

Atlas Copco

Oil-free rotary screw compressors



ZR/ZT 110-750-FF & ZR/ZT 132-900 VSD-FF
110-935 kW/150-1253 hp



Atlas Copco

Setting the standard in energy efficiency, safety and reliability

▶ Energy, safety & reliability

The shortest route to superior productivity is to minimize operational cost. 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.

Choice

Atlas Copco masters each compression principle and offers the most energy efficient technology for the application.



The right drive

Fixed speed machines are fine at full load but when air demand fluctuates, a Variable Speed Drive ensures substantial savings.



Optimal use

Central control of a multi-compressor installation can reduce the pressure band and achieve the lowest overall energy cost.



Complete safety

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

Expertise

Since 1903, Atlas Copco's philosophy has been to continually improve our products through intensive R&D, with the aim to maximize the value for our customers.



The integrated design

Internal piping, Variable Speed Drive, 100% matched components... the only way to ensure total reliability.



Trouble-free installation & commissioning

The ZR 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.





Energy recovery

Heat from compression can be recovered and put to good use in pre-heating of boiler feed water, heating of buildings etc.

Energy

Safety

The professional follow-up

Service Contracts will ensure you of the right maintenance, immediate response and genuine spare parts... all over the globe.

Reliability



ISO 8573-1 CLASS 0

Atlas Copco sets a new industry standard

▶ Class zero

When it comes to clean, oil-free compressed air for your critical processes, you can't afford to compromise. Atlas Copco, a pioneer in oil-free air screw technology, is known for its range of compressors designed especially for applications that require oil-free air.

Now Atlas Copco has achieved a new milestone: Setting the standard for air purity as the first manufacturer to be certified ISO 8573-1 CLASS 0.



▶ Why a new class?

Industries such as pharmaceuticals, food and beverages, electronics and textiles must exclude any risk of contamination. Otherwise severe consequences could follow: spoiled or unsafe products, production downtime and damage to both brand and reputation. To address the needs of critical applications where air purity is essential, the ISO 8573-1 compressed air standard was revised in 2001. Along with a more comprehensive measuring methodology, a new and more stringent class was added to the five existing purity classes: ISO 8573-1 CLASS 0.

▶ First to achieve ISO 8573-1 CLASS 0

As the industry leader committed to meeting the needs of the most demanding customers, Atlas Copco requested the renowned TÜV institute to type-test its Z range of oil-free screw compressors. 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. Thus Atlas Copco not only became the first compressor manufacturer to receive CLASS 0 certification, but also exceeded ISO 8573-1 CLASS 0 specifications.

CLASS	Concentration total oil (aerosol, liquid, vapour) 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

▶ Atlas Copco eliminates any risk

Only oil-free compressors deliver oil-free air. Whether your activities are in pharmaceutical production, food processing, critical electronics or a similarly exacting industry, it is essential to eliminate risk. That's why you need an Atlas Copco risk-free solution: oil-free screw compressors especially for applications demanding the highest levels of purity. Zero oil means zero risk. Zero risk of contamination. Zero risk of damaged or unsafe products. Zero risk of losses from operational downtime. Above all, zero oil means zero risk of ruining your hard-won reputation.



▶ The most stringent air purity testing available

Most manufacturers prefer “partial flow” testing, which targets only the center of the air flow. The Atlas Copco Z range of oil-free screw compressor was tested using the more stringent “full flow” method. This examines the entire air flow to measure aerosols, vapors and wall flow. Even with such rigorous testing, no traces of oil were found in the output air stream.

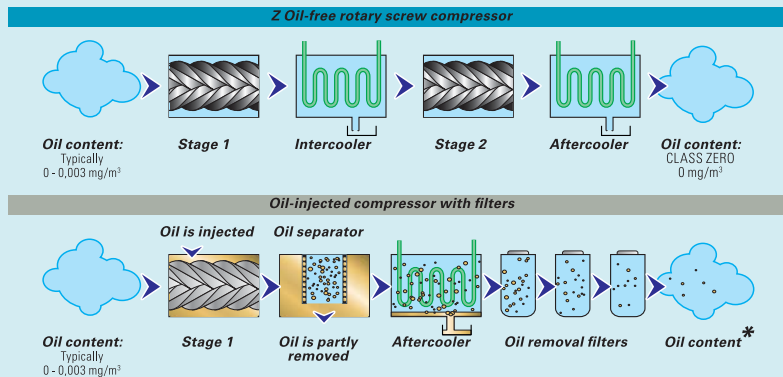


TÜV (Technische Überwachungsverein/Technical Monitoring Association) reporting on the Atlas Copco Z range of oil-free screw compressors

▶ Can oil-injected compressors with oil removal filters deliver oil-free air?

Often referred to as “technically oil-free air”, this system relies on air cooling devices (e.g. refrigeration dryers) and several stages of oil removal with multiple components. A failure of any of these components or inadequate maintenance can result in oil contamination of a process. Therefore, with oil-injected compressors there will always be a risk of contamination and the possibility of severe consequences for your business.

Move up to a risk-free standard.
Visit www.classzero.com



* If low ambient temperature + clean filters = Class 2 edition 2001 ($\leq 0.1 \text{ mg/m}^3$)
If high ambient temperature + saturated filters = Class 3 edition 2001 ($\leq 1 \text{ mg/m}^3$)

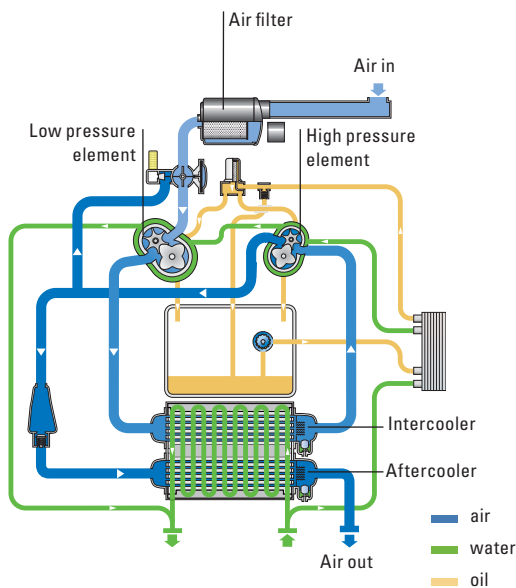
Proven Z-technology in one complete package

Watercooled ZR 250

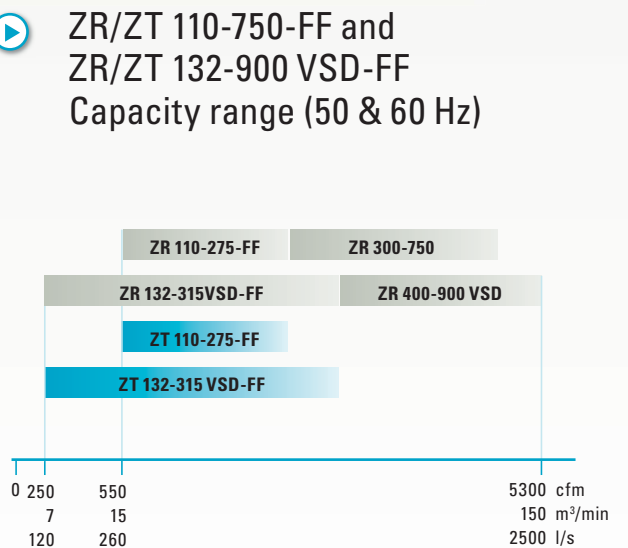
- 1 Advanced Elektronikon control and monitoring system
- 2 Oil-free screw compression element
- 3 High efficiency coolers and water separator
- 4 Inlet compensators on all piping connections



Watercooled ZR: air/oil/coolant flow



Watercooled ZR: air/oil/coolant flow



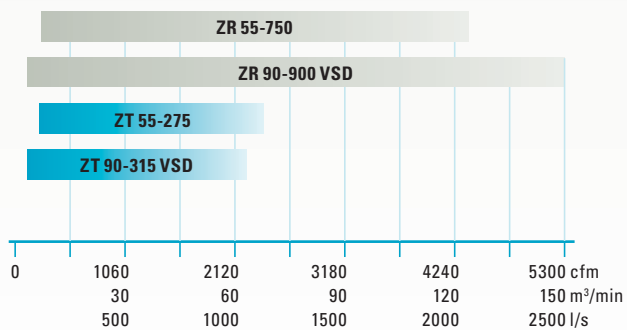
ZT: Aircooled / ZR: Watercooled / VSD: Variable Speed Drive / FF: Full Feature.
See data pages for range details.

