



# High Efficiency Central Heat Pump System



## Performance up to

|         |              |       |
|---------|--------------|-------|
| COOLING | Temperatures | SEER2 |
|         | -15°C<br>5°F | 17.4  |

|         |                |       |
|---------|----------------|-------|
| HEATING | Temperatures   | HSPF2 |
|         | -30°C<br>-22°F | 10    |

## Installation Flexibility

We offer you 2 options to meet all your needs:



An installation with the EVO Air Handler to enjoy our complete EVO system



To reduce labor and equipment costs, you can install the EVO condenser in retrofit with a third-party indoor unit such as a preexisting or new furnace by adding our A-coil, for instance our Supreme electric furnace or our Chinook gas furnace.



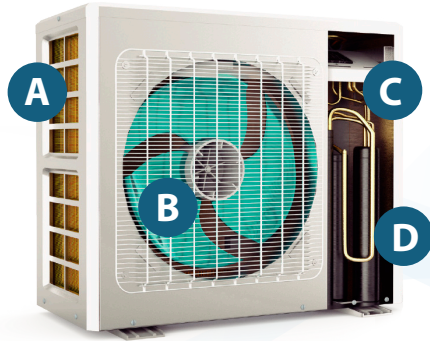
# Specifications

- 35% energy savings achieved by advanced inverter technology
- The side-discharged condenser allows installation in confined spaces
- Can be matched with most brands of air handler and A-coil
- Compatible with most thermostats on the market

- Electrical heating belt for compressor
- Self-diagnostic
- Self-Adapt mode enables ability to analyze temperature and pressure change of the unit to adjust operation
- Universal compatibility with third party applications

## A System Built To Last

### EVO Condenser

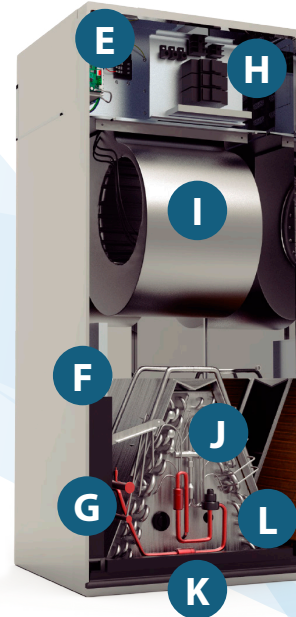


- A** Gold-Fin copper coil helps fight against corrosion in harsh environments. Thin design allows for installation in compact areas.
- B** Variable speed outdoor DC motor operates efficiently depending on requirements. Fan blade designs allows for quiet operation.
- C** Smart control board helps adjust output capacity allowing the unit to maintain temperature at set level and helps control humidity during summer months. Improves performance and comfort automatically.
- D** Inverter technology compressor with EEV valve helps to operate at high efficiency levels during heating mode. Can operate outside temperatures as low as -30°C (-22°F)

#### Outdoor Unit Dimensions: in (mm)

| Models   | W            | H             | D              |
|----------|--------------|---------------|----------------|
| EVD-24-O | 37 1/4 (946) | 31 7/8 (810)  | 16 1/8 (410)   |
| EVD-30-O |              |               |                |
| EVD-36-O | 37 1/2 (952) | 52 1/2 (1333) | 16 11/32 (410) |
| EVD-48-O |              |               |                |
| EVD-60-O |              |               |                |

### EVO Air Handler



- E** Smart control board with easy access. Allows for quicker maintenance.
- F** Flare connection for easy access when soldering is not possible. Solder adapters included.
- G** Multi-Positional drain pan flexible for vertical or horizontal applications.
- H** Can accommodate electric heat with no modifications and easy access installation. See table below.
- I** DC Motor allows for quiet operation while performing at efficiency levels controlling humidity.
- J** Aluminum coil allows efficiency heat transfer, humidity removal and easy maintenance. The EEV valve helps to operate at high efficiency levels during cooling.
- K** Easy access filter-track.
- L** Integrated drain pan made from corrosion-resistant composite material to help eliminate standing water.

