

## 80+ Variable Speed Two-Stage Heating Furnace

### FLEXIBILITY

- Supports two-stage cooling units
- 40" (1016mm) high, for ease of installation
- Factory shipped for natural gas, with Propane gas conversion kits available
- Four position - upflow/downflow/horizontal installation
- Three position inducer capability
- Category I venting
- Common venting with other Category I appliances

### SERVICE

- Self diagnostics
- Entire blower assembly removable

### COMFORT

- Adjustable timed blower heating Off delay
- Adjustable timed blower cooling On/Off delay
- 24 and 115 VAC humidifier terminals
- Electronic air cleaner terminal

### EFFICIENCY

- 80% AFUE
- Two-stage operation
- BPM Variable speed DC motor
- Two-stage Induced draft blower
- In-shot burners
- California NOx approved

### QUALITY

- RPJ3 Aluminized steel heat exchanger
- High temperature limit control prevents overheating
- Direct ignition with Silicon Nitride ignitor
- Flame roll-out sensors standard
- Louvered doors
- One piece prepainted steel cabinet
- Masonry chimney adapter available (Some models)

### WARRANTY \*

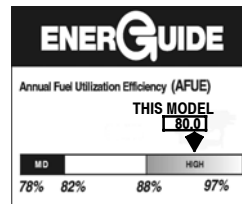
- 10 year No Hassle Replacement™ limited warranty
  - 25 year heat exchanger limited warranty with timely registration
  - 5 year parts limited warranty
    - With timely registration, an additional 5 year parts limited warranty
- \* Applies to original purchaser/homeowner, some limitations may apply. See warranty certificate for complete details.



Illustrations and photographs are only representative. Some product models may vary.

**⚠ WARNING**

This furnace is not designed for use in mobile homes, trailers, or recreational vehicles. Such use could result in property damage and/or death.



| UPFLOW/DOWNFLOW/HORIZONTAL (NATURAL GAS) |  |                  |               |                 |                                      |              |    |
|--|--|------------------|---------------|-----------------|--------------------------------------|--------------|----|
| Model Number                             | Dimensions H x W x D                     |                  | Input (MBTUH) | Efficiency AFUE | Cooling Capacity @ .5 in wc (125 Pa) | Shipping Wt. |    |
|  | Inches                                   | Millimeters      |               |                 |                                      | Lbs          | Kg |
| H8MPV050B12C                             | 40 x 15 <sup>1</sup> / <sub>2</sub> x 29 | 1016 x 394 x 737 | 50,000        | 80%             | 1.5 - 3.0 TON                        | 130          | 59 |
| H8MPV075F14C                             | 40 x 19 <sup>1</sup> / <sub>8</sub> x 29 | 1016 x 486 x 737 | 75,000        | 80%             | 1.5 - 3.5 TON                        | 154          | 70 |
| H8MPV100J20C                             | 40 x 22 <sup>3</sup> / <sub>4</sub> x 29 | 1016 x 578 x 737 | 100,000       | 80%             | 2.5 - 5.0 TON                        | 174          | 79 |
| H8MPV125J20C                             | 40 x 22 <sup>3</sup> / <sub>4</sub> x 29 | 1016 x 578 x 737 | 125,000       | 80%             | 3.0 - 5.0 TON                        | 176          | 80 |

## FURNACE SPECIFICATIONS MULTI-POSITION

| Model Number                         |                 | NATURAL GAS | *8MPV050B12C   | *8MPV075F14C   | *8MPV100J20C  | *8MPV125J20C |
|--------------------------------------|-----------------|-------------|--|--|---|--------------|
| INPUT (btuh)                         | HI Heat         |             | 50,000   | 75,000   | 100,000   | 125,000      |
|                                      | LO Heat         |             | 35,000   | 52,500   | 70,000  | 87,500       |
| HTG. CAP. (btuh)                     | HI Heat         |             | 40,000   | 61,000   | 81,000  | 101,000      |
|                                      | LO Heat         |             | 28,000   | 42,000   | 61,000  | 71,000       |
| AFUE % (ICS)                         |                 |             | 80.0%  | 80.0%  | 80.0%   | 80.0%        |
| NOx (Ng/L)                           |                 |             | <40  |  |   |              |
| TEMP. RISE (DEGREES)                 | HI Heat (°F/°C) |             | 30-60/17-33  | 30-60/17-33  | 35-65/19-36   | 30-60/17-33  |
|                                      | LO Heat (°F/°C) |             | 25-55/14-30  | 25-55/14-30  | 35-65/19-36   | 25-55/14-30  |
| VOLTS/PH/Hz                          |                 |             | 115/60/1   |  |   |              |
| MIN./MAX. VOLTAGE                    |                 |             | 104/127  |  |   |              |
| RATING PLATE AMPS.                   |                 |             | 9.8  | 11.7   | 14.9  | 14.9         |
| TRANSFORMER (V.A.)                   |                 |             | 40   |  |   |              |
| GAS PIPE SIZE - in.(mm)              |                 |             | 1/2 (12.7)   |  |   |              |
| FLUE COLLAR SIZE - in.(mm)           |                 |             | 4 (101.6mm)  |  |   |              |
| COOLING CAP.                         |                 |             | 3.0 TON  | 3.5 TON  | 5.0 TON   | 5.0 TON      |
| FILTER SIZE required - in.(mm) (qty) |                 |             | 14 x 25 x 1 (356 x 635 x 25)   |  | 16 x 25 x 1 (406 x 635 x 25) (2)  |              |
| DIMENSIONS H x W x D - in.(mm)       |                 |             | 40 x 15 <sup>1</sup> / <sub>2</sub> x 28 <sup>1</sup> / <sub>2</sub><br>(1016 x 394 x 724) | 40 x 19 <sup>1</sup> / <sub>8</sub> x 28 <sup>1</sup> / <sub>2</sub><br>(1016 x 486 x 724) | 40 x 22 <sup>3</sup> / <sub>4</sub> x 28 <sup>1</sup> / <sub>2</sub> (1016 x 578 x 724) |              |
| SHIPPING WEIGHT - Lbs(Kg)            |                 |             | 130 (59)   | 154 (70)   | 174 (79)  | 176 (80)     |

