ENERGENCE.

LENNOX ENERGENCE®

COMMERCIAL ROOFTOP UNITS

SAVING ENERGY WITH INTELLIGENCE®

LENNOX®

THE ENERGENCE ROOFTOP UNITS
DELIVER ON ALL FRONTS.

LENNOX ENERGENCE COMMERCIAL ROOFTOP UNITS

At Lennox, we're committed to building innovative products that can help save energy costs and reduce operating expenses. The Energence rooftop units were designed to deliver some of the highest commercial efficiency ratings in the industry. The exclusive Prodigy® 2.0 Unit Controller interface provides guided setup, ensuring accurate configuration and commissioning.

The Energence rooftop line features efficiency ratings up to 12.5 EER and 15.5 IEER.

Featuring intelligent technology, Energence rooftop units give you a more sophisticated level of performance and control.

The Energence rooftop units were designed to deliver some of the highest commercial rooftop unit efficiency ratings in the industry. The exclusive Prodigy® 2.0 Unit Controller interface provides guided setup, ensuring accurate configuration and commissioning.

EFFICIENT BY DESIGN

The Energence lineup of rooftop units deliver the lowest cost of ownership through exceptional efficiency and intelligent design.

- **Energy-saving efficiency ratings** of up to 12.5 EER and 15.5 IEER.
- **Optional MSAV supply fan technology** can provide up to 75% fan power savings.
- **Qualifies for energy rebates/incentives**, delivering even more ways to save money.

INTELLIGENT OPERATION

Prodigy® 2.0 Unit Controller delivers enhanced performance, fast and accurate setup, and simplified operation.

- **Four-line LCD screen** with simplified user interface and text-based display enables intuitive setup and easy system navigation.
- **Patented SmartWire™ system** allows efficient unit installation and effective troubleshooting.
- **Prodigy App** allows easy installation and troubleshooting with alarm and control parameter look-up, as well as access to technical documents.

SIMPLE SERVICE

The Simple Service™ system helps ensure ease of installation and maintenance to make every call easier.

- **Accessible gas compartment** allows access to all gas components.
- **Slide-out blower motor** reduces installation time and is easy to service.
- **Isolated compressor** allows performance check while unit is working, without interrupting airflow.

ENERGENCE® HIGHLIGHTS: 20- TO 30-TON gas/electric and electric/electric configurations

Up to 12.5 EER and 15.5 IEER.

ENERGENCE OFFERS VAV

Lennox offers a factory-installed Variable Air Volume option on 20- to 30-ton models. The enhanced Energence product portfolio offers precise individual temperature control for a wide variety of applications and configurations that reduce energy consumption.

Prodigy® 2.0 Controller provides fast, accurate setup and simplified operation

Optional MSAV® supply fan technology achieves up to 75% fan power savings

Environ™ coil system maximizes reliability and sustainability*

Improved comfort with the Humiditrol® dehumidification system

Financing available through www.lennoxleasing.com

Prodigy® 2.0

Standard on every Energence® unit, the Prodigy® 2.0 unit controller helps optimize system performance and meet design specifications. With the Prodigy 2.0 controller, monitoring and controlling the system is easier than ever before. The enhanced user interface includes additional space for more intuitive navigation, along with access to the home screen from any point in the menu for quick, user-friendly operation.

Features:

• Patented SmartWire™ system for quick and efficient installation and troubleshooting

• Four-line, backlit LCD provides an intuitive setup and navigation experience

• Integrated USB service port tracks Energence rooftop units' current and historical performance

• Seamless building automation integration with certified BACnet® and LonTalk® modules

• Over 250 adjustable parameters allow for customized comfort

• Over 100 diagnostic codes for comprehensive monitoring and simplified troubleshooting

The Helpful, Convenient Prodigy App

The Prodigy app, available as a free download from iTunes or Google Play, speeds up service by giving you on-the-spot access to helpful resources.

