

## BIG ON QUALITY. CHAMPION ON PRICE!

www.ChampionAirtech.com

PARTN.

MAMPIO

June 2019

OIL FREE

01.11

### KSA / KSV 90 SERIES

## KSA / KSV SCREW COMPRESSORS

#### At a glance...

90kW



5 - 10bar g Motor Power

**Nominal Pressure** 



**Volume Flow** 4.3 - 15.6 m³/min



## The New Generation

#### Industries across the globe rely on Champion rotary screw compressors for the supply of high quality compressed air

The KSA / KSV 90 Series air compressor range incorporates the best of Champion technology, design and quality, to deliver reliable, economical and efficient performance in a completely new package.

### High efficiency air end

KSA / KSV Series screw compression elements are manufactured inhouse using the latest CNC rotor grinding machinery, coupled with on-line laser technology, in order to maintain precise manufacturing tolerances.

Champion's commitment to quality ensures KSA / KSV Series compressors offer the highest levels of reliability and performance with low operating costs throughout the compressor's life.

### Maximum durability

We maximise service life and durability by eliminating elastomer and thermoplastic pipe and tube in system pressure lines, replacing them with corrosion resistant stainless steel tubing and passive zinc coated carbon steel piping. For ease of maintenance we complete the connection with viton sealed, grooved couplings and self-sealing high pressure compression fittings.

### **Optimised drive concept**

With direct or gear drive coupling, the belt free drive KSA / KSV 90 Series compressor range not only reduces transmission losses, it improves efficiency and reduces noise. Most importantly, it delivers greater reliability and reduced maintenance costs.

AMPION

KSV90

### **Energy efficient motor**

High efficiency TEFC IE3 electric motors are fitted as standard to the enitre KSA / KSV 90 Series screw compressor range, reducing not only your power consumption but also your CO<sub>2</sub> emissions.





# KSV Seed Technology

### Variable speed technology allows substantial energy savings of at least 25% of the energy cost

Variable speed compressors can efficiently and reliably handle the varying air demand found in most plant air systems. These compressors speed up and slow down to match air supply to air demand as it fluctuates. The right variable speed compressor in the right application delivers significant energy savings and a stable, consistent air supply.

### Heavy duty inlet filter

Dirt and dust that enter the compressor can adversely impact lubricant and machine life. An inlet filter with an efficiency rating of 99% is standard equipment on the KSA / KSV Series compressor range.

### **C-MASTER controller**

The control system ensures reliable operation and protects your investment by continuously monitoring the operational parameters, essential to reducing your running costs.



The controller also has the capability to have programmable inputs and outputs, control additional equipment, as well as providing the following features with clear readable instructions.

- Smart energy cost calculation
- Clear text indicator display
- Multiple languages
- Microprocessor controller
- Pressure, temperature & runtime display
- High temperature, high
  pressure & reverse-phase
  protection function
- Filter and oil change reminder
- Low 24V / DC control voltage.
- Intelligent protection in extreme environments

- Safe operation protection
- Multiple pressure/temperature input points
- Integrated sequence control (up to 8 compressors)
- RS-232 series communications for local monitoring
- Optional RS-485 ethernet communications for remote monitoring via Airbus485<sup>™</sup> or Modbus RTU

### **Designed for serviceability**

Maintenance personnel welcome the KSA / KSV series compressor range. Service access is quick and easy with all doors able to be removed in seconds.

We've also made sure serviceable components including filters are easily accessible and no piping needs to be disconnected to service the separator.



### KSA 90 Series: Screw Compressors, Fixed Speed

Design: Oil flooded, single stage rotary screw compressor, direct drive, star / delta starting

Pressure Range: 7.5 - 10 bar Electric motor: 90kW - IE3



KSA SERIES	TYPE	KS/	SA 90	
CODE		CMP1165285	CMP1165286	
Maximum pressure	bar	7.5	10	
Capacity at working pressure	m³/min	15.3	13.8	
Operating Voltage, 50 Hz	400V	•	•	
C-Master Controller		•	•	
Noise Level	dB(A)	75	75	
Weight	kg	1500		
Dimensions (LxWxH)	mm	2100 x 13	300 x 1580	
Compressered Air Delivery Connection		EN 10226 G2"		
OPTIONAL				
Altern. Voltage 380V/60Hz				
Extended 5 years Warranty	CC1180793			
Anti- corrosion %				
Food Grade Oil				
Kit for external heat recovery (heat recovery unit not included)				
iConn retrofit kit	ZS1185504			
Oil Heater				
SERVICE & PARTS				
Standard Service Kit KSA90	CC1154033			
Advanced Service Kit KSA90	CC1154034			
ChampLUBE Screw Lubricant 20Lt (2x20Lt needed)	CC1180020			

\* Service intervals are defined by calendar months or operating hours, whichever occurs first. In dirty ambient conditions service interval must be halved.

### KSV 90 Series: Variable Speed Screw Compressors

Design:

Oil flooded, Single stage rotary screw compressor, direct drive



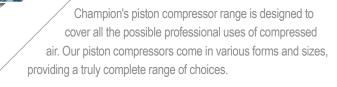
Pressure Range: 5 - 10 bar Electric motor: 90kW - IE3

KSV SERIES	TYPE	KSV 90	
CODE		CMP1164880	
Pressure range	bar	5 - 10	
Flow rate min - max	m³/min	4.3 - 15.6	
Operating Voltage, 50 Hz	400V	•	
Control voltage	24V	•	
C-Master Controller		•	
Noise level at 100% load	dB(A)	77	
Weight	kg	1640	
Dimensions (LxWxH)	mm	2104 x 1300 x 1580	
Compressered Air Delivery Connection		EN 10226 G2 "	
OPTIONAL			
Altern. Voltage 380V/60Hz			
Extended 5 years Warranty	CC1180793		
Anti- corrosion %			
Food Grade Oil			
Kit for external heat recovery (heat recovery unit not included)			
iConn retrofit kit	ZS1185504		
Oil Heater			
SERVICE & PARTS			
Standard Service Kit KSV90	CC1154035		
Advanced Service Kit KSV90	CC1154036		
ChampLUBE Screw Lubricant 20Lt (2x20Lt needed)	CC1180020		

\* Service intervals are defined by calendar months or operating hours, whichever occurs first. In dirty ambient conditions service interval must be halved.

## COMPRESSED AIR SOLUTIONS

## YOUR COMPRESSED AIR PARTNER





**CHAMPION** 

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.

#### www.championairtech.com

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

Copyright 2019 Champion Air Tech.