

WORLD CLASS · EFFICIENT · RELIABLE

LK Series

SINGLE STAGE ROTARY SCREW COMPRESSOR



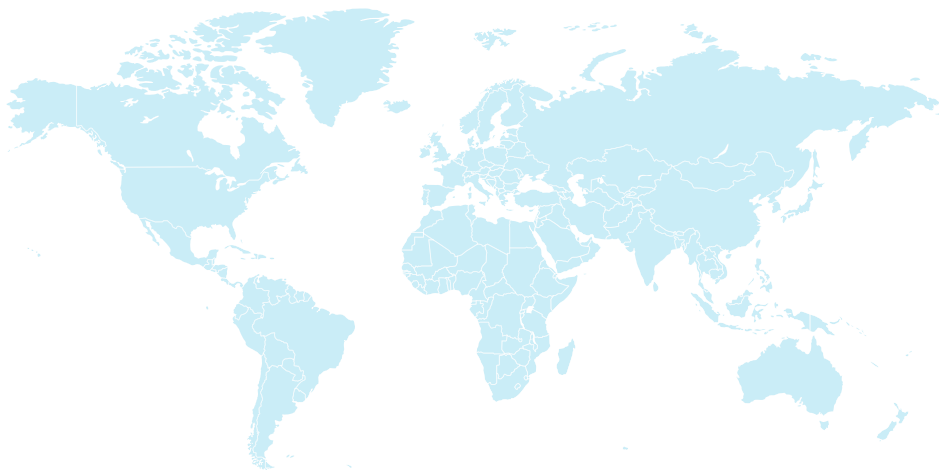


WE MANUFACTURE **85%**
OF THE COMPRESSOR COMPONENTS INTERNALLY,
ENSURING QUALITY AND CONTROLLING COSTS

60+
YEARS
IN BUSINESS

**OVER
70,000**
COMPRESSORS
PRODUCED
A YEAR

3RD LARGEST
COMPRESSOR MANUFACTURER
IN THE WORLD



LK SERIES COMPRESSORS PROVIDE 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 cycle of a compressor. Therefore, it is important to consider the life cycle cost of a compressed air system when evaluating productivity improvements. LK series advanced energy saving features reduce operation costs significantly.



*LK Series 'best in class'
rotor assembly*

**5 YEAR
AIREND
WARRANTY**

WORLD CLASS ENGINEERING

INTERNATIONALLY PATENTED SKK AIREND UNIQUE DESIGN DEVELOPED FOR EFFICIENCY AND LONG BEARING LIFE

Continued development has increased efficiency by more than 20% over earlier models

- **Direct drive (1:1 ratio) motor and airend** operate at slow speed
- **Slow speed male rotor** maximizes performance and increases efficiency
- **Steady system pressure** lowers system stress and overall air demand
- **Decreased energy consumption** delivers environmentally friendly savings
- **Duplex SKF bearings** for durability and reliability
- **Low part load energy consumption**
- **5 / 6 rotor profile** assures optimal performance while reducing energy consumption
- **Very tight tolerances** provide maximum efficiency
- **Direct flow inlet valve** provides reliable capacity control



LK Series patented airend

DIGITAL CONTROL PANEL

Monitors & Controls Key Compressor Functions

- Protects compressor in the event of a fault
- Provides service required alerts
- Sequencing of up to 16 compressors
- External monitoring via RS 485 interface
- Star Delta starter standard to reduce electrical in-rush current



AXIAL COOLING FANS

Increased Cooling Efficiency

- Higher static pressure allows for heat recovery ducting
- Even air flow across the cooler face



INDUSTRIAL GRADE ELECTRICALS

Increased Reliability / Lower Servicing Cost

- Outstanding reliability
- Excellent component life
- Industry recognized brands, with local support



HIGH EFFICIENCY ELECTRIC MOTORS

Long Operating Life / Lower Power Use

- LK uses high efficiency motors, which comply with all international standards
- TEFC (IP 54) standard, IEC frame
- Class F insulation
- Premium efficiency motors

316 STAINLESS STEEL PIPING & TUBING

Long Life / Reduced Downtime

- No cheap rubber hoses
- Stainless lines increase reliability due to corrosion free material
- Reduces nuisance breakdowns