Features of the app include:

• Step-by-step troubleshooting guides

• Instructional videos

• Product and technical FAQs

• Searchable library of technical documents on lennoxcommercial.com
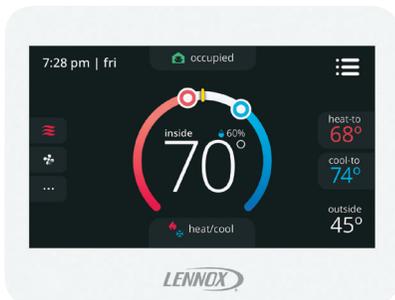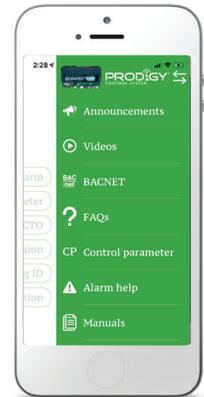
Lennox ComfortSense® 8500
Commercial Programmable Thermostats

• Designed for easy integration with all Energence rooftop units

• Fully programmable, intuitive interface for enhanced comfort and humidity control

• Compatible with BACnet networks for fully integrated control with setpoint adjustment capability

• Provides 4 stages of heating and cooling and full variable-speed operation, resulting in enhanced comfort and dehumidification

Our Energence® High-Efficiency rooftop units deliver energy savings and reduced operating expenses. They achieve efficiency ratings up to 12.5 EER and 15.5 IEER to provide significant utility savings throughout the year. And each product is engineered with features designed to keep maintenance low and performance high, including:

- Exceeds AHRAE 90.1 and DOE minimum efficiency requirements
- Environ™ coil system maximizes reliability and sustainability
- Helps buildings qualify for the most LEED® points
- 15-Year Limited Warranty on stainless steel gas heat exchanger

- 10-Year Limited Warranty on aluminized gas heat exchanger
- 5-Year Limited Warranty on compressor
- 3-Year Limited Warranty on Prodigy® 2.0 unit controller
- 3-Year Limited Warranty on Environ coil system
- 1-Year Limited Warranty on covered components

See warranty certificate for actual details.
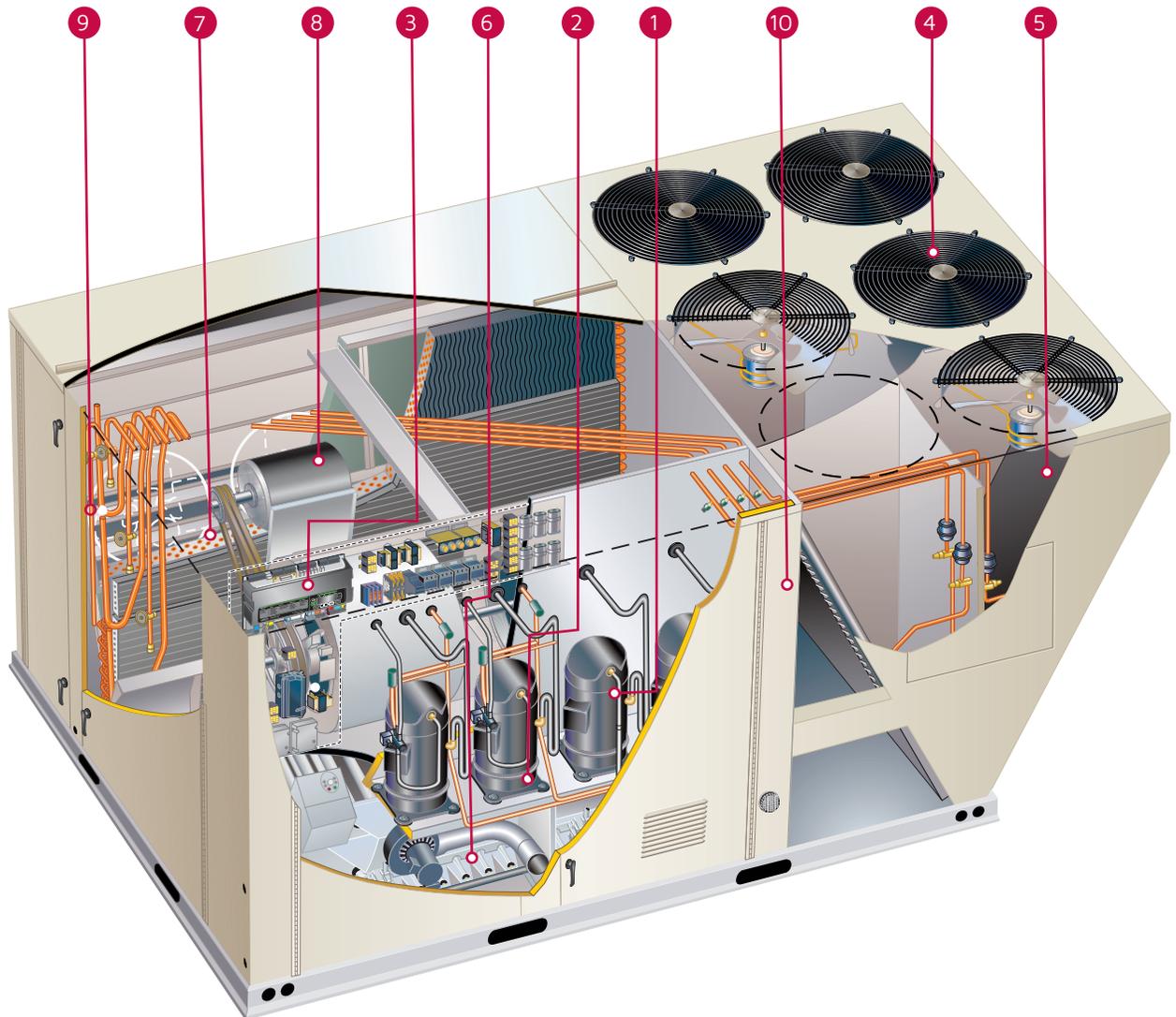
1 SCROLL COMPRESSOR
• Individual Refrigerant Circuits, Scroll

