CHAMPION
by Gardner Denver

Screw Compressors 30 - 45 kW

KSA Fixed Speed - KSV Variable Speed Series

Smart and affordable

High Efficiency
Screw Compressors

GD 4 Screw Air End

The new GD 4 air end benefits from our policy of continuous improvement in engineering function expertise of over 50 years. We pay utmost attention to the manufacturing of our screw air ends, and we test and monitor every single item that we make. Representing the core of all our GD 4 air ends, rotors are accurately and thoroughly checked and measured by a computerised control system.

High efficiency cooling system up to 45°C ambient temperature

Correct sizing of the combined radiator and CENTRIFUGAL ventilation system ensures optimum cooling of the air/oil blend and outputs compressed air at a temperature that is only 8 / 10 °C higher than ambient temperature.

Noise Levels

Appropriate canalisation of the air flow provides minimum sound for the benefit of the environment and machine operators. It also ensures optimised cooling.

Valid for KSA 37-45 and KSV 30-45

Air Basic 2 control unit

This electronic control unit is easy to use and allows the compressor to be fully managed. Controlled elements include, the star-delta motor, the rotation direction, the ON OFF operation with automatic discharge of pressure when the machine is stopped, all remote controls, all protection and warning alarms, in addition to a complete series of messages connected with ordinary maintenance.

Easy to install

Pallet structure for safe, easy handling with no anchoring needed
Electrical connections are via a terminal block inside the electric panel that is extremely easy to reach. An opening for the cooling circuit is provided on the cover of the housing to facilitate the natural flow of hot air and reduce the overall size of the cooling lines.

Low maintenance costs

The panel structure provides easy access from all sides. All the components which need periodic maintenance - air cartridge, oil cartridge, air/oil separator, belts, oil fill and drain - can be reached from a single side.

Valid for KSA 37-45 and KSV 30-45

Belt transmission with automatic tensioning system

Equipped with POLY-V belt with automatic tensioning system, high flexibility, minimum diameter, suitable for high speed and providing 20,000 working hours - noiseless and maintenance-free.

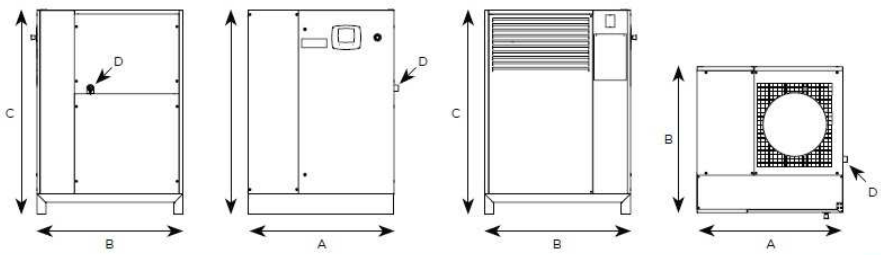
Suction valve

Improved fluid-mechanical efficiency is ensured by a new vertical design suction valve. Intake air flows through a straight-line path, which guarantees lower load loss. ON/OFF operation and unloading is controlled via a solenoid valve. This valve concept has been specially designed to keep the number of components down to a minimum, so as to ensure long-lasting durability and low maintenance requirements.

Valid for KSA models only

Electric control board

Star delta starting with controlled working pressure through a pressure transducer and market leading electrical components



Technical Data

Model	Ref	FAD[1]	Nominal pressure	IP55 Class F	Noise Level	Weight	Dimensions mm			Out BSP
		m³/min	Bar	kW	dB(A)	kg	A	B	C	D
KSA 30	CMP1110088	5.09	7.5	30	70	640	1150	1150	1610	1"
KSA 30	CMP1110089	4.48	10							
KSA 30	CMP1110090	3.76	13							
KSA 37	CMP1110091	6.35	7.5	37	68	784	1150	1150	1610	1 - ¼"
KSA 37	CMP1110092	5.65	10							
KSA 37	CMP1110093	4.71	13							
KSA 45	CMP1110094	7.01	7.5	45	72	800	1150	1150	1610	1 - ¼"
KSA 45	CMP1110095	6.10	10							
KSA 45	CMP1110096	5.20	13							

* Air flow rate measured according to standards ISO 1217, ed.4, ANNEX E – 2009 and test code / Pneurop/Cagi PN 2 CPTC2 at the following working pressure: 7 bar versions at 7.5/8/8.5 bar; 9 bar versions at 10 bar; 12 bar versions at 13 bar.

** Sound pressure level measured according to standards ISO 2151 and ISO 3744 at 1 m distance in a free field.

WARNING: in particular indoor installation environments, the noise may increase by as much as 6_10 dB(A) due to sound reflections against the walls.

KSV flexiAIR Variable Speed Technology — The correct response to changing air demand

Electrical components

Completing the equipment of the KSV range is a set of market leading electrical components including IP 55 electric motors (class F).

AirSmart™ controller

Complete, simple and intuitive. Combined with our inverter, provides excellent energy savings.

Inverter

Generously sized and reliable - the result of our extensive experience.

Valid for KSV models only

The AirSmart™ controller orchestrating your compressed air system

Simplicity

The AirSmart™ Controller was designed to make the operators' interface with the variable speed drive transparent. You don't need to be an expert on variable speed drives to operate our compressor. The controller takes care of the details and automatically adjusts the compressor performance to meet your changing air system demands - saving you energy. Changing the discharge pressure is as easy as pressing a button.

