

# ***CHAMPION***

## **100% OIL-FREE GUARANTEED**

Big on Quality. Champion on Price!



**OIL FREE**  
ISO CLASS: ZERO PLUS SILICONE FREE

S4 - S15D  
Simplex & Duplex

[www.ChampionAirtech.com](http://www.ChampionAirtech.com)

# COMPLETELY OIL LESS TECHNOLOGY

### At a glance...



**Nominal Pressure**  
8 - 10 bar g



**Motor Power**  
4 - 15kW



**Volume Flow**  
8 or 10 bar



CLASS	CONCENTRATION TOTAL OIL (AEROSOL, LIQUID, VAPOUR) MG/M <sup>3</sup>
0	As specified by the equipment user or supplier and more stringent than class 1
1	≤ 0.01
2	≤ 0.1
3	≤ 1
4	≤ 5

### Cutting edge Oil Less Technology

Champion have been at the forefront of compressor design and manufacture for over 90 years, and are committed to quality, innovation and understanding the customers' individual business and operational requirements. Not only meeting, but exceeding quality and production objectives for industries across the globe, our oil-free compressors are used in food and beverage, pharmaceutical, electronic, healthcare and power generation applications to name just a few.

### Contaminant free.

### Risk free. 100% Oil-free

Compressed air purity is crucial for many industry sectors, such as medical, research and biotechnology. The S-Series of oil-free scroll compressors from Champion does not use any oil anywhere in the compressor and has been certified ISO 8573-1 Class 0 and silicone free, which represents the highest air quality level possible.

In addition to the fulfilment of legal requirements, the oil-free scroll technology reduces the costs of ownership by avoiding oil filter replacements, oil condensate treatment and energy to combat the pressure loss caused by filtration.

### The S-Series from Champion

- 100% oil-free design
- High reliability
- Continuous operation, 100% duty cycle
- Energy efficient
- Low vibration and sound levels
- Compact design
- Low maintenance due to less moving parts





## Maximum flexibility from sophisticated modular design

### Compressor configuration

Depending on the application requirements, the versatile S-Series from Champion is available in various kW sizes. The scroll compressor range starts with Simplex units at 4, 6 and 8 kW and the Duplex units with 7, 11 and 15 kW. The compressor design features a very clean, simple and serviceable layout.

### Industries with applications requiring oil-free air:

- **Transportation** - traditional and hybrid trucks, transit buses, school buses and trains
- **Medical/Healthcare** - instrument air and breathing air
- **Biotechnology** - laboratory equipment
- **Automotive** - painting
- **Food & Beverage**
- **Electronics**
- **Commercial Printing**
- **Drug Manufacture**



## S SERIES



Duplex

### Champion S-Series

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

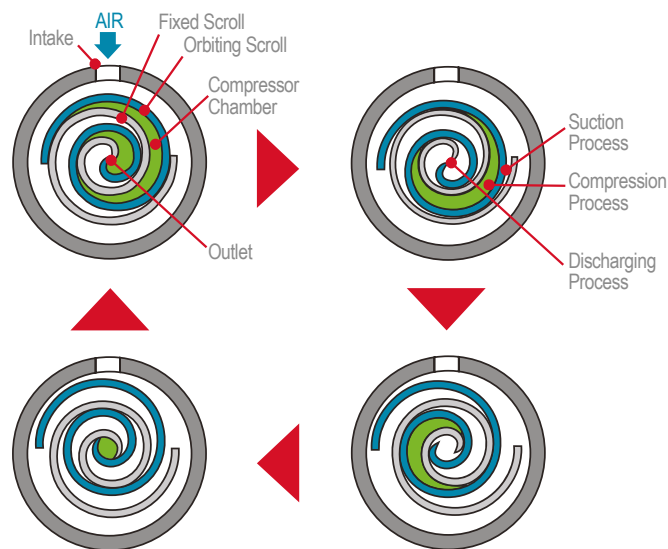




## Innovative design

### 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
- Discharge pressure is accomplished during multiple stages of compression, resulting in a continuous intake suction and discharge



# CONTROLLING AND MONITORING



The S Series from Champion have Deluxe HMI controller as standard. DOL or Soft starter in all variants is available. The Deluxe HMI control from Champion has easy to use navigation and friendly graphics that deliver interactive and intuitive information at your fingertips.

With a built in integral webserver, via ModBus TCP Ethernet connection, these controllers provide visibility to the scroll compressor system from any computer or mobile device with internet connection.

## Deluxe HMI

- 3.5" Full Color Touch Screen
- PLC Controlled
- Lead/Lag Control with Forced Alternation
- System Capacity and Operation Trending
- 26 Language Options
- 24V / DC 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 Ethernet





## S4 – S8 Simplex Series: Oil free, Scroll compressors

**Design:** 100% oil free, scroll compressor

**Pressure Range:** 8 and 10 bar

**Electric motor:** from 4 to 7.5kW

S SERIES	TYPE	S4		S6		S8	
Maximum pressure	bar	8	10	8	10	8	10
Capacity <sup>1)</sup>	m³/h	23.8	19.6	34.5	26.0	53.4	41.2
Drive motor IP 55 / class F / IE3	kW	4		5.5		7.5	
Control voltage	24V	•		•		•	
Acoustic enclosure		•		•		•	
Air cooled		•		•		•	
Deluxe HMI controller		•		•		•	
Dimensions	mm	1168 x 686 x 711		1168 x 686 x 711		1168 x 686 x 711	
Weight	kg	315		315		315	

## S7D – S15D Duplex Series: Oil free, Scroll compressors

**Design:** 100% oil free, scroll compressor

**Pressure Range:** 8 and 10 bar

**Electric motor:** from 7 to 15kW

S SERIES	TYPE	S7D		S11D		S15D	
Maximum pressure	bar	8	10	8	10	8	10
Capacity <sup>1)</sup>	m³/h	47.6	39.1	69.0	52.0	107.0	82.4
Drive motor IP 55 / class F / IE3	kW	7		11		15	
Control voltage	24V	•		•		•	
Acoustic enclosure		•		•		•	
Air cooled		•		•		•	
Deluxe HMI controller		•		•		•	
Dimensions	mm	1420 x 864 x 1404		1420 x 864 x 1404		1420 x 864 x 1404	
Weight	kg	653		653		653	

<sup>1)</sup> Data measured and stated in accordance with ISO 1217 Edition 4, Annex C & E at the following conditions: Air Intake Pressure 1 bar a / 14,5 psi; Air Intake Temperature 20° C / 68° F; Humidity 0 % (dry)

COMPRESSED AIR SOLUTIONS

**CHAMPION**

## YOUR COMPRESSED AIR PARTNER



Champion's piston compressor range is designed to cover all the possible professional uses of compressed air. Our piston compressors come in various forms and sizes, providing a truly complete range of choices.



Champion stationary rotary screw compressors, both fixed and variable speed drive, are the answer to the needs of small and medium-sized companies.



A modern production system and process demands increased levels of air quality. Our complete Air Treatment Range ensures product quality and efficient operation.



Champion also design and manufacture an enviable range of Rotary Scroll, Rotary Vane and Portable Rotary Screw compressors. All designed to provide efficiency and reliability in the most demanding applications and conditions, these compressors set new standards.

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For additional information please contact  
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Specifications subject to change without notice.