**GAS FURNACES**

**G61MPVT**

Multi-Position - Two-Stage Heat
Variable-Speed - 50HZ

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**Australian Gas Association Rating - 5.3 Stars**

**Input** - 69.6 to 139.3 MJ/h

**Nominal Add-on Cooling** - 10.5 to 17.6 kW

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**MODEL NUMBER IDENTIFICATION**

- **G 61MPVT - 36B - 070 - 1**

  - **Unit Type**
    - G = Gas Furnace
  - **Series**
    - 61 = Two-Stage
  - **Configuration**
    - MP = Multi-Position
  - **Blower**
    - V = Variable Speed Blower
  - **Voltage**
    - T = 240V-1ph-50hz
  - **Nominal Add-On Cooling Capacity**
    - 36 = 10.5 kW
    - 60 = 17.6 kW

  - **Version**
    - Gas Heat Input
      - 070 = 69.6 MJ/h
      - 090 = 92.8 MJ/h
      - 110 = 116.1 MJ/h
      - 135 = 139.3 MJ/h

  - **1 Cabinet Width**
    - B = 445 mm
    - C = 533 mm
    - D = 622 mm

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1 Indoor coils with the same letter designation will physically match the furnace.
FEATURES

CONTENTS
- Blower Data Page 12-13
- Dimensions Pages 8-11
- Exhaust Pipe Venting Information Page 6
- Features and Options Pages 2-4
- Filter Air Resistance Page 7
- Installation Clearances Page 7
- Model Number Identification Page 1
- Optional Accessories Selection Table Page 5
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WARRANTY
- Duralok Plus® Aluminized Steel Heat Exchanger - Ten year limited warranty in residential applications, five year limited warranty in non-residential applications.
- All other covered components - Five years limited warranty in residential applications, two year limited warranty in non-residential applications.
- Refer to Lennox Equipment Limited Warranty certificate included with equipment for details.

APPROVALS
- Australian Gas Association approval.
- CE marked.
- Blower data from unit tests conducted in Lennox Laboratory air test chamber.
- ENERGY STAR® (US Department of Energy) certified units are designed to use less energy, help save money on utility bills, and help protect the environment ISO 9001 Registered Manufacturing Quality System.

APPLICATIONS
- Input capacities of 69.6, 92.8, 116.1 and 139.3 Mj/h
- Australian Gas Association Rating - 5.3 Stars
- Compact cabinet for upflow, downflow, horizontal-left or horizontal-right applications without any internal modifications to the unit.
- G61MPVT-60D-135 can only be installed in horizontal-right or downflow applications.
- Lennox add-on indoor coils, high-efficiency air cleaners and humidifiers can easily be added to furnace.
- Shipped factory assembled with all controls installed and wired.
- Each unit factory test operated to ensure proper operation.

DIRECT VENT / NON-DIRECT VENT
- Furnace can be installed in either Direct Vent or Non-Direct applications. G61MPVT-60D-135 can only be installed in direct vent applications.
- In Direct Vent applications, combustion air is supplied from outdoors and flue gases are discharged outdoors. In Non-Direct Vent applications, combustion air is supplied from indoors and flue gases are discharged outdoors.

OPTIONS
- Termination Kits
  - Facilitates installation of combustion air intake pipe and flue exhaust pipe.
  - Refer to venting table in this bulletin to determine pipe size needed and proper termination kit required.
  - See Specifications table and dimension drawings.
- Termination Kit - Concentric - Direct Vent Applications Only
  - 50 or 80 mm (2 or 3 inch) kit contains concentric termination assembly, reducer bushing and 45 degree elbow.
  - 50 mm (2 inch) kit for -070 models contains an exhaust accelerator.
  - Kit requires single hole penetration of roof or wall for installation.

HEATING SYSTEM

1. Lennox Duralok Plus® Heat Exchanger Assembly
   - Lennox developed heat exchanger assembly consists of primary heat exchanger and secondary condenser coil assembly.
   - Main 3-pass clamshell type heat exchanger constructed of heavy-gauge, aluminized steel.
   - Designed for normal expansion and contraction.
   - Crimped seam design and construction provides maximum efficiency and minimum resistance to airflow.
   - Secondary heat exchanger condenser coil constructed of aluminum fins fitted to stainless steel tubes.
   - Coil is factory tested for leaks.
   - Condensate drain header box assembly located on front of coil.
   - Compact size of complete heat exchanger assembly permits low overall design of furnace cabinet.
   - All components mounted in a heavy-gauge steel frame. Heat exchanger assembly has been laboratory life cycle tested.

