R454b
Refrigerant

# SUBMITTAL DATA SHEET

Series Name: Slim Duct Energy Star Series
Model Number: MDHHU-H18B-2A/MO1ES-H18B-2A

| Slim Duct Heat Pump System | |
|---|---|
| Location: | Approval: |
| Engineer: | Date: |
| Submitted to: | Construction: |
| Submitted by: | Unit #: |
| Reference: | Drawing #: |




| INDOOR SPEINDOOR SPECIFICATIONCIFICATION | | |
|---|---|---|
| **Indoor Air Flow (Turbo/H/M/L/Si) (CFM)** | | 706 / 618 / 530 / 441 / 441 |
| **Indoor Noise Level (Turbo/H/M/L/Si) (dBA)** | | 40 / 37 / 35 / 33 / 29 |
| **Indoor static pressure range** | | 0-0.8 |
| **Dimension (W×D×H)** | **inch** | 39-3/8 x 29-1/2 x 9-5/8 |
| | **mm** | 1000 × 750 × 245 |
| **Package (W×D×H)** | **inch** | 48-1/4 x 33-7/8 x 12 |
| | **mm** | 1225 × 860 × 304 |
| **Net/Gross Weight** | **lbs** | 80 / 91 |
| | **kg** | 36.2 / 41.4 |

| OUTDOOR SPECIFICATION | | |
|---|---|---|
| **Compressor Type** | | ROTARY |
| **Compressor Model** | | KSN140D58UFZ |
| **Refrigerant** | | R454B |
| **Refrigerant Oil Charge(mL)** | | 440 |
| **Refrigerant Oil** | | 7.2 |
| **Outdoor Air Flow (Max) (CFM)** | | 1,766 |
| **Outdoor Noise Level (dBA)** | | 58 |
| **Dimension (W×D×H)** | **inch** | 35 x 13-1/2 x 26-1/2 |
| | **mm** | 890 × 342 × 673 |
| **Package (W×D×H)** | **inch** | 39-1/8 x 15-5/8 x 29-1/8 |
| | **mm** | 995 × 398 × 740 |
| **Net/Gross Weight** | **lbs** | 93 / 100 |
| | **kg** | 42.0 / 45.5 |

| EFFICIENCY | | | |
|---|---|---|---|
| **Cooling** | | **Heating** | |
| **SEER2** | 20.0 | **HSPF2-4** | 11.3 |
| **EER2** | 13.3 | **COP** | 3.90 |

| PERFORMANCE of Cooling | |
|---|---|
| **Cooling** (Btu/hr) | |
| **Rated Capacity** | 17,500 |
| **Min/Max Capacity** | 4,500~20,200 |
| **Moisture Removal(L/h)** | 1.71 |
| **Standard Operating Range(°F/°C)** | -13~122 (-25～50) |
| Conditions: | Indoor: 80°F DB/67°F WB<br>Outdoor: 95°F DB/75°F WB |

| PERFORMANCE of Heating | |
|---|---|
| **Heating** (Btu/hr) | |
| **1. @ 47°F Rated** | 20,000 |

