

# 15.5 SEER2 HEAT PUMP



## SUBMITTAL DATA

FLEXE60HP230V1AH / FLEXE60HP230V1AO  
60000 BTU/H Unitary Heat Pump Split System

Job Name

Location

Date

Purchaser

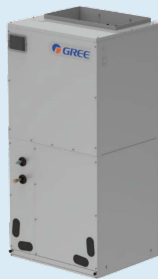
Engineer

Submitted to

For

Unit Designation

Schedule No.



FLEXE60HP230V1AH



FLEXE60HP230V1AO

## GENERAL FEATURES

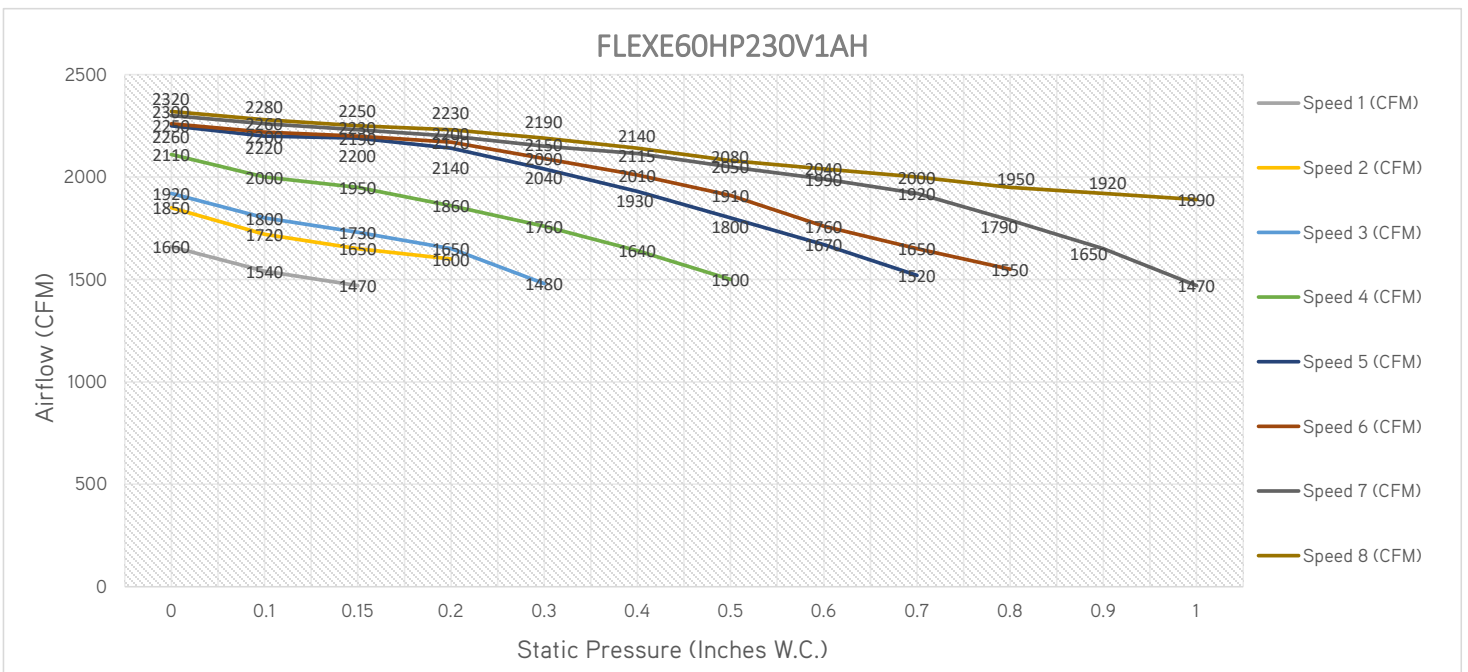
- AHRI Certificate: [211078852](#)
- High Efficiency DC Inverter Technology
- 24VAC Thermostat Compatible
- Zero Lot Line Design
- 8 Speed Fan Motor
- Matched with Indoor Unit
- Designed for New Construction or Replacement Market
- Compact and Quiet, as low as 65 dB(A) Side Discharge Outdoor Unit
- Cooling and Heating down to -15°C (5°F)
- Coil (Outdoor) Copper Tube/Aluminum Fin with Anti-Corrosion Coil Coating (Gold Colored Fin - 1500Hr Salt Spray Rating)
- Coil (Indoor) Copper Tube/Aluminum Fin with Anti-Corrosion Coil Coating (Blue Colored Fin - 500Hr Salt Spray Rating)

