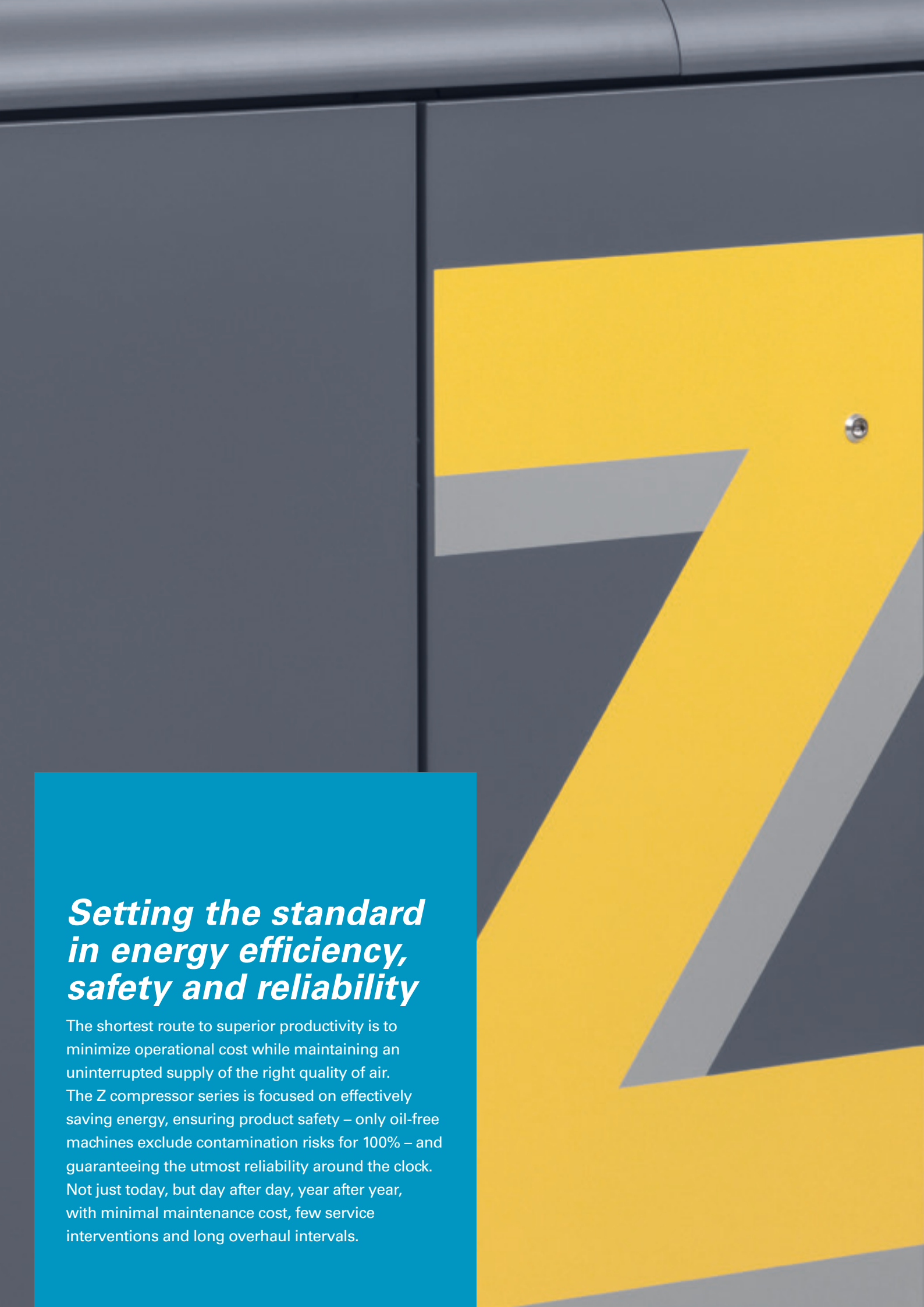
# *Oil-free rotary screw compressors*

ZR/ZT 55-90 (FF) & ZR/ZT 75-90 VSD (FF)

جهان کمپرسور
Jahan Compressor

Atlas Copco



## *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 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. Not just today, but day after day, year after year, with minimal maintenance cost, few service interventions and long overhaul intervals.

## Core technology

Atlas Copco masters each compression principle and offers the most energy efficient technology for the application. Fixed speed machines are efficient at full load but when air demand fluctuates, a Variable Speed Drive ensures substantial savings. The integrated adsorption dryer offers high quality dry air with the lowest pressure drop and uses the heat of the compressor for regeneration. Two features that lead to significant energy savings.

## Optimal use

Central control of a multi-compressor installation reduces vthe pressure band and achieves the lowest overall energy cost. Heat of compression can be recovered and put to good use in industrial processes like pre-heating of boiler feed water, heating of buildings etc.