2. Lennox Designed Header Box
   - Header box on end of condenser coil collects flue condensate for disposal through condensate collars. Hose connects the header box drains to the condensate collars.
   - The condensate collars are located on each side of the cabinet for easy field installation of condensate drain trap. Only one collar is used, the remainder stay plugged.
   - Condensate drain trap is included with the unit for field installation.
**FEATURES**

**HEATING SYSTEM - CONTINUED**

**Lennox Designed Flue Condensate Trap Assembly**
Condensate trap assembly is mounted outside the conditioned air stream.
Assembly can be mounted on either side of cabinet in upflow and downflow applications. Assembly is mounted on the bottom of the cabinet in horizontal applications. See Installation Instructions.
Connection can be made with field provided 1/2 in. PVC pipe, 3/4 in. PVC coupling, or 1-1/4 in. OD x 1 in. ID tubing with hose clamp.
Easy to clean and winterize.

**Inshot Burners**
Aluminized steel inshot burners provide efficient, trouble-free operation.
Burner venturi mixes air and gas in correct proportion for proper combustion.
Burner assembly is removable from the unit as a single component for ease of service.

**Two-Stage Gas Control Valve**
24 volt redundant combination two stage gas control valve combines manual shut off valve (On-Off), automatic electric valve (dual) and gas pressure regulation into a compact combination control.

**Flame Rollout Switch**
Manual reset switches are factory installed on burner box.
Switch provides protection from abnormal operating conditions.

**Hot Surface Mini-Nitride Ignitor**
Unique, non-porous, high strength proprietary ceramic material provides long life and trouble-free maintenance.
Low mass element provides fast heat-up and consistent igniter temperature with low power usage.
Cemented to alumina block for positive mounting and protection against current leakage.
High temperature Teflon® insulated ignition lead wires for dependable operation.

**Combustion Air Inducer**
PSC, heavy-duty blower prepurges heat exchanger and safely vents flue products.
Pressure switches prove blower operation before allowing gas valve to open.
Operates only during heating cycle.

**Limit Control**
Automatic reset, primary and secondary limits are accurately located.
Primary limit factory installed on vestibule panel on all units, secondary limit factory installed on blower housing.

**OPTIONS**

**High Altitude Pressure Switch Kit**
Required on certain units for proper unit operation on installations above 610 m.
Units not approved for installations above 1372 m.
Order two per unit.

**LPG/Propane Conversion Kit**
Required for field changeover from natural gas to LPG/Propane.

**Natural Gas Conversion Kit**
Required for field changeover from LPG/Propane to natural gas.

**CONTROLS**

**Integrated Two Stage / Variable Speed Blower Control**
Solid-state board contains all necessary controls and relays to operate furnace.
Combustion air inducer is controlled by board. Prior to ignition, a pre-purge cycle for 15 seconds is initiated.
After the main burners are turned off, a post-purge cycle for 5 seconds is run.
Electronic flame sensor assures safe, reliable operation.
Should flame fail to ignite, flame sensor will initiate 4 re-attempts at ignition before locking out unit operation for 60 minutes.
Watchguard type circuit automatically resets ignition controls after one hour of continuous thermostat demand after unit lockout, eliminating nuisance calls for service.
To aid in troubleshooting, the last three fault codes are stored for a maximum of six months. Displays the fault codes through indicator LED’s.
Jumper settings for 1 or 2 stage thermostat operation. Two selectable 2nd stage recognition times (10 and 15 minutes) are available on the board when the furnace is used with a single stage thermostat. When used with a two stage thermostat, furnace will only initiate second stage operation with a second stage thermostat demand.
Two accessory terminals furnished for additional power supply requirements for 240 volt (less than 1 amp) power humidifiers and powered air cleaners.
Two blower speeds - second stage heat and second stage cool (with four air volume selections for each) are selected by DIP switches on board. Heat speed can be adjusted to optimize discharge temperature. Cool speed can be adjusted to correct optional cooling capacity. See Blower Performance tables.
First stage blower speed is a percentage of 2nd stage speed.
The ADJUST switch (DIP) allows normal (NORM), 10% higher (+ plus) or 10% lower (— minus) motor speed selection within HEAT and COOL speeds selected for fine tuning air volume.
DELAY switch (DIP) allows one of four de-humidification profiles during cooling mode.
**Profile A** - Motor runs at 50% for 30 seconds, then at 82% for 7-1/2 minutes, then at 100% (if needed) until demand is satisfied. Once demand is met, motor runs at 50% for 30 seconds, then ramps down to stop.
**Profile B** - Motor runs at 82% for 7-1/2 minutes and then at 100% (if needed) until demand is satisfied. Once demand is met, motor ramps down to stop.
**Profile C** - Motor runs at 100% until demand is satisfied. Once demand is met, motor runs at 100% for 60 seconds, then ramps down to stop.
**Profile D** - Motor runs at 100% until demand is satisfied. Once demand is met, motor ramps down to stop.
In heat mode, blower on time is fixed at 45 seconds, blow off time is adjustable from 60, 90, 120 and 180 seconds (factory setting - 90 seconds).

