

Job Name/Location:

Tag #:

Date:

For: File Resubmit

PO No.:

Approval Other

Architect:

GC:

Engr:

Mech:

Rep:

(Company)

(Project Manager)

**LV420HHV**

Single Zone LGRED° Vertical Air Handler Unit

Outdoor Unit (ODU) - LUU420HHV Indoor Unit (IDU) - LVN420HV

**Performance:****Cooling:**

Cooling Capacity (Min~Rated~Max, Btu/h)	16,800 ~ 42,000 ~ 50,000
SEER2 / EER2	17.3 / 12.0

SEER - Seasonal Energy Efficiency Ratio

EER - Energy Efficiency Ratio

**Heating:**

Heating Capacity (Min~Rated~Max, Btu/h)	18,000 ~ 48,000 ~ 60,000
HSPF2	9.45
Max heating @ Indoor 70° DB (Btu/h)	
Outdoor 17°F WB	51,400
Outdoor 5°F WB*	40,000
Outdoor -4°F WB	38,200
Outdoor -13°F WB	28,810

HSPF - Heating Seasonal Performance Factor

\*The Capacities at 5°F does not refer to H42 testing 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 <sup>1</sup> (V/Hz/Ø)	208-230 / 60 / 1
MOP / MCA (A)	40 / 32
Cooling / Heating Rated Amps (A)	14.9 / 16.4
Compressor(A)	22.0
Fan Motor (IDU + ODU) (A)	1.3 + (1.6 x 2)
Cooling Power Input (Min~Rated~Max, kW)	1.19 ~ 3.36 ~ 5.32
Heating Power Input (Min~Rated~Max, kW)	1.34 ~ 3.69 ~ 5.8
Locked Rotor Amps (A)	33

MOP - Maximum Overcurrent Protection

MCA - Minimum Circuit Ampacity

**Piping:**

Installed Liquid Pipe (in., O.D.)	3/8 Flare
Installed Vapor Pipe (in., O.D.)	5/8 Flare
IDU Liquid Connection (in., O.D.)	3/8 Flare
IDU Vapor Connection (in., O.D.)	5/8 Flare
Additional Refrigerant (oz./ft.)	0.43
Min/Max. Pipe Length (ft.)	16.4 / 246
Piping Length (no add'l refriger., ft.)	24.9
Max. Elevation (ft.)	98.4

**Features:**

- Hot start
- Inverter (variable speed)
- Auto restart
- Control lock
- W2 terminal connection
- Group control
- Timer (on/off)
- Sleep Mode
- Optional Wi-Fi Control
- Built in dry contact
- ODU Drain Pan Heater
- Night Quiet Function

**Required Accessories (sold separately):**

Controller (Any LG wired remote controller)

**Optional Accessories:**

- ☐ MultiSITE™ CRC2 - PREMTBVC2
- ☐ Programmable Remote Controller - PREMTB100
- ☐ Delux Remote Controller - PREMTB200
- ☐ Dry Contact 3rd Party Thermostat - PDRYCB320
- ☐ Electric Heater<sup>12</sup>
- ☐ Remote Temperature Sensor - ZRTBS01
- ☐ Downflow Conversion Kit - PNDFK0
- ☐ Aux Heater relay kit - PRARH1
- ☐ AC Smart 5 - PACS5A000
- ☐ Low Ambient Wind Baffle Kit PAG-HS4/PAG-HS5 (Cooling Operation to -4°F)
- ☐ Wi-Fi Module - PWFMD200

For a complete list of available accessories, contact your LG representative.

For continual product development, LG reserves the right to change specifications without notice.