Communication & Sequencing

The optional communication module allows the KSV Series units to talk to each other and other compressors to optimise system efficiency. This isn't just an hour balancing, on/off sequencing scheme. Our controller allows the system to truly optimise efficiency because it knows the capabilities of other machines and orchestrates their operation.

Advanced Display

The controller has a four line display with menus and tactile buttons for easy navigation. Two lines display operating information such as pressure, temperature, operating hours, etc. while the other two lines display advisory messages, shutdown messages and service contact information.

Valid for KSV models only

Technical Data

Model	Ref	FAD[1)]		Nominal pressure	IP55 Class F	Noise Level	Weight	Dimensions mm			Out BSP
		Max.	Min.	Bar	kW	dB(A)	kg	A	B	C	D
KSV 30	CMP1110088V	5.09	1.14	7.5	30	63	760	1150	1150	1610	1"
KSV 30	CMP1110089V	4.48	0.90	10							
KSV 30	CMP1110090V	3.76	0.54	13							
KSV 37	CMP1110091V	5.91	1.39	7.5	37	64	820	1150	1150	1610	1 - ¼"
KSV 37	CMP1110092V	5.01	1.04	10							
KSV 37	CMP1110093V	4.26	0.74	13							
KSV 45	CMP1110094V	6.89	1.76	7.5	45	65	836	1150	1150	1610	1 - ¼"
KSV 45	CMP1110095V	6.29	1.44	10							
KSV 45	CMP1110096V	5.24	1.05	13							

* Air flow rate measured according to standards ISO 1217, ed.4, ANNEX E – 2009 and test code / Pneurop/Cagi PN 2 CPTC2 at the following working pressure: 7 bar versions at 7.5/8/8.5 bar; 9 bar versions at 10 bar; 12 bar versions at 13 bar.

** Sound pressure level measured according to standards ISO 2151 and ISO 3744 at 1 m distance in a free field.

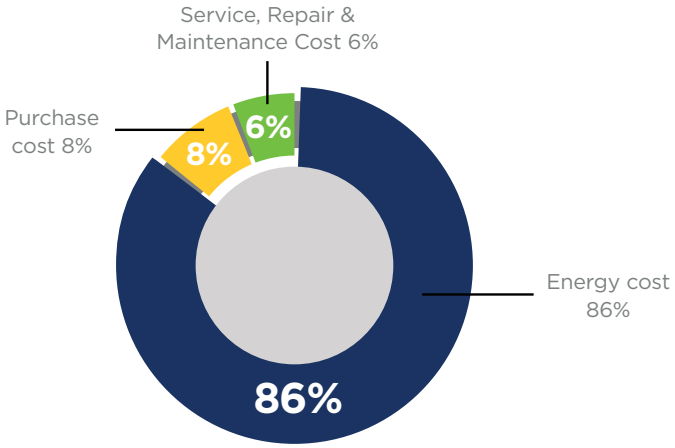
WARNING: in particular indoor installation environments, the noise may increase by as much as 6_10 dB(A) due to sound reflections against the walls.

The result is an extremely quiet and environment friendly compressor with reduced electrical input and easily recyclable materials.

= Energy savings and lower CO_2 emissions into the environment

The right solution saves you money

Compressed air is not free and has a big impact on plant productivity. The wrong air system is costly - in the form of excessive energy, repair and maintenance costs, downtime, poor compressed air quality, unacceptable noise levels and more. System design and compressor choice are important decisions with long lasting implications.



Variable speed compressor: One smart solution

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.

Compressor energy cost example

Nominal kW	Operating Cost per Year (5000 hours) at Cost per KWh (€)					
	0.06	0.08	0.10	0.12	0.14	0.16
30	€ 9.000	€ 12.000	€ 15.000	€ 18.000	€ 21.000	€ 24.000
37	€ 11.100	€ 14.800	€ 18.500	€ 22.200	€ 25.900	€ 29.600
45	€ 13.500	€ 18.000	€ 22.500	€ 27.000	€ 31.500	€ 36.000

Note: Hours of operation based on two 8hrs-shifts, 6 days per week. Calculations based on nominal kW.

KSV flexiAIR Variable Speed Technology

Allows substantial energy savings of at least 25% of the energy cost

Maintenance is as easy as ever

Fast and easy service

These compressors are designed to ensure easy access to maintenance points. All panels on the structure can be easily removed to allow full access to all service points. Also, the limited number of moving parts reduces service costs.

Service network

Our large network of approved Champion dealers is always at your service to ensure the smooth running of your compressor and ensure the swift supply of replacement parts for different system needs.

Aftersales service

Champion offers a full range of aftersales services to fulfil all customer requirements. Using original amd genuine parts will ensure customers save time and money over the life of the compressor.

CHAMPION
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Smart and affordable

Champions piston compressor range is designed to cover all the possible professional uses of compressed air. Our piston compressors in various forms and sizes, provide a truly complete range of choice.

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

The complete range is designed for continuous operation under the most severe conditions of use, with particular attention to modularity, energy consumption, low operating and maintenance costs, and ease of installation and use.

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

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www.championcompressors.eu

For additional information please contact your local representative.

Specifications subject to change without notice.

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