# SPECIFICATIONS, FEATURES & FUNCTION SUMMARY

| SPECIFICATIONS                                    |                | FLEXE60HP230V1AH / FLEXE60HP230V1AO |               | FEATURES & FUNCTIONS SUMMARY |  | FLEXE60HP230V1AH / FLEXE60HP230V1AO |  |
|---|----------------|-------------------------------------|---------------|------------------------------|--|-------------------------------------|--|
| System Type                                       |                | HEAT PUMP                           |               |                              |  |                                     |  |
| <b>SYSTEM PERFORMANCE</b>                         |                |                                     |               | <b>SYSTEM FEATURES</b>       |  |                                     |  |
| Cooling   | Min - Max      | Btu/h                               | 38250 - 57000 |                              | Compressor                                     | Inverter                            |  |
|   | Capacity @95°F | Btu/h                               | 54000         |                              | Ultra Low Frequency Torque Control             | Yes                                 |  |
| Heating   | Min - Max      | Btu/h                               | 26750 - 59000 |                              | Power Factor Correction                        | Yes                                 |  |
|   | Capacity @5°F  | Btu/h                               | 31400         |                              | Compressor Type                                | Rotary                              |  |
|   | Capacity @17°F | Btu/h                               | 30000         |                              | Refrigerant Type                               | R410A                               |  |
|   | Capacity @47°F | Btu/h                               | 54000         |                              | Outdoor Electronic Expansion Valve (EEV)       | Yes                                 |  |
| SEER2   |                |                                     | 15.2          |                              | Indoor TXV Control                             | Yes                                 |  |
| EER2  |                |                                     | 10            |                              | Basepan With Electric Heater                   | Yes                                 |  |
| HSPF2   |                |                                     | 7.8           |                              | Compressor With Electric Heater                | Yes                                 |  |
| COP @5°F  |                |                                     | 1.8           |                              | Fin Coating (Outdoor - Golden & Indoor - Blue) | Acrylic Resin                       |  |
| COP @47°F   |                |                                     | 2.9           |                              | Intelligent Defrosting                         | Yes                                 |  |
| Cooling Temperature Range                         |                | °F                                  | 5 - 118       |                              | Intelligent Preheating                         | Yes                                 |  |
| Heating Temperature Range                         |                | °F                                  | 5 - 75        |                              | Low Voltage Startup                            | Yes                                 |  |
| Refrigerant Type                                  |                |                                     | R410A         |                              | Memory/Power Failure Recovery                  | Yes                                 |  |
| <b>INDOOR UNIT</b>                                |                | <b>FLEXE60HP230V1AH</b>             |               |                              |  |                                     |  |
| Power Supply                                      | VAC            | 208-230V / 1Ph / 60 Hz              |               | Self Diagnosis               | Yes  |                                     |  |
| Sound Pressure Level                              | dB(A)          | 54                                  |               | Low Ambient Cooling          | No   |                                     |  |
| Control Voltage                                   | VAC            | 24                                  |               | 24VAC Thermostat Compatible  | Yes  |                                     |  |
| Rated Current Cooling                             | A              | 5                                   |               | Indoor Fan Type              | Centrifugal                                    |                                     |  |
| Rated Current Heating                             | A              | 5                                   |               | Multi Fan Speeds             | 8  |                                     |  |
| MCA   | A              | 7.5                                 |               | Auxiliary Electrical Heater  | Optional                                       |                                     |  |
| MOCP  | A              | 15                                  |               |                              |  |                                     |  |
| Electric Heater (Optional)                        | kW             | 5, 8, 10, 15, 20                    |               |                              |  |                                     |  |
| Air Flow  | CFM            | 1500                                |               |                              |  |                                     |  |
| External Static Pressure (Up to)                  | In W.c.        | 1.0                                 |               |                              |  |                                     |  |
| Dehumidification                                  | pt/hr          | 12.13                               |               |                              |  |                                     |  |
| External Dimensions (W x H x D)                   | in             | 24-3/4 x 52 x 21-1/4                |               |                              |  |                                     |  |
| Package Dimension (W x H x D)                     | in             | 27-5/16 x 54-1/4 x 26               |               |                              |  |                                     |  |
| Net Weight  | lbs            | 189.6                               |               |                              |  |                                     |  |
| Gross Weight                                      | lbs            | 203.9                               |               |                              |  |                                     |  |
| <b>OUTDOOR UNIT</b>                               |                | <b>FLEXE60HP230V1AO</b>             |               |                              |  |                                     |  |
| Power Supply                                      | VAC            | 208-230V / 1Ph / 60 Hz              |               |                              |  |                                     |  |
| Sound Pressure Level                              | dB(A)          | 65                                  |               |                              |  |                                     |  |
| Control Voltage                                   | VAC            | 24                                  |               |                              |  |                                     |  |
| Rated Current Cooling                             | A              | 32                                  |               |                              |  |                                     |  |
| Rated Current Heating                             | A              | 32                                  |               |                              |  |                                     |  |
| MCA   | A              | 32                                  |               |                              |  |                                     |  |
| MOCP  | A              | 45                                  |               |                              |  |                                     |  |
| External Dimensions (W x H x D)                   | in             | 39 x 37-3/4 x 14-5/8                |               |                              |  |                                     |  |
| Package Dimension (W x H x D)                     | in             | 45-7/16 x 43-3/4 x 18-7/8           |               |                              |  |                                     |  |
| Net Weight  | lbs            | 200.6                               |               |                              |  |                                     |  |
| Gross Weight                                      | lbs            | 223.8                               |               |                              |  |                                     |  |
| Refrigerant Charge - R410A                        | oz             | 197.5                               |               |                              |  |                                     |  |
| Additional Charge                                 | oz/ft          | 0.32                                |               |                              |  |                                     |  |
| <b>REFRIGERANT PIPING</b>                         |                |                                     |               |                              |  |                                     |  |
| Line Set Size (Liquid - Gas) - Flared Connections | in             | 3/8 - 3/4                           |               |                              |  |                                     |  |
| Pre-Charge Length                                 | ft             | 31                                  |               |                              |  |                                     |  |
| Pipe Length (Min - Max)                           | ft             | 10 - 164                            |               |                              |  |                                     |  |
| Max. Pipe Elevation                               | ft             | 98.4                                |               |                              |  |                                     |  |

