

**SECTION 23 8130**  
**BASIS OF DESIGN VRV EQUIPMENT**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Equipment characteristics for VRV HVAC system.

**1.02 RELATED REQUIREMENTS**

- A. Section 23 8129 - Variable Refrigerant Volume (VRV) HVAC System: Description of system, performance requirements, fundamental equipment requirements.

**PART 2 PRODUCTS**

**2.01 OUTDOOR/CONDENSER UNITS**

- A. VRV Unit \_\_\_\_: Air-cooled heat pump.
  - 1. Product: Daikin RXYMQ36PVJU.
  - 2. Cooling Capacity: 36,000 Btu/h.
  - 3. Heating Capacity: 40,000 Btu/h.
  - 4. Sound Pressure: 58 dB(A).
  - 5. Power Supply: 208-230 V/1 Phase/60Hz.
- B. VRV Unit \_\_\_\_: Air-cooled heat pump.
  - 1. Product: Daikin RXYMQ48PVJU.
  - 2. Cooling Capacity: 48,000 Btu/h.
  - 3. Sound Pressure: 58 dB(A).
  - 4. Power Supply: 208-230 V/1 Phase/60Hz.

**2.02 INDOOR UNITS**

- A. VRV Unit \_\_\_\_: Recessed ceiling unit, 3 by 3 FT.
  - 1. Product: Daikin FXFQ12MVJU(07).
  - 2. Cooling Capacity: 7,500 Btu/h.
  - 3. Heating Capacity: 8,500 Btu/h.
  - 4. Sound Pressure: 28 dB(A) at low, 31 dB(A) at high.
- B. VRV Unit \_\_\_\_: Recessed ceiling unit, 3 by 3 FT.
  - 1. Product: Daikin FXFQ12MVJU(09).
  - 2. Cooling Capacity: 9,500 Btu/h.
  - 3. Heating Capacity: 10,500 Btu/h.
  - 4. Airflow: Two speed, 350 cubic feet per minute at low, 460 cubic feet per minute at high.
  - 5. Sound Pressure: 28 dB(A) at low, 31 dB(A) at high.
- C. VRV Unit \_\_\_\_: Recessed ceiling unit, 3 by 3 FT.
  - 1. Product: Daikin FXFQ18MVJU.
  - 2. Cooling Capacity: 18,000 Btu/h.
  - 3. Heating Capacity: 20,000 Btu/h.
  - 4. Airflow: Two speed, 390 cubic feet per minute at low, 570 cubic feet per minute at high.
  - 5. Sound Pressure: 28 dB(A) at low, 33 dB(A) at high.
- D. VRV Unit \_\_\_\_: Recessed ceiling unit, 3 by 3 FT.
  - 1. Product: Daikin FXFQ24MVJU.
  - 2. Cooling Capacity: 24,000 Btu/h.
  - 3. Heating Capacity: 27,000 Btu/h.
  - 4. Airflow: Two speed, 490 cubic feet per minute at low, 670 cubic feet per minute at high.
  - 5. Sound Pressure: 29 dB(A) at low, 34 dB(A) at high.
- E. VRV Unit \_\_\_\_: Recessed ceiling unit, 3 by 3 FT.
  - 1. Product: Daikin FXFQ30MVJU.
  - 2. Cooling Capacity: 30,000 Btu/h.
  - 3. Heating Capacity: 34,000 Btu/h.

