of the outdoor unit only). All wiring must comply with applicable local and national codes.
- a. Power Supply Wiring to Outdoor Unit (No. x AWG): 3×8 for 48k, 54k, and 60k. b. Power Wiring and Communication Wiring from ODU to BDU (No. x AWG) $3 \times 14 / 2 \times 18$.
- c. Power Wiring and Communication Wiring from BDU to IDU (No. x AWG) 3 x 14 / 2 x 18. 3. Piping lengths are equivalent.
- 4. 180.4 ft. of Main Piping + 49.2 ft. of Branch Piping. 5. 49.2 ft. of Main Piping + 131.2 of Branch Piping.
- 6. At least one branch distribution (BD) unit is required for system operation; a maximum of two can be
- installed per outdoor unit with the use of a Y-branch accessory (ARBLN03321).
 7. Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.
- See the Engineering Manual Capacity Tables for ODU sensible and latent capacities.
 See the Engineering Manual Combination Tables for allocation of ODU rated capacity to each connected.
- IDU when all are calling for full capacity. Allocation percentages should be applied to ODU capacity at design conditions.
- 10. Capacity is rated 0 ft. above sea level, with a 0 ft. level difference between ODU and IDUs, and the following refrigerant pipe lengths: KUMXB481 / 541 / 601A: 16.4 ft. Main + (16.4 ft. Branch x 8) = 147.6 ft. All capacities are net with a combi-
- nation ratio between 95 105%.
- 11. Must follow installation instructions in the applicable LG installation manual.
- 12. See the Engineering Manual Capacity Tables for ODU capacity at design conditions







Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR® criteria. Ask your contractor for details or visit www.energystar.gov. (ENERGY STAR and the ENERGY STAR mark are registered trademarks owned by the U.S. Environmental Protection

SB_Multi_F_MAX_ODU_R32_KUMXB541A_2025_01_08_082120

71 ABGP04A x 2

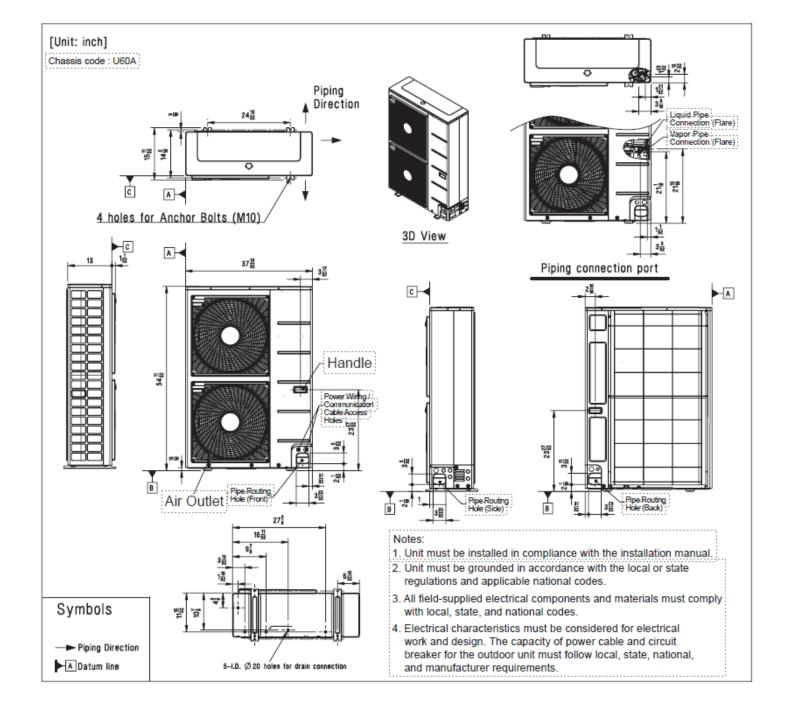
Job Name/Location:

KUMXB541A

R32 Multi F Max Outdoor Unit

Outdoor Unit (ODU) - KUMXB541A





Job Name/Location:

KUMXB541A

R32 Multi F Max Outdoor Unit

Outdoor Unit (ODU) - KUMXB541A



| Tag No.: | |
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| Date: | |
| DO No · | |

Example: Outdoor unit with seven (7) indoor units, and two (2) branch distribution units connected. ODU:

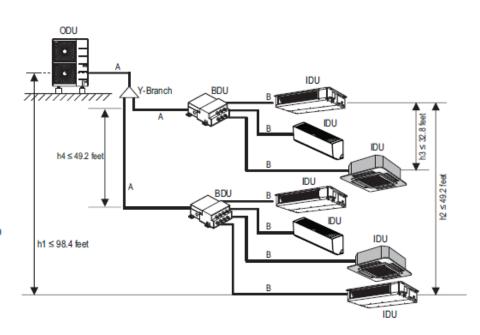
Outdoor Unit. IDU: Indoor Unit.