## Oil-free compression

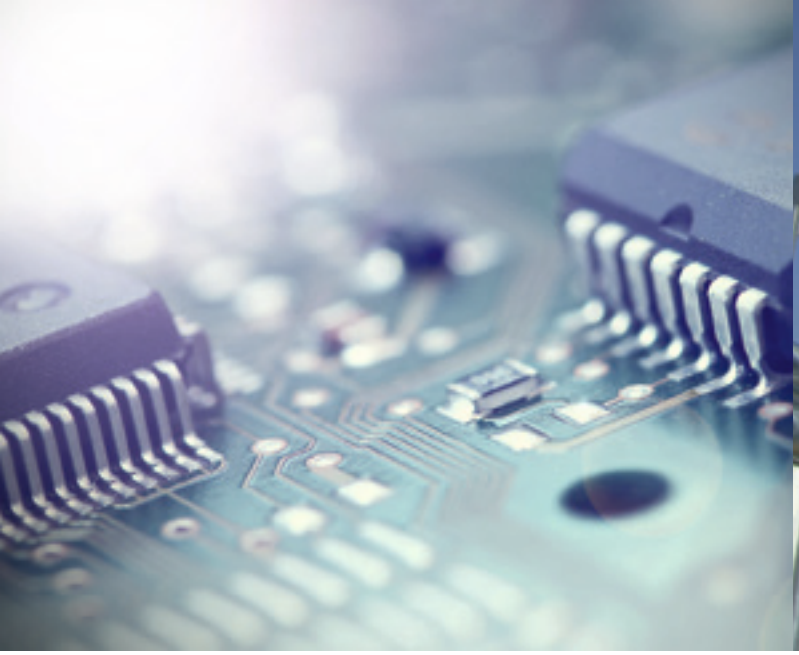
Our oil-free screw compressors have compressor chambers completely free of oil. This is possible because there is no metal contact between the precision cut rotors and hence no need for lubrication. Process, products and environment are safeguarded from contamination. The first air compressors TUV-certified as “oil-free” (ISO 8573-1 CLASS 0).

## The integrated design

Internal piping, high end design features, Variable Speed Drive, 100% matched components... the only way to ensure total reliability. Each machine is tested to ensure it meets specifications, complete security and no surprises. The ZR/ZT oil-free compressor is truly plug-and-play. Put it on a flat floor, connect the power line and the air outlet... and push the start button.

## Global presence - local service

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



# *100% certified oil-free air*

Atlas Copco is renowned for designing and manufacturing some of the most durable oil-free screw compressors. The ZR/ZT high-end rotary screw compressor comes out of this strong tradition. Ideal for industries where high-quality oil-free air is key, the ZR/ZT offers the highest reliability and safety in combination with extremely low energy costs.

## Food & beverage

- 100% pure, clean, oil-free air for all kinds of applications (e.g. fermentation, packaging, aeration, transportation, filling & capping, cleaning, instrument air).
- ISO 8573-1 CLASS 0 (2010) certification to avoid compromising the purity of your end product and ensure zero risk of contamination.

## Electronics

- Clean, dry, high-quality air is essential, produced with optimal energy efficiency.
- Applications include the removal of microscopic debris from the surfaces of computer chips and computer boards.

## Petrochemicals

- A dependable stream of 100% certified oil-free compressed air is crucial to keep the production up and running.
- Operation in extreme temperatures and humidity conditions where high performance levels and reliability are essential.

## Pharmaceuticals

- 100% oil-free air is vital to prevent contamination of processes (e.g. fermentation, aeration, tablet coating, packing and bottling, automated production lines).
- CLASS 0 eliminates risks and maintains high product quality and professional brand reputation.

# Class 0: the industry standard

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

## First in oil-free air technology

Over the past sixty years we have pioneered the development of oil-free air technology, resulting in a range of air compressors and blowers that provide 100% pure, clean air. Through continuous research and development, Atlas Copco achieved a new milestone, setting the standard for air purity as the first manufacturer to be awarded CLASS 0 certification.

## Eliminating any risk

As the industry leader committed to meeting the needs of the most demanding customers, we requested the renowned TÜV institute to type-test its range of oil-free compressors and blowers. Using the most rigorous testing methodologies available, all possible oil forms were measured across a range of temperatures and pressures. The TÜV found no traces of oil at all in the output air stream.

| CLASS | Concentration total oil (aerosol, liquid, vapor) mg/m³ |
|---|---|
| **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 |

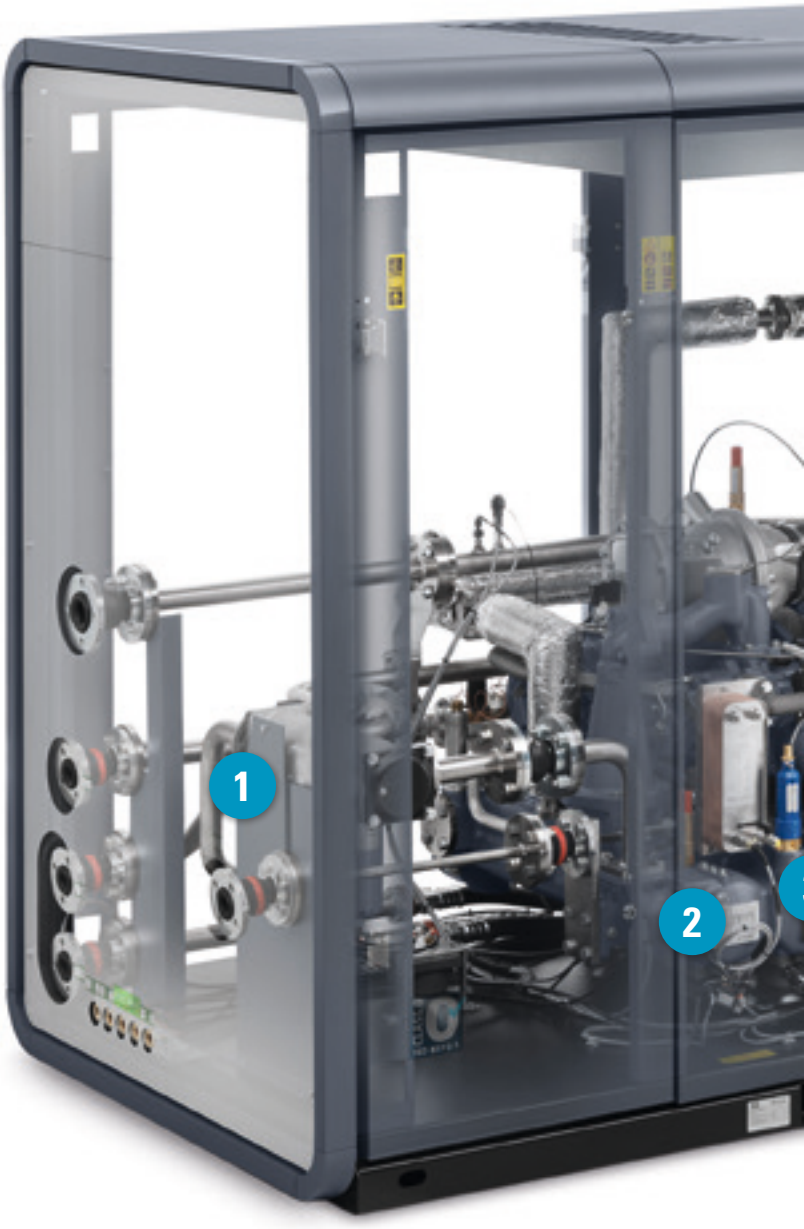
*Current ISO 8573-1 (2010) classes (the five main classes and the associated maximum concentration in total oil content).*

