

Next generation Copeland Scroll™ UltraTech™ two-stage scroll compressor

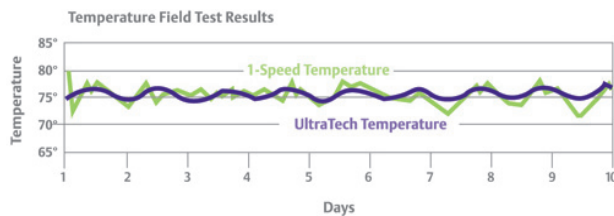


Ultra comfort and energy savings

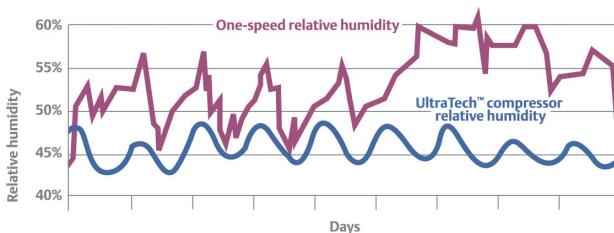
Contractors have more opportunities than ever to upsell and delight their customers with improved comfort and energy savings. In fact, an independent study recently found that 39 percent of homeowners nationwide would pay a premium for a high efficiency, two-stage air conditioner that offers humidity control and more even temperatures. That's why the next generation Copeland Scroll UltraTech compressor is so popular among contractors and their customers. Since its launch, the 15+ SEER market has grown 45 percent.

A greater level of comfort

The next generation Copeland Scroll UltraTech compressor provides superior comfort with a revolutionary two-step capacity design. At part-load capacity, systems with Copeland Scroll UltraTech compressors run longer, to reduce humidity and allow precise temperature control by modulating capacity. This eliminates uneven cooling peaks and valleys and allows for steady cooling comfort.



Copeland Scroll UltraTech compressors allow precise temperature control.



Copeland Scroll UltraTech compressors improve humidity control by 53%.

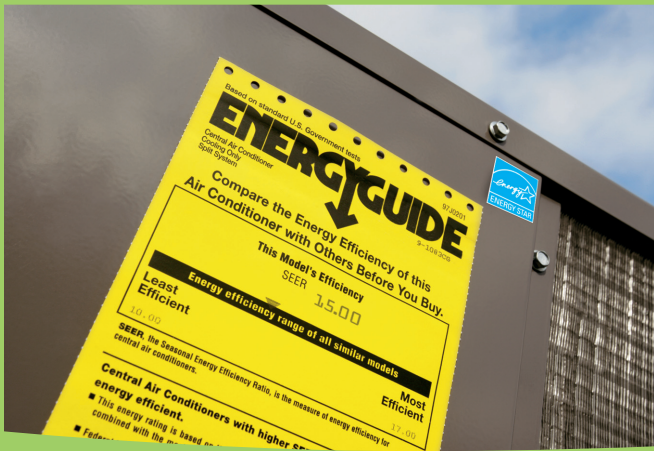
15-16 SEER energy savings

Over 40 percent of summer utility bills can come from operation of the air conditioner compressor. Copeland Scroll UltraTech compressors lead the industry with a greater level of comfort and energy efficiency, saving up to 25 percent on energy costs as compared to conventional HVAC systems. With as much as a 200 watt reduction in power consumption, systems equipped with Copeland Scroll UltraTech compressors are ideal for 15-16 SEER systems.