- ① Efficient intake air filtration
- ② Integrated frequency converter for Variable Speed Drive operation
- ③ IP55 totally enclosed high efficiency electric motor
- ④ Built-in IMD adsorption dryer

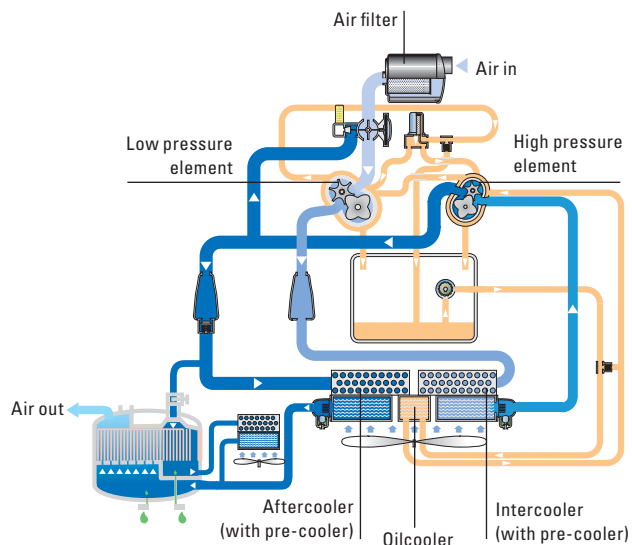
▶ Aircooled ZT 160 VSD-FF
Integrated VSD, Full Feature
version with IMD dryer



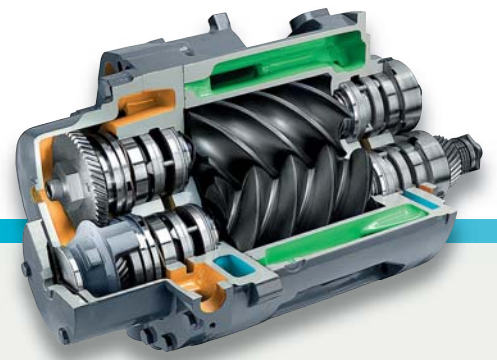
▶ Complete ZR/ZT range



▶ Aircooled ZT-FF:
air/oil/coolant flow



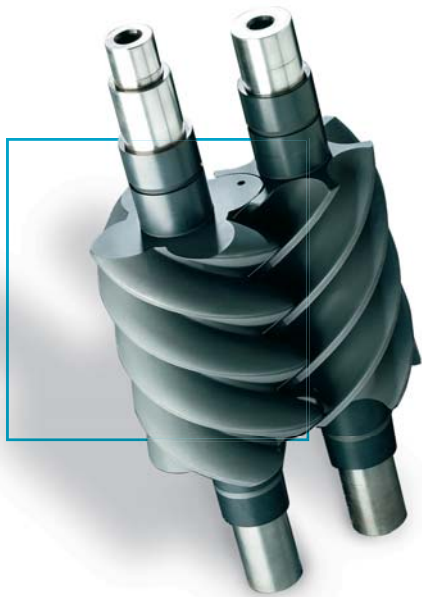
Superior design in every detail



▶ Proven Z-technology

World class oil-free compression element

- ⊕ unique Z-seal design guarantees 100 % oil-free air
- ⊕ operation far below critical speed
- ⊕ high overall efficiency, thanks to:
 - superior rotor coating
 - element cooling jackets
- ⊕ no oil 'clean up' problems



Superior element bearings

- ⊕ high stability under varying load conditions
- ⊕ no need for pre-lubrication/stabilisation time
- ⊕ bearings operate below wear limit



Reliable element intake protection

- ⊕ machine mounted, easy to maintain air filter
- ⊕ minimum intake losses



▶ High precision drive system

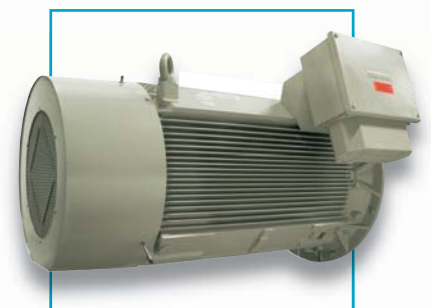
AGMA Q13/DIN Class 5 gears

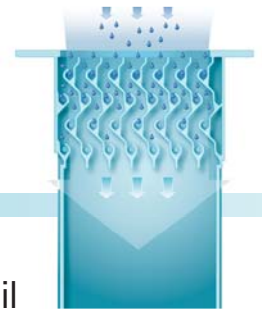
- ⊕ long lifetime
- ⊕ low transmission losses
- ⊕ low noise and vibration



Totally enclosed motor

- ⊕ IP55 TEFC protection against dust and humidity
- ⊕ high efficiency

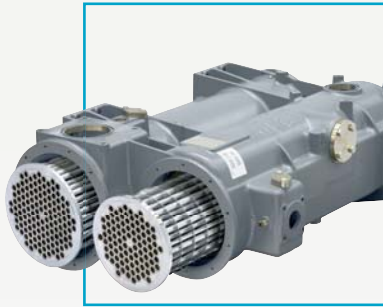




▶ Cooling system designed for life

High efficiency + high reliability water cooling (ZR)

- ▶ corrosion resistant stainless steel tubing
- ▶ highly reliable robot welding; no risk for leaks
- ▶ aluminium star insert increases heat transfer
- ▶ cooling water outside tubes guided by baffles
 - no dead zones – limited fouling
 - no degradation in cooler performance
 - easy cleaning
 - very long service intervals



High efficiency + high reliability air cooling (ZT)

- ▶ stainless steel pre-cooler with fins
- ▶ excellent heat transfer
- ▶ easy access for cleaning
- ▶ low noise + low energy cooling fans



▶ Reliability in every detail

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

Inlet valve

- ▶ air operated diaphragm
- ▶ lowest unloaded power by tuning with bypass screw
- ▶ mechanical interlock of inlet and blow-off valves



Advanced Elektronikon® control and monitoring system

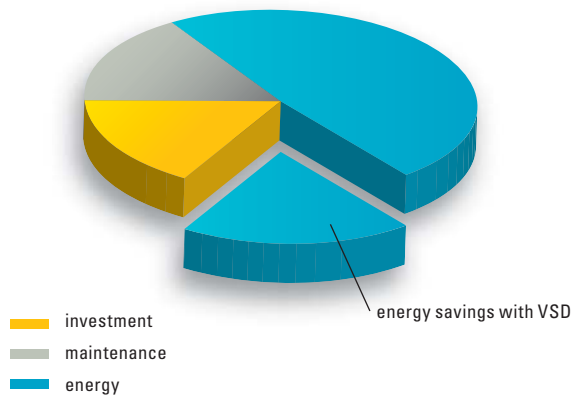
- ▶ overall system performance status with pro-active service indications, alarms for malfunctions and safety shutdowns
- ▶ multi-language selectable display
- ▶ all monitoring and control functions via one interface
- ▶ wide communication possibilities
- ▶ integration possible in many process control systems (field bus system)



Why Variable Speed Drive (VSD) compressors?

▶ Direct energy savings of up to 35%

- ▶ Unload losses are reduced to a minimum
- ▶ No blow-off of compressed air to the atmosphere
- ▶ Load/no load transition losses are eliminated
- ▶ The precise pressure control of the VSD compressor allows for a tighter pressure band and a lower average working pressure, resulting in reduced energy consumption



Predicting your savings

Call upon the expertise of Atlas Copco specialists and have an assessment carried out in your factory. A detailed report will show your current operation and the achievable savings when adding a VSD solution to your compressed air system.

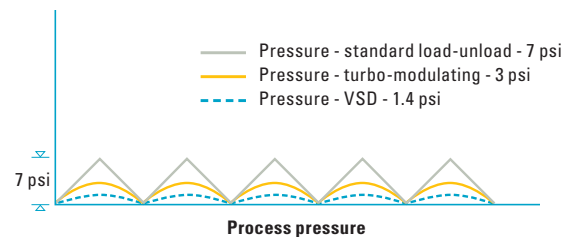


▶ Indirect energy savings

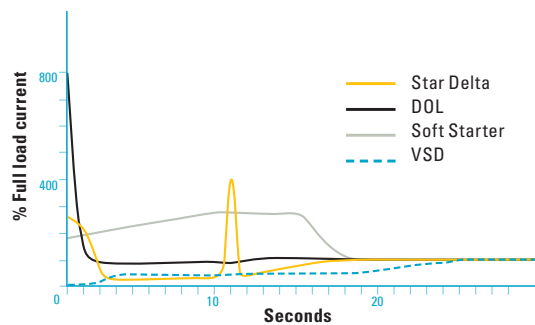
- ▶ The lower system pressure obtained by VSD results in up to 10% additional yearly savings:
 - lower energy consumption of (other) base load machines
 - leak losses are significantly reduced: e.g. leakage at 87 psi is 13 % lower than at 102 psi
 - most compressed air applications consume less air at a reduced pressure

▶ Additional VSD benefits

- ▶ **The stable system** pressure provides stability for all processes using compressed air.



- ▶ **No current peaks** during start-up
 - unlimited starting and stopping
 - no risk of current peak penalties upon starting

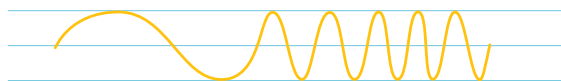


- ▶ Savings in electrical installation - smaller breakers, fuses, transformers and cables.