BD: Branch Distribution Unit(s).

A: Main Pipe.

B: Branch Pipe (Branch Distribution Unit[s] to

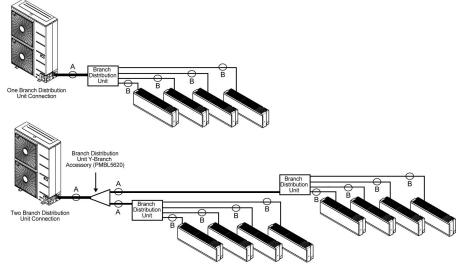
Indoor Unit[s]).



Multi F MAX Outdoor Unit Refrigerant Piping System Limitations.

| | Total piping length (ΣA + ΣB) | | ≤475.7 feet |
|---|--|-------------------------------------|-------------|
| Pipe Length | Main pipe (Outdoor Unit to Branch Distribution | Minimum for Each (A) Piping Segment | 16.4 feet |
| | Units: A) | Maximum (ΣA) | ≤180.4 feet |
| (ELF = Equivalent Length of pipe in Feet) | Total branch piping length (ΣΒ) | | ≤295.3 feet |
| or pipe in reet) | Branch pipe (Branch Distribution Units to Indoor | Minimum | 16.4 feet |
| | Units: B) | Maximum | ≤49.2 feet |
| Elevation Differential | If outdoor unit is above or below indoor unit (h1) | | ≤98.4 feet |
| (All Elevation | Between the farthest two indoor units (h2) | | ≤49.2 feet |
| Limitations are | Between branch distribution unit and farthest con | nected indoor unit(s) (h3) | ≤32.8 feet |
| Measured in Actual Feet) | Between branch distribution units (h4) | | ≤49.2 feet |

Installing the Unit



Multi F MAX Piping Sizes.

| | 1 0 | |
|--------|--------------------|-------------------------|
| Piping | Main Pipe A (inch) | Branch Pipe B |
| Liquid | Ø3/8 | Depends on the size of |
| Vapor | Ø3/4 | the indoor unit piping. |

Job Name/Location: Tag No.: For: File Resubmit Date: Approval Other. PO No .: GC: Architect: Mech: Engr: Rep:

KNUAB121A R32 Multi F Wall Mounted High Efficiency Indoor Unit



Performance:

| ſ | Nominal Cooling Capacity (Btu/h) | 12,000 |
|---|----------------------------------|--------|
| | Nominal Heating Capacity (Btu/h) | 13,600 |

Cooling Nominal Test Conditions: Indoor: 80°F DB / 67°F WB Outdoor: 95°F DB / 75°F WB

Heating Nominal Test Conditions: Indoor: 70°F DB / 60°F WB Outdoor: 47°F DB / 43°F WB

(Project Manager)

Electrical:

| Power Supply (V/Hz/Ø) ^{1,2} | 208-230/60/1 |
|--------------------------------------|--------------|
| Rated Current (A) | 0.4 |

Piping:

| Installed Liquid Pipe (in., O.D.) | ø1/4 |
|-----------------------------------|-------------|
| Installed Vapor Pipe (in., O.D.) | ø3/8 |
| Liquid Connection (in., O.D.) | ø1/4 |
| Vapor Connection (in., O.D.) | ø3/8 |
| Drain (in., O.D. / I.D.) | 27/32 , 5/8 |
| Temperature Sensor | Thermistor |

Controls Features:

- Left / right and up / down auto swing
- 24-Hour on/off timer
- Auto operation
- Auto restart
- Group control
- Inverter (variable speed fan)
- Jet cool / Jet heat

- 3M Micro Dust Filter
- Self-cleaning indoor coil
- Sleep mode
- R32 leak detection sensor
- Built-in Wi-Fi via Smart ThinQ
- Compatible with applicable Single Zone Outdoor Units (see single zone literature for matching system details)

Included Accessories:

Wireless Remote Controller — AKB76044208

Optional Accessories:

- ☐ Auxiliary Heater Kit PRARS1
- ☐ Single-Port Shutoff Valve PRHPZ010A

Controller Options:

