

# ***Oil-free rotary screw compressors***



ZR/ZT 110-275 (FF) & ZR/ZT 132-315 VSD (FF)

***Atlas Copco***



# Technical specifications

## ZR 110-275 (FF)

Type	Free air delivery <sup>(1)</sup>			Installed motor		Noise level <sup>(2)</sup>	Weight			
							Standard		Full Feature	
	l/s	m³/min	cfm	kW	hp		kg	lb	kg	lb
50 Hz										
ZR 110 - 7.5	318.2	19.1	674	110	150	69	2635	5809	2880	6349
ZR 110 - 8.6	286.1	17.2	606	110	150	69	2635	5809	2880	6349
ZR 110 - 10	266.5	16.0	565	110	150	69	2635	5809	2880	6349
ZR 132 - 7.5	365.6	21.9	775	132	150	69	2760	6085	2940	6482
ZR 132 - 8.6	326.4	19.6	692	132	150	69	2760	6085	2940	6482
ZR 132 - 10	314.2	18.9	666	132	150	69	2760	6085	2940	6482
ZR 145 - 7.5	391.6	23.5	830	145	200	70	2900	6393	3080	6790
ZR 145 - 8.6	361.7	21.7	766	145	200	70	2900	6393	3080	6790
ZR 145 - 10	334.5	20.1	709	145	200	69	2900	6393	3080	6790
ZR 145 - 13	304.0	18.2	644	145	200	73	2900	6393	3080	6790
ZR 160 - 7.5	472.2	28.3	1001	160	200	69	3850	8488	5650	12456
ZR 160 - 8.6	435.9	26.2	924	160	200	69	3850	8488	5650	12456
ZR 160 - 10	402.6	24.2	853	160	200	69	3850	8488	5650	12456
ZR 200 - 7.5	602.1	36.1	1276	200	250	67	4000	8818	5800	12787
ZR 200 - 8.6	551.6	33.1	1169	200	250	67	4000	8818	5800	12787
ZR 200 - 10	506.2	30.4	1073	200	250	69	4000	8818	5800	12787
ZR 250 - 7.5	7176	43.1	1521	250	300	67	4100	9039	5900	13007
ZR 250 - 8.6	683.8	41.0	1449	250	300	67	4100	9039	5900	13007
ZR 250 - 10	622.5	37.4	1319	250	300	67	4100	9039	5900	13007
ZR 250 - 13 <sup>(3)</sup>	514.9	30.9	1091	250	300	70	4100	9039		
ZR 275 - 7.5	774.1	46.4	1640	275	350	67	4300	9480	6100	13448
ZR 275 - 8.6	7176	43.1	1521	275	350	67	4300	9480	6100	13448
ZR 275 - 10	683.5	41.0	1448	275	350	67	4300	9480	6100	13448
ZR 275 - 13 <sup>(3)</sup>	561.8	33.7	1190	275	350	70	4300	9480		
60 Hz										
ZR 110 - 7	347.7	20.9	737	110	150	69	2635	5809	2880	6349
ZR 110 - 8.6	318.2	19.1	674	110	150	69	2635	5809	2880	6349
ZR 110 - 10.4	288.7	17.3	612	110	150	69	2635	5809	2880	6349
ZR 145 - 8.6	395.7	23.7	838	145	200	68	2900	6393	3080	6790
ZR 145 - 10.4	335.9	20.2	712	145	200	69	2900	6393	3080	6790
ZR 145 - 13	315.2	18.9	668	145	200	73	2900	6393	3080	6790
ZR 160 - 7	465.4	27.9	986	160	200	69	3850	8488	5650	12456
ZR 160 - 8.6	423.5	25.4	897	160	200	69	3850	8488	5650	12456
ZR 160 - 10.4	375.5	22.5	796	160	200	69	3850	8488	5650	12456
ZR 200 - 7	575.1	34.5	1219	200	250	67	4000	8818	5800	12787
ZR 200 - 8.6	519.1	31.1	1100	200	250	69	4000	8818	5800	12787
ZR 200 - 10.4	459.6	27.6	974	200	250	69	4000	8818	5800	12787
ZR 250 - 7	6670	40.0	1413	250	300	67	4100	9039	5900	13007
ZR 250 - 8.6	621.7	37.3	1317	250	300	67	4100	9039	5900	13007
ZR 250 - 10.4	546.9	32.8	1159	250	300	69	4100	9039	5900	13007
ZR 250 - 13 <sup>(3)</sup>	500.6	30.0	1061	250	300	70	4100	9039		
ZR 275 - 7	749.9	45.0	1589	275	350	67	4300	9480	6100	13448
ZR 275 - 8.6	725.3	43.5	1537	275	350	67	4300	9480	6100	13448
ZR 275 - 10.4	640.0	38.4	1356	275	350	67	4300	9480	6100	13448
ZR 275 - 13 <sup>(3)</sup>	561.5	33.7	1190	275	350	70	4300	9480		

