

SPECIFICATIONS KHE 15 to KHE 400 Rotary Screw Air Compressors

KHE MODEL	PRESSURE		POWER		DISCHARGE FLOW		OUTLET	WEIGHT kg	NOISE dB(A)	DIMENSIONS L x W x H mm
	bar	psi	kW	hp	m ³ /min	cfm				
15	8 10 13	116 145 188	15	20	2.5 2.2	88 78	1" BSP	600	67	1450 x 890 x 1073
18.5	8 10 13	116 145 188	18.5	25	3.10 2.79 2.25	109 99 79	1" BSP	700	67	1525 x 930 x 1143
22	8 10 13	116 145 188	22	30	3.58 3.03 2.77	126 107 98	1" BSP	800	67	1525 x 930 x 1143
30	8 10 13	116 145 188	30	40	4.90 4.05 3.52	173 143 124	1 1/4" BSP	1150	68	1525 x 930 x 1143
37	8 10 13	116 145 188	37	50	6.30 5.64 4.01	222 199 142	1 1/4" BSP	1200	69	1725 x 1010 x 1288
45	8 10 13	116 145 188	45	60	7.75 6.41 5.43	274 226 192	1 1/2" BSP	1600	70	2220 x 1410 x 1720
55	8 10 13	116 145 188	55	75	10.00 8.77 6.34	353 310 224	1 1/2" BSP	1800	70	2220 x 1410 x 1720
75	8 10 13	116 145 188	75	100	14.18 12.02 9.80	501 424 346	2" BSP	2400	72	2560 x 1520 x 1820
90	8 10 13	116 145 188	90	125	16.80 14.80 11.90	593 523 420	2" BSP	2600	72	2560 x 1520 x 1820
110	8 10 13	116 145 188	110	150	21.55 18.66 16.47	761 659 582	DN65	3600	73	3110 x 1690 x 2070
132	8 10 13	116 145 188	132	180	24.63 21.35 18.47	870 754 652	DN65	3800	73	3110 x 1690 x 2070
160	8 10 13	116 145 188	160	215	29.35 25.25 21.12	1037 892 746	DN80	4100	75	3410 x 1760 x 2140
185	8 10 13	116 145 188	185	250	33.56 29.22 25.14	1185 1032 888	DN80	4250	75	3410 x 1760 x 2140
200	8 10 13	116 145 188	200	270	37.42 33.28 29.08	1321 1175 1027	DN80	4350	76	3410 x 1760 x 2140
220	8 10 13	116 145 188	220	300	42.29 37.11 33.00	1493 1310 1165	DN100	6200	77	3860 x 2200 x 2240
250	8 10 13	116 145 188	250	335	46.55 41.93 36.80	1644 1481 1300	DN100	6450	78	3860 x 2200 x 2240
280	8 10 13	116 145 188	280	380	50.59 46.06 41.51	1786 1627 1466	DN125	7600	82	4200 x 2200 x 2240
315	8 10 13	116 145 188	315	425	55.95 50.08 45.62	1976 1768 1611	DN125	7600	82	4200 x 2200 x 2240
355	8 10 13	116 145 188	355	475	65.43 55.12 49.58	2311 1946 1751	DN125	8200	83	4200 x 2200 x 2240
400	8 10 13	116 145 188	400	540	74.31 64.46 58.07	2624 2276 2051	DN125	8200	83	4200 x 2200 x 2240

All our products are manufactured to exacting standards in accordance with ISO9001-2008.

Unit performance measured in accordance with ISO1217. Ed3 Annex C - 1996.

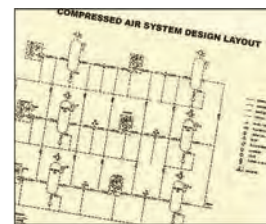
Reference conditions:

Absolute inlet pressure = 1bar

Temperature = 20°C

Cooling temperature = 20°C

Noise pressure level measured in accordance with ISO2151 2004 (E)



Our Promise... Lower Cost Compressed Air

Whatever industry you are in, here at Southern Cross Compressors we have the experience and expertise to handle every compressed air situation. Our 5 star approach begins with a thorough understanding of your application. This vital information enables us to provide the right system design, product selection, installation and service programs ensuring you get the lowest cost, most reliable system possible. Our extensive industry experience gained over thirty years, makes Southern Cross the ideal partner to look after your total compressed air system.