**Power Lead**
2.5 m power lead is provided for connection to an IEC receptacle located on the right side of the furnace.

**IEC Receptacle**
IEC receptacle provided on right side of furnace cabinet for easy, plug-in electrical connection.

**24 Volt Transformer**
Furnished and factory installed on blower wrapper. 40VA transformer has circuit breaker wired in series.
FEATURES

CONTROLS - CONTINUED

OPTIONS

ComfortSense™ 7000 Touchscreen Thermostat
Electronic
7-day,
universal,
multi-stage,
programmable,
touchscreen thermostat.
4 Heat/2 Cool.
Auto-changeover.
Controls humidity during cooling mode.
Offers enhanced capabilities including humidification / dehumidification / dewpoint measurement and control, Humiditrol® control, and equipment maintenance reminders.
Easy-to-use, menu driven thermostat with a back-lit, LCD touchscreen.
Remote outdoor temperature sensor (optional) allows the thermostat to display outdoor temperature. Required in dual fuel and Humiditrol® applications.
See the ComfortSense™ 7000 Engineering Handbook bulletin in the Controls section for more information.

BLOWER

Variable Speed Direct Drive Blower
Each blower assembly statically and dynamically balanced.
Change in blower speed is easily accomplished by simple DIP switch change on Integrated Furnace Two Stage / Variable Speed Blower Control.
See Blower Performance tables.
Blower assembly easily removed for servicing

Variable Speed Blower Motor
Variable speed motor maintains specified air volume from 0 though 200 Pa static range.
Motor is controlled by Integrated Furnace Two Stage / Variable Speed Blower Control.
Motor is resiliently mounted.

FILTER (NOT FURNISHED)
Filter and provisions for external mounting must be field provided.

CABINET

Low-profile, narrow width cabinet allows easy installation in upflow, downflow or horizontal applications.
Heavy-gauge, cold rolled steel construction.
Pre-painted cabinet finish.
Flanges provided on supply air opening for ease of plenum connection or alignment with indoor coil.
Fully insulated cabinet with foil faced insulation on sides and back of heating compartment and mat faced insulation in blower compartment.
Tool-less latches on blower and burner doors assure positive lock.
Complete service access.
Safety interlock switch automatically shuts off power to unit when blower compartment access door is removed.
Gas piping inlets are provided in both sides of cabinet.

Return Air Entry:
For bottom/end return-air entry for upflow/horizontal applications, remove furnished bottom seal panel from cabinet.
For side return-air entry (upflow applications only), corners are marked on either side of cabinet for return air cut-outs.
On furnaces with side return air and condensate trap on the same side of the cabinet, a field fabricated transition is required when using an IAQ (indoor air quality) product higher than 360 mm installed next to the unit and serviced from the front. IAQ products higher than 508 mm require a field fabricated transition. See dimension drawings.
NOTE − 60C and 60D size units that require air volumes over 850 L/s must have one of the following:
1. Single side return air with transition, to accommodate 508 x 635 x 25 mm cleanable air filter, required to maintain proper air velocity.
2. Bottom return air.
3. Return air from both sides.
4. Bottom and one side return air.
See Blower Performance Tables for additional information.

Coil Match-up
All furnaces exactly match C33 and CX34 cased upflow indoor coils and CH33 horizontal indoor coils with same letter designation in model number. No adaptor required. Engaging holes furnished on cabinet for alignment.
C33 uncased coils match furnaces without any overhang but require an optional adaptor base or field fabricated transition to match furnace opening. See C33 coil bulletin for additional information.
All furnaces exactly match CR33 cased, downflow indoor coils with adaptor rails, furnished with coil.

OPTIONS

Condensate Trap Alternate Location Kit
Allows condensate drain to be installed on the opposite side of the furnace from the exhaust venting (upflow applications only).

downflow Combustible Floor Base
Required for heating only units installed on combustible floors.
Not required in add-on cooling applications.
See Dimension Drawing.
# SPECIFICATIONS

