

Engineering the Future

WORLD CLASS, ENERGY-SAVING

EFFICIENCY & RELIABILITY

k|r|s|p=

2-STAGE ROTARY SCREW AIR COMPRESSORS

- Compression ratio between 2 stages
- Reduces internal losses
- High efficiency and performance
- Substantially lower energy costs
- Extended bearing life
- Smaller, more efficient, drive motor
- Optimised oil injection
- Enhanced air end geometry

75 - 355kW



Even more efficient with VARIABLE SPEED DRIVE





Kaishan Australia... the latest in global compressed air products plus a wealth of experience working with Australian industry

The combination of servicing the needs of Australian compressed air system operators for nearly 40 years as Southern Cross Compressors with the global resources and technology of the Kaishan Group offers our customers the very latest in energy saving efficiency.

Kaishan's global strategy of combining highly skilled engineering with efficient manufacturing has provided the Australian market with performance proven, reliable machinery at significant cost savings.

The manufacturing processes are 85% vertically integrated to ensure full control of the supply chain delivering high quality components at lower cost.



Kaishan's fundemental belief in environmental sustainability is integral to the design and manufacture of products that maximise energy efficiency and help to preserve precious resources. Unused waste materials are recycled to maximise the use of raw materials.

Kaishan's committment to environmental responsibility ensures continued development of advanced technologies and manufacturing processes that provide industry with machinery of exceptional value, now and into the future.



We fully support our products 24/7 with a fleet of highly trained and experienced mobile technicians.

All Kaishan Australia products are fully backed by nationwide customer focused service, support and spare parts.

RAPID REPAIRS AND SPARES

We stock a full range of spare parts and system components to ensure a rapid return to full production should a problem occur.

CUSTOM SERVICE PROGRAMS

We also offer flexible, customised service programs that maintain your compressed air system in peak condition day in, day out.



KAISHAN COMPRESSORS AUSTRALIA PTY LTD

krsp2

INDUSTRIAL 2-STAGE ROTARY SCREW AIR COMPRESSORS

The Kaishan range of 2-STAGE rotary screw air compressors combine outstanding performance with advanced energy saving technology.

Kaishan krsp 2-Stage Industrial Rotary Screw Air Compressors are the operating power behind major industries around the World with a trusted reputation for quality engineering, performance, efficiency and energy saving technologies.

As a global leader in the design and manufacture of rotary screw compressors, the company invests heavily in research and development to ensure the Kaishan brand is always at the forefront of compressed air innovation and cutting edge technology.

Kaishan Australia stocks the most advanced range of industrial rotary screw compressors specifically suited to local conditions.



With capacities from 75 to 355kW, Kaishan's krsp industrial air compressors are designed and engineered to provide maximum air output, whilst saving on input energy bills.

Our total confidence in the reliability and performance of these robust machines is reflected in our offering of a unique LIFETIME WARRANTY* on the airends in our complete range of krsp rotary screw machines.

krsp compressors provide high efficiency with low capital cost and low operating cost.

Low cost of ownership throughout life cycle

Compressed air is often referred to as the 'fourth utility' and is critical to most manufacturing operations. Facility performance depends upon compressor reliability and efficiency.

Power consumption is a significant cost throughout the life of a compressor, therefore it is important to consider the life cycle cost of a compressed air system when evaluating productivity improvements. KRSP series advanced energy saving features reduce operational costs significantly.



KRSP2 Series patented two stage airend



SINGLE PASS OIL & AFTER COOLERS

Long Life / Easily Accessible

- Minimise thermal stress
- · Cooler running temperatures / correct running temperature @ 50°C ambient capable
- · Low oil carryover.
- · Low cooling air velocity reduces dust build up Increased lubricant life

'ULTRAWEB' AIR INTAKE FILTERS

Increased Filtration Efficiency

- · Full airflow, low restriction, nanofiber technology
- Deep bed media ensures excellent dust capture
- · Increased free air delivery for further savings in energy and running costs

