

## OPTIONAL ELECTRIC HEAT KIT FOR MULTI-POSITION AIR HANDLER

USE WITH: PVFY-P-NAMU-E/E1; MVZ-A-AA4/7; SVZ-KP-NA; PVA-A-AA4/7

Job Name:

Schedule Reference:

Selected Electrical Heater(s):

### GENERAL FEATURES

- 208/240V Electric Heat Kits
- Mounts directly to the air outlet connection of the multi-position air handler



### CAUTION

- Do not power the electric heat kit from the outdoor unit.
  - A separate power supply must be provided.
  - Air handler must be set on non-combustible floor when using electric heat in the downflow configuration.
  - Maximum external static pressure of 0.60 in WG for all installations with electric heaters.
- For more details, see note on best design practice on page 4.

### ACCESSORIES

|                                                                                                                                                                                                                                    |                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| Separate Power Kit for MVZ, SVZ and PVA models<br>This kit allows the installer to connect power from a source other than the outdoor unit to the air handler.<br>(S2 & S3 still must connect from outdoor unit for communication) | <input type="checkbox"/> SPTB1           |
| Auxiliary Heat Lockout for MVZ, SVZ and PVA models<br>This option prevents the electric heat kit from operating above a set outside temperature.                                                                                   | <input type="checkbox"/> ETC--211000-MIT |
| Replacement Temp Probe for ETC-211000-MIT                                                                                                                                                                                          | <input type="checkbox"/> 1309007-044     |

Notes:

Specifications are subject to change without notice.

# AVAILABLE COMBINATIONS : ELECTRIC HEAT KIT

(See note on best design practice on page 4)



## NOTE

No other combination approved.

## MODEL PER OUTDOOR UNIT

All electric heat options can be used in combination with heat pump operation; 208/240V.