<table>
<thead>
<tr>
<th>Gas Heating Performance</th>
<th>Model No.</th>
<th>G61MPVT-36B-070</th>
<th>G61MPVT-60C-090</th>
<th>G61MPVT-60C-110</th>
<th>G61MPVT-60D-135</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Fire</td>
<td>Input - Mj/h</td>
<td>69.6</td>
<td>92.8</td>
<td>116.1</td>
<td>139.3</td>
</tr>
<tr>
<td></td>
<td>Output - kW</td>
<td>17.9</td>
<td>23.7</td>
<td>29.0</td>
<td>35.7</td>
</tr>
<tr>
<td></td>
<td>Temperature range - °C</td>
<td>25 - 41</td>
<td>22 - 39</td>
<td>28 - 44</td>
<td>36 - 53</td>
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<tr>
<td></td>
<td>Gas Manifold Pressure (Natural Gas) - Pa</td>
<td>0.87</td>
<td>0.87</td>
<td>0.87</td>
<td>0.87</td>
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<tr>
<td>Low Fire</td>
<td>Input - Mj/h</td>
<td>47.5</td>
<td>63.3</td>
<td>79.1</td>
<td>95.0</td>
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<tr>
<td></td>
<td>Output - kW</td>
<td>12.6</td>
<td>16.7</td>
<td>21.1</td>
<td>25.5</td>
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<tr>
<td></td>
<td>Temperature range - °C</td>
<td>14 - 31</td>
<td>11 - 28</td>
<td>17 - 33</td>
<td>22 - 39</td>
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<td>Gas Manifold Pressure (Natural Gas) - kPa</td>
<td>0.42</td>
<td>0.42</td>
<td>0.42</td>
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<td>Australian Gas Association Energy Rating - Stars</td>
<td>5.3</td>
<td>5.3</td>
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### Connections

<table>
<thead>
<tr>
<th>Intake / Exhaust Pipe (PVC)</th>
<th>2 / 2</th>
<th>2 / 2</th>
<th>2 / 2</th>
<th>3 / 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condensate Drain Trap (PVC pipe) - i.d.</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
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<tr>
<td>Condensate Drain Trap (PVC pipe) - o.d.</td>
<td>3/4</td>
<td>3/4</td>
<td>3/4</td>
<td>3/4</td>
</tr>
<tr>
<td>Gas pipe size IPS</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
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</table>

<table>
<thead>
<tr>
<th>Indoor Blower</th>
<th>Wheel nom. dia. x width - mm</th>
<th>254 x 203</th>
<th>292 x 254</th>
<th>292 x 254</th>
<th>292 x 254</th>
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</thead>
<tbody>
<tr>
<td>Motor output - W</td>
<td>373</td>
<td>745</td>
<td>745</td>
<td>745</td>
<td></td>
</tr>
<tr>
<td>kW of add-on cooling</td>
<td>7.0 - 12.2</td>
<td>12.2 - 17.6</td>
<td>12.2 - 17.6</td>
<td>12.2 - 17.6</td>
<td></td>
</tr>
<tr>
<td>Air Volume Range - L/s</td>
<td>295 - 660</td>
<td>410 - 1020</td>
<td>350 - 1045</td>
<td>430 - 1035</td>
<td></td>
</tr>
</tbody>
</table>

### Electrical characteristics

240 volts - 50 hertz - 1 phase (less than 10 amps)

### OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

#### CABINET ACCESSORIES

downflow Combustible Floor Base

- B Width Models: 11M60
- C Width Models: 11M61
- D Width Models: 11M62

#### CONDENSATE DRAIN KITS

Condensate Trap Alternate Location Kit - upflow Only

- B Width Models: 76M20
- C Width Models: 76M20
- D Width Models: - - -

#### CONTROLS

TERMINATION KITS - See Installation Instructions for specific venting information.

Concentric Termination Kits - Direct Vent Applications Only

- 50 mm (2 in.): 71M80
- 69M29
- D Width Models: 60L46

GAS HEAT ACCESSORIES

<table>
<thead>
<tr>
<th>Input</th>
<th>High Altitude Pressure Switch Kit ORDER TWO EACH</th>
<th>LPG/Propane Kit</th>
<th>LPG/Propane to Natural Gas Kit</th>
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<tr>
<td></td>
<td>611 - 1372 m</td>
<td>0 - 610 m</td>
<td>611 - 1372 m</td>
</tr>
<tr>
<td>-070</td>
<td>56M23</td>
<td>44W48</td>
<td>44W48</td>
</tr>
<tr>
<td>-090</td>
<td>56M23</td>
<td>44W48</td>
<td>44W48</td>
</tr>
<tr>
<td>-110</td>
<td>75M22</td>
<td>44W48</td>
<td>44W48</td>
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<tr>
<td>-135</td>
<td>Not allowed</td>
<td>44W48</td>
<td>Not allowed</td>
</tr>
</tbody>
</table>

NOTE: Filters and provisions for mounting are not furnished and must be field provided.
## High Altitude Information

Pressure regulator adjustment will be required depending on altitude. See below for proper pressure regulator setting.

<table>
<thead>
<tr>
<th>Natural</th>
<th>0-610</th>
<th>611-914</th>
<th>915-1219</th>
<th>1220-1372</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.87</td>
<td>0.80</td>
<td>0.75</td>
<td>0.70</td>
<td></td>
</tr>
</tbody>
</table>

1. High Altitude Pressure Switch Kits required for certain models, see Gas Heat Accessories table for order number.
2. LPG/Propane conversion kit required, see Gas Heat Accessories table for order number.

