

5-20 HP | OIL-LESS | ROTARY SCROLL COMPRESSOR

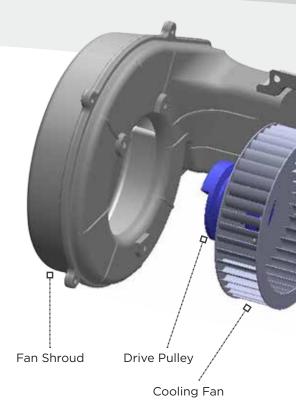
# **CA-Series ES**



## Legendary Experience Innovative Design

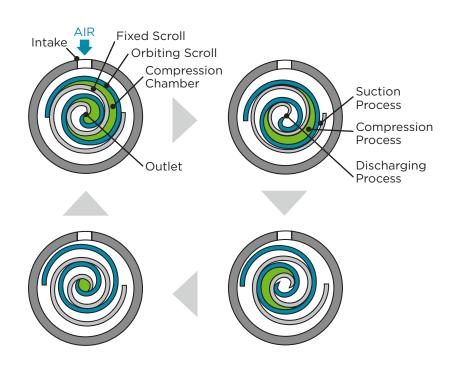
Champion has over 95 years of experience in design and manufacturing of the highest quality compressors. The CA-Series rotary scroll system is the perfect example of our progressive innovation.

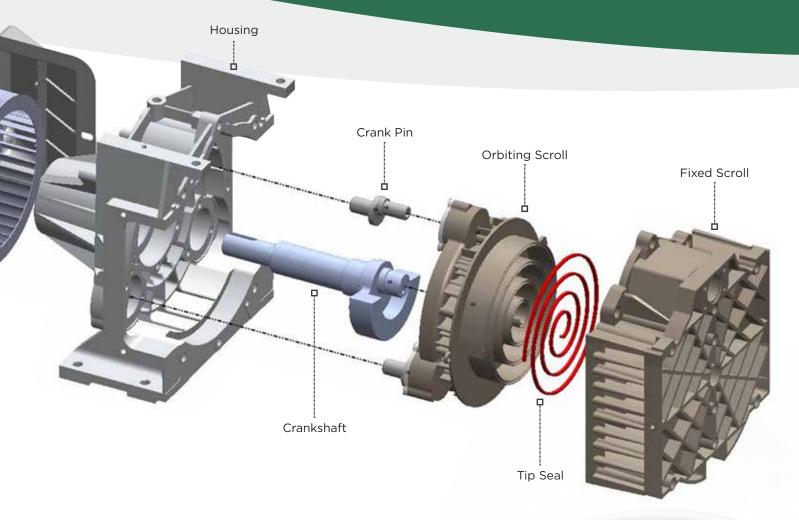
Oil-less compressors have become a standard in industries such as medical, lab/research, biotechnology, pharmaceutical, food and beverage, and semi-conductor. Oil contamination is extremely detrimental to these processes. Pure air quality demands are rapidly growing with new regulations and laws regarding oil contamination throughout multiple industries and applications. Champion has designed the CA-Series scroll compressor specifically for these applications that require 100% OIL-FREE AIR.



#### Scroll Compression Explained

- An orbiting (rotating) scroll and fixed scroll housing are mated to create the compression chambers
- The continual movement of the orbiting scroll moves atmospheric air from the intake toward the center, compressing the air into progressively smaller areas
- The compressed air is directed to the center discharge port of the compressor





#### Scroll Compressor Features & Benefits

- 100% Oil-Less Design
- Oil-Free/Contaminant Free Air
- Continuous Operation, 100% Duty Cycle
- Integral Cooling Fan
- 116 or 140 PSI Options
- Low Sound Levels
- Low Vibration
- Compact Footprint
- 5, 7.5 and 10 HP Options
- Flow from 13.7-62 CFM @ 116 PSI
- Less Moving Parts than Recip or Screw



## A Superior

# Compressor Package

Champion is providing a solution to low sound levels for noise sensitive environments, at the same time meeting the strict requirements for contaminant free, oil-free, and clean air applications. The CS-Series ES compressor has a very clean, simple, and serviceable layout while maintaining the robust quality expected from Champion. When dependability and longevity are determining factors in your clean air application, Champion has the right product for you.