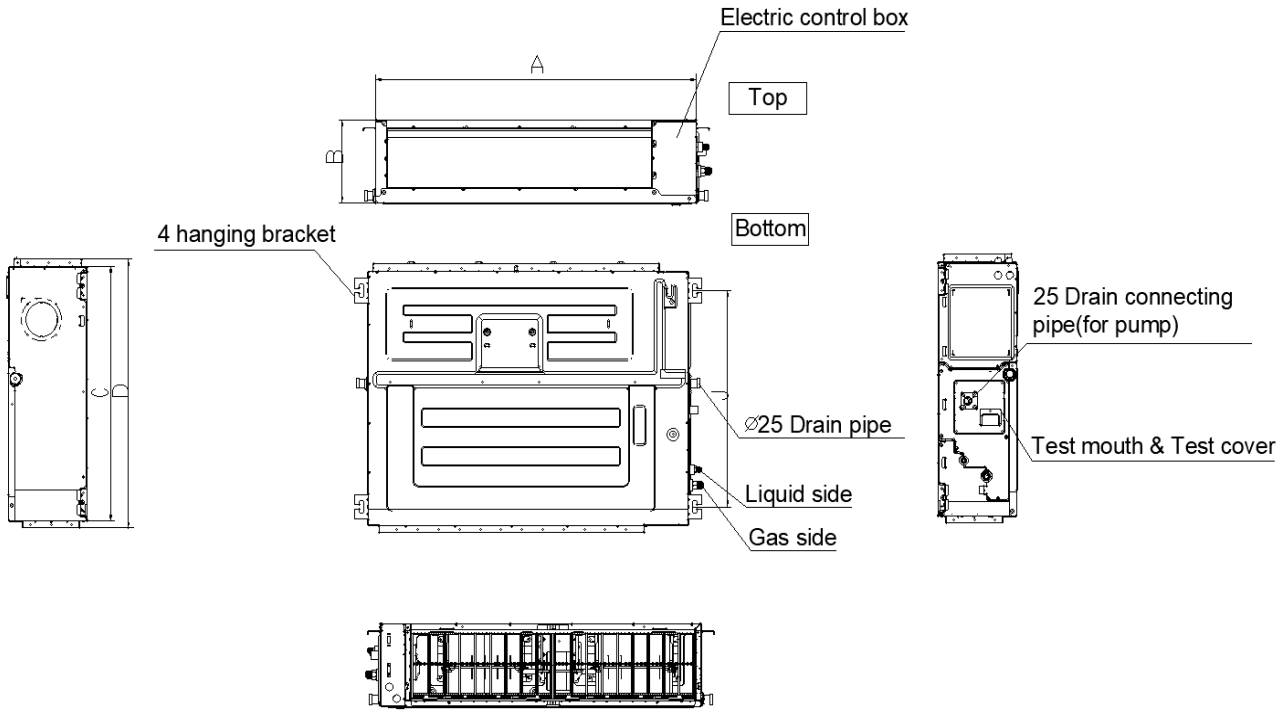
| ELECTRICAL | |
|---|---|
| **Power Supply** | 208/230V,60Hz,1Ph |
| **System MCA** | 18.0 |
| **Connection Wiring** | AWG 14/4 |
| **System MOCP** | 20.0 |
| **Compressor RLA** | 10.0 |
| **Outdoor Fan Motor RLA** | 0.9 |
| **Outdoor Fan Motor W** | 80 |
| **Indoor Fan Motor RLA** | 1.8 |
| **Indoor Fan Motor W** | 165 |
| **System Power Input @ Cooling (W)** | 1,315 (570 ~ 1,770) |
| **System Power Input @ Heating (W)** | 1,500 (310 ~1,720) |
| **MCA**: Min. circuit amps (A) | **MOCP**: Max. over current protection (A) |
| **RLA:** Rated load amps (A) | **W:** Fan motor rated output (W) |

| PIPING |
|---|

| | |
|---|---|
| **1. @ 47°F Min/Max Capacity** | 5,200~23,000 |
| **2. @ 17°F Rated** | 14,900 |
| **3. @ 5°F Rated: Capacity / COP** | 14,200/2.40 |
| **3. @ 5°F Max: Capacity** | 14,200 |
| **Standard Operating Range(°F/°C)** | -13~75 (-25～24) |
| 1. Conditions: | Indoor: 70°F DB/60°F WB |
| | Outdoor: 47°F DB/43°F WB |
| 2. Conditions: | Indoor: 70°F DB/60°F WB |
| | Outdoor: 17°F DB/15°F WB |
| 3. Conditions | Indoor: 70°F DB/60°F WB |
| | Outdoor: 5°F DB/5°F WB |

| | |
|---|---|
| **Throttle type(Indoor)** | N/A |
| **Throttle type(Outdoor)** | EXV+Throttle valve |
| **Liquid Size** | 1/4" (6.35mm) |
| **Gas Size** | 1/2" (12.7mm) |
| **Max. Piping Length(ft/m)** | 98 (30) |
| **Max. Height Difference(ft/m)** | 66 (20) |
| **Max. Pre-charged Length(ft/m)** | 25 (7.5) |
| **Refrigerant Pre-charged Amount(oz/kg)** | 48 (1.36) |
| **dditional Charge of Refrigerant((oz/ft)/(g/m** | 0.16 (15) |
| **Connection Method** | Flared |
| | |

