Job Name/Location: Tag No:

	For:	File	Resubmit
		Approval	Other
GC:			
			Approval

Mech:

Rep:

Engr:

(Project Manager)

KUMXB601A

R32 Multi F Max Outdoor Unit

Outdoor Unit (ODU) - KUMXB601A

Performance:

Cooling Capacity (MinRated-Max., Btu/h)	10,800~56,000~65,000
Heating Capacity (MinRated-Max., Btu/h)	12,420~64,000~68,000
Max. Heating Capacity at 17°F (Btu/h)	56,500
Max. Heating Capacity at 5°F (Btu/h)	52,500
Max. Heating Capacity at -4°F (Btu/h)	45,200
Cooling COP @95°F (Rated)	3.52
Heating COP @47°F (Rated)	3.45

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.)	9.26
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 Piping⁴ (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
ı	Heating (°F WB)	-4 to +64

LG

Unit Data

Ollit Data.	
Refrigerant Type	R32
Refrigerant Control	EEV
Sound Pressure (Cool / Heat) ±1 dB(A) ⁷	56 / 58
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	8

Compressor:

Туре	Scroll
Quantity	1
Oil / Type	PVE

Fan:

Туре	Propeller
Quantity	2
Motor / Drive	Brushless Digitally Controlled/Direct
Max. Airflow Rate (CFM)	2,119 x 2

Notes:

- 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 combination 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

71 ABGP04A x 2

Job Name/Location:

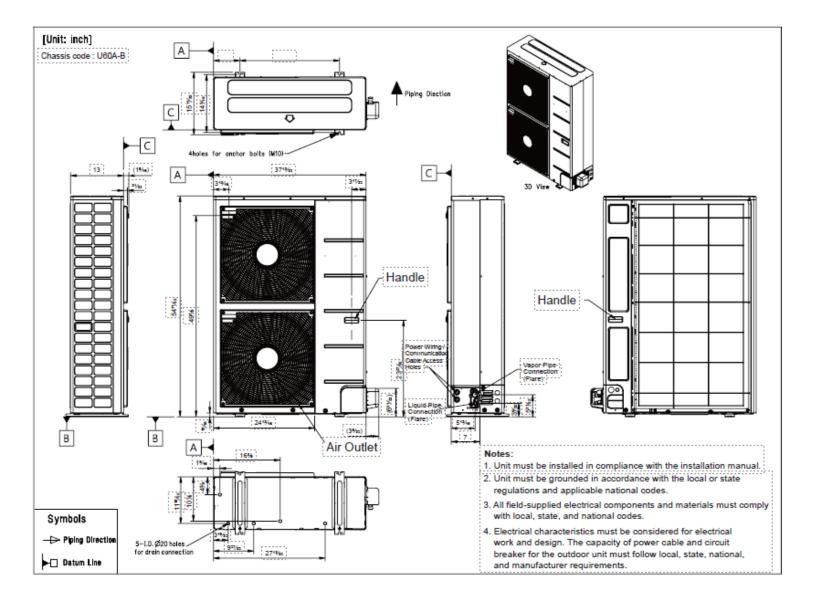
KUMXB601A

R32 Multi F Max Outdoor Unit

Outdoor Unit (ODU) - KUMXB601A



Tag No.:	
Date:	
PO No.:	



Job Name/Location:

KUMXB601A

R32 Multi F Max Outdoor Unit

Outdoor Unit (ODU) - KUMXB601A



Tag No.:	
Date:	
DO No :	

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

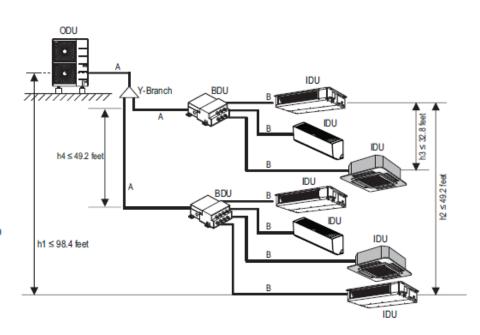
Outdoor Unit. IDU: Indoor Unit.

