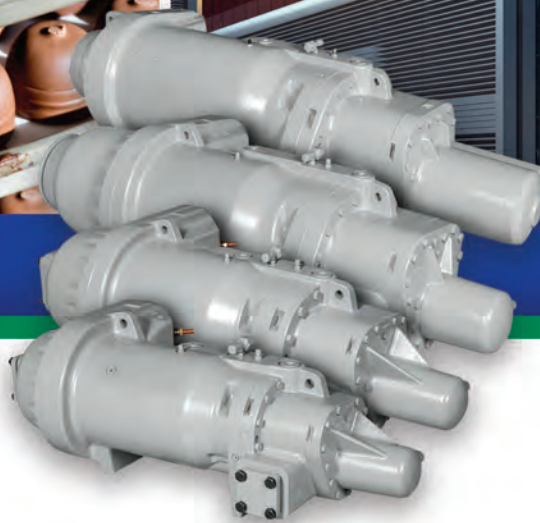
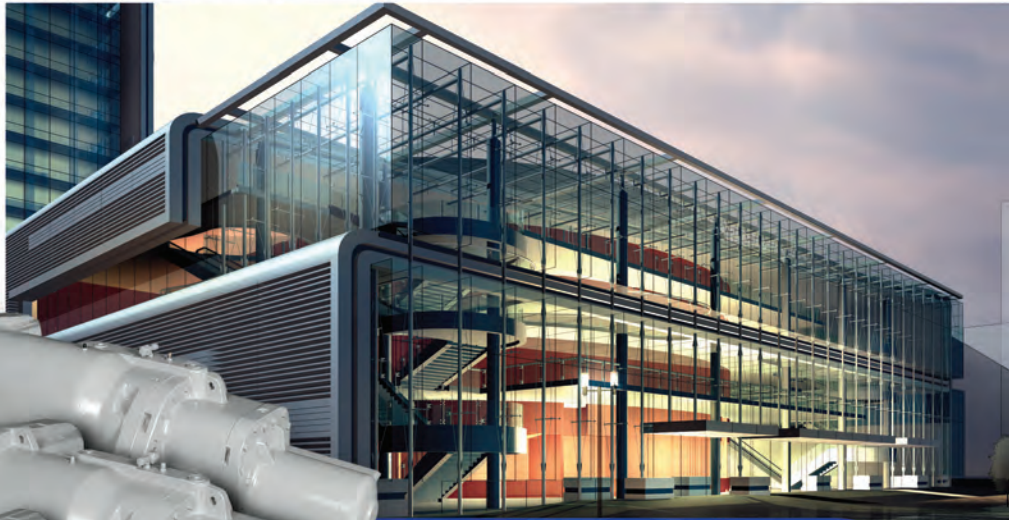




Performance you demand, quality you rely on.



**PARAGON**<sup>™</sup>  
TWIN SCREW COMPRESSORS

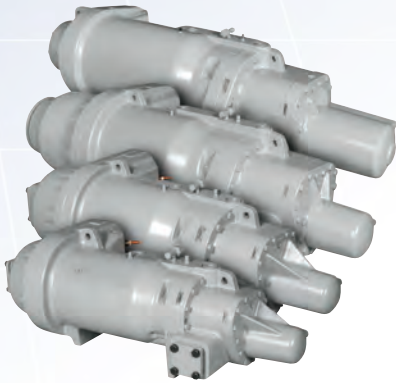
THE MOST ADVANCED  
COMPRESSOR TECHNOLOGY AVAILABLE  
**PARAGON TWIN SCREW COMPRESSORS**

THE MOST ADVANCED COMPRESSOR  
TECHNOLOGY AVAILABLE

## PARAGON™ TWIN SCREW COMPRESSORS

### Now you can have Carlyle® efficiency, reliability and quality in one twin-screw compressor: *introducing Paragon*

Its progressive, high-performing design combines Carlyle's vast refrigeration and cooling experience with the sophisticated technology from the world's largest refrigeration company. When used in your equipment, Paragon gives you unparalleled operating costs, reliability and ease of application.



### Best full and part-load efficiencies

Paragon was designed to meet your most challenging needs now—and well into the future. Our advanced engineering and design work has led to innovative, high-efficiency, patented rotor profiles and optimized housing geometry that provide exceptional efficiency and reliability. Plus, Paragon's capacity modulation has been greatly improved to provide infinitely variable capacity from 25% to 100% for perfect load matching and superior seasonal energy efficiency.

