

Oil-free rotary screw compressors

ZR/ZT 55-90 (VSD/FF)

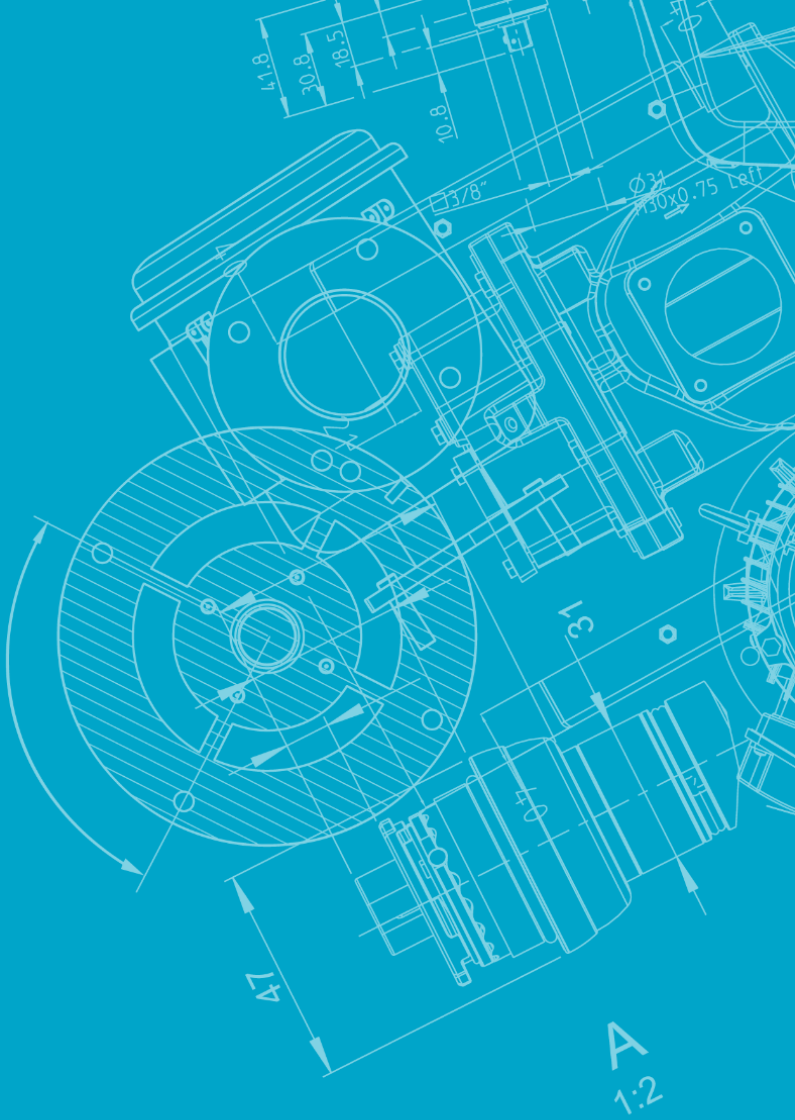


Table of contents

3 Introduction

5 Air quality

6 Reliability

10 Efficiency

13 Smart AIR solutions

16 Services

18 Options

20 Flowchart

22 Technical specifications

Setting the standard in energy efficiency, safety and reliability

The shortest route to superior productivity is to minimize operational cost while maintaining an uninterrupted supply of the right quality of air. The Atlas Copco Z compressor series is focused on effectively saving energy, ensuring product safety – only oil-free machines exclude contamination risks for 100% – and guaranteeing the utmost reliability around the clock. And not just today, but day after day, year after year, with minimal maintenance cost, few service interventions and long overhaul intervals.



Pioneering oil-free air technology

The ISO 8573-1 CLASS 0 certification means zero risk of our products contaminating the compressed air. This means we won't damage your company's hard-won professional reputation due to oil contamination from our oil-free products.



Maximum energy efficiency

The ZR/ZT's superior oil-free screw elements provide the optimum combination of high Free Air Delivery (FAD) with the lowest energy consumption. Ample sized cooling, low pressure drops and an extremely efficient drive train result in the highest compressor package efficiency.



The most complete package

With the ZR/ZT compressor, Atlas Copco provides a superior solution without hidden costs. The totally integrated, ready-to-use package includes internal piping, coolers, motor, lubrication and control system. The Full Feature version even integrates an IMD adsorption dryer for an impeccable end product. Installation is fault-free, commissioning time is low and no external instrument air is required. You simply plug and run.



Lowest possible operating costs

Our aftermarket product portfolio is designed to add maximum value for our customers by ensuring the optimum availability and reliability of their compressed air equipment with the lowest possible operating costs.



Local service

We deliver a complete service guarantee through our extensive service organization, maintaining our position as leader in compressed air.



Having the right air quality protects your production

Compressed air is used in a wide variety of manufacturing and commercial operations. Air is generated from the ambient atmosphere around the compressor and typically would contain contaminants in the form of dust and water which are two naturally occurring impurities while a third impurity which is oil typically gets added to compressed air due to the compression process. Oil though can be avoided/eliminated by using our 100% oil-free compressors.





100% oil-free compressed air

For over 60 years Atlas Copco has pioneered the development of oil-free air technology. Resulting in the largest range of air compressors and blowers within our industry. Through continuous research and development, we achieved a new milestone, setting the standard for air purity as the first manufacturer to be awarded ISO 8573-1 CLASS 0 certification. CLASS 0 certification means zero risk of oil contamination from our products.

Air treatment

Untreated compressed air contains moisture and possibly dirt particles that can damage your air system and contaminate your end product. The resulting maintenance costs far exceed air treatment costs. Atlas Copco believes in effective prevention and provides a complete range of air treatment solutions to protect investments, equipment, production processes and end products.





Avoid downtime

Low quality air heightens the risk of corrosion, which can lower the life span of production equipment. The air treatment solutions produce clean air that enhances your system's reliability, avoiding costly downtime and production delays. Compressed air coming into contact with your final products should not affect their quality. Atlas Copco provides clean, dry air to protect your production and reputation in the market.