#### EVO Electric Auxiliary Heat Module

| Models    | Descriptions                         |
|-----------|--------------------------------------|
| EAH-05B-B | 5 kW electric auxiliary heat module  |
| EAH-10B-B | 10 kW electric auxiliary heat module |
| EAH-15B-B | 15 kW electric auxiliary heat module |
| EAH-20B-B | 20 kW electric auxiliary heat module |

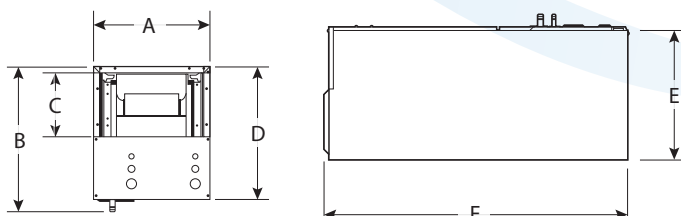
# EVO with Air Handler

| Product # <sup>1</sup>                                      | Indoor Unit                |              | EVD-24-I              | EVD-30-I               | EVD-36-I                | EVD-48-I                 | EVD-60-I                  |
|---|----------------------------|--------------|-----------------------|------------------------|-------------------------|--------------------------|---------------------------|
|   | Outdoor Unit               |              | EVD-24-O              | EVD-30-O               | EVD-36-O                | EVD-48-O                 | EVD-60-O                  |
| <b>Technical Performance</b>                                |                            |              |                       |                        |                         |                          |                           |
| <b>Power Supply</b>   |                            | V / Ph / HZ  | 230/208/1/60          |                        |                         |                          |                           |
| <b>Cooling Capacity</b>                                     | Nominal                    | W (BTU/hr)   | 7038 (24000)          | 8792 (30000)           | 10557 (36000)           | 13783 (47000)            | 16129 (55000)             |
| <b>Heating Capacity</b>                                     | Nominal                    | W (BTU/hr)   | 7038 (24000)          | 9671 (33000)           | 11730 (40000)           | 14663 (50000)            | 17 302 (59000)            |
| SEER2   |                            | -            | 17.4                  | 16.2                   | 16                      | 15.6                     | 15.3                      |
| HSPF2   |                            | -            | 10                    | 8.9                    | 9.5                     | 9.4                      | 9.4                       |
| EER2  |                            | W/W          | 11.7                  | 10                     | 10                      | 8.2                      | 8.8                       |
| COP   |                            | W/W          | 3.35                  | 3.30                   | 3.36                    | 3.15                     | 3.42                      |
| AHRI number   |                            | -            | 210365432             | 210365433              | 210365434               | 210365435                | 210365436                 |
| Energy Star   |                            | -            | ✓                     | ✓                      | ✓                       | ✓                        | ✓                         |
| <b>Indoor Unit</b>  |                            |              |                       |                        |                         |                          |                           |
| <b>Dehumidification</b>                                     |                            | pt/hr (l/hr) | 3.48 (1.98)           | 6.1 (3.49)             | 6.1 (3.49)              | 4.96 (8.72)              | 9.77 (5.55)               |
| <b>Air flow volume</b>                                      | T / H / M / L <sup>2</sup> | cfm          | 824 / 759 / 694 / 629 | 1088 / 894 / 806 / 712 | 1188 / 1082 / 971 / 865 | 1471 / 1282 / 1094 / 906 | 1806 / 1582 / 1359 / 1135 |
| <b>Sound level</b>  | H / M / L                  | dB (A)       | 39 / 36 / 33          | 42 / 41 / 37           | 45 / 43 / 41            | 50 / 47 / 44             | 51 / 46 / 42              |
| Fan motor RLA   |                            | A            | 3                     | 3.5                    | 4                       | 6                        | 7                         |
| MCOP  |                            | A            | 15                    | 15                     | 15                      | 15                       | 15                        |