|                    |                 | Electric Heat Kit |            |            |            |            |            |               |               |               |               |               |               |               |               |                |                |  |
|--------------------|-----------------|-------------------|------------|------------|------------|------------|------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|--|
|                    |                 | EH03-SVZ-S        | EH05-SVZ-S | EH08-SVZ-S | EH05-SVZ-M | EH08-SVZ-M | EH10-SVZ-M | EH03-MPA-S(B) | EH05-MPA-S(B) | EH08-MPA-S(B) | EH03-MPA-M(B) | EH05-MPA-M(B) | EH08-MPA-M(B) | EH10-MPA-M(B) | EH10-MPA-L(B) | EH15-MPAS-L(B) | EH17-MPAS-L(B) |  |
| Stages (1st + 2nd) |                 | 3                 | 5          | 4+4        | 5          | 4+4        | 5+5        | 3             | 5             | 4+4           | 3             | 5             | 4+4           | 5+5           | 5+5           | 7.5+7.5        | 8.75+8.75      |  |
| Air Handler Model  | PVFY-P08NAMU-E1 |                   |            |            |            |            |            | ○             |               |               |               |               |               |               |               |                |                |  |
|                    | PVFY-P12NAMU-E  |                   |            |            |            |            |            | ○             | ○             |               |               |               |               |               |               |                |                |  |
|                    | PVFY-P12NAMU-E1 |                   |            |            |            |            |            | ○             | ○             |               |               |               |               |               |               |                |                |  |
|                    | PVFY-P18NAMU-E  |                   |            |            |            |            |            | ○             | ○             | ○             |               |               |               |               |               |                |                |  |
|                    | PVFY-P18NAMU-E1 |                   |            |            |            |            |            | ○             | ○             | ○             |               |               |               |               |               |                |                |  |
|                    | PVFY-P24NAMU-E  |                   |            |            |            |            |            | ○             | ○             | ○             |               |               |               |               |               |                |                |  |
|                    | PVFY-P24NAMU-E1 |                   |            |            |            |            |            | ○             | ○             | ○             |               |               |               |               |               |                |                |  |
|                    | PVFY-P30NAMU-E  |                   |            |            |            |            |            |               |               |               | ○             | ○             | ○             | ○             |               |                |                |  |
|                    | PVFY-P30NAMU-E1 |                   |            |            |            |            |            |               |               |               | ○             | ○             | ○             | ○             |               |                |                |  |
|                    | PVFY-P36NAMU-E  |                   |            |            |            |            |            |               |               |               |               |               | ○             | ○             |               |                |                |  |
|                    | PVFY-P36NAMU-E1 |                   |            |            |            |            |            |               |               |               |               |               | ○             | ○             |               |                |                |  |
|                    | PVFY-P48NAMU-E  |                   |            |            |            |            |            |               |               |               |               |               |               |               | ○             | ○              | ○              |  |
|                    | PVFY-P48NAMU-E1 |                   |            |            |            |            |            |               |               |               |               |               |               |               | ○             | ○              | ○              |  |
|                    | PVFY-P54NAMU-E  |                   |            |            |            |            |            |               |               |               |               |               |               |               | ○             | ○              | ○              |  |
|                    | PVFY-P54NAMU-E1 |                   |            |            |            |            |            |               |               |               |               |               |               |               | ○             | ○              | ○              |  |
|                    | MVZ-A12AA4      |                   |            |            |            |            |            |               | ○             | ○             |               |               |               |               |               |                |                |  |
|                    | MVZ-A12AA7      |                   |            |            |            |            |            |               | ○             | ○             |               |               |               |               |               |                |                |  |
|                    | MVZ-A18AA4      |                   |            |            |            |            |            |               | ○             | ○             | ○             |               |               |               |               |                |                |  |
|                    | MVZ-A18AA7      |                   |            |            |            |            |            |               | ○             | ○             | ○             |               |               |               |               |                |                |  |
|                    | MVZ-A24AA4      |                   |            |            |            |            |            |               | ○             | ○             | ○             |               |               |               |               |                |                |  |
|                    | MVZ-A24AA7      |                   |            |            |            |            |            |               | ○             | ○             | ○             |               |               |               |               |                |                |  |
|                    | MVZ-A30AA4      |                   |            |            |            |            |            |               |               |               |               | ○             | ○             | ○             | ○             |                |                |  |
|                    | MVZ-A30AA7      |                   |            |            |            |            |            |               |               |               |               | ○             | ○             | ○             | ○             |                |                |  |
|                    | MVZ-A36AA4      |                   |            |            |            |            |            |               |               |               |               |               |               | ○             | ○             |                |                |  |
|                    | MVZ-A36AA7      |                   |            |            |            |            |            |               |               |               |               |               |               | ○             | ○             |                |                |  |
|                    | SVZ-KP12NA      | ○                 | ○          |            |            |            |            |               |               |               |               |               |               |               |               |                |                |  |
|                    | SVZ-KP18NA      | ○                 | ○          | ○          |            |            |            |               |               |               |               |               |               |               |               |                |                |  |
|                    | SVZ-KP24NA      | ○                 | ○          | ○          |            |            |            |               |               |               |               |               |               |               |               |                |                |  |
|                    | SVZ-KP30NA      |                   |            |            | ○          | ○          | ○          |               |               |               |               |               |               |               |               |                |                |  |
|                    | SVZ-KP36NA      |                   |            |            | ○          | ○          | ○          |               |               |               |               |               |               |               |               |                |                |  |
| PVA-A12AA7         |                 |                   |            |            |            |            |            | ○             | ○             |               |               |               |               |               |               |                |                |  |
| PVA-A18AA7         |                 |                   |            |            |            |            |            | ○             | ○             | ○             |               |               |               |               |               |                |                |  |
| PVA-A24AA7         |                 |                   |            |            |            |            |            |               |               |               | ○             | ○             | ○             | ○             |               |                |                |  |
| PVA-A30AA4         |                 |                   |            |            |            |            |            |               |               |               | ○             | ○             | ○             | ○             |               |                |                |  |
| PVA-A30AA7         |                 |                   |            |            |            |            |            |               |               |               | ○             | ○             | ○             | ○             |               |                |                |  |
| PVA-A36AA4         |                 |                   |            |            |            |            |            |               |               |               |               |               |               |               | ○             | ○              |                |  |
| PVA-A36AA7         |                 |                   |            |            |            |            |            |               |               |               |               |               |               |               | ○             | ○              |                |  |
| PVA-A42AA4         |                 |                   |            |            |            |            |            |               |               |               |               |               |               |               |               | ○              | ○              |  |
| PVA-A42AA7         |                 |                   |            |            |            |            |            |               |               |               |               |               |               |               |               | ○              | ○              |  |