ISO 22000

ISO 22000 is a management system for food safety. Atlas Copco is among a few compressor manufacturers to have their oil free compressors and related dryers and filters certified for ISO 22000 by Lloyds Register Quality Assurance.

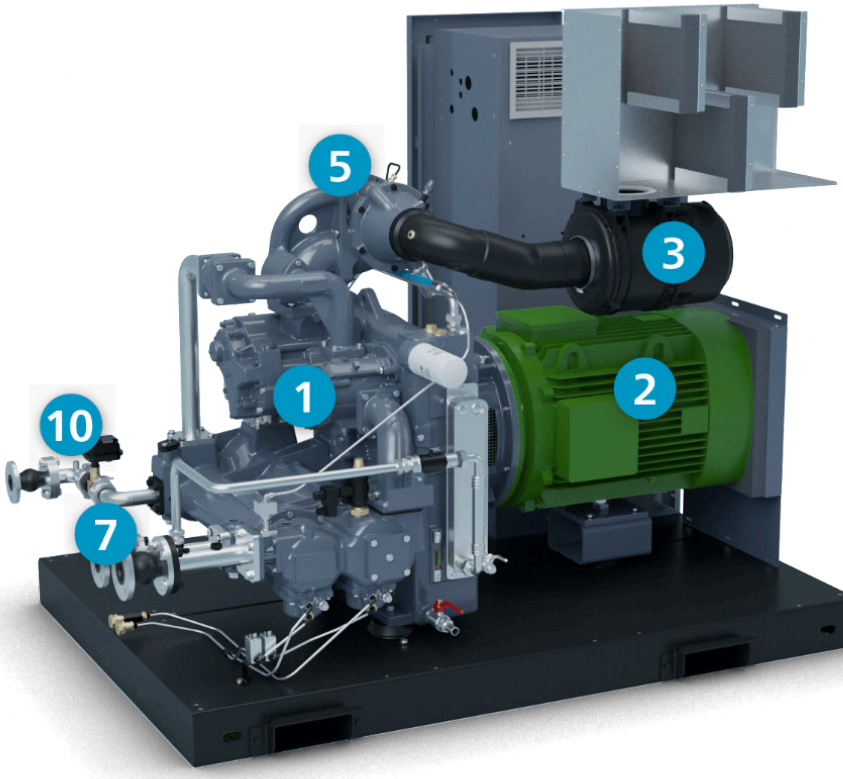
The highest reliability

ZR 90 VSD

LEFT VIEW



RIGHT VIEW



1 Oil-free air compressor elements (Class 0)

- Unique seal design guarantees certified oil-free air
- Superior coating for high durability
- Cooling jackets to ensure world class compression in different conditions

2 Main drive motor

- IP55 TEFC motor protects against dust, chemicals and humidity
- Continuous operation under severe ambient conditions

3 Efficient intake air filtration

- 2 stage dust removal system (99.9% for 3 micron)
- High grade protection of the compressor

4 Highly reliable coolers

- Compact design with low approach temperature
- Low thermal stresses ensure long lifetime
- Reliable water separation ensures low water carry over to downstream equipment
- Stainless steel water coolers designed for durability and easy serviceability

5 Reliable load/unload regulation

- No external air supply needed
- Mechanical interlock of inlet and blow-off valve
- Low unload power

6 Advanced touch screen monitoring system

- User friendly Elektronikon Touch with enhanced connectivity potential
- Integrated smart algorithms to protect equipment in harsh conditions
- Including warning indications, maintenance scheduling and online visualization of the machine's condition

7 Complete Plug-and-play package

- All in one solution: fault free installation, easy commissioning and quick start up
- Includes internal piping, coolers, motor, drive, lubrication and control system

8 Sound proof design

- Silenced canopy ensures optimal working conditions for everyone in the immediate environment
- Optimized internal ducting and integrated pulsation damper to reduce noise level

9 Ease of maintenance

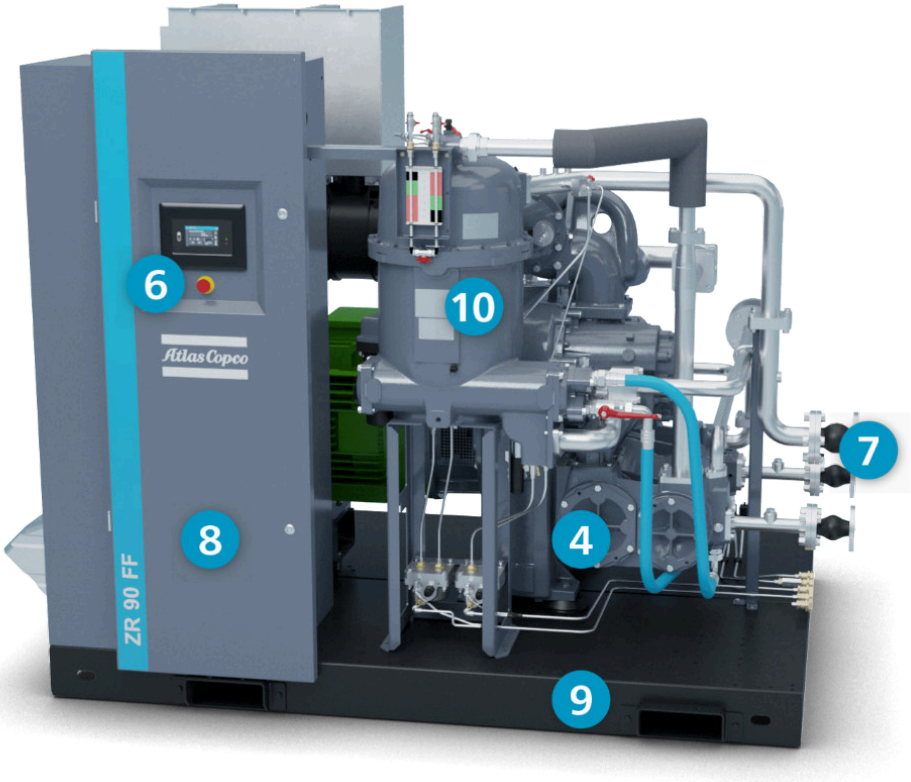
- Minimal service time with service parts grouped together for ease of access
- All components are designed for serviceability and longevity
- Optional service plans available to extend warranty