| Net weight  |                            | lb (kg)      | 106 (48)              | 129 (59)               | 129 (59)                | 131 (59)                 | 163 (74)                  |
| <b>Outdoor Unit</b>   |                            |              |                       |                        |                         |                          |                           |
| <b>Air flow volume</b>                                      |                            | cfm          | 3000                  | 3000                   | 4500                    | 4412                     | 4500                      |
| <b>Sound level</b>  |                            | dB (A)       | 62                    | 60.5                   | 64                      | 64                       | 63.5                      |
| <b>Compressor power input</b>                               |                            | W            | 2085                  | 2765                   | 3565±3%                 | 3565±3%                  | 3770                      |
| MCA   |                            | A            | 20.5                  | 23                     | 30                      | 40                       | 40                        |
| MCOP  |                            | A            | 35                    | 35                     | 50                      | 50                       | 50                        |
| Compressor RLA  |                            | A            | 15                    | 17.5                   | 32                      | 33                       | 26.2                      |
| <b>Refrigerant volume (R410A)</b>                           |                            | oz (g)       | 102 (2900)            | 134 (3799)             | 165.7 (4700)            | 169 (4800)               | 169 (4800)                |
| <b>Operating ambient temperature</b>                        | Cooling                    | °C (°F)      | -15 to 50 (5 to 122)  |                        |                         |                          |                           |
|   | Heating                    | °C (°F)      | -30 to 24 (-22 to 75) |                        |                         |                          |                           |
| <b>Net weight</b>   |                            | lb (kg)      | 137 (62)              | 160 (72.5)             | 227 (103)               | 220 (100)                | 240 (109)                 |
| <b>Connection Piping / Refrigerant</b>                      |                            |              |                       |                        |                         |                          |                           |
| <b>Pre-charge length</b>                                    |                            | ft (m)       | 25 (7.5)              | 25 (7.5)               | 25 (7.5)                | 25 (7.5)                 | 25 (7.5)                  |
| <b>Additional refrigerant charge</b>                        |                            | oz/ft (g/m)  | 0.69 (65)             | 0.69 (65)              | 0.69 (65)               | 0.69 (65)                | 0.69 (65)                 |
| <b>Liquid pipe outer diameter</b>                           |                            | in           | 3/8                   | 3/8                    | 3/8                     | 3/8                      | 3/8                       |
| <b>Gas pipe outer diameter</b>                              |                            | in           | 3/4                   | 3/4                    | 3/4                     | 3/4                      | 7/8                       |
| <b>Maximum height between outdoor and indoor units</b>      |                            | ft (m)       | 82 (25)               | 82 (25)                | 98 (30)                 | 98 (30)                  | 98 (30)                   |
| <b>Maximum pipe length between outdoor and indoor units</b> |                            | ft (m)       | 164 (50)              | 164 (50)               | 213 (65)                | 213 (65)                 | 213 (65)                  |