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# ELECTRICAL SPECIFICATION : ELECTRIC HEAT KIT

(See note on best design practice on page 4)

| Electric Heat Part Number | Heater kW |           | Heater Amps <sup>1</sup> | MCA <sup>1</sup> | MOP <sup>1</sup> | Htr & Mtr Amps <sup>2</sup> | MCA <sup>2</sup> | MOP <sup>2</sup> | Factory Installed Disconnect (Circuit Breaker) |
|---------------------------|-----------|-----------|--------------------------|------------------|------------------|-----------------------------|------------------|------------------|------------------------------------------------|
|                           | 208V/240V |           | 208V/240V                | 208V/240V        | 208V/240V        | 208V/240V                   | 208V/240V        | 208V/240V        |                                                |
| EH03-SVZ-S                | 2.3/3.0   |           | 10.8/12.5                | 13.5/15.6        | 15/20            | 13.2/14.9                   | 16.5/18.6        | 20/20            | 20                                             |
| EH05-SVZ-S                | 3.8/5.0   |           | 18.1/20.8                | 22.6/26          | 25/30            | 20.5/23.2                   | 25.6/29          | 30/30            | 30                                             |
| EH08-SVZ-S                | 6.0/8.0   |           | 28.9/33.3                | 36.1/41.7        | 40/45            | 31.3/35.7                   | 39.1/44.7        | 40/45            | 45                                             |
| EH05-SVZ-M                | 3.8/5.0   |           | 18.1/20.8                | 22.6/26          | 25/30            | 21.4/24.1                   | 26.7/30.2        | 30/30            | 30                                             |
| EH08-SVZ-M                | 6.0/8.0   |           | 28.9/33.3                | 36.1/41.7        | 40/45            | 32.2/36.6                   | 40.2/45.8        | 45/50            | 50                                             |
| EH10-SVZ-M                | 7.5/10    |           | 36.1/41.7                | 45.1/52.1        | 50/60            | 39.4/45                     | 49.3/56.2        | 50/60            | 60                                             |
| EH03-MPA-S(B)             | 2.3/3.0   |           | 10.8/12.5                | 13.5/15.6        | 15/20            | 13.2/14.9                   | 16.5/18.6        | 20/20            | 20                                             |
| EH05-MPA-S(B)             | 3.8/5.0   |           | 18.1/20.8                | 22.6/26          | 25/30            | 20.5/23.2                   | 25.6/29          | 30/30            | 30                                             |
| EH08-MPA-S(B)             | 6.0/8.0   |           | 28.9/33.3                | 36.1/41.7        | 40/45            | 31.3/35.7                   | 39.1/44.7        | 40/45            | 45                                             |
| EH03-MPA-M(B)             | 2.3/3.0   |           | 10.8/12.5                | 13.5/15.6        | 15/20            | 14.1/15.8                   | 17.7/19.8        | 20/20            | 20                                             |
| EH05-MPA-M(B)             | 3.8/5.0   |           | 18.1/20.8                | 22.6/26          | 25/30            | 21.4/24.1                   | 26.7/30.2        | 30/30            | 30                                             |
| EH08-MPA-M(B)             | 6.0/8.0   |           | 28.9/33.3                | 36.1/41.7        | 40/45            | 32.2/36.6                   | 40.2/45.8        | 45/50            | 50                                             |
| EH10-MPA-M(B)             | 7.5/10    |           | 36.1/41.7                | 45.1/52.1        | 50/60            | 39.4/45                     | 49.3/56.2        | 50/60            | 60                                             |
| EH10-MPA-L(B)             | 7.5/10    |           | 36.1/41.7                | 45.1/52.1        | 50/60            | 40.6/46.2                   | 50.8/57.7        | 60/60            | 60                                             |
| EH15-MPAS-L(B)            | 11.3/15   | Circuit 1 | 27.1/31.2                | 33.9/39.1        | 35/40            | 31.6/35.8                   | 39.5/44.7        | 40/45            | 45                                             |
|                           |           | Circuit 2 | 27.1/31.2                | 33.9/39.1        | 35/40            | 27.1/31.2                   | 33.9/39.1        | 35/40            | 40                                             |
| EH17-MPAS-L(B)            | 13.2/17.5 | Circuit 1 | 31.6/36.5                | 39.5/45.6        | 40/50            | 36.1/41                     | 45.1/51.2        | 45/60            | 60                                             |
|                           |           | Circuit 2 | 31.6/36.5                | 39.5/45.6        | 40/50            | 31.6/36.5                   | 39.5/45.6        | 40/50            | 50                                             |

<sup>1</sup> Heater amps; no motor

<sup>2</sup> Heater and motor amps (connect air handler power supply to largest circuit breaker)

Voltage and Amperage based on 60Hz

Motor amps are placed on circuit 1 when required

Unit tested at 0.60 in WG external static pressure

Minimum installation clearance to combustible material 0"

