Daikin VRV IV X
Heat Recovery

VRV IV X
HEAT RECOVERY SYSTEMS
Adapting VRV to North America.
VRV IV X

Welcome to innovation.

Engineered and assembled in North America, Daikin’s VRV IV X adapts VRV to North American HVAC market needs by expanding the applications in which VRV can be leveraged to solve traditional challenges. Packed with advanced technology, VRV IV X is the industry’s first 3-phase variable refrigerant flow system with dual-fuel capability, after Daikin’s launch of 1-phase VRV LIFE in 2018. The new series is equipped with features to optimize initial capital required on phased installations and provides ease of service and maintenance.

Features and Benefits

» Adapting VRV to North American market needs

- Industry’s first 3-phase variable refrigerant flow system to integrate with communicating gas furnaces.
- Design flexibility to enlarge system from single to dual module or dual to triple module without change to installed main pipe sizes**.
- Engineered to optimize capital on phased and tenant fit out commercial buildings.
- Choice of gas furnace or heat pump heating for optimizing operational costs based on utility cost.
- Year round comfort and energy savings with Variable Refrigerant Temperature (VRT) technology.

» Technology that matters

- Engineered with Daikin’s patented vapor injection compressor technology.
- Corrosion resistant up to 1000† hours Daikin Blue Fin coating as factory standard.
- Heat exchanger engineered with a bottom refrigerant circuit that allows installation without base pan heater.
- Refrigerant cooled inverter technology keeps PCB cool independent of ambient temperature.

» Engineered for maintenance

- New service window provides ease of access to the multi-functional display without removing the main electrical panel. The built-in multi-functional display is utilized for commissioning and maintenance and quickly converts to digital gauges to provide refrigerant pressure and temperatures.
- Multi-functional display eliminates the need to connect gauges during regular maintenance checks.
- Ease of commissioning with ability to program off site and upload using configurator tool.
- Field performable intermittent outdoor fan operation to help minimize snow accumulation on fan blades when the system is in thermal off.
- Seamless integration with T-series branch selector boxes, M, P, and T-series indoor units.
- Compatible with the full suite of Daikin VRV controls.
- Outstanding 10-Year Parts Warranty* as standard.

* Complete commercial warranty details available from your local distributor or manufacturer’s representative or at www.daikincomfort.com or www.daikinac.com
† When tested in accordance to ASTM B117 methodology.
** Refer to engineering manuals for design rules and pipe sizes.
GAS FURNACE CONNECTIVITY

Expanding VRV into applications that were limited to gas-based heating, VRV IV X is the first 3-phase dual-fuel variable refrigerant flow system in North America that integrates with communicating gas furnaces.

VRV IV X offers outstanding design flexibility when connected to Daikin communicating 80%, 96%, and 97% AFUE gas furnaces and CXTQ coils. The new VRV IV X enables the use of VRV technology to provide utility cost based heating solutions. With the flexibility to switch between electric heat pump heating and gas heating, operational costs can be optimized to building owner’s choice for a heating source.

- Space-saving with ability to connect multiple gas furnaces to one outdoor unit with 14 selectable settings.
- Customizable changeover temperatures to switch from heat pump to gas heat.
- Ability to provide system-wide heating independent of outdoor ambient temperature.

PHASED INSTALLATION

VRV IV X delivers enhanced design flexibility thanks to its ability to expand with the building’s phased construction.

- Expand the system from a single to a dual module or from dual to triple module without changes to main pipe sizes that are already installed.
- Help reduce initial capital and design complexity compared to systems that do not offer phased installation.
- Optimize piping design, branch selector boxes, and indoor units per phase of installation.
### ADAPTIVE AND LEARNING VRT

The new VRV IV X system features a newly enhanced learning VRT technology. The new learning VRT technology, in addition to helping with annual energy efficiency and maintaining comfort, provides features that enable time-based learning to adjust cooling and heating capacities to provide a stable capacity to the indoor units. The feature must be activated through field setting changes.

### HOW IS ENERGY REDUCED?

A standard variable refrigerant flow system and previous Daikin VRV systems utilize a capacity based control logic where the system will adjust to meet the capacity requirements of the space. With VRT, Daikin has optimized focus not only on capacity but also on efficiency and comfort.

According to changes in the room’s heat load and the ambient air temperature, the evaporating temperature (in cooling) and condensing temperature (in heating) are automatically adjusted to minimize the difference with the condensing temperature and the evaporation temperature, respectively.

This makes the compressors work less and also enables the system to always maintain the ideal compressor speed so that the Daikin VRV system can deliver the optimum efficiency.

