



**Submittal Data Sheet: VRFO-312VP-V2D(55)5  
( 2 x VRFO-120VP-V2D(55)5 + 1 x VRFO-72VP-V2D(55)5 )**

## OUTDOOR UNIT

Standard VRF  
Heat Pump -4 °F



**VRFO-312VP-V2B(55)5**  
2 x VRFO-120VP-V2D(55)5 + 1 VRFO-72VP-V2D(55)5

## ACCESSORIES

- COPPER/WIRE/ACC.SET
- LINESET COVERS
- WIND BAFFLE
- DISCHARGE HOOD

| Connection Pipes                       |        |                    |
|--|--------|--------------------|
| Outer Diameter GasPipe                 | inches | 2 x 7/8, 1 x 1 1/8 |
| Outer Diameter Liquid Pipe             | inches | 2 x 3/8, 1 x 1/2   |
| Modular                                |        | 3                  |
| Max. Equivalent Connection Pipe Length | ft.    | 540                |
| Max. Height ODU at upper side          | ft.    | 164                |
| Max. Height ODU at lower side          | ft.    | 295.25             |

| Dimensions & Weight Outdoor Units |        |  |
|-----------------------------------|--------|--|
| Dimensions of Unit (W x H x D)    | inches | 1 - 36 5/8 x 63 1/4 x 30 1/8<br>2 - 52 3/4 x 63 1/4 x 30 1/8 |
| Net Weight                        | lbs    | 1 x 496, 2 x 793   |

|                       |  |                        |  |
|-----------------------|--|------------------------|--|
| Job Name:             |  | Tag #:                 |  |
| Location              |  | Date:                  |  |
| General Contractor:   |  | Mechanical Contractor: |  |
| Sales Representative: |  | Sales Engineer:        |  |
| Submitted by:         |  | Drawing #:             |  |
| Reference             |  | PO #:                  |  |

### A FLEXIBLE AND AFFORDABLE VRF SYSTEM

YMGI's VRF Heat Pump systems are designed to deliver comfort year round. Effective in a wide range of outdoor ambient temperatures (as low as -4° F), the YMGI VRF Heat Pump systems can meet all your heating and cooling needs, with no need for a supplemental heating system. A YMGI VRF system can replace traditionally designed gas furnace and AC/HP coil & outdoor unit systems. VRF Heat Pump systems save money on installation and operation.

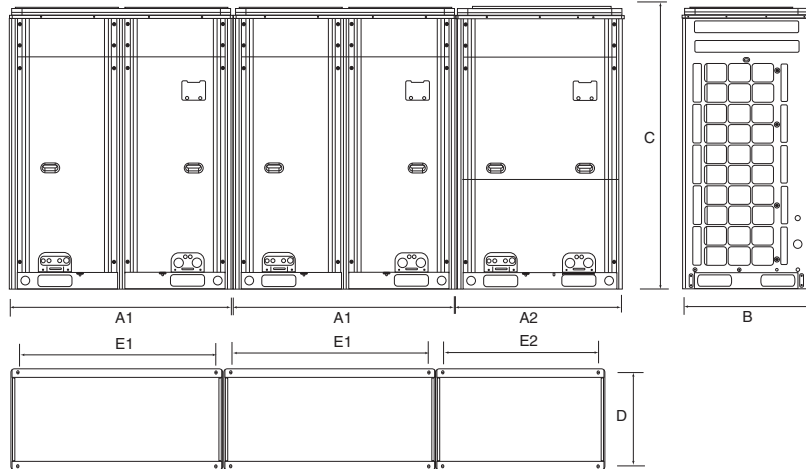
| Model   | Unit    | VRFO-312VP-V2D(55)5                |
|---|---------|------------------------------------|
| Cooling Capacity  | Btu/h   | 1 x 69,000 + 2 x 114,000=297,000   |
| Heating Capacity  | Btu/h   | 1 x 77,000 + 2 x 129,000=335,000   |
| Air flow volume   | CFM     | 1 x 6700, 2 x 8240                 |
| ESP   | WC      | 3 x 0.33"                          |
| Heating Capacities at Different OD Ambient Temperatures | 47 ° F  | 100% / 1 x 81,000 + 2 x 108,000    |
|   | 17 ° F  | 100% / 1 x 81,000 + 2 x 108,000    |
|   | -4 ° F  | 100% / 1 x 81,000 + 2 x 108,000    |
|   | -22 ° F | 80% / 1 x 64,800 + 2 x 86,400      |
| EER Ducted / Non-Ducted                                 |         | 10.50 / 10.50                      |
| IEER Ducted / Non-Ducted                                |         | 20.50 / 20.50                      |
| COP 47 Ducted / Non-Ducted                              |         | 3.30 / 3.35                        |
| COP 17 Ducted / Non-Ducted                              |         | 2.20 / 2.20                        |
| Sound Pressure/ Power Level                             | dB      | 61/72                              |
| Power Supply  | V/Ø/Hz  | 3 x 440V-460/3/60                  |
| MCA   | A       | 3 x 45                             |
| MOP/HVAC Circuit Breaker                                | A       | 3 x 70                             |
| Connection Method and Valve Sizes                       | -       | 2xBrazing (3/8+7/8") (1/2+1 1/8")  |
| R410A Refrigerant Factory Charge                        | oz      | 1 x 236, 2 x 345                   |
| Compressor Manufacturer                                 | -       | Hitachi                            |
| Compressor Type   | -       | Inverter Scroll Hermetic           |
| Compressor Quantity                                     | No.     | 2 x 2 + 1 x 2                      |
| Motor Type  | -       | Permanent Magnet Synchronous Motor |
| Fan Quantity/Type                                       | -       | 2 x Axial + 1 Axial                |
| Capacity Adjustment Range                               | %~%     | 12%~120%                           |
| Maximum No. of drive IDU                                | units   | 1 x 16 + 2 x 23                    |
| IDU Capacity Total                                      | % ODU   | 50-150% zoning                     |
| Condenser Fin Color                                     | -       | Gold                               |
| Cooling Operation Ambient Temperature Range             | ° F     | 23° ~ 126°                         |
| Heating Operation Ambient Temperature Range             | ° F     | -4° ~75°                           |
| Base Pan Heater   | -       | YES                                |