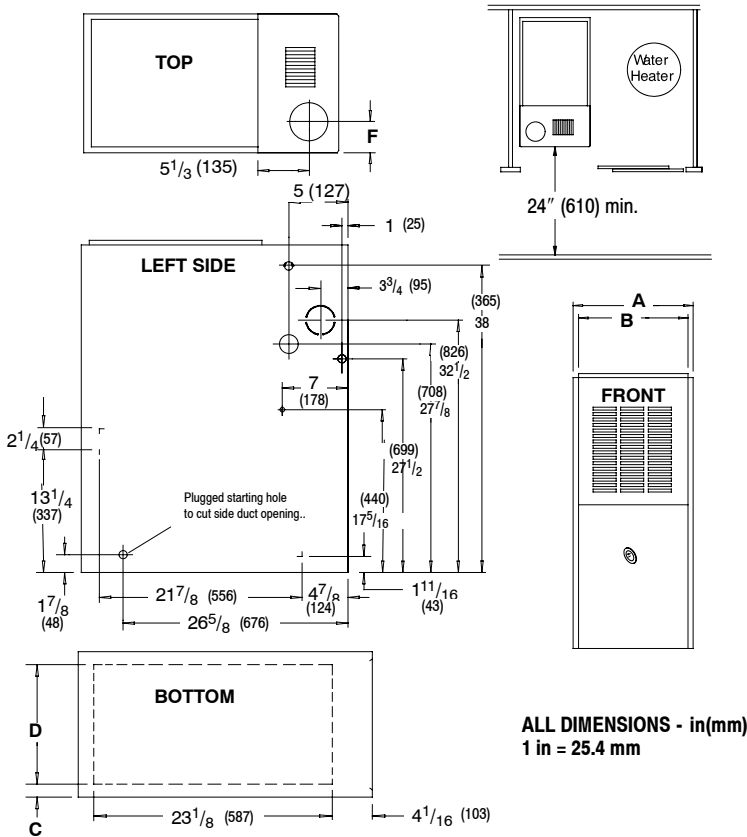
### ACCESSORIES

| Model Number                             | Description   | Used With Models  |
|--|---|---|
| <b>GAS CONVERSION KITS</b>               |   |   |
| NAHA002LP<br>1172959**                   | Natural gas to Propane conversion Kit. Allows field conversion to Propane gas.  | ALL *8MPV FURNACES  |
| NAHA002NG<br>1172961**                   | Propane to natural gas conversion kit. Allows field conversion to natural gas.  | ALL *8MPV FURNACES  |
| <b>VARIABLE SPEED BLOWER UPGRADE KIT</b> |   |   |
| NAHA050VBE                               | Blower Upgrade Kit for B Series furnace only - Variable speed blower upgrade conversion to a two stage cooling compatible variable speed motor (consists of blower motor and electronics for two stage furnaces ONLY) | *8MPV050  |
| NAHA075VBE                               |   | *8MPV075  |
| NAHA100VBE                               |   | *8MPV100  |
| NAHA125VBE                               |   | *8MPV125  |
| <b>FILTER KITS</b>                       |   |   |
| NAHA001FF                                | Filter Kits - External filter frame. 16" x 25" (406mm x 635mm)  | Side Return (All Furnaces) Bottom Return (All "F" 19 <sup>1</sup> / <sub>8</sub> " Furnaces under 1600 CFM)   |
| NAHA001FP                                | External filter frame. 16" x 25" (406mm x 635mm) Bulk Pack Kit - Qty 10   |   |
| NAHA002FF                                | Filter Kits - Bottom return filter frame kit 20" x 25" (508mm x 635mm)  | All "J" 22 <sup>3</sup> / <sub>4</sub> " Furnaces   |
| NAHA002FP                                | Bottom return filter frame kit 20" x 25" (508mm x 635mm) Bulk Pack Kit - Qty 10   |   |
| NAHA003FF                                | Bottom or side return filter frame kit 14" x 25" (356mm x 635mm)  | All "B" 15 <sup>1</sup> / <sub>2</sub> " Furnaces   |
| NAHA003FP                                | Bottom return filter frame kit 14" x 25" (356mm x 635mm) Bulk Pack Kit - Qty 10   |   |
| NAHA001TK                                | Duct Standoff Filter Kit. To adapt 20" x 25" (508mm x 635mm) filter for single side return.   | Side Return (All single return applications with 1600 CFM or greater)<br>Bottom Return (All "F" 19 <sup>1</sup> / <sub>8</sub> " Furnaces under 1600 CFM) |
| <b>COMBUSTIBLE FLOOR SUBBASES</b>        |   |   |
| NAHH001SB                                | Subbase Furnace ONLY: All 15 <sup>1</sup> / <sub>2</sub> " wide furnace models  | *8MPV050B   |
| NAHH002SB                                | Subbase Furnace ONLY: All 19 <sup>1</sup> / <sub>4</sub> " wide furnace models  | *8MPV075F-100F  |
| NAHH003SB                                | Subbase Furnace ONLY: All 22 <sup>3</sup> / <sub>4</sub> " wide furnace models  | *8MPV100J-125J  |
| NAHH004SB                                | Subbase Furnace w/ 15 <sup>1</sup> / <sub>2</sub> " cased coil  | Counterflow furnace *8MPV050B   |
| NAHH005SB                                | Subbase Furnace w/ 19 <sup>1</sup> / <sub>4</sub> " cased coil  | Counterflow furnace *8MPV075F-100F  |
| NAHH006SB                                | Subbase Furnace w/ 22 <sup>3</sup> / <sub>4</sub> " cased coil  | Counterflow furnace *8MPV100J-125J  |
| <b>MASONRY CHIMNEY ADAPTER</b>           |   |   |
| NAHA001DH                                | Chimney adapter 6"(152mm)   | *8MPV075, 100   |
| NAHA002DH                                | Chimney adapter 7"(178mm)   | *8MPV125  |
| <b>VENT GUARD</b>                        |   |   |
| NAHA002VC                                | Downflow vent guard   | All Furnaces in the Downflow Application  |
| <b>COIL ADAPTER</b>                      |   |   |
| NAHA001CA                                | Coil Adapter for Downflow Furnaces  | All Furnaces in the Downflow Application  |
| <b>WARNING LABEL REPLACEMENT KIT</b>     |   |   |
| NAHA002WL                                | To replace Warning Labels, Operating Instructions & Wiring Labels on Blower Door when needed  | *8MPV   |

\* Denotes Brand (C, H, T)

\*\* Must be ordered from Service Parts

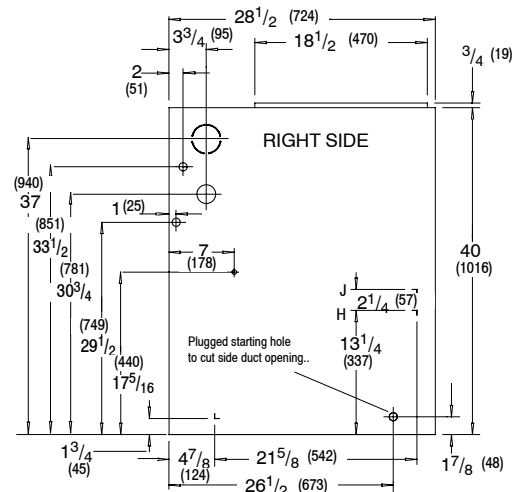
# UNIT DIMENSIONS



| MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS FOR ALL UNITS   |               |
|---|---------------|
| REAR  | 0             |
| FRONT (combustion air openings in furnace and in structure) | 3" (76 mm)    |
| Required For Service  | *24" (610 mm) |
| ALL SIDES OF SUPPLY PLENUM                                  | 1" (25 mm)    |
| SIDES   | 0             |
| VENT  |               |
| Single Wall Vent  | 6" (152 mm)   |
| Type B-1 Double Wall Vent                                   | 1" (25 mm)    |
| TOP OF FURNACE  | 1" (25 mm)    |

\*30" (762 mm) clearance recommended for furnace removal.

Horizontal position: Line contact is permissible only between lines formed by intersections of top and two sides of furnace jacket, and building joists, studs or framing.



**NOTE:** Evaporator "A" coil drain pan dimensions may vary from furnace duct opening size. Always consult evaporator specifications for duct size requirements.