# *ZR (water-cooled) version: the full feature, compact, all-in-one solution*

1

## Energy recovery

- With our integrated energy recovery system, it is feasible to recover up to 90% of the power input as hot air or hot water.
- Important energy cost savings and a high return on investment through efficiency usage of the recovered energy.
- Applications: preheated boiler feed water for industrial processes, space heating by circulation in radiators or for showers and other industrial applications like dyeing textiles, operation of absorption chillers and others.




2

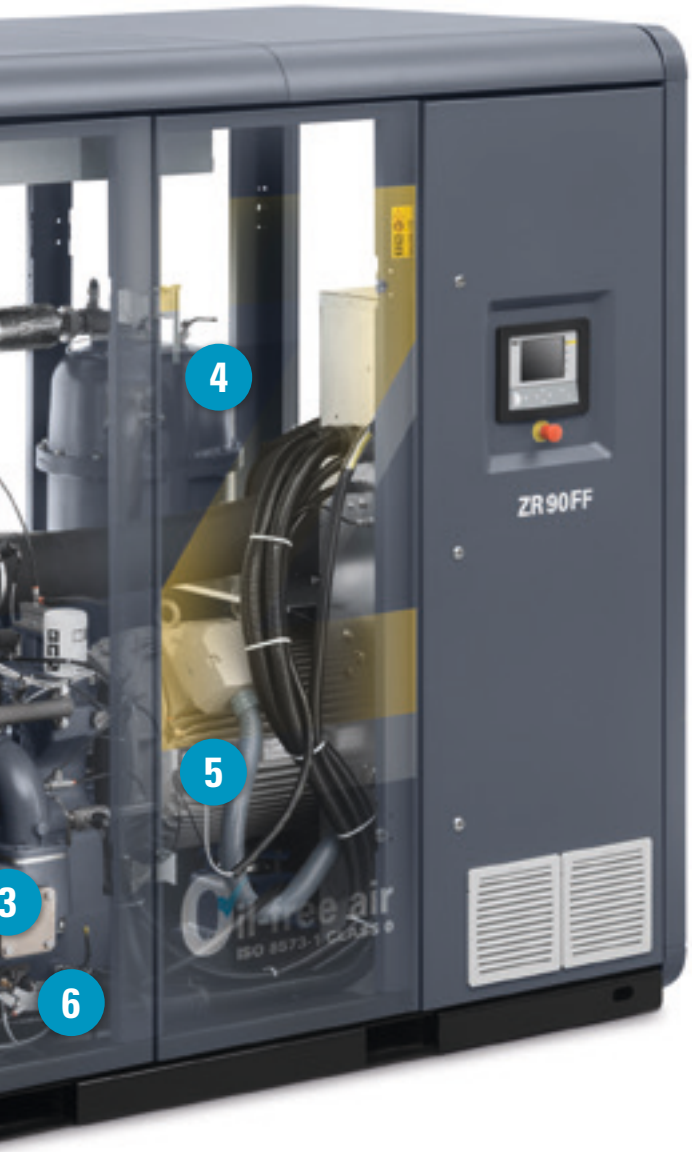
## Water separator

- The labyrinth design efficiently separates the condensate from the compressed air.
- Low moisture carry-over protects downstream equipment.
- Long high pressure element lifetime.
- Better dryer performance.

3

## Efficient & reliable water cooling (ZR)

- Corrosion resistant stainless steel tubing.
- Highly reliable robot welding; no risk of leaks.
- Aluminium star insert increases heat transfer.




4

## Full Feature

- Compact, all-in-one quality air solution.
- Integrated package offering the highest quality air at the lowest possible cost.
- IMD adsorption dryer:
  - Eliminates the moisture before it enters the air net, ensuring a reliable process and an impeccable end product.
  - No external energy is needed to dry the air, resulting in large savings in comparison to conventional dryers.
  - The pressure drop through the dryer is minimal, which again cuts down the operating cost.