3 STAGE TANGENTIAL OIL SEPARATION

Lower Pressure Drop / Lower Absorbed Power

- Excellent oil mechanical pre-separation/reduced direct oil impingement onto separator element
- · Lower dust contact resulting in lower pressure drop/longer element life/lower energy consumption
- Residual oil carryover limited to 3 ppm
- Increased lubricant life

TRIPLE DISCHARGE BEARINGS

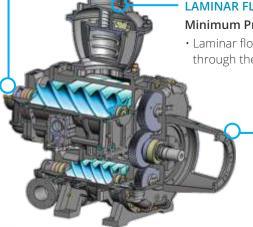
Longer Bearing Life / Quieter Operation

- The "SKY" series 2-Stage airends use three discharge bearings to absorb radial and axial loads.
- Four bearings per rotor
- · Longer bearing life under all operating conditions
- Increased load carrying capacity
- Lifetime airend warranty (conditions apply)

LAMINAR FLOW INLET VALVE

Minimum Pressure Drop / Increased Output

• Laminar flow inlet valve results in lower pressure drop through the intake, increasing output and saving energy



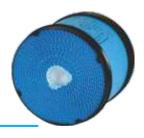
'SKY' SERIES 2-STAGE AIREND

Maximum Output with Less Energy Usage

- Asymmetric 5 / 6 rotor profile with 100% SKF bearings
- KAPP Ground rotor technology for tighter clearances and world class efficiency and performance
- · Precision machined bell housing to maintain rigid alignment



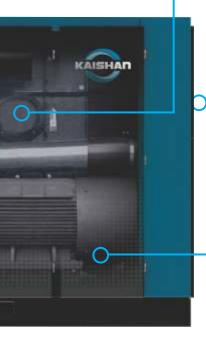
WORLD CLASS, ENERGY-SAVING EFFICIENCY & RELIABILITY



CENTRIFUGAL COOLING FANS

Increased Cooling Efficiency

- Higher static pressure allows for energy saving heat recovery
- Even air flow across the cooler face.
- VSD cooling fan (110kW and above) provides energy savings as cooling airflow is reduced during periods of light load or low temperatures.
- Cooling air bypasses main compressor compartment resulting in minimal internal dust build up





DIGITAL CONTROL PANEL

Monitors & Controls Key Compressor Functions

- Protects compressor in the event of a fault
- · Provides service required alert
- Sequencing of up to 16 compressors
- External monitoring via RS 485 interface
- WYE Delta starter is standard on all non VSD models
- MODBUS interface

WEG HIGH EFFICIENCY ELECTRIC MOTORS

Long Operating Life / Lower Power Use

- Kaishan uses high efficiency motors, which comply with MEPS2 requirements
- $\boldsymbol{\cdot}$ Motors are TEFC to protect from dust and moisture
- Class F insulation

316 STAINLESS STEEL CONTROL TUBING

Long Tubing Life / Reduced Downtime

- Increased reliability due to corrosion free material
- Material such as nylon, copper or mild steel will fail in time causing downtime

SAFETY AND THE ENVIRONMENT

Reduced OH&S Risk and Injury

The entire Kaishan range of compressors includes full safety features such as guarded rotating components and shrouded electrical components to reduce the risk of injury.







KRSP2 2-STAGE ROTARY SCREW COMPRESSORS BRING OUTSTANDING PERFORMANCE, ENERGY SAVING EFFICIENCY AND RELIABILITY TO INDUSTRY

What is 2-Stage Compressed Air Technology?

Unlike a conventional single stage compressor, a 2-Stage air compressor divides the overall compression ratio between two distinct stages. This significantly reduces internal leakage losses resulting in substantial efficiency gains as well as extended bearing life due to reduced applied loads.

Kaishan 2-Stage air compressors require a smaller drive motor to produce the equivalent volume flow rate to that of a single stage compressor. These remarkable efficiency savings are achieved through reduced leakage losses across each stage, optimised cool oil injection and enhanced airend geometry.



VSD cooling fan provides energy savings by reducing airflow during periods of light load or low temperatures.



