For: File Resubmit Date: Approval Other PO No .: GC: Architect:

Mech:

Rep: (Project Manager)

KUMXA421A R32 Multi F MAX with LGRED° Outdoor Unit Outdoor Unit (ODU) - KUMXA421A





Performance:

Engr:

Job Name/Location:

Cooling Capacity (MinRated-Max., Btu/h)	10,800~42,000~53,000
Heating Capacity (MinRated-Max., Btu/h)	12,420~48,000~54,500
Max. Heating Capacity at 17°F (Btu/h)	53,200
Max. Heating Capacity at 5°F (Btu/h)	48,000
Max. Heating Capacity at -4°F (Btu/h)	42,000
Max. Heating Capacity at -13°F (Btu/h)	37,100
Cooling COP @95°F (Rated)	4.05
Heating COP @47°F (Rated)	3.80
Cooling Naminal Test Conditions: Heating Nam	inal Tost Conditions:

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)	32.5
Cooling Rated Amps (A)	24.30
Heating Rated Amps (A)	24.30
Compressor (A)	23.0
Fan Motor (A)	1.30
Locked Rotor Amps (A)	22

MOP - Maximum Overcurrent Protection

MCA - Minimum Circuit Ampacity

Piping:

Refrigerant Charge (lbs.)	9.262
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 Length ⁵ (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
ODIL - Outdoor Unit	

ODU = Outdoor Unit

IDU = Indoor Unit

Features:

- Scroll (Variable Speed) Compressor
- Auto operation / Auto restart
- Integrated central control connection Restart delay (three [3] minutes)
- Self diagnosis / Soft start
- Defrost / Deicing

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.)

- □ AC Smart 5
- □ ACP 5

□ 4-Port BD Units -

PMBD3640ZR / PMBD3641ZR

• Low ambient cooling down to 14°F

• Factory installed Drain Pan Heater

(-4°F with Wind Baffle Kit)

- □ LG Monitoring View (LGMV) for Computers - PRCTILO
- □ Low Ambient Wind Baffle Kit -ZLABGP04A x 2
- □ ACP 5 BACnet® Gateway □ LonWorks® Gateway

BACnet® is a registered trademark of ASHRAE. Lon-Works is a registered trademark of Echelon Corp.

Operating Range:

Cooling (°F DB)	14 to 118
Heating (°F WB)	-13 to +64

Tag No:

Unit Data:

ome bata.	
Refrigerant Type	R32
Refrigerant Control	EEV
Sound Pressure (Cool / Heat) ±1 dB(A) ⁷	54 / 56
Net / Shipping Weight (lbs.)	218.3 / 239.2
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	6

Compressor:

Туре	Scroll
Quantity	1
Oil / Type	PVE

raii.	
Туре	Propeller
Quantity	2
Motor / Drive	Brushless Digitally Controlled/Direct
Max. Airflow Rate (CFM)	2.119 x 2

Notes:

- Acceptable operating voltage: 187V 253V.
 All power supply wiring to the ODU is field supplied, solid or stranded. The power wiring and the communication wiring from the ODU to the BDU, and from the BDU to the IDU is field supplied and must be stranded, shielded or unshielded (if shielded, it must be grounded to the chassis of the ODU only). All wiring must comply with applicable local and national codes
- a. Power Supply Wiring to Outdoor Unit (No. x AWG): 3 x 8 for 48k, 54k, and 60k. b. Power Wiring and Communication Wiring from ODU to BD Unit (No. x AWG) 3 x 14 / 2 x 18.
- c. Power Wiring and Communication Wiring from BD Unit 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.
- 8. See the Engineering Manual Capacity Tables for ODU sensible and latent capacities.
- 9. 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:

KUMXA361A: 16.4 ft. Main + (16.4 ft. Branch x 5) = 98.4 ft. KUMXA421A: 16.4 ft. Main + (16.4 ft. Branch x 6) = 114.8 ft.