Furnace is designed for bottom return or side return. Return air through back of furnace is NOT allowed.

| Furnace Capacity | Cabinet      |              | Top         | Bottom      |              | Return Air Opening |
|------------------|--------------|--------------|-------------|-------------|--------------|--------------------|
|                  | A            | B            | F           | C           | D            |                    |
| *8MPV050B12      | 15 1/2 (394) | 14 (356)     | 6 (152)     | 1 3/8 (35)  | 12 5/8 (321) | H                  |
| *8MPV075F14      | 19 1/8 (486) | 17 1/2 (445) | 7 3/4 (197) | 2 1/8 (54)  | 14 3/4 (375) | J                  |
| *8MPV100J20      | 22 3/4 (578) | 21 1/4 (540) | 9 1/2 (241) | 1 5/16 (49) | 18 3/4 (476) | J                  |
| *8MPV125J20      | 22 3/4 (578) | 21 1/4 (540) | 9 1/2 (241) | 1 5/16 (49) | 18 3/4 (476) | J                  |

\* Denotes Brand

Drawing is representative, but some models may vary

## MODEL NUMBER IDENTIFICATION GUIDE

|  |          |           |          |            |          |           |          |  |
|--|----------|-----------|----------|------------|----------|-----------|----------|--|
| <b>*</b>   | <b>8</b> | <b>MP</b> | <b>V</b> | <b>075</b> | <b>B</b> | <b>12</b> | <b>C</b> | <b>#</b>   |
| <b>Brand</b>   |          |           |          |            |          |           |          | <b>Engineering Rev.</b><br>Denotes minor change  |
| <b>Brand Efficiency</b><br>8 = Non-Condensing, 80+% Gas Furnace<br>9 = Condensing, 90+% Gas Furnace  |          |           |          |            |          |           |          | <b>Marketing Digit</b><br>Denotes major change   |
| <b>Installation Configuration</b><br>UP = Upflow      DN = Downflow<br>UH = Upflow/Horizontal      HZ = Horizontal<br>DH = Downflow/Horizontal<br>MP = Multiposition, Upflow/Downflow/Horizontal |          |           |          |            |          |           |          | <b>Cooling Airflow</b><br>08 = 800 CFM      16 = 1600 CFM<br>12 = 1200 CFM      20 = 2000 CFM<br>14 = 1400 CFM |
| <b>Major Design Feature</b><br>1 = One (Single) Pipe      N = Single Stage<br>2 = Two Pipe      P = PVC Vent<br>D = 1 or 2 Pipe      T = Two Stage<br>L = Low NOx      V = Variable Speed        |          |           |          |            |          |           |          | <b>Cabinet Width</b><br>B = 15.5" Wide      J = 22.8" Wide<br>F = 19.1" Wide      L = 24.5" Wide               |
|  |          |           |          |            |          |           |          | <b>Input (Nominal MBTUH)</b>   |

\* Denotes Brand (C, H, T)

# Circulation Air Blower Data - \*8MPV050

| Cooling Adjustment                |                               |     |                             |     | Heating Rise Adjustment  |                                   |  |  |
|-----------------------------------|-------------------------------|-----|-----------------------------|-----|--------------------------|-----------------------------------|--|--|
| DIP Switch<br>(OFF = 0<br>ON = 1) | High Cool @ .50 in wc(125 Pa) |     | Low Cool (80% of High Cool) |     | ** Adjust Jumper Setting | DIP Switch<br>(OFF = 0<br>ON = 1) | High Heat Rise Change @ 0.20 in wc (50 Pa) | Low Heat Rise Change at Resultant Static |
|                                   | 5 & 6                         | CFM | L/s                         | CFM |                          |                                   |  |  |
| 00                                | 1235                          | 583 | 988                         | 466 | +                        | 00                                | -3   | -3                                       |
| *00                               | 1206                          | 569 | 965                         | 455 | *NOM                     | *00                               | 0  | 0  |
| 00                                | 1114                          | 526 | 891                         | 420 | -                        | 00                                | 5  | 4  |
| 01                                | 1092                          | 515 | 874                         | 412 | +                        | 01                                | 0  | 0  |
| 01                                | 1021                          | 482 | 817                         | 386 | NOM                      | 01                                | 3  | 4  |
| 01                                | 949                           | 448 | 759                         | 358 | -                        | 01                                | 8  | 6  |
| 10                                | 884                           | 417 | 707                         | 334 | +                        | 10                                | -2   | -1                                       |
| 10                                | 826                           | 390 | 661                         | 312 | NOM                      | 10                                | 2  | 2  |
| 10                                | 740                           | 349 | 592                         | 279 | -                        | 10                                | 6  | 5  |
| 11                                | 650                           | 307 | 520                         | 245 | +                        | 11                                | -7   | -5                                       |
| 11                                | 591                           | 279 | 473                         | 223 | NOM                      | 11                                | -4   | -3                                       |
| 11                                | 530                           | 250 | 424                         | 200 | -                        | 11                                | 0  | 0  |

Airflow performance includes 1" 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                          | Airflow                                 |     |
|----------------------------------|---|-----|
| DIP Switch<br>(OFF = 0 / ON = 1) | Continuous Fan @ 0.10 in wc (25 Pa) ESP |     |
| 1 & 2                            | CFM                                     | L/s |
| *00                              | 620                                     | 293 |
| 01                               | 1060                                    | 500 |
| 10                               | 1333                                    | 629 |
| 11                               | 1333                                    | 629 |

| 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<br>(OFF = 0 / ON = 1) | 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 (L/s) for Factory Washable Filters |             |
|--|-------------|
| Filter Size in(mm)                         | CFM(L/s)    |
| 14" X 25" (356 x 635)                      | 1400 (661)  |
| 16" X 25" (406 x 635)                      | 1600 (755)  |
| 20" X 25" (508 x 635)                      | 2000 (944)  |
| 24" X 25" (610 x 635)                      | 2500 (1180) |
| Max CFM (L/s) based on 600 FPM (3.0 M/s)   |             |

NOTE: Disposable filters are typically rated at 300 FPM (1.5 M/s). These filters only allow half the airflow when compared to 600 FPM (3.0 M/s) filters.

EXAMPLE (approx.):

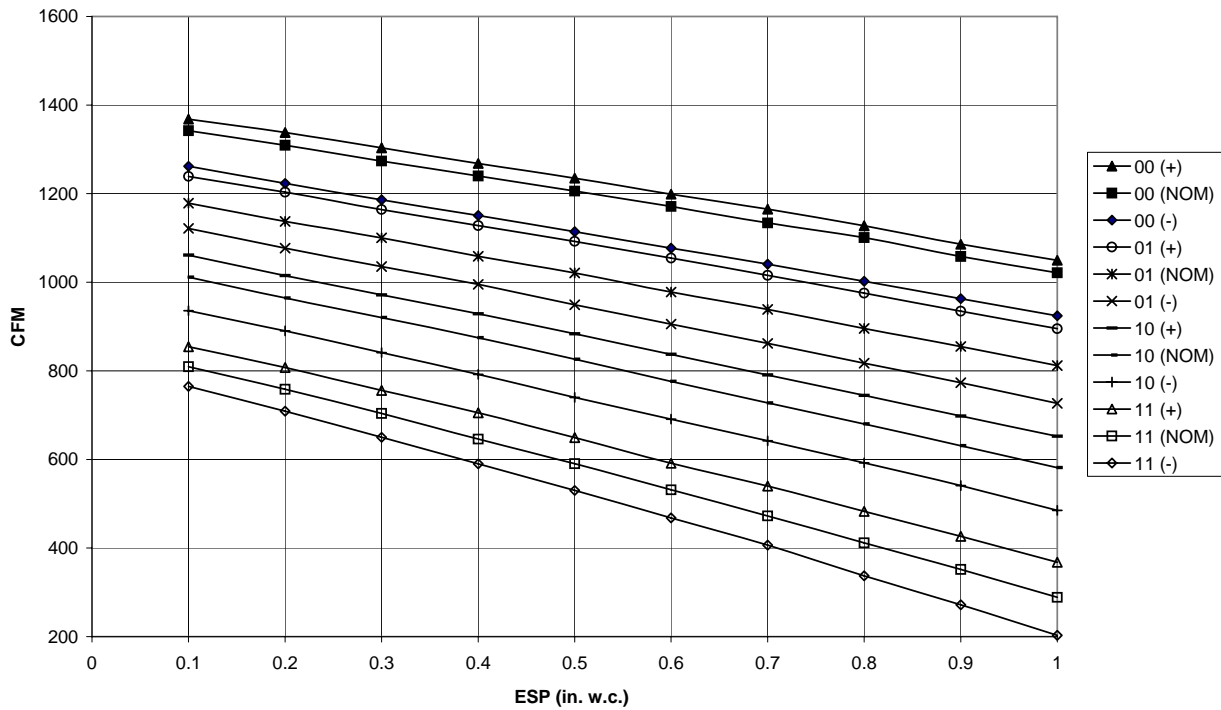
20in X 25in @ 600 FPM = 2000 CFM, @ 300 FPM = 1000 CFM