---

**Fine control to match user preference available through mode selection**

<table>
<thead>
<tr>
<th>Capacity priority</th>
<th>Energy saving priority</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed Refrigerant Temperature</strong></td>
<td><strong>Variable Refrigerant Temperature</strong></td>
</tr>
</tbody>
</table>
| **BASIC MODE**  
Fixed Te - Standard control | **AUTO MODE**  
Floating target Te depending on heat load |
| **HIGH SENSIBLE MODE**  
Fixed target Te | **ECO MODE**  
Unable to change Te |

Selecting VRT enables operation to be optimised for either energy efficiency or rapid cooling.

- **POWERFUL MODE**  
Reaction speed: Very Fast
  - Can boost capacity above 100% if needed.  
  The refrigerant temperature can go lower in cooling than the set minimum.

- **QUICK MODE**  
Reaction speed: Fast
  - Gives priority to fast reaction speed.  
  The refrigerant temperature goes down fast to keep the room setpoint stable.

- **MILD MODE**  
Reaction speed: Medium
  - Gives priority to efficiency.  
  The refrigerant temperature goes down gradually giving priority to the efficiency of the system instead of the reaction speed.

---

**How is energy reduced?**

A standard variable refrigerant flow system and previous Daikin VRV systems utilize a capacity based control logic where the system will adjust to meet the capacity requirements of the space. With VRT, Daikin has optimized focus not only on capacity but also on efficiency and comfort.

According to changes in the room’s heat load and the ambient air temperature, the evaporating temperature (in cooling) and condensing temperature (in heating) are automatically adjusted to minimize the difference with the condensing temperature and the evaporation temperature, respectively.

This makes the compressors work less and also enables the system to always maintain the ideal compressor speed so that the Daikin VRV system can deliver the optimum efficiency.

---

**How is energy reduced?**

A standard variable refrigerant flow system and previous Daikin VRV systems utilize a capacity based control logic where the system will adjust to meet the capacity requirements of the space. With VRT, Daikin has optimized focus not only on capacity but also on efficiency and comfort.

According to changes in the room’s heat load and the ambient air temperature, the evaporating temperature (in cooling) and condensing temperature (in heating) are automatically adjusted to minimize the difference with the condensing temperature and the evaporation temperature, respectively.

This makes the compressors work less and also enables the system to always maintain the ideal compressor speed so that the Daikin VRV system can deliver the optimum efficiency.

---

**How is energy reduced?**

A standard variable refrigerant flow system and previous Daikin VRV systems utilize a capacity based control logic where the system will adjust to meet the capacity requirements of the space. With VRT, Daikin has optimized focus not only on capacity but also on efficiency and comfort.

According to changes in the room’s heat load and the ambient air temperature, the evaporating temperature (in cooling) and condensing temperature (in heating) are automatically adjusted to minimize the difference with the condensing temperature and the evaporation temperature, respectively.

This makes the compressors work less and also enables the system to always maintain the ideal compressor speed so that the Daikin VRV system can deliver the optimum efficiency.

---

**How is energy reduced?**

A standard variable refrigerant flow system and previous Daikin VRV systems utilize a capacity based control logic where the system will adjust to meet the capacity requirements of the space. With VRT, Daikin has optimized focus not only on capacity but also on efficiency and comfort.

According to changes in the room’s heat load and the ambient air temperature, the evaporating temperature (in cooling) and condensing temperature (in heating) are automatically adjusted to minimize the difference with the condensing temperature and the evaporation temperature, respectively.

This makes the compressors work less and also enables the system to always maintain the ideal compressor speed so that the Daikin VRV system can deliver the optimum efficiency.

---

**How is energy reduced?**

A standard variable refrigerant flow system and previous Daikin VRV systems utilize a capacity based control logic where the system will adjust to meet the capacity requirements of the space. With VRT, Daikin has optimized focus not only on capacity but also on efficiency and comfort.

According to changes in the room’s heat load and the ambient air temperature, the evaporating temperature (in cooling) and condensing temperature (in heating) are automatically adjusted to minimize the difference with the condensing temperature and the evaporation temperature, respectively.

This makes the compressors work less and also enables the system to always maintain the ideal compressor speed so that the Daikin VRV system can deliver the optimum efficiency.

---

**How is energy reduced?**

A standard variable refrigerant flow system and previous Daikin VRV systems utilize a capacity based control logic where the system will adjust to meet the capacity requirements of the space. With VRT, Daikin has optimized focus not only on capacity but also on efficiency and comfort.

According to changes in the room’s heat load and the ambient air temperature, the evaporating temperature (in cooling) and condensing temperature (in heating) are automatically adjusted to minimize the difference with the condensing temperature and the evaporation temperature, respectively.