Quiet comfort

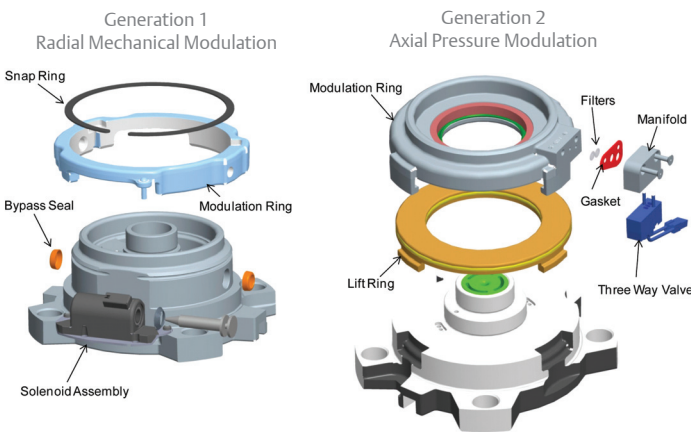
The Copeland Scroll UltraTech compressor is remarkably quiet at both full- and part-load capacity. In fact, it is up to four times quieter than a reciprocating compressor. So homeowners can enjoy its superior cooling power without having to hear its operation.





Big benefits in a simple, reliable design

With the Copeland Scroll UltraTech compressor, two internal bypass ports enable the system to run at 67 percent part-load capacity, for enhanced efficiency and humidity control. This new, innovative design uses an internal pressure differential to actuate the modulation assembly significantly reducing the power required to modulate the valve. It also minimizes the expansion volume created during full-load operation which ultimately improves full-load performance by 1.5-5.5 percent. As a result, the next generation Copeland Scroll UltraTech compressor offers contractors a solution that not only provides better performance, but also provides a more reliable product due to the inherently simpler design.



Key features:

- Enhanced humidity and temperature control for 15 - 16 SEER market, up to 5.5 percent increase in efficiency
- Two stages of capacity modulated by pressure differential that instantly shifts between full-load and part-load capacity
- Leverages 15 design improvements of the fifth generation Copeland Scroll platform
- Optimized for comfort and energy savings
- Significant reduction in VA load
- Improved sound



Proven scroll performance

While the Copeland Scroll UltraTech compressor builds on established scroll technology, it is still a scroll at heart – which means that it operates with fewer moving parts and no volumetric efficiency drop-off or compression leakage, delivering the reliability you've come to expect from a Copeland Scroll compressor.