4. Airflow: Two speed, 710 cubic feet per minute at low, 990 cubic feet per minute at high.
  5. Sound Pressure: 32 dB(A) at low, 38 dB(A) at high.
- F. VRV Unit \_\_\_\_: Recessed ceiling unit, 3 by 3 FT.
1. Product: Daikin FXFQ36MVJU.
  2. Cooling Capacity: 36,000 Btu/h.
  3. Heating Capacity: 40,000 Btu/h.
  4. Airflow: Two speed, 740 cubic feet per minute at low, 990 cubic feet per minute at high.
  5. Sound Pressure: 33 dB(A) at low, 40 dB(A) at high.
- G. VRV Unit \_\_\_\_: Recessed ceiling unit, 2 by 2 FT.
1. Product: Daikin FXZQ09M7VJU.
  2. Cooling Capacity: 9,500 Btu/h.
  3. Heating Capacity: 11,100 Btu/h.
  4. Airflow: Two speed, 265 cubic feet per minute at low, 335 cubic feet per minute at high.
  5. Sound Pressure: 29 dB(A) at low, 33 dB(A) at high.
- H. VRV Unit \_\_\_\_: Recessed ceiling unit, 2 by 2 FT.
1. Product: Daikin FXZQ12M7VJU.
  2. Cooling Capacity: 12,000 Btu/h.
  3. Heating Capacity: 14,000 Btu/h.
  4. Airflow: Two speed, 353 cubic feet per minute at low, 495 cubic feet per minute at high.
  5. Sound Pressure: 34 dB(A) at low, 41 dB(A) at high.
- I. VRV Unit \_\_\_\_: Recessed ceiling unit, 2 by 2 FT.
1. Product: Daikin FXZQ18M7VJU.
  2. Cooling Capacity: 18,000 Btu/h.
  3. Heating Capacity: 21,000 Btu/h.
  4. Airflow: Two speed, 247 cubic feet per minute at low, 320 cubic feet per minute at high.
  5. Sound Pressure: 34 dB(A) at low, 41 dB(A) at high.
- J. VRV Unit \_\_\_\_: Wall surface-mounted unit.
1. Product: Daikin FXAQ07MVJU.
  2. Cooling Capacity: 7,500 Btu/h.
  3. Heating Capacity: 8,500 Btu/h.
  4. Airflow: Two speed, 160 cubic feet per minute at low, 260 cubic feet per minute at high.
  5. Sound Pressure: 31 dB(A) at low, 36 dB(A) at high.
- K. VRV Unit \_\_\_\_: Wall surface-mounted unit.
1. Product: Daikin FXAQ09MVJU.
  2. Cooling Capacity: 9,500 Btu/h.
  3. Heating Capacity: 10,500 Btu/h.
  4. Sound Pressure: 31 dB(A) at low, 37 dB(A) at high.
- L. VRV Unit \_\_\_\_: Wall surface-mounted unit.
1. Product: Daikin FXAQ12MVJU.
  2. Cooling Capacity: 12,000 Btu/h.
  3. Heating Capacity: 13,500 Btu/h.
  4. Airflow: Two speed, 180 cubic feet per minute at low, 300 cubic feet per minute at high.
  5. Sound Pressure: 31 dB(A) at low, 38 dB(A) at high.
- M. VRV Unit \_\_\_\_: Wall surface-mounted unit.
1. Product: Daikin FXAQ18MVJU.
  2. Cooling Capacity: 18,000 Btu/h.
  3. Heating Capacity: 20,000 Btu/h.
  4. Airflow: Two speed, 400 cubic feet per minute at low, 500 cubic feet per minute at high.
  5. Sound Pressure: 37 dB(A) at low, 43 dB(A) at high.
- N. VRV Unit \_\_\_\_: Wall surface-mounted unit.
1. Product: Daikin FXAQ24MVJU.

2. Cooling Capacity: 24,000 Btu/h.
3. Heating Capacity: 27,000 Btu/h.
4. Airflow: Two speed, 470 cubic feet per minute at low, 635 cubic feet per minute at high.
5. Sound Pressure: 40 dB(A) at low, 47 dB(A) at high.

### **PART 3 EXECUTION**

#### **3.01 INSTALLATION**

- A. Section 23 8129 - Variable Refrigerant Volume (VRV) HVAC System: Description of system, performance requirements, fundamental equipment requirements.

**END OF SECTION 23 8130**