## FAN PERFORMANCE

| Static Pressure (Inches W.C.) | 0    | 0.1  | 0.15 | 0.2  | 0.3  | 0.4  | 0.5  | 0.6  | 0.7  | 0.8  | 0.9  | 1    |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Speed 1 (CFM)                 | 1660 | 1540 | 1470 |      |      |      |      |      |      |      |      |      |
| Speed 2 (CFM)                 | 1850 | 1720 | 1650 | 1600 |      |      |      |      |      |      |      |      |
| Speed 3 (CFM)                 | 1920 | 1800 | 1730 | 1650 | 1480 |      |      |      |      |      |      |      |
| Speed 4 (CFM)                 | 2110 | 2000 | 1950 | 1860 | 1760 | 1640 | 1500 |      |      |      |      |      |
| Speed 5 (CFM)                 | 2250 | 2200 | 2190 | 2140 | 2040 | 1930 | 1800 | 1670 | 1520 |      |      |      |
| Speed 6 (CFM)                 | 2260 | 2220 | 2200 | 2170 | 2090 | 2010 | 1910 | 1760 | 1650 | 1550 |      |      |
| Speed 7 (CFM)                 | 2300 | 2260 | 2230 | 2200 | 2150 | 2115 | 2050 | 1990 | 1920 | 1790 | 1650 | 1470 |
| Speed 8 (CFM)                 | 2320 | 2280 | 2250 | 2230 | 2190 | 2140 | 2080 | 2040 | 2000 | 1950 | 1920 | 1890 |