### Exhaust Pipe Venting Table

#### For altitudes of 0-610 m

<table>
<thead>
<tr>
<th>Vent Pipe Diameter</th>
<th>G61MPVT</th>
<th>G61MPVT</th>
<th>G61MPVT</th>
<th>G61MPVT</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 mm (2 in.)</td>
<td>12.2</td>
<td>4.5</td>
<td>not allowed</td>
<td>not allowed</td>
</tr>
<tr>
<td>80 mm (3 in.)</td>
<td>16.1</td>
<td>12.2</td>
<td>7.6</td>
<td>10</td>
</tr>
<tr>
<td>100 mm (4 in.)</td>
<td>44</td>
<td>34.5</td>
<td>20</td>
<td>27.5</td>
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</table>

#### For altitudes of 611-1372 m

<table>
<thead>
<tr>
<th>Vent Pipe Diameter</th>
<th>G61MPVT</th>
<th>G61MPVT</th>
<th>G61MPVT</th>
<th>G61MPVT</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 mm (2 in.)</td>
<td>7.6</td>
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<td>not allowed</td>
<td>not allowed</td>
</tr>
<tr>
<td>80 mm (3 in.)</td>
<td>10</td>
<td>7.6</td>
<td>7.6</td>
<td>not allowed</td>
</tr>
<tr>
<td>100 mm (4 in.)</td>
<td>27.5</td>
<td>21.5</td>
<td>18.7</td>
<td>not allowed</td>
</tr>
</tbody>
</table>

**NOTE** - Minimum Equivalent Vent Pipe length is 4.6 m.

1. Maximum Equivalent Vent Length is defined as "Total Length (linear meters) of vent pipe, plus equivalent length (m) of fittings, plus equivalent length (m) of termination."
2. 110 models installed in upflow or downflow applications must have the supplied 90° street ell installed directly into the unit flue collar. The street ell must be included in the elbow count.
3. 135 models installed in downflow applications must have 80 to 50 mm (3 in. to 2 in.) reducing elbow (supplied) installed directly into the flue collar. Reducing ell must be included in elbow count.
4. 90° elbows must be limited to swept type elbows.

**VENTING NOTES** — One 90° elbow is equivalent to 1.5 m of straight vent pipe.

Two 45° elbows are equal to one 90° elbow.

One 45° elbow is equivalent to 0.76 m of straight vent pipe.

Wall and roof termination (non-concentric) exhaust pipe must terminate with reducer to improve exhaust velocity away from intake piping.

- 070 - 50, 80, or 100 mm (2, 3 or 4 in.) - terminate with 40 mm (1-1/2 in.) pipe
- 090 - 50, 80, or 100 mm (2, 3 or 4 in.) - terminate with 50 mm (2 in.) pipe
- 110 - 80 or 100 mm (3 or 4 in.) - terminate with 50 mm (2 in.) pipe
- 135 - 80 or 100 mm (3 or 4 in.) - terminate with 50 mm (2 in.) pipe

### Termination Kits - Equivalent Vent Lengths

<table>
<thead>
<tr>
<th>Heat Size</th>
<th>Vent Pipe Diameter</th>
<th>Concentric Kits</th>
<th>Vent Pipe Equivalent Length - meters</th>
<th>Outdoor Exhaust Accelerator (Diameter x Length)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 71M80 or 69M29</td>
<td>2 60L46</td>
<td>40 mm (1-1/2 in.) x 305 mm</td>
</tr>
<tr>
<td>-070</td>
<td>50 mm (2 in.)</td>
<td>3.6</td>
<td>not allowed</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>80 mm (3 in.)</td>
<td>7.3</td>
<td>not allowed</td>
<td>2.4</td>
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<tr>
<td></td>
<td>100 mm (4 in.)</td>
<td>12.8</td>
<td>not allowed</td>
<td>4.3</td>
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<tr>
<td>-090</td>
<td>50 mm (2 in.)</td>
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<td></td>
<td>80 mm (3 in.)</td>
<td>1.8</td>
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<td></td>
<td>100 mm (4 in.)</td>
<td>3.7</td>
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<td></td>
<td>100 mm (4 in.)</td>
<td>3.7</td>
<td>3.7</td>
<td>not allowed</td>
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<tr>
<td>-135</td>
<td>80 mm (3 in.)</td>
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<td>4.8</td>
<td>not allowed</td>
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<tr>
<td></td>
<td>100 mm (4 in.)</td>
<td>not allowed</td>
<td>7.6</td>
<td>not allowed</td>
</tr>
</tbody>
</table>

1. Outdoor exhaust accelerator included in 71M80 kit; for use with -070 models.
NOTE - On upflow and downflow configurations, the vent piping and condensate drain can be moved to the other side of the unit. Vent piping and drain must be installed on the same side of the unit with each other unless optional Condensate Trap Alternate Location Kit (upflow only) is used. On horizontal installations the drain must be located at the bottom and the vent piping at the top.

