

WORLD CLASS · SUPER EFFICIENT · RELIABLE · SILENT

k|r|o|f

OIL-FREE ROTARY SCREW COMPRESSORS (AIR-COOLED)



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Kaishan Compressor Global

WORLD WIDE SUPPORT

Globally recognized industrial presence

Over the last sixty years, Kaishan has steadily grown to become a significant, diversified engineering company developing high value machinery for industries worldwide. With modern, specialized manufacturing facilities positioned in seven strategic locations, Kaishan's group of thirty-two subsidiary companies produce over 70,000

rotary screw and 250,000 reciprocating compressors annually. Kaishan is the world's third largest manufacturer of compressed air, mining and drilling equipment and supports industries in more than 60 countries including: USA, Australia, Germany, Japan, Korea, Russia, Africa and throughout Latin America.

Vertically integrated global strategy

Kaishan's global strategy of combining skilled engineering with highly efficient manufacturing allows us to provide performance proven, reliable equipment at a significant cost savings to our customers. Additionally, Kaishan's manufacturing processes are 85% vertically integrated

insuring full control of the material supply chain. This vertical approach supplies high quality components at a lower cost, and affords Kaishan the ability to respond rapidly to changing market demands.



Practiced environmental sustainability

Integral to the design and manufacture of our products is outstanding energy efficiency. Kaishan's fundamental belief in environmental sustainability drives us to produce products that maximize energy efficiency and help to preserve precious energy resources. Single and two-stage compressors that produce more compressed air per unit of power input as well as expanders that utilize waste energy to produce electricity are just two of the fundamental products in our sustainable approach.

Throughout our manufacturing processes, unused waste materials are recycled at every stage to minimise the use of raw materials. This approach translates to lower initial costs and a smaller environmental footprint that helps us all. Kaishan's commitment to environmental responsibility ensures that we will continue to develop technologies and manufacturing solutions that provide industry with machinery of exceptional value - now and well into the future.

AIR QUALITY
STANDARDS
ISO 8573.1

class
zero 
OIL-FREE ROTARY

OIL-FREE ROTARY SCREW COMPRESSORS

KROF45-315



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PRECOOLER / INTERCOOLER

- Precooler reduces thermal stress load
- Highly efficient robust 2 stage cooling
- Approach temperatures under 15 degree



HYDRAULICALLY CONTROLLED INLET VALVE

- Quicker response to system changes
- Lower starting inrush current
- Control independent of operating pressure
- Reliable, robust design



UNIQUE PACKAGE LAYOUT

- Package is split into cold / hot side
- Cooling air efficiently distributed through packaged
- Each aspect of package designed for sound attenuation



INLET FILTER / DUCTING

- High flow / low pressure drop
- Clean fresh air
- Noise reduction
- Minimize restriction