**NOTE:**

1. Above chart CFM ratings are based on dry coil with factory filter installed.
2. For wet coil CFM ratings, multiply the CFM by 0.96 correction factor.

## DIMENSIONS

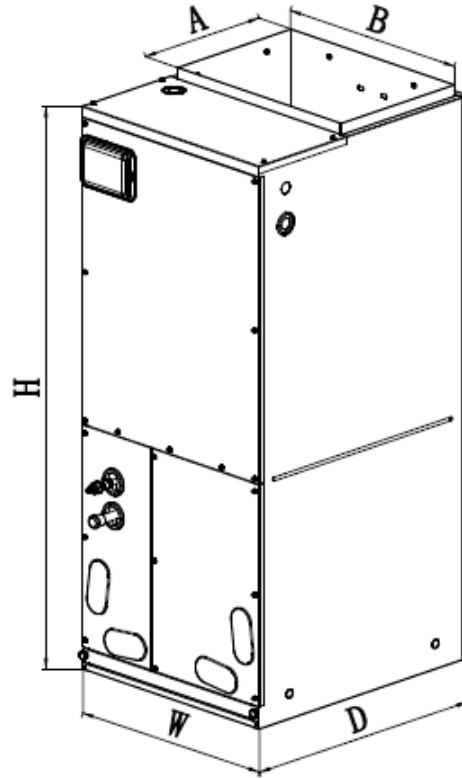
### INDOOR UNIT

Unit: inch

| FLEXE60HP230V1AH |         |
|------------------|---------|
| DIMENSIONS       |         |
| A                | 11-5/8" |
| B                | 14-1/2" |
| H                | 52"     |
| W                | 24-3/4" |
| D                | 21-1/4" |

| FILTER SIZE |                          |
|-------------|--------------------------|
| Supplied*   | 20-3/4" x 20-3/8" x 5/8" |
| Suggested   | 20-3/4" x 20-3/8" x 1"   |