- ☐ MultiSITE™ CRC* Controllers
- ☐ Simple Remote Controllers
- □ Standard III Remote Controllers
- □ Deluxe Remote Controller
- ☐ Remote Temperature Button Sensor
- □ Dry Contacts

Entering Mixed Air:

| Cooling (°F WB) | 57 ~ 77 |
|-----------------|---------|
| Heating (°F DB) | 59 ~ 81 |

Unit Data:

| Refrigerant Type | R32 |
|--|---------------------|
| Refrigerant Control | EEV |
| Sound Pressure (H/M/L) (±3 dB[A]) ³ | 38 / 34 / 29 |
| Primary Filter | Washable Pre-filter |
| Secondary Filter | 3M Micro Dust |
| Net Weight (lbs.) | 19.73 |
| Shipping Weight (lbs.) | 22.7 |

Fan:

| Type Quantity | Cross Flow |
|-----------------------------|---------------------------------------|
| Quantity | 1 |
| Motor/Drive | Brushless Digitally Controlled/Direct |
| Air Flow H/M/L (CFM) | 282 / 233 / 177 |
| Dehumidification (pts./hr.) | 2.75 |

Notes:

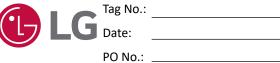
- 1. Acceptable operating voltage: 187V-253V.
- The power wiring and the communication wiring from the outdoor unit to the indoor unit, or from the branch distribution unit to the indoor unit is field supplied and must be stranded, shielded or unshielded (if shielded, it must be grounded to the chassis of the outdoor unit only). All wiring must comply with applicable local and national codes.
- a. Power Wiring and Communication Wiring from Outdoor Unit to Indoor Unit (No. x AWG) 3 x 14 / 2 x 18.
- b. Power Wiring and Communication Wiring from Branch Distribution Unit to Indoor Unit (No. x AWG) 3 x 14 / 2 x 18.
- Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
 See Engineering Manual for sensible and latent capacities.
- 5. The indoor unit comes with a dry helium charge.6. Corresponding refrigerant piping length is in accordance with standard length of each outdoor unit and
- the level difference is 0 ft. All capacities are net with a combination ratio between 95 105%.
- 7. Must follow installation instructions in the applicable LG installation manual



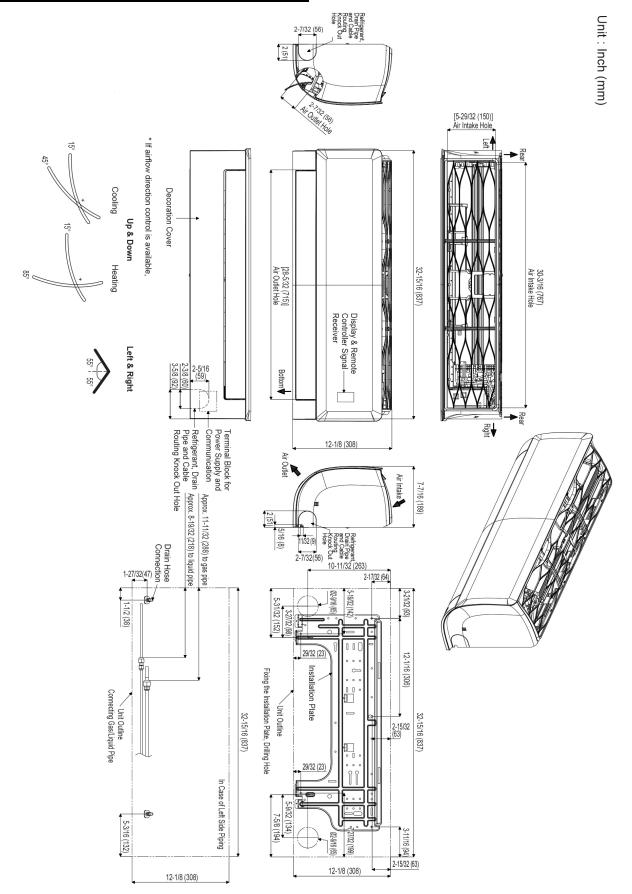


KNUAB121A

R32 Multi F Wall Mounted High Efficiency Indoor Unit



12,000 Btu/h



Job Name/Location: Tag No.: For: File Resubmit Date: Approval Other. PO No .: GC: Architect: Mech: Engr:

KNMAB241A R32 Multi F Wall Mounted High Efficiency Indoor Unit



Performance:

