

# Rotary Screw Compressors

RKHD Fixed and Variable Speed 50HP-420HP



**Pneutech**  
Efficiency Under Pressure

## Heavy Duty Series Single Stage



**10 Year Warranty**  
*Industry-Leading Peace-of-Mind*

## RKHD Series:

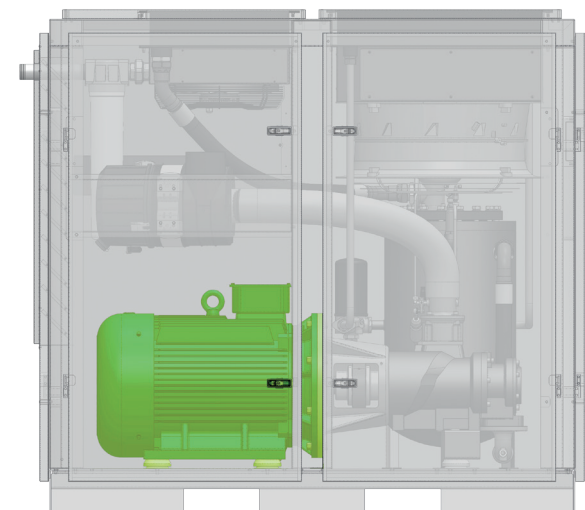
Fixed speed single-stage rotary screw compressors with direct transmission.

## RKHD-VSD:

Variable speed single-stage rotary screw compressors with direct transmission.

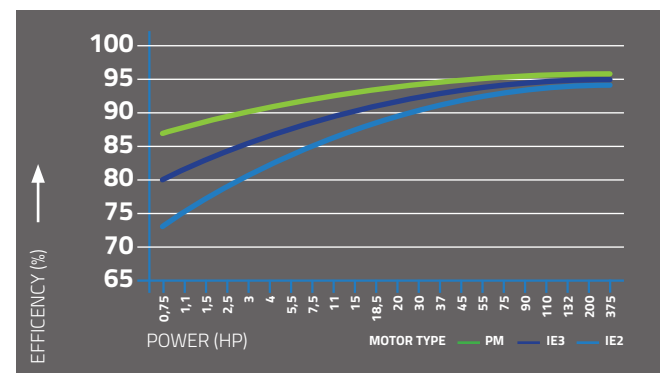
The RKHD and RKHD-VSD series lubricated screw compressors are particularly indicated for generating industrial use compressed air.

In case of continuous and constant air demand the compressed air needs are perfectly satisfied with RKHD Fixed Speed. In case of non-continuous needs and several daily fluctuations of air demand RKHD-VSD is the most suitable solution.



The selection of low rotation speed motor (4/6 poles in the fixed speed version) and properly sized rotary screws (max 1400 rpm) ensures the bearings a long life.

The variable speed version is equipped with Permanent Magnet Motor.

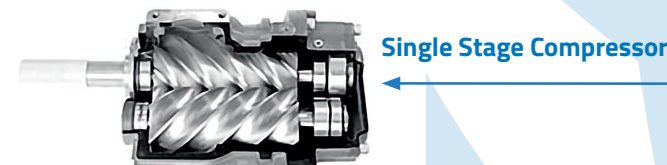
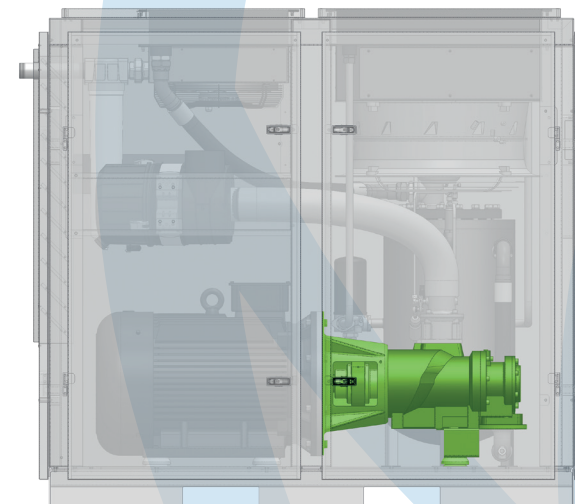
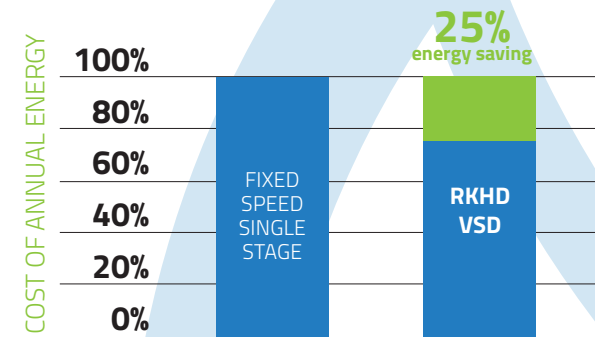


## ADVANTAGES

RKHD-VSD version with Permanent Magnet Variable Speed Motor (PM) guarantees an excellent ratio of energy costs and air flow rates.