BD: Branch Distribution Unit(s).

A: Main Pipe.

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

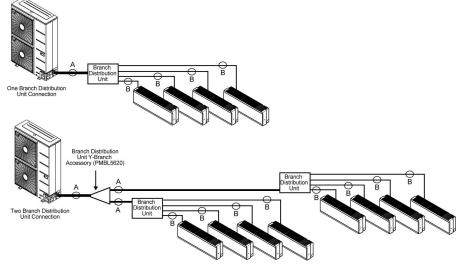
Indoor Unit[s]).



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

KNMAB151A R32 Multi F Wall Mounted High Efficiency Indoor Unit



Performance:

Rep:

Nominal Cooling Capacity (Btu/h)	14,300
Nominal Heating Capacity (Btu/h)	15,600

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

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	42 / 38 / 32
Primary Filter	Washable Pre-filter
Secondary Filter	3M Micro Dust
Net Weight (lbs.)	19.73
Shipping Weight (lbs.)	22.7

Fan:

Type Quantity Motor/Drive	Cross Flow
Quantity	1
Motor/Drive	Brushless Digitally Controlled/Direct
Air Flow H/M/L (CFM)	314 / 268 / 184
Dehumidification (pts./hr.)	2.80

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.



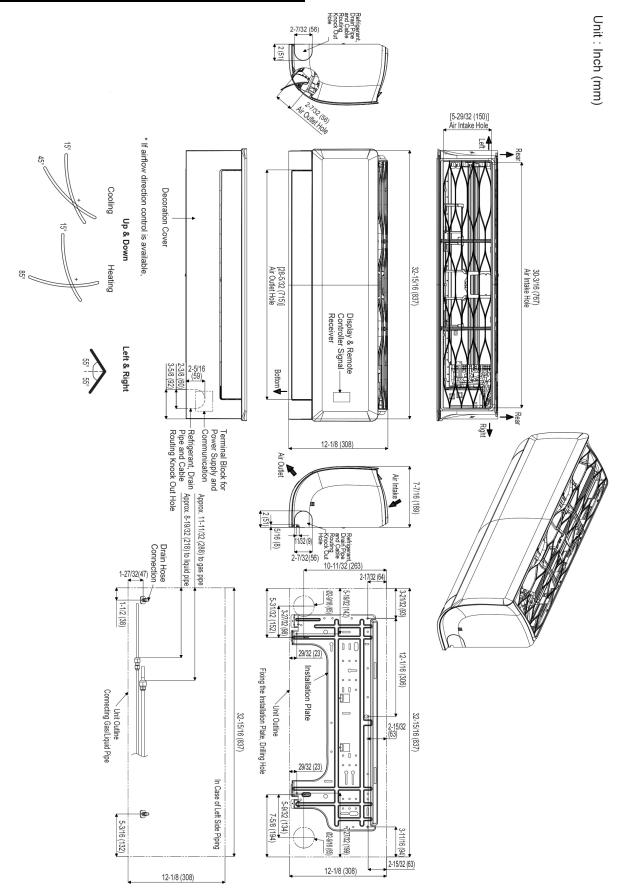


KNMAB151A

R32 Multi F Wall Mounted High Efficiency Indoor Unit



14,300 Btu/h



Date: For: File Resubmit Approval Other-PO No.: Architect: GC: Engr: Mech: Rep: (Project Manager)



PMBD3640ZR

Job Name/Location:

Four-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	73,000
(Btu/h) (sum of ports) Connected Indoor Unit	7,000 ~ 24,000
Capacity (Btu/h)	
Power Input (W)	97

Electrical:

Power Supply (V/Hz/Ø)¹	208-230/60/1
Rated Amps (A)	0.4

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 4
Vapor Line (in., O.D.)	Ø3/8 Flare x 4

Features:

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

Operating Range:

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

Tag No:

Unit Data:

Net Weight (lbs.)	19.4
Shipping Weight (lbs.)	22.9
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. 2. The power wiring and the communication wring 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 x 14 / 2 x 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.



PMBD3640ZR

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

