

Atlas Copco

Oil-free Centrifugal Compressors



ZH 10000-15000/5000-9000



Atlas Copco

Highly Efficient and Re

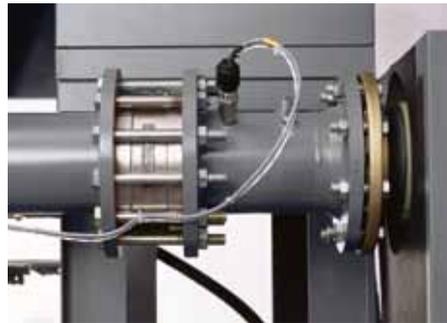


Minimized Energy Cost Dedicated Elektronikon Controller

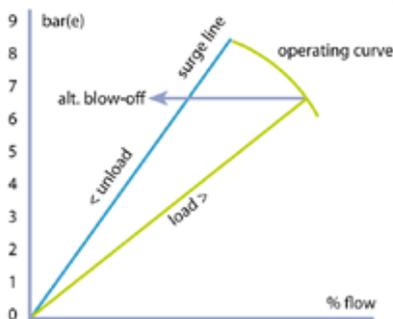
- based on PLC technology
- powerful, reliable and simple to operate
- Connectivity Modbus, Profibus, ES (Ultimate central controller)

Intergrated discharge no-return vavle

- high quality, anti-erosion
- metal to metal sealing, low pressure drop



Adjustable discharge valve designed for constant pressure



Automatic dual control for varied flow to achieve effecient energy-saving.



Inter- and after coolers High Quality

- Straight tubes for easy cleaning (rodable)
- Water-in-tube; aluminum fins for better heat dissipation
- Stainless steel tubes & end plates for higher corrosion resistance



liable Standard ZH Units

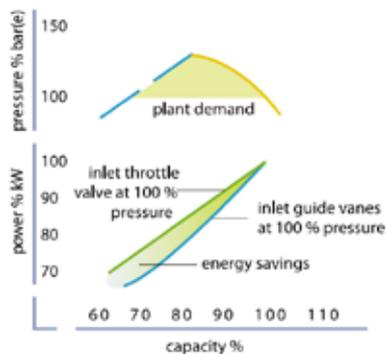
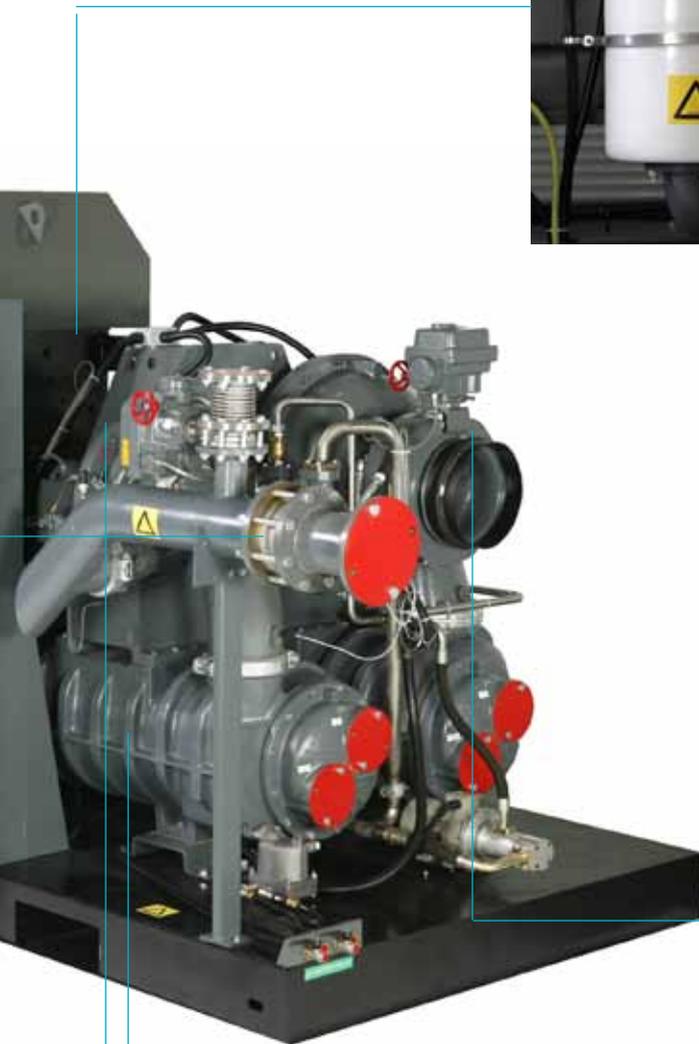
Designed for easy maintenance Motor-driven Demister

