

VARIX VRF SYSTEMS

THE PRECISION OF VRF. THE POWER OF DIRECT.

Complete Product Guide

LENNOX Powered by
SAMSUNG

COMMERCIAL SOLUTIONS

RISING DEMANDS. READY SOLUTIONS.

Meet evolving heating and cooling needs with precision

Today's commercial buildings face rising demands for efficiency, control and flexibility. Help meet these challenges head-on with Varix™ VRF Systems. By intelligently and seamlessly managing heating and cooling across multiple zones, you can achieve advanced control when and where you need it—reducing operating costs while delivering the comfort modern buildings require.

Unlock the full potential of VRF with Lennox Powered by Samsung

We've partnered with Samsung to combine proven, innovative products with the direct speed, service and support of Lennox.



Get direct answers to your HVAC questions

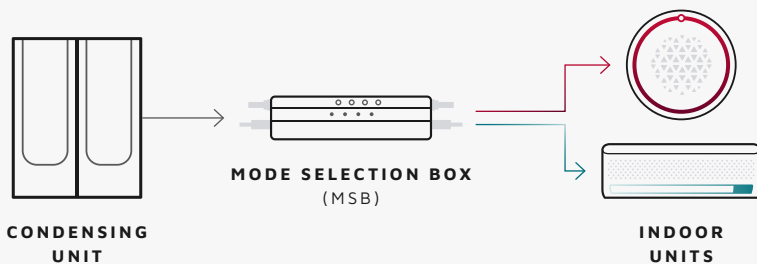
Sign up for VRF webinars and training, and access extensive commercial HVAC resources at [Lennox.com/Commercial](https://www.lennox.com/commercial)



VRF 101: HOW IT WORKS

By regulating variable refrigerant flow (VRF) rates between source and indoor units to match real-time demands, a single condensing unit provides independent temperature control across multiple zones. The system can also modulate overall output, conserving energy by scaling down from 100% capacity.

Seamlessly Deliver Zoned Comfort from a Single Source



CONDENSING UNIT

A single air or water condensing unit can serve zones throughout the building. For expanded capacity, multiple condensing units can be connected.

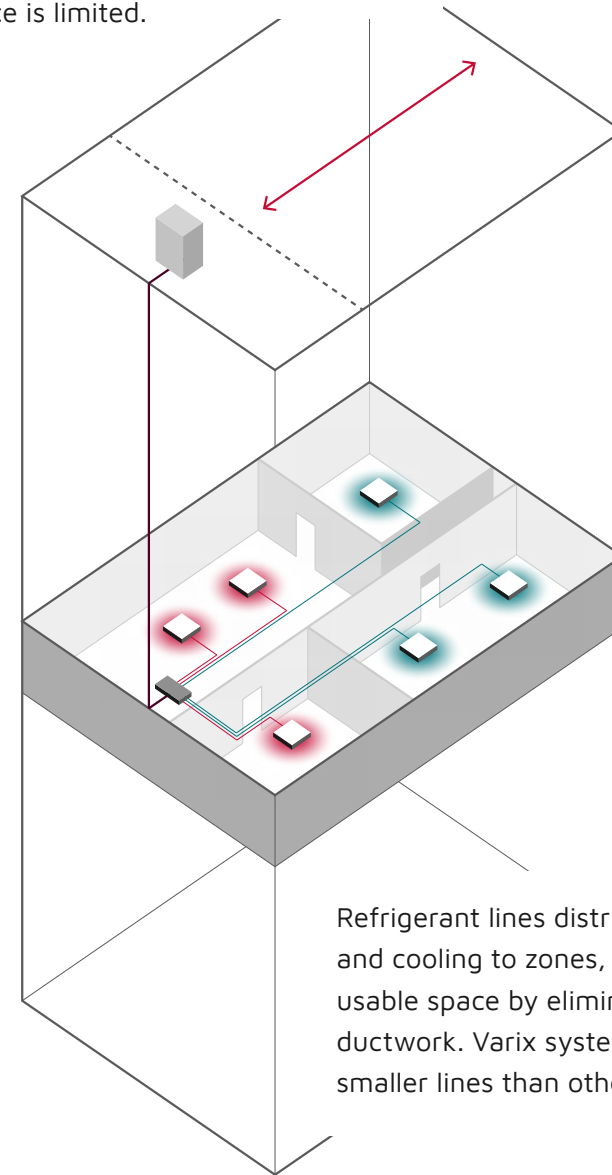
MODE SELECTION BOX (MSB)