▶ The magic of VSD

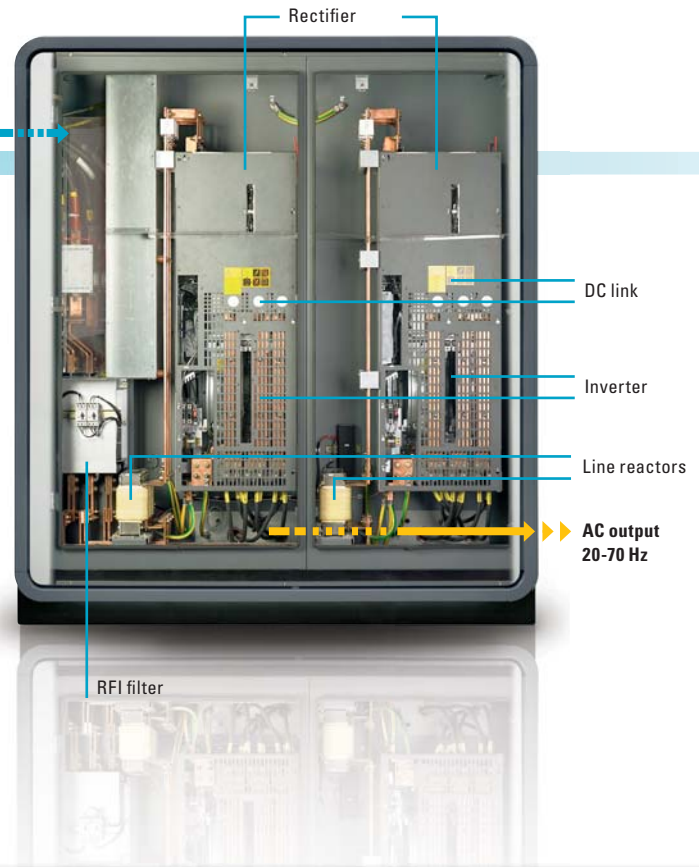


— AC input 50 or 60 Hz
— AC output 20 to 70 Hz



The frequency of the drive motor is continuously adapted to the fluctuating air demand.

AC input
50 or 60 Hz



▶ Integrated VSD - The only way



1 Elektronikon® controls compressor and inverter

- ⊙ maximum machine safety
- ⊙ easy networking of the compressor

2 EMC tested and certified

- ⊙ maximum operating range
- ⊙ no influence of external sources
- ⊙ no emissions to other equipment

3 Motor specifically designed for VSD

- ⊙ bearings protected against induced bearing currents
- ⊙ motor & converter perfectly tuned to obtain best efficiency over entire speed range
- ⊙ optimized cooling air flow

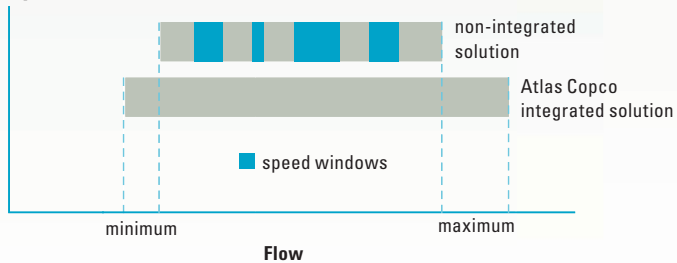
4 Mechanical enhancements

- ⊙ proper lubrication to gears and bearings for all speeds
- ⊙ all components operate below critical vibrations

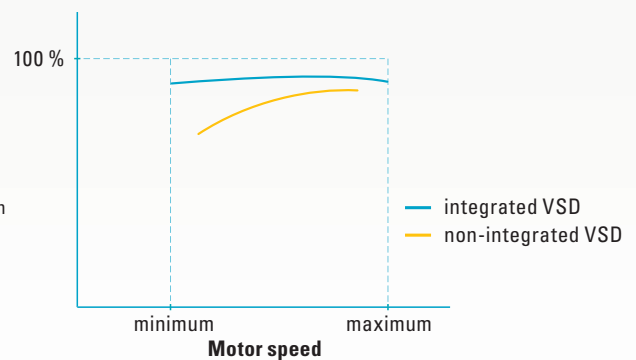
5 Tested over complete speed range

- ⊙ elimination of "speed windows", ensuring stable pressure and consistent energy savings

Operating range



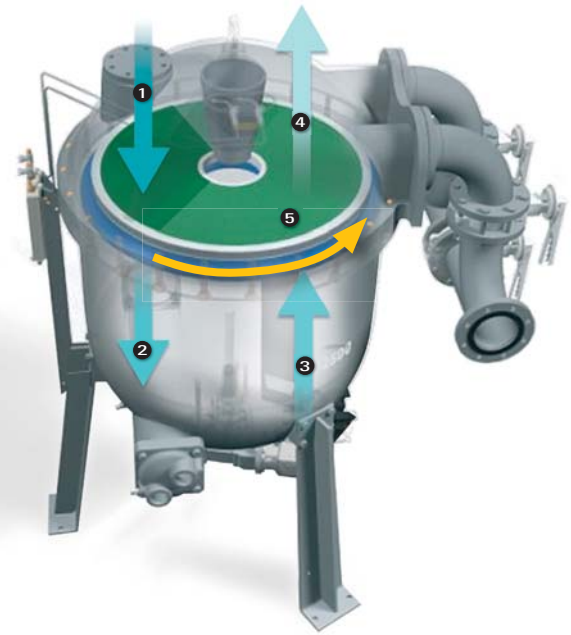
Combined motor/converter efficiency



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

▶ Dry compressed air out of the box

- ▶ The Full Feature concept is a total installation, providing dry compressed air. Integrating the IMD dryer and its Variable Speed Drive on VSD models, this compact package offers high quality air at the lowest cost.
- ▶ The 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.
- ▶ The pressure drop through the dryer is minimal, which again cuts down the operating cost.
- ▶ The IMD dryer needs **no purge air**: no compressed air is wasted.
- ▶ The Full Feature compressor is a pre-wired and pre-piped solution, ready to use.

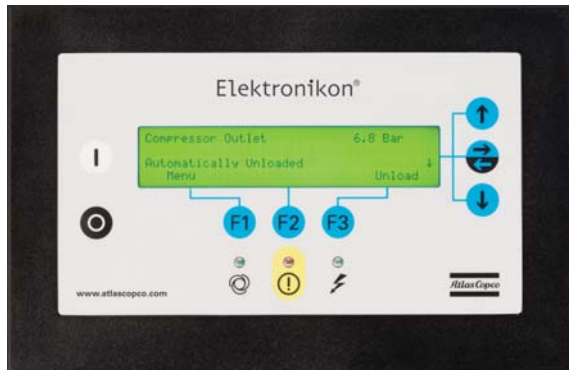


The IMD drying principle

- 1 Hot unsaturated air
- 2 Hot saturated air
- 3 Cold saturated air
- 4 Dry air
- 5 Drying section



Watercooled
ZR 160 VSD-FF



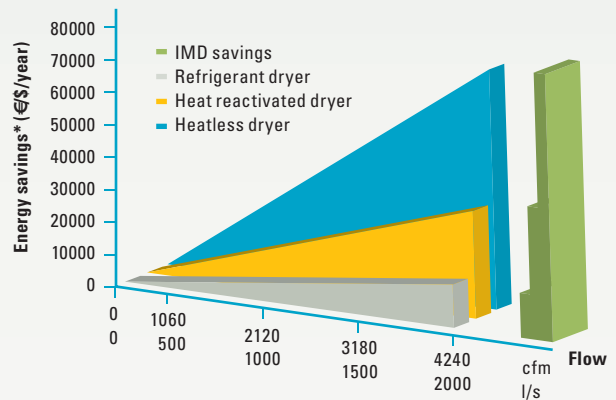
Overall system control and monitoring

- ▶ One integrated control system for compressor and dryer
- ▶ Monitoring of the IMD dryer includes:
 - Temperature readings of
 - IMD dryer inlet and outlet
 - regeneration air inlet and outlet
 - mix air inlet
 - Pressure dewpoint after the IMD (option)
 - Loading reporting of dryer

▶ Energy savings with Full Feature/MD

Direct savings

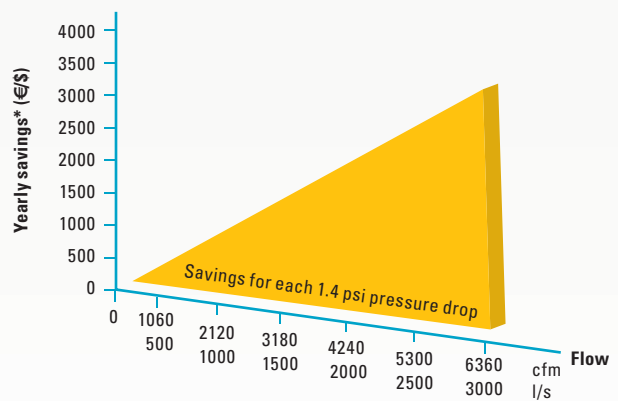
The IMD drying process requires no external energy; over time this results in large savings.