### FILTER AIR RESISTANCE

For 25 mm Cleanable Filter (Field Provided)

<table>
<thead>
<tr>
<th>L/s</th>
<th>Pa</th>
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<tbody>
<tr>
<td>0</td>
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</tr>
<tr>
<td>95</td>
<td>2</td>
</tr>
<tr>
<td>190</td>
<td>7</td>
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<td>285</td>
<td>10</td>
</tr>
<tr>
<td>375</td>
<td>15</td>
</tr>
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<td>470</td>
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</tr>
<tr>
<td>565</td>
<td>30</td>
</tr>
<tr>
<td>660</td>
<td>37</td>
</tr>
<tr>
<td>755</td>
<td>47</td>
</tr>
<tr>
<td>850</td>
<td>57</td>
</tr>
<tr>
<td>945</td>
<td>67</td>
</tr>
<tr>
<td>1040</td>
<td>82</td>
</tr>
<tr>
<td>1130</td>
<td>94</td>
</tr>
<tr>
<td>1225</td>
<td>109</td>
</tr>
</tbody>
</table>

### INSTALLATION CLEARANCES

<table>
<thead>
<tr>
<th></th>
<th>Sides</th>
<th>Rear</th>
<th>Top/Plenum</th>
<th>Front</th>
<th>Front (service/alcove)</th>
<th>Floor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 0 mm</td>
<td>0 mm</td>
<td>25 mm</td>
<td>0 mm</td>
<td>610 mm</td>
<td>2 Combustible</td>
</tr>
</tbody>
</table>

1 Allow proper clearances to accommodate condensate trap and vent pipe installation.
2 Clearance for installation on combustible floor if optional downflow combustible floor base is installed between furnace and combustible floor. Not required in add-on cooling applications if installed in accordance with local codes. Do not install the furnace directly on carpeting, tile, or other combustible materials other than wood flooring.
**NOTE** - 60C and 60D size units that require air volumes over 850 L/s must have one of the following:

a. Single side return air with transition, to accommodate 508 x 635 x 25 mm air filter. Required to maintain proper air velocity.

b. Bottom return air.

c. Return air from both sides.

d. Bottom and one side return air.

See Blower Performance Tables for additional information.

---

**Model No.**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>G61MPVT-36B-070</td>
<td>446</td>
<td>416</td>
<td>406</td>
</tr>
<tr>
<td>G61MPVT-60C-090</td>
<td>533</td>
<td>505</td>
<td>495</td>
</tr>
<tr>
<td>G61MPVT-60C-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G61MPVT-60D-135</td>
<td>622</td>
<td>594</td>
<td>584</td>
</tr>
</tbody>
</table>
DIMENSIONS - MM - FURNACE/COIL COMBINED DIMENSIONS

upflow POSITION

Model No | Cased | Uncased (CX34 - cased only)
---------|-------|------------------------
CX34-18/24B-6F | C33-24B | 419 | 1435 | 352 | 1368
CX34-18/24C-6F | C33-24C | 470 | 1486 | 403 | 1419
CX34-25B-6F | C33-25B | 521 | 1537 | 451 | 1467
CX34-30B-6F | C33-30B | 572 | 1588 | 514 | 1530
CX34-30C-6F | C33-30C | 622 | 1638 | 556 | 1572
CX34-31B-6F | C33-31B | 622 | 1638 | 540 | 1556
CX34-36B-6F | C33-36B | 622 | 1638 | 559 | 1575
CX34-36C-6F | C33-36C | 622 | 1638 | 556 | 1572
CX34-38B-6F | C33-38B | 699 | 1715 | 667 | 1683
CX34-38C-6F | C33-38C | 699 | 1715 | 654 | 1670
CX34-42B-6F | C33-42B | 622 | 1638 | 546 | 1562
CX34-42C-6F | C33-42C | 622 | 1638 | 562 | 1578
CX34-44/48B-6F | C33-48B | 622 | 1638 | 546 | 1562
CX34-44/48C-6F | C33-48C | 622 | 1638 | 546 | 1562
CX34-49C-6F | C33-49C | 699 | 1715 | 629 | 1645
CX34-50/60C-6F | C33-60D | 648 | 1664 | 629 | 1645
CX34-50/60D-6F | C33-60D | 800 | 1816 | 778 | 1793
CX34-62D-6F | C33-62D | 749 | 1765 | 730 | 1746

