

## T-CLASS™

*Reliable, cost-effective and service-  
friendly split systems inside and out*

Commercial Split Systems

Up to 20 tons

TSA/TPA models

Up to 11.7 EER



**LENNOX**  
Innovation never felt so good.®

#### **TSA/TPA units at a glance:**

*Range of sizes from 6–20 tons  
for application flexibility*

*Single- and dual-circuit units available*

*Corner access control panels with  
Direct Digital Control (DDC)  
expansion space*

*Easy-access refrigerant lines and  
service valves*

*Feature environmentally friendly  
R-410A refrigerant for excellent  
performance and less impact on  
the environment*

#### **TAA units at a glance:**

*Range of sizes from 6–20 tons  
for application flexibility*

*Units can be installed horizontally  
or vertically to fit job requirements*

*Units come fully assembled, ready  
for install with selected drives  
and motors*

*Service access from four sides*

*Corrosion-resistant removable/  
reversible plastic drain pan*

*Improved indoor air quality with  
UVC lamps and MERV 10 and  
MERV 16 5" filter options*

#### **Efficiency Rating**

*Up to 11.7 Energy Efficiency Ratio (EER)*

#### **Warranty**

**5-Year Limited Warranty**  
on compressor

**1-Year Limited Warranty**  
on covered components

*See warranty certificate for actual details.*

## **LENNOX® UNITS DELIVER COMFORT AND CONTROL THAT YOU CAN DEPEND ON**

The latest offerings from Lennox represent a new design in air conditioners and heat pumps that install easily and are built to last. T-Class™ TSA air conditioners and TPA heat pumps provide reliable cooling in a variety of commercial applications. In addition, TAA air handlers are the perfect match for the TSA/TPA units for overall system performance and reliability.

### **Rugged, reliable air conditioners and heat pumps**

Built from high-quality, durable components, Lennox® TSA/TPA units feature scroll compressors for smooth, efficient and quiet operation, and corrosion-resistant cabinets made from galvanized steel to protect against rust.

With a wide range of sizes up to 20 tons, these units accommodate a variety of applications. With the addition of numerous field-installed options and accessories, TSA/TPA systems offer great flexibility for a perfect fit for your next project.

The TSA/TPA split systems also provide easy access to compressors and service valves for convenient serviceability. In addition, corner access control panels allow for DDC expansion space.

Dual independent refrigeration circuits on 10- to 20-ton models provide part-load cooling capability for better comfort. Optional heavy-gauge steel hail guards prevent damage to the coil.

### **Air handlers built for application flexibility**

Lennox' TAA air handlers are designed to match with the TSA/TPA units to provide optimum performance. Fully assembled with drive kit and motor, these multi-position field-convertible air handlers feature plastic corrosion-resistant drain pans and condensate overflow protection with optional float switch kits. In addition, the TAA units feature industry-leading indoor air quality accessories such as MERV 16 filtration and bacteria-killing UVC germicidal lamps that are designed for easy installation.

The TAA air handler was designed from the ground up to be an easy unit to maintain. The low-maintenance blower belt auto tensioner provides longer belt life and quick belt replacement. There is also service access on four sides of the unit. The TAA's compact size fits through standard doorways, and a single filter size for all 6- to 20-ton units, combined with a slide-out blower motor, makes it one of the most service-friendly air handlers on the market.

TAA 090 and 120 models have expansion valves with internal check valves standard, making them heat pump ready.



T-Class large split systems were selected to receive the Gold award in the HVAC Light Commercial Equipment category in the 2009 Dealer Design Awards presented by the ACHR News.

# TSA/TPA AIR CONDITIONERS AND HEAT PUMPS

## Quiet and efficient operation

- 1 Scroll Compressor(s)**—Provides smooth, efficient and quiet operation.
- 2 Outdoor Coil Fan(s)**—Moves large volumes of air uniformly through entire condenser coil for high system efficiency.
- 3 Copper Tube/Enhanced Fin Coil**—Lanced fins provide maximum exposure of fin surface to air stream, resulting in excellent heat transfer.

## Easy installation and maintenance

- 4 Refrigerant Line and Service Valves**—Located in one central area of cabinet for easy access.
- 5 Full-Perimeter Base Rails**—Provide structural integrity during unit transport and movement. Forklift slots and lifting holes help speed up tasks such as moving and lifting the unit on the job site.