AIR AUDITS

Inefficiencies as high as 50% are typical. A site audit can uncover many opportunities. Using the latest ultrasonic flow meter and leak detection technology, an air usage profile can be matched to each customer's ideal system. This can lead to thousands of dollars in energy cost savings per year.



DESIGN

Designing the right compressed air system is fundamental to maximising efficiency and reliability. This will lead to significant savings in energy over the life of the system. We are experts in engineering the right compressed air system taking into consideration maintenance access, ventilation, pressure drop and environment.

Compressed air where you need itefficiently.

PRODUCTS

Our range of quality products include:

- Fixed and variable speed rotary screw compressors
- Reciprocating compressors
- Portable diesel compressors
- Air dryers

- Coalescing filters
- After coolers
- Pressure vessels
- Oil-Water separators
- Condensate separators
- Auto drains

INSTALLATION

A flexible compressed air system is critical to ensuring costs are minimised. Stringent installation procedures ensure pipe work is installed to exacting standards. i.e. leak free, minimal pressure drop and with future expansion in mind.

Compressed air where you need it on time and on budget.

Materials used include copper, mild steel, aluminium and PE (plastic).

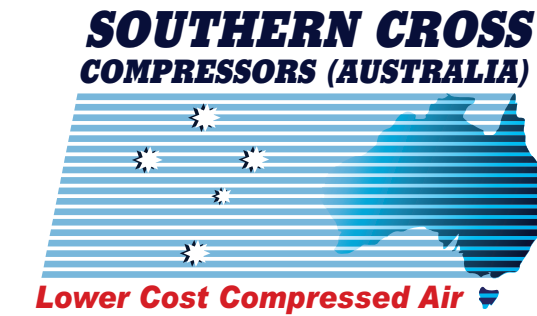
SERVICE

Reputation built around consistently meeting the needs of customers underpins our success.

Highly trained, professional service technicians understand the importance of minimising downtime and maximising reliability.

An extensive range of flexible service plans allow our customers to budget and control the cost of preventative maintenance.

24/7 rapid response support ensures that if there is ever a problem, we are there to fix it promptly!