- No external air
- No fumes leaking to atmosphere

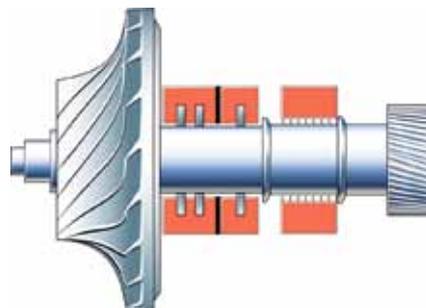


High speed rotors

- Individually balanced before assembly (overspeed test at 115%)
- Micro-spline impeller/pinion attachment
- Perfect positioning no risk of metal tearing
- Proven design up to 10,000 kW
- Easy dismantling and re-assembly



Inlet regulating wheel is quite useful for energy-saving during part load (air demand reduced or environment temperature lower than set value)



State-of-the-art impellers

- Backward lean impeller design
- Greater operating flexibility with turndown range up to 35%
- combination with IGV's for highest efficiency and power savings at partial load

Carbon Ring Air Seal Labyrinth Oil Seal

- Patented combination
- No external air
- Minimal losses





Complete safety

Process, products and environment are safeguarded from contamination. The first air compressors TÜV-certified as “oil-free” (ISO 8573-1 CLASS 0).

CLASS 0 means:

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

Excellence by design

- Two and three-stage models
- Small footprint for installation flexibility
- Low energy consumption – at full and partial load
- High reliability and peace-of-mind
- Low maintenance cost and service friendly design
- Environmentally friendly design
- Completely oil-free – no risk of oil contamination
- No startup or seal air required
- No instrument air required
- Uncompromised quality in base standard scope (e.g. inlet guide vanes, premium stainless steel coolers)

Options

Options	ZH 7000-15000	ZH 4000-9000
ANSI Connection	✓	✓
Loose Blow-off silencer	✓	✓
Loose after cooler	✓	✓
Dual oil filter	✓	✓
Export Seaworthy Packing	✓	✓
BOV compensator	✓	✓

Technical Specifications ZH 7000-15000/4000-9000

50 Hz	Free air delivery ⁽¹⁾ m ³ /hr	Installed motor ⁽²⁾ kW	Weight ⁽³⁾ kg	Dimensions mm		
				A	B	C
Three-stage, watercooled						
ZH 10000	5200 to 11800	630 to 1120	14570	2110	3950	2520
ZH 15000	8000 to 18000	1000 to 1850	18310	2260	4600	2650
Two-stage, watercooled						
ZH 10000	5200 to 11800	500 to 710	11640	2110	3950	2520
ZH 15000	8000 to 18000	710 to 1250	12350	2260	4600	2650

60 Hz	Free air delivery ⁽¹⁾ cfm	Installed motor ⁽²⁾ hp	Weight ⁽³⁾ kg	Dimensions mm		
				A	B	C
Three-stage, watercooled						
ZH 6000	3050 to 7000	800 to 1500	14570	2110	3950	2520
ZH 9000	4700 to 10600	1250 to 2250	18310	2260	4600	2650
Two-stage, watercooled						
ZH 6000	3050 to 7000	600 to 900	11640	2110	3950	2520
ZH 9000	4700 to 10600	900 to 1500	12350	2260	4600	2650

(1) Reference conditions:

- barometric pressure: 1 bar(a) / 14.5 psia
- air intake temperature: 35 °C / 95 °F
- relative humidity: 60 %
- cooling water inlet temperature: 26.7 °C / 80 °F

(2) Depending on pressure variant

(3) Typical ODP/IP23 motor

Sound pressure level:

Acc. to ISO 2151:2004 and using ISO 9614-2

Depending on model:

- 80 to 85 dB(A)