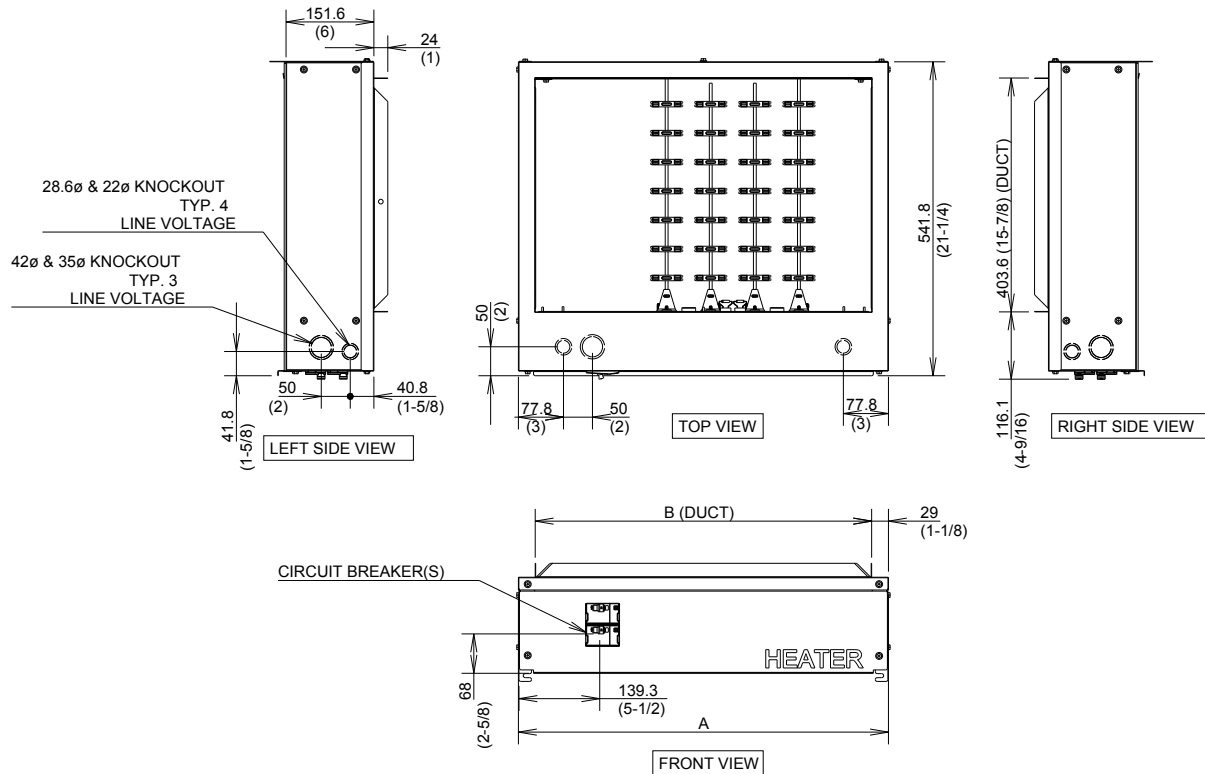
Maximum outlet air temperature 200° F

The building power supply circuit breaker must be sized per MOP listed for the provided voltage.

The factory installed circuit breaker in this kit is provided as a disconnect switch only.

# DIMENSIONS : ELECTRIC HEAT KIT

Units: mm (in.)



| MODEL          | A           | B                 |
|----------------|-------------|-------------------|
| EH03-MPA-S(B)  | 433<br>(17) | 376<br>(14-13/16) |
| EH05-MPA-S(B)  |             |                   |
| EH08-MPA-S(B)  |             |                   |
| EH03-SVZ-S     |             |                   |
| EH05-SVZ-S     |             |                   |
| EH08-SVZ-S     |             |                   |
| EH03-MPA-M(B)  | 534<br>(21) | 477<br>(18-13/16) |
| EH05-MPA-M(B)  |             |                   |
| EH08-MPA-M(B)  |             |                   |
| EH10-MPA-M(B)  |             |                   |
| EH05-SVZ-M     |             |                   |
| EH08-SVZ-M     |             |                   |
| EH10-SVZ-M     |             |                   |
| EH10-MPA-L(B)  | 635<br>(25) | 579<br>(22-13/16) |
| EH15-MPAS-L(B) |             |                   |
| EH17-MPAS-L(B) |             |                   |



## NOTE

### BEST DESIGN PRACTICE TO ASSURE ADEQUATE AIRFLOW REQUIREMENTS

During electric heater operation the fan is defaulted to high speed to help assure adequate airflow. To maintain adequate airflow required for electric heater operation, it is recommended that an additional 0.20 WG static pressure drop be added to system ductwork design when using the electric heat kit.

Examples:

When air handler is set for 0.50 WG static, the maximum external static pressure for ductwork should not exceed 0.30 WG.

When air handler is set for 0.80 WG static, the maximum external static pressure for ductwork should not exceed 0.60 WG, etc.