Job Name/Location:

Date:

PO No.:

Architect:

Engr:

Resubmit

Approval Other

Mech:

Rep:

(Project Manager)



## **PMBD3630**

## 3-Port Branch Distribution Unit (BD Unit)

#### Performance:

(Company)

Max Nominal Port Capacity Btu/h (each port)	24,000
Max Nominal Unit Capacity Btu/h (sum of ports)	72,000
Power Input (W)	24

#### **Electrical:**

Power Supply (V¹/Hz/Ø)	208-230/60/1
Rated Amps (A)	0.12

#### Piping:

## Piping Connection to Outdoor Unit:

Liquid Line (in, OD)	3/8
Vapor Line (in, OD)	3/4

#### Piping Connection to Indoor Unit:

Liquid Line (in, OD)	1/4 (Qty 3)
Vapor Line (in, OD)	3/8 (Qty 3)

## **Standard Features:**

- •Distributes refrigerant to indoor units
- •Internal components are insulated
- Flare joints provided for easy installation
- $\bullet \textbf{Compact design} \\$

## **Operating Range:**

Operating Range (°F DB)	0-150
, , ,	

#### **Unit Data:**

Net Weight (lbs)	15
Shipping Weight (lbs)	17

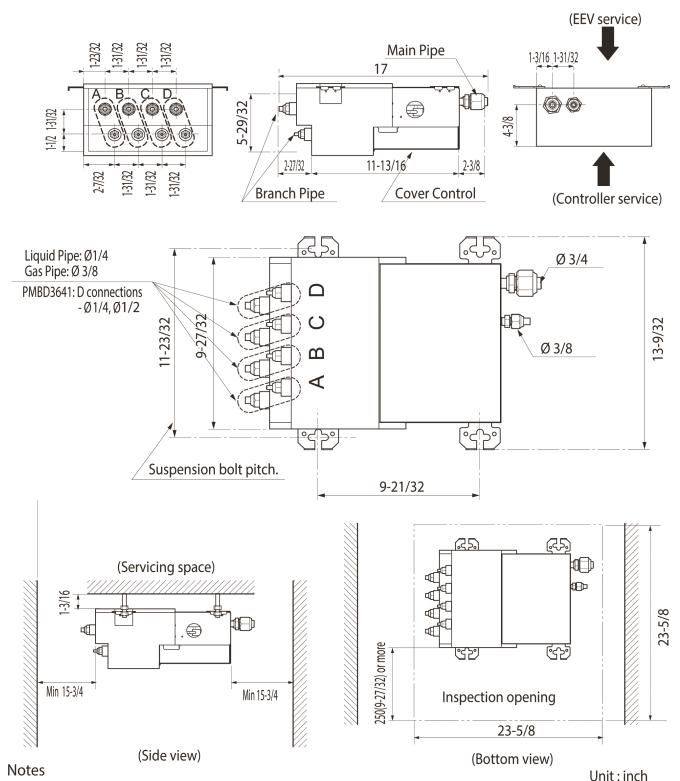
- ${\bf 1. Acceptable\ operating\ voltage:\ 187 V-253 V.}$
- 2.All power/communication cable to be minimum 16 AWG from the outdoor unit to the BD unit and 18 AWG from the BD unit to the indoor unit.
- 3.All power/communication cable to be 4-conductor, stranded, shielded and must comply with applicable local and national code.
- 4.Piping lengths:
- Maximum height difference between BD unit and indoor units 32.8 ft
- •Maximum height difference between BD unit and BD unit 49.2 ft.
- •Maximum piping length between BD unit and indoor units 49.2 ft
- 5.The BD unit should be installed inside of a building.
- 6.Must follow installation instructions in the applicable LG installation manual.
- 7. Power wiring cable size must comply with the applicable local and national code.

# **PMBD3630**

3-Port Branch Distribution Unit (BD Unit)



Tag #:
Date:
PO No.:



- 1. For PMBD3620 unit, ports A and B are available.
- 2. For PMBD3630 unit, ports A, B and C are available.
- 3. For PMBD3640 and PMBD3641 units, ports A, B, C and D are available.