508mm x 635mm @ 3.0 M/s = 944 L/s, @ 1.5 M/s = 472 L/s

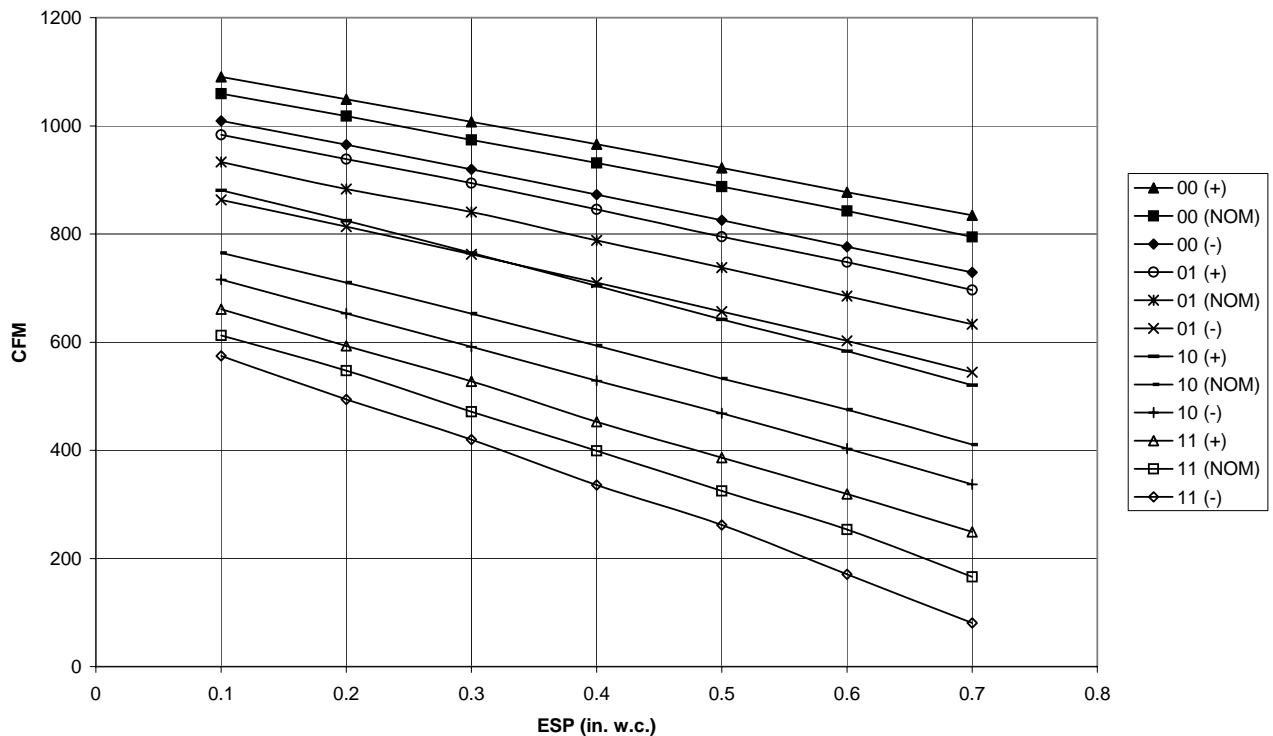
# Circulation Air Blower Data - \*8MPV050

## Cooling Airflow Settings

### High Cooling Airflows \*8MPV050B12



### Low Cooling Airflows \*8MPV050B12



NOTE: OFF = 0 / ON = 1

# Circulation Air Blower Data - \*8MPV075

| Cooling Adjustment                |                               |     |                             |     | Heating Rise Adjustment  |                                   |  |  |
|-----------------------------------|-------------------------------|-----|-----------------------------|-----|--------------------------|-----------------------------------|--|--|
| DIP Switch<br>(OFF = 0<br>ON = 1) | High Cool @ .50 in wc(125 Pa) |     | Low Cool (80% of High Cool) |     | ** Adjust Jumper Setting | DIP Switch<br>(OFF = 0<br>ON = 1) | High Heat Rise Change @ 0.20 in wc (50 Pa) | Low Heat Rise Change at Resultant Static |
|                                   | 5 & 6                         | CFM | L/s                         | CFM |                          |                                   |  |  |
| 00                                | 1550                          | 731 | 1240                        | 585 | +                        | 00                                | -3   | -2                                       |
| *00                               | 1423                          | 672 | 1138                        | 537 | *NOM                     | *00                               | 0  | 0  |
| 00                                | 1240                          | 585 | 992                         | 468 | -                        | 00                                | 3  | 3  |
| 01                                | 1524                          | 719 | 1219                        | 575 | +                        | 01                                | 0  | 0  |
| 01                                | 1209                          | 571 | 967                         | 456 | NOM                      | 01                                | 2  | 3  |
| 01                                | 1038                          | 490 | 830                         | 392 | -                        | 01                                | 7  | 6  |
| 10                                | 1131                          | 534 | 905                         | 427 | +                        | 10                                | -3   | -3                                       |
| 10                                | 1005                          | 474 | 804                         | 379 | NOM                      | 10                                | 0  | 1  |
| 10                                | 851                           | 402 | 681                         | 321 | -                        | 10                                | 3  | 4  |
| 11                                | 908                           | 429 | 726                         | 343 | +                        | 11                                | -8   | -7                                       |
| 11                                | 777                           | 367 | 622                         | 294 | NOM                      | 11                                | -7   | -6                                       |
| 11                                | 651                           | 307 | 521                         | 246 | -                        | 11                                | -4   | -2                                       |

Airflow performance includes 1" 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                          | Airflow                                 |     |
|----------------------------------|---|-----|
| DIP Switch<br>(OFF = 0 / ON = 1) | Continuous Fan @ 0.10 in wc (25 Pa) ESP |     |
| 1 & 2                            | CFM                                     | L/s |
| *00                              | 700                                     | 330 |
| 01                               | 1244                                    | 587 |
| 10                               | 1597                                    | 754 |
| 11                               | 1597                                    | 754 |

| 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<br>(OFF = 0 / ON = 1) | Timed ON (sec) | Airflow during on delay | Timer OFF (sec) |
| *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