Rep:

| Nominal Cooling Capacity (Btu/h) | 24,000 |
|----------------------------------|--------|
| Nominal Heating Capacity (Btu/h) | 25,600 |

Cooling Nominal Test Conditions: Indoor: 80°F DB / 67°F WB Outdoor: 95°F DB / 75°F WB

Heating Nominal Test Conditions: Indoor: 70°F DB / 60°F WB Outdoor: 47°F DB / 43°F WB

(Project Manager)

Electrical:

| Power Supply (V/Hz/Ø) ^{1,2} | 208-230/60/1 |
|--------------------------------------|--------------|
| Rated Current (A) | 0.4 |

Piping:

| Installed Liquid Pipe (in., O.D.) | ø1/4 |
|-----------------------------------|------------|
| Installed Vapor Pipe (in., O.D.) | ø1/2 |
| Liquid Connection (in., O.D.) | ø1/4 |
| Vapor Connection (in., O.D.) | ø1/2 |
| Drain (in., O.D. / I.D.) | 27/32,5/8 |
| Temperature Sensor | Thermistor |

Controls Features:

- Left / right and up / down auto swing
- 24-Hour on/off timer
- Auto operation
- Auto restart
- Group control
- Inverter (variable speed fan)
- Jet cool / Jet heat

- 3M Micro Dust Filter
- Self-cleaning indoor coil
- Sleep mode
- R32 leak detection sensor
- Built-in Wi-Fi via Smart ThinQ

Included Accessories:

Wireless Remote Controller — AKB76044208

Optional Accessories:

- ☐ Auxiliary Heater Kit PRARS1
- ☐ Single-Port Shutoff Valve PRHPZ010A

Controller Options:

- □ MultiSITE™ CRC* Controllers
- ☐ Simple Remote Controllers
- □ Standard III Remote Controllers
- □ Deluxe Remote Controller
- ☐ Remote Temperature Button Sensor
- □ Dry Contacts

Entering Mixed Air:

| Co | oling (°F WB) | 57 ~ 77 |
|----|----------------|---------|
| He | eating (°F DB) | 59 ~ 81 |

Unit Data:

| Refrigerant Type | R32 |
|--|---------------------|
| Refrigerant Control | EEV |
| Sound Pressure (H/M/L) (±3 dB[A]) ³ | 46 / 41 / 36 |
| Primary Filter | Washable Pre-filter |
| Secondary Filter | 3M Micro Dust |
| Net Weight (lbs.) | 26.5 |
| Shipping Weight (lbs.) | 30.0 |

Fan:

| Type Quantity Motor/Drive | Cross Flow |
|---------------------------------|---------------------------------------|
| Quantity | 1 |
| Motor/Drive | Brushless Digitally Controlled/Direct |
| Air Flow H/M/L (CFM) | 597 / 452 / 367 |
| Dehumidification (pts./hr.) | 5.55 |

Notes:

- 1. Acceptable operating voltage: 187V-253V.
- The power wiring and the communication wiring from the outdoor unit to the indoor unit, or from the branch distribution unit to the indoor unit is field supplied and must be stranded, shielded or unshielded (if shielded, it must be grounded to the chassis of the outdoor unit only). All wiring must comply with applica-
- a. Power Wiring and Communication Wiring from Outdoor Unit to Indoor Unit (No. x AWG) 3 x 14 / 2 x 18. b. Power Wiring and Communication Wiring from Branch Distribution Unit to Indoor Unit (No. x AWG) 3 x 14 / 2 x 18.
- Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
 See Engineering Manual for sensible and latent capacities.
- 5. The indoor unit comes with a dry helium charge.
 6. Corresponding refrigerant piping length is in accordance with standard length of each outdoor unit and
- the level difference is 0 ft. All capacities are net with a combination ratio between 95 105%. 7. Must follow installation instructions in the applicable LG installation manual.
- 8. The 24k IDU includes a socket adapter for vapor refrigerant pipe connections.