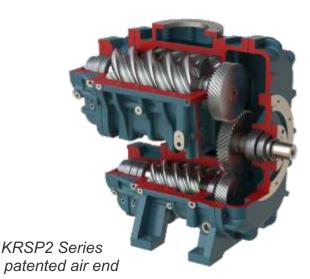
Lubricant filter assembly features a spin-on,

WORLD CLASS ENGINEERING

INTERNATIONALLY PATENTED 'SKY' AIREND DEVELOPED EXCLUSIVELY BY KAISHAN ENGINEERS

Continual trial and development has created an advanced airend that increases compressor efficiency by more than 20% over earlier models

- 2-Stage airend design for high flow rate and low power consumption
- efficiency by more than 20% over earlier models. Direct coupled motor and airend with machined bell housing to maintain alignment for long coupling life
 - Low part load energy consumption
 - Steady system pressure lowers system stress and overall air demand
 - Slow speed rotors maximise performance and increase reliability
 - Decreased energy consumption delivers environmentally friendly savings
 - 5/6 rotor profile optimal performance while reducing energy consumption
 - 2 in 1 intake valve design (with check valve) for increased efficiency
 - Direct flow inlet valve provides reliable capacity control
 - Triple discharge bearings on each rotor for durability and reliability
 - Very tight tolerances provide maximum efficiency



KAISHAN COMPRESSORS AUSTRALIA PTY LTD



KRSP2 SERIES CONTROL SYSTEM PROVIDES TOTAL MANAGEMENT OF ALL OPERATING PARAMETERS

KRSP controller capabilities include the following features:

- Operating parameters display
- Programmed maintenance schedules
- Warning stop alarms
- Recordings of compressor history

The control panel contains a special programmed microprocessor that can safely and efficiently control all the functions of the compressor. The touch screen display monitors line pressure, oil temperature and working conditions (running, idling and stop) Abnormal conditions will trigger a flashing LED and a flashing message indicating the cause of the alarm. Microprocessor functions are password protected, accessible only to the authorised personnel.



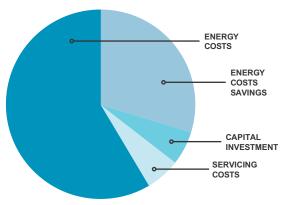
KRSP Series
System Management Control Panel

KRSP SERIES VARIABLE SPEED DRIVE OPTION PROVIDES MAJOR ENERGY SAVINGS

KRSP VSD combines a robust power platform with a state-of-the-artontrol scheme

The drive provides a soft start and the ability to operate efficiently through the compressor's capacity range by matching flow to demand while maintaining a high level of pressure control. By eliminating wasted energy, cost savings as high as 50% or more are possible. With this level of savings, the additional capital cost of the variable speed drive can be recovered in less than one years operation.





Schneider Variable Speed Drive

The variable speed drive used in KRSP compressors are renowned for:

- Efficient and reliable service
- Worldwide support



Engineering the Future

MODEL KTA	CAPACITY m³/min	MOTOR SPEED rpm	POWER kW	FULL LOAD bar	CONNECTION	DIMENSIONS (mm) L X W X H	WEIGHT* KG
KRSP2-75-7	15.48	3000	75	7	DN 65	2660 x 1580 x 1890	3300
KRSP2-75-8	14.36	3000	75	8	DN 65	2660 x 1580 x 1890	3300
KRSP2-90-7	19.75	1500	90	7	DN 65	2660 x 1580 x 1890	3600
KRSP2-90-8	18.87	1500	90	8	DN 65	2660 x 1580 x 1890	3600
KRSP2-90-10	16.15	1500	90	10	DN 65	2660 x 1580 x 1890	3600
KRSP2-90-13	15.07	3000	90	13	DN 65	2660 x 1580 x 1890	3280
KRSP2-110-7	23.54	1500	110	7	DN 80	3220 x 1860 x 2070	4030
KRSP2-110-8	22.54	1500	110	8	DN 80	3220 x 1860 x 2070	4030
KRSP2-110-10	19.70	1500	110	10	DN 80	3220 x 1860 x 2070	4030
KRSP2-110-13	17.54	1500	110	13	DN 80	3220 x 1860 x 2070	4030
KRSP2-132-7	27.98	1500	132	7	DN 80	3220 x 1860 x 2070	4720
KRSP2-132-8	26.36	1500	132	8	DN 80	3220 x 1860 x 2070	4100
KRSP2-132-10	23.46	1500	132	10	DN 80	3220 x 1860 x 2070	4100
KRSP2-132-13	20.99	1500	132	13	DN 80	3220 x 1860 x 2070	4100
KRSP2-160-7	35.87	1500	160	7	DN 100	3560 x 1910 x 2320	4900
KRSP2-160-8	33.62	1500	160	8	DN 100	3560 x 1910 x 2320	4900
KRSP2-160-10	27.89	1500	160	10	DN 100	3560 x 1910 x 2320	4900
KRSP2-160-13	24.83	1500	160	13	DN 100	3560 x 1910 x 2320	4250
KRSP2-200-7	44.37	1500	200	7	DN 100	3560 x 1910 x 2320	5050
KRSP2-200-8	42.26	1500	200	8	DN 100	3560 x 1910 x 2320	5000
KRSP2-200-10	35.93	1500	200	10	DN 100	3560 x 1910 x 2320	5000
KRSP2-200-13	33.56	1500	200	13	DN 100	3560 x 1910 x 2320	5000
KRSP2-250-7	54.88	1500	250	7	DN 125	3745 x 2110 x 2380	6930
KRSP2-250-8	51.45	1500	250	8	DN 125	3745 x 2110 x 2380	6550
KRSP2-250-10	44.10	1500	250	10	DN 125	3745 x 2110 x 2380	6550
KRSP2-250-13	40.08	1500	250	13	DN 125	3745 x 2110 x 2380	5720
KRSP2-280-7	63.50	1500	280	7	DN 125	4110 x 2310 x 2350	7260
KRSP2-280-8	61.15	1500	280	8	DN 125	4110 x 2310 x 2350	7260
KRSP2-280-10	54.59	1500	280	10	DN 125	4110 x 2310 x 2350	7260
KRSP2-280-13	44.20	1500	280	13	DN 125	4110 x 2310 x 2350	6380
KRSP2-315-7	65.37	1500	315	7	DN 125	4110 x 2370 x 2525	8460
KRSP2-315-8	63.50	1500	315	8	DN 125	4110 x 2310 x 2350	7360
KRSP2-315-10	57.92	1500	315	10	DN 125	4110 x 2310 x 2350	7360
KRSP2-315-13	49.20	1500	315	13	DN 125	4110 x 2310 x 2350	7360
KRSP2-355-7	75.66	1500	355	7	DN 150	4350 x 2200 x 2580	10130
KRSP2-355-8	71.54	1500	355	8	DN 150	4350 x 2200 x 2580	10130
KRSP2-355-10	63.21	1500	355	10	DN 150	4350 x 2200 x 2580	10130
KRSP2-355-13	54.59	1500	355	13	DN 150	4350 x 2200 x 2580	10130

Models to KRSP2 450-13 available.

3,5 and 6 bar models available

*VSD models will be heavier than fixed speed model weight shown

FOR FURTHER INFORMATION CONTACT KAISHAN AUSTRALIA

Unit performance measured in accordance with: ISO 1217, Ed3, Annex C-1996

Reference conditions: Absolute inlet pressure = 1bar; Ambient temperature = 20° C; Cooling temperature = 20° C; Sound pressure level measured in accordance with test code: ISO2151-2004 (E). NOTE: Technical specifications of compressors are subject to change without notice.





COMPRESSED AIR SYSTEM ACCESSORIES

Kaishan Australia offer a quality range of ancillary components to enhance the performance of every compressed air system.





AUTO DRAINS
Automatically drains unwanted condensate from your system.



AIR RECEIVERS

To increase efficiency and reduce maintenance in every system.

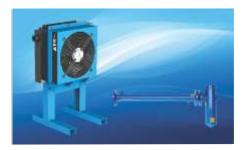


REFRIGERATED AIR DYERS
For applications where dry air is needed, even in the hottest conditions.



Separates lubricants from condensate for easy, responsible disposal.

OIL WATER SEPARATORS



AFTER COOLERS
Vital for protection from moisture contamination and damage.