This makes the compressors work less and also enables the system to always maintain the ideal compressor speed so that the Daikin VRV system can deliver the optimum efficiency.

---

**How is energy reduced?**

A standard variable refrigerant flow system and previous Daikin VRV systems utilize a capacity based control logic where the system will adjust to meet the capacity requirements of the space. With VRT, Daikin has optimized focus not only on capacity but also on efficiency and comfort.

According to changes in the room’s heat load and the ambient air temperature, the evaporating temperature (in cooling) and condensing temperature (in heating) are automatically adjusted to minimize the difference with the condensing temperature and the evaporation temperature, respectively.
1 DAIKIN K-TYPE VAPOR INJECTION SCROLL COMPRESSOR

» Compressor technology with spiral design and injection valves for precise refrigerant control.

» Strong and efficient motors for optimized compressor performance and part load efficiencies.

UP TO THREE TIMES MORE VAPOR INJECTION COMPARED TO OTHER VAPOR INJECTION COMPRESSORS

2 Inverter Board Cooled by Refrigerant Circuit.
Minimum influence on electronics from ambient temperature.
Section of the coil in the unit is permanently set as condenser for cooling of the inverter board.

3 Special Coating applied on printed circuit board for protection against dust and water.

4 Service Window for access to multi-functional digital display for easy commissioning and troubleshooting applied on printed circuit board for protection against dust and water.
4-SIDED, 3-ROW HEAT EXCHANGER

» The heat exchanger features a vertically divided, optimized refrigerant circuit which delivers high efficiencies and capacities across the operation range. The innovative heat exchanger design provides additional benefits as mentioned below.

**Hot Gas Defrost Circuit.** No base pan heater is required to avoid ice accumulation at the bottom of the coil.

**7mm Coil – 3 Row.** Improved heat exchanger efficiency over previous coil realizes highly integrated heat exchanger performance (increase row, resistance fin pitch) by reducing airflow resistance which changes cooling tube to Ø7mm.

**Corrosion Protected Coil.** The VRV IV X comes as standard with a corrosion resistant coil coating — 1000 hr of salt spray testing according to ASTM B117.

Example – Heat Recovery Only: 60% heating, 40% cooling of total load

Mechanically bonded to aluminum waffle louvered fins increases surface area for more efficient heat transfer
CONTINUOUS HEATING DURING DEFROST*

» Reduces cold drafts.
» No extra energy for reheating indoors, piping & zone (compared to variable refrigerant flow systems without continuous heating during defrost).
* Multi-modules only.

Each module goes into defrost mode at different times so continuous heating is maintained — avoiding discomfort indoors.

SIMPLE COMMISSIONING AND SERVICING

» Configurator software designed to assist in the commissioning and maintenance of the system.
» Multi-functional digital display on the unit for improved and faster configuration, commissioning, and troubleshooting compared to previous models.

IMPROVED MULTI-FUNCTIONAL DIGITAL DISPLAY

» System state information such as EEV opening, compressor total operation time, refrigerant temperatures and pressures can be read through multi-functional digital display.
» New service window provides quick access to multi-functional display and configuration buttons.

<table>
<thead>
<tr>
<th>DISPLAY ITEM</th>
<th>UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation Pressure (High/Low)</td>
<td>psi</td>
</tr>
<tr>
<td>Expansion Valve Opening</td>
<td>pulse</td>
</tr>
<tr>
<td>Thermistor Temperature (Suction, Discharge, Gas, Liquid, etc.)</td>
<td>°F</td>
</tr>
<tr>
<td>Compressor Total Operation Time</td>
<td>h/100</td>
</tr>
</tbody>
</table>
### INSTALLATION SPACE

- **During installation, install the units using the most appropriate of the patterns shown in the figure for the location in question, taking into consideration human traffic and wind.**
- **If the number of units installed is more than that shown in the pattern in the figure, install the units so that there is no air short circuiting.**

#### For single unit installation
- **Pattern 1**
  - 411/3/4 x 1000 or more
  - 3/9/10 or more

#### For installation in rows
- **Pattern 1**
  - 611/3/4 x 1000 or more
  - 2/4/10 or more

#### For centralized group layout
- **Pattern 1**
  - 3/9/10 or more

### PIPING LIMITATIONS

<table>
<thead>
<tr>
<th>Liquid Line Max (ft)</th>
<th>VRV IV X Heat Pump</th>
<th>VRV IV X Heat Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Vertical Drop</td>
<td>164 (295)¹</td>
</tr>
<tr>
<td>B</td>
<td>Between IDU</td>
<td>100 (49)³</td>
</tr>
<tr>
<td>C</td>
<td>Vertical Rise</td>
<td>130 (295)¹</td>
</tr>
<tr>
<td>D</td>
<td>From 1st Joint</td>
<td>130 (295)¹</td>
</tr>
<tr>
<td>E</td>
<td>Linear Length</td>
<td>540</td>
</tr>
<tr>
<td></td>
<td>Total Network</td>
<td>3280</td>
</tr>
</tbody>
</table>

1. Field setting changes and upsizing are required above 164 ft. (vertical drop) and 130 ft. (vertical rise). Refer to Installation Manual for details.
2. Upsizing is required for extension up to 295 ft. Refer to Installation Manual for details.
3. Limitations may apply above 49 ft.; refer to Installation Manual for details.