COOLING FANS

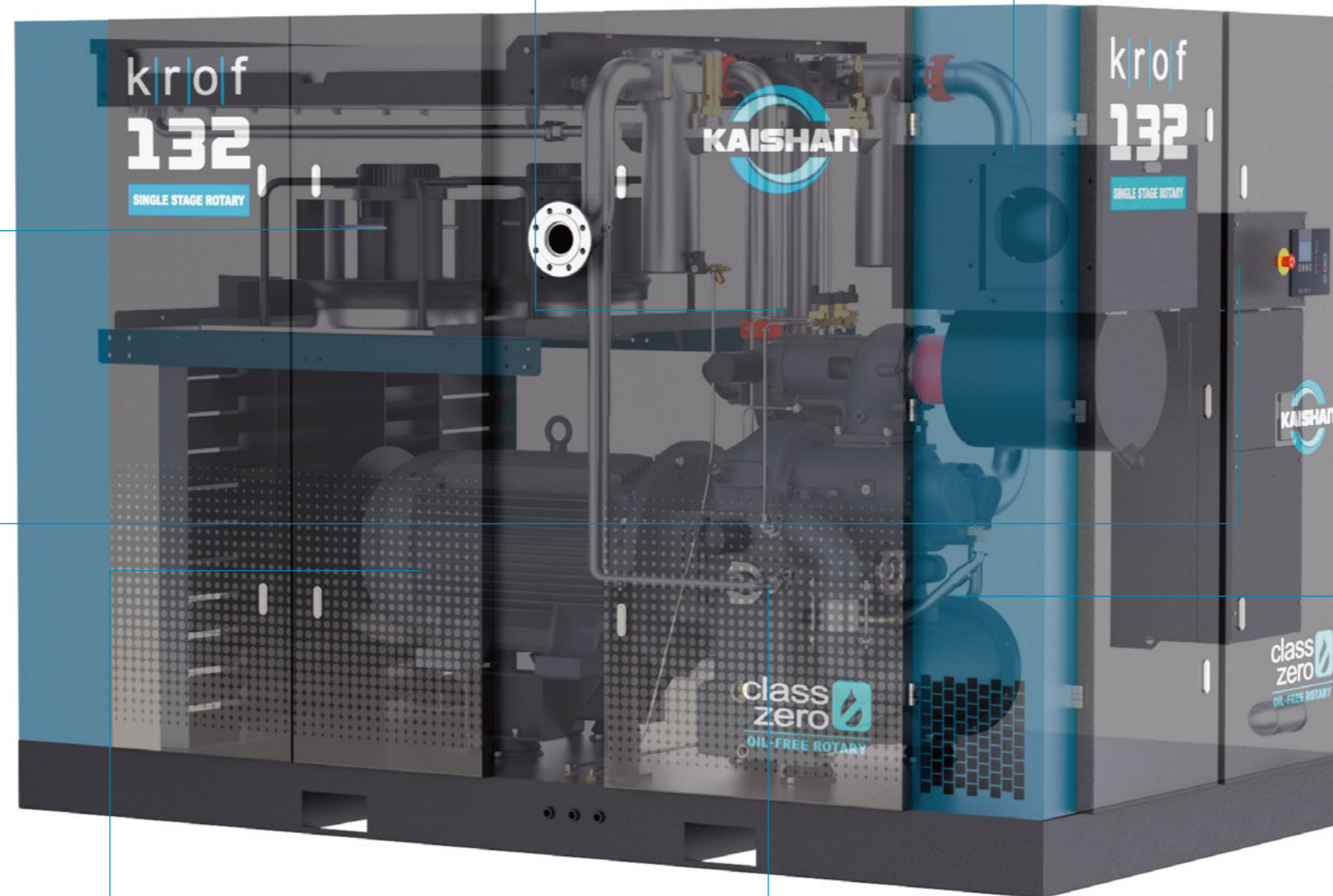
- Aerospace grade Polycarbonate
- Dynamically balanced
- Extremely Efficient
- Modular designed integrated motor
- High static pressure capability

CONTROLS

- Critical operating parameters monitored and controlled for safe operation
- Networking capable of 16 machines
- Multi-lingual capabilities
- Rugged and robust – UV protected
- Alarms and maintenance reminders

SERVICABILITY

- Less service parts
- Less service time
- All PMs parts on same corner
- Spin on oil filter

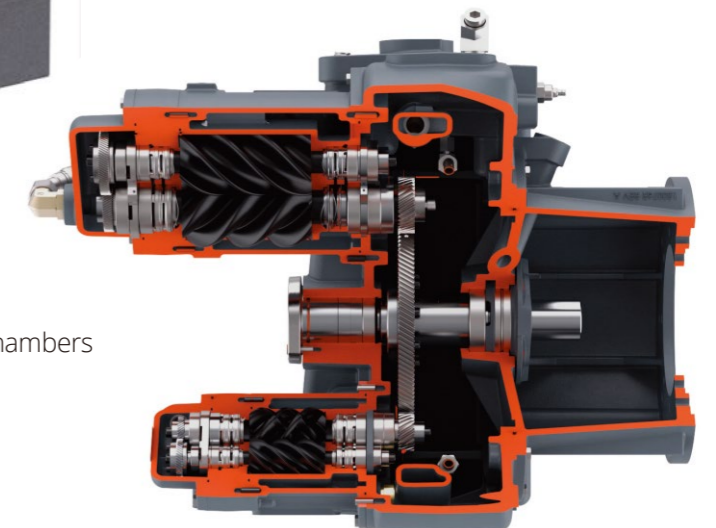


MOTOR

- IEC TEFC IE3 Premium Efficiency – Ip55 protects against dust, chemicals and humidity
- Flexible Direct coupled
- Integral motor adapter for guaranteed alignment