(1) 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.

FAD is measured at the following working pressures:

Fixed speed:

- 7/7.5/8.6 bar versions at 7 bar.
- 10/10.4 bar versions at 9 bar.
- 13 bar version at 12 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) Not available as FF variant.

# Technical specifications

## ZT 110-275 (FF)

Type	Free air delivery <sup>(1)</sup>			Installed motor		Noise level <sup>(2)</sup>	Weight			
							Standard		Full Feature	
	l/s	m³/min	cfm	kW	hp		kg	lb	kg	lb
50 Hz										
ZT 110 - 7.5	306.9	18.4	650	110	150	71	3560	7848	4070	8973
ZT 110 - 8.6	286.2	17.2	606	110	150	71	3560	7848	4070	8973
ZT 110 - 10	266.9	16.0	566	110	150	71	3560	7848	4070	8973
ZT 132 - 7.5	363.1	21.8	769	132	150	72	3700	8157	4210	9281
ZT 132 - 8.6	325.2	19.5	689	132	150	72	3700	8157	4210	9281
ZT 132 - 10	313.3	18.8	664	132	150	72	3700	8157	4210	9281
ZT 145 - 7.5	387.3	23.2	821	145	200	72	3850	8488	4360	9612
ZT 145 - 8.6	358.4	21.5	759	145	200	72	3850	8488	4360	9612
ZT 145 - 10	332.3	19.9	704	145	200	72	3850	8488	4360	9612
ZT 160 - 7.5	465.5	27.9	986	160	200	77	5150	11354	6350	13999
ZT 160 - 8.6	429.4	25.8	910	160	200	77	5150	11354	6350	13999
ZT 160 - 10	396.3	23.8	840	160	200	78	5150	11354	6350	13999
ZT 200 - 7.5	568.4	34.1	1204	200	250	78	5250	11574	6450	14220
ZT 200 - 8.6	521.7	31.3	1105	200	250	78	5250	11574	6450	14220
ZT 200 - 10	499.6	30.0	1059	200	250	78	5250	11574	6450	14220
ZT 250 - 7.5	706.3	42.4	1497	250	300	77	5300	11684	6500	14330
ZT 250 - 8.6	673.5	40.4	1427	250	300	78	5300	11684	6500	14330
ZT 250 - 10	613.9	36.8	1301	250	300	78	5300	11684	6500	14330
ZT 275 - 7.5	738.1	44.3	1564	275	350	77	5400	11905	6600	14550
ZT 275 - 8.6	706.3	42.4	1497	275	350	78	5400	11905	6600	14550
ZT 275 - 10	673.1	40.4	1426	275	350	78	5400	11905	6600	14550
60 Hz										
ZT 110 - 8.6	317.7	19.1	673	110	150	71	3560	7848	4070	8973
ZT 110 - 10.4	288.6	17.3	612	110	150	71	3560	7848	4070	8973
ZT 145 - 8.6	391.2	23.5	829	145	200	72	3850	8488	4360	9612
ZT 145 - 10.4	334.1	20.0	708	145	200	72	3850	8488	4360	9612
ZT 160 - 8.6	416.9	25.0	883	160	200	77	5150	11354	6350	13999
ZT 160 - 10.4	371.0	22.3	786	160	200	78	5150	11354	6350	13999
ZT 200 - 8.6	512.1	30.7	1085	200	250	77	5150	11354	6350	13999
ZT 200 - 10.4	453.2	27.2	960	200	250	78	5150	11354	6350	13999
ZT 250 - 8.6	613.0	36.8	1299	250	300	78	5300	11684	6500	14330
ZT 250 - 10.4	540.1	32.4	1144	250	300	78	5300	11684	6500	14330
ZT 275 - 8.6	713.7	42.8	1512	275	350	78	5400	11905	6600	14550
ZT 275 - 10.4	630.9	37.9	1337	275	350	78	5400	11905	6600	14550

(1) 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.

