



# PG9MTAV MULTIPOISE CONDENSING VARIABLE SPEED GAS FURNACE

## Product Data

### 90+ Variable Speed Two-Stage Heating Furnace

#### FLEXIBILITY

- Supports two-stage cooling units
- Dual Certified venting (1 or 2 pipe), Direct Vent Furnace
- 40" high with wider cabinets, for ease of installation
- Factory shipped for natural gas, with Propane
- Gas conversion kits available
- Four position - upflow/downflow/horizontal installation
- Vent pipe can be run horizontally or vertically
- Internal condensate drain system

#### SERVICE

- Self diagnostics
- Entire blower assembly removable

#### COMFORT

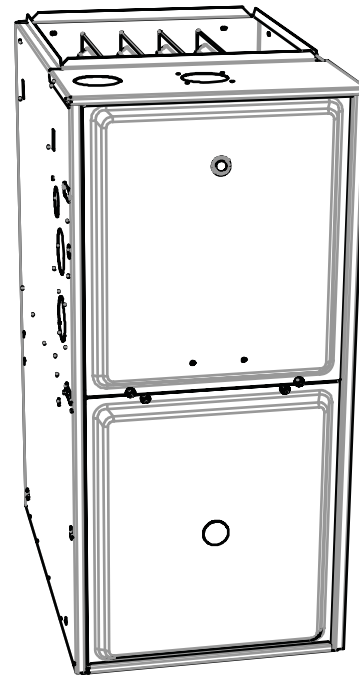
- Adjustable timed blower heating Off delay
- Adjustable timed blower cooling On/Off delay
- Thermal lined, one piece steel cabinet for noise reduction
- Insulated blower compartment
- 24 and 115VAC humidifier terminals
- Electronic air cleaner terminal
- Dehumidification option

#### EFFICIENCY

- 92.1% AFUE
- Two-stage operation
- BPM Variable speed DC motor
- Two-stage Induced draft blower
- In-shot burners

#### QUALITY

- Stainless steel primary heat exchanger
- Stainless steel secondary heat exchanger
- High temperature limit control prevents overheating
- Direct ignition with Silicon Nitride ignitor
- Flame roll-out sensors standard
- External filter rack with permanent filters
- Solid doors
- 5 year limited parts warranty
- 20 year heat exchanger warranty



A07836

### **WARNING**

#### APPLICATION OPERATION HAZARD

Failure to follow this warning could result in personal injury or death

This furnace is not designed for use in mobile homes, trailers, or recreational vehicles.



As an ENERGY STAR Partner, Payne Heating & Cooling Systems has determined that this product meets the ENERGY STAR guidelines for energy efficiency.



| Model Number | Dimensions<br>H x W x D (In.)                                    | Input<br>(MBTUH) | Efficiency<br>AFUE | Cooling Capacity. @ .5 in wc |
|--------------|------------------------------------------------------------------|------------------|--------------------|------------------------------|
| PG9MTAV36050 | 40 x 19 <sup>1</sup> / <sub>8</sub> x 29<br>1016 x 486.8 x 736.6 | 50               | 92.1               | 2.0 - 3.0 TON                |
| PG9MTAV36075 | 40 x 19 <sup>1</sup> / <sub>8</sub> x 29<br>1016 x 577.9 x 736.6 | 75               | 92.1               | 2.0 - 3.0 TON                |
| PG9MTAV60100 | 40 x 22 <sup>3</sup> / <sub>4</sub> x 29<br>1016 x 572.9 x 736.6 | 100              | 92.1               | 3.0 - 4.0 TON                |
| PG9MTAV60125 | 40 x 24 <sup>1</sup> / <sub>2</sub> x 29<br>1016 x 622.3 x 736.6 | 125              | 92.1               | 3.5 - 5.0 TON                |

**Upflow / Downflow / Horizontal (Natural Gas)**

| Model Number                                           | PG9MTAV36050                                                       | PG9MTAV36075                                                       | PG9MTAV60100                                                       | PG9MTAV60125                                                       |
|--------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------|
| INPUT HIGH HEAT (BTUH)<br>LOW HEAT (BTUH)              | 50,000<br>35,000                                                   | 75,000<br>52,500                                                   | 100,000<br>70,000                                                  | 125,000<br>87,500                                                  |
| HTG. CAP. HIGH HEAT (BTUH)<br>LOW HEAT (BTUH)          | 46,000<br>32,000                                                   | 70,000<br>48,000                                                   | 93,000<br>65,000                                                   | 118,000<br>82,000                                                  |
| AFUE % (ICS)                                           | 92.1                                                               | 92.1                                                               | 92.1                                                               | 92.1                                                               |
| TEMP. RISE RANGE High Heat (°F/°C)<br>Low Heat (°F/°C) | 35-65/19-36<br>35-65/19-36                                         | 40-70/22-39<br>40-70/22-39                                         | 40-70/22-39<br>40-70/22-39                                         | 40-70/22-39<br>40-70/22-39                                         |
| VENT SIZE^                                             | 2" OD                                                              | 2" - 3" OD                                                         | 3" OD                                                              | 3" OD                                                              |
| VOLTS/HZ/PH                                            | 115/60/1                                                           | 115/60/1                                                           | 115/60/1                                                           | 115/60/1                                                           |
| RATING PLATE AMPS.                                     | 9.5                                                                | 11.4                                                               | 14.6                                                               | 15.4                                                               |
| MIN./MAX. VOLTAGE                                      | 104/127                                                            | 104/127                                                            | 104/127                                                            | 104/127                                                            |
| TRANSFORMER (V.A.)                                     | 40                                                                 | 40                                                                 | 40                                                                 | 40                                                                 |
| GAS PIPE SIZE (IN.)                                    | 1/2                                                                | 1/2                                                                | 1/2                                                                | 1/2                                                                |
| COOLING CAP. (TONS)                                    | 3.0                                                                | 3.0                                                                | 5.0                                                                | 5.0                                                                |
| HIGH ALTITUDE PRESSURE SWITCH                          | 1013165                                                            | 1013165                                                            | 1013165                                                            | 1013157                                                            |
| FILTER SIZE (IN. / mm)                                 | 16X25X1(1)<br>406.4 x 635.0 x 25.4                                 | 16X25X1(1)<br>406.4 x 635.0 x 25.4                                 | 16X25X1(2)<br>406.4 x 635.0 x 25.4                                 | 16X25X1(2)<br>406.4 x 635.0 x 25.4                                 |
| DIMENSIONS (in.) WIDTH X DEPTH X HEIGHT                | 19 <sup>1</sup> / <sub>8</sub> x 29 x 40<br>485.8 x 736.6 x 1016.0 | 19 <sup>1</sup> / <sub>8</sub> x 29 x 40<br>485.8 x 736.6 x 1016.0 | 22 <sup>3</sup> / <sub>4</sub> x 29 x 40<br>577.9 x 736.6 x 1016.0 | 24 <sup>1</sup> / <sub>2</sub> x 29 x 40<br>622.3 x 736.6 x 1016.0 |
| WEIGHT (Lbs.)                                          | 150                                                                | 168                                                                | 187                                                                | 203                                                                |