HIGH EFFICIENCY AIR INTAKE FILTERS

Increased Filtration Efficiency

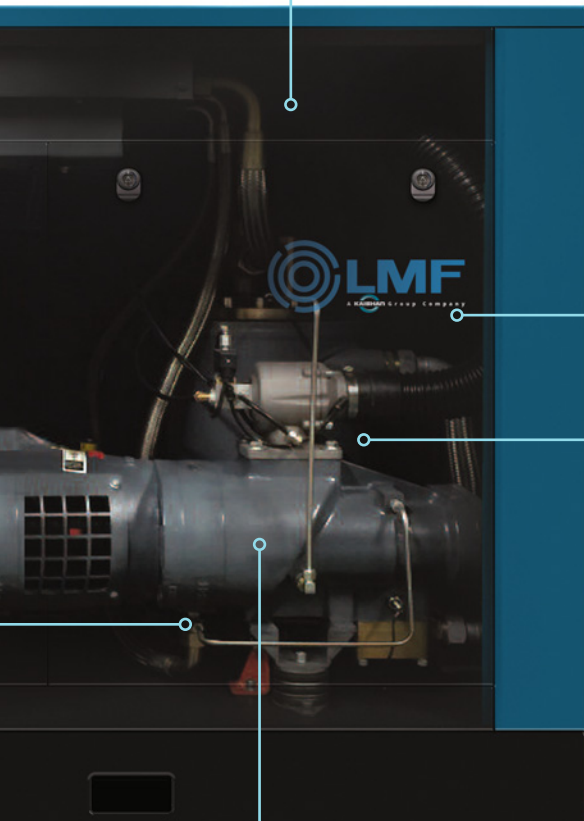
- Full airflow, low restriction
- Deep bed media ensures excellent dust capture
- Increased free air delivery for further energy savings



SAFETY AND THE ENVIRONMENT

Reduced OSHA Risk and Injury

- The entire Kaishan range of compressors includes full safety features such as guarded rotating components and shrouded electrical components



3 STAGE TANGENTIAL OIL SEPARATION

Lower Pressure Drop / Lower Absorbed Power

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

SINGLE PASS OIL & AFTER COOLERS

Long Life / Easily Accessible

- Minimize thermal stress
- Coolers oversized to accommodate 40°C ambient temperatures
- Low oil carryover increases bearing life
- Low cooling air velocity reduces dust build up

MODULATING INLET VALVE

Minimum Pressure Drop / Increased Output

- Lower pressure drop through the intake, increasing output and saving energy

PREMIUM DISCHARGE BEARINGS

Longer Bearing Life / Quieter Operation

- The "SKK" series direct drive air ends use two discharge bearings to absorb radial and axial loads
- Longer bearing life under all operating conditions
- Increased load carrying capacity

'SKK' SERIES AIR END

Maximum Output with Less Energy Usage

- Asymmetric 5 / 6 rotor profile with 100% SKF bearings
- KAPP Grinder rotor technology for tighter clearances and improved lubrication
- Flanged motor adapter ensures perfect coupling alignment

DIRECT DRIVE - 1:1 DRIVE RATIO NO GEARBOX

Maximum Air Output / Reduced Energy Usage

- Large, slow running air end
- Eliminates transmission energy losses
- Increases bearing life
- Flexible, easily removable coupling element



LK SERIES FIXED SPEED

MODEL	POWER kW	FLOW m ³ /min			SOUND dBA	WEIGHT kg	DIMENSIONS (LxWxH) mm
		8 bar	10 bar	13 bar			
LK18	18,5	3,37	2,53	-	73	510	1370 x 900 x 1110
LK22	22	3,8	3,3	2,42	73	540	1370 x 900 x 1110
LK30	30	5,5	4,5	3,55	74	650	1600 x 960 x 1220
LK37	37	6,8	5,4	3,7	75	700	1600 x 960 x 1220
LK45	45	8,5	6,6	5,3	76	880	1630 x 960 x 1220
LK55	55	10,2	8,4	6,5	76	1090	1850 x 1200 x 1500
LK75	75	14,2	11,6	9,9	76	1550	2160 x 1220 x 1580
LK90	90	17,2	14,2	11,6	77	2000	2160 x 1220 x 1580
LK110	110	21	16,9	13,9	78	2700	2440 x 1400 x 1700
LK132	132	24,3	20,9	16,5	79	2800	2440 x 1400 x 1700
LK160	160	30	24	20,3	80	4200	3060 x 1860 x 2050
LK200	200	36,8	32,9	29,2	80	4300	3060 x 1860 x 2050
LK220	220	37,2	37	-	83	6000	3510 x 2160 x 2170
LK250	250	45,5	41	36	84	6000	3510 x 2200 x 2200
LK315	315	55	49,5	45,4	85	7200	4200 x 2200 x 2210
LK355	355	66	55	49,3	85	7400	4200 x 2200 x 2210

LK SERIES CONTROL SYSTEM PROVIDES TOTAL MANAGEMENT OF ALL OPERATING PARAMETERS

LK MAM 6090 controller capabilities include the following features:

- Operating parameters display, including amps & volts
- Warning & shutdown alarms
- Programmed maintenance schedules



LK series System Management Control Panel

The LK contains an intuitive HMI with microprocessor controller that can safely and efficiently control all the functions of the compressor.

