

Product Description

Xcelaero's HELIC 44 positive displacement compressor is the heart of our vapor cycle system (VCS). With its high-efficiency design, it runs effectively all along its performance curve. Cooling capacity is modulated by varying the speed of the compressor, reducing power, and extending mission range. The HELIC 44 is attitude insensitive, allowing it to be mounted in any orientation. It is flexible for use with R134a, R1234yf and other low GWP Refrigerants. The compressor pump head, as well as the motor drive, can be optimized based on your application.

Specifications

Design Type	Semi-Hermetic Refrigerant Twin Screw
Refrigerant	R-134a
Burst Pressure	75.0 bar(a)
Proof Pressure	37.5 bar(a)
Max Operating Pressure	24.5 bar(a)
Mechanical Connector Type	SAE AS4395 (-24 Suction, -12 Discharge)
Electrical Connector Type	MIL-DTL-38999 Series III
Altitude	-5 to 55,000ft



Motor Options

	PM Synchronous Motor	400 Hz Induction Motor
Voltage	270 V DC	115 V AC
Operating Speeds	6,000 – 24,000 rpm	8,000 rpm / 12,000 rpm
Dry Weight	25.0 lbs	47.0 lbs
Overall length (A)	14.5 inches	16.0 inches
Overall height (B)	7.5 inches	9.7 inches
Max Width (C)	7.5 inches	8.3 inches
Capacity with R134a at 50°F SST / 120°F SDT	30.0 kW at 22,000 rpm	16.6 kW at 12,000 rpm