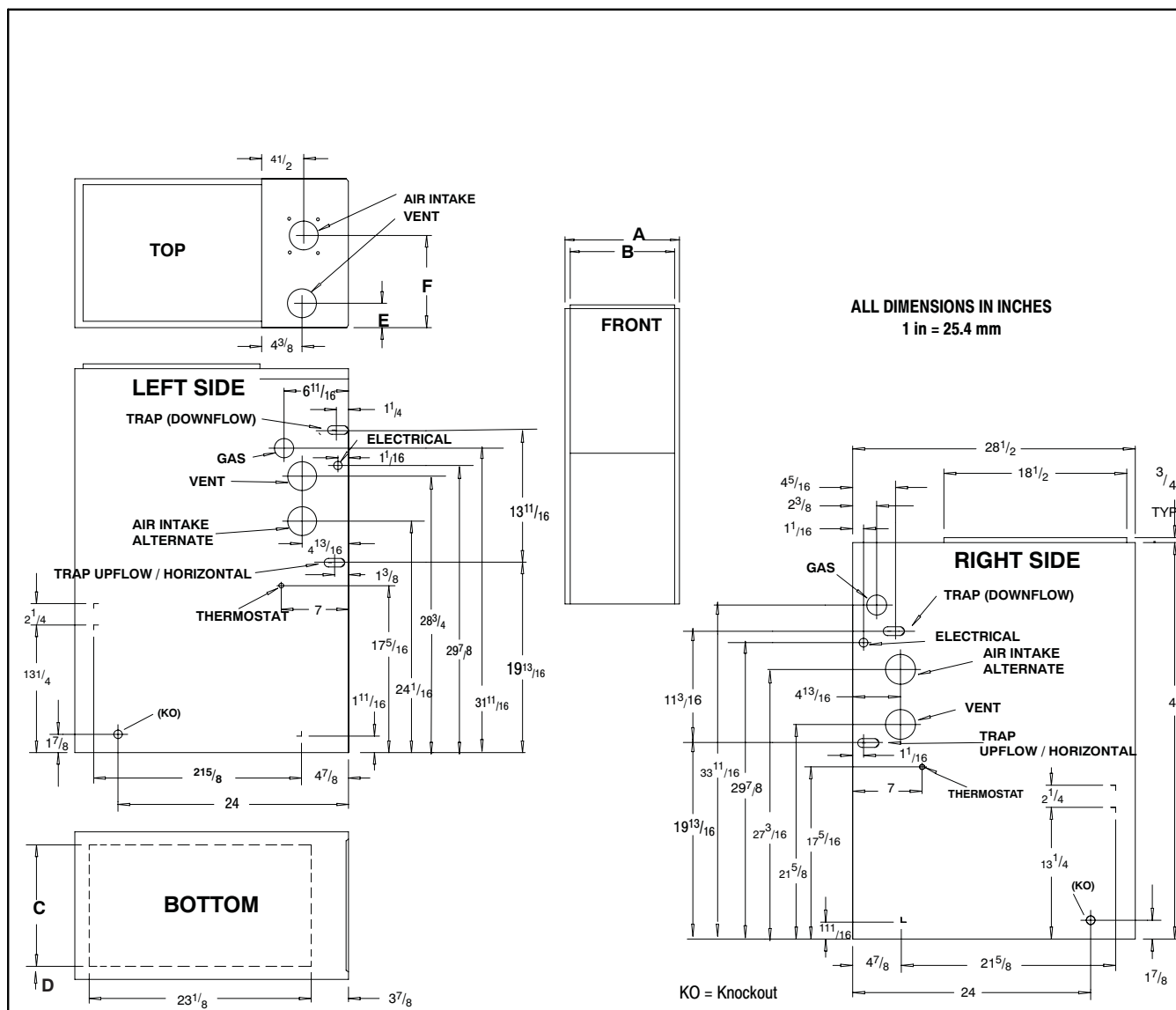
^ Vent size may vary depending on length, number of elbows, standard vent or direct vent. See Installation Instructions.

\* Denotes Brand (C, H, T)

**Furnace Specifications**

| Cabinet to Combustible Clearances |      |    |    |      |      |      |
|-----------------------------------|------|----|----|------|------|------|
| TOP                               | BOT. | RH | LH | BACK | FRNT | FLUE |
| 1"                                | 0"   | 0" | 0" | 0"   | 3"   | 0"   |

| Dimensions       |                                |                                |                                |                                 |                               |                                |
|------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------------|-------------------------------|--------------------------------|
| Unit<br>Capacity | Cabinet                        |                                | Bottom                         |                                 | Top                           |                                |
|                  | A                              | B                              | C                              | D                               | E                             | F                              |
| PG9MTAV36050     | 19 <sup>1</sup> / <sub>8</sub> | 17 <sup>5</sup> / <sub>8</sub> | 14 <sup>3</sup> / <sub>4</sub> | 2 <sup>1</sup> / <sub>8</sub>   | 2 <sup>1</sup> / <sub>2</sub> | 9 <sup>1</sup> / <sub>2</sub>  |
| PG9MTAV36075     | 19 <sup>1</sup> / <sub>8</sub> | 17 <sup>5</sup> / <sub>8</sub> | 14 <sup>3</sup> / <sub>4</sub> | 2 <sup>1</sup> / <sub>8</sub>   | 2 <sup>1</sup> / <sub>2</sub> | 9 <sup>1</sup> / <sub>2</sub>  |
| PG9MTAV60100     | 22 <sup>3</sup> / <sub>4</sub> | 21 <sup>1</sup> / <sub>4</sub> | 18 <sup>3</sup> / <sub>4</sub> | 1 <sup>15</sup> / <sub>16</sub> | 2 <sup>5</sup> / <sub>8</sub> | 11 <sup>3</sup> / <sub>8</sub> |
| PG9MTAV60125     | 24 <sup>1</sup> / <sub>2</sub> | 23                             | 23                             | 7 <sup>7</sup> / <sub>16</sub>  | 2 <sup>1</sup> / <sub>4</sub> | 12 <sup>1</sup> / <sub>4</sub> |



A07834

## PART NUMBER NOMENCLATURE

|                                                                                                                                       |                       |          |          |          |          |           |            |                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------|----------|----------|----------|-----------|------------|-----------------------------------------------------------------------------------------------|
| <b>Brand Identifier</b><br>P = Payne<br>G = Gas Furnace                                                                               | <b>PG</b><br><b>9</b> | <b>M</b> | <b>T</b> | <b>A</b> | <b>V</b> | <b>36</b> | <b>075</b> | <b>#</b><br><b>Engineering Rev.</b><br>Denotes minor changes                                  |
| <b>Model Efficiency</b><br>9 = Condensing Furnace                                                                                     |                       |          |          |          |          |           |            | <b>Input (Nominal) MBtuh</b><br>050 = 50,000<br>075 = 75000<br>100 = 100,000<br>125 = 125,000 |
| <b>Installation Configuration</b><br>U = Upflow      D = Downflow      Y = Upflow/Horizontal<br>H = Horizontal      M = Multiposition |                       |          |          |          |          |           |            | <b>Cooling Airflow</b><br>36 = 1200 CFM<br>60 = 2000 CFM                                      |
| <b>Electrical</b><br><br>A = 1 Stage, 110V, 60 Hz<br>T = 2 Stage, 110V, 60 Hz                                                         |                       |          |          |          |          |           |            | <b>Major Design Feature</b><br>0 = PSC Motor<br>V = Variable Speed                            |
|                                                                                                                                       |                       |          |          |          |          |           |            | <b>Marketing Digit</b><br>Denotes major change                                                |