CONDENSATE SEPARATORS

Centrifugal separators remove condensed moisture from the air.



Achieves very low pressure dewpoint for moisture sensitive applications.



Remove traces of contaminants in the compressed air stream



QUALITY SPARE PARTSGenuine parts and lubricants to ensure the integrity of your system.



THE RIGHT AIR COMPRESSOR TO MATCH DEMANDS FROM HEAVY



krsp Rotary Screw Air Compressors

The krsp range of advanced, energy efficient, rotary screw compressors are designed for maximum energy efficiency and reliability in the toughest operating conditions.

- Up to 20% higher energy savings (even more with Variable Speed Drive)
- Extended bearing life
- Direct drive, no gears
- Low pressure 3 and 5 bar
- Multiple machine sequencing
- IP55 MEPS compliant WEG drive motor



pmv Rotary Screw Air Compressors

The systemic optimisation of the compressor airend, advanced permanent magnet drive motor and variable speed drive technology provides a greater air output for far less energy input.

- Single or 2-Stage
- Energy cost savings up to 50%*
- Controlled air output to exactly meet demand
- No start up spikes and cost penalties
- Reduced part load energy consumption
- Significantly lower noise levels
 No gears, belts or couplings

*When compared to fixed speed, single stage equivalent



VSD

Optional Variable Speed Drive: Schneider Altivar ATV900



VSD is optional with our entire krsp range of single and 2-stage air compressors.
With the elimination of wasted energy, additional cost savings as high as 50% are possible.

In many instances such savings mean the additional capital cost of the variable speed drive option can be recovered in less than one years operation.

INDUSTRIAL TO WORKSHOP AND SPECIALISED APPLICATIONS





OX Series Compact Lubricated Scroll Air Compressors

Advanced, lubricated 'Scroll' technology delivers energy efficiency with minimal moving parts in an ultra quiet, compact package.

TANK MOUNTED, INTEGRATED OR FREE STANDING

- Lubricated Scroll technology
- Maximum energy efficiency
- Super quiet, compact package
- 100% continuous duty rated
- Integrated aftercooler reduces condensate
- Low maintenance reliability
- Ip55 MEPS compliant WEG drive motor



krisit Compact Rotary Screw Air Compressors

The krst Series receiver mounted, rotary screw compressors provide the ideal choice for industries requiring high performance in a compact compressed air package.

- Large, slow running air end for highest efficiency
- Integrated after cooler
- Large capacity 500 litre receiver
- Integrated dryer and air filter
- Engineered from the highest quality components
- Minimal service and maintenance
- Ip55 MEPS compliant WEG drive motor

Custom Designed Air Compressors





Our local and international design and engineering teams can work with you to build a customised air compressor to work in a variety of applications and environments.

Examples of this are stainless steel clad units for operations in an extreme marine environment and skid mounted, heavy framed units for mining applications.





Engineering the Future

WORLD CLASS
COMPRESSED AIR
PRODUCTS
& SUPPORT

Kaishan Australia is the Australian division of the Kaishan Group of Companies, one of the largest and most advanced designers and manufacturers of compressed air and gas products in the world.

Kaishan is committed to the continuous development of new compressor technologies and currently produces more than 80,000 rotary and 25,000 reciprocating air compressors annually for applications and installations in the Australian, European, SE Asian, USA, India and Latin American markets with growth globally through partnerships and acquisitions.

Mr Kevin Cao, President of the Kaishan Group of Companies stated that the organisation currently has plant and equipment valued at over USD\$2.1b based in multiple plants across the world employing more than 4,500 personnel including over 2,000 trained technicians. Kaishan Australia supplies its extensive compressed air product range offering truly heavy duty, high quality and premium efficiency machinery for an enormously broad range of applications.

After more than 38 years of success in supporting the Australian compressed air market, Kaishan Australia utilises the world's best technologies with the ability to customise solutions that provide optimal benefits to its Australian customers.



KAISHAN AUSTRALIA PTY LTD

24 HOUR AUSTRALIA WIDE SUPPORT National Sales and Service: 1300 098 901

www.kaishan.com.au