### VRV IV X INSTALLATION SPACE

- Consider the space needed for the refrigerant piping when installing the units, as determined by local codes.
- If the space requirements in the figure do not apply, contact your contractor or Daikin directly.
- The installation space requirement shown in the figure is a reference for cooling. Refer to Installation Manual for further details.
## TECHNICAL DATA FOR VRV IV X - XATJA/XAYDA/XAYCA HEAT RECOVERY OUTDOOR UNITS

<table>
<thead>
<tr>
<th>Model</th>
<th>6 Ton</th>
<th>8 Ton</th>
<th>10 Ton</th>
<th>12 Ton</th>
<th>14 Ton</th>
<th>16 Ton</th>
<th>18 Ton</th>
<th>20 Ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>208-230V/3Ph/60Hz</td>
<td>REYQ264XAYDA</td>
<td>REYQ288XAYDA</td>
<td>REYQ312XAYDA</td>
<td>REYQ336XAYDA</td>
<td>REYQ360XAYDA</td>
<td>REYQ384XAYDA</td>
<td>REYQ408XAYDA</td>
<td>REYQ432XAYDA</td>
</tr>
<tr>
<td>460V/3Ph/60Hz</td>
<td>REYQ264XAYDA</td>
<td>REYQ288XAYDA</td>
<td>REYQ312XAYDA</td>
<td>REYQ336XAYDA</td>
<td>REYQ360XAYDA</td>
<td>REYQ384XAYDA</td>
<td>REYQ408XAYDA</td>
<td>REYQ432XAYDA</td>
</tr>
<tr>
<td>575V/3Ph/60Hz</td>
<td>REYQ264XAYDA</td>
<td>REYQ288XAYDA</td>
<td>REYQ312XAYDA</td>
<td>REYQ336XAYDA</td>
<td>REYQ360XAYDA</td>
<td>REYQ384XAYDA</td>
<td>REYQ408XAYDA</td>
<td>REYQ432XAYDA</td>
</tr>
</tbody>
</table>

### Performance

- **Rated Cooling Capacity (BTU/h)**: 69,000, 92,000, 114,000, 138,000, 160,000, 194,000, 206,000, 256,000
- **Rated Heating Capacity (BTU/h)**: 77,000, 103,000, 129,000, 154,000, 180,000, 206,000, 232,000, 256,000
- **Standard Operation Range Cooling (°F (°C) DB)**: 23 to 122
- **Standard Operation Range Heating (°F (°C) WB)**: -13 to 60
- **Sound Pressure (dBA)**: 65, 65, 65, 66, 66, 68, 68, 68
- **Airflow (CFM)**: 720, 798, 798, 940, 940, 978 + 978, 978 + 978, 978 + 978
- **Fan ESP, Standard/Max**: 0.12 / 0.32

### Compressor

- **Compressors, all inverter**: Qty 1, 2
- **Revolutions per minute (RPM)**: 3738, 5142, 6688, 5214, 6300, 5214 + 5214, 5984 + 5984, 6702 + 6702
- **Capacity Control Range %**: 15-100, 13-100, 11-100, 14-100, 12-100, 6-100, 6-100, 5-100

### Refrigerant Piping, Layout

- **Maximum Vertical Pipe Length Above Unit ft.**: 164 (205 With Field Setting)
- ** Maximum Vertical Pipe Length Below Unit ft.**: 130 (195 With Field Setting)
- **Maximum Vertical Pipe Length Between IUU ft.**: 100
- **Maximum Actual Pipe Length ft.**: 541
- **Maximum Equivalent Pipe Length ft.**: 620
- **Maximum Total Pipe Length ft.**: 3,200

### Refrigerant Piping, Connections

- **Liquid Pipe, Main Line in.**: 3/8, 3/8, 1/2, 1/2, 5/8, 5/8, 5/8, 5/8
- **Standard Connectable Indoor Unit Ratio %**: 70 - 200%
- **Maximum Number of Indoor Units Qty**: 12, 16, 20, 25, 29, 33, 37, 41

