

Job Name: \_\_\_\_\_

Location: \_\_\_\_\_

Engineer: \_\_\_\_\_

Submitted to: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Reference: \_\_\_\_\_

Date: \_\_\_\_\_

Approval: \_\_\_\_\_

Construction: \_\_\_\_\_

Unit #: \_\_\_\_\_

Drawing #: \_\_\_\_\_

## KEY FEATURES:

- Heat Pump operation (heating and cooling)
- Inverter-driven DC compressor for variable capacity
- 24V communicating controls compatible with a communicating indoor unit
- Available from 1.5 to 5 tons (18,000–60,000 BTU)
- R-454B refrigerant
- Variable-speed outdoor fan motor
- Soft start with very low starting current
- High part-load efficiency (excellent SEER2)
- Wide operating range for both cooling and heating
- Built-in diagnostics and fault reporting
- Quiet operation due to inverter modulation

## NOTES:

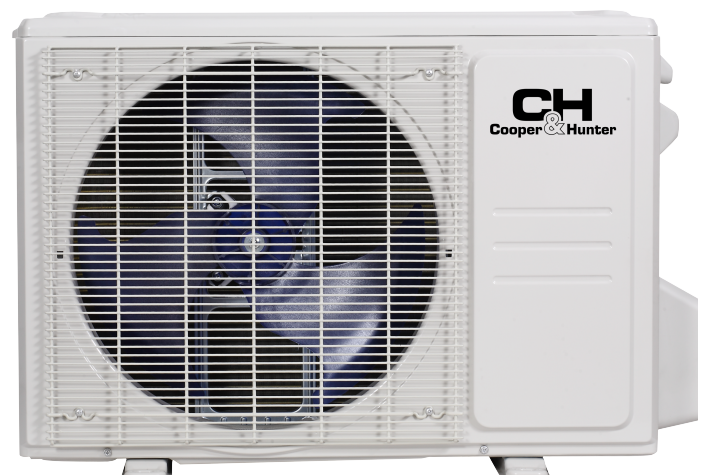
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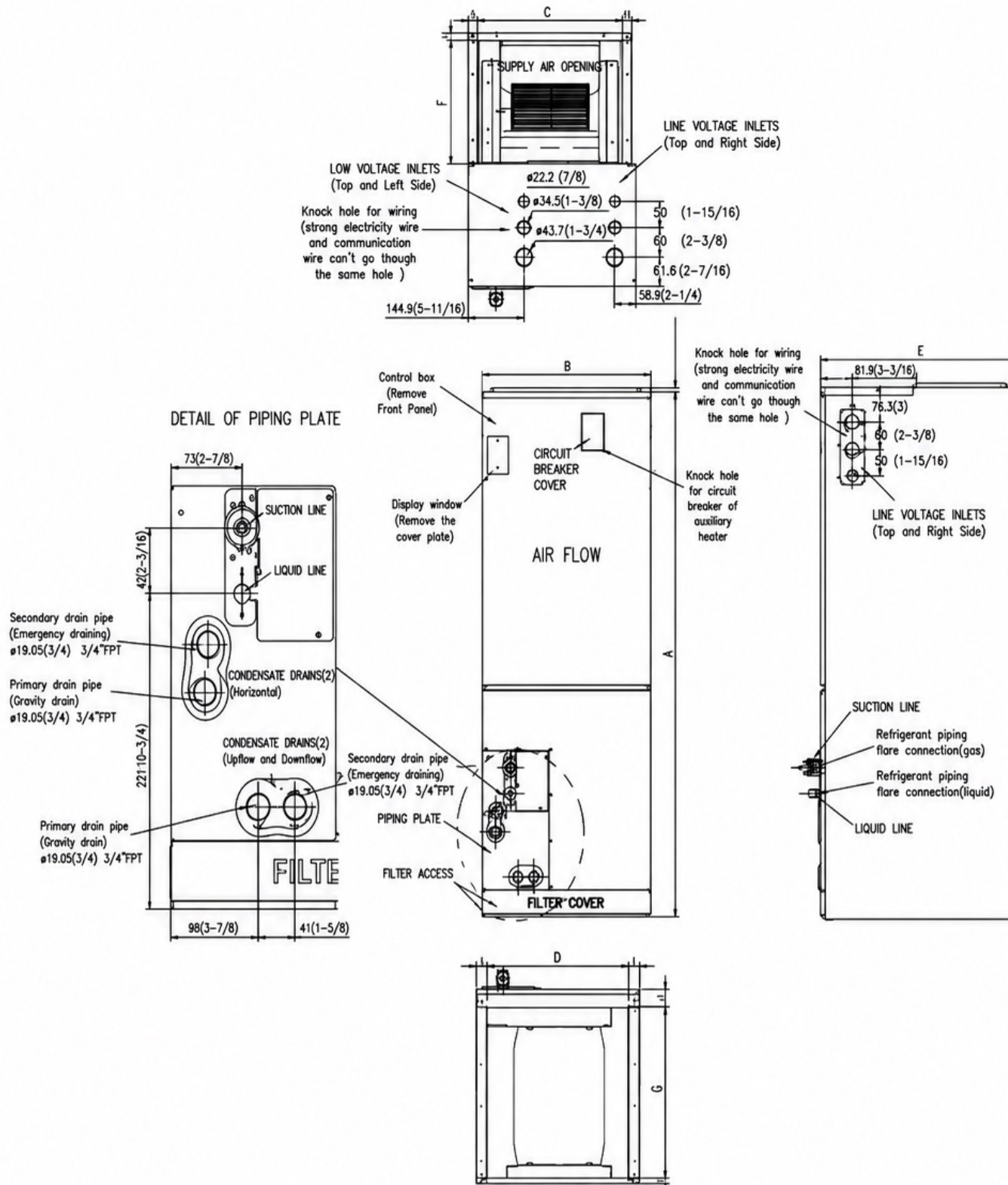
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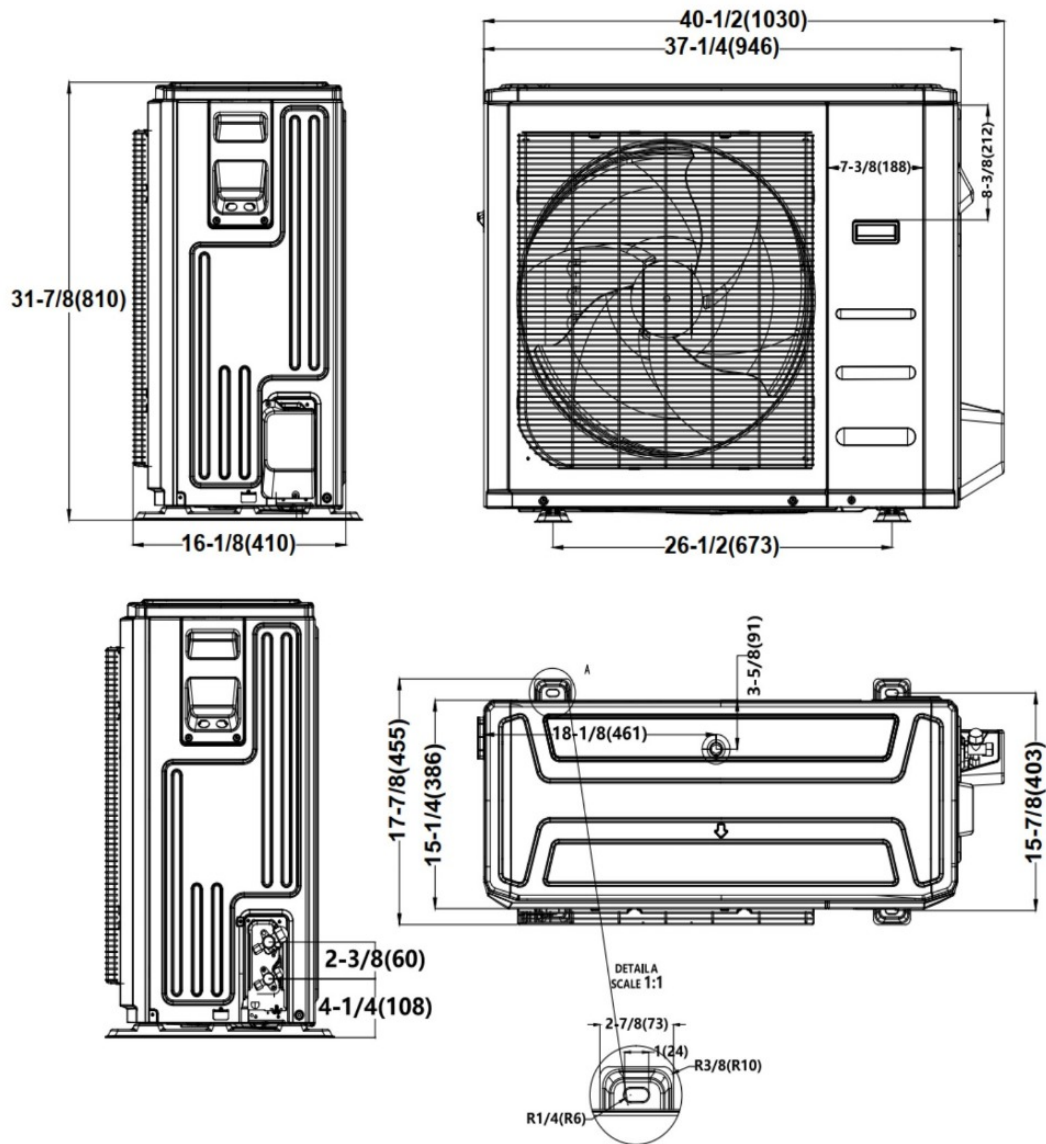
| Indoor Model                                |                    |           | CH-MP48AHU24V                 |
|---------------------------------------------|--------------------|-----------|-------------------------------|
| Power supply                                |                    | V, Ph, Hz | 115/208/230V,60Hz             |
| Communication wiring                        |                    |           | AWG 20x2                      |
| Cooling                                     | Capacity           | Btu/h     | 48,000 (9,100~50,100)         |
|                                             | Input              | w         | 6,132                         |
|                                             | Rated current      | A         | 25.8                          |
|                                             | EER/EER2           | Btu/w     | 8.0                           |
|                                             | SEER/SEER2         | Btu/w     | 15.2                          |
| Heating at 47 °F                            | Capacity           | Btu/h     | 48000 (11,300~52,600)         |
|                                             | Input              | W         | 6210 (760 ~6,670)             |