## ACCESSORIES

| Model Number | Description                                                                                                                                   | Used With Models                                                                                           |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| KGAPN37012HW | Gas Conversion Kits (2-Stage) - Propane to natural gas conversion kit. Allows field conversion to natural gas.                                | PG9MTAV                                                                                                    |
| KGANP44012HW | Gas Conversion Kits (2-Stage) - Natural gas to Propane conversion Kit (includes low pressure switch). Allows field conversion to Propane gas. | PG9MTAV                                                                                                    |
| KGAFR0901P16 | Filter Kits - External filter frame. 16" x 25"                                                                                                | Side Return (All Furnaces)<br>Bottom Return (All 19 <sup>1</sup> / <sub>8</sub> " Furnaces under 1600 CFM) |
| KGAFR001P20  | Filter Kits - Bottom return filter frame kit 20" x 25"                                                                                        | (All 22 <sup>3</sup> / <sub>4</sub> " Furnaces)                                                            |
| P908-0001*   | Condensate Neutralizer Kit - for condensing gas furnaces                                                                                      | All PG9MTAV Furnaces if Required                                                                           |
| KGASB0301P01 | Combustible Floor Subbase - Subbase Furnace ONLY: All 19 <sup>1</sup> / <sub>4</sub> " wide furnace models                                    | PG9MTAV 36050/075                                                                                          |
| KGASB0401P02 | Combustible Floor Subbase - Subbase Furnace ONLY: All 22 <sup>3</sup> / <sub>4</sub> " wide furnace models                                    | PG9MTAV 60100                                                                                              |
| KGASB0801P06 | Combustible Floor Subbase - Subbase Furnace ONLY: All 24 <sup>1</sup> / <sub>2</sub> " wide furnace models                                    | PG9MTAV 60125                                                                                              |
| KGASB0501P03 | Subbase - Furnace w/19 <sup>1</sup> / <sub>4</sub> " cased coil                                                                               | PG9MTAV 36050/075<br>Counterflow furnace w/19 <sup>1</sup> / <sub>4</sub> " cased coil                     |
| KGASB0601P04 | Subbase - Furnace w/22 <sup>3</sup> / <sub>4</sub> " cased coil                                                                               | PG9MTAV60100<br>Counterflow furnace w/22 <sup>3</sup> / <sub>4</sub> " cased coil                          |
| KGASB0701P05 | Subbase Furnace w/24 <sup>1</sup> / <sub>2</sub> " cased coil                                                                                 | PG9MTAV60125<br>Counterflow furnace w/24 <sup>1</sup> / <sub>2</sub> " cased coil                          |
| 333719-751   | High Altitude Pressure Switch Kit                                                                                                             | PG9MTAV, 050, 075 & 100                                                                                    |
| 333720-751   | High Altitude Pressure Switch Kit                                                                                                             | PG9MTAV60125                                                                                               |
| KGAVT0601CVT | 3" Concentric Vent Kit - allows single wall penetration for 2 pipe direct vent applications (90+).                                            | PG9MTAV60100/125                                                                                           |
| KGAVT0501CVT | 2" Concentric Vent Kit - allows single wall penetration for 2 pipe direct vent applications (90+).                                            | PG9MTAV36050/075                                                                                           |
| KGADA0101PYN | Coil Adapter for Downflow Furnaces                                                                                                            | All Downflow Models                                                                                        |

\*Must be ordered from Service Parts

# Circulation Air Blower Data - PG9MTAV36050

| Cooling CFM Adjustment |                        |                             |                          | Heating Rise Adjustment |                                    |                                          |
|------------------------|------------------------|-----------------------------|--------------------------|-------------------------|------------------------------------|------------------------------------------|
| DIP Switch 5 & 6       | High Cool @ 0.50 in wc | Low Cool (80% of High Cool) | ** Adjust Jumper Setting | DIP Switch 3 & 4        | High Heat Rise Change @ 0.20 in wc | Low Heat Rise Change at Resultant Static |
| 00                     | 1246                   | 997                         | +                        | 00                      | -4                                 | -3                                       |
| *00                    | 1211                   | 969                         | *NOM                     | *00                     | 0                                  | 0                                        |
| 00                     | 1122                   | 898                         | -                        | 00                      | 5                                  | 5                                        |
| 01                     | 1105                   | 884                         | +                        | 01                      | 3                                  | 4                                        |
| 01                     | 1027                   | 822                         | NOM                      | 01                      | 7                                  | 7                                        |
| 01                     | 945                    | 756                         | -                        | 01                      | 13                                 | 14                                       |
| 10                     | 892                    | 714                         | +                        | 10                      | -1                                 | 0                                        |
| 10                     | 820                    | 656                         | NOM                      | 10                      | 4                                  | 5                                        |
| 10                     | 745                    | 596                         | -                        | 10                      | 9                                  | 9                                        |
| 11                     | 688                    | 550                         | +                        | 11                      | -15                                | -15                                      |
| 11                     | 609                    | 487                         | NOM                      | 11                      | -13                                | -12                                      |
| 11                     | 541                    | 433                         | -                        | 11                      | -9                                 | -9                                       |

Airflow performance includes 1" (25.4 mm) washable filter media.

\*Factory Setting

\*\*Adjust Jumper Setting (+, NOM, -) is applied to both Cooling and Heating

Note 1: HP Mode Jumper provides a 10% reduction in airflow when in Comfort position and a call for low or high cooling is present with the "O" line off. This feature is to provide lower airflow for running in HP Heating Mode if desirable.

Note 2: DEHUM mode (24VAC on DEHUM terminal) provides a 20% airflow reduction during cooling calls.

Note 3: Low Heat ESP is a result of High Heat ESP (- is decrease in rise).

Note 4: High and low heat rise values are approximate air temperature change from return air temperature when at factory default settings.

| Table 2          | Continuous Fan @ 0.10" in wc ESP |
|------------------|----------------------------------|
| DIP Switch 1 & 2 | Airflow (CFM)                    |
| *00              | 592                              |
| 01               | 1021                             |
| 10               | 1346                             |
| 11               | 1346                             |

| Table 3    | SW2 DIP Assignments |
|------------|---------------------|
| DIP Switch | Blower Parameter    |
| 1 & 2      | Cont Fan Adj        |
| 3 & 4      | Heat Speed Adj      |
| 5 & 6      | Cool Speed Adj      |
| 7 & 8      | Cool On/Off Delay   |

\* Factory Setting

| Table 4       | Cooling Delay Options (SW2 - 7, 8) |                         |                 |                          |
|---------------|------------------------------------|-------------------------|-----------------|--------------------------|
|               | ON DELAY                           |                         | OFF DELAY       |                          |
| DIP SW2 - 7/8 | Timed ON (sec)                     | Airflow during on delay | Timer OFF (sec) | Airflow during off delay |
| *00           | 5                                  | OFF                     | 90              | 100%                     |
| 01            | 5                                  | OFF                     | 0               | OFF                      |
| 10            | 30                                 | 50%                     | 30              | 100%                     |
| 11            | 30                                 | 50%                     | 180             | 50%                      |

Airflow % is of High Cool airflow demand determined from SW2-5/6 Table 1

Airflow resumes to 100% after on delay time is completed

Airflow stops (or switches to continuous fan speed) after off delay time is completed