2 ISOLATED COMPRESSOR
• Allows performance check during normal
  compressor operation without disrupting airflow

3 PRODIGY® 2.0 CONTROLLER
• Standard on every Energence® rooftop unit
• Intuitive interface improves installation and service times

4 OUTDOOR FAN
• Thermal overload protected, totally enclosed, permanently
  lubricated ball bearings, shaft up, wire basket mount

5 ENVIRON™ COIL SYSTEM
• All aluminum brazed fin construction, which is up to
  59% lighter. Contains up to 52% less refrigerant and
 has as much as 20% fewer brazed connections

6 ACCESSIBLE GAS COMPARTMENT
• Gas components within hands' reach
  for improved serviceability

7 SLIDE-OUT BLOWER
• Access to all indoor blower components
  through a hinged access panel

8 INDOOR BLOWER
• Belt-drive, inverter VAV blower
• Belt-drive, inverter-driven MSAV or
  VAV blower (25 to 30 tons)

9 TXV
• Provides peak cooling performance across
  the entire application range

10 HINGED ACCESS PANELS
• Provide quick access to components and protect
  panels and roof from damage during servicing

Patented Dehumidification Technologies

Energence units offer additional dehumidification technologies that deliver optimized comfort.

Energence High-Efficiency units offer an additional Humiditrol® dehumidification system, which removes moisture based on humidity requirements rather than temperature, making it easy and efficient to create a better indoor environment.*

REFRIGERANT SCHEMATIC

EVAPORATOR COIL

NOTE: Refrigerant circuits one and two operates when there is a first - stage thermostat demand.

COOL/DEHUMIDIFIED AIR

MIXED INDOOR/OUTDOOR AIR

"NEUTRAL" DEHUMIDIFIED AIR

CONDENSER COIL

REHEAT COIL 2

REHEAT COIL 1

COMPRESSORS

OUTDOOR AIR

1	REFRIGERANT CIRCUIT 1
2	REFRIGERANT CIRCUIT 2
3	REFRIGERANT CIRCUIT 3
4	REFRIGERANT CIRCUIT 4
	REHEAT VALVE
	CHECK VALVE
	THERMAL EXPANSION VALVES

Prodigy®
2.0 Unit Controller

Humidity Sensor

*Innovative Humiditrol technology Available for 300H and 360H models only with MSAV® Multi-Stage Air Volume option and without VFD Bypass Option.