* Assumptions: 1kWh = 0.05 €/€/\$ – 8000 h/year

Indirect savings

Other than direct energy input, the pressure drop in dryers causes indirect energy consumption as well. IMD dryers have a very low pressure drop, which leads to a further reduction in energy cost.



Custom*Design*

▶ The answer to every non-standard question

The new generation of Z-compressor is designed as standard to perform in a wide range of operating and site conditions.

However some environments call for additional measures. For all those special requests Atlas Copco's Custom *Design* department offers an adequate solution.

- ▶ **Customizing** the standard products to fit your local plant standards. Meeting these standards on electrical voltage, color coatings, explosion proof zones, documentation, test and inspection requirements...
- ▶ **Designing** products to secure operation in harsh environments. Allow outdoor installation in sub-zero temperatures, increase corrosion resistance for windy coastal and off-shore applications or ensure performance in hot, moist or dusty environments...
- ▶ **Extending** the range to nitrogen compressors and booster units to suit your specific application...

All this of course retaining the high standards on energy, safety and reliability, inherent to all Atlas Copco products.

With dedicated teams in both Product Companies and Regional Engineering Centers Custom*Design* offers close-to-home solutions fitting your applications world-wide.



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 Aftermarket organization, maintaining our position as the leader in compressed air.

▶ Full range of available Aftermarket products

Activity	Product*
Genuine parts	Atlas Copco Service kits & oils
Extended warranties	AIRXtend
Service contracts	ServicePlan
System audits	AIRScan™
Remote monitoring	AIRConnect™
Energy saving	AIROptimizer™
Product improvements	Upgrade programs

* More information is available from your local Atlas Copco customer centre

The perfect match for your needs

Z-compressors

The new generation of Z-compressors provides unprecedented freedom to select the right features for your specific needs.

The compressor you want is the compressor we build.

Pressure

- 50 Hz:
 - 7.5 bar
 - 8.6 bar
 - 10 bar
 - 13 bar (only on ZR145/250/275)
- 60 Hz:
 - 100 psi / 7 bar
 - 125 psi / 8.6 bar
 - 151 psi / 10.4 bar
 - 189 psi / 13 bar (only on ZR145/250/275)

Capacity (power)

- 150 Hp (fixed speed)
- 175 Hp (VSD - Variable Speed Drive)
- 200 Hp (fixed speed & VSD - Variable Speed Drive)
- 250 Hp (fixed speed)
- 300 Hp (fixed speed & VSD - Variable Speed Drive)
- 350 Hp (fixed speed)
- 400 Hp (fixed speed & VSD - Variable Speed Drive)
- 450 Hp (fixed speed)
- 500 Hp (fixed speed & VSD - Variable Speed Drive)
- 600 Hp (fixed speed)
- 700 Hp (fixed speed & VSD - Variable Speed Drive)
- 800 Hp (fixed speed)
- 900 Hp (fixed speed)
- 938 Hp (VSD - Variable Speed Drive)
- 1253 Hp (VSD - Variable Speed Drive)

Cooling

- ZR: watercooled
- ZT: aircooled (up to 400 Hp)

Motor drive

- Fixed Speed Drive
- Variable Speed Drive (VSD) - saving up to 35% in energy costs

Dryer

- MD dryer for dry air at no energy cost:
 - integrated IMD for Z 110-275 and Z 132-315 VSD
 - free-standing MD for ZR 300-750 and ZR 400-900 VSD
- BD/XD dryer for very dry air
- Compressor without dryer

In/outdoor

- Standard package for indoor use
- Outdoor variant mounted in a standard container (up to 400 Hp)

Ambient temperature

- Standard machine: operating range between 32 and 104 °F
- HAT (High Ambient Temperature) version: operating range between 32 and 122 °F
- Winterization option: temperatures to -4 °F (only on outdoor variant)

Complete scope suiting all needs

Features and benefits

Numerous features are included as standard. Some applications may also need or benefit from one of the factory installed options.

Standard

<input checked="" type="checkbox"/>	Air intake filter and silencer	<input checked="" type="checkbox"/>	Complete oil circuit pre-piped
<input checked="" type="checkbox"/>	Air intake flexible	<input checked="" type="checkbox"/>	Built-in oil breather system
<input checked="" type="checkbox"/>	Stainless steel inter and aftercooler cores *	<input checked="" type="checkbox"/>	AGMA class 13, DIN class 5 gears
<input checked="" type="checkbox"/>	Outlet air silencer	<input checked="" type="checkbox"/>	Electric IP 55 motors pre-mounted **
<input checked="" type="checkbox"/>	Six sided silencing canopy	<input checked="" type="checkbox"/>	Starters **
<input checked="" type="checkbox"/>	Terminal expansion joints – air and water side	<input checked="" type="checkbox"/>	Pre-mounted electrical and VSD cubicles
<input checked="" type="checkbox"/>	Outlet air flange	<input checked="" type="checkbox"/>	Skid with no need for foundations
<input checked="" type="checkbox"/>	Complete water circuit *	<input checked="" type="checkbox"/>	Suppression of emissions/harmonic distortions in VSD
<input checked="" type="checkbox"/>	Single point inlet and outlet cooling water connection *		
<input checked="" type="checkbox"/>	Back-flush arrangement for cooler cleaning *		

- * Only for watercooled versions
- ** Standard on LV, optional on MV
- *** Option on ZR 300-750

Options

- Energy recovery
- Hot air version (= without aftercooler)
- HAT (High Ambient Temperature) version
- Teflon-free elements
- Pre-filter kit
- Separate air intake
- Automatic water shut off valve
- Thermostatic water valve
- Electronic drain
- ANSI flange(s) for air (and water) connections
- Duplex oil filters
- IP55 (TEFC) enclosure for MV motors (1)
- Anti condensation heater for motor
- PT1000 motor winding protection
- PT1000 motor bearing protection
- Oversized motor
- MODBUS interface
- PROFIBUS interface
- ETHERNET/IP interface
- Remote speed or setpoint control
- Witness performance test (2)
- Performance test certificates (2)
- Material certificates (2)
- Wooden packing case
- SPM (Shock Pulse Measurement) monitoring
- (I)MD dryer bypass (3)
- PDP (Pressure Dew-Point) sensor behind (I)MD (3)

	Z1110-275	Z1132-315VSD	ZR110-275	ZR132-315VSD	ZR300-750	ZR400-900VSD
			•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	std	std	std	std	•	std
	•	•	•	•	•	•
	•	•	•	•	•	•
	std on LV	std	std on LV	std	std on LV	std
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	•	•
	•	•	•	•	std	std
	•	•	•	•	•	•

(1) MV = Medium Voltage (= above 2130 V AC) / LV = Low Voltage

(2) Fixed content

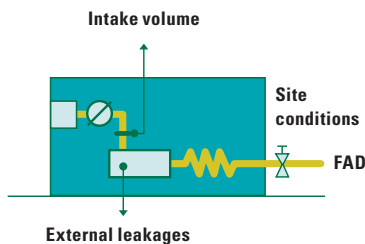
(3) On Full Feature units or units with free-standing MD

Technical data

True performance

Atlas Copco Z-compressors are measured according to ISO 1217, Annex C, Edition 3, stipulating the FAD (Free Air Delivery) measurement at the outlet of the package, net of all losses.

Atlas Copco specifications correspond to the capacity and pressure that are effectively available to the user, not to the air volume that is sucked in. Differences can be substantial.