\* Factory Setting

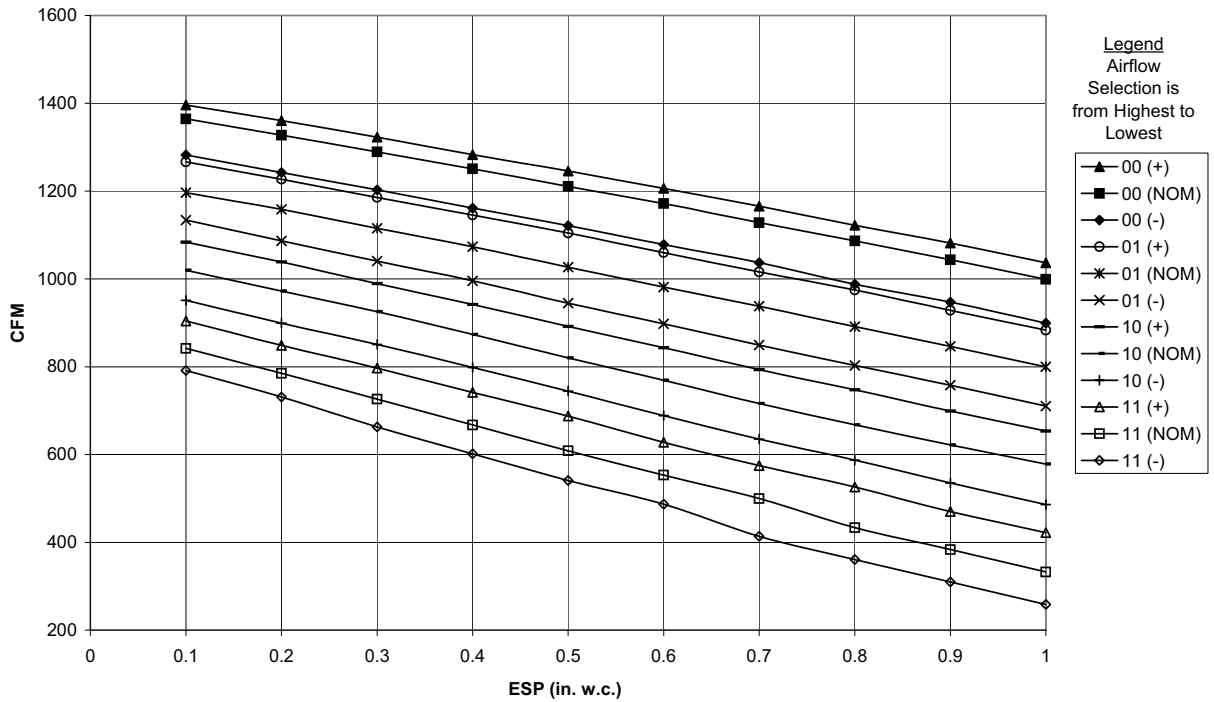
| MAX CFM's for Factory Washable Filters |               |
|----------------------------------------|---------------|
| Dimensions (in/mm)                     | Airflow (CFM) |
| 14" x 25" / 355.6 x 635.0              | 1400          |
| 16" x 25" / 406.4 x 635.0              | 1600          |
| 20" x 25" / 508.0 x 635.0              | 2000          |
| 24" x 25" / 609.6 x 635.0              | 2500          |
| MAX CFM based on 600 FPM               |               |

Note 1: Disposable filters are typically rated at 300 FPM. These filters only allow half the airflow when compared to 600 FPM filters. (example, 20 x 25 @ 600 FPM = 2000CFM, @ 300 FPM = 1000 CFM)

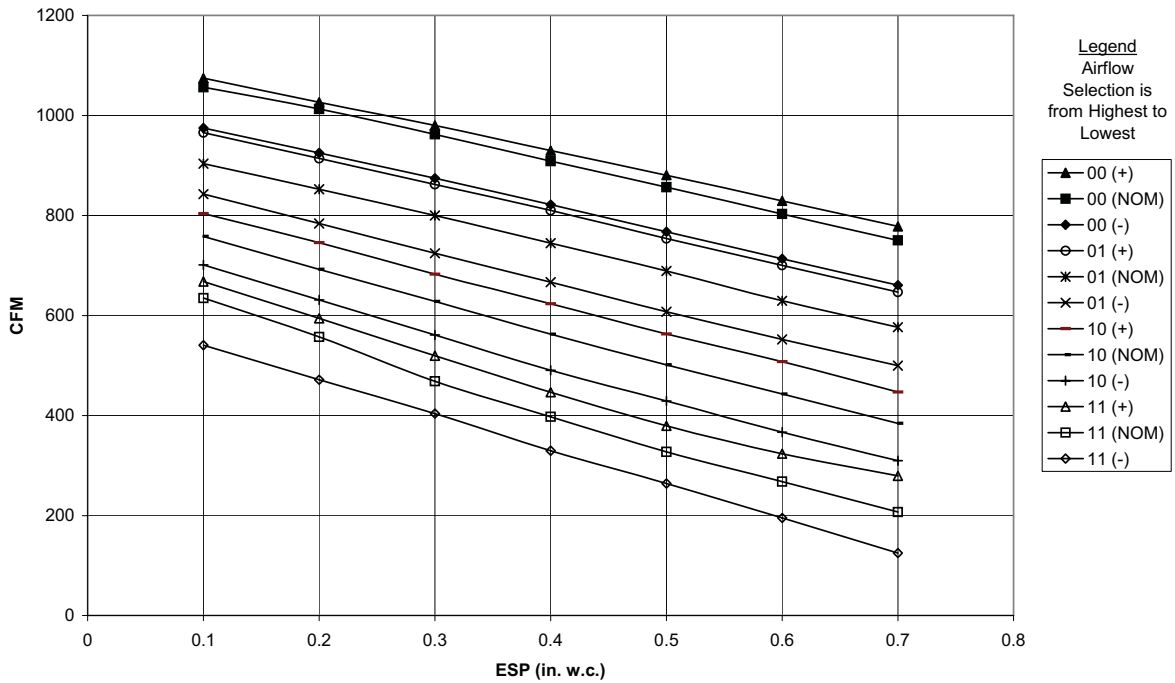
# Circulation Air Blower Data - PG9MTAV36050

## Cooling Airflow Settings

### High Cooling Airflows



### Low Cooling Airflows



# Circulation Air Blower Data - PG9MTAV36075

| Cooling CFM Adjustment |                        |                             |                          | Heating Rise Adjustment |                                    |                                          |
|------------------------|------------------------|-----------------------------|--------------------------|-------------------------|------------------------------------|------------------------------------------|
| DIP Switch 5 & 6       | High Cool @ 0.50 in wc | Low Cool (80% of High Cool) | ** Adjust Jumper Setting | DIP Switch 3 & 4        | High Heat Rise Change @ 0.20 in wc | Low Heat Rise Change at Resultant Static |
| 00                     | 1342                   | 1074                        | +                        | 00                      | -4                                 | -4                                       |
| *00                    | 1210                   | 968                         | *NOM                     | *00                     | 0                                  | 0                                        |
| 00                     | 1053                   | 842                         | -                        | 00                      | 5                                  | 4                                        |
| 01                     | 1135                   | 908                         | +                        | 01                      | 1                                  | 1                                        |
| 01                     | 1020                   | 816                         | NOM                      | 01                      | 6                                  | 5                                        |
| 01                     | 872                    | 698                         | -                        | 01                      | 12                                 | 10                                       |
| 10                     | 965                    | 772                         | +                        | 10                      | -1                                 | -1                                       |
| 10                     | 840                    | 672                         | NOM                      | 10                      | 3                                  | 3                                        |
| 10                     | 680                    | 544                         | -                        | 10                      | 9                                  | 8                                        |
| 11                     | 708                    | 566                         | +                        | 11                      | -6                                 | -6                                       |
| 11                     | 590                    | 472                         | NOM                      | 11                      | -2                                 | -3                                       |
| 11                     | 488                    | 390                         | -                        | 11                      | 3                                  | 2                                        |

Airflow performance includes 1" (25.4 mm) washable filter media.

\*Factory Setting

\*\*Adjust Jumper Setting (+, NOM, -) is applied to both Cooling and Heating

Note 1: HP Mode Jumper provides a 10% reduction in airflow when in Comfort position and a call for low or high cooling is present with the "O" line off. This feature is to provide lower airflow for running in HP Heating Mode if desirable.

Note 2: DEHUM mode (24VAC on DEHUM terminal) provides a 20% airflow reduction during cooling calls.

Note 3: Low Heat ESP is a result of High Heat ESP (- is decrease in rise).