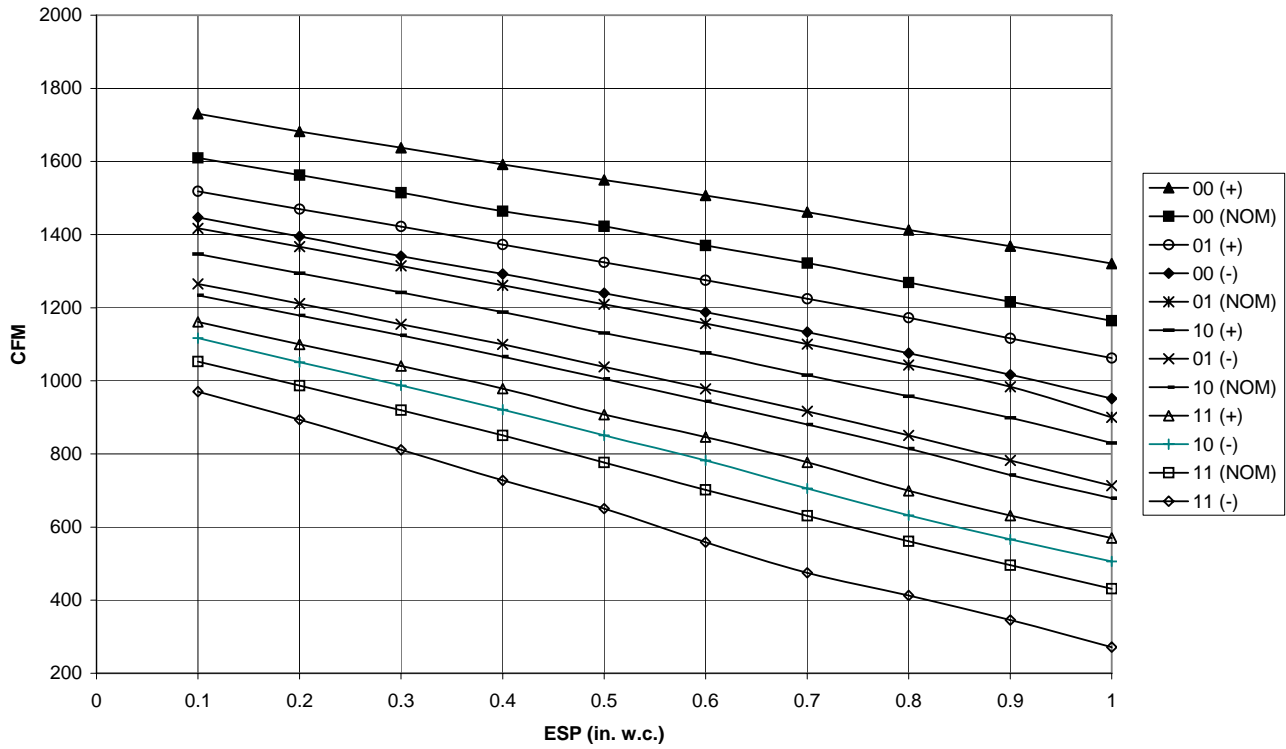
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|--|-------------|
| Filter Size in(mm)                         | CFM(L/s)    |
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| Max CFM (L/s) based on 600 FPM (3.0 M/s)   |             |

NOTE: Disposable filters are typically rated at 300 FPM (1.5 M/s). These filters only allow half the airflow when compared to 600 FPM (3.0 M/s) filters.

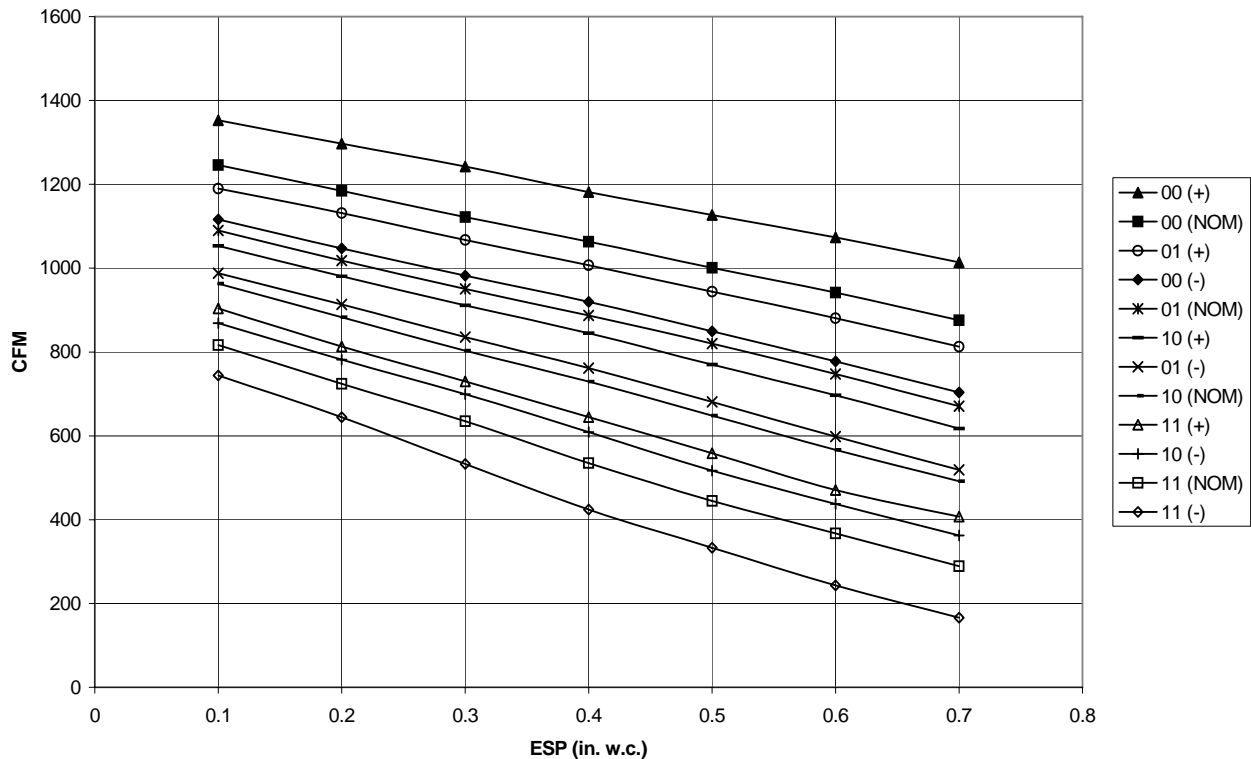
EXAMPLE (approx.):  
20in X 25in @ 600 FPM = 2000 CFM, @ 300 FPM = 1000 CFM  
508mm x 635mm @ 3.0 M/s = 944 L/s, @ 1.5 M/s = 472 L/s

# Circulation Air Blower Data - \*8MPV075

## High Cooling Airflows \*8MPV075F14



## Low Cooling Airflows \*8MPV075F14



NOTE: OFF = 0 / ON = 1

# Circulation Air Blower Data - \*8MPV100

| Cooling Adjustment                |                               |     |                             |     | Heating Rise Adjustment  |                                   |  |  |
|-----------------------------------|-------------------------------|-----|-----------------------------|-----|--------------------------|-----------------------------------|--|--|
| DIP Switch<br>(OFF = 0<br>ON = 1) | High Cool @ .50 in wc(125 Pa) |     | Low Cool (80% of High Cool) |     | ** Adjust Jumper Setting | DIP Switch<br>(OFF = 0<br>ON = 1) | High Heat Rise Change @ 0.20 in wc (50 Pa) | Low Heat Rise Change at Resultant Static |
|                                   | 5 & 6                         | CFM | L/s                         | CFM |                          |                                   |  |  |
| 00                                | 2101                          | 992 | 1681                        | 793 | +                        | 00                                | -3   | -3                                       |
| *00                               | 2016                          | 951 | 1613                        | 761 | *NOM                     | *00                               | 0  | 0  |
| 00                                | 1847                          | 872 | 1478                        | 697 | -                        | 00                                | 4  | 4  |
| 01                                | 1721                          | 812 | 1377                        | 650 | +                        | 01                                | 5  | 6  |
| 01                                | 1600                          | 755 | 1280                        | 604 | NOM                      | 01                                | 9  | 9  |
| 01                                | 1470                          | 694 | 1176                        | 555 | -                        | 01                                | 15   | 16                                       |
| 10                                | 1334                          | 630 | 1067                        | 504 | +                        | 10                                | 2  | 2  |
| 10                                | 1228                          | 580 | 982                         | 463 | NOM                      | 10                                | 7  | 6  |
| 10                                | 1114                          | 526 | 891                         | 420 | -                        | 10                                | 11   | 11                                       |
| 11                                | 920                           | 434 | 736                         | 347 | +                        | 11                                | -9   | -9                                       |
| 11                                | 809                           | 382 | 647                         | 305 | NOM                      | 11                                | -7   | -6                                       |
| 11                                | 698                           | 329 | 558                         | 263 | -                        | 11                                | -3   | -3                                       |