#### **CA-SERIES ES**

Enclosed Scroll simplex units at 5, 7.5, and 10 HP are available as base mounted or factory mounted on a 30, 80, or 120 gallon receivers. The CS-Series ES is the perfect choice for a compact, efficient, and low maintenance option in a wide variety of clean air applications.

#### CA-SERIES ES D

Enclosed Scroll Duplex units with a total of 10, 15, and 20 HP are available as base mounted configurations. The CS-Series ES D units provide peace of mind with redundancy of a second compression element, and supports energy efficiency by controlling the number of compressor elements in operation to meet current air demand.











### System Controls

The CS-Series ES integrated control system protects your compressor and ensures reliable operation. Simplex units feature a user friendly relay panel equipped with basic controls to start/stop the unit automatically as the set pressure is reached. The Deluxe HMI controller from Champion is an optional upgrade to the simplex product offering, and is a standard feature on the duplex packages.

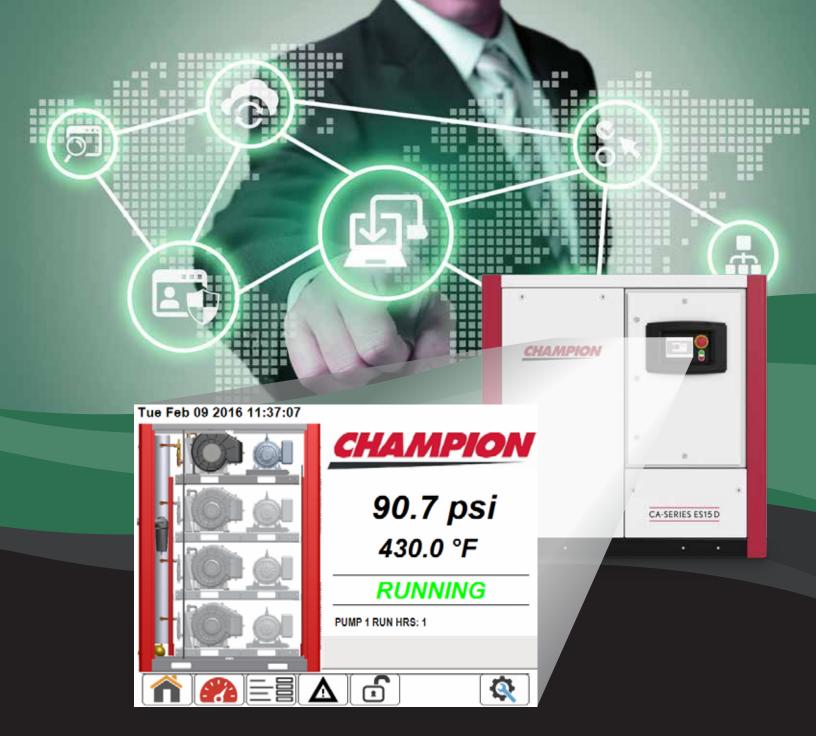
The monitoring features enhance both product reliability and operational efficiency, easy to use navigation, and user friendly graphics that deliver interactive and intuitive monitoring information at your fingertips. With an integral webserver, via Modbus TCP Ethernet connection, the Deluxe HMI controller provides visibility to the CS-Series scroll compressor system from any computer or mobile device with an internet connection.