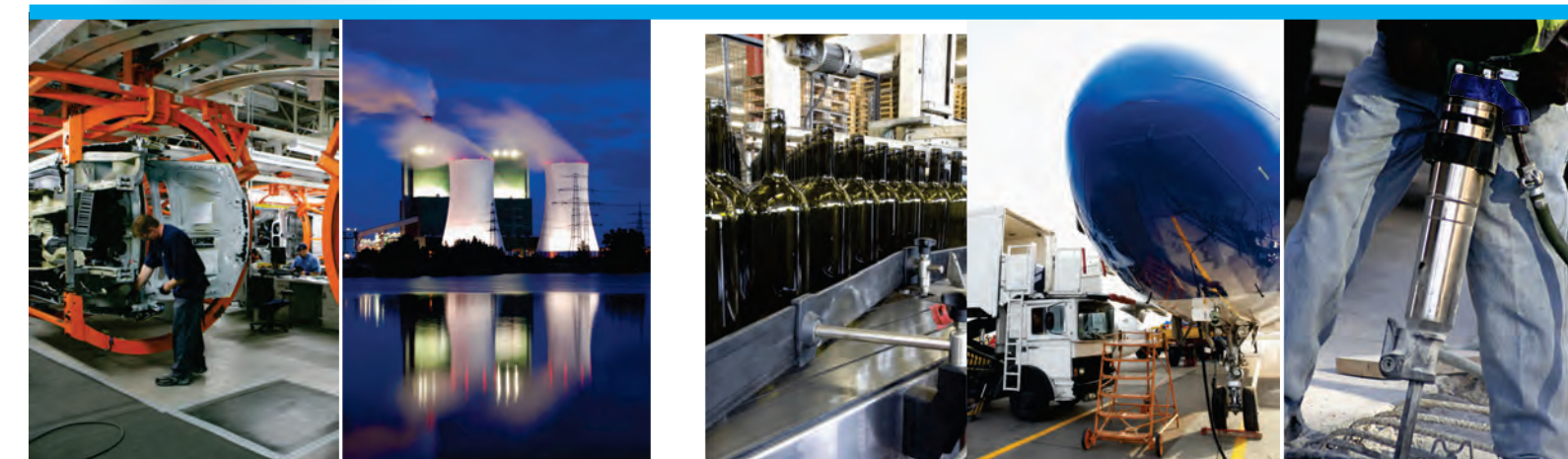


KHE SERIES ROTARY SCREW COMPRESSORS

Fixed and Variable speed



15 - 400 kW



Our Southern Cross KHE Compressor Series are available in a wide range of options to suit your specific requirements including:

- Variable Speed Drive
- Sequencing Control
- Remote Start/Stop
- High Pressure 13 bar
- Low Pressure 3 bar
- Heat Recovery Systems
- Water Cooled Packages
- Dirty Environment Packages
- Custom Engineered Packages

**SOUTHERN CROSS
COMPRESSORS (AUSTRALIA)**

**Lower Cost
Compressed Air**



24-7 BREAKDOWN SERVICE
1300 735 649



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Lower Cost Compressed Air

***AIR AUDITS *DESIGN *PRODUCTS *INSTALLATION *SERVICE**

All information displayed in this publication is subject to change without prior notification.
Dimensions and weights shown are for fixed speed compressors and may vary for variable speed models.

Safety and the Environment

- **REDUCED OHS RISK AND INJURY**
 - The entire Southern Cross range of compressors include full safety features such as guarded rotating components, shrouded electrical components and internal spillage containment.

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 RS485 ineterface

Single Pass Oil and After Coolers

- **LONG LIFE / EASILY ACCESSIBLE**
 - Minimised thermal stress.
 - Cooler running temperatures / correct running temperature @ 50°C ambient capable.
 - Low oil carryover, longer bearing life.
 - Low cooling air velocity, reduces dust build up.

Schneider Switchgear

- **INCREASED RELIABILITY / LOWER SERVICING COST**
 - Outstanding reliability
 - Excellent component life
 - Worldwide support

Laminar Flow Inlet Controller

- **MINIMAL PRESSURE DROP / INCREASED OUTPUT**
 - Laminar flow controller results in lower pressure drop through the intake increasing output and saving energy.

316 Stainless Steel Control Tubing

- **LONG TUBING LIFE / REDUCED DOWNTIME**
 - Increased reliability due to indefinite, corrosion free life. Material such as nylon, copper or mild steel will fail in time causing downtime.

Three 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 carrover limited to 2mg/m³* (*liquid phase).

Triple Discharge Bearings

- **LONGER BEARING LIFE / QUIETER RUNNING**
 - The 'SKY' series direct drive airends use three discharge bearings on each rotor to absorb radial and axial loads.
 - Longer bearing life under all operating conditions.
 - Increased load carrying capacity.

'SKY' Series Airend

- **MAXIMUM OUTPUT WITH LESS ENERGY USAGE**
 - Asymmetric 5/6 rotor profile.
 - KAPP ground rotor technology for tighter clearances and improved lubrication.
 - Precision machined bell housing to maintain coupling alignment.
 - Flexible coupling with easily removable element.

Direct Drive - 1:1 Drive Ratio - No Gearbox

- **MAXIMUM AIR OUTPUT / REDUCED ENERGY USAGE.**
 - Large, slow running airend.
 - Eliminates transmission energy losses.
 - Increased bearing life.