Job Name/Location:					Tag #:		
Date:	F	or:	File	Resubmit			
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Architect:	GC:				_	фия	ELOLOW
Engr:	Mech:				-		
Rep:	(Project Mana	ger)			_		

Multi F Wall Mounted High Efficiency Indoor Unit 7,000 Btu/h



#### Performance:

Nominal Cooling Capacity (Btu/h)	7,000
Nominal Heating Capacity (Btu/h)	8,100

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 <sup>1</sup> /Hz/Ø)	208-230/60/1
Rated Amps (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:**

- 4-Way auto swing24-Hour on/off timerAuto operation

- Auto restartChaos wind
- Inverter (variable speed fan)
- Jet cool/Jet heat3M Micro Dust Filter

- Self-cleaning indoor coil
   Sleep mode
   Condensate sensor connection
   Built-in Wi-Fi via Smart ThinQ app

#### **Included Accessories:**

Wireless Remote Controller — AKB74955602

## **Optional Accessories:**

☐ MultiSITE™ CRC1 - PREMTBVC0 ☐ MultiSITE CRC1+ - PREMTBVC1 ☐ Dry Contact - PDRYCB300

## **Entering Mixed Air:**

Cooling (°F DB)	57 ~ <b>7</b> 7
Heating (°F WB)	59 ~ 81

#### **Unit Data:**

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Pressure (H/M/L) (±3 dB[A]) <sup>2</sup>	35 / 31 / 26
Primary Filter	Washable Pre-filter
Secondard Filter	3M Micro Dust
Net Weight (lbs.)	18.3
Shipping Weight (lbs.)	23.4

#### Fan:

Туре	Cross Flow
Quantity	1
Motor/Drive	Brushless Digitally Controlled/Direct
Air Flow H/M/L (CFM)	254 / 204 / 148

- NOTES:

  1. Acceptable operating voltage: 187V-253V.
  2. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
  3. See Engineering Manual for sensible and latent capacities.
  4. All communication / connection (power) cable from the outdoor unit to the indoor unit is field supplied and must be a minimum of four-conductor, 18 AWG, stranded, shielded or unshielded (if shielded, it must be grounded to the chassis of the outdoor unit only), and must comply with applicable local and national codes.
  5. Power wiring cable size must comply with applicable local and national code.
  6. The indoor unit comes with a dry helium charge.
  7. 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%.
  8. Must follow installation in instructions in the applicable LG installation manual.

- 8. Must follow installation instructions in the applicable LG installation manual.



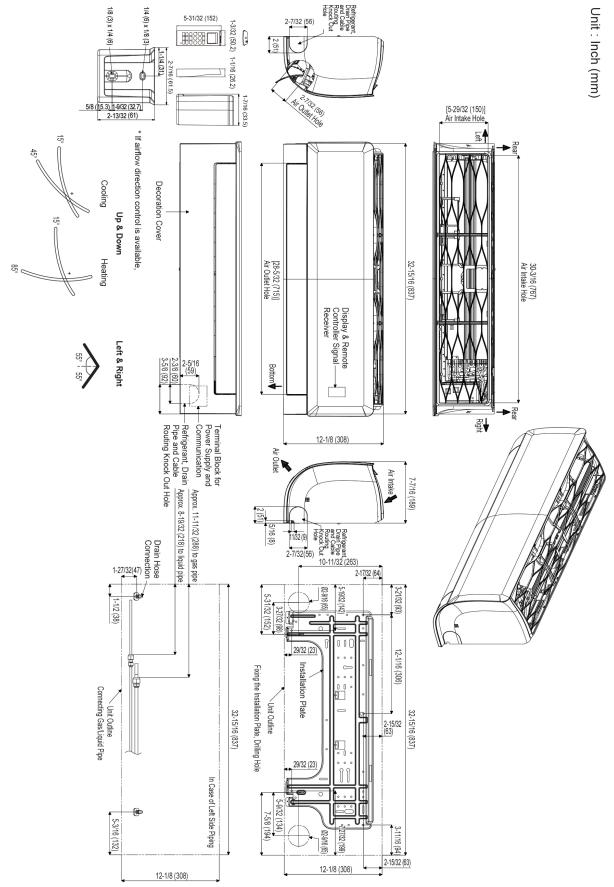




Job I	Name/	Location:
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Multi F Wall Mounted High Efficiency Indoor Unit 7,000 Btu/h