#### Simplex Basic Relay Panel

- NEMA 1, UL508A Labeled Panel
- Magnetic Contactor with Overload Protection
- 115V Control Circuit Transformer with Fusing
- Door Mounted TOA Switch
- Green Power On Light
- Emergency Stop Button
- Reset Button
- Run Time Meter
- Pressure Gauge



MODEL	TOTAL HP	TOTAL KW	APPROX. SHIP WEIGHT		NOISE LEVEL DB(A)	MAX. WORKING PRESSURE			
						116 PSI	8 BAR	140 PSI	10 BAR
			LBS.	KG		ACFM	M³/HR	ACFM	M³/HR
ES5	5	4	695	315	65	13.7	23.3	12.5	21.2
ES7	7.5	6	775	351	70	21.5	36.5	15.8	26.8
ES10	10	8	810	367	73	31.0	52.7	25.3	43.0
ES10 D	10	7	1240	562	64	27.4	46.6	25.0	42.5
ES15 D	15	11	1320	598	68	43.0	73.1	31.6	53.7
ES20 D	20	15	1355	614	71	62.0	105.3	50.6	86.0



#### Deluve HMI

- 3.5" Full Color Touch Screen
- PLC Controlled
- Lead/Lag Control with Forced Alternation
- System Capacity and Operation Trending
- 26 Language Options
- 24VDC Power Supply with Fusing

- System Run Time Meter
- Alarm/Fault Log
- System Discharge Pressure
- Pump Discharge Temperature
- System Maintenance Timers
- Integral Webserver
- Modbus TCP Interface over <u>Ethernet</u>

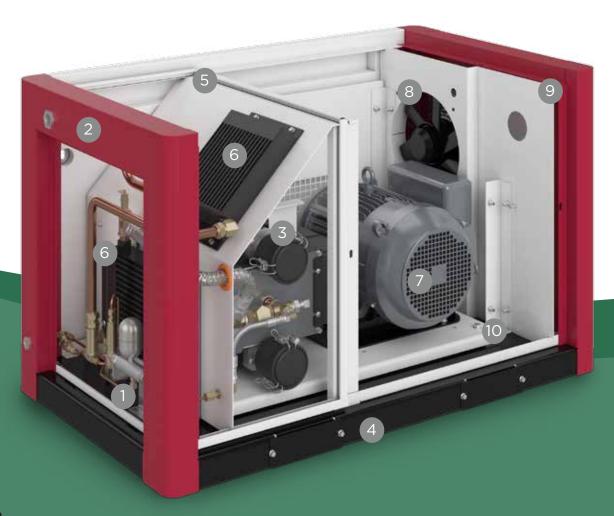




# SIMPLE RELIABLE Savings User Friendly QUIET Oil-Less Premium Technology

#### **CS-Series ES**

- Automatic Condensate Drain
- 2 Rigid Framework
- 3 5 Micron Inlet Filter
- 4 Fork Slots for Easy Handling
- Unique Chambered Design
   Maximized Cooling and
   Serviceability
- 6 Large Industrial Aftercoolers
- Premium Efficient TEFC Motor
- 8 High Volume Cooling Fan
- 9 Sound Attenuating Enclosure
- Internal Vibration Isolators



# QUALITY Efficient Superior Design

Oil-Free Air Contaminant Free

# SERVICEABLE Clean Air



## Champion—the Total Package

Since 1919, Champion has been selling more than just great products. We've been selling solutions to the compressed air industry through a complete offering of different compressor technologies, air dryers, lubricants, piping, downstream accessories, and genuine Champion parts. Our focus on providing total system solutions ensures your focus remains on running your business.

# Refrigerated Air Dryers, Desiccant Air Dryers, and Medical Desiccant Air Dryer Systems

Compressed air systems require clean dry air with environmentally sound disposal of by-products. That is why Champion support does not stop at the compressor. Proper removal of contaminates is essential in preventing costly damage to equipment. Champion provides a broad range of dryers, filters, separators, drains, and other downstream products to ensure total system reliability.











# Sales & Service Distributors Across America

#### An Extensive Network

Your sales, service and technical support needs will be handled quickly and easily by our extensive network of Champion factory-trained, authorized local distributors. Maintaining and adequately servicing your compressor has never been easier.



The leader in every market we serve by continuously improving all business processes with a focus on innovation and velocity



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