Note 4: High and low heat rise values are approximate air temperature change from return air temperature when at factory default settings.

| Table 2          | Continuous Fan @ 0.10" in wc ESP |
|------------------|----------------------------------|
| DIP Switch 1 & 2 | Airflow (CFM)                    |
| *00              | 612                              |
| 01               | 1096                             |
| 10               | 1403                             |
| 11               | 1403                             |

| Table 3    | SW2 DIP Assignments |
|------------|---------------------|
| DIP Switch | Blower Parameter    |
| 1 & 2      | Cont Fan Adj        |
| 3 & 4      | Heat Speed Adj      |
| 5 & 6      | Cool Speed Adj      |
| 7 & 8      | Cool On/Off Delay   |

## \* FACTORY SETTING

| Table 4       | Cooling Delay Options (SW2 - 7, 8) |                         |                 |                          |
|---------------|------------------------------------|-------------------------|-----------------|--------------------------|
|               | ON DELAY                           |                         | OFF DELAY       |                          |
| DIP SW2 - 7/8 | Timed ON (sec)                     | Airflow during on delay | Timer OFF (sec) | Airflow during off delay |
| *00           | 5                                  | OFF                     | 90              | 100%                     |
| 01            | 5                                  | OFF                     | 0               | OFF                      |
| 10            | 30                                 | 50%                     | 30              | 100%                     |
| 11            | 30                                 | 50%                     | 180             | 50%                      |

Airflow % is of High Cool airflow demand determined from SW2-5/6 Table 1

Airflow resumes to 100% after on delay time is completed

Airflow stops (or switches to continuous fan speed) after off delay time is completed

| MAX CFM's for Factory Washable Filters |               |
|----------------------------------------|---------------|
| Dimensions (in/mm)                     | Airflow (CFM) |
| 14" x 25" / 355.6 x 635.0              | 1400          |
| 16" x 25" / 406.4 x 635.0              | 1600          |
| 20" x 25" / 508.0 x 635.0              | 2000          |
| 24" x 25" / 609.6 x 635.0              | 2500          |
| MAX CFM based on 600 FPM               |               |

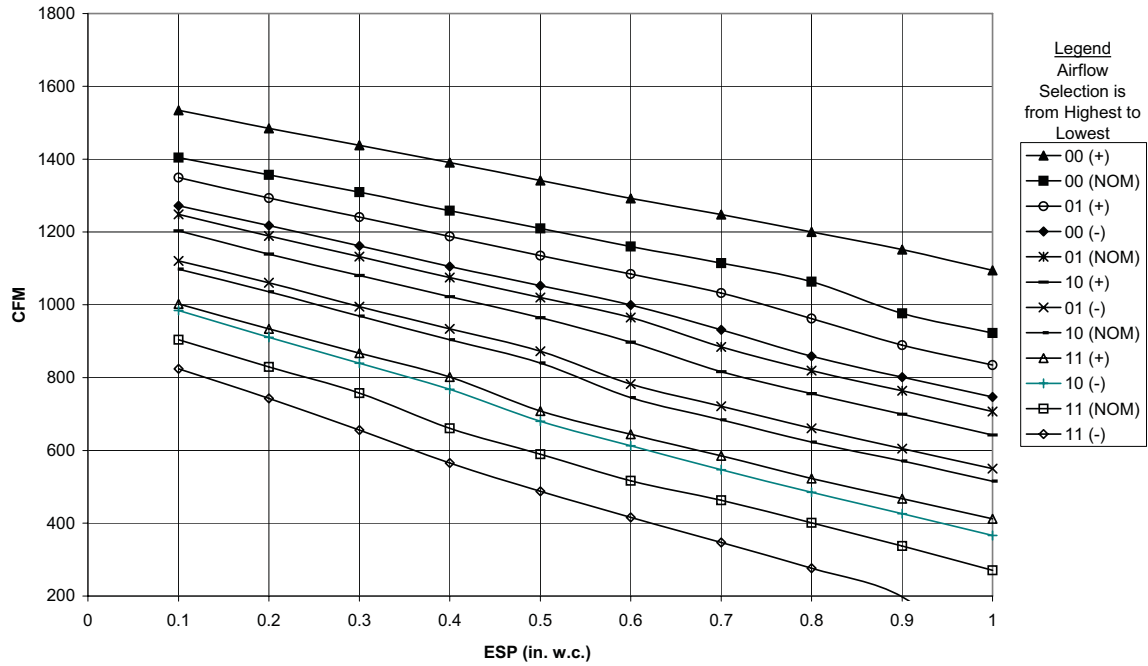
\* Factory Setting

Note 1: Disposable filters are typically rated at 300 FPM. These filters only allow half the airflow when compared to 600 FPM filters. (example, 20 x 25 @ 600 FPM = 2000CFM, @ 300 FPM = 1000 CFM)

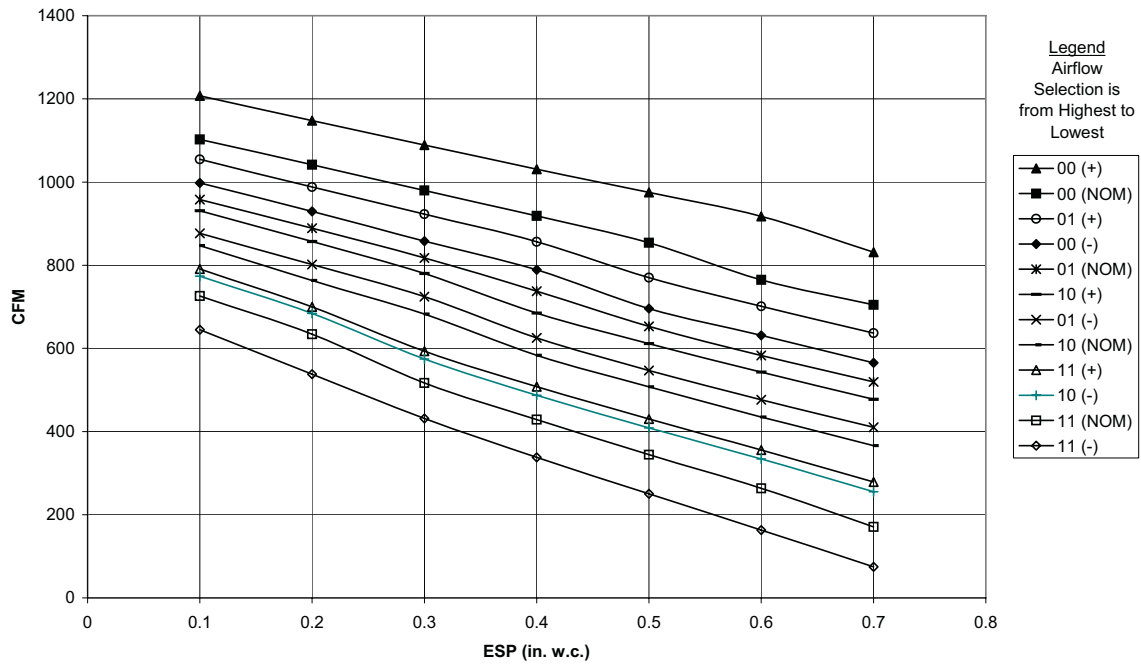
# Circulation Air Blower Data - PG9MTAV36075

## Cooling Airflow Settings

### High Cooling Airflows



### Low Cooling Airflows



# Circulation Air Blower Data - PG9MTAV60100

| Cooling CFM Adjustment |                        |                             |                          | Heating Rise Adjustment |                                    |                                          |
|------------------------|------------------------|-----------------------------|--------------------------|-------------------------|------------------------------------|------------------------------------------|
| DIP Switch 5 & 6       | High Cool @ 0.50 in wc | Low Cool (80% of High Cool) | ** Adjust Jumper Setting | DIP Switch 3 & 4        | High Heat Rise Change @ 0.20 in wc | Low Heat Rise Change at Resultant Static |
| 00                     | 2144                   | 1715                        | +                        | 00                      | -4                                 | -4                                       |
| *00                    | 2013                   | 1610                        | *NOM                     | *00                     | 0                                  | 0                                        |
| 00                     | 1842                   | 1474                        | -                        | 00                      | 5                                  | 5                                        |
| 01                     | 1772                   | 1418                        | +                        | 01                      | 2                                  | 1                                        |
| 01                     | 1624                   | 1299                        | NOM                      | 01                      | 8                                  | 7                                        |
| 01                     | 1471                   | 1177                        | -                        | 01                      | 14                                 | 14                                       |
| 10                     | 1367                   | 1094                        | +                        | 10                      | 0                                  | -1                                       |
| 10                     | 1227                   | 982                         | NOM                      | 10                      | 6                                  | 5                                        |
| 10                     | 1077                   | 862                         | -                        | 10                      | 13                                 | 11                                       |
| 11                     | 930                    | 744                         | +                        | 11                      | -6                                 | -7                                       |
| 11                     | 808                    | 646                         | NOM                      | 11                      | -2                                 | -2                                       |
| 11                     | 634                    | 507                         | -                        | 11                      | 3                                  | 3                                        |

Airflow performance includes 1" (25.4 mm) washable filter media.

