



SEMI-HERMETIC COMPRESSORS



Semi-hermetic compressors are engineered for durability, serviceability, and reliable performance in commercial refrigeration and HVAC systems. Designed for walk-in coolers, freezers, and light industrial applications, these compressors provide strong cooling capacity, efficient motor performance, and long operational life.

Available in multiple refrigerants including R-134a, R-404A, and R-407C, these units support both medium and low temperature applications.

Product Line Overview

Compressor Type: Semi-Hermetic
Cooling Method: Air-Cooled
Application Range: Medium & Low Temperature
Capacity Range: 264W – 2200W
Voltage Options: 220–240V / 460V
Phase Options: Single Phase & Three Phase
Motor Types: RSIR, PSC, CSR

Core Features

Compact semi-hermetic design.
Serviceable construction for long lifecycle.
Air-cooled operation.
RSIR, PSC, and CSR motor configurations.
Single-phase and three-phase models available.
Reliable performance in medium and low temperature ranges.
Optimized for commercial refrigeration systems.
Low vibration and quiet operation (select models).
Low maintenance requirements.

Electrical Characteristics

- 50Hz and 60Hz models available
- Single-phase and three-phase configurations
- RSIR (Resistance Start Induction Run)
- PSC (Permanent Split Capacitor)
- CSR (Capacitor Start Capacitor Run)
- High starting torque (select models)
- Thermal overload protection

Application Guidelines

Medium Temperature Applications

- Walk-in coolers
- Reach-in refrigerators
- Beverage coolers

Low Temperature Applications

- Commercial freezers
- Frozen food storage
- Ice cream cabinets

Environmental & Compliance

- Designed for commercial refrigeration standards
- Compatible with commonly approved refrigerants
- Built for long lifecycle and serviceability

Construction & Design

- Heavy-duty semi-hermetic cast housing
- Serviceable valve plate and motor assembly
- Replaceable internal components
- High-quality crankshaft and bearing system
- Oil sight glass (select models)
- Suction and discharge stub connections

Installation requirements

- Proper oil level must be maintained
- Ensure adequate airflow for air-cooled operation
- Install vibration isolation mounts
- Follow refrigerant charging guidelines
- Electrical supply must match compressor rating

Advantages of Design

- Serviceable (unlike fully hermetic compressors)
- Lower lifecycle cost
- Higher durability in commercial environments
- Strong performance in demanding applications

Model Specification Summary

Model	Refrigerant	Temp Range	Application	Capacity	Voltage	Phase	Frequency	Motor Type	Weight	Dimensions
CP-134A-SH-01	R-134a	28–40°F	Walk-In Cooler	264 W	220-240V	1	50 Hz	RSIR	69 lbs	9.7x7.5x17 in
CP-134A-SH-02	R-134a	30–45°F	Commercial Refrigeration	400 W	220-240V	1	60 Hz	PSC	75 lbs	10.5x8.2x18.5 in
CP-404A-SH-03	R-404A	-10–10°F	Commercial Freezer	1800 W	460V	3	60 Hz	CSR	120 lbs	14x11x22 in
CP-407C-SH-04	R-407C	25–55°F	HVAC & Refrigeration	2200 W	460V	3	60 Hz	CSR	130 lbs	15x12x24 in
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CP-134A-SH-02	R-134a	30–45°F	Commercial Refrigeration	400 W	220-240V	1	60 Hz	PSC	75 lbs	10.5x8.2x18.5 in
CP-404A-SH-03	R-404A	-10–10°F	Commercial Freezer	1800 W	460V	3	60 Hz	CSR	120 lbs	14x11x22 in