5

## Totally enclosed motor

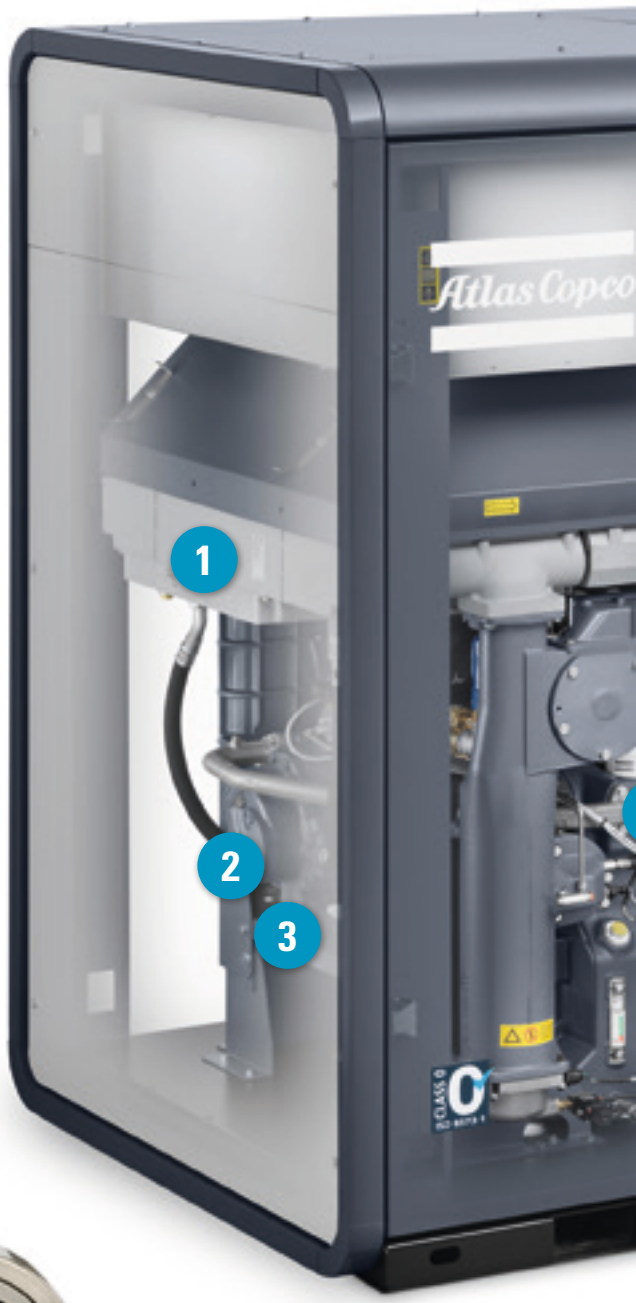
- IP55 TEFC protection against dust and humidity.
- Highly efficient fixed speed motor according to IE3 (equal to NEMA Premium).

6

## Effective electronic regulating drains

- Reliable solid state actuation, no loss of air.
- Alarm for malfunction on the Elektronikon® display.

# *ZT (air-cooled) version: superior design in every detail*




1

## High efficiency air cooling (ZT)

- Stainless steel pre-cooler with fins.
- Excellent heat transfer.
- Easy access for cleaning.
- Low noise + low energy radial cooling fans.

2

## World class oil-free compression element

- 100% oil-free rotary screw compression for high quality air.
- High overall efficiency thanks to superior rotor coating and element cooling jackets.

3

## Superior element bearings

- High stability under varying load conditions.

4

## Advanced Elektronikon® unit controller

- One integrated control system for compressor and dryer.
- Overall system performance status with pro-active service indications, alarms for malfunctions and safety shutdowns.
- Multi-language selectable display.
- Designed for interfacing with the ES system level control and integration into standard serial communication protocols.

5

## Integrated VSD

- Direct energy savings up to 35% with Variable Speed Drive (VSD) motor.
- Unload losses are reduced to a minimum.
- No blow-off of compressed air to the atmosphere.
- Full regulation between 30 to 100% of the maximum capacity.

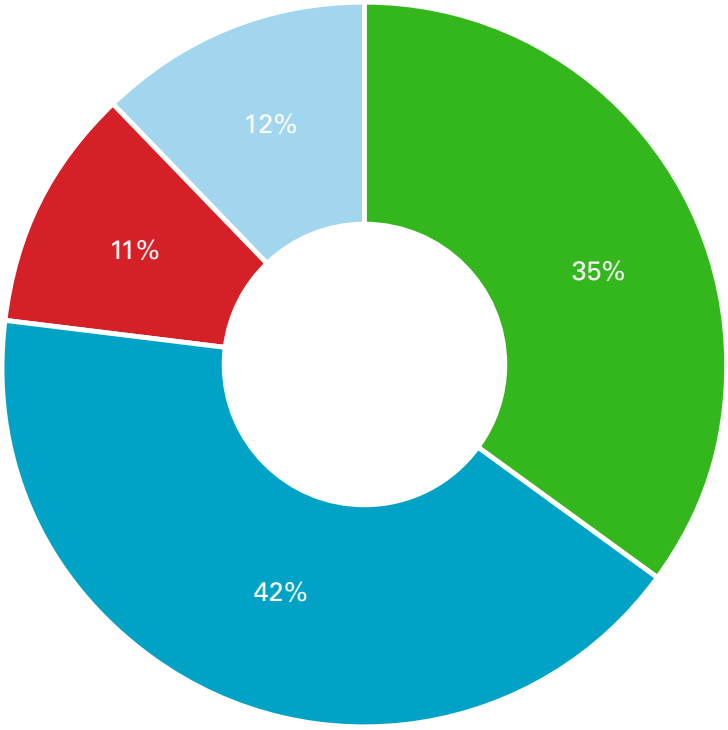
6

## AGMA A5/DIN Class 5 gears in the main drive

- Long lifetime.
- Low transmission losses, low noise and vibration.