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**Operating Range:****Outdoor Unit:**

Cooling (°F DB)	5 to 118
Heating (°F WB)	-13 to 64

**Indoor Unit:**

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

**System Data:**

Refrigerant Type/Control	R410A / EEV
Refrigerant Charge (lbs.)	9.26
ODU Sound Pressure Max (Cool / Heat) ±1 dB(A) <sup>3</sup>	54 / 56
IDU Sound Pressure (H/M/L) ±1 dB(A) <sup>3</sup>	48 / 45 / 44
ODU Net / Shipping Weight (lbs.)	210.9 / 234.1
IDU Net / Shipping Weight (lbs.)	158.7 / 176.4

**Fan:**

ODU / IDU Fan Type	Propeller / Sirocco
Fan Speeds (Fan/Cool/Heat)	3 / 3 / 3
Fan Quantity (ODU + IDU)	2 + 1
Motor/Drive	Brushless Digitally Controlled / Direct
Maximum ODU Air Volume (CFM)	4,238
IDU Air Volume (H/M/L) (CFM)	1,260 / 1,100 / 1,000
Dehumidification Rate (pts/hr) <sup>9</sup>	6.76
IDU External Static Pressure Operating Range (Min~Default~Max) (in-wg) <sup>11</sup>	0.1 ~ 0.3 ~ 1.0

**Notes:**

1. Acceptable operating voltage: 187V-253V.
2. Piping lengths are equivalent.
3. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
4. All power/communication cable to be minimum 14 American wire gage (AWG), 4-conductor, stranded, shielded or unshielded wire and must comply with applicable local and national code. If shielded, the wire must be grounded to the chassis at the outdoor unit only.
5. Power wiring cable size must comply with the applicable local and national code.
6. The indoor unit comes with a dry helium charge.
7. This data is rated 0 ft. above sea level, with 25 ft. of refrigerant line and a 0 ft. level difference between outdoor and indoor units.
8. Must follow installation instructions in the applicable LG installation manual.
9. Dehumidification rate is based on high speed airflow.
10. 18k and 24k VAHUs are supplied with socket adapters for pipe transitions.
11. 18k, 24k, and 36k IDU units have ECM fan that automatically adjusts throughout the ESP (External Static Pressure) range. Therefore, there is no default ESP value for these units.
12. Electric heater accessory available in 3kW, 5kW, 8kW, 10kW, 15kW, and 20kW capacities. Refer to the engineering manual for details.
13. Controller not included.