FAD is measured at the following working pressures:

Fixed speed:

- 7/7.5/8.6 bar versions at 7 bar.
- 10/10.4 bar versions at 9 bar.
- 13 bar version at 12 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.

## 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 110-145	2540	100.0	1650	65.0	2000	78.7	3440	135.4	1650	65.0	2000	78.7
ZR 160-275	3140	123.0	1650	65.0	2000	78.7	4340	170.9	1650	65.0	2000	78.7
ZT 110-145	4040	159.1	1650	65.0	2000	78.7	4040	159.1	1650	65.0	2000	78.7
ZT 160-275	5040	198.4	1650	65.0	2100	82.7	5040	198.4	1650	65.0	2100	82.7



# Technical specifications

## ZR 132-315 VSD (FF) (50/60 Hz)

Type	Working pressure <sup>(1)</sup>		Free air delivery <sup>(2)</sup>			Noise level <sup>(3)</sup>	Weight			
		bar(e)	l/s	m³/min	cfm		Standard		Full Feature	
						dB(A)	kg	lb	kg	lb
ZR 132 VSD - 8.6 bar(e)	Minimum	3.5	130 - 440	78 - 26.4	276 - 932	74	2870	6327	3500	7716
	Effective	7	129 - 374	7.7 - 22.4	273 - 792					
	Maximum	8.6	128 - 343	7.7 - 20.6	272 - 727					
ZR 132 VSD - 10.4 bar(e)	Minimum	6	119 - 373	7.1 - 22.4	252 - 789	74	2870	6327	3500	7716
	Effective	9	122 - 337	7.3 - 20.2	258 - 715					
	Maximum	10.4	137 - 313	8.2 - 18.8	291 - 663					
ZR 160 VSD - 8.6 bar(e)	Minimum	3.5	130 - 440	78 - 26.4	276 - 931	74	2870	6327	3500	7716
	Effective	7	129 - 431	7.7 - 25.9	273 - 914					
	Maximum	8.6	128 - 398	7.7 - 23.9	272 - 843					
ZR 160 VSD - 10.4 bar(e)	Minimum	6	119 - 412	7.1 - 24.7	252 - 872	74	2870	6327	3500	7716
	Effective	9	122 - 392	7.3 - 23.5	258 - 831					
	Maximum	10.4	137 - 366	8.2 - 21.9	291 - 774					
ZR 250 VSD - 8.6 bar(e)	Minimum	3.5	244 - 831	14.7 - 49.8	518 - 1760	73	4600	10141	6400	14109
	Effective	7	243 - 714	14.6 - 42.9	514 - 1514					
	Maximum	8.6	242 - 660	14.5 - 39.6	513 - 1399					
ZR 250 VSD - 10.4 bar(e)	Minimum	6	211 - 742	12.7 - 44.5	447 - 1572	73	4600	10141	6400	14109
	Effective	9	234 - 640	14.0 - 38.4	496 - 1357					
	Maximum	10.4	322 - 592	19.3 - 35.5	682 - 1254					
ZR 315 VSD - 8.6 bar(e)	Minimum	3.5	244 - 831	14.7 - 49.8	518 - 1760	73	4600	10141	6400	14109
	Effective	7	243 - 830	14.6 - 49.8	514 - 1759					
	Maximum	8.6	242 - 775	14.5 - 46.5	513 - 1642					
ZR 315 VSD - 10.4 bar(e)	Minimum	6	211 - 749	12.7 - 44.9	447 - 1587	73	4600	10141	6400	14109
	Effective	9	234 - 737	14.0 - 44.2	496 - 1563					
	Maximum	10.4	322 - 698	19.3 - 41.9	682 - 1478					

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

(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.

FAD is measured at the following working pressures:

Fixed speed:

- 7/7.5/8.6 bar versions at 7 bar.
- 10/10.4 bar versions at 9 bar.
- 13 bar version at 12 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.