MSAV®
MULTI-STAGE AIR VOLUME

MSAV® Technology

MSAV® provides significant year-round savings and lower monthly utility costs without compromising on comfort. With up to seven different airflow settings, the MSAV supply fan can easily adjust its speed in response to changing weather conditions, allowing the unit to operate at optimum efficiency and deliver many performance benefits.

• MSAV comes as an option for Energence High-Efficiency units
• Reduced energy consumption: Up to 75% supply fan power savings**
• Improved indoor comfort: Up to 29% better moisture removal*

Low   Medium   High

january
february
march
april
may
june
july
august
september
october
november
december
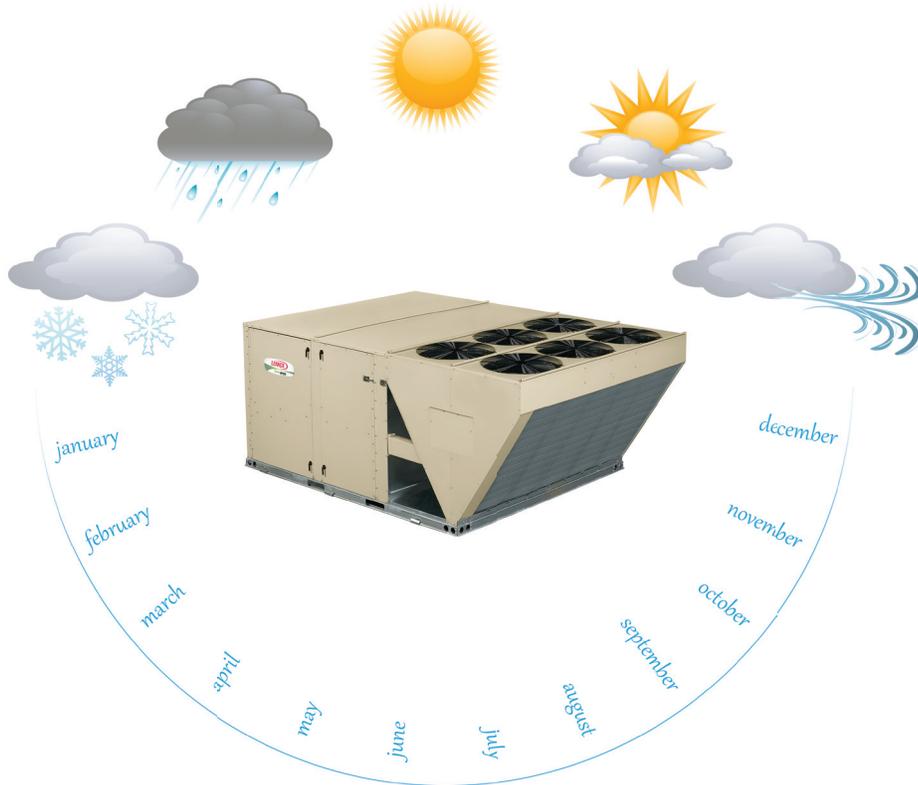
*At 67% airflow when compared to full load.
**At 55% airflow when compared to full load.

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	ENERGENCE®
COOLING	
Metering device	TXV
Freezestats	Standard
High-pressure switch	Standard
Low-pressure switch	Standard
Filter driers	Standard
Corrosion protection	Factory
Condensate drain trap	Factory, Field
Drain pan overflow switch	Factory, Field
HEATING	
Low-temp vestibule heater	Field
LPG/Propane conversion kit	Field
Stainless steel heat exchanger	Factory
BLOWER/SUPPLY AIR	
MSAV® (Multi-Stage Air Volume)	Factory
VFD bypass for MSAV	Factory
CABINET	
Hinged panels	Standard
Coil guards	Field
Hail guards	Field
CONTROLS	
Prodigy® control system	Standard
Blower proving switch	Factory, Field
Dirty filter switch	Factory, Field
BACnet® gateway	Factory, Field
LonTalk® gateway	Factory, Field
Novar LSE	Factory
INDOOR AIR QUALITY	
High-efficiency filters	Factory, Field
Humiditrol® dehumidification system	Factory
Demand control ventilation ready	Standard
ELECTRICAL	
HACR circuit breakers	Factory
Phase/voltage detection	Standard
Disconnect switch	Factory, Field
GFI service outlet	Factory, Field
OUTDOOR AIR CONTROLS	
High-performance economizer	Factory, Field
Differential enthalpy control	Factory, Field
Sensible control	Factory
Single enthalpy control	Factory, Field
Global control	Factory
Barometric relief dampers	Factory, Field
Motorized outdoor air damper	Factory, Field
Manual outdoor air damper	Field
Power exhaust	Factory, Field
Fresh-air tempering	Factory, Field