## Indoor Unit Dimension

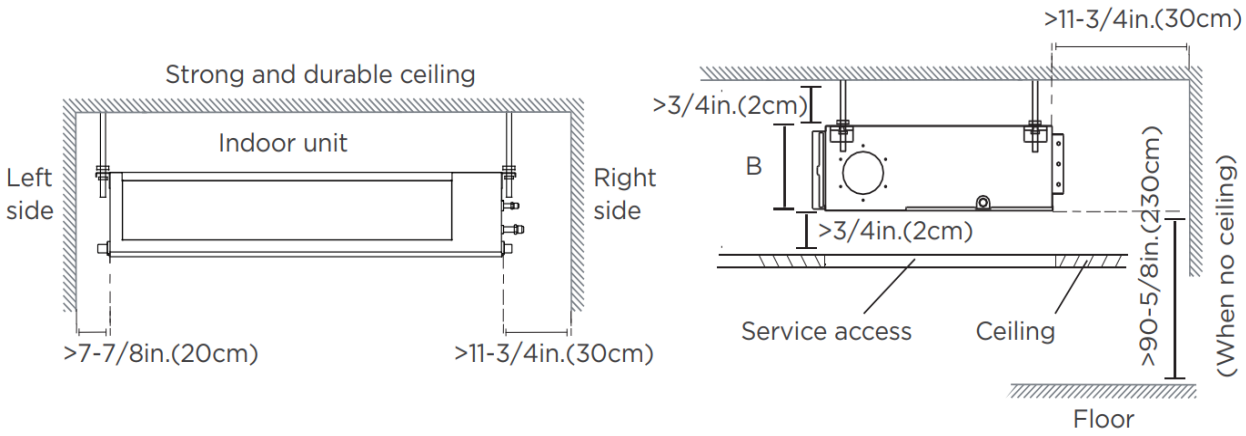



inch(mm)

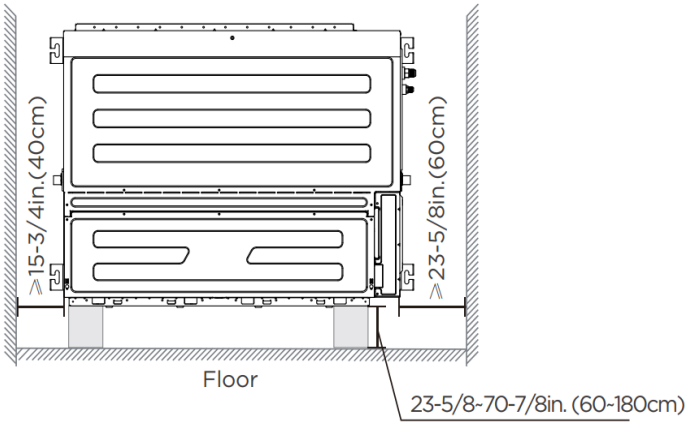
| MODEL | A | B | C | D |
|---|---|---|---|---|
| 9~12K | 27-1/2(700) | 9-5/8(245) | 29-1/2(750) | 31-1/4(795) |
| 18K~24K | 39-3/8(1000) | 9-5/8(245) | 29-1/2(750) | 31-1/4(795) |
| 36K~48K | 47-1/8(1200) | 11-7/8(300) | 29-1/2(750) | 31-1/4(795) |
| 60K | 55-1/8(1400) | 15(380) | 31-1/2(800) | 33-1/4(845) |