Reference conditions

- (1) Reference conditions:
 - Dry air
 - Absolute inlet pressure 14.5 psig(a)
 - Cooling and air intake temperature 68 °F
 - Nominal working pressure:
 - 102 psig for 102, 109 and 125 psig
 - 131 psig for 145 and 151 psig variants
 - 174 psig for 184 psig variants
 - Z VSD: 5 % derating for 380V nets
 - Capacity of the compressor package measured according to ISO 1217, Third Edition, Annex C
- (2) Cooling water temp. rise of 27 °F (18 °F for FF)
- (3) Pressure dewpoint is specified for
 - 68 °F cooling air/water temperature
 - relative humidity of 60 %
 - nominal working pressure
 - load level of minimum 50 %
- (4) ± 3 dB(A) according to ISO 2151:2004 and using ISO 9614-2

Conversions

- 1 kg = 2.2 lbs
- 1 mm = 0.039 inch
- °F = °C x 9/5 + 32



ZR 110-750 and ZR 132-900 VSD compressors - 50 Hz

	ZR watercooled	Free air delivery ⁽¹⁾			Installed motor	Cooling water consumption ⁽²⁾	Pressure dewpoint ⁽³⁾	Sound pressure level ⁽⁴⁾		Weight	Dimensions		
		Type	l/s	m ³ /min				cfm	kW		l/s	°C	w/o duct dB(A)
50 Hz - 7.5 bar(e)													
FF (with IMD Dryer)	ZR 110	318	19.1	674	110	3.5	-28	70	68	3265	3440	2000	1650
	ZR 132	367	22.0	778	132	4.1	-29	70	68	3390	3440	2000	1650
	ZR 145	394	23.6	835	160	4.2	-30	70	68	3530	3440	2000	1650
	ZR 160	471	28.3	998	160	4.4	-25	67	66	4705	4340	2000	1650
	ZR 200	607	36.4	1286	200	5.1	-25	67	66	5365	4340	2000	1650
	ZR 250	726	43.6	1538	250	5.8	-28	67	66	5360	4340	2000	1650
	ZR 275	780	46.8	1653	275	6.2	-30	67	66	5560	4340	2000	1650
Pack (w/o IMD Dryer)	ZR 110	318	19.1	674	110	1.7	-	67	65	2635	2540	2000	1650
	ZR 132	367	22.0	778	132	1.9	-	67	65	2760	2540	2000	1650
	ZR 145	394	23.6	835	160	2.0	-	67	66	2900	2540	2000	1650
	ZR 160	471	28.3	998	160	2.3	-	67	66	3795	3140	2000	1650
	ZR 200	607	36.4	1286	200	3.0	-	67	66	3995	3140	2000	1650
	ZR 250	726	43.6	1538	250	3.7	-	67	66	3990	3140	2000	1650
	ZR 275	780	46.8	1653	275	4.1	-	67	66	4190	3140	2000	1650
	ZR 300	775	46.5	1642	315	4.0	-	70	69	6650	3700	2400	2120
	ZR 315	855	51.3	1812	315	4.4	-	71	69	6650	3700	2400	2120
	ZR 355	949	56.9	2011	355	4.8	-	71	69	6950	3700	2400	2120
	ZR 400	1049	62.9	2223	400	5.4	-	71	70	7050	3700	2400	2120
	ZR 425	1162	69.7	2462	450	6.2	-	72	70	7250	3700	2400	2120
	ZR 450	1257	75.4	2663	450	7.2	-	73	71	9500	4060	2400	2120
	ZR 500	1387	83.2	2939	500	7.8	-	73	71	9500	4060	2400	2120
	ZR 630	1726	103.6	3657	630	9.4	-	75	73	10225	4060	2400	2120
	ZR 750	2075	124.5	4397	750	11.3	-	75	73	10325	4060	2400	2120

ZR watercooled	Free air delivery ⁽¹⁾			Installed motor	Cooling water consump- tion ⁽²⁾	Pressure dewpoint ⁽³⁾	Sound pressure level ⁽⁴⁾		Weight	Dimensions			
	Type	cfm	m³/min				l/s	kW		l/s	°C	w/o duct dB(A)	with duct dB(A)
50 Hz - 8.6 bar(e)													
FF (with IMD Dryer)	ZR 110	604	17.1	604	110	3.1	-28	70	68	3265	3440	2000	1650
	ZR 132	326	19.6	691	132	3.5	-29	70	68	3390	3440	2000	1650
	ZR 132 VSD	364	21.8	771	132	3.9	-28/-32	68-72	66-69	3500	3440	2000	1650
	ZR 145	362	21.7	767	160	3.9	-30	70	68	3530	3440	2000	1650
	ZR 160	435	26.1	922	160	4.2	-25	67	66	4705	4340	2000	1650
	ZR 160 VSD	431	25.9	913	160	4.2	-28/-32	68-74	66-71	3500	3440	2000	1650
	ZR 200	553	33.2	1172	200	4.8	-25	67	66	5365	4340	2000	1650
	ZR 250	691	41.5	1464	250	5.6	-28	67	66	5360	4340	2000	1650
	ZR 250 VSD	721	43.3	1528	250	5.8	-25/-30	63-73	62-71	6080	4340	2000	1650
	ZR 275	723	43.4	1532	315	5.8	-30	67	66	5560	4340	2000	1650
	ZR 315 VSD	836	50.2	1771	315	6.8	-25/-30	63-73	62-71	6080	4340	2000	1650
	ZR 110	285	17.1	604	110	1.5	-	67	65	2635	2540	2000	1650
	ZR 132	326	19.6	691	132	1.7	-	67	65	2760	2540	2000	1650
	ZR 132 VSD	369	22.1	782	132	1.9	-	62-68	61-66	2870	2540	2000	1650
ZR 145	362	21.7	767	160	1.9	-	67	66	2900	2540	2000	1650	
ZR 160	435	26.1	922	160	2.2	-	67	66	3795	3140	2000	1650	
ZR 160 VSD	434	26.0	920	160	2.2	-	62-70	61-66	2870	2540	2000	1650	
ZR 200	553	33.2	1172	200	2.8	-	67	66	3995	3140	2000	1650	
ZR 250	691	41.5	1464	250	3.5	-	67	66	3990	3140	2000	1650	
ZR 250 VSD	721	43.3	1528	250	3.7	-	63-73	62-71	4710	3140	2000	1650	
ZR 275	723	43.4	1532	315	3.8	-	67	66	4190	3140	2000	1650	
ZR 300	723	43.4	1532	315	4.1	-	71	70	6650	3700	2400	2120	
ZR 315	798	47.9	1691	315	4.5	-	72	70	6650	3700	2400	2120	
ZR 315 VSD	836	50.2	1771	315	4.3	-	63-73	62-71	4710	3140	2000	1650	
ZR 355	886	53.2	1877	355	4.9	-	72	72	6950	3700	2400	2120	
ZR 400	978	58.7	2072	400	5.4	-	72	71	7050	3700	2400	2120	
ZR 400 VSD	1114	66.9	2361	425	6.4	-	68-75	66-73	8350	4060	2470	2120	
ZR 425	1081	64.9	2291	450	6.2	-	73	71	7250	3700	2400	2120	
ZR 450	1166	70.0	2471	450	7.1	-	74	72	9500	4060	2400	2120	
ZR 500	1291	77.5	2735	500	7.7	-	74	72	9500	4060	2400	2120	
ZR 500 VSD	1318	79.1	2793	525	7.6	-	68-76	66-74	8350	4060	2470	2120	
ZR 630	1602	96.1	3394	630	9.3	-	76	74	10225	4060	2400	2120	
ZR 700 VSD	2063	123.8	4371	700	11.6	-	70-78	68-76	11850	4675	2470	2120	
ZR 750	1850	111.0	3920	750	10.7	-	76	74	10325	4060	2400	2120	
ZR 900 VSD	2456	147.4	5204	935	13.2	-	68-78	68-76	11850	4675	2470	2120	
50 Hz - 10 bar(e)													
FF (with IMD Dryer)	ZR 110	265	15.9	562	110	3.3	-28	70	68	3265	3440	2000	1650
	ZR 132	313	18.8	663	132	3.8	-29	70	68	3390	3440	2000	1650
	ZR 132 VSD	330	19.8	699	132	4.1	0,875	68-72	66-69	3500	3440	2000	1650
	ZR 145	334	20.0	708	160	4.1	-30	70	68	3530	3440	2000	1650
	ZR 160	402	24.1	852	160	4.3	-25	67	66	4705	4340	2000	1650
	ZR 160 VSD	392	23.5	831	160	4.4	0,875	68-74	66-71	3500	3440	2000	1650
	ZR 200	504	30.2	1068	200	4.9	-25	67	66	4905	4340	2000	1650
	ZR 250	629	37.7	1333	250	5.6	-28	67	66	5360	4340	2000	1650
	ZR 250 VSD	648	38.9	1373	250	5.8	-25/-30	67-73	65-71	6080	4340	2000	1650
	ZR 275	689	41.3	1460	315	6.0	-30	67	66	5560	4340	2000	1650
	ZR 315 VSD	746	44.8	1581	315	6.7	-25/-30	67-73	65-71	6080	4340	2000	1650
	ZR 110	265	15.9	562	110	1.6	-	67	65	2380	2540	2000	1650
	ZR 132	313	18.8	663	132	1.8	-	67	65	2440	2540	2000	1650
	ZR 132 VSD	333	20.0	706	132	1.9	-	62-68	61-66	2590	2540	2000	1650
ZR 145	334	20.0	708	160	1.9	-	67	66	2580	2540	2000	1650	
ZR 160	402	24.1	852	160	2.3	-	67	66	3795	3140	2000	1650	
ZR 160 VSD	394	23.6	835	160	2.1	-	62-70	61-66	2590	2540	2000	1650	
ZR 200	504	30.2	1068	200	2.9	-	67	66	3995	3140	2000	1650	
ZR 250	629	37.7	1333	250	3.6	-	67	66	3990	3140	2000	1650	
ZR 250 VSD	648	38.9	1373	250	3.7	-	64-70	65-68	4710	3140	2000	1650	
ZR 275	689	41.3	1460	315	4.0	-	67	66	4190	3140	2000	1650	
ZR 300	689	41.3	1460	315	4.2	-	71	70	6650	3700	2400	2120	
ZR 315	765	45.9	1621	315	4.5	-	72	70	6650	3700	2400	2120	
ZR 315 VSD	746	44.8	1581	315	4.3	-	63-73	62-71	4710	3140	2000	1650	
ZR 355	846	50.8	1793	355	4.9	-	73	71	6950	3700	2400	2120	
ZR 400	939	56.3	1990	400	5.4	-	73	71	7050	3700	2400	2120	
ZR 400 VSD	979	58.7	2074	425	5.7	-	69-76	66-73	8350	4060	2470	2120	
ZR 450	1047	62.8	2218	450	7.1	-	74	72	9500	4060	2400	2120	
ZR 500	1199	71.9	2541	500	7.9	-	74	72	9500	4060	2400	2120	
ZR 500 VSD	1150	69.0	2437	525	7.6	-	69-77	66-74	8350	4060	2470	2120	
ZR 630	1474	88.4	3123	630	9.3	-	76	74	10225	4060	2400	2120	
ZR 700 VSD	1859	111.5	3939	700	11.4	-	70-78	68-76	11850	4675	2470	2120	
ZR 750	1704	102.2	3611	750	10.5	-	76	74	10325	4060	2400	2120	
ZR 900 VSD	2057	123.4	4359	935	12.5	-	68-79	68-77	11850	4675	2470	2120	
50 Hz - 13 bar(e)													
FF (with IMD)	ZR 145	297	17.8	629	160	4.2	-30	75	72	3530	3440	2000	1650
	ZR 250	505	30.3	1070	250	5.4	-28	72	70	5360	4340	2000	1650
	ZR 275	550	33.0	1165	275	5.7	-30	72	70	5560	4340	2000	1650
Pack (w/o IMD)	ZR 145	297	17.8	629	160	2.0	-	75	72	2900	2540	2000	1650
	ZR 250	505	30.3	1070	250	3.4	-	72	70	3990	3140	2000	1650
	ZR 275	551	33.1	1168	275	3.7	-	72	70	4190	3140	2000	1650

