

Over and Above Estimate

Region: 5

Location: VA049

CSS #: 14320

Maximo Work Order No.: 6451

Date Issued: 8/7/19

Original Description: Replacement of Motor Pool -Mitsubishi 12,000btu Ductless Mini Split M# MS09NW
- Remove existing unit and replace with new.

Non Pre-Priced Estimate:

Quantity	Line Item Number	Description	Labor Hours	Unit	Labor	Materials	Equipment	Total
1	N/A	Labor to remove old unit and install new system	28		\$120 PER HOUR			\$3360.00
1	N/A	Materials -see attached				\$4211.86		\$4211.86

Note: RS Means (Pre-Priced) not used in compiling this estimate.

Note: Subcontractor quote attached.

Estimate Summary:

Labor Hours	Labor Cost	Material Cost	Equipment Cost	Total Cost	CE Factor	Total Estimate
28	\$3360.00	\$4211.86	\$0	\$7571.86	106%	\$8,026.17

Note: See attached materials cost break down and Energy star rated cut sheet



P.O. Box 119 • Altavista, VA 24517 • 24 Hour Service: 800.789.7199 • Fax: 888.722.2712 • MooresElectric.com

Replacement Proposal

August 7, 2019

Quotes are valid for 30 days.

International Support Group
6700 Strathmore Rd.
North Chesterfield, VA 23237
CSS# 14320, WO# 6451, Location: VA049-01

Contact Name Mike Merchan
Telephone 954-900-1095 ext 1006
Cell Phone NA
Email mmerchan@internationalsupportgroup.com

DESCRIPTION OF EQUIPMENT:

Motor Pool -Mitsubishi 12,000btu Ductless Mini
Split M# MS09NW S# N/A

DESCRIPTION OF PROBLEM:

Customer requested updated quote to include updated pricing on 12,000 BTU Energy Star rated system.

DESCRIPTION OF REPAIRS:

To remove and replace the above unit with a new LG 12,000btu mini split wall mounted HP system. Moore's will make all connections from the old unit to the new unit. This includes connecting to existing electrical connections from the new disconnect to the new unit, low voltage connections, including running new refrigerant lines and drain line with condensate pump. Start, test, and ensure proper operation of the system.

*** UNIT COMES WITH A ONE YEAR PARTS AND LABOR WARRANTY AND FIVE YEAR COMPRESSOR PART WARRANTY.***

*** There will be two men required on this job due to our safety policy and the amount of work needed.***

NOTE: WORK CANNOT BEGIN UNTIL PERMIT HAS BEEN ISSUED.

NOTE: EQUIPMENT LEAD TIME IS SUBJECT TO CHANGE BASED ON STOCK AVAILABILITY.

NOTE: THE LEAD TIME ON THE EQUIPMENT IS 7-10 BUSINESS DAYS.

NOTE: EQUIPMENT BRAND IS LG ART COOL MIRROR MODEL # LAN120HSV5 & # LSU120HSV5

Exclusions:

- Any and all fire alarm wiring or coordination
- Engineering or drawings for permit • Smoke detectors
- Hazardous material testing, abatement or disposal • Thermostats
- Roof cutting or patching and/or structural modifications
- Temporary heating or cooling • Air test and balance • Overtime

MATERIAL, EQUIP OR PARTS

LG 12k 115v Dual Inverter M# LAN120HSV5 Condenser
LG 12k 115v Dual Inverter M# LSU120HSV5 Wall Unit
Disconnect M# D221NRB
Fuses M# ECRN30
Elec. Whip M# 6-34-6NM
50' Comm. Wire M# 6332B
Disconnect Whip M#6-12-6NMSP
Weatherproof Outlet Cover M# MG420C
GFCI Outlet M# GFRST15W3Z
Condensate Pump M# ASP-MA-UNIT
50' Refrigerant Piping M# D61020500B3B6
Torch, Vacuum & Nitrogen FEE
Slim Duct Kit M# SDK-100-W
EPDM Adhesive M# EPDM-LG-BA10-1
EPDM Flashing Boot M# 309991-43
Sealant M# Sonolastic-150W
PVC Glue & Primer Part # 89255
6" PVC SCH 40 45 Degree M# PVC003261400
6" PVC Pipe SCH 40 M# PVC 046000600
Permit
Final Inspection Fee
S&H
Truck Fee

