

# Copeland Scroll Outdoor Condensing Units

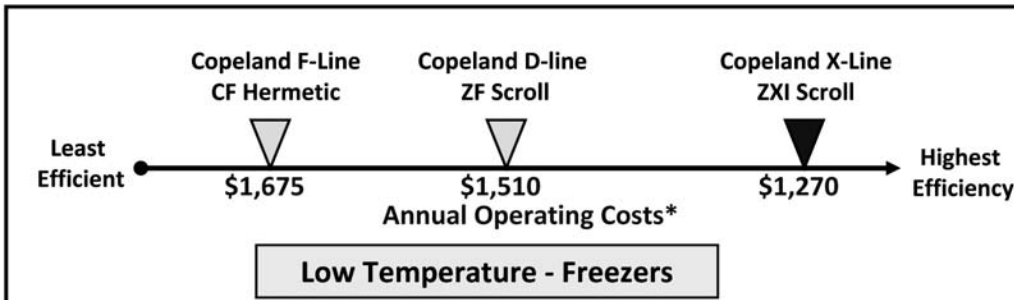
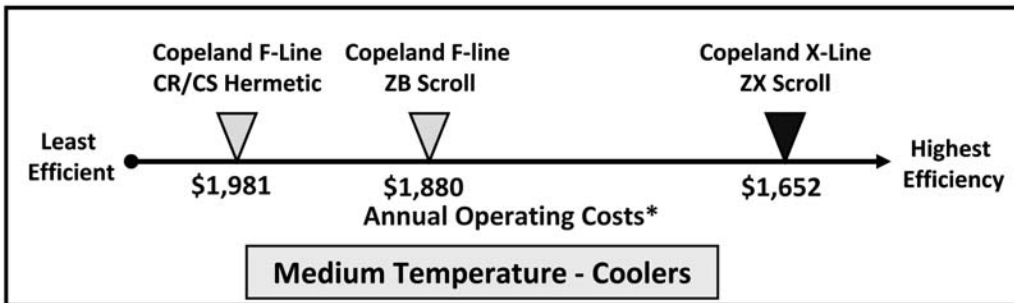
Low and Medium Temperature  
Outdoor Refrigeration Condensing Units

- High Efficiency:** Scroll compressors offer the highest energy efficiency levels to lower end user energy bills. With integrated controls, that optimize fan motor speed to maximize the heat transfer through over-sized condenser coils, additional energy savings are achieved.
- Diagnostic Protection:** Advanced protection and early warning against common failure conditions will help lower maintenance costs. To avoid unneeded service, protection against common nuisance conditions is also included. With the fault code retrieval capabilities of the diagnostic controller, accuracy in the diagnosis of field issues is greatly enhanced, facilitating the service process to further reduce repair expenses.
- Quiet Operation:** Smooth scroll movement lowers sound and vibration levels. Ultra quiet variable speed fan motors and internal baffling further improve the sound quality, creating a better customer experience and providing additional location options.



## Annual Energy Savings: Outdoor Condensing Units

\* Annual Operating Costs Are Based On Typical 3 Hp Product



Based on 3 HP medium temperature R404A condensing unit

Item # \_\_\_\_\_

Job \_\_\_\_\_

# Copeland Scroll Outdoor Condensing Units



## Energy-Efficient Design

Because there are no pistons to compress gas, scroll compressors achieve 100 percent volumetric efficiency, which provides reduced energy costs in many applications.

During operation centrifugal force maintains nearly continuous compression and constant, leak-free contact (see below). Separation of suction and discharge gases reduces heat-transfer loss.



**1** Gas enters an outer opening as one scroll orbits the other.



**2** The open passage is sealed as gas is drawn into the compression chamber.



**3** As one scroll continues orbiting, the gas is compressed into an increasingly smaller "pocket."



**4** Gas is continually compressed to the center of the scrolls, where it is discharged through precisely machined ports and returned to the system.



**5** During actual operation, all passages are in various stages of compression at all times, resulting in near-continuous intake and discharge.

	Models	Compressor	HP	Capacity (Btu/hr) @ 95°F Ambient	
				208/230V-1φ	208/230V-3φ
Medium Temperature Coolers (+25°F Evap Temp)	XJAM-020Z	ZX15KCE	2	18,800	18,800
	XJAM-030Z	ZX21KCE	3	27,200	27,200
	XJAM-040Z	ZX30KCE	4	37,000	37,000
	XJAM-050Z	ZX38KCE	5	45,400	45,400
	XJAM-060Z	ZX45KCE	6	-----	52,400
Low Temperature Freezers (-10°F Evap Temp)	XJAL-020Z	ZXI06KCE	2	12,900	12,900
	XJAL-030Z	ZXI09KCE	3	-----	16,800
	XJAL-035Z	ZXI11KCE	3.5	18,900	-----
	XJAL-040Z	ZXI14KCE	4	24,200	24,200
	XJAL-050Z	ZXI16KCE	5	24,600	24,600
	XJAL-060Z	ZXI18KCE	6	-----	33,700

The above models are for 60Hz operation only.

**Copeland Scroll Outdoor Condensing Units**



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