10 Smart Energy Recovery valve

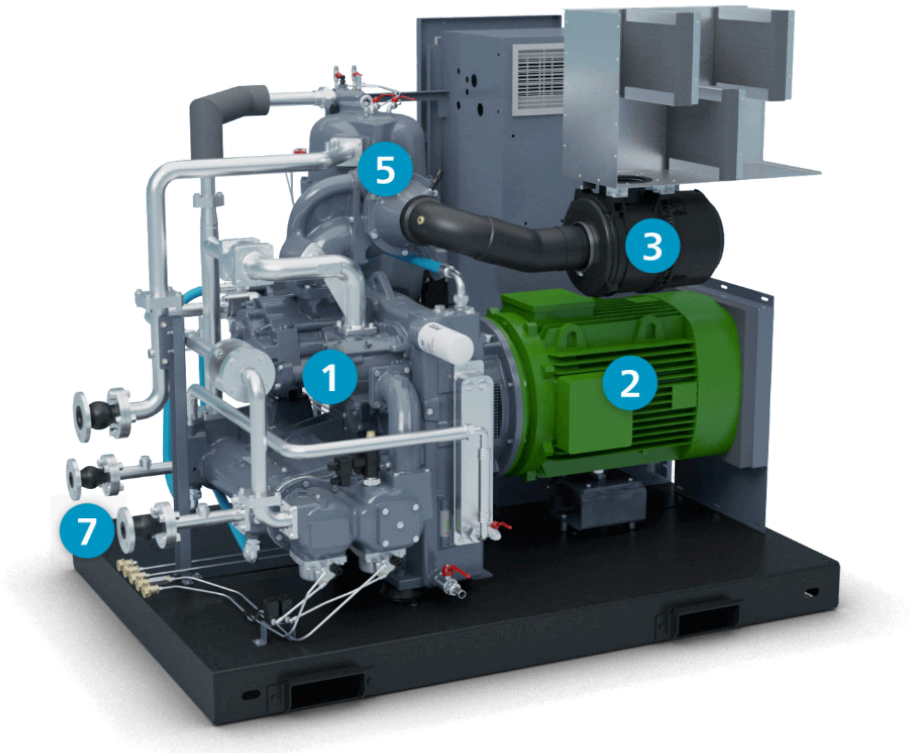
The Energy Recovery option on ZR has improved regulation to ensure stable water temperature at the required level for your processes.

ZR 90 VSD FF

LEFT VIEW



RIGHT VIEW



1 Oil-free air compressor elements (Class 0)

- Unique seal design guarantees certified oil-free air
- Superior coating for high durability
- Cooling jackets to ensure world class compression in different conditions

2 Main drive motor

- IP55 TEFC motor protects against dust, chemicals and humidity
- Continuous operation under severe ambient conditions

3 Efficient intake air filtration

- 2 stage dust removal system (99.9% for 3 micron)
- High grade protection of the compressor

4 Highly reliable coolers

- Compact design with low approach temperature
- Low thermal stresses ensure long lifetime
- Reliable water separation ensures low water carry over to downstream equipment
- Stainless steel water coolers designed for durability and easy serviceability

5 Reliable load/unload regulation

- No external air supply needed
- Mechanical interlock of inlet and blow-off valve
- Low unload power

6 Advanced touch screen monitoring system

- User friendly Elektronikon Touch with enhanced connectivity potential
- Integrated smart algorithms to protect equipment in harsh conditions
- Including warning indications, maintenance scheduling and online visualization of the machine's condition

7 Complete Plug-and-play package

- All in one solution: fault free installation, easy commissioning and quick start up
- Includes internal piping, coolers, motor, drive, lubrication and control system

8 Sound proof design

- Silenced canopy ensures optimal working conditions for everyone in the immediate environment
- Optimized internal ducting and integrated pulsation damper to reduce noise level

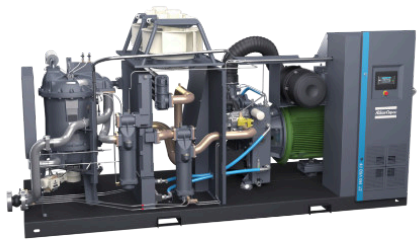
9 Ease of maintenance

- Minimal service time with service parts grouped together for ease of access
- All components are designed for serviceability and longevity
- Optional service plans available to extend warranty

10 Integrated dryer

With the ZR/ZT you have the option to include a dryer. IMD dryer with Silicone free rotor.

Design & control algorithms for optimal efficiency

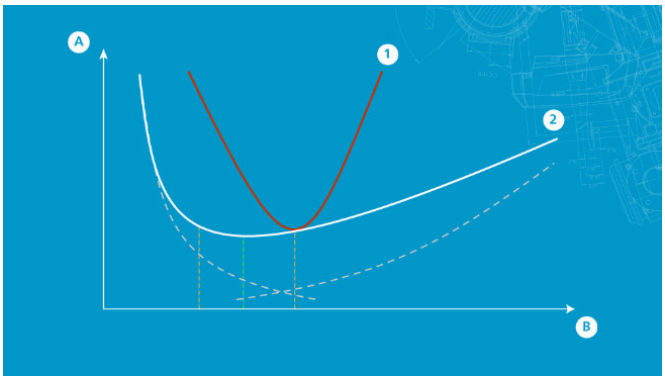


Components designed for efficiency

- Compressor elements with superior coating, optimized design and low loss bearings and seals ensure highest efficiency.
- Efficient intake filtration for minimum losses and low pressure drop.
- Coolers are designed for efficiency with low pressure drop and low air approach temperature, ensuring coolest possible running conditions.
- Our fixed speed machines come with IE4 super premium efficiency motors, giving you extra energy savings, every hour the machine runs.
- VSD machines are equipped with IE3 premium efficiency motors, in combination with our highly efficient in-house designed Neos frequency converter.
- With machines typically running 4000 to 8000 hours per year, again a major contributor to energy savings.