- KUMXA481A: 16.4 ft. Main + (16.4 ft. Branch x 8) = 147.6 ft.
- 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 trade-marks

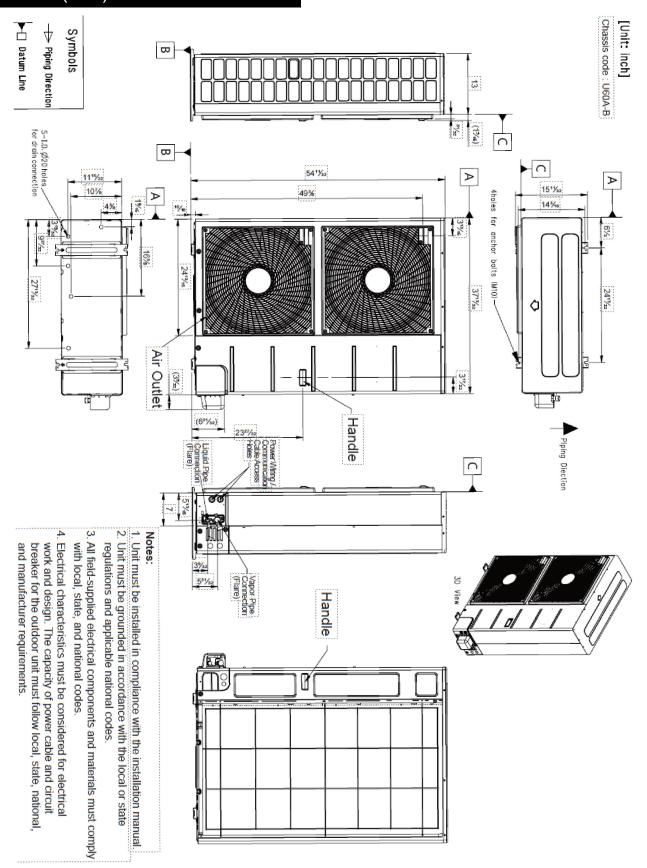
owned by the U.S. Environmental Protection Agency.



KUMXA421A R32 Multi F MAX with LGRED° Outdoor Unit Outdoor Unit (ODU) - KUMXA421A



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Date: _____
PO No.: _____

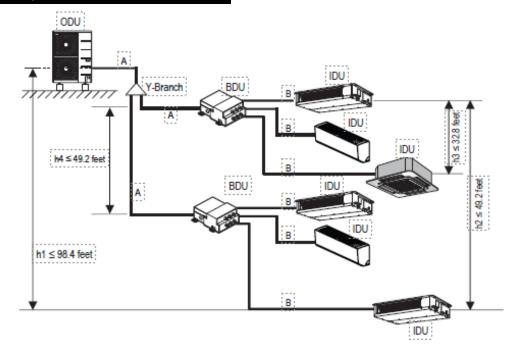


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KUMXA421A R32 Multi F MAX with LGRED° Outdoor Unit Outdoor Unit (ODU) - KUMXA421A



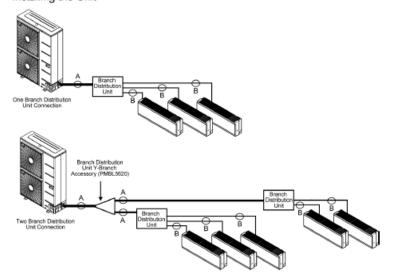
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PO No.:	



Multi F MAX with LGRED 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 connected 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 with LGRED Piping Sizes.

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: For: File Date: Approval PO No .: Architect: GC: Mech: Engr: Rep: (Company) (Project Manager) KNUQB091A Multi F R32 Wall Console Indoor Unit Performance: 9,000 Nominal Cooling Capacity (Btu/h) Nominal Heating Capacity (Btu/h) 10,600 Cooling Nominal Test Conditions: Heating Nominal Test Conditions: Indoor: 80°F DB / 67°F WB Outdoor: 95°F DB / 75°F WB Indoor: 70°F DB / 60°F WB Outdoor: 47°F DB / 43°F WB **Electrical:** Power Supply (V/Hz/Ø)^{1,2} 208-230/60/1 Rated Amps (A) 0.7 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.) 21/32, 15/32 Temperature Sensor Thermistor **Controls Features:** • Inverter (variable speed fan) • Child lock • Auto swing (up and down) • Sleep mode • Jet cool / Jet heat • Timer (on/off/weekly) • Long-life washable prefilter Group control • R32 leak detection sensor Hot start · Self diagnosis • Compatible with applicable • Soft dry operation Single Zone Outdoor Units (see Auto operation single zone literature for Auto restart matching system details) **Included Accessories:** • Wireless Remote Controller — AKB75735427 **Optional Accessories:** \square Single-Port Shutoff Valve - PRHPZ010A ☐ Auxiliary Heater Kit - PRARH1 **Controller Options:** ☐ Standard III Wired Remote Controllers ☐ MultiSITE™ CRC* Controllers