Information is representative of most models for each product line. Not all models will have every standard feature, factory option or field-installed accessory available.
Please consult the Product Specifications (EHB) document for detailed availability.
LonTalk is a registered trademark of the Echelon Corporation.
BACnet is a registered trademark of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

ᴇNER*GENCE.*

Saving Energy with Intelligence®.

Energence rooftop units, offered in 20-30 tons deliver some of the highest commercial rooftop unit efficiency ratings in the industry.The exclusive Prodigy® 2.0 Unit Controller interface provides guided setup, ensuring the most accurate configuration and commissioning in the least amount of time

Energence High-Efficiency rooftop unit performance specifications

			COOLING DATA		HEATING DATA (KBTUH)				PHYSICAL DATA	
	NOM. TON	MODEL	EER	SEER OR IEER	LOW	STD.	MED.	HIGH	DIMENSIONS H X W X L [INCHES]	SHIP WT. [LBS.]
GAS/ELECTRIC UNITS	20	LGH242H4V	12.3	15.5	—	260	360	480	65 x 91 x 145	3,317
	25	LGH300H4M	11.6	14.4	—	260	360	480	65 x 91 x 145	3,317
	25	LGH300H4V	11.6	14.3	—	260	360	480	65 x 91 x 145	3,317
	30	LGH360H4V	10.6	13.5	—	260	360	480	65 x 91 x 145	3,317
	30	LGH360H4M	10.6	14.0	—	260	360	480	65 x 91 x 145	3,317
					KW RANGE					
ELECTRIC/ELECTRIC UNITS	20	LCH242H4V	12.5	15.5	30–120				65 x 91 x 145	3,207
	25	LCH300H4M	11.6	14.4	30–120				65 x 91 x 145	3,207
	25	LCH300H4V	11.6	14.3	30–120				65 x 91 x 145	3,207
	30	LCH360H4V	10.8	13.5	30–120				65 x 91 x 145	3,207
	30	LCH360H4M	10.8	14.0	30–120				65 x 91 x 145	3,207

SOLUTIONS FOR CUSTOMIZED COMFORT

Don't just choose a Lennox product—choose a Lennox® Commercial Comfort System.

These complete packages of HVAC solutions provide tools to create a healthy and comfortable environment.

PACKAGED UNITS

- Model L™ Rooftop Units
- Enlight™ Rooftop Units
- Xion™ Rooftop Units
- Raider® Rooftop Units
- Energence® Rooftop Units
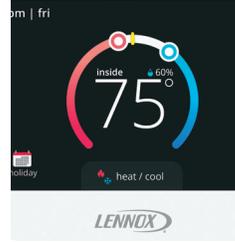
COMMERCIAL CONTROLS

- Lennox® CORE Control System
- Prodigy® Control System
- Lennox Commercial Thermostats and Sensors

VRF

- Outdoor Units
- Indoor Units
- Controls
- Accessories

MINI-SPLIT SYSTEMS

- Heat Pump Mini-Splits
- Low Ambient Heat Pump Mini-Splits
- Indoor Units
- Controls

HEATING

- Unit Heaters
- Duct Furnaces
- Furnaces

INDOOR AIR QUALITY

- Humiditrol® Dehumidification System
- Demand Control Ventilation
- High Efficiency MERV Filters
- UVC Lamps
- Needle Point Bipolar Ionizers

SPLIT SYSTEMS

- Elite® Series Large and Small Split Systems
- Merit® Series Small Split Systems
- Air Handlers
- Indoor Coils