## Installation Instruction

**1) Ceiling-mounted**

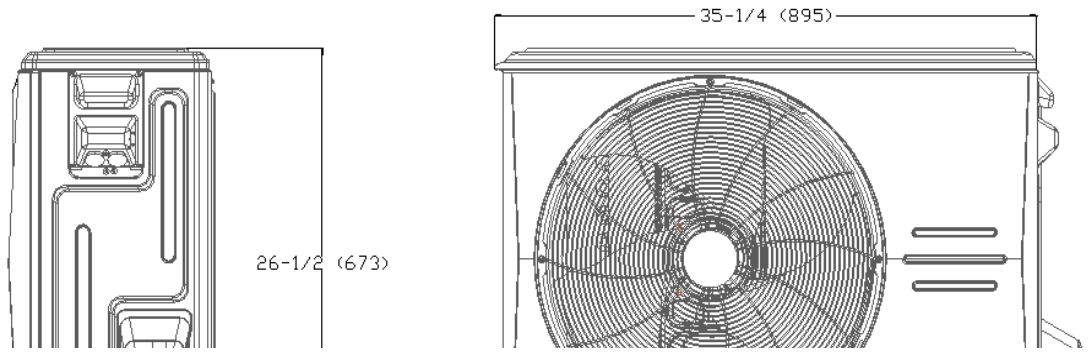


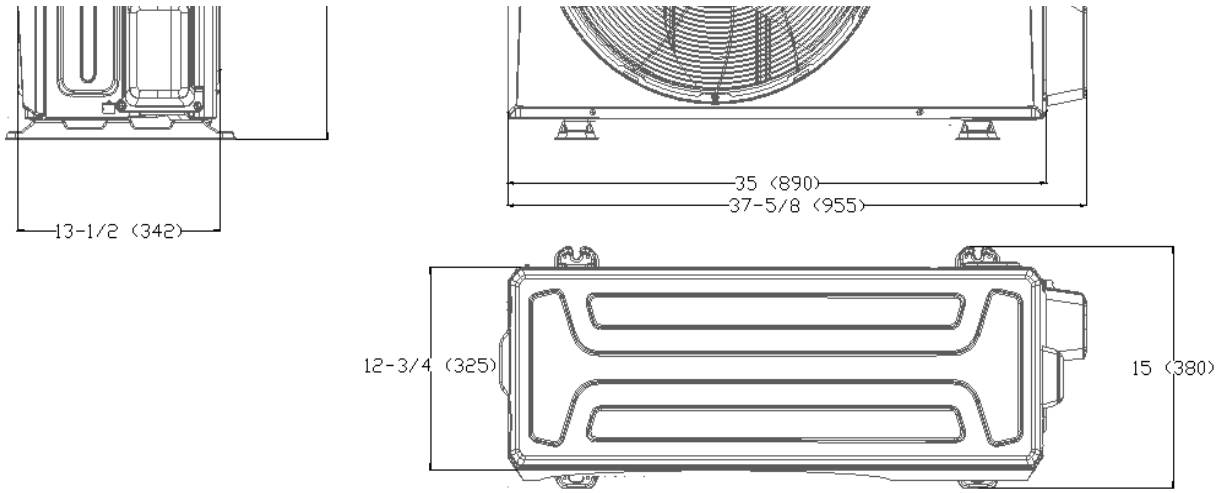

**2) Wall-mounted**



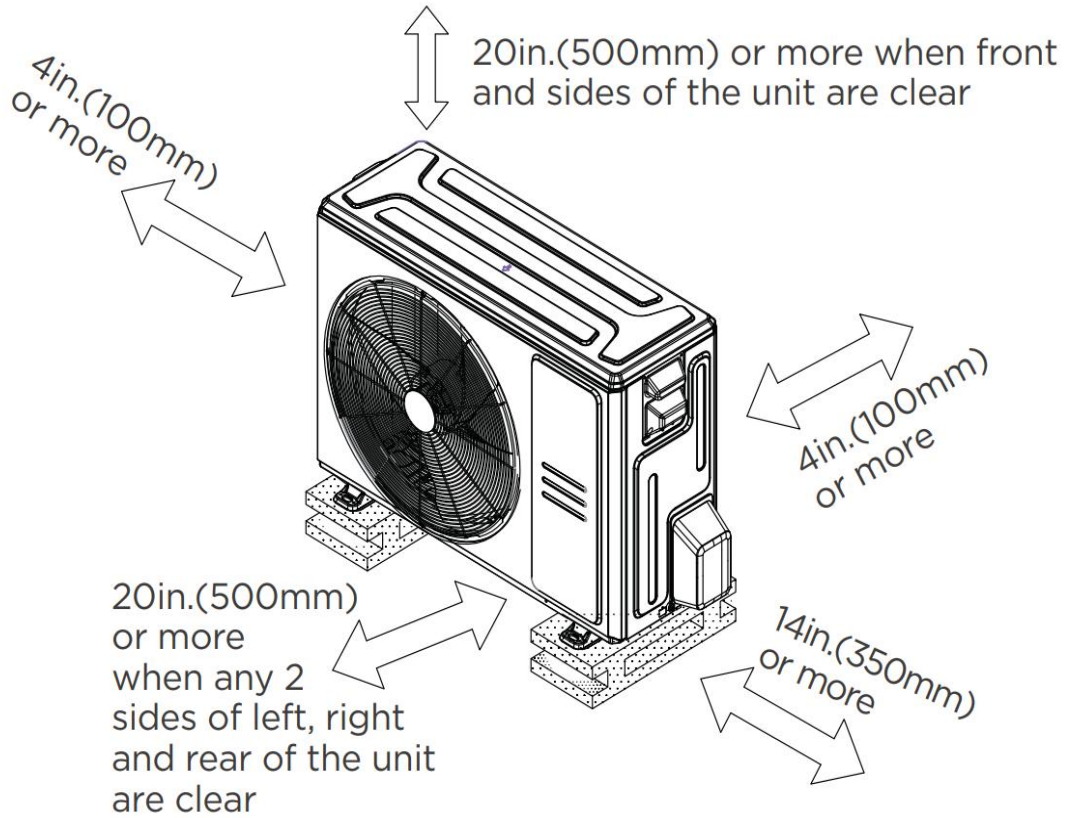

## Outdoor Unit Dimension

**Unit: inch (mm)**





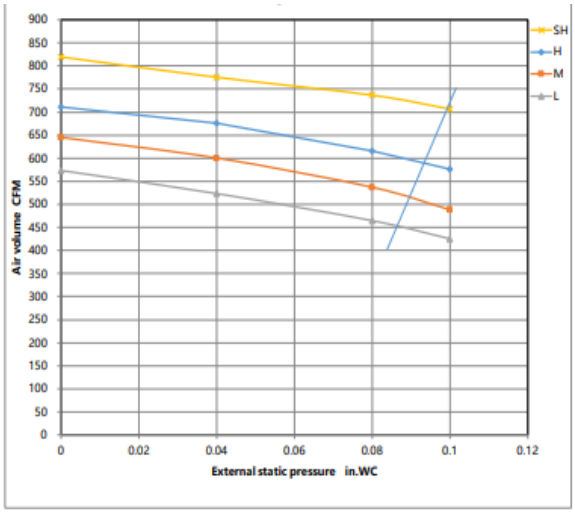