☐ Simple Remote Controllers ☐ Deluxe Remote Controller

☐ Wi-Fi Module - PWFMDD200

☐ Dry Contacts

☐ Remote Temperature Button Sensor





Resubmit

Other_

Entering Mixed Air:

Tag #:

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

Unit Data:

R32
EEV
38 / 32 / 27
Washable Pre-filter
33.7
39.7

Fan:

Туре	Turbo
Quantity	1
Motor/Drive	Brushless Digitally Controlled/Direct
Air Flow H/M/L (CFM)	318 / 300 / 237 / 177
Dehumidification (pts./hr.)	1.72

Notes:

- 1. Acceptable operating voltage: 187V-253V.
- 2. 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.
- 3. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
- 4. 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





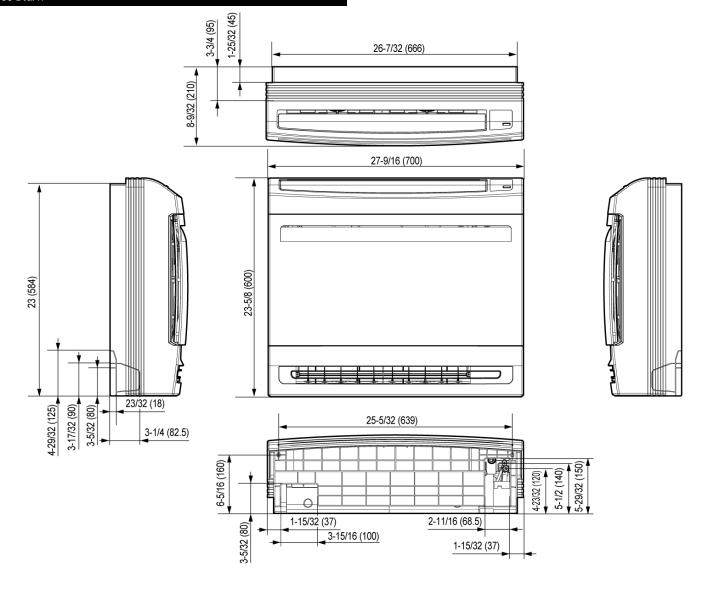
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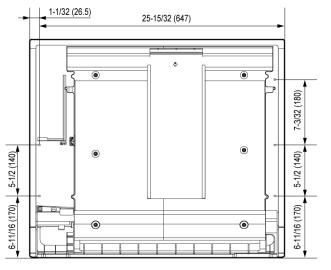
KNUQB091A Multi F R32 Wall Console Indoor Unit 9,000 Btu/h

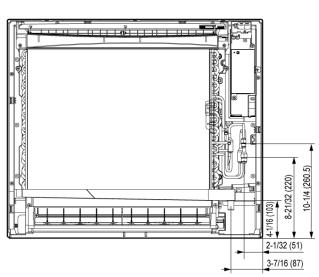


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Date: _____







Job Name/Location: For: File Resubmit Date: Approval Other_ PO No .: GC: Architect: Mech: Engr: Rep: (Company) (Project Manager) KNMQB151A Multi F R32 Wall Console Indoor Unit Performance: 15,710 Nominal Cooling Capacity (Btu/h) Nominal Heating Capacity (Btu/h) 17.070 Heating Nominal Test Conditions: Cooling Nominal Test Conditions: Indoor: 80°F DB / 67°F WB Outdoor: 95°F DB / 75°F WB Indoor: 70°F DB / 60°F WB Outdoor: 47°F DB / 43°F WB **Electrical:** Power Supply (V/Hz/Ø)^{1,2} 208-230/60/1 Rated Amps (A) 0.7