ZR 110-750 and ZR 132-900 VSD compressors - 60 Hz

	ZR watercooled	Free air delivery ⁽¹⁾			Installed motor	Cooling water consumption ⁽²⁾	Pressure dewpoint ⁽³⁾	Sound pressure level ⁽⁴⁾		Weight	Dimensions		
		Type	cfm	m ³ /min				l/s	HP		gpm	°F	w/o duct dB(A)
60 Hz - 102 psig													
FF (with IMD Dryer)	ZR 110	746	21.1	352	150	62	-18	70	68	7198	135.4	78.7	65.0
	ZR 160	981	27.8	463	200	70	-13	67	66	10351	170.9	78.7	65.0
	ZR 200	1216	34.4	574	250	78	-13	67	66	11696	170.9	78.7	65.0
	ZR 250	1413	40.0	667	300	86	-18	67	66	12158	170.9	78.7	65.0
	ZR 275	1593	45.1	752	350	94	-22	67	66	12423	170.9	78.7	65.0
Pack (w/o IMD Dryer)	ZR 110	746	21.1	352	150	30	-	67	65	5809	100.0	78.7	65.0
	ZR 160	981	27.8	463	200	36	-	67	66	8344	123.6	78.7	65.0
	ZR 200	1216	34.4	574	250	46	-	67	66	8675	123.6	78.7	65.0
	ZR 250	1413	40.0	667	300	54	-	67	66	9138	123.6	78.7	65.0
	ZR 275	1593	45.1	752	350	60	-	67	66	9403	123.6	78.7	65.0
60 Hz - 125 psig													
FF (with IMD Dryer)	ZR 110	674	19.1	318	150	60	-18	70	68	7198	135.4	78.7	65.0
	ZR 132 VSD	771	21.8	364	175	62	-18/-26	68-72	66-69	7716	135.4	78.7	65.0
	ZR 145	843	23.9	398	200	65	-22	70	68	7782	135.4	78.7	65.0
	ZR 160	888	25.1	419	200	70	-13	67	66	10351	170.9	78.7	65.0
	ZR 160 VSD	913	25.9	431	215	67	-18/-26	68-74	66-71	7716	135.4	78.7	65.0
	ZR 200	1093	31.0	516	250	73	-13	67	66	11696	170.9	78.7	65.0
	ZR 250	1312	37.1	619	300	82	-18	67	66	12158	170.9	78.7	65.0
	ZR 250 VSD	1528	43.3	721	335	92	-13/-22	63-73	62-71	13404	170.9	78.7	65.0
	ZR 275	1538	43.6	726	350	92	-22	67	66	12423	170.9	78.7	65.0
	ZR 315 VSD	1771	50.2	836	423	108	-13/-22	63-73	62-71	13404	170.9	78.7	65.0
Pack (w/o IMD Dryer)	ZR 110	674	19.1	318	150	27	-	67	65	5809	100.0	78.7	65.0
	ZR 132 VSD	782	22.1	369	175	30	-	62-68	61-66	6327	100.0	78.7	65.0
	ZR 145	843	23.9	398	200	33	-	68	66	6393	100.0	78.7	65.0
	ZR 160	888	25.1	419	200	33	-	67	66	8344	123.6	78.7	65.0
	ZR 160 VSD	920	26.0	434	215	35	-	62-70	61-66	6327	100.0	78.7	65.0
	ZR 200	1093	31.0	516	250	41	-	67	66	8675	123.6	78.7	65.0
	ZR 250	1312	37.1	619	300	49	-	67	66	9138	123.6	78.7	65.0
	ZR 250 VSD	1528	43.3	721	335	59	-	63-73	62-71	10384	123.6	78.7	65.0
	ZR 275	1538	43.6	726	350	59	-	67	66	9403	123.6	78.7	65.0
	ZR 300	1600	45.3	755	350	65	-	71	70	14440	145.7	94.5	83.5
	ZR 315	1801	51.0	850	400	73	-	72	70	14440	145.7	94.5	83.5
	ZR 315 VSD	1771	50.2	836	423	68	-	63-73	62-71	10384	123.6	94.5	65.0
	ZR 355	2024	57.3	955	450	81	-	72	70	15322	145.7	94.5	83.5
	ZR 400	2210	62.6	1043	500	89	-	72	71	15543	145.7	94.5	83.5
	ZR 400 VSD	2361	66.9	1114	570	101	-	68-75	66-73	18342	159.8	97.2	83.5
	ZR 450	2767	78.4	1306	600	124	-	74	72	20503	159.8	94.5	83.5
	ZR 500	3259	92.3	1538	700	141	-	74	72	20944	159.8	94.5	83.5
	ZR 500 VSD	2793	79.1	1318	703	120	-	68-76	66-74	18342	159.8	97.2	83.5
	ZR 630	3602	102.0	1700	800	157	-	76	74	22542	159.8	94.5	83.5
	ZR 700 VSD	4371	123.8	2063	938	184	-	70-78	68-76	26125	184.1	97.2	83.5
ZR 750	4109	116.3	1939	900	178	-	76	74	22542	159.8	94.5	83.5	
ZR 900 VSD	5204	147.4	2456	1253	209	-	68-78	68-76	26125	184.1	97.2	83.5	