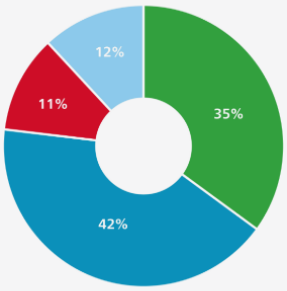
Lower energy costs with Atlas Copco's VSD technology

Over 80% of a compressor's lifecycle cost is taken up by the energy it consumes. Moreover, the generation of compressed air can account for more than 40% of a plant's total electricity bill. To cut your energy costs, Atlas Copco pioneered Variable Speed Drive (VSD) technology in the compressed air industry. VSD leads to major energy savings, while protecting the environment for future generations. Thanks to continual investments in this technology, Atlas Copco offers the widest range of integrated VSD compressors on the market.



Legend

A = Losses
B = Speed
1 = Total losses traditional element
2 = Total losses Atlas Copco element



Up to 35% energy savings

Atlas Copco's VSD technology closely follows the air demand by automatically adjusting the motor speed. This results in large energy savings of up to 35%. The Life Cycle Cost of a compressor can be cut by an average of 22%. In addition, lowered system pressure with VSD minimizes energy use across your production dramatically.

Legend

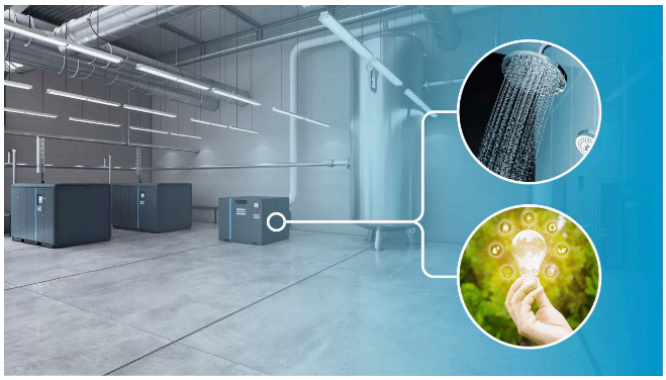
42% = Energy
35% = Energy savings with VSD
12% = Investment
11% = Maintenance

Monitor your compressed air installation with **SMART**LINK

Knowing the status of your compressed air equipment at all times is the surest way to achieve optimal efficiency and maximum availability.

Go for energy efficiency
Customized reports on the energy efficiency of your compressor room.
Increase uptime
All components are replaced on time, ensuring maximum uptime.
Save money
Early warnings avoid breakdowns and production loss.





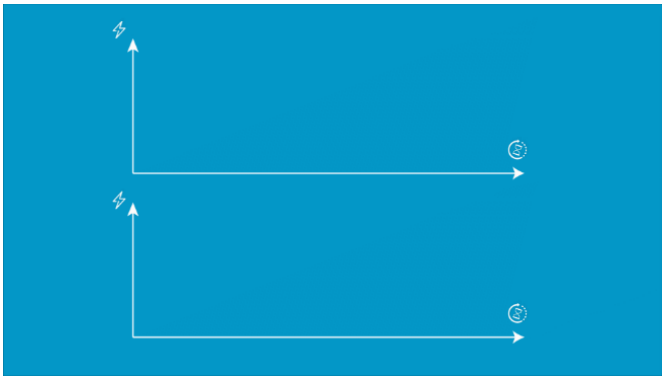
Energy Recovery

You can turn your compressor into an energy source. Our ZR compressors equipped with Energy Recovery can help you achieve your goals in becoming carbon neutral. Compressed air is one of the most important utilities for the industry. It is also one of the largest consumers of energy. Up to 94% of the electrical energy is converted into compression heat. Without energy recovery, this heat is lost into the atmosphere via the cooling system and radiation. You can use hot water recovered from the compressed air system for sanitary purposes and space heating. But it is particularly suitable for process applications. Using the hot water as boiler pre-feed or directly in processes requiring 70 to 90°C can save you costly energy sources such as natural gas and heating oil.

Advanced control algorithms

The Elektronikon compressor monitoring system saves energy by using advanced control algorithms:

Delayed Second Stop (DSS): in traditional fixed speed machines (load/unload), when a compressor reaches the unload pressure, the machine will be kept running in unload for a fixed time, to prevent too frequent starting and causing the electrical motor to overheat. Our sophisticated Delayed Second Stop (DSS) will take the running conditions of the machine into account and will allow the machine to stop if no frequent motor starts preceded. This will generate major savings compared to traditional load/unload compressors.
Timer functions: stop your machines when no air is needed. Often, machines are kept running over night and during weekends, even if there is no need for compressed air during these times. The timer function on our compressors can easily fix this.
Dual pressure band: even if compressed air is needed during nights and weekends, often, the required pressure is lower during these times. Implementing a dual pressure band with lower settings during nights and weekends will save loads of energy.







Dual set-point and automatic stop

Most production processes create fluctuating levels of demand which, in turn, can create energy waste in low use periods. Using the Elektronikon® unit controller, you can manually or automatically switch between two different setpoints to optimize energy use and reduce costs at low use times. In addition, the sophisticated algorithm runs the drive motor only when needed. As the desired setpoint is maintained while the drive motor's run time is minimized, energy consumption is kept to a minimum.