Airflow performance includes 1" 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                          |   |      | Airflow |  |
|----------------------------------|---|------|---------|--|
| DIP Switch<br>(OFF = 0 / ON = 1) | Continuous Fan @ 0.10 in wc (25 Pa) ESP |      |         |  |
|                                  | 1 & 2                                   | CFM  | L/s     |  |
| *00                              | 1006                                    | 475  |         |  |
| 01                               | 1764                                    | 832  |         |  |
| 10                               | 2205                                    | 1041 |         |  |
| 11                               | 2205                                    | 1041 |         |  |

| 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<br>(OFF = 0 / ON = 1) | Timed ON (sec) | Airflow during on delay | Timer OFF (sec) |
| *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 (L/s) for Factory Washable Filters |             |
|--|-------------|
| Filter Size in(mm)                         | CFM(L/s)    |
| 14" X 25" (356 x 635)                      | 1400 (661)  |
| 16" X 25" (406 x 635)                      | 1600 (755)  |
| 20" X 25" (508 x 635)                      | 2000 (944)  |
| 24" X 25" (610 x 635)                      | 2500 (1180) |
| Max CFM (L/s) based on 600 FPM (3.0 M/s)   |             |

NOTE: Disposable filters are typically rated at 300 FPM (1.5 M/s). These filters only allow half the airflow when compared to 600 FPM (3.0 M/s) filters.

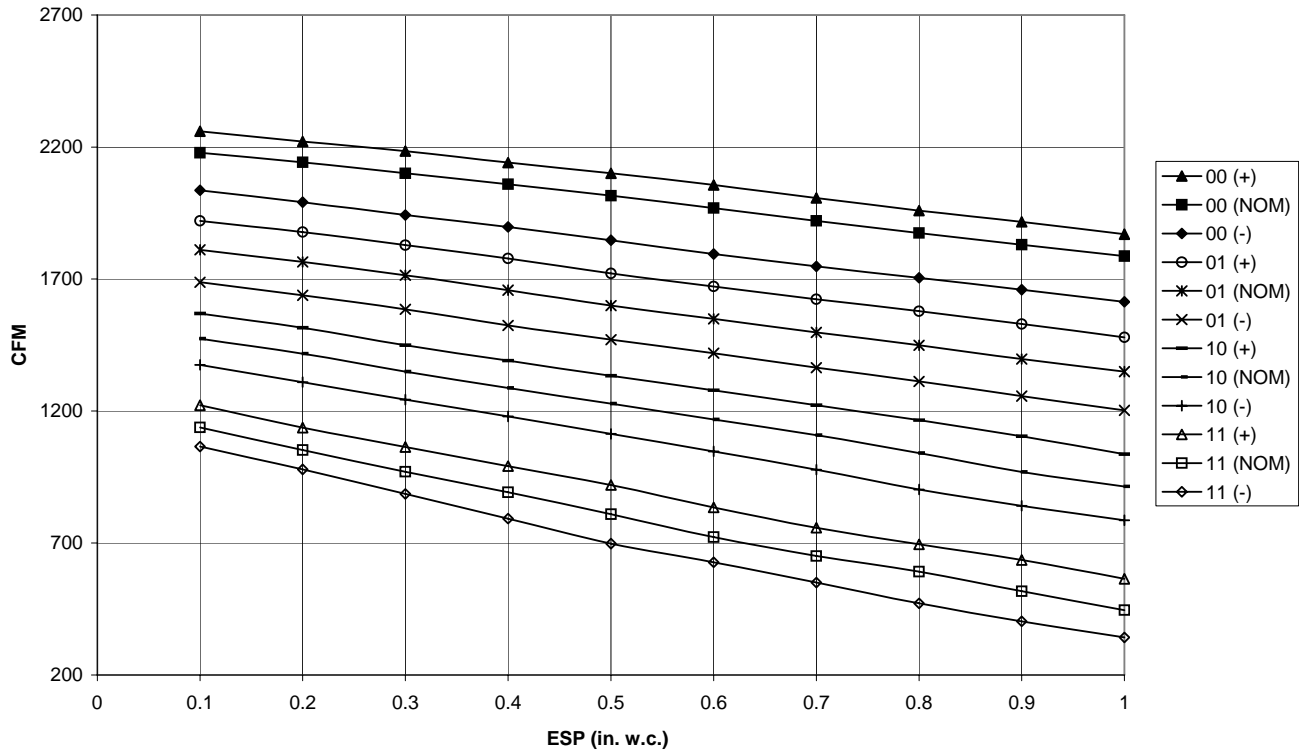
EXAMPLE (approx.):

20in X 25in @ 600 FPM = 2000 CFM, @ 300 FPM = 1000 CFM  
508mm x 635mm @ 3.0 M/s = 944 L/s, @ 1.5 M/s = 472 L/s