It also capable of an unlimited operating pressure adjustment.

The direct drive fixed speed RKHD models are equipped with IE3 motors offering an additional contribution to energy saving.



## SINGLE STAGE ROTARY SCREW COMPRESSOR

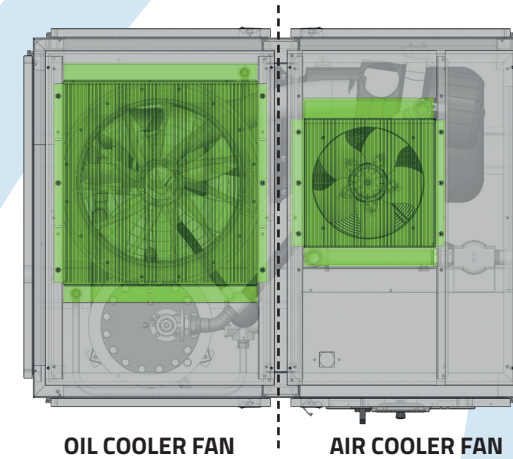
Low rotation speeds allow longer bearings service life. Our Air-End installed on the RKHD range has an optimized rotor's profile from the fluid dynamics point of view. By optimizing the internal circuit, the pressure drops have been further reduced thus obtaining a 8% less energy consumption improving the specific power output.

## COOLING SYSTEM

The Variable Speed Drive (VSD) range has been developed and sized to work at 100% duty cycle even in the most severe conditions, respecting the energy saving concept due to an inverter controlled fan of the oil cooler.

All the components are fully enclosed and protected from contamination. The air cooling system has been sized to work at up to 52°C ambient temperature.

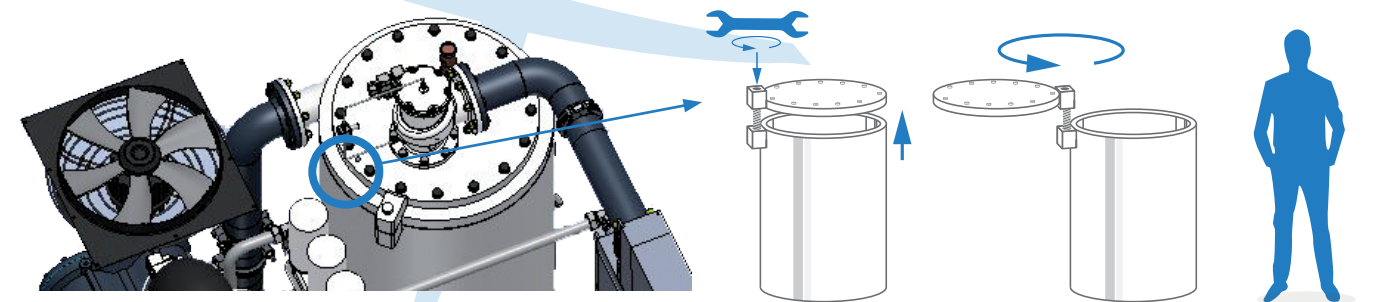
**Option: The units can be provided with water cooling system upon request.**



## EASY MAINTENANCE

All the easily removable external panels of the compressor permits easy access to all the components requiring routine maintenance.

The air-oil separator cartridge can be quickly replaced due to easy rotation of the tank lid without disassembling it.



## INDUSTRY 4.0

Ready for Industry 4.0: the compressor can be networked locally or remotely via the internet.



## Improved fluids temperature control

The coolers are separate and managed individually: **air / air and air / oil**

RKHD-VSD: The oil cooler fan is inverter controlled and is dynamically managing the temperature of the fluid. In this way, the oil temperature is controlled perfectly with relevant benefits in the oil circuit, and improving the energy savings as well. In addition, the separate air cooler management allows to optimize the air temperature at the compressors outlet thus avoiding condense formation and eliminating the damages caused by humidity. As consequence the dryer installed after the compressor will have also benefits on the lower operating load.

**All these features allow energy savings for all the system.**



## BENEFITS OF SPEED CONTROL

The high precision detection of the working pressure and the motor speed control guarantee the perfect flow rate according to the real air demand, with considerable energy savings.