Job Name/Location:					Tag #:	Tag #:	
Date:	F	or:	File	Resubmit			
PO No.:			Approval	Other			
Architect:	GC:				_	фия	ELOLOW
Engr:	Mech:				-		
Rep:	(Project Mana	ger)			_		

Multi F Wall Mounted High Efficiency Indoor Unit 7,000 Btu/h



#### Performance:

Nominal Cooling Capacity (Btu/h)	7,000
Nominal Heating Capacity (Btu/h)	8,100

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 <sup>1</sup> /Hz/Ø)	208-230/60/1
Rated Amps (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:**

- 4-Way auto swing24-Hour on/off timerAuto operation

- Auto restartChaos wind
- Inverter (variable speed fan)
- Jet cool/Jet heat3M Micro Dust Filter

- Self-cleaning indoor coil
   Sleep mode
   Condensate sensor connection
   Built-in Wi-Fi via Smart ThinQ app

#### **Included Accessories:**

Wireless Remote Controller — AKB74955602

## **Optional Accessories:**

☐ MultiSITE™ CRC1 - PREMTBVC0 ☐ MultiSITE CRC1+ - PREMTBVC1 ☐ Dry Contact - PDRYCB300

## **Entering Mixed Air:**

Cooling (°F DB)	57 ~ <b>7</b> 7
Heating (°F WB)	59 ~ 81

#### **Unit Data:**

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Pressure (H/M/L) (±3 dB[A]) <sup>2</sup>	35 / 31 / 26
Primary Filter	Washable Pre-filter
Secondard Filter	3M Micro Dust
Net Weight (lbs.)	18.3
Shipping Weight (lbs.)	23.4

#### Fan:

Туре	Cross Flow
Quantity	1
Motor/Drive	Brushless Digitally Controlled/Direct
Air Flow H/M/L (CFM)	254 / 204 / 148

- NOTES:

  1. Acceptable operating voltage: 187V-253V.
  2. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
  3. See Engineering Manual for sensible and latent capacities.
  4. All communication / connection (power) cable from the outdoor unit to the indoor unit is field supplied and must be a minimum of four-conductor, 18 AWG, stranded, shielded or unshielded (if shielded, it must be grounded to the chassis of the outdoor unit only), and must comply with applicable local and national codes.
  5. Power wiring cable size must comply with applicable local and national code.
  6. The indoor unit comes with a dry helium charge.
  7. 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%.
  8. Must follow installation in instructions in the applicable LG installation manual.

- 8. Must follow installation instructions in the applicable LG installation manual.



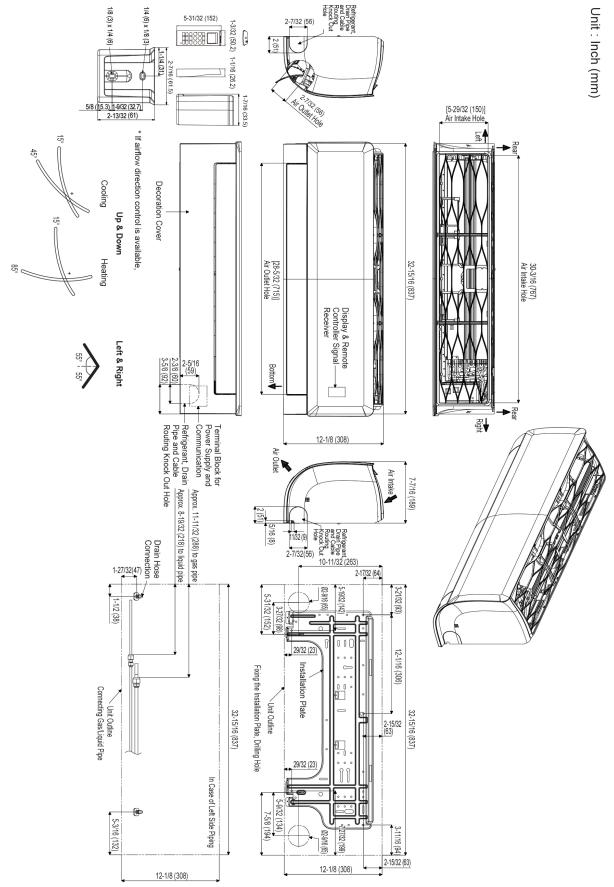




Job I	Name/	Location:
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Multi F Wall Mounted High Efficiency Indoor Unit 7,000 Btu/h