### Electrical

- **Compressor Rated Load Amps, (208-230V / 460V / 575V) A**: 20.8 / 9.4 / 7.5, 23.3 / 10.5 / 8.4, 28.2 / 12.8 / 10.2, 42.6 / 19.3 / 15.4, 49.0 / 22.2 / 17.7, 24.7 + 24.7 / 11.2 + 11.2 / 8.9 + 8.9, 28.5 + 28.5 / 12.9 + 12.9 / 10.3 + 10.3, 29.0 + 29.0 / 13.5 + 13.5 / 10.8 + 10.8

### Unit

- **Factory Refrigerant Charge lbs.**: 25.8, 25.8, 25.8, 25.8
- **Weight lbs.**: 727, 727, 727, 793, 793, 727 + 727, 727 + 727, 727 + 727
- **Dimensions (H x W x D) in.**: 66-11/16 x 48-7/8 x 30-3/16, 66-11/16 x 48-7/8 x 30-3/16

1 Varies based on indoor model selected  
2 35.5 ton for REYQ432XAYCA

## OPERATION RANGE FOR ALL VRV IV X HEAT RECOVERY OUTDOOR UNITS

- **Cooling °F DB** -4° to 122
- **Heating °F WB** -13° to 60

*Application rules apply*
<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions (H x W x D) in.</th>
<th>Weight lbs.</th>
<th>Compressor Rated Load Amps</th>
<th>Maximum Number of Main Line in.</th>
<th>Pipe Length ft.</th>
<th>Maximum Vertical Pipe</th>
<th>Capacity Control Range %</th>
<th>Revolutions per minute RPM</th>
<th>Airflow CFM</th>
<th>Standard Connectable Liquid Pipe, Main Line in.</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.1</td>
<td>66-11/16 x 48-7/8 x 30-3/16</td>
<td>727</td>
<td>727</td>
<td>727</td>
<td>727</td>
<td>727</td>
<td>727</td>
<td>727</td>
<td>727</td>
<td>727</td>
</tr>
<tr>
<td>22 Ton</td>
<td>23 to 122</td>
<td>-13 to 60</td>
<td>69</td>
<td>69</td>
<td>69</td>
<td>69</td>
<td>70</td>
<td>71</td>
<td>71</td>
<td>71</td>
</tr>
<tr>
<td>24 Ton</td>
<td>252,000</td>
<td>274,000</td>
<td>296,000</td>
<td>320,000</td>
<td>342,000</td>
<td>364,000</td>
<td>368,000</td>
<td>394,000</td>
<td>394,000</td>
<td>405,000</td>
</tr>
<tr>
<td>26 Ton</td>
<td>282,000</td>
<td>294,000</td>
<td>320,000</td>
<td>336,000</td>
<td>376,000</td>
<td>386,000</td>
<td>394,000</td>
<td>405,000</td>
<td>414,000</td>
<td>-</td>
</tr>
<tr>
<td>28 Ton</td>
<td>310,000</td>
<td>332,000</td>
<td>360,000</td>
<td>384,000</td>
<td>416,000</td>
<td>432,000</td>
<td>450,000</td>
<td>468,000</td>
<td>486,000</td>
<td>504,000</td>
</tr>
<tr>
<td>30 Ton</td>
<td>340,000</td>
<td>362,000</td>
<td>392,000</td>
<td>420,000</td>
<td>448,000</td>
<td>472,000</td>
<td>496,000</td>
<td>520,000</td>
<td>544,000</td>
<td>568,000</td>
</tr>
<tr>
<td>32 Ton</td>
<td>370,000</td>
<td>392,000</td>
<td>424,000</td>
<td>452,000</td>
<td>480,000</td>
<td>504,000</td>
<td>528,000</td>
<td>552,000</td>
<td>576,000</td>
<td>600,000</td>
</tr>
<tr>
<td>34 Ton</td>
<td>400,000</td>
<td>422,000</td>
<td>454,000</td>
<td>482,000</td>
<td>510,000</td>
<td>534,000</td>
<td>558,000</td>
<td>582,000</td>
<td>606,000</td>
<td>630,000</td>
</tr>
<tr>
<td>36 Ton</td>
<td>430,000</td>
<td>452,000</td>
<td>484,000</td>
<td>512,000</td>
<td>540,000</td>
<td>564,000</td>
<td>588,000</td>
<td>612,000</td>
<td>636,000</td>
<td>660,000</td>
</tr>
<tr>
<td>38 Ton</td>
<td>460,000</td>
<td>482,000</td>
<td>514,000</td>
<td>542,000</td>
<td>570,000</td>
<td>594,000</td>
<td>618,000</td>
<td>642,000</td>
<td>666,000</td>
<td>690,000</td>
</tr>
</tbody>
</table>