### Pre-engineered oil management for easy application

Carlyle's technology team simplified the design of the entire oil management system and accessory packages to provide the following options: side mount horizontal oil separator, compact over/under oil separator, or the vertical oil separator. These options meet the needs of refrigeration systems which require high-efficiency oil separation and also those applications that are less demanding. Close-coupled oil separators include external, easy to service oil filters, level sensors and heaters to reduce installation labor and eliminate the need for an accessory oil pump.

### Performance you demand, quality you deserve

Whatever your application requires, you can build your reputation by relying on the standard of high performance and durability of Paragon compressors in your equipment. Paragon is the result of extensive R & D testing, as well as the world's most sophisticated design and manufacturing capabilities. It's this innovative engineering and rigorous product testing—both in our state-of-the-art laboratories and in the real world—that make Carlyle® compressors models of excellence. Build your reputation on the reliability, durability and efficiency of Paragon screw compressor technology.



### Unequaled Performance

- 35 to 300 ton sizes for R134a, R507A, R407A, and R404A
- Patented rotor profile geometry produced on state-of-the-art manufacturing processes

### Integrated Check Valve

- Quiet shutdown
- Flexibility to use multiple compressors in parallel

### Superior Quality and Reliability

- 100% factory-run tested
- Fewer parts—less chance of breakage and downtime
- “33 point” in-process inspections

### Perfect Load Matching

- Continuous unloading down to 25% on some models
- Built-in Vi compensation at part load
- Automatic unloaded starting
- Simple dual-solenoid control

### Dependable Rolling Element Bearings

- Sealed cavity for reduced loads
- Long-life, eliminating in-service inspection and replacement
- Robust thrust bearing design
- Oil pump is not required

### High Strength Motor for Y- $\Delta$ or Across-the-Line Starting

- High motor efficiency
- Suction cooled with screen for improved reliability
- Integrated NTC winding sensor for thermal protection
- Slip fit for motor serviceability
- Available in all standard voltages

### Slide Valve Unloading System

- All Paragon screw compressors can utilize a continuous slide valve unloading system.
- Decreases the compressor’s capacity by reducing the amount of compression performed by the screw rotors.
- Compressor Protection — Monitors motor and discharge temperatures through a factory installed 5k thermistor in the motor windings and field installed 5k thermistor inserted into a thermos-well on the compressor body

### Paragon Slide Valve Controller (PCM)

- Functions to control compressor capacity by operating the compressor unloading slide valve as directed by a pressure transducer or NTC temperature sensor input (control variable) to the PCM
- Functionality to protect the compressor from high motor and discharge temperatures and loss of oil flow to the compressor
- Provides LED fault status indication to the end user
- Network capable to communicate to the System Controller using MODBUS, LonWorks, BacNet, or N2. These network parameters are all preconfigured and setup in the PCM
- Pre-loaded with Carlyle Software
- Part of a Carlyle Controls Package Kit which provides the user with all necessary hardware to install the PCM and Protection Components

### Oil Management System

- High-efficiency oil separation
- Available in three options: side-mount horizontal oil separator, compact over/under oil separator, and vertical oil separator



*New Paragon™ Slide Valve Controller (PCM)*



## Paragon Twin Screw Compressors

### Variable Speed for Capacity Control

- Many of the R-134a air-cooled and water-cooled compressors have been qualified for operation with a variable frequency drive (VFD). In many applications it is possible to combine the use of variable speed and slide valve control to achieve superior compressor capacity controls.

### Service Friendly & Easy Application

- Semi-hermetic
- Simple disassembly and reassembly
- Large external oil filters for long service life and easy replacement
- Pre-engineered oil management accessories
- Flexible oil separator selections to match design requirements

- Offer service and compressor packages which are all fully serviceable
- Compressor replacement parts include motors and bearings to name a few

### Certifications

- UL and CSA approval on refrigeration models with R507A, R407A, R404A; CE marking

### Proven More Durable in Real-World Applications

- Statistically proven more reliable than the competition
- Widest operating range
- Less downtime
- Dependable parts availability and delivery

### Coast-to-Coast Distribution Network

- Widest breadth of line in the industry
- 24 x 7 x 365 service and availability
- Superior technical support
- World class training resources
- Competitive pricing
- Around-the-clock emergency compressor delivery and guaranteed core pickup
- Immediate shipments available for OEM customers
- No need to wait for production lead times



**Carlyle**<sup>®</sup>

Performance you demand, quality you rely on.

Carlyle Compressor  
PO Box 4808

Syracuse, NY 13221, USA

© Carrier Corporation 2015  
Lit. No. 574-932 Rev. B 0815