The display monitors the line pressure, oil temperature and working conditions (running, idling and stop). Abnormal conditions will trigger a flashing LED and a message indicating the cause for the alarm. Key functions are password protected, accessible only to authorized personnel.

LK SERIES COMPRESSORS PROVIDE ROBUST, TURN-KEY INDUSTRIAL SOLUTIONS

LK HAS LOW LIFE CYCLE COST BY PROVIDING:

Low Capital Cost + Low Operating Cost + Exceptional Reliability & Efficiency

- Electrical components are designed to meet or exceed industrial standards
- Optimum operating temperature to prevent moisture in the system
- Rugged and proven technology to ensure long operating life
- Heavy duty isolators to minimize operating vibration
- SAE fittings eliminates leaks, saving maintenance costs
- Spin-on fluid filter for quick maintenance
- Premium efficiency IE3 and IE4 TEFC electrical motors
- Acoustical enclosure reduces noise to industry leading dB(A) levels

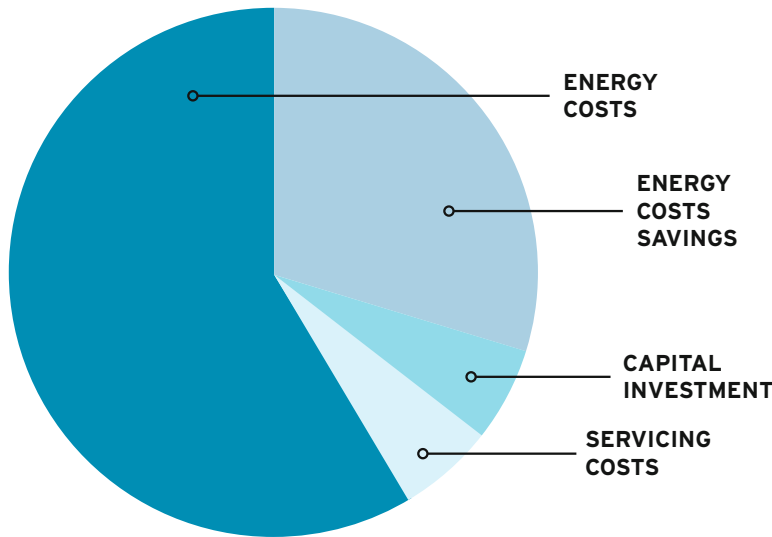
LK SERIES VARIABLE SPEED DRIVE OPTION PROVIDES A MAJOR ENERGY SAVINGS

LK VSD combines a robust power platform with a state-of-the-art control 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 40% are possible. With this level of savings, the additional capital cost of the variable speed drive can be recovered in less than one year.



LK series System Management Control Panel



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



LK Variable Speed Drive

LK SERIES VARIABLE SPEED

MODEL	POWER kW	FLOW m ³ /min			SOUND dBA	WEIGHT kg	DIMENSIONS (L x W x H) mm
		8 bar	10 bar	13 bar			
LK18 VSD	18,5	3,2-1,02	2,45-0,78	-	73	550	1370 x 900 x 1190
LK22 VSD	22	3,69-1,18	3,2-1,02	3,35-1,07	73	600	1370 x 900 x 1190
LK30 VSD	30	5,34-1,71	4,37-1,4	3,44-1,10	74	730	1870 x 960 x 1220
LK37 VSD	37	6,6-2,11	5,24-1,68	3,59-1,15	75	780	1870 x 960 x 1220
LK45 VSD	45	8,25-2,64	6,4-2,05	5,14-1,64	76	1000	1960 x 960 x 1220
LK55 VSD	55	9,7-3,10	8,15-2,61	6,31-2,02	76	1220	2010 x 1200 x 1500
LK75 VSD	75	13,41-4,29	12,1-3,87	10,0-3,2	76	1700	2310 x 1220 x 1580
LK90 VSD	90	17,0-5,44	13,9-4,45	11,5-3,68	77	2150	2290 x 1320 x 1580
LK110 VSD	110	20,7-6,62	16,9-5,41	14,1-4,51	78	2850	2710 x 1400 x 1710
LK132 VSD	132	24,3-7,78	20,4-6,53	16,8-5,38	79	2950	2710 x 1400 x 1710
LK160 VSD	160	30,0-9,60	24-7,68	20,3-6,5	80	4500	3110 x 1860 x 2050
LK200 VSD	200	36,8-11,78	32,9-10,53	29,2-9,34	80	4500	3110 x 1860 x 2050

Performance test based on ISO 1217.