Copeland Scroll UltraTech compressor specification chart

| Model | Part-Load Capacity at 50/100 | Full-Load Capacity at 50/115 | Run Cap. MFD/Volts | Suction Height (in.) | Discharge Height (in.) | Height (in.) | Weight (lbs.) | Suction Diameter (in.) | Discharge Diameter (in.) |
|------------------|------------------------------|------------------------------|--------------------|----------------------|------------------------|--------------|---------------|------------------------|--------------------------|
| ZPS20K5E-PFV | 20000 | 25600 | 5.5 | 10.4 | 14.3 | 15.3 | 47.3 | 3/4 | 1/2 |
| ZPS20K5E-PFJ | 20000 | 25600 | 5.5 | 10.4 | 14.3 | 15.3 | 47.3 | 3/4 | 1/2 |
| ZPS20K5E-TF5/D/E | 20000 | 25600 | 5.5 | 10.4 | 14.3 | 15.3 | 47.3 | 3/4 | 1/2 |
| ZPS21K5E-PFV | 20600 | 26400 | 5.5 | 10.4 | 14.3 | 15.3 | 47.3 | 3/4 | 1/2 |
| ZPS26K5E-PFV | 25000 | 32800 | 5.5 | 10.4 | 14.3 | 15.3 | 47.3 | 3/4 | 1/2 |
| ZPS26K5E-PFJ | 25000 | 32800 | 5.5 | 10.4 | 14.3 | 15.3 | 47.3 | 3/4 | 1/2 |
| ZPS26K5E-TF5/D/E | 25000 | 32800 | 5.5 | 10.4 | 14.3 | 15.3 | 47.3 | 3/4 | 1/2 |
| ZPS30K5E-PFV | 27700 | 38000 | 5.5 | 10.4 | 14.3 | 15.3 | 49.6 | 3/4 | 1/2 |
| ZPS30K5E-PFJ | 27700 | 38000 | 5.5 | 10.4 | 14.3 | 15.3 | 49.6 | 3/4 | 1/2 |
| ZPS30K5E-TF5/D/E | 27700 | 38000 | 5.5 | 10.4 | 14.3 | 15.3 | 49.6 | 3/4 | 1/2 |
| ZPS31K53-PFV | 29300 | 39000 | 5.5 | 10.4 | 14.3 | 15.3 | 49.6 | 3/4 | 1/2 |
| ZPS35K5E-PFV | 33500 | 45300 | 6.5 | 11.6 | 15.5 | 16.9 | 72.9 | 7/8 | 1/2 |
| ZPS35K5E-TF5/D/E | 33500 | 45300 | 6.5 | 11.6 | 15.5 | 16.9 | 72.9 | 7/8 | 1/2 |
| ZPS40K5E-PFV | 38400 | 51000 | 6.5 | 11.6 | 15.5 | 16.9 | 72.9 | 7/8 | 1/2 |
| ZPS40K5E-PFJ | 38400 | 51000 | 6.5 | 11.6 | 15.5 | 16.9 | 72.9 | 7/8 | 1/2 |
| ZPS40K5E-TF5/D/E | 38400 | 51000 | 6.5 | 11.6 | 15.5 | 16.9 | 67.0 | 7/8 | 1/2 |
| ZPS49K5E-PFV | 45500 | 60600 | 6.5 | 11.6 | 15.5 | 16.9 | 76.5 | 7/8 | 1/2 |
| ZPS49K5E-TF5/D/E | 45500 | 60600 | 6.5 | 11.6 | 15.5 | 16.9 | 72.8 | 7/8 | 1/2 |
| ZPS51K5E-PFV | 48300 | 64100 | 6.5 | 11.6 | 15.5 | 16.9 | 76.5 | 7/8 | 1/2 |
| ZPS51K5E-PFJ | 48300 | 64100 | 6.5 | 11.6 | 15.5 | 16.9 | 76.5 | 7/8 | 1/2 |
| ZPS51K5E-TF5/D/E | 48300 | 64100 | 6.5 | 11.6 | 15.5 | 16.9 | 76.5 | 7/8 | 1/2 |
| ZPS60K5E-PFV | 57300 | 73300 | 6.5 | 11.6 | 15.9 | 17.4 | 96.0 | 7/8 | 1/2 |
| ZPS60K5E-TF5/D/E | 57300 | 73300 | 6.5 | 11.6 | 15.9 | 17.4 | 79.3 | 7/8 | 1/2 |

Mounting pattern 7.5"x7.5" (same as previous Copeland Scroll models)

For complete product details and additional information, visit EmersonClimate.com and select Online Product Information (OPI) or CopelandScroll.com.

Copeland Scroll UltraTech compressor nomenclature

| Z | P | S | 3 | 0 | K | 5 | E | - | P | F | V | - | 1 | 3 | 0 |
|------------------------|--------------|-----------|--------------------------------------|-------------------------------|----------------------|-------------------------------------|--|---|------------------------------|------|---------------------------------|-----------|-----------|---|------------------------------------|
| Z scroll family series | AC, R-410A/B | UltraTech | Nominal Capacity at Rating Condition | Capacity Multiplier K - 1,000 | Model Variation 4, 5 | Oil type E - POE Oil - AK/DA or 3MA | P = Single Phase Motor T = Three Phase Motor B = BPM 50/50 F = 3PWS K = Three Phase Motor Encapsulated Stator | | Internal Inherent Protection | Code | 60 Hz. | 50 Hz. | | | Bill of Material Product Variation |
| | | | | | | | | | | | D | 460-3 | 380-420-3 | | |
| | | | | | | | | | | | E | 575-3 | — | | |
| | | | | | | | | | | | J | 265-1 | 220-240-1 | | |
| | | | | | | | | | | | M | 380-420-3 | — | | |
| | | | | | | | | | | | V | 208-230-1 | 200-1* | | |
| | | | | | | | | | | | 5 | 200-230-3 | 200-220-3 | | |
| | | | | | | | | | | | *only on some A/C scroll models | | | | |

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