## Installation Instruction

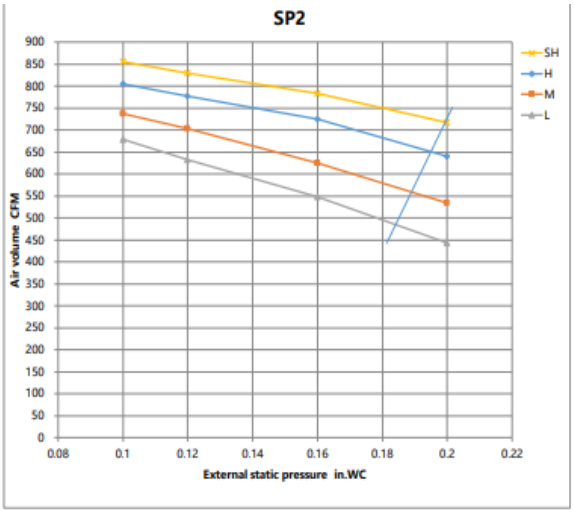


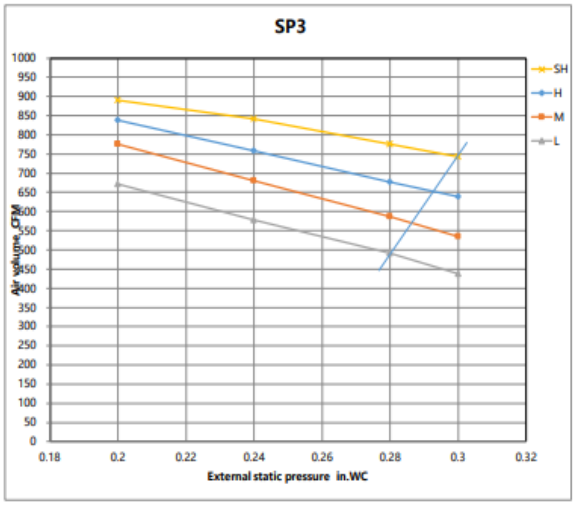

## Fan performance

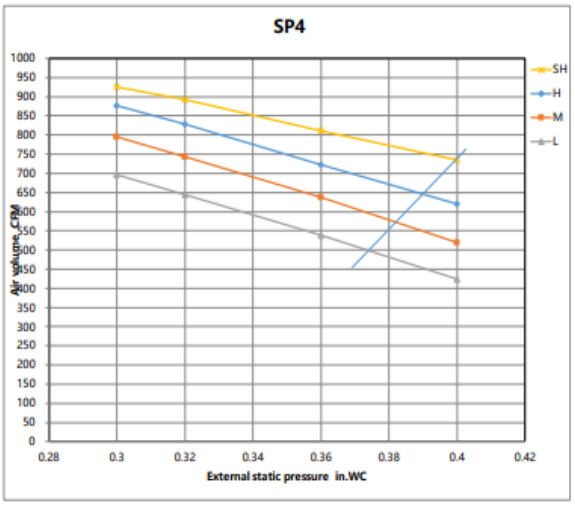
The default setting is SP1, which can be changed to SP2,3,4,5,6,7,8 using the wired controller.