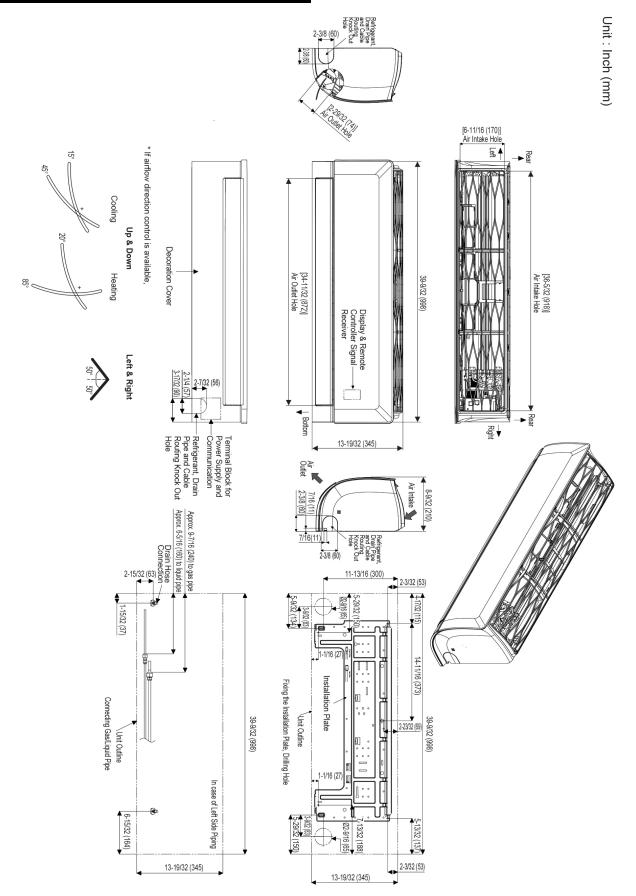


KNMAB241A

R32 Multi F Wall Mounted High Efficiency Indoor Unit

24,000 Btu/h





Job Name/Location: Date: For: File Resubmit Approval Other-PO No.: Architect: GC: Engr: Mech: Rep:

(Project Manager)



PMBD3630ZR

Three-Port Branch Distribution Unit For Multi F MAX and Multi F MAX with LGRED° Outdoor Units

Performance:

| Max. Nominal Port Capacity (Btu/h) (each port) | 24,000 |
|--|----------------|
| Max. Nominal Unit Capacity | 72,000 |
| (Btu/h) (sum of ports) Connected Indoor Unit | 7,000 ~ 24,000 |
| Capacity (Btu/h) | |
| Power Input (W) | 87 |

Electrical:

| Power Supply (V/Hz/Ø) ¹ | 208-230/60/1 |
|------------------------------------|--------------|
| Rated Amps (A) | 0.36 |

Piping:

Piping Connections to Outdoor Unit:

| Liquid Line (in., O.D.) | ø3/8 Braze |
|-------------------------|------------|
| Vapor Line (in., O.D.) | ø3/4 Braze |

Piping Connections to Indoor Unit:

| Liquid Line (in., O.D.) | Ø1/4 Flare x 3 |
|-------------------------|----------------|
| Vapor Line (in., O.D.) | Ø3/8 Flare x 3 |

Features:

- Distributes refrigerant to indoor units
- Internal components are insulated
- Compact design

Operating Range:

| Temperature Range (°F D.B.) | 0 ~ 150 |
|-----------------------------|---------|
| Maximum Humidity | 80% |

Unit Data:

| Net Weight (lbs.) | 18.3 |
|--|----------------|
| Shipping Weight (lbs.) | 21.8 |
| Power Wiring: ODU→BDU, BDU→IDU (No x AWG) ² | 3 x 14, 3 x 14 |
| Comm. Wiring: ODU→BDU, BDU→IDU (No x AWG) ² | 2 x 18, 2 x 18 |

Notes:

- 1. Acceptable operating voltage: 187V-253V.
- 2. The power wiring and the communication wiring from the outdoor unit to the branch distribution unit. and from the branch distribution unit to the indoor unit is field supplied and must be stranded, shielded or unshielded (if shielded, it must be grounded to the chassis of the outdoor unit only). All wiring must comply with applicable local and national codes.

 a. Power Wiring and Communication Wiring from ODU to BDU (No. x AWG) 3 x 14 / 2 x 18.
- b. Power Wiring and Communication Wiring from BDU to IDU (No. x AWG) $3 \times 14/2 \times 18$. 3. Piping lengths:
- Maximum height difference between branch distribution unit and indoor units 32.8 feet.
 Maximum height difference between branch distribution unit and branch distribution unit 49.2 feet.
- Maximum piping length between branch distribution unit and indoor units 49.2 feet.

 4. The branch distribution unit should be installed inside of a building.
- 5. Must follow installation instructions in the applicable LG installation manual.

Tag No:



PMBD3630ZR

Three-Port Branch Distribution Unit For Multi F MAX and Multi F MAX with LGRED° Outdoor Units



