

# Description

## Scroll Compressors

When Emerson first pioneered the use of scroll technology in compressors, it changed the industry forever. Since then, Copeland Scroll technology remains at the forefront for HVACR applications, impressing contractors and original equipment manufacturers (OEMs) with its superior efficiency, proven reliability and ease of installation.

### Efficiency

Approximately 35 percent of the electrical energy consumed each year in the United States is used by HVACR systems. Compressors make up a vast majority of the energy used in air conditioning and refrigeration systems. That means compressor selection is key to improving the overall efficiency of HVACR systems. The inherent design of Copeland Scroll compressors makes them a preferred choice for more energy-efficient systems. In fact, Copeland Scroll compressors play a key role in helping the industry throughout major transitions like the 1992 move to a 10 SEER standard and the industry's shift in 2006 to a 13 SEER minimum. As the industry prepares for another regulatory change - this time the phaseout of R-22 refrigerants in favor of the more environmentally friendly R-410A - it will benefit from the versatility and efficiency of scroll compressor technology.

### Environment

As the industry transitions from R-22 refrigerants to the more environmentally friendly R-410A, a surprising event has occurred. Adoption is taking place faster than anticipated. In fact, the market is already 50 percent higher in R-410A than expected. With nearly 10 million Copeland Scroll R-410A compressors installed worldwide, we have the industry's broadest line of environmentally friendly R-410A compressors.

### Reliability

Copeland Scroll compressors are known for their reliability because of their Patented design features including:

- 70 percent fewer moving parts
- Ability to start under any system load, without start components
- Compact, light-weight design
- No complex internal suction and discharge valves for quieter operation and higher reliability

### Innovation

With the broadest product line in the industry, Copeland Scroll compressors range from 1-60 HP and are installed in more than 100 million installations around the world. They have become the compressor of choice to lead the industry through major transitions, including the 13 SEER minimum-efficiency requirement and R-22 phaseout. Copeland Scroll compressors can be used in single or tandem configurations and can also be modulated for increased efficiency and homeowner comfort.

### Design Benefits

#### Better Liquid Handling

Axial and radial compliance allow the scroll members to separate in the presence of liquid refrigerant, thus, providing protection against liquid damage

## Greater Efficiency

More efficient over their entire operating range

## Improved Sound

Operate at lower sound and vibration levels than traditional compressors

## Unmatched Reliability

- Easy to service and maintain due to their compact size and lightweight, simple design
- Engineered for optimum performance with today's chlorine-free refrigerants

California residents: see [Proposition 65 Warning](#)

## Features and Specification

Weight	159.000000
Package Width	16.000000
Product Family	ZR
Protection	External Enhanced
Package Length	18.500000
Refrigerant	R-22; R407C; R134a
Package Weight	159.000000
OPT Code	ZR190KCETED965
Oil Type	Polyol Ester (POE)
Oil Charge Recharge	110 oz.
Oil Charge Initial	114 oz.
Mounting Dimensions	7.5" x 7.5" x 23.02"
Motor Type	General 3 Lead Single Voltage
Package Height	29.000000
Phase	Three
Return Gas Temperature	55°F, 65°F (18.3°C)
Suction Line Size (OD)	1 3/8"

Suction Line Fitting	Sweat or Braze
Width	16.000000
Type	Scroll
UOM	EA
UPC	See Optical
Voltage	380-420 VAC, 460 VAC
Warranty Offered	Yes
Maximum Voltage	460 VAC
Discharge Connection	7/8" Stub
Dimensional Weight	64.000000
Cycle/Hertz	50/60 Hz
Cubic Measurement	4.967600
Color	Black
BTU Output	190000
Brand	Copeland
Base	7.50" x 7.50" x 23.02"
Application	AC
Amps	24, 26.2
Mass Flow	2180 lbs./hr., 2630 lbs./hr.
Length	18.500000
High Locked Rotor Amps	173
Features	Displacment (in <sup>3</sup> /Rev): 15.20, Displacment (ft <sup>3</sup> /hr): 1847.47
Evaporating Temperature	35°F, 45°F (7.2°C)
Height	29.000000