Quantity	Sell price
1.00	\$ 1,060.53
1.00	\$ 744.12
1.00	\$ 72.50
2.00	\$ 34.29
1.00	\$ 41.09
1.00	\$ 80.85
1.00	\$ 13.18
1.00	\$ 33.07
1.00	\$ 56.41
1.00	\$ 178.08
1.00	\$ 190.80
1.00	\$ 195.00
1.00	\$ 103.03
1.00	\$ 58.70
1.00	\$ 53.84
1.00	\$ 15.68
1.00	\$ 16.40
2.00	\$ 47.85
1.00	\$ 11.42
1.00	\$ 699.60
1.00	\$ 300.00
1.00	\$ 95.40
2.00	\$ 110.00
Material Total	\$ 4,211.86

LABOR ITEMIZED

Labor - One Man 14
Labor - Second Man 14

Labor	
Rate	Price
\$ 120.00	\$ 1,680.00
\$ 120.00	\$ 1,680.00
Labor Total	\$ 3,360.00

Thank you for your business. If you have any questions or concerns,
please feel free to contact us via telephone or quotes@mooreselectric.com

Materials	\$ 4,211.86
Labor	\$ 3,360.00
TOTAL	\$ 7,571.86

This does not include
original call cost.

Robert Lowery, VA Changeout Estimator 434-309-2591
Gordon Yowell, NC Changeout Estimator 434-309-2469
James Davis, Estimator 434-309-2568
Marvin Slaughter, Estimator 434-369-3514
Ian Harris, NC Estimator 434-309-2497

Approved by:_____

Standard Terms and Conditions

Payments past 30 days are subject to 1.5% monthly service charge on unpaid balance. Additional charges for payments made through credit cards may apply. Late payments sent to collections or legal process the purchaser agrees to pay all costs, expenses, and reasonable attorney fees.

Job Name/Location:

Tag #:

Date:

For: File Resubmit

PO No.:

Approval Other

Architect:

GC:

Engr:

Mech:

Rep:

(Company)

(Project Manager)

LA120HSV5

Performance:

Cooling:

Cooling Capacity (Min~Rated~Max) (Btu/h)	1,023 ~ 12,000 ~ 13,785
SEER	22.7
EER	12.5

SEER - Seasonal Energy Efficiency Ratio

EER - Energy Efficiency Ratio

Heating:

Heating Capacity (Min~Rated~Max) (Btu/h)	1,023 ~ 13,600 ~ 22,178
HSPF	11.4
Max. Heating @ Indoor 70°F DB	
Outdoor 19°F DB / 17°F WB	13,810 (102%)
Outdoor 6°F DB / 5°F WB	11,930 (88%)
Outdoor -3°F DB / -4°F WB	10,360 (76%)

HSPF - Heating Seasonal Performance Factor

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

Outdoor Unit:

MOP (A)	15
MCA (A)	10
Cooling / Heating Rated Amps (A)	7.4 / 7.4
Compressor (A)	7
Fan Motor (A)	0.4

MOP - Maximum Overcurrent Protection

MCA - Minimum Circuit Ampacity

Total Power Input:

Cooling Power Input (kW)	0.96
Heating Power Input (kW)	1.04

Piping:

Liquid Line (in., O.D.)	ø1/4
Vapor Line (in., O.D.)	ø3/8
Additional Refrigerant (oz./ft.)	0.22
Min. / Max. Pipe Length (ft.) ²	9.8 / 82
Piping Length (no add'l refig., ft.)	41
Max. Elevation (ft.)	49.2

Controls Features:

- 24-Hour on/off timer
- 4-Way auto swing
- Auto changeover
- Auto restart
- Jet cool/Jet heat
- Built-in low ambient standard, down to 14°F (cooling mode)
- Condensate Sensor Connection
- Inverter (variable speed compressor)
- IDU compatible with Multi F ODUs
- Smart Diagnosis
- 3M Micro Filter
- Self-cleaning indoor coil
- Sleep mode
- Cooling only function
- Built-in Wi-Fi via Smart ThinQ™ app
- Built-in drain pan heater (9/12k; optional for 18k)

Optional Accessories:

- ☐ MultiSITE™ CRC1 - PREMTBVC0
- ☐ MultiSITE CRC1+ - PREMTBVC1
- ☐ MultiSITE Comm. Mgr. - PBACNBTR0A
- ☐ PI-485 - PMNFP14A1
- ☐ Dry Contact - PDRYCB300
- ☐ LonWorks® Gateway - PLNWKB100
- ☐ AC Smart IV BACnet® Gateway - PBACNA000
- ☐ ACP IV BACnet Gateway - PQNFB17C2
- ☐ Drain Pan Heater for 18k - PQSH1201
- ☐ Low Ambient Wind Baffle Kit (Cooling to 0°F) - ZLABGP01A

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)	14 ~ 118
Heating (°F WB)	-4 ~ +65

Indoor Unit:

Cooling (°F WB)	53 ~ 75
Heating (°F DB)	60 ~ 86

Electrical:

Power Supply (V/Hz/Ø)	208-230/60/1
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System Data:

Refrigerant Type	R410A
Refrigerant Control	EEV
Refrigerant Charge (lbs.)	2.21
ODU Sound Pressure (Cooling / Heating) (±3 dB[A]) ³	45 / 48
IDU Sound Pressure Cooling (H/M/L/Sleep) (±3 dB[A]) ³	39 / 33 / 23 / 19
Heating (H/M/L) (±3 dB[A]) ³	39 / 33 / 23
ODU Net / Shipping Weight (lbs.)	74.1 / 78.9
IDU Net / Shipping Weight (lbs.)	20.5 / 25.6
Heat Exchanger Coating	GoldFin™

Fan:

ODU Type	Propeller
IDU Type	Cross Flow
Fan Speeds (Fan/Cool/Heat)	6 / 6 / 6
Quantity (ODU + IDU)	1 + 1
Motor/Drive	Brushless Digitally Controlled/Direct
ODU Max. Air Flow Rate (CFM)	1,165
IDU Air Flow Cooling, Max/H/M/L (CFM)	459 / 338 / 317 / 194
Heating, Max/H/M/L (CFM)	459 / 338 / 317 / 229
Dehumidification (pts./hr.)	2.7

Notes:

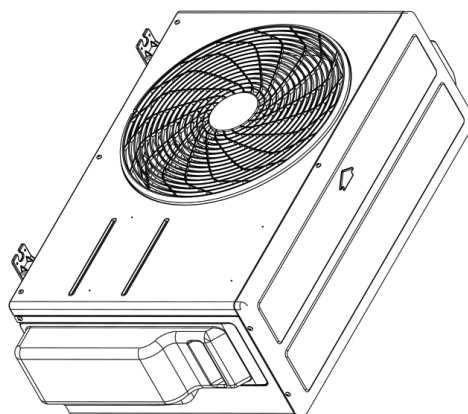
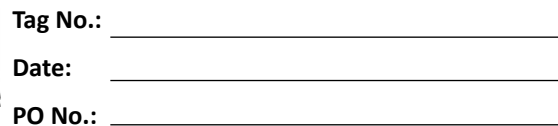
1. Acceptable operating voltage: 187V-253V.
2. Piping lengths are equivalent.
3. Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.
4. All communication / connection (power) cable from the outdoor unit to the indoor unit is field supplied and is to be minimum four-conductor, 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. See Engineering Manual for sensible and latent capacities.
6. Power wiring cable size must comply with the applicable local and national code.
7. The indoor unit comes with a dry helium charge.
8. This data is rated 0 ft. above sea level, with 24.6 ft. of refrigerant line and a 0 ft. level difference between outdoor and indoor units.
9. Must follow installation instructions in the applicable LG installation manual.
10. Multi compatible 18k IDUs include socket adapters for refrigerant pipe connections with Multi F systems. BACnet® is a registered trademark of ASHRAE. LonWorks® is a trademark of Echelon Corporation.



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LA120HSV5
Single Zone Art Cool™ Mirror Wall Mount
Outdoor Unit (ODU) - LSU120HSV5, Indoor Unit (IDU) - LAN120HSV5



LA120HSV5

Single Zone Art Cool™ Mirror Wall Mount

Outdoor Unit (ODU) - LSU120HSV5, Indoor Unit (IDU) - LAN120HSV5



PO No.: _____

Unit : inch (mm)

Front View Dimensions:

- Top: 30-3 1/8 (767) Air Intake Hole
- Right: 32-15 1/8 (837)
- Bottom: 12-1/8 (308)
- Left: 24-15 1/8 (623)

Side View Dimensions:

- Top: 32-15 1/8 (837)
- Right: 24-15 1/8 (623)
- Bottom: 12-1/8 (308)
- Left: 12-1/8 (308)

Top View Dimensions:

- Top: 32-15 1/8 (837)
- Right: 12-1/8 (308)
- Bottom: 12-1/8 (308)
- Left: 32-15 1/8 (837)

Labels and Notes:

- Refrigerant, Drain Pipe, and Cable Knock Out Hole
- Air Intake Hole
- Air Outlet Hole
- Display & Remote Controller Signal Receiver Signal
- Installation Plate
- Unit Outline
- Fixing the Installation Plate, Drilling Hole
- Terminal Block for Power Supply and Communication
- Refrigerant, Drain Pipe and Cable Knock Out Hole
- Drain Hose Connection
- Unit Outline
- Connecting Gas/Liquid Pipe
- In Case of Left Side Piping
- Decorative Cover
- Up & Down
- Left & Right
- Cooling
- Heating
- * If airflow direction control is available.