Routes proper refrigerant phases to each individual indoor unit.

INDOOR UNITS

Deliver personalized comfort with independent temperature control in each area.

Varix source units have a small footprint, easing installation where space is limited.



Refrigerant lines distribute heating and cooling to zones, maximizing usable space by eliminating traditional ductwork. Varix systems also require smaller lines than other VRF systems.

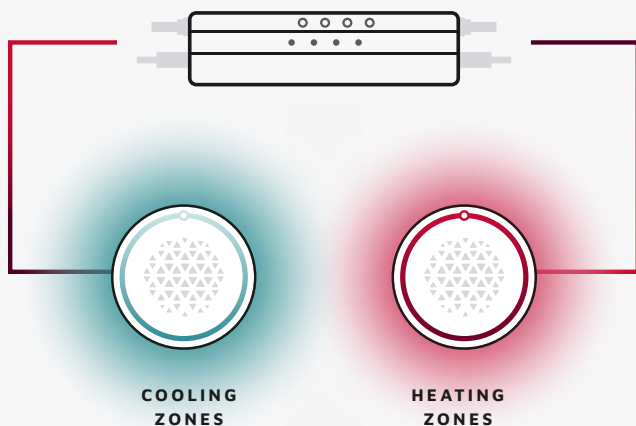
ADVANCED CONTROL, EXCEPTIONAL EFFICIENCY

Varix™ VRF Systems help you answer increasing expectations for sustainability, energy efficiency and comfort. Combining advanced engineering with intelligent controls that learn from your building's needs, they continuously optimize performance.

INTELLIGENT PERFORMANCE

Turn wasted energy into comfort.

Varix systems featuring heat recovery can capture heat from cooling zones and redirect it where needed, improving energy savings and comfort simultaneously.



REDUCE OPERATING COSTS

Precise zone control, smart load matching and advanced energy recovery drive measurable returns



MAINTAIN PEAK EFFICIENCY

AI-driven performance optimization learns from your building's needs



ACHIEVE PROVEN PERFORMANCE ACROSS CLIMATES

Ambient temperature operating range from -22°F to 122°F



ELIMINATE COLD DRAFTS

Proprietary cooling technology disperses gentle "still air"



MAXIMIZE USABLE SPACE

Offers more flexible design and installation, with compact footprint and use of smaller refrigerant lines versus both traditional ductwork and the larger lines used in other VRF brands



MINIMIZE MAINTENANCE NEEDS

Fewer moving parts across the system means fewer points of failure



MEET TOMORROW'S NEEDS WITH FUTURE-READY SYSTEMS

Equipped to meet Low GWP refrigerant*, electrification and decarbonization mandates

* R-410A units available today, with R-32 compatible units coming soon.

PRECISION SOLUTIONS FOR COMPLEX ENVIRONMENTS

Address the diverse needs of commercial buildings with flexible configurations and dedicated Lennox expertise to find the right solution. Varix™ VRF Systems deliver maximum value in buildings requiring zone-level temperature control, superior energy efficiency and design flexibility—ideal for verticals ranging from education to offices and hotels.