**LGRED°**  
 Powerful Heat Technology

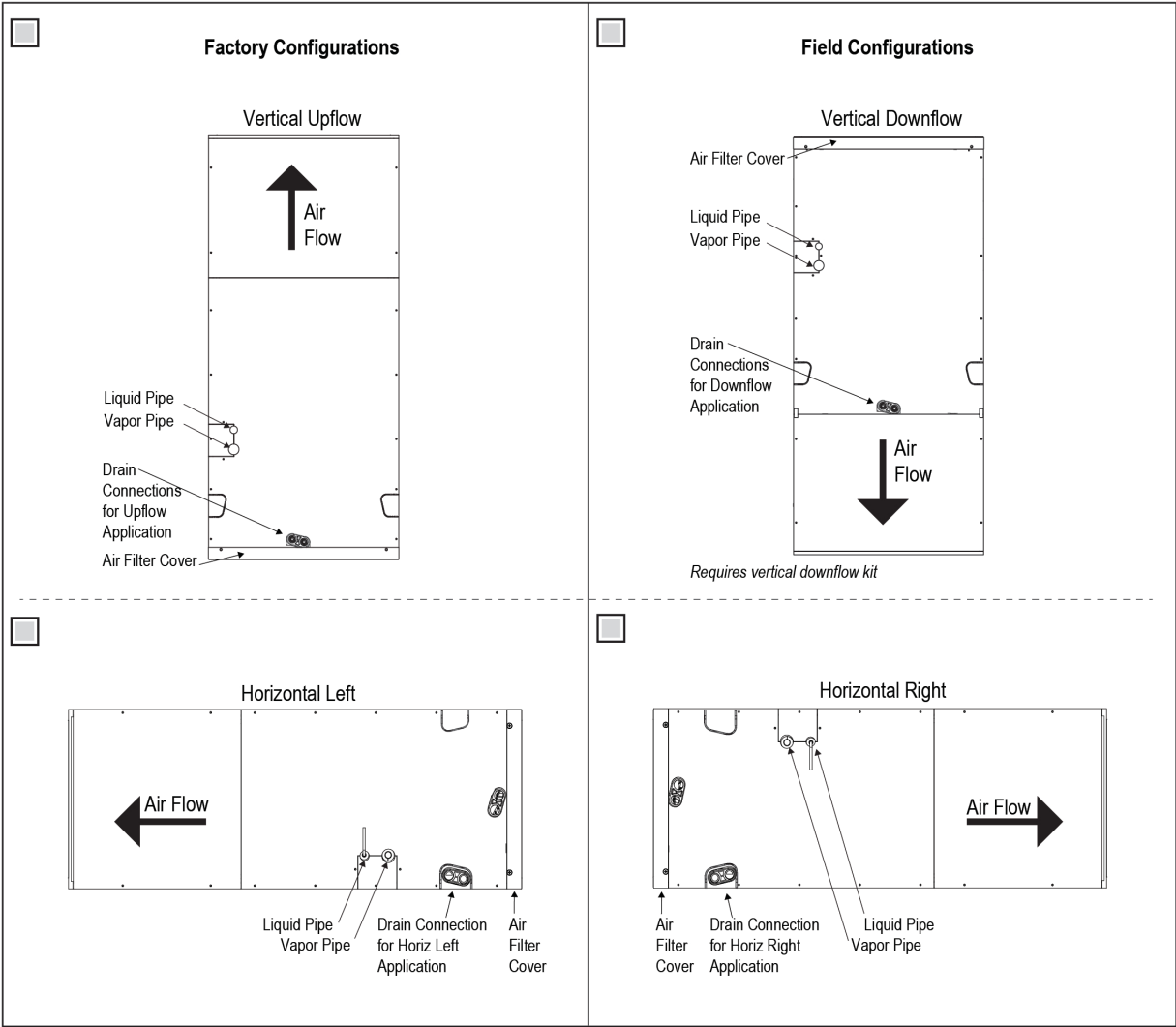
**Inverter**


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**LVN420HV**  
Single Zone LGRED° Vertical Air Handler Unit



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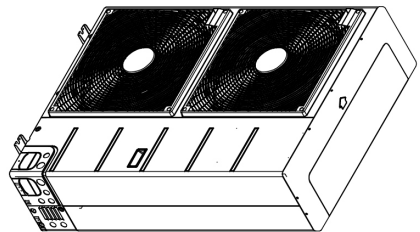
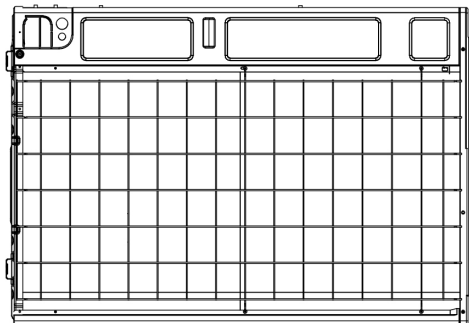
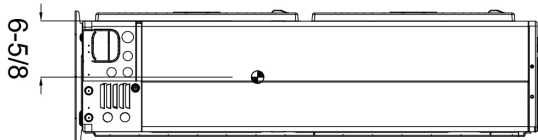
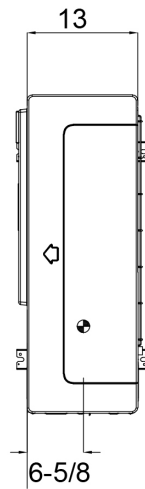
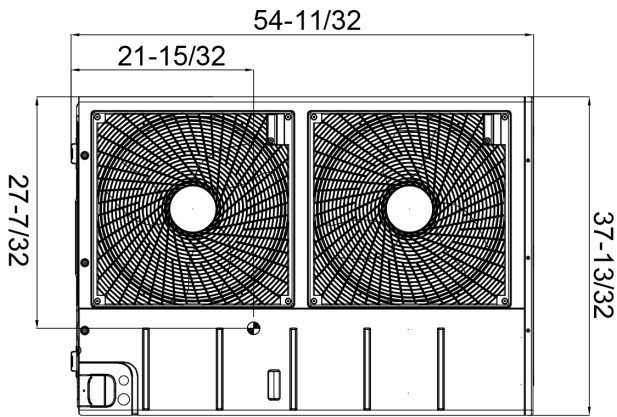
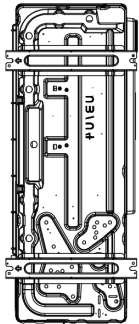
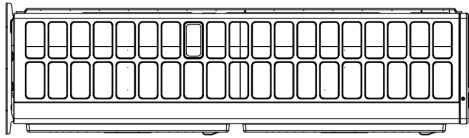
**LUU420HHV**  
Single Zone LGRED° Vertical Air Handler Unit