HORIZONTAL POSITION

Model Number | A | B
-------------|---|---
CH33-36B-2F | CH33-42B-2F | 673 | 1689
CH33-36C-2F | CH33-48C-2F | CH33-60D-2F
CH33-44/48B-2F | CH33-62D-2F | 800 | 1816

downflow POSITION

Model Number | Coil Width | Furnace Width | Coil Height | Overall Height
--------------|-------------|---------------|-------------|----------------
CR33-24B-F    | 446         | 446           | 337         | 1353
CR33-30/36B-F | 446         | 446           | 410         | 1426
CR33-30/36C-F | 533         | 533           | 410         | 1426
CR33-48B-F    | 533         | 446           | 508         | 1524
CR33-48C-F    | 533         | 533           | 508         | 1524
CR33-50/60C-F | 622         | 533           | 600         | 1362
CR33-60D-F    | 622         | 622           | 600         | 1362
### Optional Accessory Dimensions - MM

#### Down-flow Combustible Floor Base

<table>
<thead>
<tr>
<th>Model No.</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>G61MPVT-36B-070</td>
<td>497</td>
<td>421</td>
<td>476</td>
</tr>
<tr>
<td>G61MPVT-60C-090</td>
<td>586</td>
<td>510</td>
<td>565</td>
</tr>
<tr>
<td>G61MPVT-60C-110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G61MPVT-60D-135</td>
<td>675</td>
<td>598</td>
<td>654</td>
</tr>
</tbody>
</table>
OPTIONAL ACCESSORY DIMENSIONS - MM

CONCENTRIC WALL TERMINATION APPLICATIONS

- INTAKE AIR
- EXHAUST AIR
- OUTSIDE WALL
- Clamp (Not Furnished)
- Minimum Above Grade
- 305 Minimum Above Average Snow Accumulation

CONCENTRIC ROOF TERMINATION APPLICATIONS

- CLAMP
- FLASHING (Not Furnished)
- SHEET METAL STRAP
  (Clamp and sheet metal strap must be fieldinstalled to support the weight of the termination kit.)

71M80/69M29 - 2 inch
60L46 — 3 inch
See Installation Instructions for specific usage.

- 848 - 71M80/69M29
- 987 - 60L46
- 89 - 71M80/69M29
- 114 - 60L46
- 165
- 152
- EXHAUST AIR
- INTAKE AIR
- ELBOW (Field Supplied)
- TERMINATION ASSEMBLY (Furnished)
- Outdoor Exhaust Accelerator included with 71M80
  (Required with -070 models)
### BLOWER DATA - 0 through 200 Pa External Static Pressure Range

#### G61MPVT-36B-070 BLOWER PERFORMANCE (less filter)

<table>
<thead>
<tr>
<th>Switch Positions</th>
<th>Second Stage “HEAT” Speed - L/s</th>
<th>Second Stage “COOL” Speed - L/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>420</td>
<td>480</td>
</tr>
<tr>
<td>1 NORM</td>
<td>385</td>
<td>440</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>395</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Switch Positions</th>
<th>First Stage “HEAT” Speed - L/s</th>
<th>First Stage “COOL” Speed - L/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>385</td>
<td>345</td>
</tr>
<tr>
<td>1 NORM</td>
<td>360</td>
<td>320</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>295</td>
</tr>
</tbody>
</table>

#### G61MPVT-60C-090 BLOWER PERFORMANCE (less filter)

**Bottom Return Air, Return Air from Both Sides or Return Air from Bottom and One Side.**

<table>
<thead>
<tr>
<th>Switch Positions</th>
<th>Second Stage “HEAT” Speed - L/s</th>
<th>Second Stage “COOL” Speed - L/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>710</td>
<td>755</td>
</tr>
<tr>
<td>1 NORM</td>
<td>640</td>
<td>680</td>
</tr>
<tr>
<td></td>
<td>565</td>
<td>600</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Switch Positions</th>
<th>First Stage “HEAT” Speed - L/s</th>
<th>First Stage “COOL” Speed - L/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>640</td>
<td>520</td>
</tr>
<tr>
<td>1 NORM</td>
<td>575</td>
<td>470</td>
</tr>
<tr>
<td></td>
<td>520</td>
<td>420</td>
</tr>
</tbody>
</table>

#### G61MPVT-60C-090 BLOWER PERFORMANCE (less filter)

**Single Side Return Air - Air volumes in bold require field fabricated transition to accommodate 508 x 635 x 25 mm cleanable air filter in order to maintain proper air velocity across the filter.**

<table>
<thead>
<tr>
<th>Switch Positions</th>
<th>Second Stage “HEAT” Speed - L/s</th>
<th>Second Stage “COOL” Speed - L/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>685</td>
<td>745</td>
</tr>
<tr>
<td>1 NORM</td>
<td>625</td>
<td>665</td>
</tr>
<tr>
<td></td>
<td>550</td>
<td>590</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Switch Positions</th>
<th>First Stage “HEAT” Speed - L/s</th>
<th>First Stage “COOL” Speed - L/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>620</td>
<td>510</td>
</tr>
<tr>
<td>1 NORM</td>
<td>560</td>
<td>465</td>
</tr>
<tr>
<td></td>
<td>505</td>
<td>410</td>
</tr>
</tbody>
</table>