<sup>1</sup> 1 indoor unit and 1 outdoor unit. Note that each unit is individually packaged.

<sup>2</sup> Fan Speeds: (T) Turbo / (H) High / (M) Medium / (L) Low.

## Air Handler Dimensions



| Model    | A            | B        | C            | D            | E            | F         |
|----------|--------------|----------|--------------|--------------|--------------|-----------|
| EVD-24-I | 15 3/4 (400) | 23 (585) | 10 1/4 (260) | 17 1/2 (445) | 21 (534)     | 45 (1143) |
| EVD-30-I | 19 1/4 (488) | 23 (585) | 10 1/4 (260) | 21 (534)     | 21 (534)     | 49 (1245) |
| EVD-36-I |              |          |              |              |              |           |
| EVD-48-I |              |          |              |              |              |           |
| EVD-60-I | 22 7/8 (580) | 23 (585) | 10 1/4 (260) | 21 (534)     | 24 1/2 (622) | 53 (1346) |

# EVO with A Coil



## Specifications

- Up to 16.8 SEER2
- Available in multiple sizes: 17.5", 21", 24.5"
- Horizontal or Vertical cased coil flexibility
- Can be matched with third-party furnace or blower
- 24V or 485 Communication Mode

| Product # <sup>1</sup>                               |           | Indoor Unit  | MAC24H1718E                        | MAC36H2124E                       |                                   | MAC48H2124E                       | MAC60H2428E                         |
|--|-----------|--------------|------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------------------|
|  |           | Outdoor Unit | EVD-24-O                           | EVD-30-O                          | EVD-36-O                          | EVD-48-O                          | EVD-60-O                            |
| Power Supply   |           | V / Ph / HZ  | 230 / 208 / 1 / 60                 |                                   |                                   |                                   |                                     |
| Cooling Capacity                                     | Nominal   | W (BTU/hr)   | 7034 (24000)                       | 8792 (30000)                      | 10550 (36000)                     | 13481 (46000)                     | 15534 (53000)                       |
| Heating Capacity                                     | Nominal   | W (BTU/hr)   | 7327 (25000)                       | 9671 (33000)                      | 11430 (39000)                     | 14947 (51000)                     | 15826 (54000)                       |
| SEER2  |           | -            | 16.8                               | 15.5                              | 14.8                              | 14.3                              | 14.5                                |
| HSPF2  |           | -            | 9.5                                | 9.7                               | 10                                | 9                                 | 8.6                                 |
| EER2   |           | W/W          | 10.7                               | 10.5                              | 9.8                               | 8.6                               | 8.6                                 |
| COP  |           | W/W          | 1.95                               | 1.85                              | 2.0                               | 1.80                              | 1.8                                 |
| AHRI number  |           | -            | 213460480                          | 213160482                         | 213160483                         | 213160484                         | 213160485                           |
| Energy Star  |           | -            | ✓                                  | ✓                                 | ✓                                 | -                                 | -                                   |
| Indoor Unit  |           |              |                                    |                                   |                                   |                                   |                                     |
| Air flow volume                                      | (Max)     | SCFM         | 720                                | 960                               | 960                               | 1015                              |                                     |
| Net weight   |           | lb (kg)      | 43 (19.5)                          | 67 (30)                           | 67 (30)                           | 67 (30)                           | 87 (39)                             |
| Dimension  | W × D × H | In (mm)      | 17½ × 21 × 18<br>(445 × 535 × 460) | 21 × 21 × 24<br>(535 × 535 × 610) | 21 × 21 × 24<br>(535 × 535 × 610) | 21 × 21 × 24<br>(535 × 535 × 610) | 24 ½ × 21 × 28<br>(622 × 533 × 711) |
| Outdoor Unit   |           |              |                                    |                                   |                                   |                                   |                                     |
| Air flow volume                                      |           | cfm          | 3000                               | 3000                              | 4500                              | 4500                              | 4500                                |
| Sound level  |           | dB (A)       | 63.5                               | 63                                | 61                                | 64                                | 62                                  |
| Compressor power input                               |           | W            | 2085                               | 2765                              | 3565±3%                           | 3565±3%                           | 3770                                |
| MCA  |           | A            | 20.5                               | 23                                | 40                                | 40                                | 40                                  |
| MCOP   |           | A            | 35                                 | 35                                | 50                                | 50                                | 50                                  |
| Refrigerant volume (R410A)                           |           | oz (kg)      | 102 (2900)                         | 134 (3.8)                         | 166 (4.7)                         | 169 (4.8)                         | 169 (4.8)                           |
| Operating ambient temperature                        | Cooling   | °C (°F)      | -15 to 50 (5 to 122)               |                                   |                                   |                                   |                                     |
|  | Heating   | °C (°F)      | -30 to 24 (-22 to 75)              |                                   |                                   |                                   |                                     |
| Net weight   |           | lb (kg)      | 137 (62)                           | 160 (72.5)                        | 227 (103)                         | 220 (100)                         | 240 (109)                           |
| Connection Piping / Refrigerant                      |           |              |                                    |                                   |                                   |                                   |                                     |
| Pre-charge length                                    |           | ft (m)       | 25 (7.5)                           | 25 (7.5)                          | 25 (7.5)                          | 25 (7.5)                          | 25 (7.5)                            |
| Additional refrigerant charge                        |           | oz/ft (g/m)  | 0.69 (65)                          | 0.69 (65)                         | 0.69 (65)                         | 0.69 (65)                         | 0.69 (65)                           |
| Liquid pipe outer diameter                           |           | in           | 3/8                                | 3/8                               | 3/8                               | 3/8                               | 3/8                                 |
| Gas pipe outer diameter                              |           | in           | 3/4                                | 3/4                               | 3/4                               | 7/8                               | 7/8                                 |
| Maximum height between outdoor and indoor units      |           | ft (m)       | 66 (20)                            | 82 (25)                           | 98 (30)                           | 98 (30)                           | 98 (30)                             |
| Maximum pipe length between outdoor and indoor units |           | ft (m)       | 98 (30)                            | 164 (50)                          | 213 (65)                          | 213 (65)                          | 213 (65)                            |

<sup>1</sup> 1 indoor unit and 1 outdoor unit. Note that each unit is individually packaged.

Authorized Retailer



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