|                                             | Rated current      | A         | 27.3 (4.1 ~29)                |
|                                             | COP                | W/W       | 2.33                          |
|                                             | HSPF4/HSPF2-4      |           | 8.2                           |
|                                             | HSPF5/HSPF2-5      |           | 6.8                           |
| Indoor fan motor                            |                    | Qty       | 1                             |
|                                             |                    | Input     | 560                           |
|                                             |                    | RLA       | 4.0/6.4                       |
| Indoor air flow (Turbo/Hi/Med/Lo) (No duct) |                    | CFM       | 1601 / 1398 / 991 / 594 / N\A |
| ESP (range)                                 |                    | In.wg.    | 0-0.8 In.W.G                  |
| Indoor noise level (Hi/Med/Lo)              |                    | dB(A)     | N\A/52/48/44/N\A              |
| Dehumidification                            |                    | L/H       | 11.15                         |
| Indoor unit                                 | Dimensions (WxDxH) | inch      | 21.02 x 21.02 x 49.02         |
|                                             | Packing (WxDxH)    | inch      | 26.57 x 24.41 x 52.56         |
|                                             | Net/Gross weight   | lbs       | 133/158                       |
| Drainage water pipe diameter                |                    | inch      | 3/4"                          |
| Refrigerant piping (Liquid side/Gas side)   |                    | inch      | 3/8" 3/4"                     |
| Design pressure                             |                    | PSIG      | 550 / 340                     |
| Controller                                  |                    |           | 120N/24V                      |
| Room temperature                            | Cooling            | F         | 60~90                         |
|                                             | Heating            | F         | 60~90                         |