#### G61MPVT-60C-110 BLOWER PERFORMANCE (less filter)

**Bottom Return Air, Return Air from Both Sides or Return Air from Bottom and One Side.**

<table>
<thead>
<tr>
<th>Switch Positions</th>
<th>Second Stage “HEAT” Speed - L/s</th>
<th>Second Stage “COOL” Speed - L/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>710</td>
<td>745</td>
</tr>
<tr>
<td>1 NORM</td>
<td>645</td>
<td>690</td>
</tr>
<tr>
<td></td>
<td>570</td>
<td>610</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Switch Positions</th>
<th>First Stage “HEAT” Speed - L/s</th>
<th>First Stage “COOL” Speed - L/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>645</td>
<td>445</td>
</tr>
<tr>
<td>1 NORM</td>
<td>580</td>
<td>395</td>
</tr>
<tr>
<td></td>
<td>520</td>
<td>350</td>
</tr>
</tbody>
</table>

---

1 Factory default jumper setting.

N/A - First and second stage HEAT positions shown cannot be used on this model.

NOTES - The effect of static pressure is included in air volumes shown.

First stage HEAT is approximately 91% of the same second stage HEAT speed position.

First stage COOL (two-stage air conditioning units only) is approximately 70% of the same second stage COOL speed position.

Continuous Fan Only speed is approximately 38% of the same second stage COOL speed position - minimum 235 L/s.
### BLOWER DATA - 0 through 200 Pa External Static Pressure Range

**G61MPVT-60C-110 BLOWER PERFORMANCE (less filter)**

Single Side Return Air - Air volumes in bold require field fabricated transition to accommodate 508 x 635 x 25 mm cleanable air filter in order to maintain proper air velocity across the filter.

#### Switch Positions

<table>
<thead>
<tr>
<th>&quot;ADJUST&quot; Switch Positions</th>
<th>Speed Switch Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Second Stage &quot;HEAT&quot; Speed - L/s</strong></td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>+</td>
<td>700</td>
</tr>
<tr>
<td>1 NORM</td>
<td>635</td>
</tr>
<tr>
<td>-</td>
<td>555</td>
</tr>
</tbody>
</table>

#### Switch Positions

<table>
<thead>
<tr>
<th>&quot;ADJUST&quot; Switch Positions</th>
<th>Speed Switch Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>First Stage &quot;HEAT&quot; Speed - L/s</strong></td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>+</td>
<td>625</td>
</tr>
<tr>
<td>1 NORM</td>
<td>565</td>
</tr>
<tr>
<td>-</td>
<td>510</td>
</tr>
</tbody>
</table>

**G61MPVT-60D-135 BLOWER PERFORMANCE (less filter)**

Bottom Return Air, Return Air from Both Sides or Return Air from Bottom and One Side.

#### Switch Positions

<table>
<thead>
<tr>
<th>&quot;ADJUST&quot; Switch Positions</th>
<th>Speed Switch Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Second Stage &quot;HEAT&quot; Speed - L/s</strong></td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>+</td>
<td>710</td>
</tr>
<tr>
<td>1 NORM</td>
<td>645</td>
</tr>
<tr>
<td>-</td>
<td>580</td>
</tr>
</tbody>
</table>

#### Switch Positions

<table>
<thead>
<tr>
<th>&quot;ADJUST&quot; Switch Positions</th>
<th>Speed Switch Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>First Stage &quot;HEAT&quot; Speed - L/s</strong></td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>+</td>
<td>655</td>
</tr>
<tr>
<td>1 NORM</td>
<td>590</td>
</tr>
<tr>
<td>-</td>
<td>535</td>
</tr>
</tbody>
</table>

1 Factory default jumper setting.

N/A - First and second stage HEAT positions shown cannot be used on this model.

NOTES - The effect of static pressure is included in air volumes shown.

First stage HEAT is approximately 91% of the same second stage HEAT speed position.

First stage COOL (two-stage air conditioning units only) is approximately 70% of the same second stage COOL speed position.

Continuous Fan Only speed is approximately 38% of the same second stage COOL speed position - minimum 235 L/s.
<table>
<thead>
<tr>
<th>Sections</th>
<th>Description of Change</th>
</tr>
</thead>
</table>
| Optional Accessories Table/ Gas Heating Accessories | Replaced SignatureStat with ComfortSense 7000  
Updated High Altitude Pressure Switch Kits, Natural to LPG Conversion Kits and LPG to Natural Conversion Kits |
| Dimensions | Changed height on cased, CX34-19A, CX34-25A/B, CX34-31A/B, CX34-43B/C, CX34-62C |