Job Name/Location: Tag No:

(Project Manager)

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

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

Rep:

LMU601HV Multi F MAX Outdoor Unit 5.0 Ton Heat Pump





## Performance:

Cooling Capacity (MinRated-Max., Btu/h)	10,800~60,000~65,000
Heating Capacity (MinRated-Max., Btu/h)	12,420~64,000~68,000
Max. Heating Capacity at 17°F (Btu/h)	57,590
Max. Heating Capacity at 5°F (Btu/h)	52,840
Max. Heating Capacity at -4°F (Btu/h)	46,220
Cooling COP @95°F (Rated)	3.31
Heating COP @47°F (Rated)	3.45

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

#### **Electrical:**

Power Supply $(V/Hz/\emptyset)^1$ 208-230V, 60	
MOP (A)	40
MCA (A)	32.7
Cooling Rated Amps (A)	
Heating Rated Amps (A)	
Compressor (A)	
Fan Motor (A) 1.6	
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'l 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
- · Defrost / Deicing Low ambient cooling down to 14°F
- · Restart delay (three [3] minutes)

- Auto operation Auto restart
  - Soft start
- · Self diagnosis

# **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 ☐ Drain Pan Heater - PQSH1200

### 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
- 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 LLS Environmental Protection

owned by the U.S. Environmental Protection



Operating Range

o berating manger		
Cooling (°F DB) <sup>15</sup>	14 to 118	
Heating (°F WB)	-4 to +64	

#### **Unit Data:**

Refrigerant Type	R410A
Refrigerant Control	EEV
Sound Pressure (Cool / Heat) ±1 dB(A) <sup>6</sup>	56 / 58
Net / Shipping Weight (lbs.)	218 / 243
Heat Exchanger Coating	Gold Fin™
Minimum No. of Indoor Units	2
Maximum No. of Indoor Units	8

#### Compressor:

Туре	R1 Scroll
Quantity	1
Oil / Type	FVC68D

#### Fan:

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

#### Notes:

- 1. Acceptable operating voltage: 187V 253V.
- 2. Piping lengths are equivalent.
- 3. 180.4 ft. of Main Piping + 49.2 ft. of Branch Piping. 4. 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
- 6. Sound pressure levels are tested in an anechoic chamber under ISO Standard 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 / communication 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.
- 10. See the Engineering Manual Capacity Tables for ODU sensible and latent capacities. 11. 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. Capacity is rated 0 ft. above sea level, with a 0 ft. level difference between ODU
- and IDUs, and the following refrigerant pipe lengths: LMU483 / 543 / 601HV: 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
- 15. Installation of an optional Low Ambient Wind Baffle Kit will allow operation down to -4°F in cooling mode.

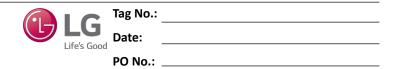


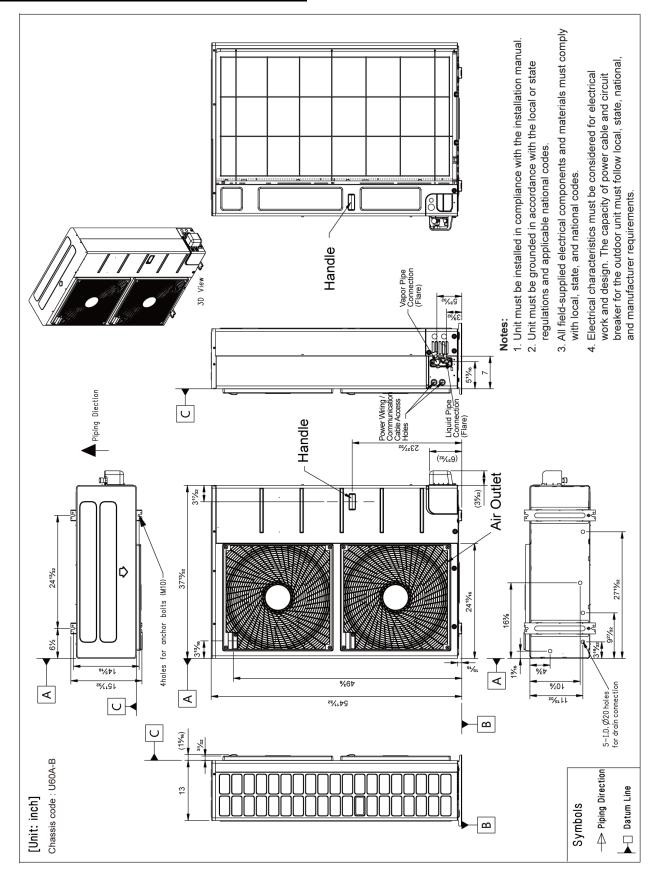




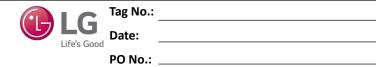


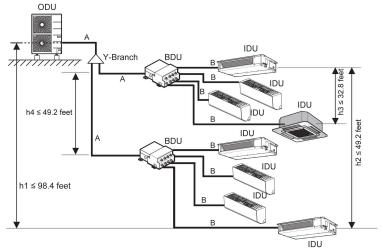
# LMU601HV Multi F MAX Outdoor Unit 5.0 Ton Heat Pump





# LMU601HV Multi F MAX Outdoor Unit 5.0 Ton Heat Pump





Example: outdoor unit with eight (8) indoor units and two (2) branch distri-

bution units connected. ODU: Outdoor Unit. IDU: Indoor Unit.

BDU: Branch Distribution Unit(s).

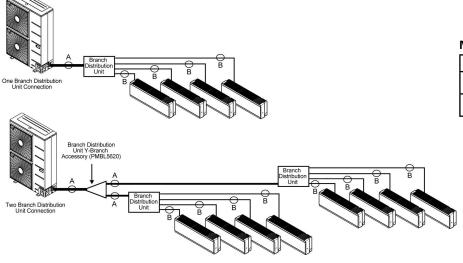
A: Main Pipe.

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

# Multi F MAX Outdoor Unit Refrigerant Piping System Limitations.

	Total piping length (ΣA + ΣB)		≤475.7 feet
Pipe Length	Main pipe (Outdoor Unit to Branch Distribution Units: A)	Minimum (ΣΑ)	16.4 feet
		Maximum (ΣA)	≤180.4 feet
(ELF = Equivalent Length of pipe in Feet)	Total branch piping length (ΣΒ)		≤295.3 feet
Length of pipe in rect,	Drough wine (Brough Distribution Huite to Indoor Huite, D)	Minimum	16.4 feet
	Branch pipe (Branch Distribution Units to Indoor Units: B)	Maximum	≤49.2 feet
<b>Elevation Differential</b>	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.