\*Factory Setting

\*\*Adjust Jumper Setting (+, NOM, -) is applied to both Cooling and Heating

Note 1: HP Mode Jumper provides a 10% reduction in airflow when in Comfort position and a call for low or high cooling is present with the "O" line off. This feature is to provide lower airflow for running in HP Heating Mode if desirable.

Note 2: DEHUM mode (24VAC on DEHUM terminal) provides a 20% airflow reduction during cooling calls.

Note 3: Low Heat ESP is a result of High Heat ESP (- is decrease in rise).

Note 4: High and low heat rise values are approximate air temperature change from return air temperature when at factory default settings.

| Table 2          | Continuous Fan @ 0.10" in wc ESP |
|------------------|----------------------------------|
| DIP Switch 1 & 2 | Airflow (CFM)                    |
| *00              | 1007                             |
| 01               | 1742                             |
| 10               | 2204                             |
| 11               | 2204                             |

| Table 3    | SW2 DIP Assignments |
|------------|---------------------|
| DIP Switch | Blower Parameter    |
| 1 & 2      | Cont Fan Adj        |
| 3 & 4      | Heat Speed Adj      |
| 5 & 6      | Cool Speed Adj      |
| 7 & 8      | Cool On/Off Delay   |

\* Factory Setting

| Table 4       | Cooling Delay Options (SW2 - 7, 8) |                         |                 |                          |
|---------------|------------------------------------|-------------------------|-----------------|--------------------------|
|               | ON DELAY                           |                         | OFF DELAY       |                          |
| DIP SW2 - 7/8 | Timed ON (sec)                     | Airflow during on delay | Timer OFF (sec) | Airflow during off delay |
| *00           | 5                                  | OFF                     | 90              | 100%                     |
| 01            | 5                                  | OFF                     | 0               | OFF                      |
| 10            | 30                                 | 50%                     | 30              | 100%                     |
| 11            | 30                                 | 50%                     | 180             | 50%                      |

Airflow % is of High Cool airflow demand determined from SW2-5/6 Table 1

Airflow resumes to 100% after on delay time is completed

Airflow stops (or switches to continuous fan speed) after off delay time is completed

| MAX CFM's for Factory Washable Filters |               |
|----------------------------------------|---------------|
| Dimensions (in/mm)                     | Airflow (CFM) |
| 14" x 25" / 355.6 x 635.0              | 1400          |
| 16" x 25" / 406.4 x 635.0              | 1600          |
| 20" x 25" / 508.0 x 635.0              | 2000          |
| 24" x 25" / 609.6 x 635.0              | 2500          |
| MAX CFM based on 600 FPM               |               |

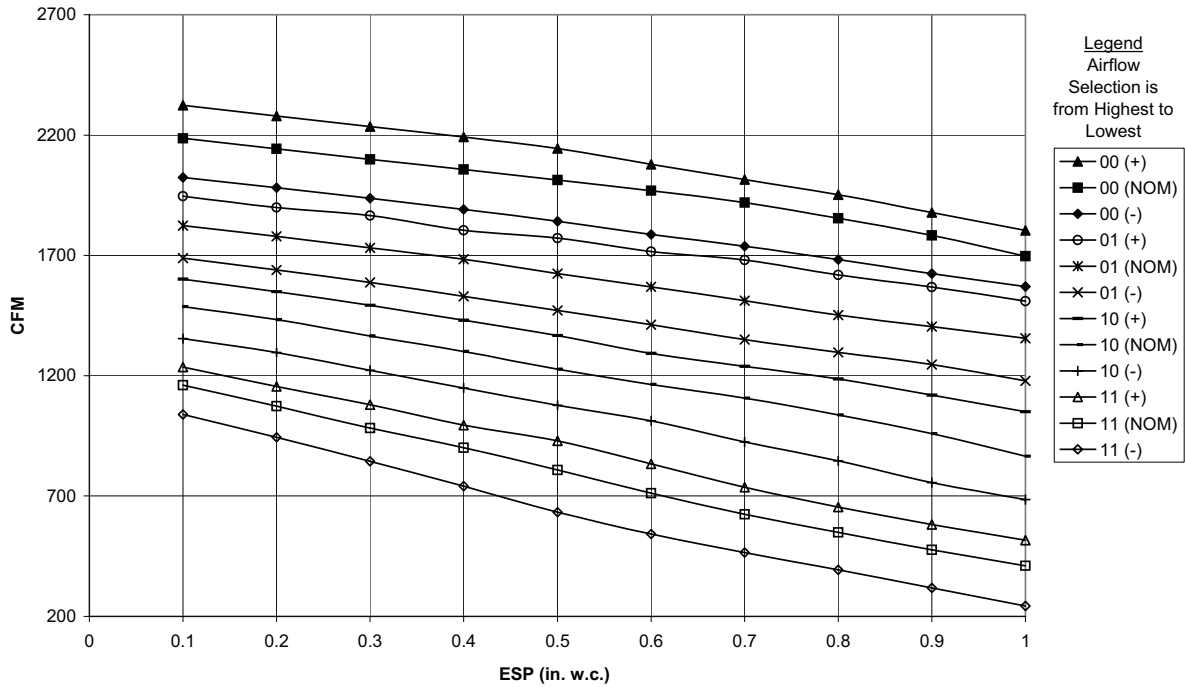
\* Factory Setting

Note 1: Disposable filters are typically rated at 300 FPM. These filters only allow half the airflow when compared to 600 FPM filters. (example, 20 x 25 @ 600 FPM = 2000CFM, @ 300 FPM = 1000 CFM)

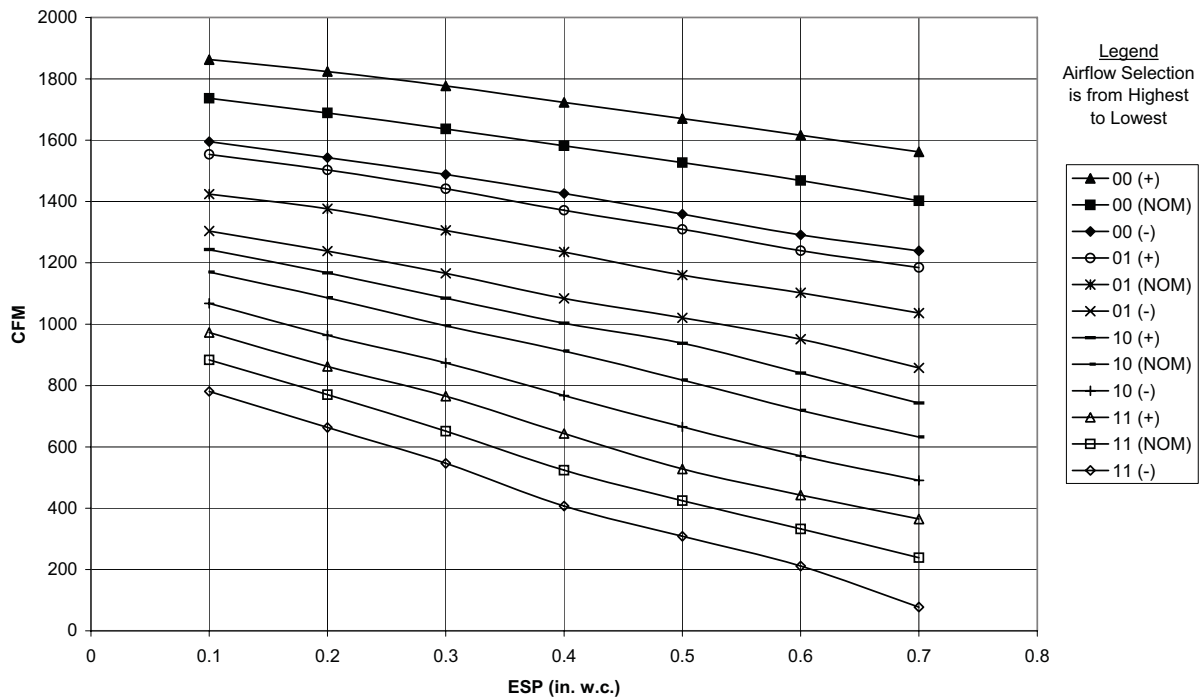
# Circulation Air Blower Data - PG9MTAV60100