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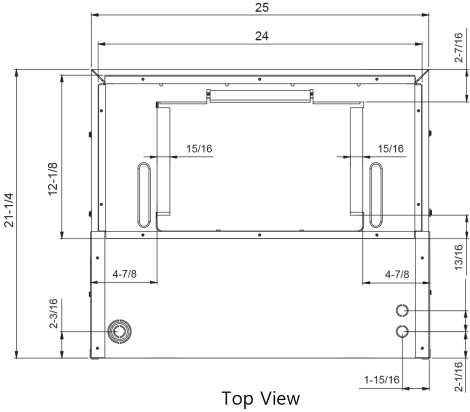


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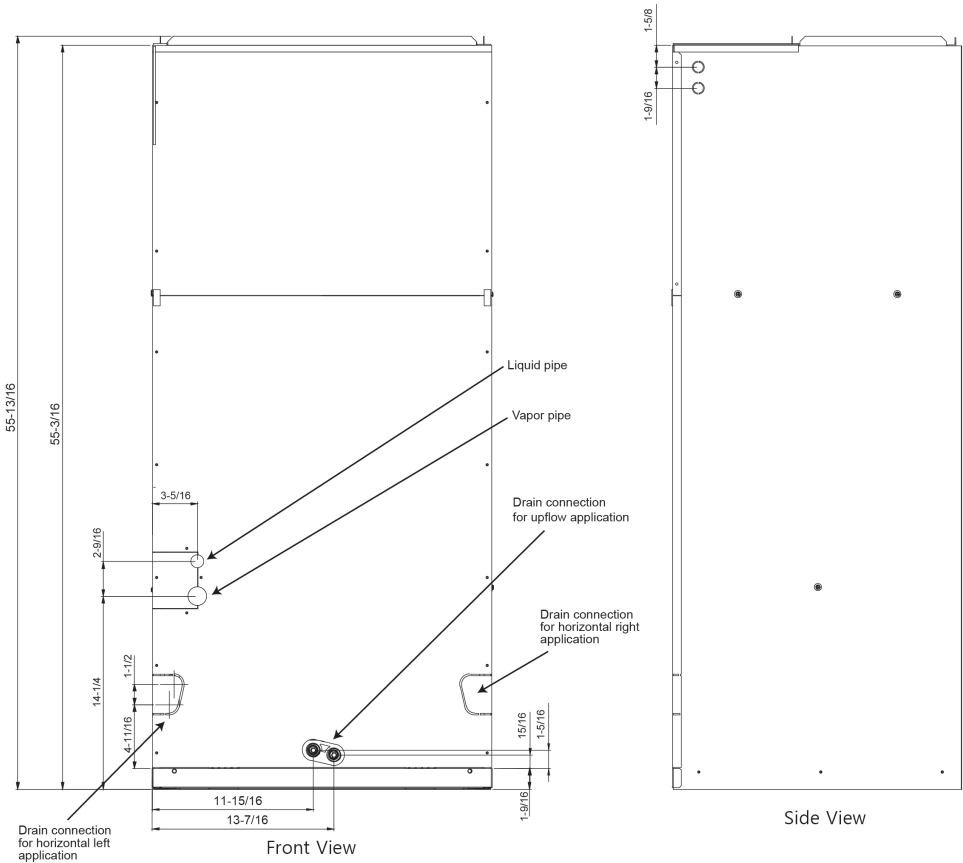
**LVN420HV**  
Single Zone LGRED° Vertical Air Handler Unit



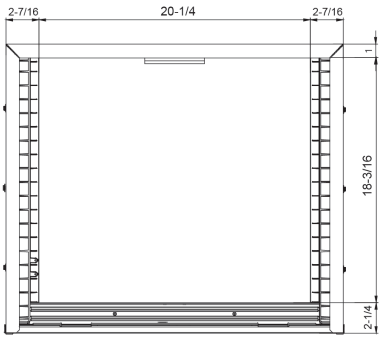
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Top View



Side View



Bottom View

Unit: inch