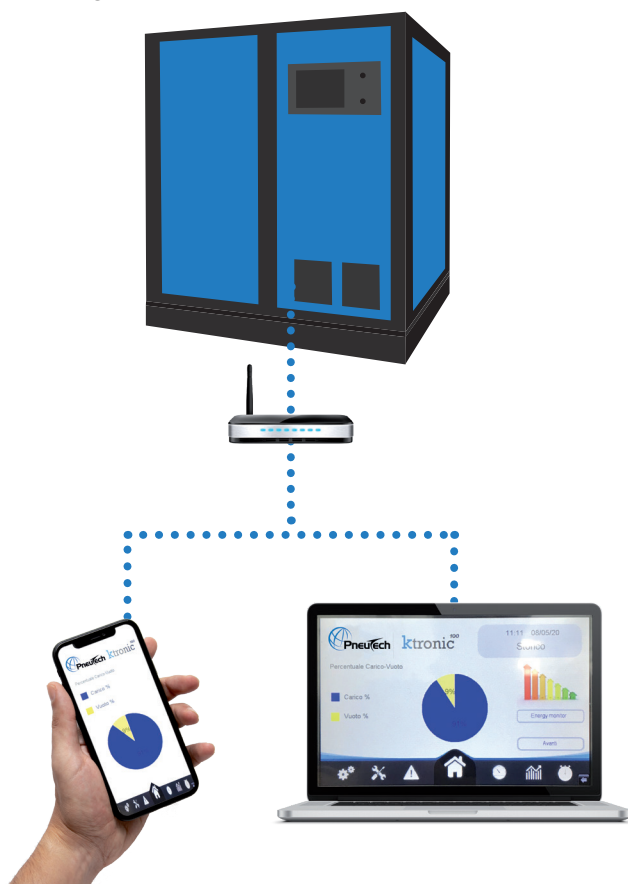


### Electronic Controller

The intuitive KTronic 1000 touch screen panel permits full access to the functions, parameter control and diagnostics of the unit, increasing the efficiency of the compressor.

## REMOTE CONTROL & CONNECTIVITY ALWAYS WITH YOU

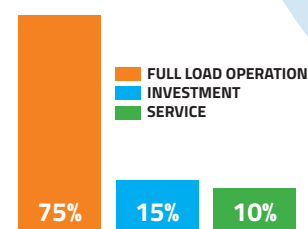
The RKHD Series can be connected to a LAN allowing the compressor to be monitored and managed from a remote PC or a SMARTPHONE.



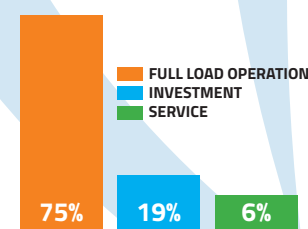
## ENERGY SAVING COMPARISON BETWEEN A VSD AND A FIXED SPEED UNIT (LOAD-UNLOAD) UNIT

The VSD unit allows the compressor to be very flexible and efficient in responding to changes in air demand. The required air demand is fulfilled through the inverter that constantly adjusts the speed of the electric motor. The real air flow and pressure values are constantly monitored through the electronic controller to guarantee the attainment of the pre-set values. The variable speed units guarantees more flexibility, lower energy consumption and less mechanical stress compared to the load/unload (on/off) version. The VSD unit setting can force the standby mode when the inverter has reached the lowest rotation speed.