# VSD: driving down energy costs

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, we offer the widest range of integrated VSD compressors on the market.




## Energy savings of up to 35%

Our 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.

## Total compressor lifecycle cost

- *Energy*
- *Investment*
- *Energy savings with VSD*
- *Maintenance*

## What is unique about the integrated Atlas Copco VSD?

1. The Elektronikon® controls both the compressor and the integrated converter, ensuring maximum machine safety within parameters.
2. Flexible pressure selection from 4 to 10.4 bar with VSD reduces electricity costs.
3. Specific converter and motor design (with protected bearings) for the highest efficiency across the speed range.
4. Electric motor specifically designed for low operating speeds with clear attention to motor cooling and compressor cooling requirements.
5. All our VSD compressors are EMC tested and certified. Compressor operation does not influence external sources and vice versa.
6. Mechanical enhancements ensure that all components operate below critical vibration levels throughout the entire compressor speed range.
7. A highly efficient frequency converter in a cubicle ensures stable operation in high ambient temperatures up to 50°C/122°F (standard up to 40°C/104°F).
8. No 'speed windows' that can jeopardize the energy savings and the stable net pressure. Turndown capability of the compressor is maximized to 70-75%.
9. Net pressure band is maintained within 0.10 bar, 1.5 psi.

# *Monitoring and control: how to get the most from the least*

The Elektronikon® unit controller is specially designed to maximize the performance of your compressors and air treatment equipment under a variety of conditions. Our solutions provide you with key benefits such as increased energy efficiency, lower energy consumption, reduced maintenance times and less stress… less stress for both you and your entire air system.

## Intelligence is part of the package

- High resolution color display gives you an easy to understand readout of the equipment's running conditions.
- Clear icons and intuitive navigation provides you fast access to all of the important settings and data.
- Monitoring of the equipment running conditions and maintenance status; bringing this information to your attention when needed.
- Operation of the equipment to deliver specifically and reliably to your compressed air needs.
- Built-in remote control and notifications functions provided as standard, including simple to use Ethernet based communication.
- Support for 31 different languages, including character based languages.

## Online & mobile monitoring

Monitor your compressors over the Ethernet with the new Elektronikon® controller. Monitoring features include warning indications, compressor shut-down and maintenance scheduling. An Atlas Copco App is available for iPhone/Android phones as well as iPad and Android tablets. It allows fingertip monitoring of your compressed air system through your own secured network.

## SMARTLINK*: Data Monitoring Program

- A remote monitoring system that helps you optimize your compressed air system and save you energy and cost.
- It offers you a complete insight in your compressed air network and anticipates on potential problems by warning you up-front.

**Please contact your local sales representative for more information.*

# Protect your compressed air system

A dry compressed air system is essential to maintain the reliability of production processes and the quality of the end products. Untreated air can cause corrosion in the pipe work, premature failure of pneumatic equipment and product spoilage.

## The Full Feature compressor: a compact, all-in-one quality air solution

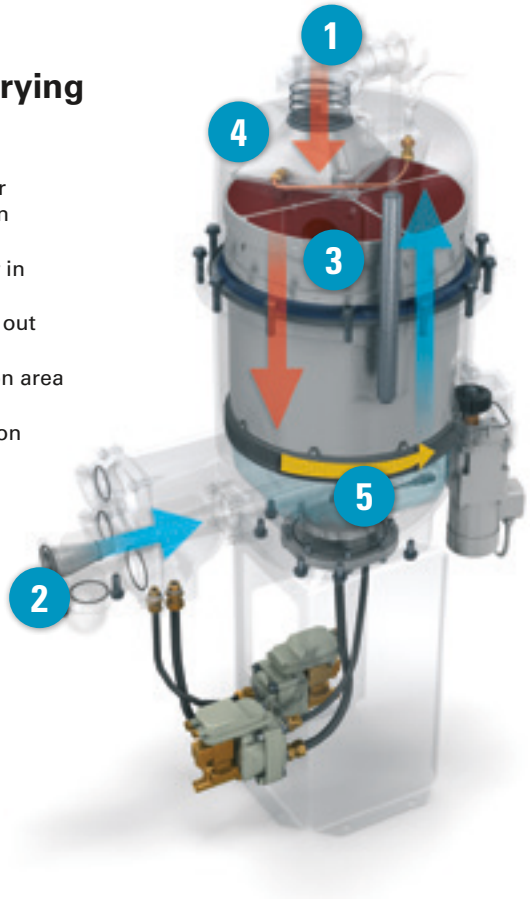
Our Full Feature concept stands for a compact, all-in-one quality air solution. Integrating the IND or IMD dryer and its Variable Speed Drive on VSD models, this complete package offers the highest quality air at the lowest possible cost.

## IMD adsorption dryer

The IMD adsorption dryer eliminates the moisture before it enters the air net, ensuring a reliable process and an impeccable end product.
As no external energy is needed to dry the air, large savings are obtained. The pressure drop through the dryer is minimal, which again cuts down the operating cost.

## The IMD drying principle

1. Hot air in for regeneration
2. Cold wet air in
3. Cold dry air out
4. Regeneration area
5. Drum rotation




# A dryer solution for every need

Atlas Copco believes in effective prevention and also provides a complete range of free-standing refrigerant and rotary drum heat-of-compression dryers.

## Rotary drum heat of compression dryers: ND & MD

- Use of freely available heat of compression.
- Negligible power consumption.
- Variants with extra heat augmentation for lower dew points.