**HEAT RECOVERY SYSTEMS**

**VRV IV X**

- 2 x REYQ120XA
- 1 x REYQ144XA
- 1 x REYQ168XA
- 2 x REYQ120XA
- 1 x REYQ144XA
- 1 x REYQ168XA
- 3 x REYQ144XA
- 1 x REYQ168XA

- 1 x REYQ120XA
- 1 x REYQ144XA
- 1 x REYQ168XA

- 25,2,000
- 27,4,000
- 29,6,000
- 32,0,000
- 34,2,000
- 36,4,000
- 38,6,000
- 40,0,000
- 41,0,000
- 43,0,000

- 252,000
- 274,000
- 296,000
- 320,000
- 342,000
- 364,000
- 368,000
- 394,000
- 394,000
- 405,000
- 414,000

- 66-11/16 x 48-7/8 x 30-3/16
- 66-11/16 x 48-7/8 x 30-3/16
- 66-11/16 x 48-7/8 x 30-3/16
- 66-11/16 x 48-7/8 x 30-3/16
- 66-11/16 x 48-7/8 x 30-3/16
- 66-11/16 x 48-7/8 x 30-3/16
- 66-11/16 x 48-7/8 x 30-3/16
- 66-11/16 x 48-7/8 x 30-3/16
- 66-11/16 x 48-7/8 x 30-3/16
- 66-11/16 x 48-7/8 x 30-3/16

**DAIKIN VRV IV X HEAT RECOVERY SYSTEMS**

**11**
## DAIKIN VRV IV X — INDOOR UNITS

<table>
<thead>
<tr>
<th>INDOOR UNIT TYPE</th>
<th>CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>FXMQ_PBVJU</td>
<td>MBH</td>
</tr>
<tr>
<td>HSP DC Concealed Ducted Unit</td>
<td>5.8 7.5 9 12 15 18 24 30 36 42 48 54 60 72 96</td>
</tr>
<tr>
<td>TONS 0.5 0.6 0.75 1 1.25 1.5 2 2.5 3 3.5 4 4.5 5</td>
<td></td>
</tr>
<tr>
<td>FXSO_TAVJU</td>
<td>MSP Concealed Ducted Unit</td>
</tr>
<tr>
<td>FXDQ_MVJU</td>
<td>LSP Slim Concealed Ducted Unit</td>
</tr>
<tr>
<td>FXTQ_TAVJU</td>
<td>Multi-Position Air Handling Unit</td>
</tr>
<tr>
<td>HSP High Capacity Concealed Ducted Unit</td>
<td></td>
</tr>
<tr>
<td>FXNQ_MVJU9</td>
<td>Concealed Floor- Standing Unit</td>
</tr>
<tr>
<td>FXFQ_TVJU</td>
<td>Round Flow Sensing Cassette, Ceiling Mounted</td>
</tr>
<tr>
<td>FXUQ_PVJU</td>
<td>4-Way Blow Ceiling-Suspended Cassette</td>
</tr>
<tr>
<td>FXHQ_MVJU</td>
<td>Ceiling-Suspended Unit</td>
</tr>
<tr>
<td>FXAQ_PVJU</td>
<td>Wall-Mounted Unit</td>
</tr>
<tr>
<td>FXLQ_MVJU9</td>
<td>Floor-Standing Unit</td>
</tr>
</tbody>
</table>

**DZK (Daikin Zoning Kit)**

The optional DZK increases the flexibility of the Daikin VRV and SkyAir systems in both residential and commercial applications by adding a Zoning Box to an indoor unit fan coil, allowing several separate ducts to supply air to different individually controlled zones. The DZK BACnet™ Interface module will work with any BACnet™/IP compatible Building Management System.

**DZK Zoning Box for FXMQ_PB and FXSQ indoor units**

**DZK Wired, Wireless, and Wireless Lite thermostat options**

www.daikincomfort.com
CXTQ ALL ALUMINUM COIL FEATURES

» Available in 2, 3, 4, and 5-Ton capacities.
» Engineered for VRV IV X outdoor units.
» Factory installed electronic expansion valve with PID control loop for precision capacity control.
» Seamless integration to full suite of Daikin controls using onboard control board
» Air cleaner and humidifier integration capable.
» UV and rust resistant, 5VA rated thermoplastic drain pan with integrated secondary drain.
» Foil-faced insulation covers internal casing to reduce cabinet condensation.
» Split seam front for easy installation and service access.
» Light weight all aluminum evaporator coil.
» Ships factory standard up flow with easy field conversion to downflow.
» Backed by a 10-Year Parts Limited Warranty*.