ZR watercooled	Free air delivery ⁽¹⁾			Installed motor	Cooling water consump- tion ⁽²⁾	Pressure dewpoint ⁽³⁾	Sound pressure level ⁽⁴⁾		Weight	Dimensions			
	Type	cfm	m ³ /min				l/s	HP		gpm	°F	w/o duct dB(A)	with duct dB(A)
60 Hz - 151 psig													
FF (with IMD Dryer)	ZR 110	608	17.2	287	150	55	-18	70	68	7198	135.4	78.7	65.0
	ZR 132 VSD	699	19.8	330	175	62	-18/-26	68-72	66-69	7716	135.4	78.7	65.0
	ZR 145	712	20.2	336	200	65	-22	70	68	7782	135.4	78.7	65.0
	ZR 160	795	22.5	375	200	70	-13	67	66	10351	170.9	78.7	65.0
	ZR 160 VSD	831	23.5	392	215	67	-18/-26	68-74	66-71	7716	135.4	78.7	65.0
	ZR 200	973	27.5	459	250	74	-13	67	66	11696	170.9	78.7	65.0
	ZR 250	1161	32.9	548	300	82	-18	67	66	12158	170.9	78.7	65.0
	ZR 250 VSD	1373	38.9	648	335	92	-13/-22	67-73	65-71	13404	170.9	78.7	65.0
	ZR 275	1358	38.5	641	350	90	-22	67	66	12423	170.9	78.7	65.0
	ZR 315 VSD	1581	44.8	746	423	106	-13/-22	67-73	65-71	13404	170.9	78.7	65.0
Pack (w/o IMD Dryer)	ZR 110	608	17.2	287	150	27	-	67	65	5809	100.0	78.7	65.0
	ZR 132 VSD	706	20.0	333	214	30	-	62-68	61-66	6327	100.0	78.7	65.0
	ZR 145	712	20.2	336	200	32	-	67	66	6393	100.0	78.7	65.0
	ZR 160	795	22.5	375	200	35	-	67	66	8344	123.6	78.7	65.0
	ZR 160 VSD	835	23.6	394	215	33	-	62-70	61-66	6327	100.0	78.7	65.0
	ZR 200	973	27.5	459	250	41	-	67	66	8675	123.6	78.7	65.0
	ZR 250	1161	32.9	548	300	49	-	67	66	9138	123.6	78.7	65.0
	ZR 250 VSD	1373	38.9	648	335	59	-	64-70	65-68	10384	123.6	78.7	65.0
	ZR 275	1358	38.5	641	350	57	-	67	66	9403	123.6	78.7	65.0
	ZR 300	1434	40.6	677	350	68	-	71	70	14440	145.7	94.5	83.5
	ZR 315	1615	45.7	762	400	73	-	72	70	14440	145.7	94.5	83.5
	ZR 315 VSD	1581	44.8	746	423	68	-	63-73	62-71	10384	123.6	78.7	65.0
	ZR 355	1818	51.5	858	450	81	-	73	71	15322	145.7	94.5	83.5
	ZR 400	2002	56.7	945	500	87	-	73	71	15543	145.7	94.5	83.5
	ZR 400 VSD	2074	58.7	979	570	90	-	69-76	66-73	18409	159.8	97.2	83.5
	ZR 450	2424	68.6	1144	600	122	-	74	xx	20503	159.8	94.5	83.5
	ZR 500	2822	79.9	1332	700	138	-	75	xx	20944	159.8	94.5	83.5
	ZR 500 VSD	2437	69.0	1150	703	120	-	69-77	66-74	18409	159.8	97.2	83.5
	ZR 630	3123	88.4	1474	800	149	-	76	74	22542	159.8	94.5	83.5
	ZR 700 VSD	3939	111.5	1859	938	181	-	70-78	68-76	26125	184.1	97.2	83.5
ZR 750	3685	104.3	1739	900	171	-	76	74	22542	159.8	94.5	83.5	
ZR 900 VSD	4359	123.4	2057	1253	198	-	68-79	68-77	26125	184.1	97.2	83.5	
60 Hz - 189 psig													
FF (with IMD Dryer)	ZR 145	634	17.9	299	200	68	-18	75	72	7782	135.4	78.7	65.0
	ZR 250	1040	29.5	491	300	86	-18	72	70	12158	170.9	78.7	65.0
	ZR 275	1165	33.0	550	350	92	-22	72	70	12423	170.9	78.7	65.0
Pack (w/o IMD Dryer)	ZR 145	634	17.9	299	200	32	-	75	72	6393	100.0	78.7	65.0
	ZR 250	1040	29.5	491	300	54	-	72	70	9138	123.6	78.7	65.0
	ZR 275	1165	33.0	550	350	60	-	72	70	9403	123.6	78.7	65.0

- (1) Reference conditions:
- Dry air
 - Absolute inlet pressure 14.5 psi(a)
 - Cooling and air intake temperature 68 °F
 - Nominal working pressure:
 - 102 psig for 102, 109, and 125 psig variants
 - 131 psig for 145 and 151 psig variants
 - 174 psig for 189 psig variants
 - Z VSD: 5 % derating for 380V nets
 - Capacity of the compressor package measured according to ISO 1217, Third Edition, Annex C

- (2) Cooling water temp. rise of 27 °F (18 °F for FF)

- (3) Pressure dewpoint is specified for
- 68 °F cooling air/water temperature
 - relative humidity of 60 %
 - nominal working pressure
 - load level of minimum 50 %

- (4) ± 3 dB(A) according to ISO 2151:2004 and using ISO 9614-2



ZT 110-275 and ZT 132-315 VSD compressors - 50 Hz

	ZT aircooled	Free air delivery ⁽¹⁾			Installed motor	Installed fan motor	Pressure dewpoint ⁽³⁾	Sound pressure level ⁽⁴⁾		Weight	Dimensions		
		Type	l/s	m ³ /min				cfm	kW		kW	°C	w/o duct dB(A)
50 Hz - 7.5 bar(e)													
FF (with IMD Dryer)	ZT 110	312	18.7	661	110	4.8	-28	72	70	4095	4040	2000	1650
	ZT 132	360	21.6	763	132	4.8	-29	73	70	4220	4040	2000	1650
	ZT 145	386	23.2	818	160	4.8	-30	73	71	4360	4040	2000	1650
	ZT 160	457	27.4	968	160	8.8	-30	77	75	5625	5040	2100	1650
	ZT 200	557	33.4	1180	200	8.8	-25	77	75	6285	5040	2100	1650
	ZT 250	695	41.7	1473	250	8.8	-28	77	75	6280	5040	2100	1650
Pack (w/o IMD Dryer)	ZT 275	729	43.7	1545	315	18.5	-30	77	75	6630	5040	2100	1650
	ZT 110	314	18.8	665	110	4.8	-	71	70	3585	4040	2000	1650
	ZT 132	362	21.7	767	132	4.8	-	72	70	3710	4040	2000	1650
	ZT 145	388	23.3	822	160	4.8	-	72	70	3850	4040	2000	1650
	ZT 160	457	27.4	968	160	8.8	-	77	75	5185	5040	2100	1650
	ZT 200	557	33.4	1180	200	8.8	-	77	75	5385	5040	2100	1650
	ZT 250	695	41.7	1473	250	8.8	-	77	75	5380	5040	2100	1650
	ZT 275	729	43.7	1545	275	8.8	-	77	75	5580	5040	2100	1650
50 Hz - 8.6 bar(e)													
FF (with IMD Dryer)	ZT 110	281	16.9	595	110	4.8	-28	72	70	4095	4040	2000	1650
	ZT 132	322	19.3	682	132	4.8	-29	73	70	4220	4040	2000	1650
	ZT 132 VSD	349	20.9	739	132	4.8	-25/-30	67-71	66-70	4330	4040	2000	1650
	ZT 145	357	21.4	756	160	4.8	-30	73	71	4360	4040	2000	1650
	ZT 160	422	25.3	894	160	8.8	-30	77	75	5625	5040	2100	1650
	ZT 160 VSD	404	24.2	856	160	4.8	-25/-30	67-74	66-71	4330	4040	2000	1650
	ZT 200	510	30.6	1081	200	8.8	-25	77	75	6285	5040	2100	1650
	ZT 250	661	39.7	1401	250	8.8	-28	77	75	6280	5040	2100	1650
	ZT 250 VSD	690	41.4	1462	250	18.5	-25/-30	70-77	68-75	6660	5040	2100	1650
	ZT 275	696	41.8	1475	315	18.5	-30	77	75	6630	5040	2100	1650
Pack (w/o IMD Dryer)	ZT 315 VSD	778	46.7	1648	315	18.5	-25/-30	70-78	68-76	6660	5040	2100	1650
	ZT 110	281	16.9	595	110	4.8	-	71	70	3585	4040	2000	1650
	ZT 132	322	19.3	682	132	4.8	-	72	70	3710	4040	2000	1650
	ZT 132 VSD	354	21.2	750	132	4.8	-	67-74	66-71	3820	4040	2000	1650
	ZT 145	357	21.4	756	160	4.8	-	72	70	3850	4040	2000	1650
	ZT 160	422	25.3	894	160	8.8	-	77	75	5185	5040	2100	1650
	ZT 160 VSD	410	24.6	869	160	4.8	-	67-74	66-71	3820	4040	2000	1650
	ZT 200	510	30.6	1081	200	8.8	-	77	75	5385	5040	2100	1650
	ZT 250	661	39.7	1401	250	8.8	-	77	75	5380	5040	2100	1650
	ZT 250 VSD	690	41.4	1462	250	8.8	-	70-77	68-75	6130	5040	2100	1650
	ZT 275	696	41.8	1475	315	8.8	-	77	75	5580	5040	2100	1650
	ZT 315 VSD	778	46.7	1648	315	8.8	-	70-78	68-76	6130	5040	2100	1650
50 Hz - 10 bar(e)													
FF (with IMD Dryer)	ZT 110	260	15.6	551	110	4.8	-28	72	70	4095	4040	2000	1650
	ZT 132	307	18.4	650	132	4.8	-29	73	70	4220	4040	2000	1650
	ZT 132 VSD	316	19.0	670	132	4.8	-25/-30	67-71	66-70	4330	4040	2000	1650
	ZT 145	327	19.6	693	160	4.8	-30	73	70	4360	4040	2000	1650
	ZT 160	383	23.0	812	160	8.8	-30	78	76	5625	5040	2100	1650
	ZT 160 VSD	370	22.2	784	160	4.8	-25/-30	67-74	66-71	4330	4040	2000	1650
	ZT 200	485	29.1	1028	200	8.8	-30	78	76	5825	5040	2100	1650
	ZT 250	605	36.3	1282	250	8.8	-28	78	76	6280	5040	2100	1650
	ZT 250 VSD	610	36.6	1293	250	18.5	-25/-30	71-78	69-76	6660	5040	2100	1650
	ZT 275	667	40.0	1413	315	18.5	-30	78	76	6630	5040	2100	1650
Pack (w/o IMD Dryer)	ZT 315 VSD	702	42.1	1487	315	18.5	-25/-30	71-79	69-77	6660	5040	2100	1650
	ZT 110	261	15.7	553	110	4.8	-	71	70	3560	4040	2000	1650
	ZT 132	309	18.5	655	132	4.8	-	72	70	3700	4040	2000	1650
	ZT 132 VSD	320	19.2	678	132	4.8	-	67-71	66-70	4050	4040	2000	1650
	ZT 145	329	19.7	697	160	4.8	-	72	70	3850	4040	2000	1650
	ZT 160	383	23.0	812	160	8.8	-	78	76	5185	5040	2100	1650
	ZT 160 VSD	384	23.0	814	160	4.8	-	67-74	66-71	4050	4040	2000	1650
	ZT 200	485	29.1	1028	200	8.8	-	78	76	5385	5040	2100	1650
	ZT 250	605	36.3	1282	250	8.8	-	78	76	5380	5040	2100	1650
	ZT 250 VSD	610	36.6	1293	250	8.8	-	71-78	69-76	6130	5040	2100	1650
	ZT 275	667	40.0	1413	315	8.8	-	78	76	5580	5040	2100	1650
	ZT 315 VSD	702	42.1	1487	315	8.8	-	71-79	69-77	6130	5040	2100	1650