**FIX SPEED ROTARY SCREW COMPRESSOR TO 75% AT FULL LOAD**



**VARIABLE SPEED ROTARY SCREW COMPRESSOR TO 75% AT FULL LOAD**



## Technical Specifications - RKHD Fixed Speed Single Stage

Model	Power HP	Pressure		Air Flow (ISO1217) CFM	Outlet Dimension DN	Noise Level dB[A]	Dimensions (mm)	Weight (kgs)
		PSI	BAR					
RKHD-50F	50	116	8	219	51mm	67	1951 x 1204 x 1593	1020
		145	10	194				
		190	13	177				
RKHD-60F	60	116	8	265	51mm	68	1951 x 1204 x 1593	1080
		145	10	250				
		190	13	219				
RKHD-75F	75	116	8	346	51mm	70	1951 x 1204 x 1593	1180
		145	10	296				
		190	13	254				
RKHD-100F	100	116	8	448	51mm	74	2093 x 1521 x 1956	2150
		145	10	392				
		190	13	335				
RKHD-125F	125	116	8	558	76mm	76	2093 x 1521 x 1956	2446
		145	10	456				
		190	13	410				
RKHD-150F	150	116	8	675	76mm	76	2982 x 1852 x 2019	3199
		145	10	540				
		190	13	470				
RKHD-180F	180	116	8	770	102mm	78	3282 x 1880 x 2121	3601
		145	10	664				
		190	13	547				
RKHD-220F	220	116	8	908	102mm	78	3282 x 1880 x 2121	3900
		145	10	855				
		190	13	717				
RKHD-270F	270	116	8	1105	102mm	78	3449 x 1999 x 2151	5000
		145	10	1028				
		190	13	805				
RKHD-340F	340	116	8	1455	102mm Flange	78	4001 x 2151 x 2250	7000
		145	10	1314				
		190	13	1112				
RKHD-420F	420	116	8	1840	102mm Flange	78	4001 x 2151 x 2250	7600
		145	10	1660				
		190	13	1353				

### RKHD :

Direct Drive  
Single Stage  
Fixed Speed  
IE3 Asynchronous Motor

1. The above technical parameters are based on ISO1217.
2. Different voltages are available upon request.
3. Water-cooled units are available.
4. If you need other power models, please contact the sales team.
5. PneuTech holds the right to modify the mechanical layout and the technical specifications.
6. All noise levels are calculated in ducted conditions.

## Technical Specifications - RKHD Variable Speed Single Stage

Model	Power HP	Pressure PSI BAR		Air Flow (ISO1217) CFM	Outlet Dimension DN	Noise Level dB[A]	Dimensions (mm)	Weight (kgs)
RKHD-100VSD	100	116	8	127 - 434	51mm	74	2093 x 1521 x 1956	2200
		145	10	138 - 396				
		190	13	134 - 321				
RKHD-125VSD	125	116	8	187 - 569	76mm	76	2093 x 1521 x 1956	2449
		145	10	148 - 477				
		190	13	145 - 424				
RKHD-150VSD	150	116	8	230 - 682	76mm	76	2982 x 1852 x 2022	3200
		145	10	180 - 554				
		190	13	180 - 487				
RKHD-180VSD	180	116	8	265 - 791	102mm	78	3282 x 1880 x 2121	3500
		145	10	226 - 689				
		190	13	180 - 569				
RKHD-220VSD	220	116	8	321 - 915	102mm	78	3282 x 1880 x 2121	3900
		145	10	297 - 848				
		190	13	254 - 738				
RKHD-270VSD	270	116	8	396 - 1134	102mm	78	3449 x 1999 x 2151	4900
		145	10	364 - 1042				
		190	13	290 - 823				
RKHD-340VSD	340	116	8	516 - 1476	102mmFlange	78	4001 x 2151 x 2250	7000
		145	10	466 - 1331				
		190	13	473 - 1148				
RKHD-420VSD	420	116	8	646 - 1847	102mmFlange	78	4001 x 2151 x 2250	7800
		145	10	583 - 1663				
		190	13	487 - 1388				

### RKHD-VSD:

Direct Drive  
Single Stage  
Variable Speed  
PM permanent magnet motor  
SM IE3 Asynchronous Motor

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## 10 Year Pneu-Assure Warranty

Industry-Leading Peace-of-Mind

✓ **10 Year Air-End Warranty\***  
Includes Parts & Labor

✓ **5 Year Warranty on Major Components\***  
Oil Sump Tank  
Electric Motor(s)  
Air Cooler  
Oil Cooler  
VSD Unit

Warranty subject to change based on region and distributor's agreement.  
\* 10 Year Warranty on Air-End and 5 Year Warranty on Major Components requires the use of Genuine PneuTech Parts & Compressor Oil

✓ **1 Year Warranty on the Entire Unit**  
Regular maintenance NOT included

✓ **Guaranteed Support**  
From Your Certified Distributor

✓ **Technical Expertise**  
Industry-leading knowledge & experience

## Why PneuTech?

**You** are the **#1** priority when you partner with PneuTech.

**Your** goals are our goals - because your success is our success.

**Your** experience is superior when partnering with PneuTech because of quality products and personal service.

*You want **efficiency, reliability and versatility** when sourcing compressed air equipment - that's what we strive for.*



United States  
United Kingdom  
Australia  
New Zealand

# Our Mission Statement

Using our combined industry experience, we provide knowledge, support, and superior products to compressed air distributors across the globe.

We are committed to producing positive results through being trustworthy, ethical, and accessible.

We are founded in the beliefs that through working together we can continue to transform the industry, while rising to turn challenges into opportunities.



United States | Australia  
United Kingdom | New Zealand

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