HOTELS

Higher ratings, higher revenue through precise guest comfort



OFFICES

Productive workspaces with zone-level comfort



MULTIFAMILY

Efficient operation with simplified management and maintenance



DINING

Balanced comfort across the diverse needs of dining and kitchen spaces



EDUCATION

Optimal learning environments and quiet operation



RETAIL

Flexible zoning with complementary RTU operation for open floors

WHERE VARIX SYSTEMS WORK BEST

VARIX™ VRF SYSTEMS EXCEL IN PROJECTS INVOLVING:

- Mid-sized buildings with multiple zones
- Varying occupancy patterns and heating/cooling needs
- Focus on long-term operational costs
- Renovations and retrofits without space for ductwork
- Adapting existing buildings to new uses

VERSATILE USE ACROSS A RANGE OF BUILDINGS' NEEDS

Varix systems are designed for flexibility, adapting to a wide variety of projects.



5,000-
96,000

BTU/H

range of options for indoor units supports small offices to open floors

38

TONS

system capacity by connecting multiple Varix air conditioning units, delivering expanded coverage

3,280

FEET

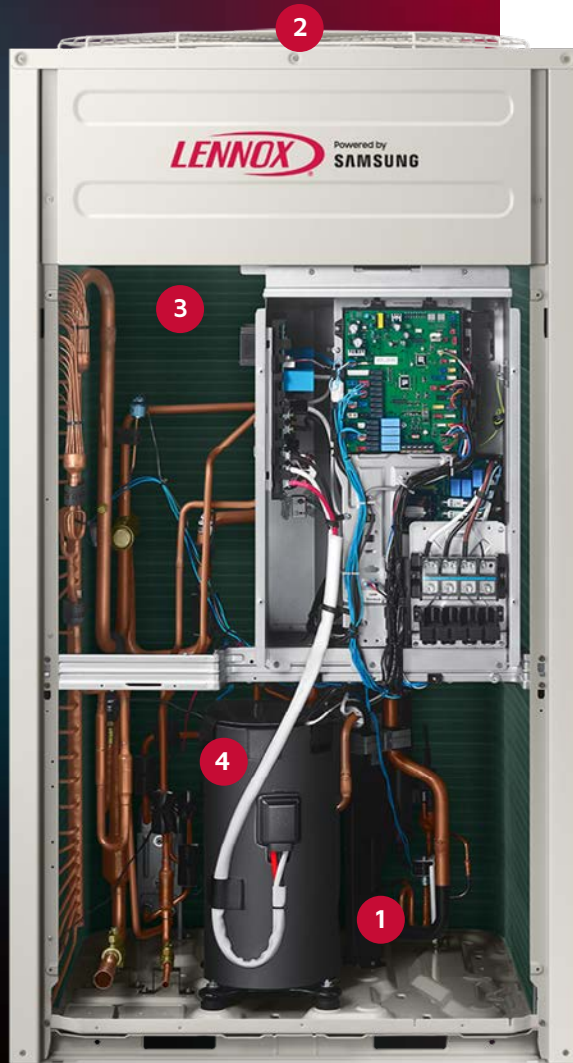
maximum refrigerant piping length accommodates large structures



Maximize efficiency in mixed open/partitioned buildings by pairing VRF precision with RTU power

WE'LL HELP YOU UNDERSTAND WHERE AND HOW VARIX SYSTEMS WORK BEST

Whether for your entire building or to complement other HVAC systems, such as RTUs. Connect with our dedicated VRF application engineers and sales managers at vrfsales@lennoxind.com.



SYSTEM OVERVIEW

The heart of every Varix™ VRF System is its advanced condensing unit, either an air source unit (shown to the left) or water source. These units combine multiple innovations to seamlessly and efficiently deliver heating and cooling throughout the building.