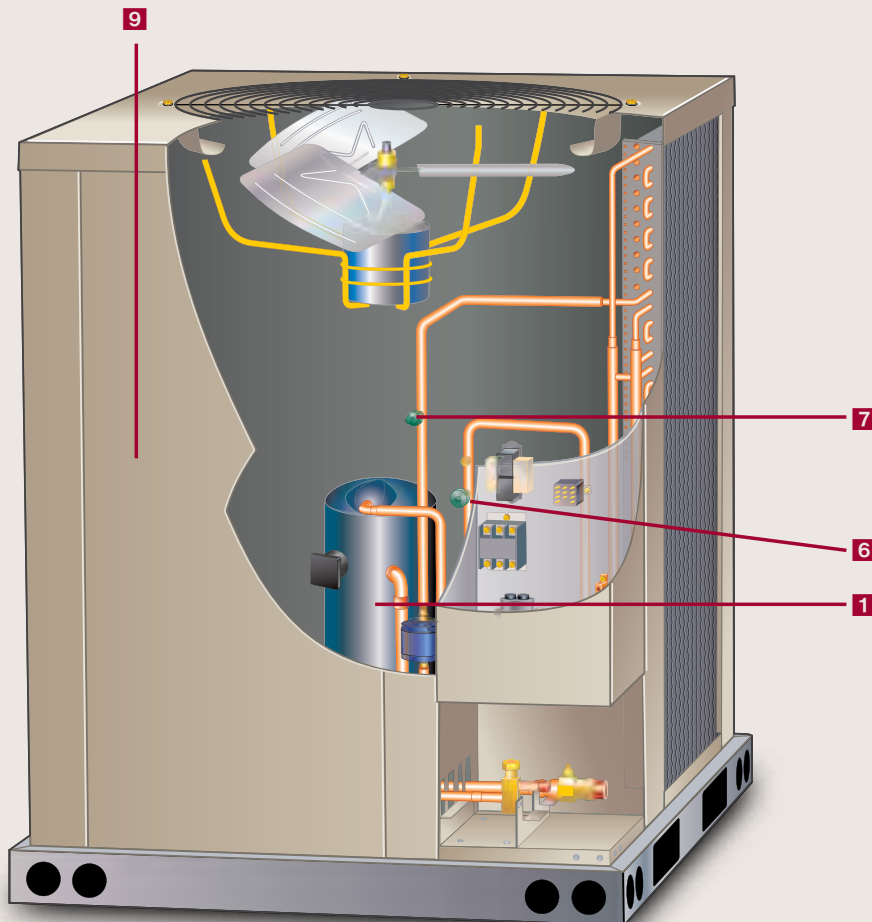
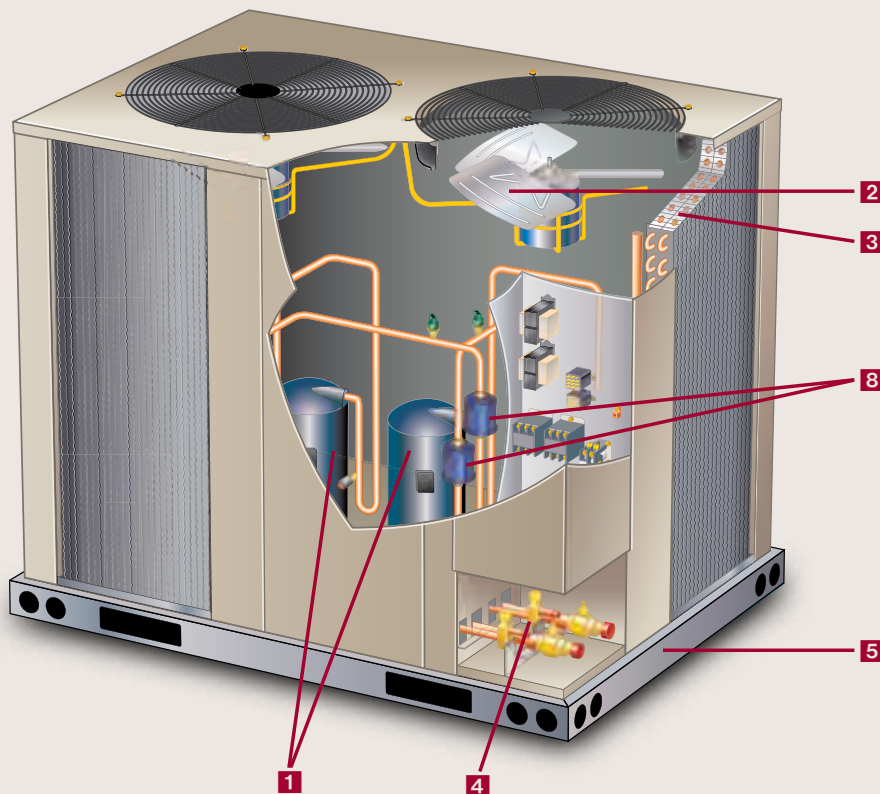
## Reliable performance