Multiple machine control

Any installation with three or more machines will benefit from our advanced controller, the Optimizer 4.0. It will control your installation in a more efficient way than the individual machines with individual settings can.




Atlas Copco
ZT 160

Class-leading compressed air products

As a compressor is only one component in a compressed air system, true efficiency can only be achieved by looking at the bigger picture. Atlas Copco smart AIR solutions are complete systems optimized for energy performance, reliability, and output quality. They are based on a range of class-leading compressed air products, fully optimized to work better together for the most efficient and reliable combination of a compressor with our air and gas equipment.

The most efficient and reliable combination

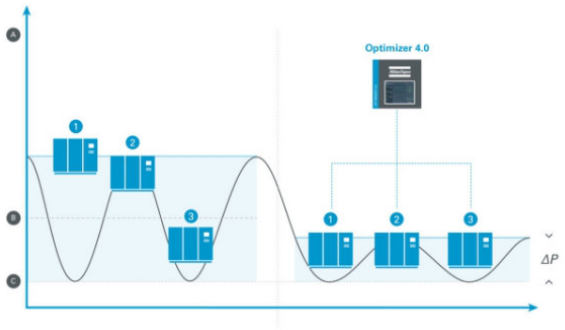
Atlas Copco smart AIR solutions can include dryers, filters, controllers, energy recovery systems, nitrogen or oxygen generators, air receivers, coolers, or boosters specified to your needs. If you have multiple compressors, the combination of machines is important for the efficiency of the complete system. And if you have three or more compressors, a central controller will allow smarter, more effective control than individual controllers.





1 Central controllers

Having a central controller reduces the average pressure band.It also reduces the operating pressure of your machines.
• By reducing the pressure by 1 bar (or 14.5 psi), your energy usage lowers by 7%.
• By reducing the pressure by 1 bar (or 14.5 psi) decreases air leakages by 13%.
Multiple embedded functions in the Optimizer 4.0 in which pressure, capacity and speed can be regulated.
Legend
A = Net pressure
B = Average pressure
C = Min. system pressure



2 Energy efficient and reliable compressors

All smart AIR solutions start with picking the correct components in the correct combination. Choosing energy efficient compressors, paying special attention to the mix of compressors will be a major contributor to a smart AIR solution. Our sound proof design contributes to a better working environment around the compressors. Our compressors have been designed with maintenance in mind, reducing the downtime of machines and improving availability of compressed air.

3 Variable Speed Drive (VSD) compressors

Compressed air demand of most applications varies widely. Adding one or multiple VSD compressors to the installation will greatly help to improve energy efficiency of the total installation, stability of compressed air pressure and reliability, thanks to more stable regime of each machine.

4 Ventilation

Compressors generate heat. Adequate evacuation of this heat will ensure favorable working conditions for compressors and dryers alike.

5 Air receiver

Even with a Variable Speed Drive compressor, having an appropriately sized buffer tank for compressed air will help smoothening the variation in demand and allow compressors to work in more stable operating conditions, thus helping both energy efficiency and reliability.

6 Compressed air dryers

The correct choice of dryer technology corresponding to the compressed air quality requirements is detrimental to a reliable and energy efficient compressed air installation.
The choice for integrated dryers – our full feature concept – will have additional benefits, reducing installation cost, time and complexity, having dryers controlled together with the compressors, reducing connecting pipes, hence the chance of leakages and extra pressure drops. And look at the major space saving full feature machines can bring.
Smart AIR solutions have impact on every aspect of your compressed air installation.

7 Compressed air filters

Also the correct filter grade in correspondence with air quality requirements will be an important contributor in a smart AIR solution. This goes hand in hand with correct maintenance of the filters, as incorrectly maintained filters will jeopardize both the reliability of your installation as the energy efficiency.

Easy maintenance and low ownership costs

By taking proper care of your air compressor, you will reduce running costs and avoid the risk of unplanned breakdowns or production stops. Atlas Copco offers energy efficiency checks, service, repairs, spare parts, and maintenance plans for all air compressors to keep your business running smoothly.

Complete compressor care with our Total Responsibility Plan

We take care of all your compressor maintenance, upgrades, repairs and even breakdowns for an all-inclusive price.

Complete compressor care
On-time maintenance by expert service engineers, genuine parts, proactive upgrades and compressor overhauls.

Total risk coverage
This means we take care of all your compressor repairs and even breakdowns, without extra charges.

Ultimate efficiency
Fitting the latest drive line components gives you as-new levels of compressor efficiency and reliability.





Audit your compressed air installation with AIRScan

AIRScan offers a reliable analysis and well-founded recommendations to improve your energy efficiency.

Go for energy efficiency
AIRScan offers a reliable analysis and actionable insights for energy efficiency improvements.

Save energy: up to 30 % of your costs
Our unique compressor audit software simulates various configurations of your compressed air installation. This allows us to provide realistic projections on potential energy savings.

Clear report
An AIRScan report provides a summary for decision makers, as well as an in-depth evaluation of problems and solutions for your technicians.

AIRnet

AIRnet is a piping solution that guarantees operational excellence for compressed air, vacuum, nitrogen and other inert gas applications. Available in aluminium and stainless steel.

Fast, easy and reliable

AIRnet Aluminium is the most effective solution for your air or gas network. Its fast and easy installation gets your operations up and running in record time. AIRnet is leak-proof and corrosion-free. Its pipes and fittings come with a 10-year warranty.

Safe, solid and clean

AIRnet Stainless Steel piping system ensures 100% oil free air delivery from the generation to the point of use, in compliance with the highest quality standards.



Optimize your system

With the ZR/ZT, Atlas Copco provides an all-in-one standard package incorporating the latest technology in a built to-last design. To further optimize your ZR/ZT's performance or to simply tailor it to your specific production environment, optional features are available.