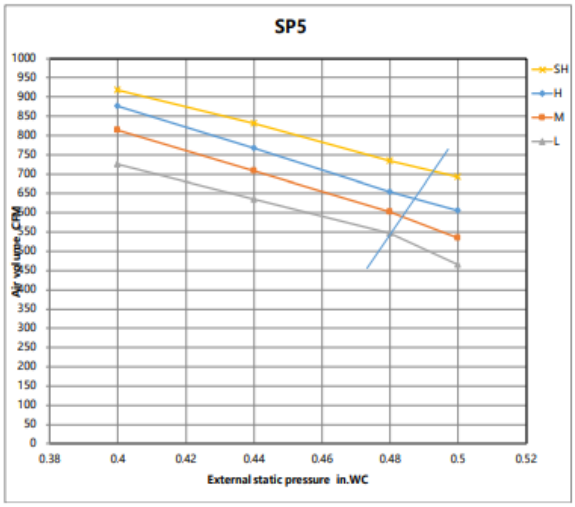
| SP1 | |
|---|---|

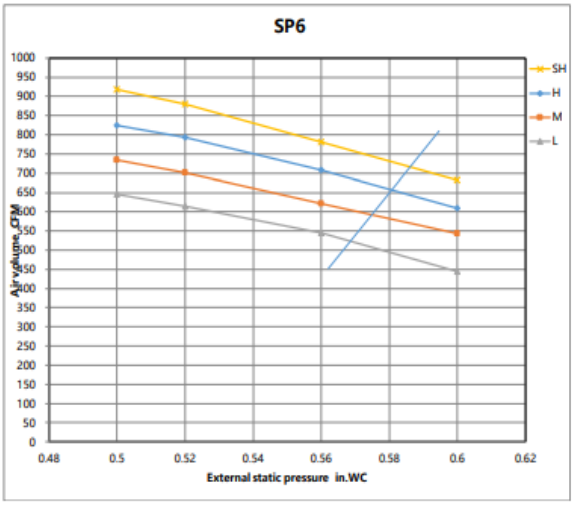

Air volume CFM
External static pressure in.WC
SH
H
M
L

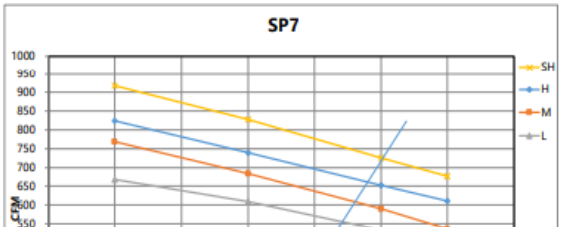

SP2
Air volume CFM
External static pressure in.WC
SH
H
M
L


SP3
Air volume CFM
External static pressure in.WC
SH
H
M
L

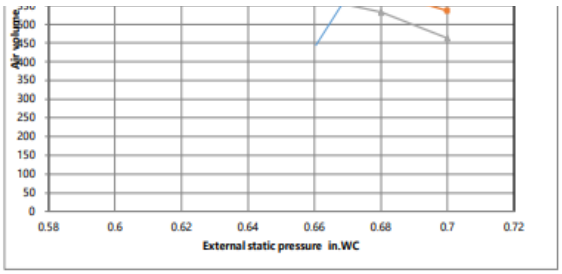

SP4
Air volume CFM
External static pressure in.WC
SH
H
M
L

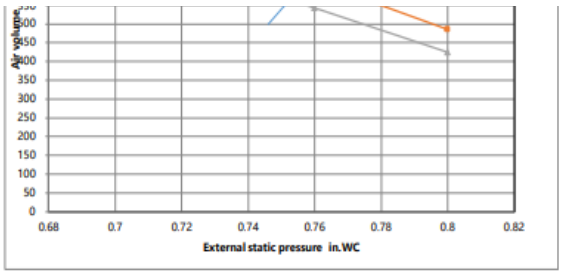

SP5
Air volume CFM
External static pressure in.WC
SH
H
M
L


SP6
Air volume CFM
External static pressure in.WC
SH
H
M
L


SP7
CFM
SH
H
M
L


SP8
CFM
SH
H
M
L




## Constant air volume