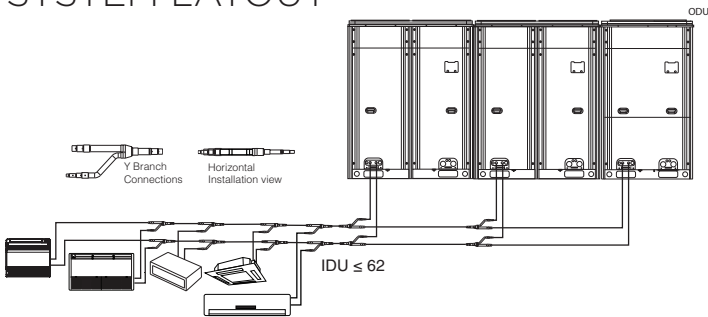
# Submittal Data Sheet: VRFO-312VP-V2D(55)5 (2 x VRFO-96VP-V2D(55)5 + 1 x VRFO-72VP-V2D(55)5)

## OUTDOOR UNIT

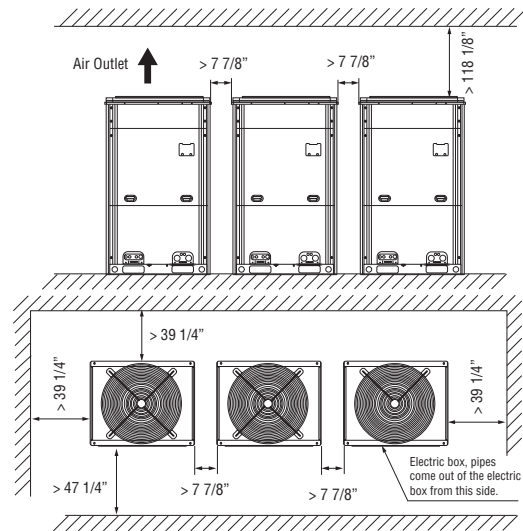
| Dimensions |         |
|------------|---------|
|            | inches  |
| A1         | 52 3/4" |
| A2         | 36 5/8" |
| B          | 30 1/8" |
| C          | 63 1/4" |
| D          | 28 3/4" |
| E1         | 39 1/4" |
| E2         | 31 1/8" |



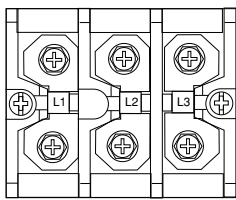
## SYSTEM LAYOUT



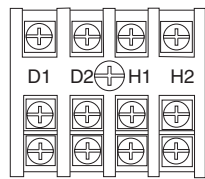
## CLEARANCES



## TERMINAL BLOCKS In Each VRFO



208/230/3/60



IDU/ODU Communication D1 D2  
Wired Controller H1 H2

|   |                   | Modular VRF Systems |          |
|---|-------------------|---------------------|----------|
|   |                   | Allowable value     |          |
|   |                   | m                   | f        |
| Total length (actual length) of fitting pipe    |                   | ≤1000               | 3280-3/4 |
| Length of farthest fitting pipe                 | Actual length     | ≤165                | 541 1/4  |
|   | Equivalent length | ≤190                | 623 1/4  |
| From the 1st branch to the farthest indoor pipe |                   | ≤40                 | 131 1/4  |
| Height difference between ODU and IDU           | ODU at upper side | ≤40                 | 131 1/4  |
|   | ODU at lower side | ≤90                 | 295 1/4  |
| Height difference between IDUs                  |                   | ≤30                 | 98 1/2   |

## FEATURES

- 208-230/3/60 power input
- Heats at 80% capacity down to -4° F
- Quiet and efficient heating & cooling.
- Compact outdoor unit with top discharge
- ODU ships pre-charged with environmentally friendly R410A refrigerant.

- DC Inverter technology
- All DC Inverter high quality compressors
- Sensorless DC fan motor
- Durable powder coated cabinet
- Brazed refrigerant line connections
- Built to ETL/UL/CSA/AHRI standards
- Easy installation and maintenance

## YMG I Group

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