	ZR/ZT 55-90 (VSD)
Monitoring & Protection bundle (Anti-Condensation heaters / Monitoring & Protection bundle (Anti-Condensation heaters / SPM equipment / PT 1000 in the windings & bearings)	•
Integrated SMARTLINK	•
Kit for purge of dry air during standstill	•
Silicone-free rotor for dryer	Standard scope
Anchor pads	•
Wooden case protection packaging	•
High ambient temperature version*	•
Test certificate	•
Witnessed performance test	•
IT Network (VSD)	•
Energy recovery	•
Teflon free	•
MD heater	•
Hot air	•
Water shutoff valve	•

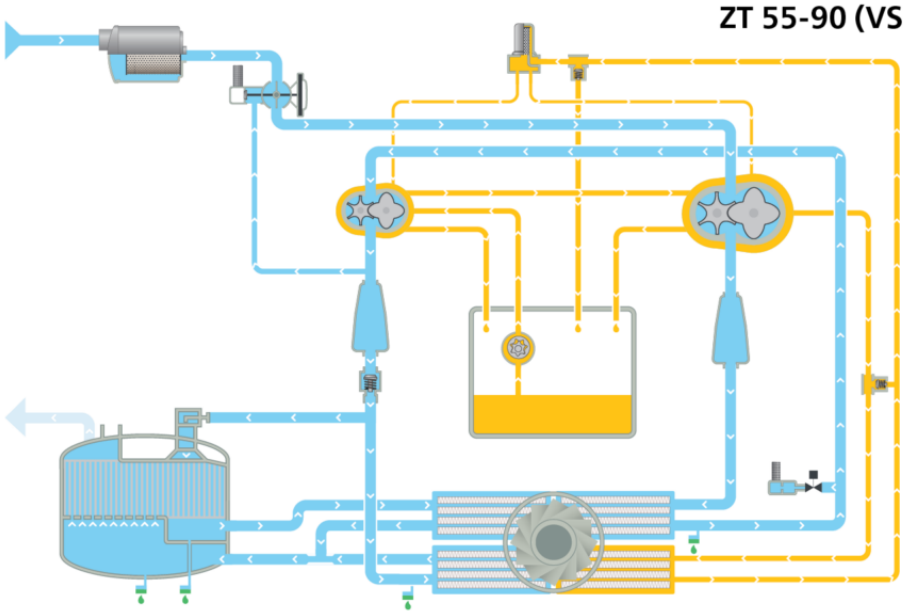


• Optional
** Maximum intake/cooling air temperature is 50°C/122 °F for HAT versions. Please note the availability of the option depends on the chosen configuration.*

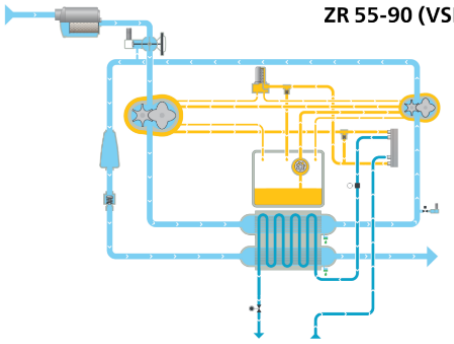


Process, oil and cooling flows – a step by step guide

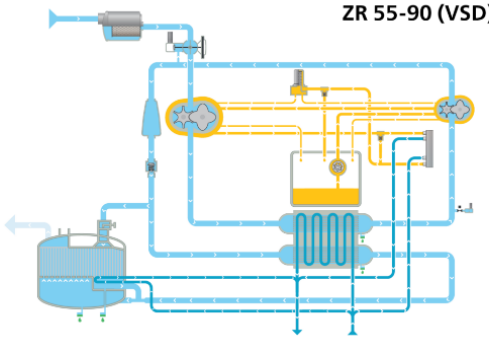
ZT 55-90 (VSD) FF



ZR 55-90 (VSD)



ZR 55-90 (VSD) FF



1. Filtration & first compression

The light blue flow represents the air. Air is drawn into the compressor through the inlet filter where the air is cleaned. Then passes through the throttle valve with integrated blow off valve that takes care of the load unload regulation. In the first compression stage the air pressure is raised to the intermediate pressure after which the air is cooled down in the inter-cooler.

2. Cooling & second compression

After the inter-cooler the air passes through a moisture separation system before entering the high pressure stage. In the high pressure stage the pressure is brought to the final pressure.

3. Cooling & drying

The air at the outlet of the high pressure stage is split in two parts. One part goes via the pulsation damper with integrated check valve to the after-cooler where it is cooled down and moisture is separated and evacuated. A second part goes directly to the regeneration area of the heat compression MD dryer.

In the regeneration area of the dryer the hot air regenerates the adsorption drum after which it passes through the regeneration cooler where it is cooled down and moisture is separated and evacuated. The cold air coming from the regeneration section is then mixed with the cold air from the after-cooler in the nozzle-ejector system before passing through the drying section of the adsorption drum where the moisture is removed. Dry air leaves the compressor through the outlet connection flanges.

4. Oil flow

The yellow flow is the oil path within the compressor where the oil pump sucks oil from the oil sump and pumps it through the oil cooler and a high efficiency filter to give cool clean oil to the bearings and the gears; then the oil flows back to the gear casing.