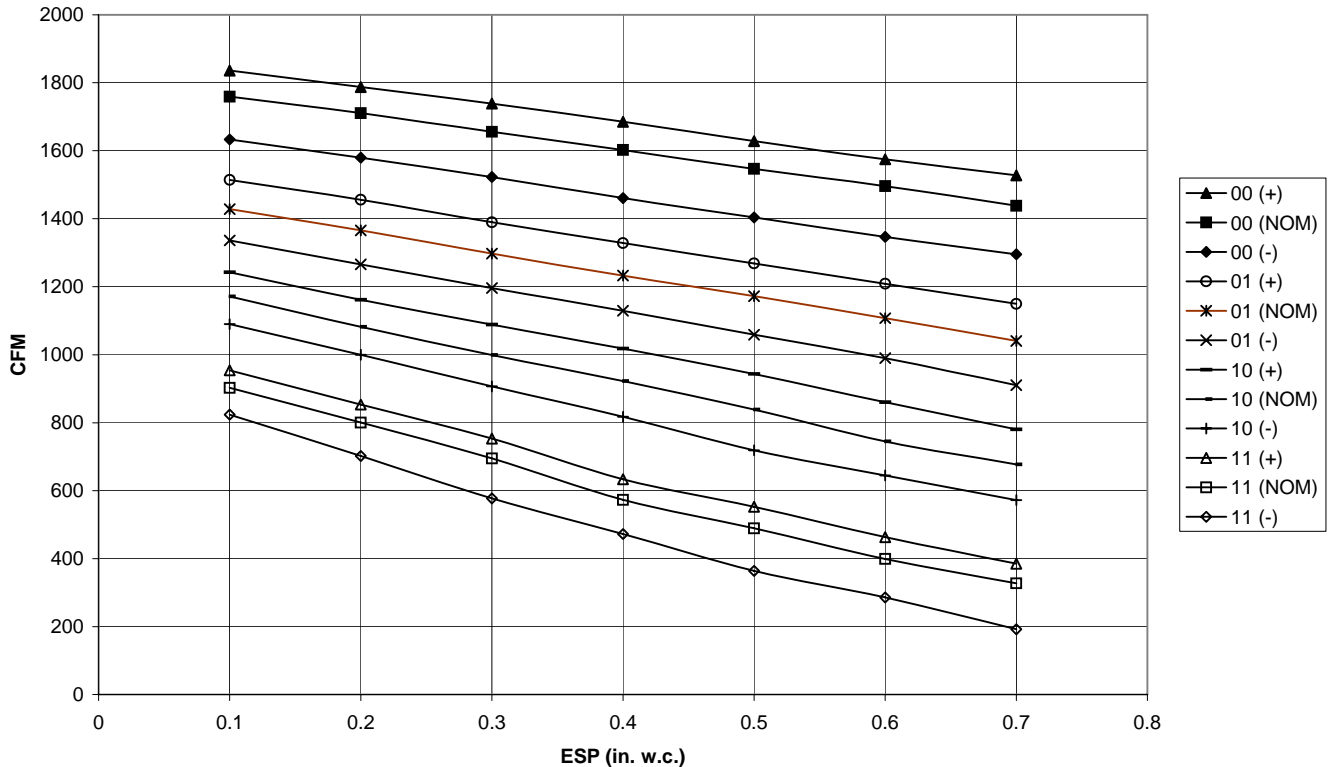


# Circulation Air Blower Data - \*8MPV100

## High Cooling Airflows \*8MPV100J20



## Low Cooling Airflows \*8MPV100J20



NOTE: OFF = 0 / ON = 1

# Circulation Air Blower Data - \*8MPV125

| Cooling Adjustment                |                               |      |                             |     | Heating Rise Adjustment  |                                   |  |  |
|-----------------------------------|-------------------------------|------|-----------------------------|-----|--------------------------|-----------------------------------|--|--|
| DIP Switch<br>(OFF = 0<br>ON = 1) | High Cool @ .50 in wc(125 Pa) |      | Low Cool (80% of High Cool) |     | ** Adjust Jumper Setting | DIP Switch<br>(OFF = 0<br>ON = 1) | High Heat Rise Change @ 0.20 in wc (50 Pa) | Low Heat Rise Change at Resultant Static |
|                                   | 5 & 6                         | CFM  | L/s                         | CFM |                          |                                   |  |  |
| 00                                | 2153                          | 1016 | 1722                        | 813 | +                        | 00                                | -3   | -3                                       |
| *00                               | 2001                          | 944  | 1601                        | 756 | *NOM                     | *00                               | 0  | 0  |
| 00                                | 1808                          | 853  | 1446                        | 682 | -                        | 00                                | 4  | 4  |
| 01                                | 1761                          | 931  | 1409                        | 665 | +                        | 01                                | -1   | 0  |
| 01                                | 1621                          | 765  | 1297                        | 612 | NOM                      | 01                                | 4  | 3  |
| 01                                | 1458                          | 688  | 1166                        | 550 | -                        | 01                                | 8  | 8  |
| 10                                | 1345                          | 635  | 1076                        | 508 | +                        | 10                                | -2   | -1                                       |
| 10                                | 1216                          | 574  | 973                         | 459 | NOM                      | 10                                | 2  | 2  |
| 10                                | 1074                          | 507  | 859                         | 405 | -                        | 10                                | 7  | 5  |
| 11                                | 933                           | 440  | 746                         | 352 | +                        | 11                                | -6   | -4                                       |
| 11                                | 802                           | 378  | 642                         | 303 | NOM                      | 11                                | -3   | -2                                       |
| 11                                | 692                           | 327  | 554                         | 261 | -                        | 11                                | 1  | 1  |

Airflow performance includes 1" 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                          | Airflow                                 |      |
|----------------------------------|---|------|
| DIP Switch<br>(OFF = 0 / ON = 1) | Continuous Fan @ 0.10 in wc (25 Pa) ESP |      |
| 1 & 2                            | CFM                                     | L/s  |
| *00                              | 1013                                    | 478  |
| 01                               | 1674                                    | 790  |
| 10                               | 2193                                    | 1035 |
| 11                               | 2193                                    | 1035 |

| 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<br>(OFF = 0 / ON = 1) | 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 (L/s) for Factory Washable Filters |             |
|--|-------------|
| Filter Size in(mm)                         | CFM(L/s)    |
| 14" X 25" (356 x 635)                      | 1400 (661)  |
| 16" X 25" (406 x 635)                      | 1600 (755)  |
| 20" X 25" (508 x 635)                      | 2000 (944)  |
| 24" X 25" (610 x 635)                      | 2500 (1180) |
| Max CFM (L/s) based on 600 FPM (3.0 M/s)   |             |

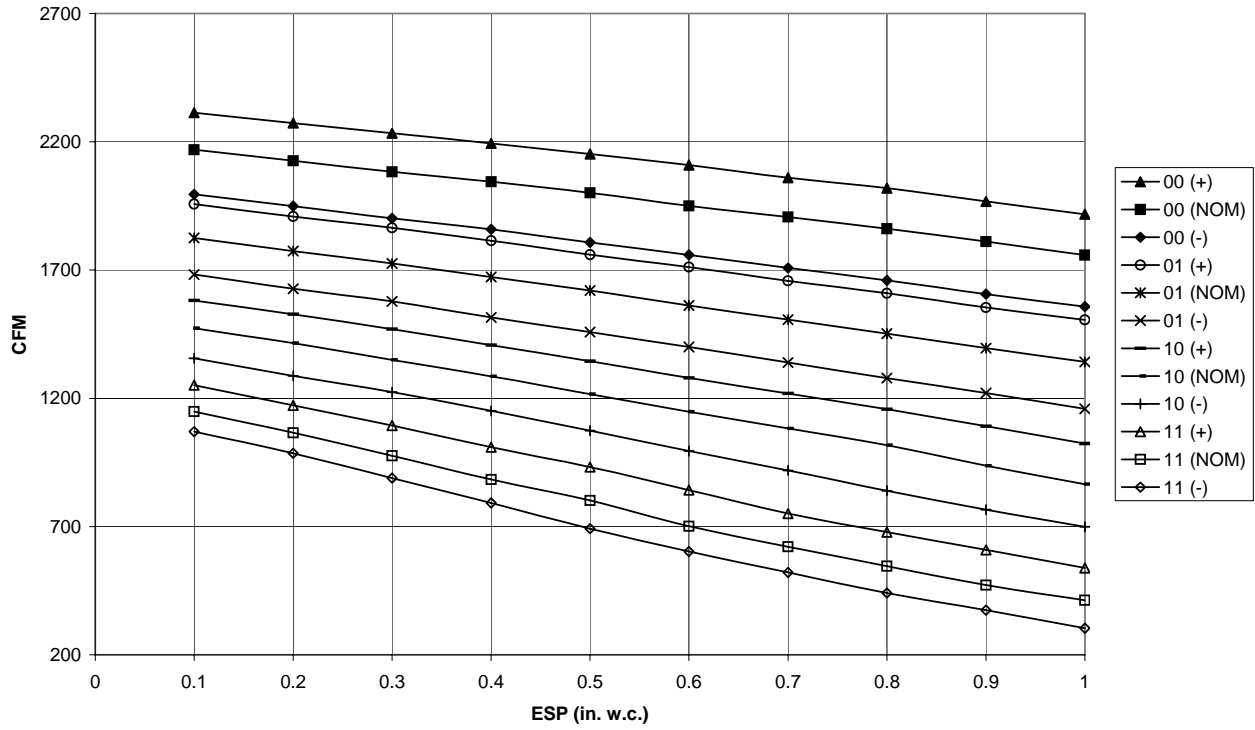
NOTE: Disposable filters are typically rated at 300 FPM (1.5 M/s). These filters only allow half the airflow when compared to 600 FPM (3.0 M/s) filters.