- 6 High-Pressure Switch**—Protects the compressor from excessive condensing pressure.
- 7 Loss-of-Charge Switch**—Provides loss-of-charge and freeze-up protection.
- 8 Hi-Capacity Drier**—Traps moisture and dirt that can contaminate the refrigerant system.
- 9 Corrosion-Resistant Cabinet**—Heavy-gauge, pre-painted steel cabinet provides superior rust and corrosion protection.

**Crankcase Heaters**—Protect the compressor against refrigerant migration that can occur during low ambient operation.

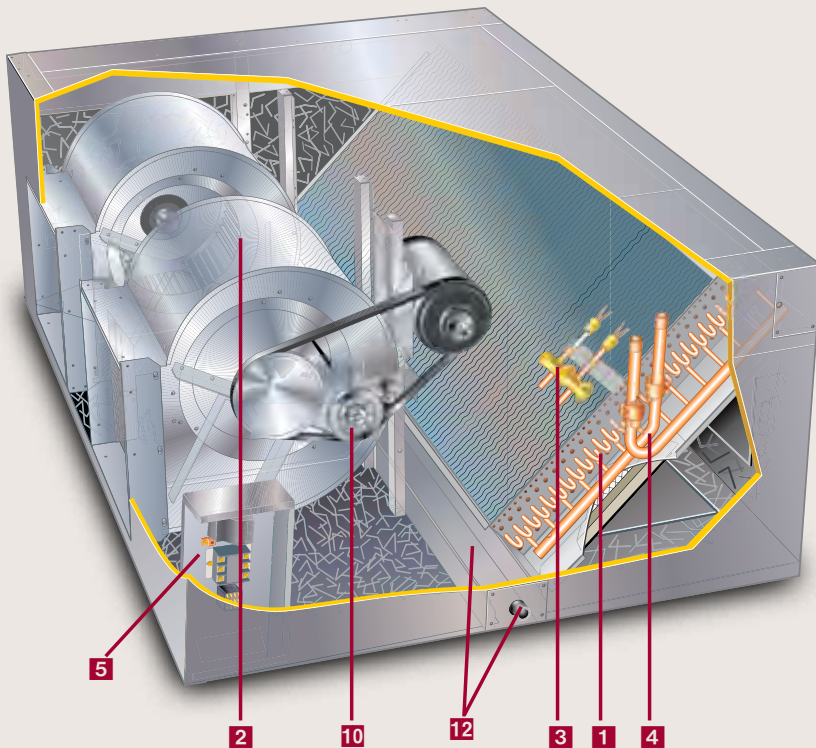
**Reversing Valve**—Provides rapid change of refrigerant flow direction, resulting in quick changeover from cooling to heating and vice versa (heat pump unit only).

**Defrost Control**—Starts a defrost cycle whenever system heating performance falls below optimum levels (heat pump unit only).





# TAA AIR HANDLER



## Quiet and efficient operation

- 1 Multi-Circuit Copper-Tube Coil**—Provides maximum cooling efficiency, excellent heat transfer and low air resistance.
- 2 Belt-Drive Blowers**—Deliver large volumes of air quietly and efficiently.

## Easy installation and maintenance

- 3 Expansion Valve**—Reduces installation time and provides peak cooling performance across the entire application range.
- 4 Refrigerant Piping**—Quick and easy installation with knock-out access on either end of the unit.
- 5 Control Box**—Field-relocatable control box for easier access when space around the unit is tight.
- 6 Bearings**—Heavy-duty, self-aligning, permanently sealed and lubricated. Access panel on 180 and 240 models for easier service.
- 7 Blower Motor, Belt and Tensioner Access**—Isolated from the rest of the cabinet for easier access.
- 8 Filter Access**—Quick and easy access for removal of filters on either end of unit.
- 9 Full Access Panels**—Removable panels provide complete service access.