ZR 55-90 (FF)

50 Hz

Type	Working pressure (1)		Free Air Delivery (2)		Installed motor power (3)	Noise level (4)
		bar(e)	l/s	m^3/min	kW	dB(A)
ZR 55	Minimum	7.5	169.9	10.2	55	71
	Effective	8.6	156.3	9.4		
	Maximum	10	140.7	8.4		74
ZR 75	Minimum	7.5	224.6	13.5	75	69
	Effective	8.6	214.7	12.9		
	Maximum	10	204.8	12.3		74
ZR 90	Minimum	7.5	267.2	16.0	90	72
	Effective	8.6	250.7	15.0		
	Maximum	10	263.4	14.2		74

50 Hz

Type	Working pressure (1)		Free Air Delivery (2)		Installed motor power (3)	Noise level (4)
		psig	l/s	cfm	hp	dB(A)
ZR 55	Minimum	100	169.9	360.2	75	71
	Effective	125	156.3	332.0		
	Maximum	145	140.7	296.6		74
ZR 75	Minimum	100	224.6	476.7	100	69
	Effective	125	214.7	455.6		
	Maximum	145	204.8	434.4		74
ZR 90	Minimum	100	267.2	565.0	120	72
	Effective	125	250.7	529.7		
	Maximum	145	263.4	501.5		74

60 Hz

Type	Working pressure (1)		Free Air Delivery (2)		Installed motor power (3)	Noise level (4)
		bar(e)	l/s	m^3/min	kW	dB(A)
ZR 55	Effective	8.6	161.7	9.7	55	70
	Maximum	10	142.7	8.6		74
ZR 75	Effective	8.6	226.1	13.6	75	70
	Maximum	10	200.3	12.0		74
ZR 90	Effective	8.6	262.1	15.7	90	71
	Maximum	10	240.8	14.5		74

60 Hz

Type	Working pressure (1)		Free Air Delivery (2)		Installed motor power (3)	Noise level (4)
		psig	l/s	cfm	hp	dB(A)
ZR 55	Effective	125	161.7	342.6	75	70
	Maximum	150	142.7	303.7		74
ZR 75	Effective	125	226.1	480.3	100	70
	Maximum	150	200.3	423.8		74
ZR 90	Effective	125	262.1	554.4	120	71
	Maximum	150	240.8	512.1		74

ZR 75-90 VSD (FF)

Type	Working pressure (1)		Free Air Delivery (2)		Installed motor power (3)	Noise level (4)
		bar(e)	l/s	m^3/min	kW	dB(A)
ZR 75 VSD – 8.6	Minimum	4	75.6 – 239.5	4.6 – 14.4	75	70
	Effective	7	74.7 – 229.4	4.48 – 13.8		
	Maximum	8.6	74.1 – 208.6	4.4 – 12.5		
ZR 75 VSD – 10.4	Minimum	4	82.6 – 239.2	4.3 – 14.35		74
	Effective	9	81.7 – 202.9	5.0 – 12.2		
	Maximum	10.4	81.3 – 184.6	4.9 – 11.1		
ZR 90 VSD – 8.6	Minimum	6	75.1 – 297.2	4.51 – 17.8	90	71
	Effective	7	74.1 – 282.5	4.4 – 16.9		
	Maximum	8.6	73.6 – 258.1	4.42 – 15.5		
ZR 90 VSD – 10.4	Minimum	6	76.5 – 292.9	4.6 – 17.6		74
	Effective	9	75.5 – 250.5	4.53 – 15.0		
	Maximum	10.4	75.0 – 229.2	4.5 – 13.7		

Type	Working pressure (1)		Free Air Delivery (2)		Installed motor power (3)	Noise level (4)
		psig	l/s	cfm	hp	dB(A)
ZR 75 VSD – 8.6	Minimum	58	75.6 – 239.5	160.2 – 507.5	100	70
	Effective	100	74.7 – 229.4	158.2 – 486.1		
	Maximum	125	74.1 – 208.6	157 – 442		
ZR 75 VSD – 10.4	Minimum	87	82.6 – 239.2	175 – 506.8		74
	Effective	130	81.7 – 202.9	173.1 – 429.9		
	Maximum	150	81.3 – 184.6	172.3 – 391.1		
ZR 90 VSD – 8.6	Minimum	58	75.1 – 297.2	159.1 – 629.7	120	71
	Effective	100	74.1 – 282.5	157 – 598.6		
	Maximum	125	73.6 – 258.1	155.9 – 546.9		
ZR 90 VSD – 10.4	Minimum	87	76.5 – 292.9	162.1 – 620.6		74
	Effective	130	75.5 – 250.5	160 – 530.8		
	Maximum	150	75.0 – 229.2	158.9 – 485.6		

ZT 55-90 (FF)

50 Hz

Type	Working pressure (1)		Free Air Delivery (2)		Installed motor power (3)	Noise level (4)
		bar(e)	l/s	m^3/min	kW	dB(A)
ZT 55	Minimum	7.5	166.3	10	55	76
	Effective	8.6	153.0	9.2		75
	Maximum	10	137.4	8.2		76
ZT 75	Minimum	7.5	221.2	13.3	75	78
	Effective	8.6	211.4	12.7		
	Maximum	10	201.5	12.1		74
ZT 90	Minimum	7.5	263.9	15.8	90	79
	Effective	8.6	247.4	14.8		77
	Maximum	10	233.0	14.0		79

50 Hz

Type	Working pressure (1)		Free Air Delivery (2)		Installed motor power (3)	Noise level (4)
		psig	l/s	cfm	hp	dB(A)
ZT 55	Minimum	100	166.3	352.4	75	76
	Effective	125	153.0	324.2		75
	Maximum	145	137.4	291.1		76
ZT 75	Minimum	100	221.2	468.7	100	78
	Effective	125	211.4	447.9		
	Maximum	145	201.5	427.0		74
ZT 90	Minimum	100	263.9	559.2	120	79
	Effective	125	247.4	524.2		77
	Maximum	145	233.0	493.7		79

60 Hz

Type	Working pressure (1)		Free Air Delivery (2)		Installed motor power (3)	Noise level (4)
		bar(e)	l/s	m^3/min	kW	dB(A)
ZT 55	Effective	8.6	158.4	9.5	55	77
	Maximum	10	139.3	8.4		79
ZT 75	Effective	8.6	222.8	13.4	75	
	Maximum	10	197.0	11.8		76
ZT 90	Effective	8.6	258.7	15.5	90	78
	Maximum	10	237.4	14.2		