1 Rules apply, refer to installation manual for details.

80-97% AFUE COMMUNICATING GAS FURNACE

» Compatible with VRV IV X outdoor units – Available from 60,000 Btu up to 120,000 Btu.
» Durable heat exchanger – Unique tubular stainless-steel construction formed using wrinkle-bend technology results in an extremely durable heat exchanger. Paired with a stainless-steel secondary heat exchanger, this combination provides for reliability, durability and efficiency.
» Modulating gas valve – Operates between 35% - 100% capacity, providing precise efficiency and the ultimate in comfort.
» Continuous air circulation – Provides filtration and keeps air moving throughout your home to help maintain comfort.
» Self-diagnostic control board – continuously monitors the system for consistent, reliable operation.
» Quiet, variable-speed induced draft blower – provides precise control and enhanced energy-efficient performance as compared to single-speed blowers.

* Complete commercial warranty details available from your local Daikin manufacturer’s representative or distributor or online at www.daikincomfort.com or www.daikinac.com.
Major Accessories Lineup
**BRANCH SELECTOR BOXES**

Providing flexibility and minimizing mechanical and electrical installation costs, Daikin’s branch selector boxes that are used in Heat Recovery systems, are ideal for spaces that require individual heating and cooling control.

<table>
<thead>
<tr>
<th>NUMBERS OF BRANCHES / MAXIMUM TOTAL CAPACITY INDEX (KBTU/H)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSQ36TVJ</td>
</tr>
<tr>
<td>1/36</td>
</tr>
</tbody>
</table>

**REFNET**

REFNET joints distribute correct flow of refrigerant in every branch of the piping network.

**AIR TREATMENT SYSTEMS**

Daikin’s Outside Air Processing Unit can combine fresh air treatment and air conditioning, supplied from a single system. The compact Energy Recovery Ventilator is designed to improve indoor air quality while reducing the overall HVAC system power consumption. This is achieved by providing fresh outside air and recovering waste heat from exhaust air leaving the conditioned space.
VRV CONTROLS

Optimized for VRV technology, Daikin controls provide highly scalable solutions for all applications and budgets. VRV controls offer solutions to meet your project controls needs from individual zone control with local controllers to centrally controlling the building with Centralized Controllers and/or interfacing with Building Management Systems (BMS) for comfort control in an easily managed and operated system.

<table>
<thead>
<tr>
<th>PROJECT REQUIREMENTS</th>
<th>Navigation Remote Controller</th>
<th>DKN Cloud Wi-Fi Adaptor</th>
<th>Simplified Remote Controller</th>
<th>intelligent Touch Controller</th>
<th>intelligent Touch Manager</th>
<th>BACnet™ Interface</th>
<th>LonWorks Interface</th>
<th>Modbus Interface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual zone control</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Independent cool and heat setpoints</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Individual zone control with weekly programmable scheduling</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Basic central point on/off control of all air handling units</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Advanced multi-zone control of small to medium size projects</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Advanced multi-zone control of large commercial projects</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Advanced multi-zone control with scheduling logic and calendar</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Automatic cooling/heating changeover for heat pump systems</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Single input batch shutdown of all connected air handlers</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Web browser control and monitoring via Intranet and Internet</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>E-mail notification of system alarms and equipment malfunctions</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Multiple tenant power billing for shared condenser applications</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Temperature set-point range restrictions</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Graphical user interface with floor plan layout</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Start/stop control of ancillary building systems’</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Daikin VRV integration with BACnet™ based automation systems</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Daikin VRV integration with LonWorks® based automation systems</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Daikin VRV integration with Modbus® based automation systems</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Wi-Fi Option</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Remote Control and Monitoring through smartphone app</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

* Requires one or more DEC102A51-US2 Digital Input/Output units or WAGO ® IO module (for use with I/TM only).

** Native application or feature for this device. • Dependent upon capabilities of the third party energy management system.

POWERFUL SERVICE TOOL WITH INDOOR AND OUTDOOR UNIT OPERATION DATA POINTS

» When a problem occurs, the BMS integrators and Service Technicians can start troubleshooting immediately before going to the site.

» Indoor and outdoor operation data trending* by BMS can benefit the VRV service process.

*BMS programming needed
SNOW/WIND HOOD KITS

The optional Snow/Wind Hood Kits mount to VRV IV X and VRV AURORA series units over the heat exchanger coil to protect from snow build-up and wind in cold climates. The Hoods install easily to condensing units using existing screw taps with no modification required. Different kits can be ordered for different job requirements per table below.