## Refrigerant dryer: FD

- Use of cooling circuit for cooling down compressed air.
- Guaranteed pressure dew points.
- Lowest energy consumption in all operating conditions.
- Air and water-cooled variants.

# Optimize your system

With the ZR/ZT, we provide 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.

## Options

| | ZR 55-90 | ZR 75-90 VSD | ZR 55-90 FF | ZR 75-90 VSD FF | ZT 55-90 | ZT 75-90 VSD | ZT 55-90 FF | ZT 75-90 VSD FF |
|---|---|---|---|---|---|---|---|---|
| Monitoring & protection bundle (anti-condensation heaters / SPM equipment / PT 1000 in the windings & bearings) | • | • | • | • | • | • | • | • |
| **SMART**LINK | • | • | • | • | • | • | • | • |
| Teflon-free elements | • | • | • | • | • | • | • | • |
| Anchor pads | • | • | • | • | • | • | • | • |
| Wooden case protection packaging | • | • | • | • | • | • | • | • |
| Kit for purge of dry air during standstill (for tropical environment) | • | • | • | • | • | • | • | • |
| Material certificates | • | • | • | • | • | • | • | • |
| Test certificate | • | • | • | • | • | • | • | • |
| Witnessed performance test | • | • | • | • | • | • | • | • |
| Energy recovery | • | • | • | • | - | - | - | - |
| Water shut-off valve | • | • | • | • | - | - | - | - |
| PDP sensor | - | - | • | • | - | - | • | • |
| Low load kit | - | - | • | • | - | - | • | • |
| Earthing system IT, TT or TN network | - | • | - | • | - | • | - | • |
| High ambient temperature version (required when ambient temperature is above 40°C) | - | - | - | - | • | - | - | - |

*Please note the availability of the option depends on the chosen configuration.*

*• : Optional  - : Not available*

# Engineered solutions

We recognize the need to combine our serially produced compressors and dryers with the specifications and standards applied by major companies for equipment purchases. Strategically located departments within the Atlas Copco Group take care of the design and manufacturing of customized equipment to operate at extreme temperatures, often in remote locations.

## Innovative technology

All equipment is covered by our manufacturer warranty.
The reliability, longevity and performance of our equipment will not be compromised. A global aftermarket operation employing 360 field service engineers in 160 countries ensures reliable maintenance by Atlas Copco as part of a local service operation.

## Innovative engineering

Each project is unique and by entering into partnership with our customers, we can appreciate the challenge at hand, ask the relevant questions and design the best engineered solution for all your needs.

# Technical specifications
## ZR/ZT 55-90 (FF)

| Type | Free air delivery [1] | | | Installed motor | | Noise level [2] | Weight | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Standard | | Full Feature | |
| | l/s | m³/min | cfm | kW | hp | dB(A) | kg | lb | kg | lb |
| **50 Hz** | | | | | | | | | | |
| ZR 55 - 7.5 | 148.3 | 8.9 | 314 | 55 | 75 | 74 | 1800 | 3968 | 2050 | 4519 |
| ZR 55 - 8.6 | 133.9 | 8.0 | 284 | 55 | 75 | 74 | 1800 | 3968 | 2050 | 4519 |
| ZR 55 - 10 | 123.1 | 7.4 | 261 | 55 | 75 | 74 | 1800 | 3968 | 2050 | 4519 |
| ZR 75 - 7.5 | 204.6 | 12.3 | 434 | 75 | 100 | 74 | 1890 | 4167 | 2135 | 4707 |
| ZR 75 - 8.6 | 189.6 | 11.4 | 402 | 75 | 100 | 74 | 1890 | 4167 | 2135 | 4707 |
| ZR 75 - 10 | 181.2 | 10.9 | 384 | 75 | 100 | 74 | 1890 | 4167 | 2135 | 4707 |
| ZR 90 - 7.5 | 241.4 | 14.5 | 511 | 90 | 120 | 74 | 1925 | 4244 | 2175 | 4795 |
| ZR 90 - 8.6 | 227.6 | 13.7 | 482 | 90 | 120 | 74 | 1925 | 4244 | 2175 | 4795 |
| ZR 90 - 10 | 214.6 | 12.9 | 455 | 90 | 120 | 74 | 1925 | 4244 | 2175 | 4795 |
| **60 Hz** | | | | | | | | | | |
| ZR 55 - 7.25 | 160.2 | 9.6 | 340 | 55 | 75 | 74 | 1800 | 3968 | 2050 | 4519 |
| ZR 55 - 9 | 140.6 | 8.4 | 298 | 55 | 75 | 74 | 1800 | 3968 | 2050 | 4519 |
| ZR 55 - 10.4 | 130.2 | 7.8 | 276 | 55 | 75 | 74 | 1800 | 3968 | 2050 | 4519 |
| ZR 75 - 7.25 | 217.1 | 13.0 | 460 | 75 | 100 | 74 | 1890 | 4167 | 2135 | 4707 |
| ZR 75 - 9 | 200.1 | 12.0 | 424 | 75 | 100 | 74 | 1890 | 4167 | 2135 | 4707 |
| ZR 75 - 10.4 | 192.1 | 11.5 | 407 | 75 | 100 | 74 | 1890 | 4167 | 2135 | 4707 |
| ZR 90 - 7.25 | 268.1 | 16.1 | 568 | 90 | 120 | 74 | 1925 | 4244 | 2175 | 4795 |
| ZR 90 - 9 | 240.9 | 14.5 | 510 | 90 | 120 | 74 | 1925 | 4244 | 2175 | 4795 |
| ZR 90 - 10.4 | 230.9 | 13.9 | 489 | 90 | 120 | 74 | 1925 | 4244 | 2175 | 4795 |