- 1 ENHANCED HEATING PERFORMANCE**
Flash injection compressor technology maintains optimal heating performance even in extreme cold by optimizing refrigerant flow
- 2 QUIETER OPERATION**
Multi-serration fan design that minimizes the air vortex around the wing tip
- 3 EXCEPTIONAL PERFORMANCE**
Enlarged heat exchanger, featuring up to 36% larger heat transfer area*, reducing wind speed and friction
- 4 EFFICIENT, MODULATING OPERATION**
Digital inverter motors that precisely match output to demand

SMART DESIGN, SIMPLE OPERATION



ACTIVE AI TECHNOLOGIES LEARN AND ADAPT

- **Faster heating and cooling** by learning usage patterns, piping length and elevation difference to optimize refrigerant pressure
- **40% greater continuous heating time** by detecting ice formations and optimizing defrost cycles
- **Real-time refrigerant analysis maintains** optimal levels, providing alerts if it's too low

EASILY INSTALL, SERVICE AND MAINTAIN

- **Convenient service access** with single-piece cover design
- **Streamlined error diagnosis** through one-touch button on printed board assembly
- **Safe and simple transport** with built-in center of gravity indicator that eases lifting and moving with a crane or forklift
- **Multiple voltage options**, available in 208/230V, 460V or 575V

MONITOR, MANAGE AND OPTIMIZE WITH FLEXIBLE SYSTEM CONTROLS

- **Versatile options** from simple local operation to full integration with building management systems
- **Identify savings opportunities** with real-time, zone-by-zone energy monitoring
- **Quick issue resolution** with advanced remote diagnostics

VARIX VRF

Standard Varix units combine proven heat pump technology with superior energy efficiency for consistent performance in moderate climates.

ADVANCED VERSATILITY

- Available in heat pump and heat recovery
- Connect up to 3 outdoor units for system capacities up to 38 tons
- Connect up to 64 indoor units
- Simplified chassis design and integral inverter check function
- Available in 208/230V, 460V or 575V

COMBINE OUTDOOR UNITS UP TO 38 TONS



SINGLE MODULE
6 to 20 Tons



TWIN MODULES
22 to 34 Tons



TRIPLE MODULES
36 to 38 Tons

AIR SOURCE AMBIENT TEMPERATURE OPERATING RANGE

COOLING OPERATION



5° F // -15° C

122° F // 50° C

HEATING OPERATION



-22° F // -30° C

75° F // 24° C

-15° F	0° F	15° F	30° F	45° F	60° F	75° F	90° F	105° F
-27° C	-18° C	-9° C	-1° C	7° C	15° C	24° C	32° C	40° C

VARIX EXTREME

Varix Extreme units deliver advanced cold climate performance with flash injection technology that provides guaranteed 100% heating capacity down to -22°F.

ADVANCED VERSATILITY

- Single module outdoor unit capacities from 6 to 10 tons
- Combination capacities up to 24 tons
- Mode Selection Boxes 1- to 12-port
- Available in 208/230V and 460V

COLD CLIMATE PERFORMANCE

- Guaranteed heating operation down to -22°F
- 100% heating capacity at -22°F
- Flash Injection Technology

COMBINE OUTDOOR UNITS UP TO 24 TONS



SINGLE MODULE
6 to 10 Tons



TWIN MODULES
12 to 16 Tons



TRIPLE MODULES
18 to 24 Tons

VARIX EXTREME TEMPERATURE OPERATING RANGE

COOLING OPERATION



5°F // -15°C

122°F // 50°C

HEATING OPERATION



-22°F // -30°C

75°F // 24°C

-15°F 0°F 15°F 30°F 45°F 60°F 75°F 90°F 105°F
-27°C -18°C -9°C -1°C 7°C 15°C 24°C 32°C 40°C

VARIX MINI

With multiple capacities for residential and light commercial applications, Varix Mini systems give you performance, efficiency and savings in a smaller footprint.