Centrifugal Cooling Fans

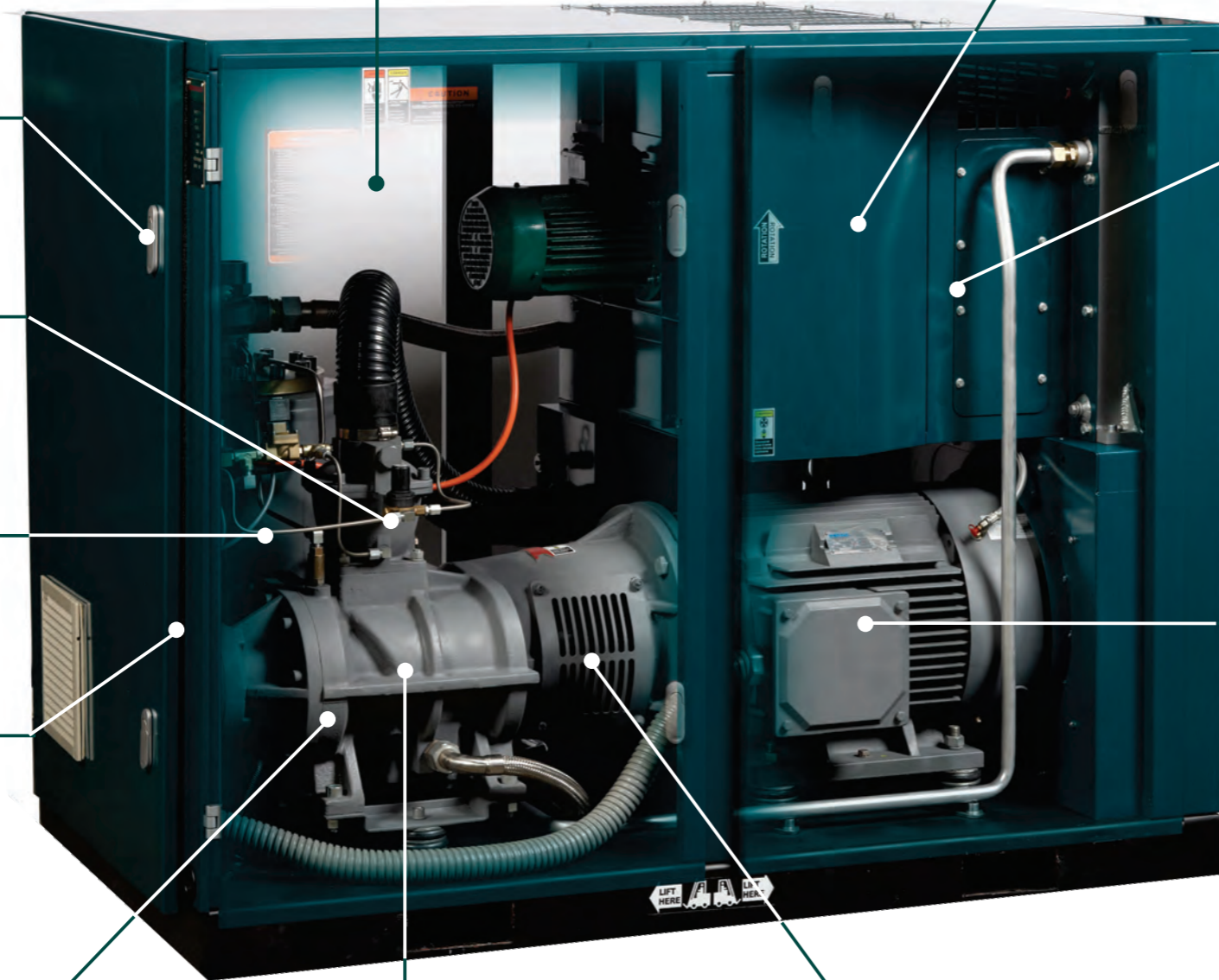
- **INCREASED COOLING EFFICIENCY**
 - Higher static pressure ensures these fans run much quieter than traditional axial cooling fans.
 - Even air flow across the cooler face.
 - VSD fan control (110kW & above) provides energy savings as cooling air flow is reduced during periods of light load or low temperatures.
 - Cooling air bypasses main compressor compartment resulting in minimal internal dust build up.

High Efficiency Electric Motors

- **LONG OPERATING LIFE / LOWER POWER USE**
 - Southern Cross use high efficiency motors which comply with MEPS2 (Minimum Energy Performance Standard) requirements.
 - TEFC to IP 55, protected from dust and moisture.
 - Class F insulation.