▶ ZT 110-275 and ZT 132-315 VSD compressors - 60 Hz

ZT aircooled	Free air delivery ⁽¹⁾			Installed motor HP	Installed fan motor HP	Pressure dewpoint ⁽³⁾ °F	Sound pressure level ⁽⁴⁾		Weight lbs.	Dimensions			
	Type	cfm	m ³ /min				l/s	w/o duct dB(A)		with duct dB(A)	A inches	B inches	C inches
60 Hz - 125 psig													
FF (with IMD Dryer)	ZT 110	661	18.7	312	150	6.5	-18	72	70	9028	159.1	78.7	65.0
	ZT 132 VSD	739	20.9	349	175	6.5	-13/-22	67-71	66-70	9546	159.1	78.7	65.0
	ZT 145	828	23.5	391	200	6.5	-22	73	70	9612	159.1	78.7	65.0
	ZT 160	869	24.6	410	200	12.3	-22	77	75	12379	198.4	82.7	65.0
	ZT 160 VSD	856	24.2	404	215	6.5	-13/-22	67-74	66-71	9546	159.1	78.7	65.0
	ZT 200	1059	30.0	500	250	12.3	-13	77	75	13724	198.4	82.7	65.0
	ZT 250	1263	35.8	596	300	12.3	-18	77	75	14187	198.4	82.7	65.0
	ZT 250 VSD	1462	41.4	690	335	24.8	-13/-22	70-77	68-75	14683	198.4	82.7	65.0
	ZT 275	1481	41.9	699	350	24.8	-22	77	75	14782	198.4	82.7	65.0
	ZT 315 VSD	1648	46.7	778	423	24.8	-13/-22	70-78	68-76	14683	198.4	82.7	65.0
Pack (w/o IMD Dryer)	ZT 110	665	18.8	314	150	6.5	-	71	70	7904	159.1	78.7	65.0
	ZT 132 VSD	750	21.2	354	175	6.5	-	67-74	66-71	8929	159.1	78.7	65.0
	ZT 145	831	23.5	392	200	6.5	-	72	70	8488	159.1	78.7	65.0
	ZT 160	869	24.6	410	200	12.3	-	77	75	11409	198.4	82.7	65.0
	ZT 160 VSD	869	24.6	410	215	6.5	-	67-74	66-71	8929	159.1	78.7	65.0
	ZT 200	1059	30.0	500	250	12.3	-	77	75	11740	198.4	82.7	65.0
	ZT 250	1263	35.8	596	300	12.3	-	77	75	12203	198.4	82.7	65.0
	ZT 250 VSD	1462	41.4	690	335	12.3	-	70-77	68-75	13514	198.4	82.7	65.0
	ZT 275	1481	41.9	699	350	12.3	-	77	75	12467	198.4	82.7	65.0
	ZT 315 VSD	1648	46.7	778	423	12.3	-	70-78	68-76	13514	198.4	82.7	65.0
60 Hz - 151 psig													
FF (with IMD Dryer)	ZT 110	598	16.9	282	150	6.5	-18	72	70	9028	159.1	78.7	65.0
	ZT 132 VSD	670	19.0	316	175	6.5	-13/-22	67-71	66-70	9546	159.1	78.7	65.0
	ZT 145	697	19.7	329	200	6.5	-22	73	70	9612	159.1	78.7	65.0
	ZT 160	761	21.5	359	200	12.3	-22	78	76	12379	198.4	82.7	65.0
	ZT 160 VSD	784	22.2	370	215	6.5	-13/-22	67-74	66-71	9546	159.1	78.7	65.0
	ZT 200	928	26.3	438	250	12.3	-22	78	76	13724	198.4	82.7	65.0
	ZT 250	1115	31.6	526	300	12.3	-18	78	76	14187	198.4	82.7	65.0
	ZT 250 VSD	1293	36.6	610	335	24.8	-13/-22	71-78	69-76	14683	198.4	82.7	65.0
	ZT 275	1305	37.0	618	350	24.8	-22	78	76	14782	198.4	82.7	65.0
	ZT 315 VSD	1487	42.1	702	423	24.8	-13/-22	71-79	69-77	14683	198.4	82.7	65.0
Pack (w/o IMD Dryer)	ZT 110	600	17.0	283	150	6.5	-	71	70	7904	159.1	78.7	65.0
	ZT 132 VSD	678	19.2	320	175	6.5	-	67-71	66-70	8929	159.1	78.7	65.0
	ZT 145	701	19.9	331	200	6.5	-	72	70	8488	159.1	78.7	65.0
	ZT 160	761	21.5	359	200	12.3	-	78	76	11409	198.4	82.7	65.0
	ZT 160 VSD	814	23.0	384	215	6.5	-	67-74	66-71	8929	159.1	78.7	65.0
	ZT 200	928	26.3	438	250	12.3	-	78	76	11740	198.4	82.7	65.0
	ZT 250	1115	31.6	526	300	12.3	-	78	76	12203	198.4	82.7	65.0
	ZT 250 VSD	1293	36.6	610	335	12.3	-	71-78	69-76	13514	198.4	82.7	65.0
	ZT 275	1305	37.0	616	350	12.3	-	78	76	12467	198.4	82.7	65.0
	ZT 315 VSD	1487	42.1	702	423	12.3	-	71-79	69-77	13514	198.4	82.7	65.0

(1) Reference conditions:

- Dry air
- Absolute inlet pressure 14.5 psig
- Cooling and air intake temperature 68 °F
- Nominal working pressure:
 - 102 psig for 102, 109, and 125 variants
 - 131 psig for 145 and 151 psig variants
- Z VSD: 5 % derating for 380V nets
- Capacity of the compressor package measured according to ISO 1217, Third Edition, Annex C

(2) Cooling water temp. rise of 27 °F (18 °F for FF)

(3) Pressure dewpoint is specified for

- 68 °F cooling air/water temperature
- relative humidity of 60 %
- nominal working pressure
- load level of minimum 50 %

(4) ± 3 dB(A) according to ISO 2151:2004 and using ISO 9614-2





What sets Atlas Copco apart? Our belief that, to excel, we must provide the best possible know-how and technology in ways that our customers value. Whether we're fully supporting existing products or advancing technology through innovation, we constantly focus on customer needs.

The Atlas Copco way of doing business grows from ongoing interaction, long-term relationships, and a commitment to understanding each customer's process and objectives. As a result, every compressed air solution we create helps a customer operate with greater efficiency, economy, and productivity.

Satisfying customer needs effectively has made Atlas Copco the number one compressor manufacturer in the world. We will continue to attract new business through our unwavering conviction to creating products and ideas that help our customers succeed.



Danger: Compressed air should never be supplied as breathing air unless air is properly purified for breathing. Atlas Copco assumes no responsibility or liability related to the purchaser's/user's breathing air system.

The information contained herein is general in nature and is not intended for specific construction, installation or application purposes



Copyright © 2007 Atlas Copco Compressors LLC. All rights reserved.
® Atlas Copco is a registered trademark of Atlas Copco AB

Atlas Copco Compressors LLC
1800 Overview Drive
Rock Hill, SC 29730
Tel. 803-817-7000
Tel. 800-232-3234
Fax. 803-817-7450
www.atlascopco.us