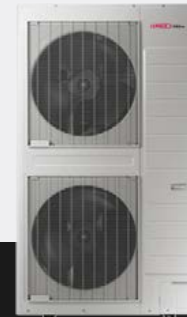
HEAT PUMP AND HEAT RECOVERY

- 208/230V, 60 Hz, 1 Ph
- 3, 4, 4.5 and 5 ton single modules
- Connect up to 10 indoor units
 - 3 ton – up to 8 / 4 ton – up to 9 / 5 ton – up to 10
- High heating performance at -13°F (-25°C)
- Quiet operation mode offers 3 levels of outdoor unit noise reduction
- Optional Wi-Fi adapter available
- Installation flexibility with maximum piping length up to 492 ft., vertical separation* up to 164 ft. between the outdoor unit and lowest indoor unit (when the outdoor unit is above the indoor units) and 131 ft. between the highest and lowest indoor unit (when the outdoor unit is below the indoor units)

* Restrictions Apply

LENNOX // COMMERCIAL SOLUTIONS

COMBINE OUTDOOR UNITS UP TO 10 TONS



HEAT PUMP AND
HEAT RECOVERY
3, 4 and 4.5 Tons



HEAT PUMP AND
HEAT RECOVERY
5 Tons

MINI-VRF AMBIENT TEMPERATURE OPERATING RANGE

COOLING OPERATION

0°F // -18°C

118°F // 48°C

HEATING OPERATION

-13°F // -25°C

75°F // 24°C

-15°F	0°F	15°F	30°F	45°F	60°F	75°F	90°F	105°F
-27°C	-18°C	-9°C	-1°C	7°C	15°C	24°C	32°C	40°C

VARIX CHILLER

By combining the benefits of chiller and VRF technology, Varix Chiller systems provide performance, efficiency and incredible space savings.

HEAT PUMP

- 208/230V, 60 Hz / 3 Ph or 460V, 60 Hz, 3 Ph
 - 10 and 15 ton modules
 - Connect up to 16 units for up to 240 tons
 - Outdoor unit static pressure up to 0.32" WC
 - Standard, rotation and efficiency modes
 - Easily combine and fit multiple units even when space is limited
 - Optional kits available to integrate third-party fan coil units to central and local controls
 - Delivers water at a wide range of temperatures
 - Cooling: 41°F - 77°F (5°C - 25°C) standard, 14°F - 77°F (-10°C - 25°C) with brine solutions
 - Heating: 77°F - 131°F (25°C - 55°C)*
- * Optional settings to automatically adjust leaving water temperature based on outdoor ambient temperature or indoor ambient temperature.

COMBINE OUTDOOR UNITS UP TO 240 TONS



HEAT PUMP
10 and 15 Tons

CHILLER AMBIENT TEMPERATURE OPERATING RANGE

COOLING OPERATION

5°F // -15°C

118°F // 48°C

HEATING OPERATION

-13°F // -25°C

109°F // 43°C

-15°F 0°F 15°F 30°F 45°F 60°F 75°F 90°F 105°F
-27°C -18°C -9°C -1°C 7°C 15°C 24°C 32°C 40°C

VARIX WATER

Water source systems use water as a means of rejecting heat to a cooling tower, geothermal loops, and various other water-cooled applications.

HEAT PUMP

- 208/230V, 60 Hz, 1 Ph
- 3, 4 and 5 ton single modules
- Connect up to 9 indoor units

HEAT PUMP OR HEAT RECOVERY

- 208/230V, 60 Hz, 3 Ph or 460V, 60 Hz, 3 Ph
- 6, 8, 10, 16 and 20 ton single modules
- Connect up to 3 units for system capacities up to 34 tons
- Connect up to 64 indoor units

COMBINE OUTDOOR UNITS UP TO 34 TONS



SINGLE MODULE
HEAT PUMP
3, 4 and 5 Tons



SINGLE MODULE
HEAT PUMP OR
HEAT RECOVERY
6, 8 and 10 Tons



SINGLE MODULE
HEAT PUMP OR
HEAT RECOVERY
16 and 20 Tons

WATER SOURCE AMBIENT TEMPERATURE OPERATING RANGE

COOLING OPERATION



50° F // 10° C

113° F // 45° C

HEATING OPERATION



50° F // 10° C

113° F // 45° C

45° F
7° C

60° F
15° C

75° F
24° C

90° F
32° C

105° F
40° C

115° F
46° C

INDOOR UNITS

Different form factors accommodate different building designs and construction needs. Every indoor unit contains smart features to increase efficiency and functionality.