| Outdoor Model                              |                          |           | CH-ALT48HP24V-230VO   |
|--------------------------------------------|--------------------------|-----------|-----------------------|
| Power supply                               |                          | V, Ph, Hz | 115/208/230V,60Hz     |
| Min. circuit ampacity                      |                          | A         | 32                    |
| Max. fuse                                  |                          | A         | 35                    |
| Compressor                                 | Model                    |           | KTF420D62UNT          |
|                                            | Type                     |           | TWIN-ROTARY           |
|                                            | Brand                    |           | GMCC                  |
|                                            | Capacity                 | Btu/h     | N/A                   |
|                                            | Input                    | w         | 3,540.00              |
|                                            | Rated current (RLA)      | A         | 6.76                  |
|                                            | Refrigerant oil          | oz        | VG74                  |
| Outdoor fan motor                          | Qty                      |           | 1                     |
|                                            | Input                    | w         | 230                   |
|                                            | RLA                      | A         | 1.5                   |
|                                            | Speed                    | r/min     | 850/800/750/650       |
| Outdoor air flow (Max)                     |                          | CFM       | 2825                  |
| Outdoor noise level (Max)                  |                          | dB(A)     | 61                    |
| Throttle type                              |                          |           | EXV                   |
| Outdoor unit                               | Dimensions (WxDxH)       | inch      | 37.24 x 16.14 x 31.89 |
|                                            | Packing (WxDxH)          | inch      | 42.91 x 19.68 x 34.84 |
|                                            | Net/Gross weight         | lbs       | 168.43/179.23         |
| Refrigerant                                | Type                     |           | R454B                 |
|                                            | Precharge                | ft        | 24.6                  |
| Additional charge for 1/4 inch liquid pipe |                          | oz        |                       |
| Additional charge for 3/8 inch liquid pipe |                          | oz        | .7 oz/ft              |
| Refrigerant piping                         | Liquid side/Gas side     | inch      | 3/8" 3/4"             |
|                                            | Max. pipe length         | ft        | 246'                  |
|                                            | Max. difference in level | ft        | 98.4'                 |
| Ambient temperature                        | Cooling                  | F         | -13~122               |
|                                            | Heating                  | F         | -13~75                |