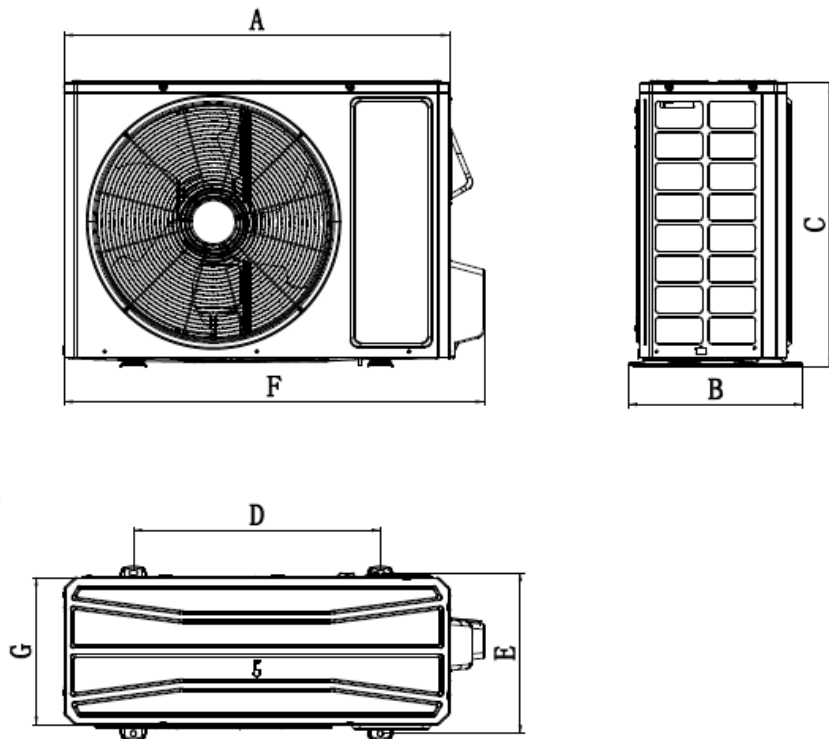
\*Supplied filter is metal mesh



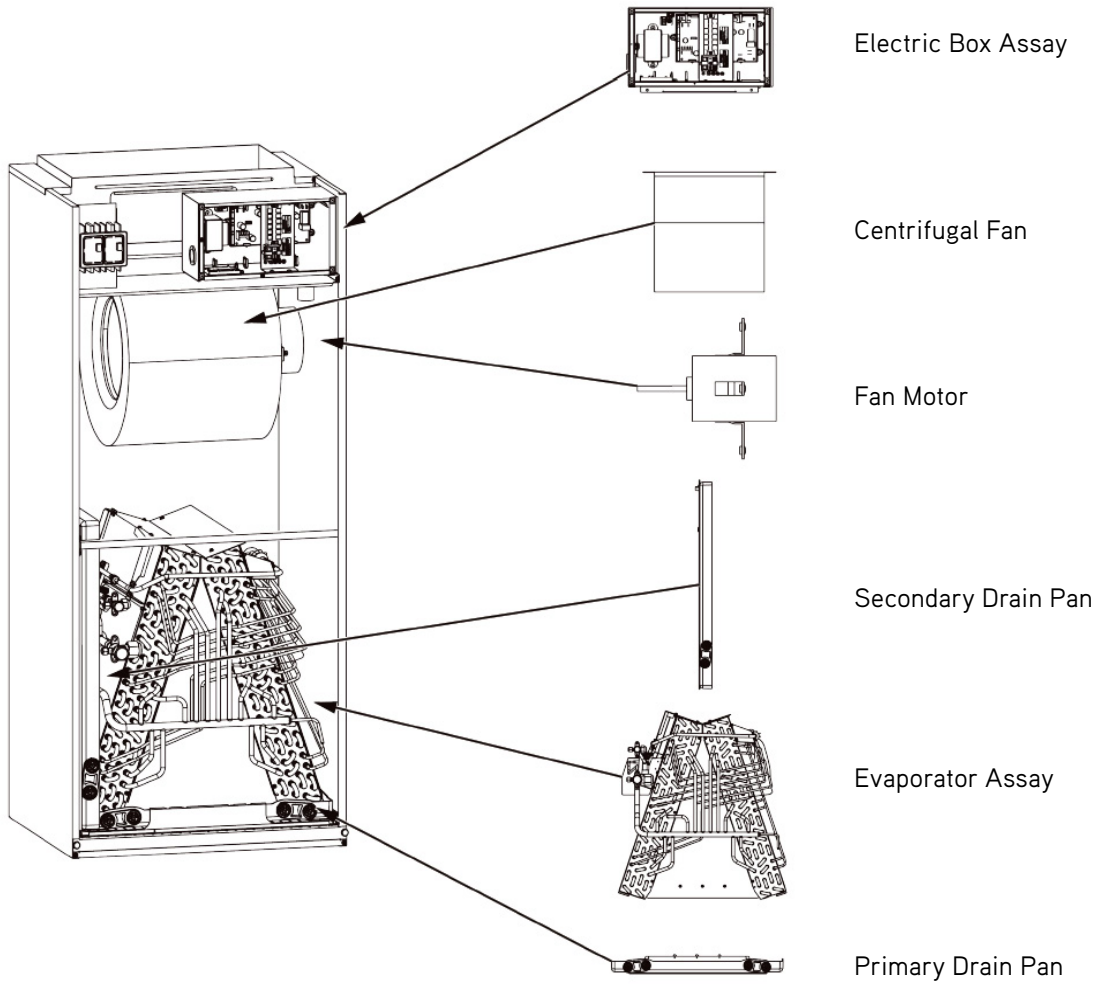
### OUTDOOR UNIT

Unit: inch

| FLEXE60HP230V1AO |           |
|------------------|-----------|
| DIMENSIONS       |           |
| A                | 39"       |
| B                | 15-13/16" |
| C                | 37-3/4"   |
| D                | 22-7/16"  |
| E                | 14-9/16"  |
| F                | 38-1/4"   |
| G                | 14-5/8"   |



## ACCESSORY HEATER AND GENERAL INFORMATION



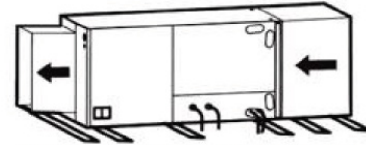
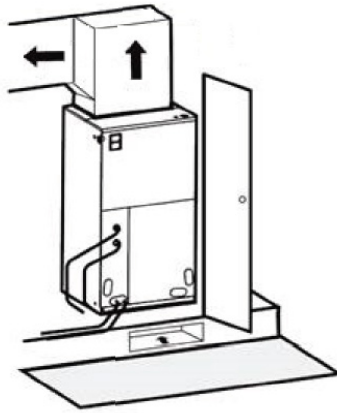
| Model            | Heat Kit Model   | Electric Heat (kW) |         | Min. Circuit Ampacity (A) |         | Max Fuse or Breaker (A) |         |         |         |         |         |         |         |         |
|------------------|------------------|--------------------|---------|---------------------------|---------|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
|                  |                  | 208V               | 230V    | 208V                      | 230V    | 208V                    | 230V    |         |         |         |         |         |         |         |
| FLEXE60HP230V1AH | One Mains Supply |                    |         |                           |         |                         |         |         |         |         |         |         |         |         |
|                  | ECOHTR05KW       | 3.74               | 4.6     | 31                        | 33      | 35                      | 35      |         |         |         |         |         |         |         |
|                  | ECOHTR08KW       | 6.03               | 7.36    | 44                        | 48      | 45                      | 50      |         |         |         |         |         |         |         |