OIL FREE AIREND

- Integrated oil distribution lines
- Integrated motor adapter
- PTFE coating on compression chambers
- Seal design ensures zero oil in
- Pressure versatility
- 5- years warranty
- Integrated oil pump



INTEGRATED PULSATION DAMPENERS

- Industry leading low dBA
- Reduces pressure spikes
- Laminar flow

CLASS 0 MEANS:

- ✓ Zero risk of contamination.
- ✓ Zero risk of damaged or unsafe products.
- ✓ Zero risk of losses from operational downtime.
- ✓ Zero risk of damaging your company's hard-won professional reputation.



CLASS	Concentration total oil (aerosol, liquid, vapor) mg/m ³
0	As specified by the equipment user or supplier and more stringent than class 1
1	< 0.01
2	< 0.1
3	< 1
4	< 5

With a Kaishan Oil Free rotary you have the peace of mind that only the highest purity of compressed air is reaching your products.

Oil-free air is used in all kinds of industries where air quality is paramount for the end product and production process.

These applications include food and beverage processing, pharmaceutical manufacturing and packaging, chemical and petrochemical processing, semiconductor and electronics manufacturing, the medical sector, automotive paint spraying, textile manufacturing and many more. In these critical environments, contamination by even the smallest quantities of oil can result in costly production downtime and product spoilage.



Food and Beverage



Pharmaceutical



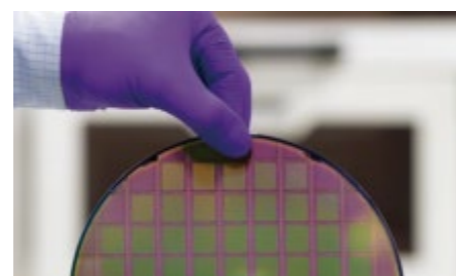
Utilities



Chemical industry



Textile



Electron industry

KROF SERIES SPECIFICATIONS

MODEL	Rated Power kW	Capacity FAD (m ³ /min)			Connection	Weight KG	Dimension mm
		7bar(g)	8bar(g)	10bar(g)			
45-90kW Power frequency unit							
KROF-45	45	7.23	6.07	4.66	DN65	2735	2300X1400X2100
KROF-45W	45	7.23	6.07	4.66	DN65	2910	2200x1500x2200
KROF-55	55	9.35	7.97	6.58	DN65	2830	2300X1400X2100
KROF-55W	55	9.35	7.97	6.58	DN65	2930	2200x1500x2200
KROF-75	75	12.95	12.55	10.01	DN65	3020	2470X1500X2200
KROF-75W	75	12.95	12.55	10.01	DN65	3120	2200x1500x2200
KROF-90	90	15.79	14.12	11.86	DN65	3060	2470X1500X2200
KROF-90W	90	15.79	14.12	11.86	DN65	3160	2200x1500x2200

45-90kW Variable frequency unit							
KROF-45 VSD	45	7.23	6.07	4.66	DN65	2615	2300X1400X2100
KROF-45W VSD	45	7.23	6.07	4.66	DN65	2665	2200x1500x2200
KROF-55 VSD	55	9.35	8.20	6.58	DN65	2615	2300X1400X2100
KROF-55W VSD	55	9.35	8.20	6.58	DN65	2710	2200x1500x2200
KROF-75 VSD	75	12.95	12.55	10.01	DN65	2685	2470X1500X2200
KROF-75W VSD	75	12.95	12.55	10.01	DN65	2780	2200x1500x2200
KROF-90 VSD	90	15.79	14.12	11.86	DN65	2700	2470X1500X2200
KROF-90W VSD	90	15.79	14.12	11.86	DN65	2800	2200x1500x2200