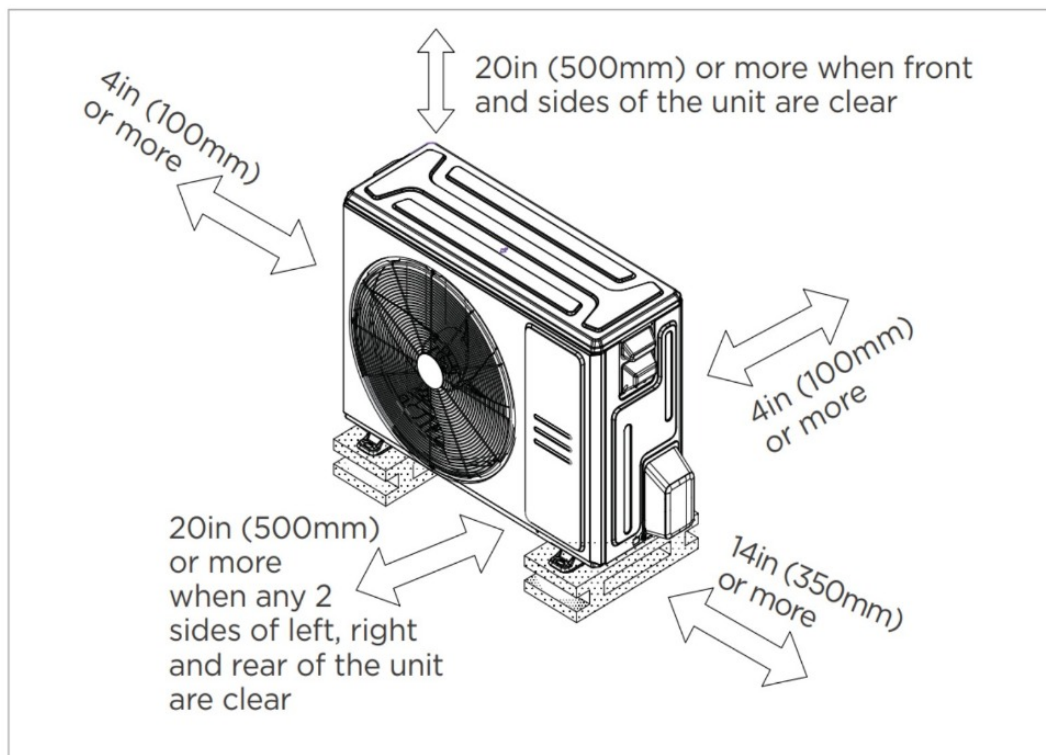


| Dimensions \ Model |                                    | 18/24/30k |      | 36/48/60k |      |
|--------------------|------------------------------------|-----------|------|-----------|------|
|                    |                                    | inch      | mm   | inch      | mm   |
| A                  | Model Height                       | 45        | 1143 | 49        | 1245 |
| B                  | Model Width                        | 17-1/2    | 445  | 21        | 534  |
| C                  | Supply Air Opening Width           | 15-5/8    | 397  | 19-1/8    | 486  |
| D                  | Return Air Opening Width           | 15-1/8    | 384  | 18-5/8    | 473  |
| E                  | Model Depth                        | 21        | 534  | 21        | 534  |
| F                  | Supply Air Opening Depth           | 10-1/4    | 260  | 10-1/4    | 260  |
| G                  | Return Air Opening Depth           | 18-3/4    | 476  | 18-3/4    | 476  |
| H                  | Supply Air Opening Clearance       | 15/16     | 24   | 15/16     | 24   |
| I                  | Return Air Opening Side Clearance  | 1-1/4     | 32   | 1-1/4     | 32   |
| J                  | Return Air Opening Front Clearance | 1-1/2     | 38   | 1-5/8     | 41   |
| K                  | Return Air Opening Back Clearance  | 5/8       | 16   | 5/8       | 16   |





#### Installation Instruction For Outdoor Unit



Meets all spatial requirements shown in Installation Clearance Requirements above.