|                  | ECOHTR10KW       | 7.49               | 9.2     | 53                        | 58      | 60                      | 60      |         |         |         |         |         |         |         |
|                  | Two Mains Supply |                    |         |                           |         |                         |         |         |         |         |         |         |         |         |
|                  |                  |                    | Power A | Power B                   | Power A | Power B                 | Power A | Power B | Power A | Power B | Power A | Power B | Power A | Power B |
|                  | ECOHTR15KW       | 7.49               | 3.74    | 9.2                       | 4.6     | 53                      | 23      | 58      | 25      | 60      | 25      | 60      | 30      | 30      |
| ECOHTR20KW       | 7.49             | 7.49               | 9.2     | 9.2                       | 53      | 46                      | 58      | 50      | 60      | 50      | 60      | 60      | 60      |         |

# CLEARANCES

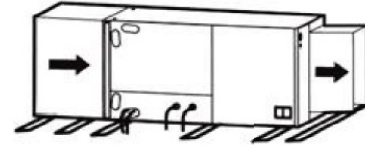
## INDOOR UNIT

Minimum clearance

FRONT > 24



Horizontal Left Configuration - No Modification Needed



Horizontal Right Configuration - Must Relocate Drain Pan

### NOTE:

Allow a minimum of 24" in front of the unit for service clearance. When installing in an area directly over a finished ceiling (such as an attic), an emergency drain pan is required directly under the unit. **See local and state codes for requirements.** When installing this unit in an area that may become wet, elevate the unit with a sturdy, non-porous material. In installations that may lead to physical damage (i.e. a garage) it is advised to install a protective barrier to prevent such damage. This air handler is designed for a complete supply and return ductwork system.