V22C 4-WAY
CASSETTE 2 X 2



V33C 4-WAY
CASSETTE 3 X 3



V36, 360
CASSETTE



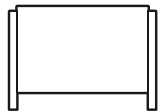
VOWC ONE WAY
CASSETTE



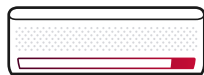
VBCC, CEILING/
FLOOR MOUNT



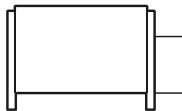
VUCC, CEILING/
FLOOR MOUNT



VSEC FLOOR
STANDING EXPOSED



VWMC
WALL MOUNT



VSCC FLOOR
STANDING CONCEALED

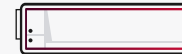
VRF DUCTED INDOOR UNITS



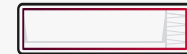
VLOC LOW STATIC
DUCTED



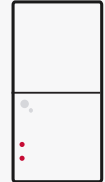
VMDC MEDIUM
STATIC DUCTED



VHIC HIGH STATIC
DUCTED



VOSC OUTSIDE
AIR DUCTED



VVCC VERTICAL
AIR HANDLER

HYDRO UNITS

Acting as a bridge between the VRF refrigerant and water-based systems, hydro units deliver hot or chilled water for radiant floors, radiators and fan coil units—expanding your design flexibility.



VHEC HYDRO UNIT



VHTC HYDRO UNIT

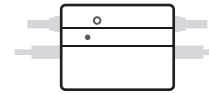


MODE SELECTION BOX

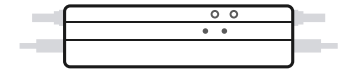
The mode selection box is key to the Varix system's zoning and heat recovery. By routing either liquid or discharge gas to each indoor unit, it allows independent heating and cooling in each unit.

Liquid, suction and hot-gas refrigerant piping connects the mode control unit to the outdoor/source unit. The proper refrigerant phases are then routed to each individual set of indoor unit refrigerant ports, allowing each indoor unit to operate in heating or cooling mode independently.

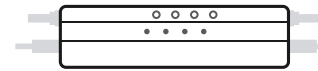
Mode selection boxes are available in 1- to 12-port options, for connecting up to 64 indoor units to a single box.



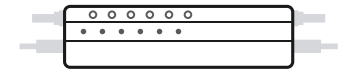
MODEL V1MSBB01
1 Port



MODEL V1MSBB02
2 Port



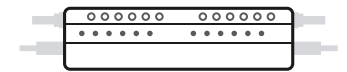
MODEL V1MSBB04
4 Port



MODEL V1MSBB06
6 Port

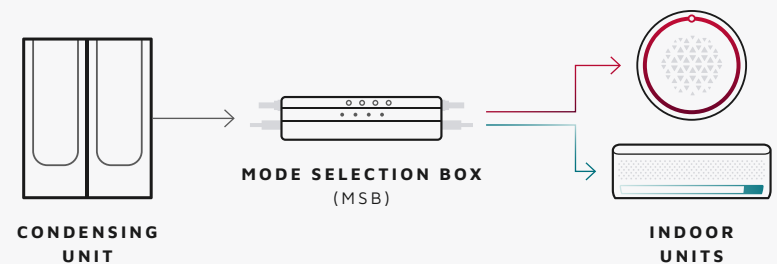


MODEL V1MSBB08
8 Port



MODEL V1MSBB12
12 Port

DIRECTS HEATING AND COOLING WHERE IT'S NEEDED

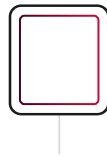


CONTROLS

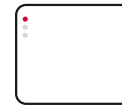
Multiple control options and accessories allow both convenient local operation, along with supporting full integration with building management systems.