Job Name/Location: Tag #: For: File Resubmit Date: Approval Other. PO No .: GC: Architect: Mech: Engr: Rep: (Project Manager) (Company)

## LMN159HVT

Multi F Wall Mounted High Efficiency Indoor Unit 14,300 Btu/h



#### Performance:

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

#### **Electrical:**

Power Supply (V¹/Hz/Ø)	208-230/60/1
Rated Amps (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:**

- 4-Way auto swing24-Hour on/off timer
- Auto operation
- Auto restartChaos wind
- Inverter (variable speed fan)
- Jet cool/Jet heat3M Micro Dust Filter

- Self-cleaning indoor coil
   Sleep mode
   Condensate sensor connection
   Built-in Wi-Fi via Smart ThinQ app

#### **Included Accessories:**

Wireless Remote Controller — AKB74955602

## **Optional Accessories:**

☐ MultiSITE™ CRC1 - PREMTBVC0 ☐ MultiSITE CRC1+ - PREMTBVC1 ☐ Dry Contact - PDRYCB300

## **Entering Mixed Air:**

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

#### **Unit Data:**

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Pressure (H/M/L) (±3 dB[A]) <sup>2</sup>	42 / 38 / 32
Primary Filter	Washable Pre-filter
Secondard Filter	3M Micro Dust
Net Weight (lbs.)	18.3
Shipping Weight (lbs.)	23.4

#### Fan:

Туре	Cross Flow
Quantity	1
Motor/Drive	Brushless Digitally Controlled/Direct
Air Flow H/M/L (CFM)	314 / 268 / 184

- NOTES:

  1. Acceptable operating voltage: 187V-253V.
  2. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
  3. See Engineering Manual for sensible and latent capacities.
  4. All communication / connection (power) cable from the outdoor unit to the indoor unit is field supplied and must be a minimum of four-conductor, 18 AWG, stranded, shielded or unshielded (if shielded, it must be grounded to the chassis of the outdoor unit only), and must comply with applicable local and national codes.
  5. Power wiring cable size must comply with applicable local and national code.
  6. The indoor unit comes with a dry helium charge.
  7. 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%.
  8. Must follow installation in instructions in the applicable LG installation manual.

- 8. Must follow installation instructions in the applicable LG installation manual.





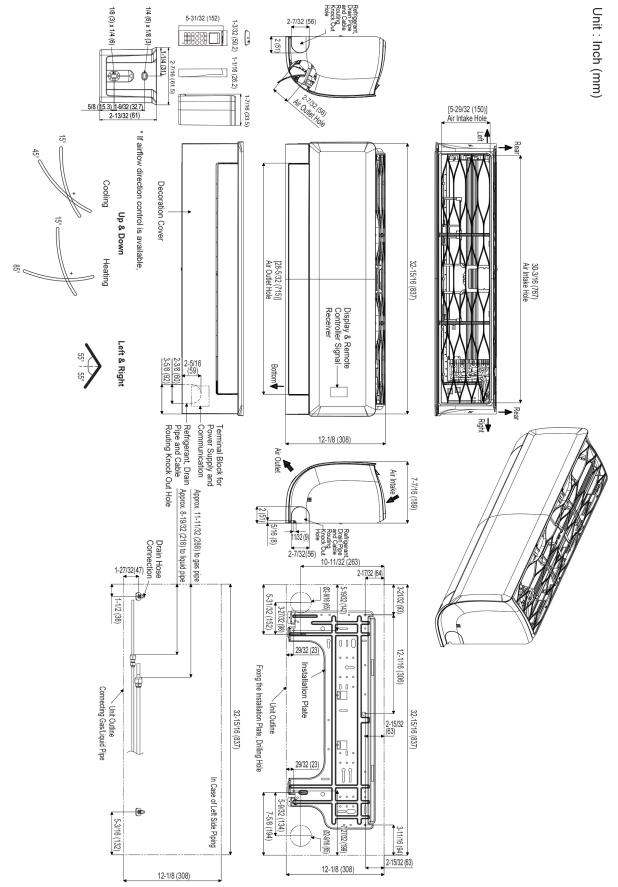


Job I	Name/	Location:
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# LMN159HVT