## OUTDOOR UNIT

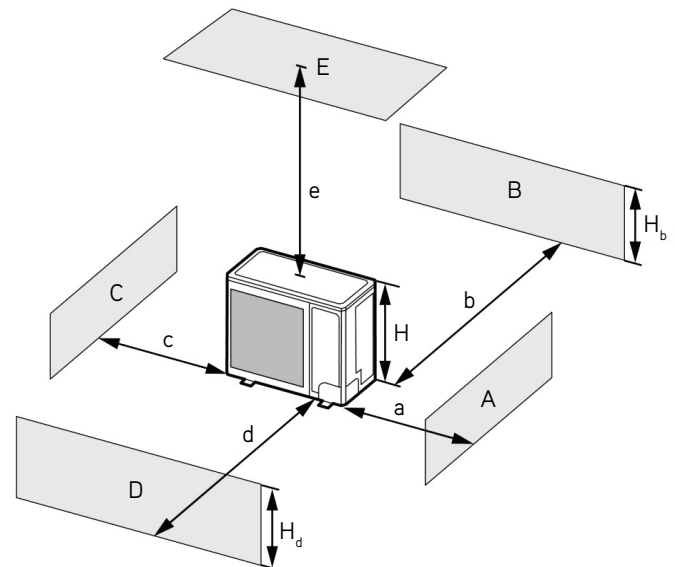
Minimum clearance

### NOTE:

Install the Outdoor Unit **2 Inches** Above the Expected Snow Line

1. When one outdoor unit is to be installed.

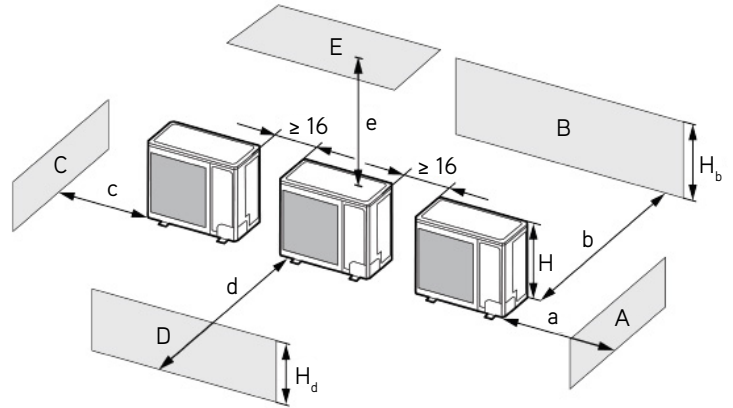
| A - E      | $H_b$ $H_d$ H |                     | (in)       |           |          |           |           |
|------------|---------------|---------------------|------------|-----------|----------|-----------|-----------|
|            |               |                     | a          | b         | c        | d         | e         |
| B          | -             | -                   | -          | $\geq 4$  | -        | -         | -         |
| A, B, C    | -             | -                   | $\geq 12$  | $\geq 4$  | $\geq 4$ | -         | -         |
| B, E       | -             | -                   | -          | $\geq 4$  | -        | -         | $\geq 40$ |
| A, B, C, E | -             | -                   | $\geq 12$  | $\geq 6$  | $\geq 6$ | -         | $\geq 40$ |
| D          | -             | -                   | -          | -         | -        | $\geq 40$ | -         |
| D, E       | -             | -                   | -          | -         | -        | $\geq 40$ | $\geq 40$ |
| B, D       | $H_b < H_d$   | $H_d < H$           | -          | $\geq 4$  | -        | $\geq 40$ | -         |
|            | $H_b > H_d$   | $H_d > H$           | -          | $\geq 4$  | -        | $\geq 40$ | -         |
| B, D, E    | $H_b < H_d$   | $H_b \leq 1/2H$     | -          | $\geq 10$ | -        | $\geq 80$ | $\geq 40$ |
|            |               | $1/2H < H_b \leq H$ | -          | $\geq 10$ | -        | $\geq 80$ | $\geq 40$ |
|            | $H_b > H_d$   | $H_b > H$           | Prohibited |           |          |           |           |
|            |               | $H_b \leq 1/2H$     | -          | $\geq 4$  | -        | $\geq 80$ | $\geq 40$ |
|            |               | $1/2H < H_b \leq H$ | -          | $\geq 8$  | -        | $\geq 80$ | $\geq 40$ |
|            | $H_b > H$     | Prohibited          |            |           |          |           |           |