## Cooling Airflow Settings

### High Cooling Airflows



### Low Cooling Airflows



# Circulation Air Blower Data - PG9MTAV60125

| Cooling CFM Adjustment |                        |                             |                          | Heating Rise Adjustment |                                    |                                          |
|------------------------|------------------------|-----------------------------|--------------------------|-------------------------|------------------------------------|------------------------------------------|
| DIP Switch 5 & 6       | High Cool @ 0.50 in wc | Low Cool (80% of High Cool) | ** Adjust Jumper Setting | DIP Switch 3 & 4        | High Heat Rise Change @ 0.20 in wc | Low Heat Rise Change at Resultant Static |
| 00                     | 2150                   | 1720                        | +                        | 00                      | -4                                 | -4                                       |
| *00                    | 2025                   | 1620                        | *NOM                     | *00                     | 0                                  | 0                                        |
| 00                     | 1856                   | 1485                        | -                        | 00                      | 4                                  | 5                                        |
| 01                     | 1755                   | 1404                        | +                        | 01                      | 1                                  | 2                                        |
| 01                     | 1615                   | 1292                        | NOM                      | 01                      | 6                                  | 7                                        |
| 01                     | 1452                   | 1162                        | -                        | 01                      | 12                                 | 13                                       |
| 10                     | 1338                   | 1070                        | +                        | 10                      | -1                                 | 0                                        |
| 10                     | 1201                   | 961                         | NOM                      | 10                      | 3                                  | 4                                        |
| 10                     | 1069                   | 855                         | -                        | 10                      | 9                                  | 10                                       |
| 11                     | 909                    | 727                         | +                        | 11                      | -6                                 | -6                                       |
| 11                     | 800                    | 640                         | NOM                      | 11                      | -3                                 | -3                                       |
| 11                     | 627                    | 502                         | -                        | 11                      | 3                                  | 3                                        |

Airflow performance includes 1" (25.4 mm) washable filter media.

\*Factory Setting

\*\*Adjust Jumper Setting (+, NOM, -) is applied to both Cooling and Heating

Note 1: HP Mode Jumper provides a 10% reduction in airflow when in Comfort position and a call for low or high cooling is present with the "O" line off. This feature is to provide lower airflow for running in HP Heating Mode if desirable.

Note 2: DEHUM mode (24VAC on DEHUM terminal) provides a 20% airflow reduction during cooling calls.

Note 3: Low Heat ESP is a result of High Heat ESP (- is decrease in rise).

Note 4: High and low heat rise values are approximate air temperature change from return air temperature when at factory default settings.

| Table 2          | Continuous Fan @ 0.10" in wc ESP |
|------------------|----------------------------------|
| DIP Switch 1 & 2 | Airflow (CFM)                    |
| *00              | 1032                             |
| 01               | 1778                             |
| 10               | 2178                             |
| 11               | 2178                             |

| Table 3    | SW2 DIP Assignments |
|------------|---------------------|
| DIP Switch | Blower Parameter    |
| 1 & 2      | Cont Fan Adj        |
| 3 & 4      | Heat Speed Adj      |
| 5 & 6      | Cool Speed Adj      |
| 7 & 8      | Cool On/Off Delay   |

\* Factory Setting

| Table 4       | Cooling Delay Options (SW2 - 7, 8) |                         |                 |                          |
|---------------|------------------------------------|-------------------------|-----------------|--------------------------|
|               | ON DELAY                           |                         | OFF DELAY       |                          |
| DIP SW2 - 7/8 | Timed ON (sec)                     | Airflow during on delay | Timer OFF (sec) | Airflow during off delay |
| *00           | 5                                  | OFF                     | 90              | 100%                     |
| 01            | 5                                  | OFF                     | 0               | OFF                      |
| 10            | 30                                 | 50%                     | 30              | 100%                     |
| 11            | 30                                 | 50%                     | 180             | 50%                      |

Airflow % is of High Cool airflow demand determined from SW2-5/6 Table 1

Airflow resumes to 100% after on delay time is completed

Airflow stops (or switches to continuous fan speed) after off delay time is completed

| MAX CFM's for Factory Washable Filters |               |
|----------------------------------------|---------------|
| Dimensions (in/mm)                     | Airflow (CFM) |
| 14" x 25" / 355.6 x 635.0              | 1400          |
| 16" x 25" / 406.4 x 635.0              | 1600          |
| 20" x 25" / 508.0 x 635.0              | 2000          |
| 24" x 25" / 609.6 x 635.0              | 2500          |
| MAX CFM based on 600 FPM               |               |

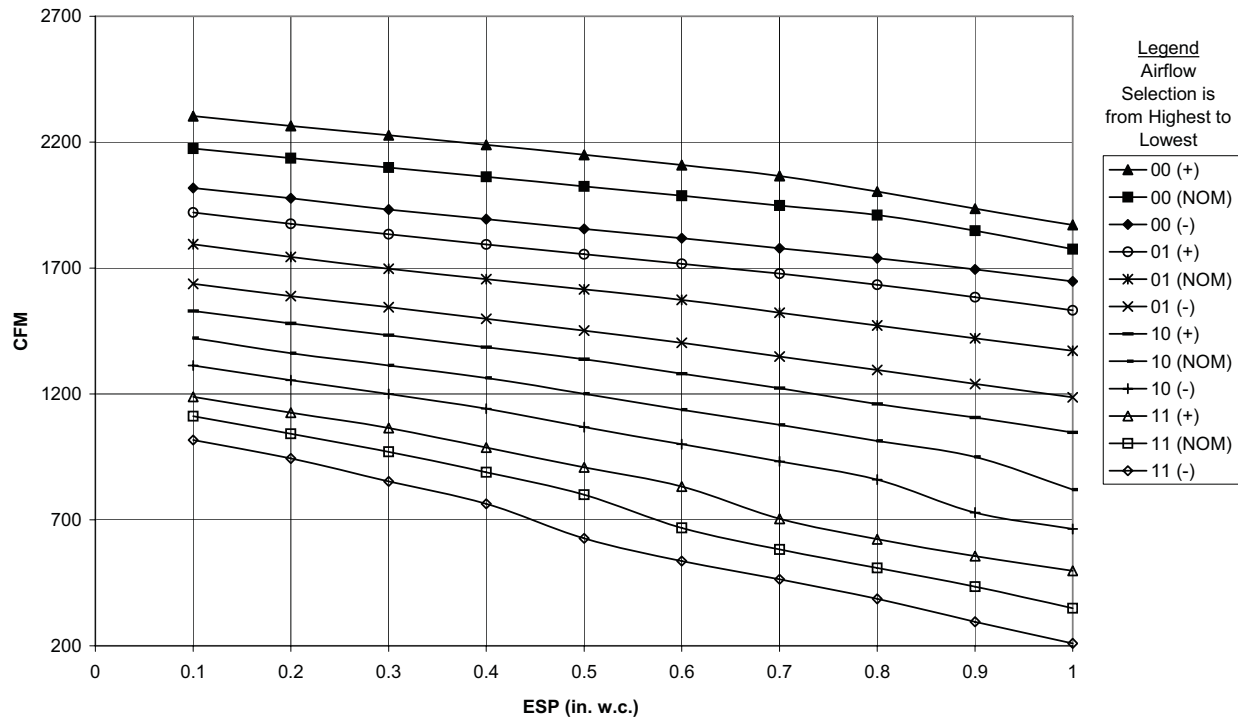
\* Factory Setting

Note 1: Disposable filters are typically rated at 300 FPM. These filters only allow half the airflow when compared to 600 FPM filters. (example, 20 x 25 @ 600 FPM = 2000CFM, @ 300 FPM = 1000 CFM)