WIRELESS
REMOTE CONTROLLER



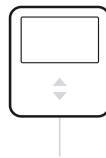
TOUCH SCREEN
WIRED CONTROLLER



WI-FI
ADAPTER



CENTRAL TOUCH
CONTROLLER



INDIVIDUAL WIRED
CONTROLLER



24V THERMOSTAT
ADAPTER



BACNET
GATEWAY



DIRECT SUPPORT AT EVERY STEP

You can confidently implement Varix™ VRF Systems with direct access to the people, products and guidance you need to succeed. Lennox has decades of focused HVAC expertise and a nationwide direct distribution network for innovative VRF solutions backed by responsive service and a single point of accountability for your entire project.

Our comprehensive support combines hands-on training, technical resources and dedicated VRF teams to assist you from initial specification through ongoing operation. Whatever your project needs, we're with you at every step.

- Dedicated VRF application engineers
- 95% on-time delivery through nationwide direct distribution network
- Direct access to our full offering of equipment and parts at all times
- Single point of accountability for your entire project
- Extensive onsite and online VRF training resources
- Growing nationwide network of certified VRF installers
- 24/7 emergency response

More speed, service and control from start to finish.

THAT'S THE DIRECT EFFECT OF LENNOX.



Innovation Through Partnership

As commercial buildings face evolving heating and cooling needs, Lennox is partnering to bring you a broader range of future-ready HVAC options. We've joined forces with Samsung to provide world-class ductless solutions. The joint venture will continue to deliver forward-thinking solutions to North America, ready to help you meet rising demands for efficiency, control and flexibility.



ACCESS ADDITIONAL RESOURCES

Explore the full Varix product portfolio, educational content and other resources at [Lennox.com/Commercial](https://www.lennox.com/Commercial)

EVERYTHING YOU NEED TO BE VRF CONFIDENT

LENNOX EQUIPS ENGINEERS AND CONTRACTORS FOR SUCCESS WITH COMPREHENSIVE TOOLS AND TRAINING.



SPECIFYING ENGINEERS

Receive personalized specification guidance with direct access to VRF specialists and tools

- System layout design and equipment selection
- Application-specific performance modeling and ROI calculations
- Advanced LVSS 2.0 spec support software, compatible with AutoCAD



Contact a specification rep
[Lennox.com/Commercial/Resources](https://www.lennox.com/commercial/resources)



MECHANICAL CONTRACTORS

Ensure proper installation and maintenance with comprehensive training and guidance

- Hands-on installation training and on-site support, plus online resources
- Advanced diagnostics training
- Ongoing maintenance guidance



Get resources and guidance
[Lennox.com/Commercial/Resources](https://www.lennox.com/commercial/resources)

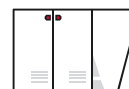


COMPLETE COMMERCIAL CLIMATE SOLUTIONS

Create your ideal building environment with the comprehensive Lennox Commercial portfolio. Each solution is engineered to optimize performance, energy-efficiency, serviceability and environmental impact. From Varix™ VRF Systems working alongside rooftop units to complete custom turnkey solutions, we'll help you find the perfect system for your needs.



Contact us to discuss your project and request a quote.
[Lennox.com/Commercial/Connect](https://www.lennox.com/commercial/connect)



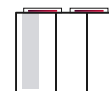
PACKAGED UNITS

Model L™, Enlight, Xion™, Raider®



VRF

Outdoor and Indoor Units,
 Controls, Accessories



SPLIT SYSTEMS

Elite® Series Large, Merit® Series Small,
 Air Handlers, Indoor Coils



COMMERCIAL CONTROLS

Lennox® CORE Control System, Lennox
 Commercial Thermostats and Sensors



MINI-SPLIT SYSTEMS

Outdoor and Indoor Units,
 Controls, Accessories



HEATING

Unit Heaters, Furnaces, Duct Furnaces



INDOOR AIR QUALITY

Dehumidification, Filtration, Purification

WITH YOU EVERY STEP OF THE WAY

Get fast, direct access to commercial HVAC expertise and equipment—straight from the source. Your Lennox team is here to help you be more efficient, informed and effective at every stage of your projects.



1-800-9-LENNOX // Lennox.com/Commercial