## CLEARANCES

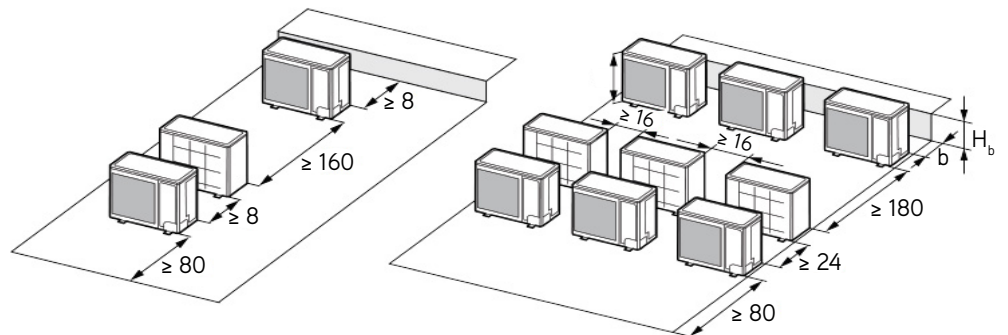
2. When two or more outdoor units are to be installed side by side.

| A - E      | $H_b$ $H_d$ H | (in)                |            |           |           |            |
|------------|---------------|---------------------|------------|-----------|-----------|------------|
|            |               | a                   | b          | c         | d         | e          |
| A, B, C    | -             | $\geq 12$           | $\geq 12$  | $\geq 40$ | -         | -          |
| A, B, C, E | -             | $\geq 12$           | $\geq 12$  | $\geq 40$ | -         | $\geq 40$  |
| D          | -             | -                   | -          | -         | $\geq 80$ | -          |
| D, E       | -             | -                   | -          | -         | $\geq 80$ | $\geq 40$  |
| B, D       | $H_b < H_d$   | $H_d > H$           | -          | $\geq 12$ | -         | $\geq 80$  |
|            | $H_b > H_d$   | $H_d \leq 1/2H$     | -          | $\geq 10$ | -         | $\geq 80$  |
| B, D, E    | $H_b > H_d$   | $1/2H < H_b \leq H$ | -          | $\geq 12$ | -         | $\geq 100$ |
|            |               | $H_b \leq 1/2H$     | -          | $\geq 12$ | -         | $\geq 80$  |
|            | $H_b < H_d$   | $1/2H < H_b \leq H$ | -          | $\geq 12$ | -         | $\geq 100$ |
|            |               | $H_b > H$           | Prohibited |           |           |            |
|            | $H_b > H_d$   | $H_d \leq 1/2H$     | -          | $\geq 10$ | -         | $\geq 100$ |
|            |               | $1/2H < H_d \leq H$ | -          | $\geq 12$ | -         | $\geq 100$ |
|            | $H_d > H$     | Prohibited          |            |           |           |            |



3. When outdoor units are installed in rows.

| $H_b$ $H_d$         | (in)        |
|---------------------|-------------|
| $H_b \leq 1/2H$     | $b \leq 10$ |
| $1/2H < H_b \leq H$ | $b \leq 12$ |
| $H_b > H_d$         | Prohibited  |



4. When outdoor units are installed one above another.