## Reliable performance

- 10 Auto Tensioning Pulley**—Automatically controls belt tension.
- 11 Heavy-Duty Cabinet**—Constructed of heavy-gauge steel. Completely lined with thick fiberglass insulation, resulting in quiet and efficient operation.
- 12 Drain Pan**—Deep, corrosion-resistant plastic drain pan. Reversible drain pan allows for drain outlets on either end of cabinet. Shipped in upflow location and can be relocated easily to the horizontal position.





**TSA/TPA Units**



**TAA Air Handlers**

## OPTIONS AND ACCESSORIES

### Field-installed options

- Electric heat
- Water heating
- 5" MERV 10 or 16 air filtration
- UVC germicidal lamp kits
- Economizers
- Hail guards
- Coil guards
- Return air grilles
- Float switch kit
- Freezestat kit
- Low ambient control kits (down to 0°F)

### Factory-installed options

- Low-static drive
- High-static drive
- Protective coil coating (indoor and/or outdoor)

## TSA/TPA AIR CONDITIONER AND HEAT PUMP PERFORMANCE SPECIFICATIONS

				COOLING DATA <sup>2, 3</sup>		HEATING DATA <sup>4, 5</sup>				PHYSICAL DATA	
	Nominal Tonnage	Model	Sound Rating dB <sup>1</sup>	ARI Rated Cap. [Btuh]	Efficiency [EER]	Capacity [Btuh]	17F COP	Capacity [Btuh]	47F COP	Dimensions H x W x L [inches]	Ship Wt. [lbs.]
AIR CONDITIONERS	6	TSA072S4S	81	71,000	11.2	—	—	—	—	48.75 x 37.625 x 46.125	325
	7.5	TSA090S4S	81	92,000	11.3	—	—	—	—	48.75 x 37.625 x 46.125	375
	10	TSA120S4S	86	113,000	11.2	—	—	—	—	48.75 x 57.875 x 41.375	490
	10	TSA120S4D	85	108,000	11.7	—	—	—	—	48.75 x 57.875 x 41.375	505
	12.5	TSA150S4D	86	142,000	11.2	—	—	—	—	48.75 x 57.875 x 41.375	560
	15	TSA180S4D	88	190,000	11.6	—	—	—	—	48.75 x 57.875 x 86.5	800
	20	TSA240S4D	89	236,000	11.3	—	—	—	—	48.75 x 57.875 x 86.5	890
HEAT PUMPS	7.5	TPA090S4S	85	92,300	11.0	50,000	2.25	88,000	3.30	48.75 x 57.875 x 41.375	460
	10	TPA120S4S	86	116,000	11.0	70,000	2.25	116,000	3.30	48.75 x 57.875 x 41.375	540

<sup>1</sup>Sound rating number in accordance with test conditions included in ARI Standard 270.

<sup>2</sup>6-ton-and-over equipment certified in accordance with ULE certification program, which is based on ARI Standard 340/360.

<sup>3</sup>Cooling ratings, 95°F (35°C) outdoor air temperature and 80°F (27°C) db/67°F (19°C) wb entering indoor coil air.

<sup>4</sup>High-temperature heating ratings, 47°F (8°C) db/43°F (6°C) wb outdoor air temperature and 70°F (21°C) entering indoor coil air.

<sup>5</sup>Low-temperature heating ratings, 17°F (-8°C) db/15°F (-9°C) wb outdoor air temperature and 70°F (21°C) entering indoor coil air.

Note: Due to Lennox' ongoing commitment to quality, all specifications, ratings and dimensions are subject to change.

# 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

- Strategos® Rooftop Units
- Emergence® Rooftop Units
- Landmark® Rooftop Units

## Split Systems

- S-Class® Air Conditioners/  
Heat Pumps
- T-Class™ Air Conditioners/  
Heat Pumps
- Air Handlers
- Indoor Coils

## Heating

- T-Class Separated Combustion  
Unit Heaters
- Unit Heaters
- Duct Furnaces
- Furnaces

## Commercial Controls

- Prodigy® Control System
- L Connection® Network
- Systems Integration Solutions
- Commercial Thermostats

## Indoor Air Quality

- Humiditrol®  
Dehumidification System
- Demand Control Ventilation
- Energy Recovery Systems
- Air Filters
- UVC Germicidal Lights



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