

# Climate 5000 Series - Gen 4

## 24K BTU Single Zone Regular System

### 4-Way Cassette IDU

Engineering  
Submittal  
Sheet



# BOSCH

#### Overview and Project Information



|                    |  |
|--------------------|--|
| Project name       |  |
| Location           |  |
| Architect          |  |
| Engineer           |  |
| General contractor |  |
| Reference #        |  |

#### 24K Btu Single Zone Regular System - 4-Way Cassette IDU

|                      |                      |
|----------------------|----------------------|
| Indoor part number   | 8-733-962-681        |
| Indoor model number  | BMS500-AAU024-1AHCXD |
| Outdoor part number  | 8-733-962-687        |
| Outdoor model number | BMS500-AAS024-1CSXRD |

#### Efficiency Data AHRI 210/240 2023

|                 |      |
|-----------------|------|
| SEER2           | 22   |
| EER2            | 12.0 |
| HSPF2 Region IV | 10.5 |
| HSPF2 Region V  | 8.1  |
| COP(47F)        | 3.20 |
| COP (5F)        | 2.30 |

#### Performance Data AHRI 210/240 2023

|         |                      |             |
|---------|----------------------|-------------|
| Cooling | Capacity Range       | 12300~26800 |
|         | Rated Capacity       | 24000       |
|         | Current              | 8.8         |
|         | Input Power          | 2000        |
| Heating | Capacity Range       | 11600~33100 |
|         | Rated Capacity (47F) | 25000       |
|         | Rated Capacity (5F)  | 18500       |
|         | Current              | 10.2        |
|         | Input Power          | 2268        |

#### Electrical Data

|                                          |                  |
|------------------------------------------|------------------|
| Power supply (V / Ø / Hz)                | 208-230 / 1 / 60 |
| Min. circuit ampacity indoor/outdoor (A) | 3.0 / 24.0       |
| Max. fuse indoor/outdoor (A)             | 15.0 / 25.0      |

#### Compressor Data

|                                  |             |
|----------------------------------|-------------|
| Type:                            | Rotary      |
| Refrigerant oil /oil charge (ml) | VG74 / 620  |
| Input (W)                        | 805 / 2045  |
| Rated current (RLA/A)            | 4.15 / 9.30 |

#### Piping

|                                     |              |
|-------------------------------------|--------------|
| Refrigerant precharge (oz/kg)       | 70.55 / 2.00 |
| Length for precharge (ft/m)         | 24.6 / 7.5   |
| Liquid side (in/mm)                 | 3/8" / Ø9.52 |
| Gas side (in/mm)                    | 5/8" / Ø15.9 |
| Additional charge per ft (oz/g)     | 0.32 / 9.07  |
| Max. refrigerant pipe length (ft/m) | 164.00 / 50  |
| Max. difference in height (ft/m)    | 82.00 / 25   |

#### Operation Range

|     |                   |                  |
|-----|-------------------|------------------|
| ODU | Cooling (°F / °C) | -13~122 / -25~50 |
|     | Heating (°F / °C) | -13~75 / -25~24  |
| IDU | Cooling (°F / °C) | 60~90 / 16~32    |
|     | Heating (°F / °C) | 32~86 / 0~30     |

#### System Data

|                           |                                             |                                     |
|---------------------------|---------------------------------------------|-------------------------------------|
| Refrigerant type          |                                             | R454B                               |
| Design pressure (PSIG)    |                                             | 550 / 340                           |
| Dehumidification (pts/hr) |                                             | 5.41                                |
| IDU                       | Fan motor model                             | ZKFN-45-8-1                         |
|                           | Fan motor qty (ea)                          | 1                                   |
|                           | Fan motor input (W)                         | 50.0                                |
|                           | Fan speed (RPM)                             | 624 / 568 / 426                     |
|                           | Air flow, Turbo / H / M / L / Si (CFM)      | 765.2 / 706.3 / 635.7 / 547.4 / N/A |
|                           | Approx. Air Throw Range ft (m)              | 9.8 / 3                             |
|                           | Noise level, Turbo / H / M / L / Si (dB(A)) | N/A / 45.5 / 43.0 / 33.5 / 30.5     |
|                           | Net weight (lbs / kg)                       | 47.18 / 21.4                        |
|                           | Gross weight (lbs / kg)                     | 59.08 / 26.8                        |
|                           | Panel net weight (lbs / kg)                 | 13.23 / 6                           |
| ODU                       | Gross panel weight (lbs / kg)               | 19.84 / 9                           |
|                           | Drain pipe diameter (mm)                    | ODΦ25mm                             |
|                           | Fan motor model                             | ZKFN-120-10-1L                      |
|                           | Fan motor qty (ea)                          | 1                                   |
|                           | Fan motor input (W)                         | 170.0                               |
|                           | Fan motor speed (RPM)                       | 810 / 700 / 450                     |
|                           | Air flow, Max (CFM)                         | 2236.7                              |
|                           | Noise level, Max (dB(A))                    | 59.5                                |
|                           | Net weight (lbs / kg)                       | 122.13 / 55.4                       |
|                           | Gross weight (lbs / kg)                     | 132.28 / 60.0                       |