| Type | Free air delivery [1] | | | Installed motor | | Noise level [2] | Weight | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Standard | | Full Feature | |
| | l/s | m³/min | cfm | kW | hp | dB(A) | kg | lb | kg | lb |
| **50 Hz** | | | | | | | | | | |
| ZT 55 - 7.5 | 146.3 | 8.8 | 310 | 55 | 75 | 76 | 1900 | 4189 | 2520 | 5556 |
| ZT 55 - 8.6 | 132.7 | 8,0 | 281 | 55 | 75 | 76 | 1900 | 4189 | 2520 | 5556 |
| ZT 55 - 8.6 HAT [3] | 122.5 | 7.4 | 260 | 55 | 75 | 76 | 1900 | 4189 | 2520 | 5556 |
| ZT 55 - 10 | 122.3 | 7.3 | 259 | 55 | 75 | 76 | 1900 | 4189 | 2520 | 5556 |
| ZT 75 - 7.5 | 200.9 | 12.1 | 426 | 75 | 100 | 76 | 2000 | 4409 | 2600 | 5732 |
| ZT 75 - 8.6 | 186.7 | 11.2 | 396 | 75 | 100 | 76 | 2000 | 4409 | 2600 | 5732 |
| ZT 75 - 8.6 HAT [3] | 178.8 | 10.7 | 379 | 75 | 100 | 76 | 2000 | 4409 | 2600 | 5732 |
| ZT 75 - 10 | 178.7 | 10.7 | 379 | 75 | 100 | 76 | 2000 | 4409 | 2600 | 5732 |
| ZT 90 - 7.5 | 236.0 | 14.2 | 500 | 90 | 120 | 76 | 2050 | 4519 | 2650 | 5842 |
| ZT 90 - 8.6 | 223.3 | 13.4 | 473 | 90 | 120 | 76 | 2050 | 4519 | 2650 | 5842 |
| ZT 90 - 8.6 HAT [3] | 211.4 | 12.7 | 448 | 90 | 120 | 76 | 2050 | 4519 | 2650 | 5842 |
| ZT 90 - 10 | 211.3 | 12.7 | 448 | 90 | 120 | 76 | 2050 | 4519 | 2650 | 5842 |
| **60 Hz** | | | | | | | | | | |
| ZT 55 - 7.25 | 157.8 | 9.5 | 334 | 55 | 75 | 76 | 1900 | 4189 | 2520 | 5556 |
| ZT 55 - 8.6 HAT [3] | 129.5 | 7.8 | 274 | 55 | 75 | 76 | 1900 | 4189 | 2520 | 5556 |
| ZT 55 - 9 | 139.2 | 8.4 | 295 | 55 | 75 | 76 | 1900 | 4189 | 2520 | 5556 |
| ZT 55 - 10.4 | 129.3 | 7.8 | 274 | 55 | 75 | 76 | 1900 | 4189 | 2520 | 5556 |
| ZT 75 - 7.25 | 212.8 | 12.8 | 451 | 75 | 100 | 76 | 2000 | 4409 | 2600 | 5732 |
| ZT 75 - 8.6 HAT [3] | 189.2 | 11.4 | 401 | 75 | 100 | 76 | 2000 | 4409 | 2600 | 5732 |
| ZT 75 - 9 | 196.7 | 11.8 | 417 | 75 | 100 | 76 | 2000 | 4409 | 2600 | 5732 |
| ZT 75 - 10.4 | 189.1 | 11.3 | 401 | 75 | 100 | 76 | 2000 | 4409 | 2600 | 5732 |
| ZT 90 - 7.25 | 261.3 | 15.7 | 554 | 90 | 120 | 76 | 2050 | 4519 | 2650 | 5842 |
| ZT 90 - 8.6 HAT [3] | 226.9 | 13.6 | 481 | 90 | 120 | 76 | 2050 | 4519 | 2650 | 5842 |
| ZT 90 - 9 | 236.1 | 14.2 | 500 | 90 | 120 | 76 | 2050 | 4519 | 2650 | 5842 |
| ZT 90 - 10.4 | 226.8 | 13.6 | 481 | 90 | 120 | 76 | 2050 | 4519 | 2650 | 5842 |

*(1) Unit performance measured according to ISO 1217, Annex C, Edition 4 (2009).*
*Reference conditions:*
*- Relative humidity: 0%.*
*- Absolute inlet pressure: 1 bar (14.5 psi).*
*- Intake air temperature: 20°C/68°F.*
*FAD is measured at the following working pressures:*
*Fixed speed:*
*- 7.25/7.5/7 bar versions at 7 bar.*
*- 8.6/9 bar versions at 8 bar.*
*- 10/10.4 bar versions at 9 bar.*
*For VSD: at their maximum working pressure.*

*(2) A-weighted emission sound pressure level at the work station (LpWSAd).*

*Measured according to ISO 2151: 2004 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.*