Controls Features:

- Inverter (variable speed fan)
- Auto swing (up and down)
- Jet cool / Jet heat
- Long-life washable prefilter
- Hot start
- · Self diagnosis
- Soft dry operation
- Auto operation
- Auto restart

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.)	21/32, 15/32
Temperature Sensor	Thermistor

• Child lock

- Sleep mode
- Timer (on/off/weekly)
- Group control
- R32 leak detection sensor

Included Accessories:

• Wireless Remote Controller — AKB75735427

Optional Accessories:

- \square Single-Port Shutoff Valve PRHPZ010A
- ☐ Auxiliary Heater Kit PRARH1

Controller Options:

- ☐ Standard III Wired Remote Controllers
- ☐ MultiSITE™ CRC* Controllers
- ☐ Simple Remote Controllers
- ☐ Deluxe Remote Controller
- ☐ Remote Temperature Button Sensor
- ☐ Dry Contacts
- ☐ Wi-Fi Module PWFMDD200



Entering Mixed Air:

Tag #:

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

Unit Data:

Refrigerant Type	R32
Refrigerant Control	EEV
Sound Pressure (H/M/L) dB(A) ³	44 / 39 / 35
Primary Filter	Washable Pre-filter
Net Weight (lbs.)	33.7
Shipping Weight (lbs.)	39.7

Fan:

Туре	Turbo
Quantity	1
Motor/Drive	Brushless Digitally Controlled/Direct
Air Flow H/M/L (CFM)	388 / 357 / 304 / 254
Dehumidification (pts./hr.)	4.4

- 1. Acceptable operating voltage: 187V-253V.
- 2. 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.
- 3. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
- 4. 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





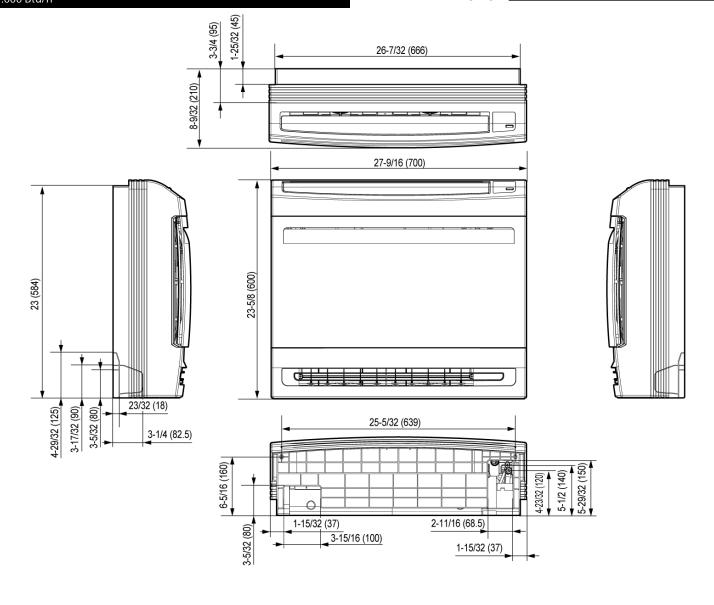
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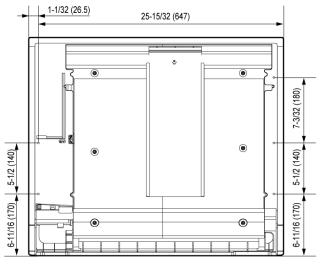
KNMOB151A Multi F R32 Wall Console Indoor Unit 15,000 Btu/h

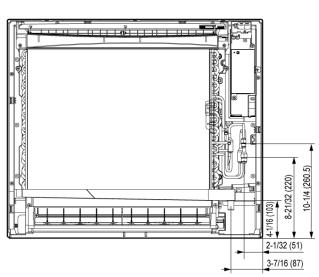


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PO No.:







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