#### Accessories

|                          |                               |
|--------------------------|-------------------------------|
| BMS-RCG-XXD (8733962703) | Decorative Grille - 24K ~ 48K |
| BMS-WT2-XXD (8733962707) | Wired Wall Thermostat         |
| BMS-DRY-XXD (8733969263) | 24V Interface                 |
| BMS-PK3-7X1 (8733951015) | 25ft Lineset                  |

#### Standard Parts

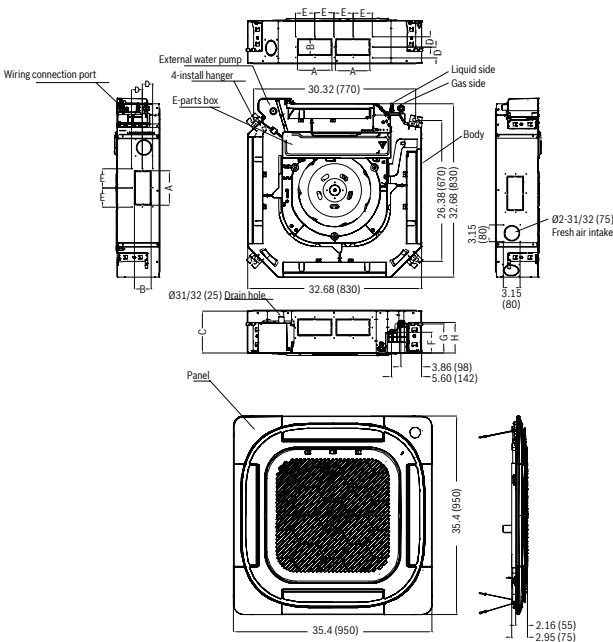
|               |                |
|---------------|----------------|
| 8-733-969-065 | Remote Control |
|---------------|----------------|

# Climate 5000 Series - Gen 4

## 24K Btu Single Zone Regular System - 4-Way Cassette IDU

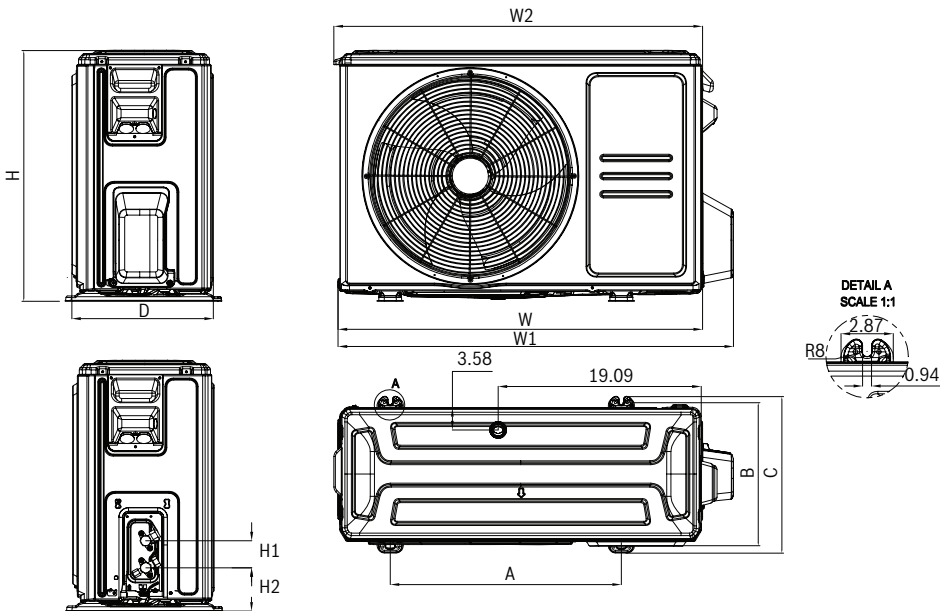


### Indoor Unit Dimensions and Connections



| Model                | W (in) | D (in) | H (in) |
|----------------------|--------|--------|--------|
| BMS500-AAU024-1AHCXD | 32.68  | 32.68  | 8.07   |

### Outdoor Unit Dimensions and Connections



| Model                | W (in) | D (in) | H (in) | W1 (in) | W2 (in) | A (in) | B (in) | C (in) | H1 (in) | H2 (in) |
|----------------------|--------|--------|--------|---------|---------|--------|--------|--------|---------|---------|
| BMS500-AAS024-1CSXRD | 37.24  | 16.14  | 31.89  | 40.55   | 37.24   | 26.5   | 15.87  | 17.9   | 2.36    | 4.25    |