*(3) Maximum intake/cooling air temperature is 50°C/122 °F for HAT versions.*

# Technical specifications
## ZR 75-90 VSD (FF) (50/60 Hz)

| Type | Working pressure [1] | | Free air delivery [2] | | | Noise level [3] | Weight | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Standard | | Full Feature | |
| | | bar(e) | l/s | m³/min | cfm | dB(A) | kg | lb | kg | lb |
| ZR 75 VSD - 8.6 bar (e) | Minimum | 4 | 76 - 259 | 4.6 - 15.5 | 161 - 548 | 74 | 1925 | 4244 | 2170 | 4784 |
| | Effective | 7 | 75 - 222 | 4.5 - 13.3 | 158 - 470 | | | | | |
| | Maximum | 8.6 | 74 - 201 | 4.4 - 12.1 | 157 - 426 | | | | | |
| ZR 75 VSD - 10.4 bar (e) | Minimum | 4 | 76 - 259 | 4.6 - 15.5 | 161 - 549 | 74 | 1925 | 4244 | 2170 | 4784 |
| | Effective | 9 | 74 - 196 | 4.4 - 11.8 | 157 - 415 | | | | | |
| | Maximum | 10.4 | 96 - 178 | 5.8 - 10.7 | 203 - 377 | | | | | |
| ZR 90 VSD - 8.6 bar (e) | Minimum | 4 | 76 - 259 | 4.6 - 15.5 | 161 - 548 | 74 | 1970 | 4343 | 2220 | 4894 |
| | Effective | 7 | 75 - 258 | 4.5 - 15.5 | 158 - 548 | | | | | |
| | Maximum | 8.6 | 74 - 240 | 4.4 - 14.4 | 157 - 509 | | | | | |
| ZR 90 VSD - 10.4 bar (e) | Minimum | 4 | 76 - 259 | 4.6 - 15.5 | 161 - 549 | 74 | 1970 | 4343 | 2220 | 4894 |
| | Effective | 9 | 74 - 237 | 4.4 - 14.2 | 157 - 502 | | | | | |
| | Maximum | 10.4 | 96 - 221 | 5.8 - 13.3 | 203 - 469 | | | | | |

# Technical specifications
## ZT 75-90 VSD (FF) (50/60 Hz)

| Type | Working pressure [1] | | Free air delivery [2] | | | Noise level [3] | Weight | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Standard | | Full Feature | |
| | | bar(e) | l/s | m³/min | cfm | dB(A) | kg | lb | kg | lb |
| ZT 75 VSD - 8.6 bar (e) | Minimum | 4 | 75 - 252 | 4.5 - 15.1 | 160 - 534 | 76 | 2030 | 4475 | 2630 | 5798 |
| | Effective | 7 | 75 - 217 | 4.5 - 13.0 | 158 - 460 | | | | | |
| | Maximum | 8.6 | 74 - 198 | 4.4 - 11.9 | 157 - 420 | | | | | |
| ZT 75 VSD - 10.4 bar (e) | Minimum | 4 | 75 - 252 | 4.5 - 15.1 | 159 - 534 | 76 | 2030 | 4475 | 2630 | 5798 |
| | Effective | 9 | 74 - 193 | 4.4 - 11.6 | 157 - 409 | | | | | |
| | Maximum | 10.4 | 96 - 176 | 5.7 - 10.6 | 203 - 373 | | | | | |
| ZT 90 VSD - 8.6 bar (e) | Minimum | 4 | 75 - 252 | 4.5 - 15.1 | 160 - 535 | 76 | 2100 | 4630 | 2700 | 5952 |
| | Effective | 7 | 75 - 252 | 4.5 - 15.1 | 158 - 534 | | | | | |
| | Maximum | 8.6 | 74 - 235 | 4.4 - 14.1 | 157 - 498 | | | | | |
| ZT 90 VSD - 10.4 bar (e) | Minimum | 4 | 75 - 252 | 4.5 - 15.1 | 159 - 534 | 76 | 2100 | 4630 | 2700 | 5952 |
| | Effective | 9 | 74 - 232 | 4.4 - 13.9 | 157 - 492 | | | | | |
| | Maximum | 10.4 | 96 - 217 | 5.7 - 13.0 | 203 - 460 | | | | | |

*(1) For the working pressure of the FF variant, please consult Atlas Copco.*

*(2) Unit performance measured according to ISO 1217, Annex C, Edition 4 (2009).*
*Reference conditions:*
*- Relative humidity 0%.*
*- Absolute inlet pressure: 1 bar (14.5 psi).*
*- Intake air temperature: 20°C/68°F.*
*FAD is measured at the following working pressures:*
*Fixed speed:*
*- 7.25/7.5/7 bar versions at 7 bar.*
*- 8.6/9 bar versions at 8 bar.*
*- 10/10.4 bar versions at 9 bar.*
*For VSD: at their maximum working pressure.*

*(3) A-weighted emission sound pressure level at the work station (LpWSAd).*

*Measured according to ISO 2151: 2004 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.*

## Dimensions

| Type | Standard | | | | | | Full Feature | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A (Length) | | B (Width) | | C (Height) | | A (Length) | | B (Width) | | C (Height) | |
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| ZR 55-90 | 2180 | 85.8 | 1450 | 57.1 | 2184 | 86.0 | 2180 | 85.8 | 1450 | 57.1 | 2184 | 86.0 |
| ZR 75-90 VSD | 2180 | 85.8 | 1450 | 57.1 | 2184 | 86.0 | 2180 | 85.8 | 1450 | 57.1 | 2184 | 86.0 |
| ZT 55-90 | 2180 | 85.8 | 1450 | 57.1 | 2184 | 86.0 | 2880 | 113.4 | 1450 | 57.1 | 2184 | 86.0 |
| ZT 75-90 VSD | 2180 | 85.8 | 1450 | 57.1 | 2184 | 86.0 | 2880 | 113.4 | 1450 | 57.1 | 2184 | 86.0 |

## *COMMITTED TO SUSTAINABLE PRODUCTIVITY*

We stand by our responsibilities towards our customers, towards the environment and the people around us. We make performance stand the test of time. This is what we call – Sustainable Productivity.

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