Multi F Wall Mounted High Efficiency Indoor Unit 14,300 Btu/h





Job Name/Location: Tag #: For: File Resubmit Date: Approval Other. PO No .: GC: Architect: Mech: Engr: Rep: (Project Manager) (Company)

## LMN159HVT

Multi F Wall Mounted High Efficiency Indoor Unit 14,300 Btu/h



#### Performance:

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

#### **Electrical:**

Power Supply (V¹/Hz/Ø)	208-230/60/1
Rated Amps (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:**

- 4-Way auto swing24-Hour on/off timer
- Auto operation
- Auto restartChaos wind
- Inverter (variable speed fan)
- Jet cool/Jet heat3M Micro Dust Filter

- Self-cleaning indoor coil
   Sleep mode
   Condensate sensor connection
   Built-in Wi-Fi via Smart ThinQ app

#### **Included Accessories:**

Wireless Remote Controller — AKB74955602

## **Optional Accessories:**

☐ MultiSITE™ CRC1 - PREMTBVC0 ☐ MultiSITE CRC1+ - PREMTBVC1 ☐ Dry Contact - PDRYCB300

## **Entering Mixed Air:**

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

#### **Unit Data:**

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Pressure (H/M/L) (±3 dB[A]) <sup>2</sup>	42 / 38 / 32
Primary Filter	Washable Pre-filter
Secondard Filter	3M Micro Dust
Net Weight (lbs.)	18.3
Shipping Weight (lbs.)	23.4

#### Fan:

Туре	Cross Flow
Quantity	1
Motor/Drive	Brushless Digitally Controlled/Direct
Air Flow H/M/L (CFM)	314 / 268 / 184

- NOTES:

  1. Acceptable operating voltage: 187V-253V.
  2. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
  3. See Engineering Manual for sensible and latent capacities.
  4. All communication / connection (power) cable from the outdoor unit to the indoor unit is field supplied and must be a minimum of four-conductor, 18 AWG, stranded, shielded or unshielded (if shielded, it must be grounded to the chassis of the outdoor unit only), and must comply with applicable local and national codes.
  5. Power wiring cable size must comply with applicable local and national code.
  6. The indoor unit comes with a dry helium charge.
  7. 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%.
  8. Must follow installation in instructions in the applicable LG installation manual.

- 8. Must follow installation instructions in the applicable LG installation manual.





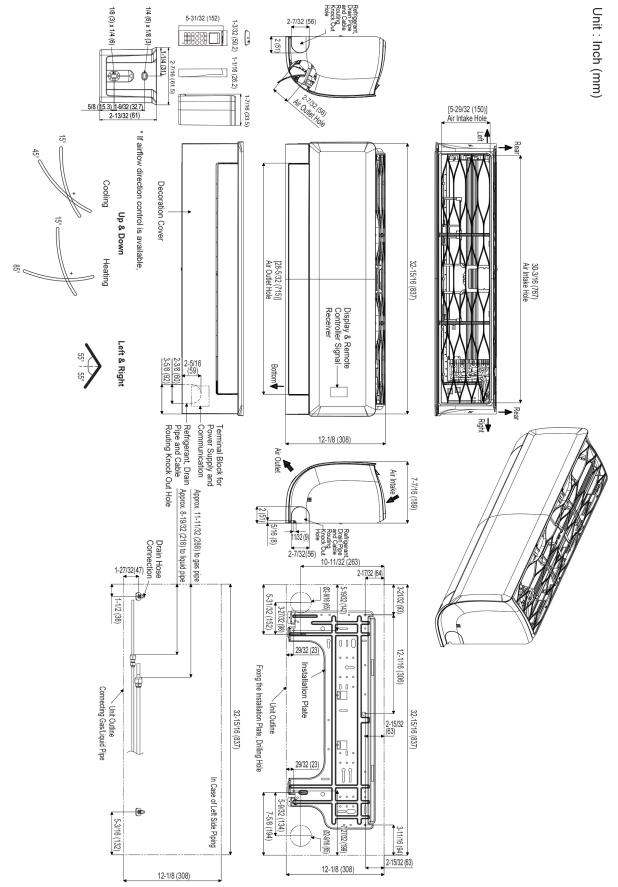


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# LMN159HVT

Multi F Wall Mounted High Efficiency Indoor Unit 14,300 Btu/h





Job Name/Location: Tag No:

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

GC: **Architect:** Mech: Engr:

Rep:

(Project Manager)

# LMU421HHV Multi F MAX with LGRED° Outdoor Unit 3.5 Ton Heat Pump





#### Performance:

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)	53,330
Max. Heating Capacity at 5°F (Btu/h)	48,450
Max. Heating Capacity at -4°F (Btu/h)	42,670
Max. Heating Capacity at -13°F (Btu/h)	37,640
Cooling COP @95°F (Rated)	4.05
Heating COP @47°F (Rated)	3.80

Cooling Nominal Test Conditions: Heating Nominal Test Conditions: Indoor: 70°F DB / 60°F WB Indoor: 80°F DB / 67°F WB Outdoor: 95°F DB / 75°F WB Outdoor: 47°F DB / 43°F WB

#### **Electrical:**

Power Supply (V/Hz/Ø) <sup>1</sup>	208-230V, 60, 1
MOP (A)	40
MCA (A)	32.7
Cooling Rated Amps (A)	28.4
Heating Rated Amps (A)	28.4
Compressor (A)	22.0
Fan Motor (A)	1.6 x 2
Locked Rotor Amps (A)	22

MOP - Maximum Overcurrent Protection MCA - Minimum Circuit Ampacity

## Piping:

Refrigerant Charge (lbs.)	11.46
Liquid Line Connection (in., O.D.)	Ø3/8 x 1
Vapor Line Connection (in., O.D.)	Ø3/4 x 1
Maximum Total Piping <sup>2</sup> (ft.)	475.7
Min. / Max. ODU to IDU Piping <sup>3</sup> (ft.)	32.8 / 229.6
Piping Length⁴ (no add'I refrigerant, ft.)	180.4
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:**

- R1 Scroll (Variable
- Speed) Compressor Auto operation
- Auto restart Self diagnosis
- Defrost / Deicing • Low ambient cooling
- down to 14°F
- Soft start
- · Restart delay (three [3] minutes)
- Factory installed Drain Pan Heater

## **Optional Accessories:**

- ☐ PI-485 PMNFP14A1 ☐ AC Smart 5 - PACS5A000 ☐ ACP 5 - PACP5A000
- ☐ MultiSITE™ Comm. Mgr. PBACNBTR0A
- ☐ Power Distribution Indicator (PDI) Premium - PQNUD1S41
- ☐ Mobile LGMV PLGMVW100 ☐ Low Ambient Wind Baffle (Cooling Operation Down to -4°F) - ZLABGP04A x2

## Required<sup>5</sup> Accessories:

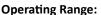
- ☐ 2 Port BD Unit PMBD3620 ☐ 3 Port BD Unit - PMBD3630 ☐ 4 Port BD Unit - PMBD3640 ☐ 4 Port BD Unit - PMBD3641







Page 1 of 3



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

#### **Unit Data:**

3		
ſ	Refrigerant Type	R410A
l	Refrigerant Control	EEV
l	Sound Pressure (Cool / Heat) ±1 dB(A) <sup>6</sup>	54 / 56
l	Net / Shipping Weight (lbs.)	218 / 243
l	Heat Exchanger Coating	Gold Fin™
l	Minimum No. of Indoor Units	2
١	Maximum No. of Indoor Units	6