60 Hz

Type	Working pressure (1)		Free Air Delivery (2)		Installed motor power (3)	Noise level (4)
		psig	l/s	cfm	hp	dB(A)
ZT 55	Effective	125	158.4	335.6	75	77
	Maximum	150	139.3	295.1		79
ZT 75	Effective	125	222.8	472.1	100	
	Maximum	150	197.0	417.4		76
ZT 90	Effective	125	258.7	548.1	120	78
	Maximum	150	237.4	503.0		

ZT 75-90 VSD (FF)

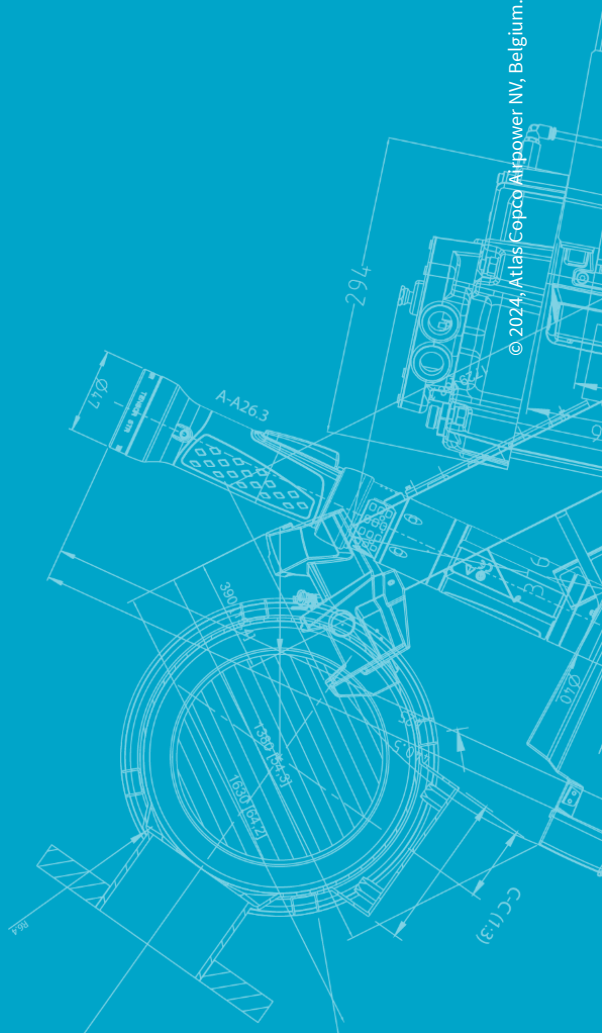
Type	Working pressure (1)		Free Air Delivery (2)		Installed motor power (3)	Noise level (4)
		bar(e)	l/s	m^3/min	kW	dB(A)
ZT 75 VSD – 8.6	Minimum	4	72.2 – 236.1	4.33 – 14.2	75	78
	Effective	7	71.2 – 226.0	4.27 – 13.6		
	Maximum	8.6	70.7 – 205.2	4.24 – 12.3		
ZT 75 VSD – 10.4	Minimum	6	79.2 – 235.8	4.8 – 14.1		76
	Effective	9	78.2 – 199.6	4.7 – 12.0		
	Maximum	10.4	77.8 – 181.3	4.67 – 10.9		
ZT 90 VSD – 8.6	Minimum	4	71.7 – 293.9	4.3 – 17.6	90	78
	Effective	7	70.6 – 279.1	4.24 – 16.7		
	Maximum	8.6	70.1 – 254.7	4.2 – 15.3		
ZT 90 VSD – 10.4	Minimum	6	73.0 – 289.5	4.4 – 17.4		77
	Effective	9	72.0 – 247.1	4.3 – 14.8		
	Maximum	10.4	71.5 – 225.7	4.29 – 13.5		

Type	Working pressure (1)		Free Air Delivery (2)		Installed motor power (3)	Noise level (4)
		psig	l/s	cfm	hp	dB(A)
ZT 75 VSD – 8.6	Minimum	58	72.2 – 236.1	153 – 500	100	78
	Effective	100	71.2 – 226.0	150.9 – 478.9		
	Maximum	125	70.7 – 205.2	149.8 – 434.8		
ZT 75 VSD – 10.4	Minimum	87	79.2 – 235.8	167.8 – 499.6		76
	Effective	130	78.2 – 199.6	165.7 – 422.6		
	Maximum	150	77.8 – 181.3	164.8 – 384.1		
ZT 90 VSD – 8.6	Minimum	58	71.7 – 293.9	151.9 – 622.7	120	78
	Effective	100	70.6 – 279.1	149.6 – 591.4		
	Maximum	125	70.1 – 254.7	148.5 – 539.7		
ZT 90 VSD – 10.4	Minimum	87	73.0 – 289.5	154.7 – 613.4		77
	Effective	130	72.0 – 247.1	152.6 – 523.6		
	Maximum	150	71.5 – 225.7	151.5 – 478.2		

(1 + 2) Unit performance measured according to ISO 1217, Annex C & E, Edition 4 (2009). Reference conditions: relative humidity 0%, absolute inlet pressure: 1 bar (14.5 psi), intake air temperature: 20°C (68°F). Free Air Delivery (FAD) is measured at the following working pressures: 7.5 bar versions at 7 bar, 8.6 bar versions at 8 bar, 10 bar versions at 9.5 bar. For VSD at 7 bar. For the working pressure of the FF variant, please contact Atlas Copco.
(3) The installed motor power might deviate depending on the options, voltages and pressure variants.
(4) A-weighted emission sound pressure level at the work station (LpWSAd). Measured according to ISO 2151: 2008 using ISO 9614-2 (sound intensity scanning method). The added correction factor (+/- 3 dB(A)) is the total uncertainty value (KpAd) conform with the test code.

WWW.ATLASCOPCO.COM

Atlas Copco AB
(publ) SE-105 23 Stockholm, Sweden
Phone: +46 8 743 80 00
Reg. no: 556014-2720



© 2024, Atlas Copco Airpower NV, Belgium. All rights reserved. Designs and specifications are subject to change without notice or obligation. Read all safety instructions in the manual before usage.