90P-160kW Power frequency unit							
KROF-90P	90	15.19	15.05	/	DN80	4070	3435x1865x2250
KROF-90PW	90	15.19	15.05	/	DN80	4280	3435x1865x2230
KROF-110	110	18.65	18.57	15.57	DN80	4120	3435x1865x2250
KROF-110W	110	18.65	18.57	15.57	DN80	4350	3435x1865x2230
KROF-132	132	22.5	22.42	20.53	DN80	4180	3435x1865x2250
KROF-132W	132	22.5	22.42	20.53	DN80	4420	3435x1865x2230
KROF-160	160	27.78	27.68	24.96	DN80	4270	3435x1865x2250
KROF-160W	160	27.78	27.68	24.96	DN80	4510	3435x1865x2230

90P-160kW Variable frequency unit							
KROF-110 VSD	110	18.65	18.57	15.57	DN80	3870	3435x1865x2250
KROF-110W VSD	110	18.65	18.57	15.57	DN80	3970	3435x1865x2230
KROF-132 VSD	132	22.5	22.42	20.53	DN80	3920	3435x1865x2250
KROF-132W VSD	132	22.5	22.42	20.53	DN80	4050	3435x1865x2230
KROF-160 VSD	160	27.78	27.68	24.96	DN80	4250	3435x1865x2250
KROF-160W VSD	160	27.78	27.68	24.96	DN80	4320	3435x1865x2230

185-315kW Power frequency unit							
KROF-185	185	33.28	33.18	28.7	DN125	5940	4000x2200x2450
KROF-185W	185	33.28	33.18	28.7	DN125	6258	3800x2000x2450
KROF-200	200	35.8	35.69	31.43	DN125	6050	4000x2200x2450
KROF-200W	200	35.8	35.69	31.43	DN125	6258	3800x2000x2450
KROF-250	250	44.33	44.2	39.64	DN125	6880	4000x2200x2450
KROF-250W	250	44.33	44.2	39.64	DN125	7197	3800x2000x2450
KROF-280W	280	48.9	48.75	44.18	DN125	7160	3800x2000x2450
KROF-315W	315	53.48	53.32	48.81	DN125	7180	3800x2000x2450

185-315kW Variable frequency unit							
KROF-185 VSD	185	33.28	33.18	28.7	DN125	5740	4000x2200x2450
KROF-185W VSD	185	33.28	33.18	28.7	DN125	6245	3800x2000x2450
KROF-200 VSD	200	35.8	35.69	31.43	DN125	5850	4000x2200x2450
KROF-200W VSD	200	35.8	35.69	31.43	DN125	6305	3800x2000x2450
KROF-250 VSD	250	44.33	44.2	39.64	DN125	6100	4000x2200x2450
KROF-250W VSD	250	44.33	44.2	39.64	DN125	6335	3800x2000x2450
KROF-280W VSD	280	48.9	48.75	44.18	DN125	6650	3800x2000x2450
KROF-315W VSD	315	53.48	53.32	48.81	DN125	6725	3800x2000x2450

Technical data- low pressure

MODEL	Rated Power kW	Capacity FAD (m ³ /min)		Connection	Weight KG	Dimension mm
		2.5bar(g)	3bar(g)			
KROF-90	90	29.5	/	DN 200	4470	3452x1930x2260
KROF-110	110	36.2	32.2	DN 200	4500	3452x1930x2260
KROF-132	132	43	38.5	DN 200	4580	3452x1930x2260
KROF-160	160	51.8	46.6	DN 200	4640	3452x1930x2260
KROF-185	185	54	51.5	DN 200	4700	3452x1930x2260

NOTE:
 *.Model with "W" means water cooled, without "W" is air cooled. *Other Model can be customized according to customers' requirement. *Rated Voltage: 380V/50hz.
 *.Reference condition: • Dry air • Absolute inlet Pressure:1 bar(a) • Inlet temperature:20°C • Flow rate measured in accordance with ISO 1217 • Sound pressure level measured according to ISO 2151: 2004 using ISO 9614/2 (sound intensity method), Deviation ±3dB(A).