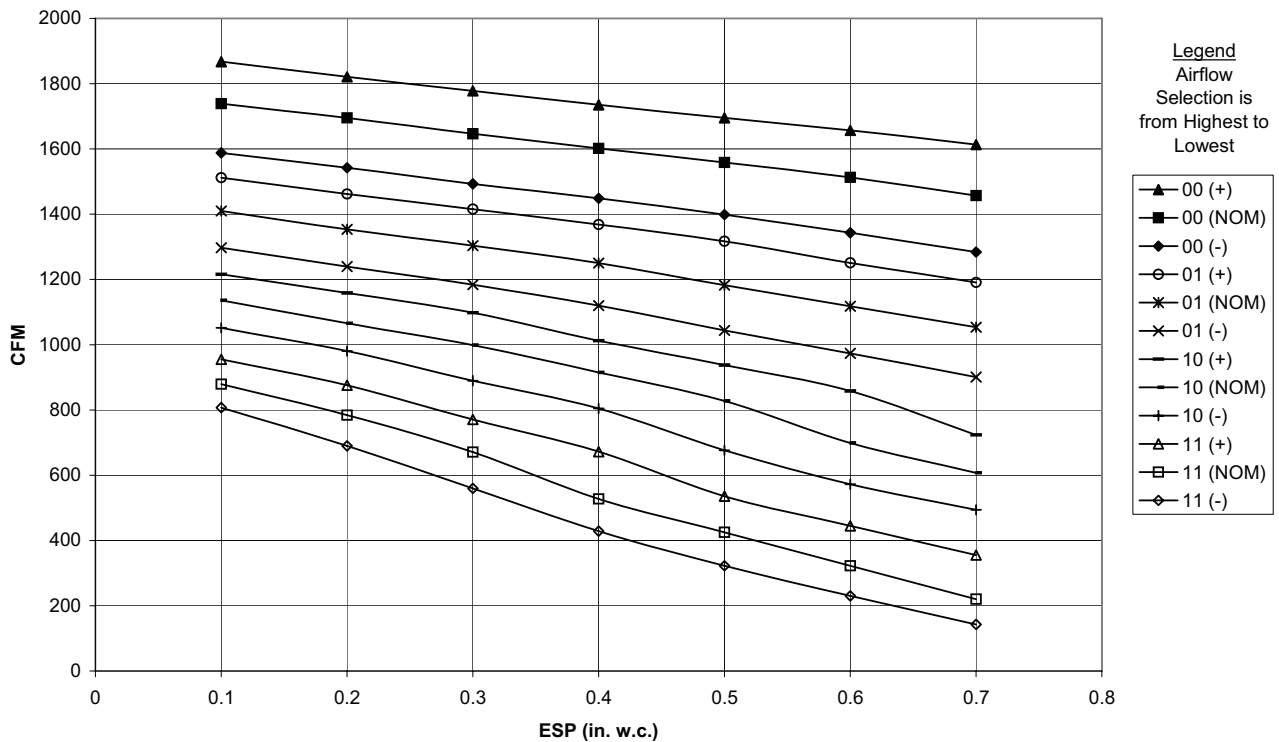
# Circulation Air Blower Data - PG9MTAV60125

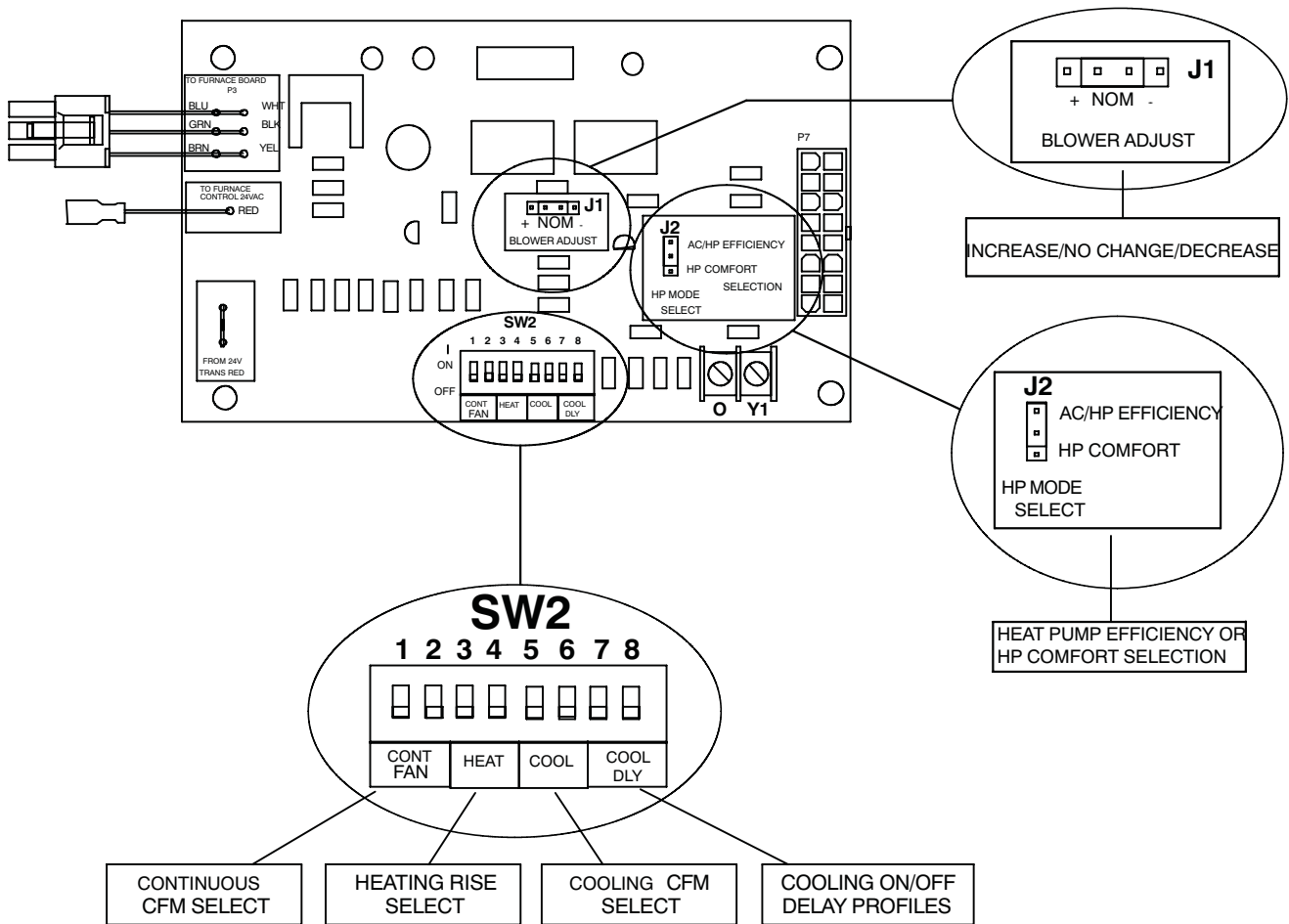
## Cooling Airflow Settings

### High Cooling Airflows



### Low Cooling Airflows





A07835