**NUMBER OF KITS REQUIRED FOR EACH OUTDOOR SYSTEM**

<table>
<thead>
<tr>
<th>MODEL TYPE</th>
<th>NUMBER OF MODULES</th>
<th>VRVHGS-K1</th>
<th>VRVHGL-K1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VRV AURORA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>208-230V / 460V / 575V</td>
<td>R_LQ72-120T</td>
<td>Single</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>R_LQ144-240T</td>
<td>Dual</td>
<td>2</td>
</tr>
<tr>
<td><strong>VRV IV X Heat Recovery</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>208-230V / 460V / 575V</td>
<td>REYQ72-168X</td>
<td>Single</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>REYQ192-336X</td>
<td>Dual</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>REYQ360-456X*</td>
<td>Triple</td>
<td>3</td>
</tr>
<tr>
<td><strong>VRV IV X Heat Pump</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>208-230V / 460V</td>
<td>RXYQ72X</td>
<td>Single</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>RXYQ96-168X</td>
<td>Single</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>RXYQ192X</td>
<td>Dual</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>RXYQ216-336X</td>
<td>Dual</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RXYQ360-408X</td>
<td>Triple</td>
<td>3</td>
</tr>
<tr>
<td>575V</td>
<td>RXYQ72-168XAYC</td>
<td>Single</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>RXYQ192-336XAYC</td>
<td>Dual</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RXYQ360-384XAYC</td>
<td>Triple</td>
<td>3</td>
</tr>
</tbody>
</table>

*Up to 432 on 575V

**SNOW/WIND HOOD KITS**

The optional Snow/Wind Hood Kits mount to VRV IV X and VRV AURORA series units over the heat exchanger coil to protect from snow build-up and wind in cold climates. The Hoods install easily to condensing units using existing screw taps with no modification required. Different kits can be ordered for different job requirements per table below.

**NUMBER OF KITS REQUIRED FOR EACH OUTDOOR SYSTEM**

<table>
<thead>
<tr>
<th>MODEL TYPE</th>
<th>NUMBER OF MODULES</th>
<th>VRV-SHS-FR</th>
<th>VRV-SHL-FR</th>
<th>VRV-SH-RL</th>
<th>VRV-SHS-T</th>
<th>VRV-SHL-T</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VRV AURORA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>208-230V / 460V / 575V</td>
<td>R_LQ72-120T</td>
<td>Single</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>R_LQ144-240T</td>
<td>Dual</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>VRV IV X Heat Recovery</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>208-230V / 460V</td>
<td>REYQ72-168X</td>
<td>Single</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>REYQ192-336X</td>
<td>Dual</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>REYQ360-456X*</td>
<td>Triple</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>VRV IV X Heat Pump</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>208-230V / 460V</td>
<td>RXYQ72X</td>
<td>Single</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>RXYQ96-168X</td>
<td>Single</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>RXYQ192X</td>
<td>Dual</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>RXYQ216-336X</td>
<td>Dual</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RXYQ360-408X</td>
<td>Triple</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>575V</td>
<td>RXYQ72-168XAYC</td>
<td>Single</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>RXYQ192-336XAYC</td>
<td>Dual</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RXYQ360-384XAYC</td>
<td>Triple</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

*Up to 432 on 575V
The tools have been designed to be simple to use, easily accessible and to address the various considerations and steps in the evolution of a residential or commercial project, aimed at helping the architect, consulting engineer, contractor, installation technician, and service company to enhance workflows and general project execution.

### SUPPORT AND TOOLS OVERVIEW

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>TOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection</td>
<td>WebXpress</td>
</tr>
<tr>
<td>Energy screening and simulation</td>
<td>● ● ●</td>
</tr>
<tr>
<td>Design and verification</td>
<td>● ● ● ●</td>
</tr>
<tr>
<td>Online and tablet reference (spec, data, submittal)</td>
<td>●</td>
</tr>
<tr>
<td>Smartphone and mobile reference</td>
<td>● ●</td>
</tr>
<tr>
<td>After sales and service</td>
<td>● ● ●</td>
</tr>
</tbody>
</table>

**DAIKIN VRV IV X — SUPPORT AND TOOLS**
WARNINGS:

» Always use a licensed installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.

» Use only those parts and accessories supplied or specified by Daikin. Ask a licensed contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.

» Read the User’s Manual carefully before using this product. The User’s Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

» For any inquiries, contact your local Daikin sales office.

About Daikin:

Daikin Industries, Ltd. (DIL) is a global Fortune 1000 company which celebrated its 95th anniversary in May 2019. The company is recognized as the leading HVAC (Heating, Ventilation, Air Conditioning) manufacturer in the world. DIL is primarily engaged in developing indoor comfort systems and refrigeration products for residential, commercial and industrial applications. Its consistent success is derived, in part, from a focus on innovative, energy-efficient and premium quality indoor climate and comfort management solutions.