#### Compressor:

Туре	R1 Scroll
Quantity	1
Oil / Type	FVC68D

#### Fan:

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

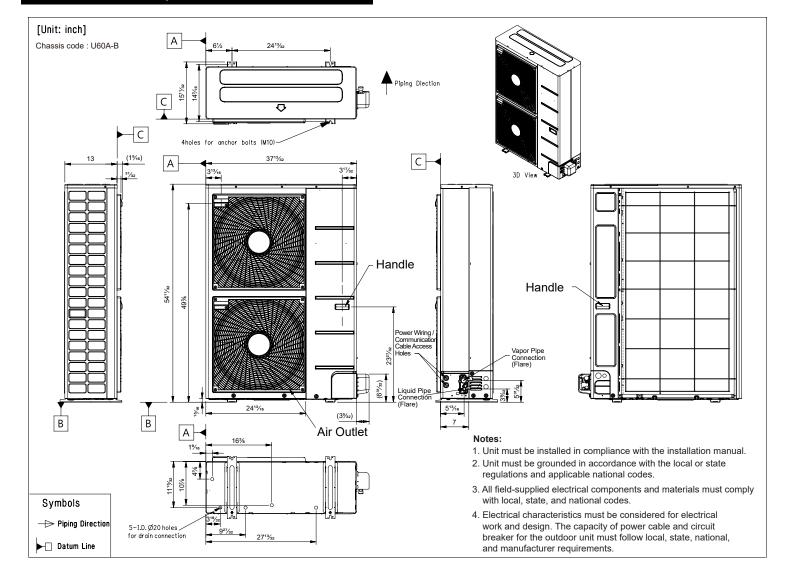
- 1. Acceptable operating voltage: 187V 253V.
- Piping lengths are equivalent.
   180.4 ft. of Main Piping + 49.2 ft. of Branch Piping.
   49.2 ft. of Main Piping + 131.2 of Branch Piping.
- 5. At least one branch distribution (BD) unit is required for system operation; a maximum of two can be installed per ODU with the use of a Y-branch accessory (PMBL5620).
- 6. Sound pressure levels are tested in an anechoic chamber under ISO Std. 3745.
- 7. All power / communication cable to be minimum 14 AWG from the ODU to the BD unit, and 14 AWG from the BD unit to the IDU.
- 8. All power / commuication cable to be 4-conductor, stranded, shielded or unshielded, and must comply with applicable local and national codes. If shielded, the wire must be grounded to the chassis at the ODU only
- 9. Power wiring size must comply with the applicable local and national codes.
- 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.
- 12. This data is rated 0 ft. above sea level, with 0 ft. level difference between ODU and IDUs, and the following refrigerant pipe lengths:
  - LMU361HHV: 16.4 ft. Main + (16.4 ft. Branch x 5) = 98.4 ft. LMU421HHV: 16.4 ft. Main + (16.4 ft. Branch x 6) = 114.8 ft.

  - LMU480HHV: 16.4 ft. Main + (16.4 ft. Branch x 8) = 147.6 ft.
- All capacities are net with a combination ratio between 95 105%
- 13. Must follow installation instructions in the applicable LG installation manual. 14. See the Engineering Manual Capacity Tables for ODU capacity at design conditions.

Job Name/Location:

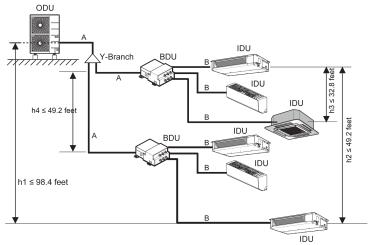
# LMU421HHV Multi F MAX with LGRED° Outdoor Unit 3.5 Ton Heat Pump





# LMU421HHV Multi F MAX with LGRED° Outdoor Unit 3.5 Ton Heat Pump





Example: LMU421HHV outdoor unit with six (6) indoor units and two (2)

branch distribution units connected.

ODU: Outdoor Unit. IDU: Indoor Unit.

BDU: Branch Distribution Unit(s).

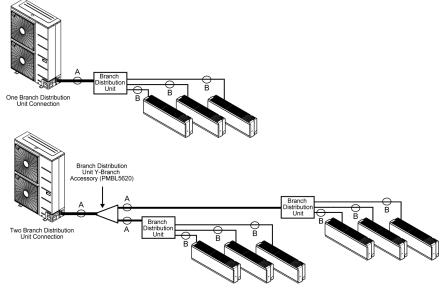
A: Main Pipe.

B: Branch Pipe (Branch Distribution Unit[s] to Indoor Unit[s]).

## Multi F MAX with LGRED Outdoor Unit Refrigerant Piping System Limitations.

	Total piping length (ΣA + ΣB)		≤475.7 feet
	Main pipe (Outdoor Unit to Branch Distribution Units: A)	Minimum for Each (A) Piping Segment	16.4 feet
Pipe Length	Main pipe (Outdoor Onit to Branch Distribution Onits. A)	Maximum (ΣA)	≤180.4 feet
(ELF = Equivalent Length of pipe in Feet)	Total branch piping length (ΣΒ)		≤295.3 feet
Length of pipe in recty	Branch pipe (Branch Distribution Units to Indoor Units: B)	Minimum	16.4 feet
		Maximum	≤49.2 feet
<b>Elevation Differential</b>	If outdoor unit is above or below indoor unit (h1)		≤98.4 feet
(All Elevation	I 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.