'Ultra Web' Air Intake Filters

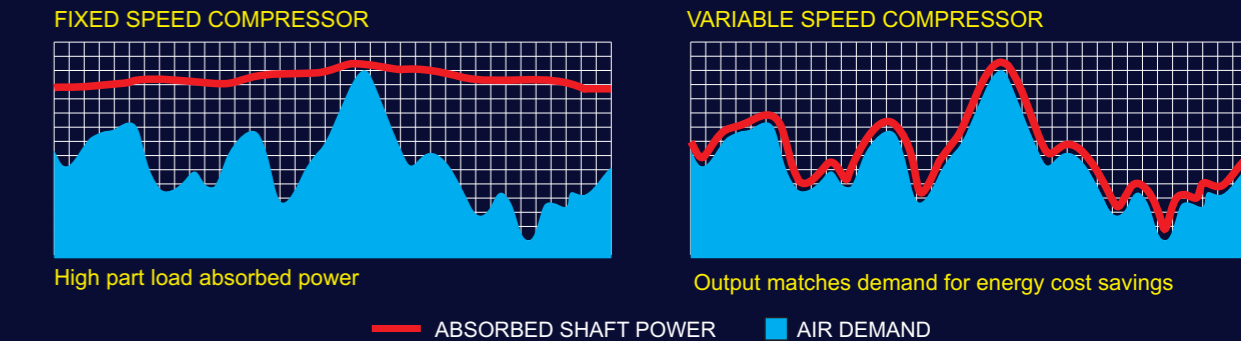
- **INCREASED FILTRATION EFFICIENCY**
 - Full air flow, low restriction, nanofibre technology.
 - Deep bed media ensures excellent dust capture.
 - Increased free air delivery for further savings in energy and running costs.



Imagine an intelligent air compressor that can accurately and rapidly vary its output to match your changing demand with corresponding reduction in absorbed power.

More than 70% of the long term cost of owning an air compressor can be attributed to energy usage. Over the life of the compressor, this adds up to many times the original investment, yet in many cases, much of this energy is wasted through poor part load control.

A variable speed controller enables the compressor output to exactly match demand eliminating the high part load energy usage experienced with fixed speed compressors.



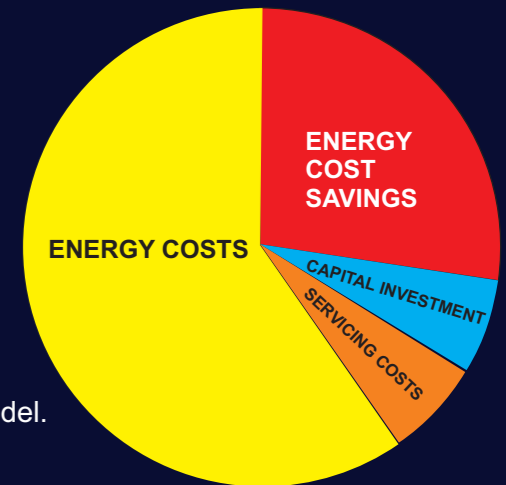
BENEFITS

- Direct drive (1:1 ratio) motor and airend operate at low speed.
- Gradual increase in motor speed eliminates starting spikes and cost penalties.
- Excessive part load energy consumption is significantly reduced.
- A steady system pressure is maintained lowering system stress and overall air demand.
- Reduced air leaks due to lower operating pressures.
- Significantly lower noise levels.
- Environmentally friendly energy savings.

Major energy savings with variable speed drive

With the elimination of wasted energy, cost savings as high as 35% or more are possible. Such savings mean the additional capital cost of the variable speed drive option can be recovered in less than one year's operation.

KHE Series VSD Rotary Screw Compressor operating at 70% load compared to a fixed speed model.



SCHNEIDER ALTIVAR 61 VARIABLE SPEED DRIVE

Southern Cross VSD compressors use the renowned Schneider Altivar 61 Variable Speed Drive.

- Efficient and reliable
- Worldwide support