EXAMPLE (approx.):

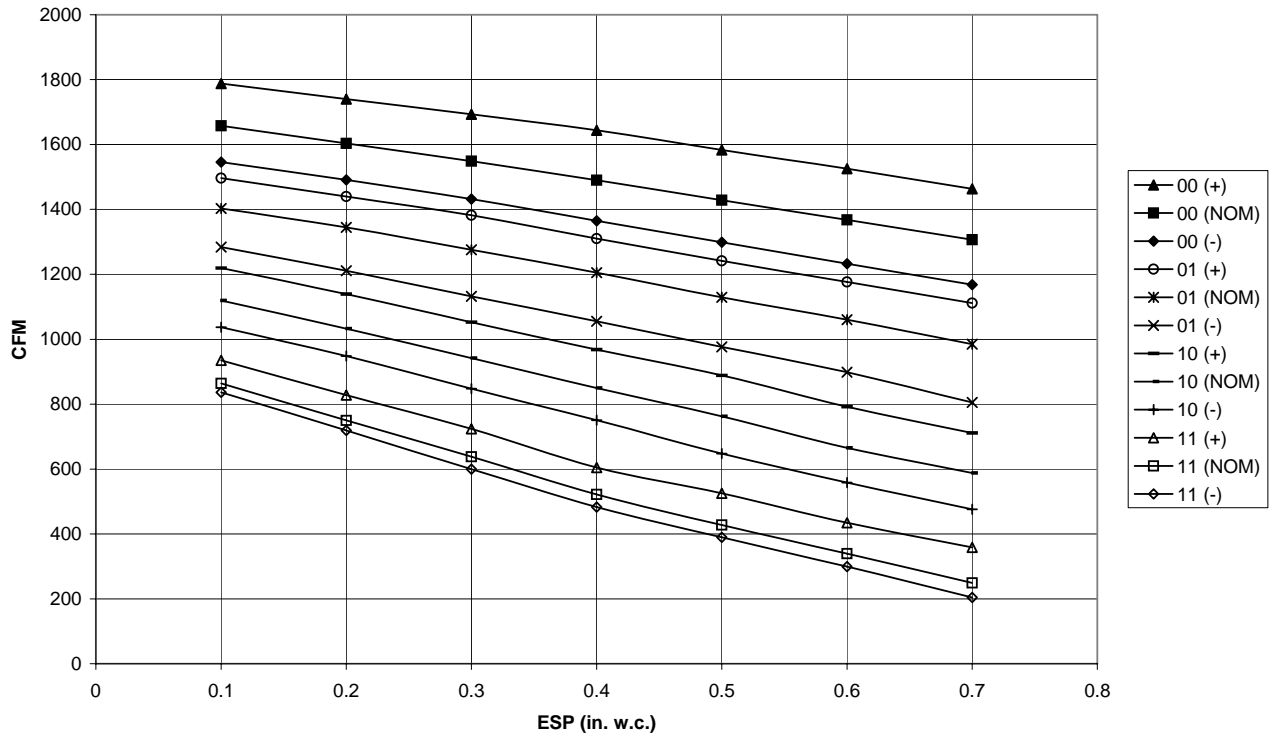
20in X 25in @ 600 FPM = 2000 CFM, @ 300 FPM = 1000 CFM  
508mm x 635mm @ 3.0 M/s = 944 L/s, @ 1.5 M/s = 472 L/s

# Circulation Air Blower Data - \*8MPV125

**High Cooling Airflows**  
\*8MPV125J20

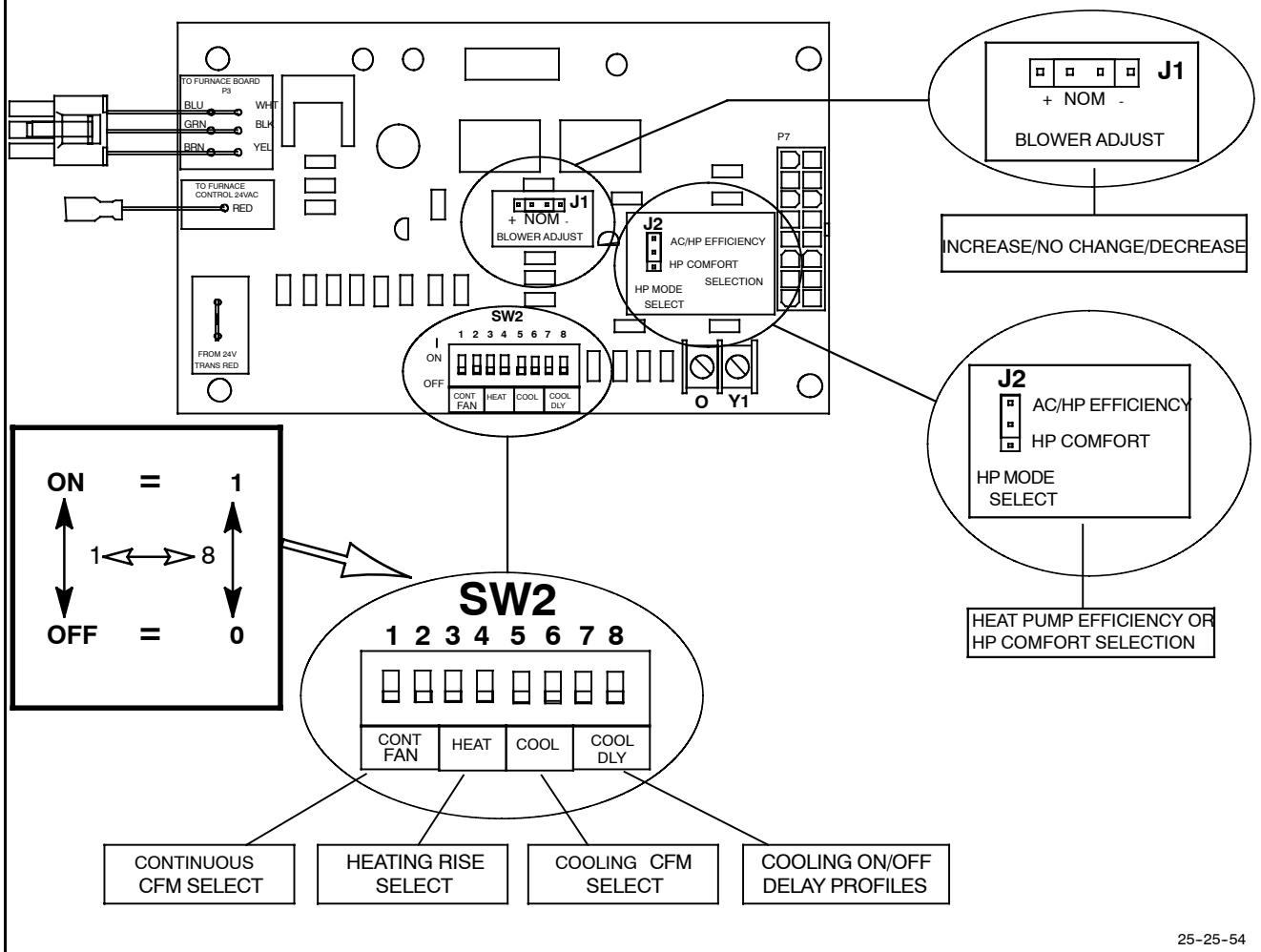


**Low Cooling Airflows**  
\*8MPV125J20



**NOTE: OFF = 0 / ON = 1**

# Variable Speed (8MPV) Tap Select Interface Board (TSIB)



25-25-54

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