

# COMPRESSOR DATA SHEET

Federal Uniform Test Method for Certain Air Compressors Not Applicable

Rotary Compressor: Variable Frequency Drive

MODEL DATA - FOR COMPRESSED AIR

1	Manufacturer: Atlas Copco														
2	Model Number: ZR 90 VSD STD-8.6	Date: 01-05-2021													
	<input type="checkbox"/> Air-cooled <input checked="" type="checkbox"/> Water-cooled	Type: Screw													
	<input type="checkbox"/> Lubricated <input checked="" type="checkbox"/> Oil-free	# of Stages: 2													
3	Full Load Operating Pressure*(b)	102.0	psig*(b)												
4	Drive Motor Nominal Rating	120.7	hp												
5	Drive Motor Nominal Efficiency	94.4	percent												
6	Fan Motor Nominal Rating (if applicable)	--	hp												
7	Fan Motor Nominal Efficiency	--	percent												
8*	Input Power (kW)	Capacity (acfm) *(a,d)	Specific Power (kW/100 acfm)*(d)												
	108.4 Max	597.5	18.1												
	88.6	487.4	18.2												
	69.5	377.2	18.4												
	52.0	267.1	19.5												
	36.0 Min	157.0	23.0												
9*	Total Package Input Power at Zero Flow*(c,d)		6.6 kW												
10	<table border="1"> <caption>Specific Power vs Capacity Data</caption> <thead> <tr> <th>Capacity (ACFM)</th> <th>Specific Power (kW/100ACFM)</th> </tr> </thead> <tbody> <tr> <td>150</td> <td>23.5</td> </tr> <tr> <td>275</td> <td>19.5</td> </tr> <tr> <td>375</td> <td>18.5</td> </tr> <tr> <td>490</td> <td>18.2</td> </tr> <tr> <td>600</td> <td>18.1</td> </tr> </tbody> </table>			Capacity (ACFM)	Specific Power (kW/100ACFM)	150	23.5	275	19.5	375	18.5	490	18.2	600	18.1
Capacity (ACFM)	Specific Power (kW/100ACFM)														
150	23.5														
275	19.5														
375	18.5														
490	18.2														
600	18.1														

\*For models that are tested in the CAGI Performance Verification Program, these items are verified by program administrator

Consult CAGI website for a list of participants in the third party verification program:

[www.cagi.org](http://www.cagi.org)

Notes:

- Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex E; acfm is actual cubic feet per minute at inlet conditions.
- The operating pressure at which the Capacity and Electrical Consumption were measured for this data sheet.
- No Load Power. In accordance with ISO 1217, Annex E, if measurement of no load power equals less than 1%, manufacturer may state "not significant" or "0" on the test report.
- Tolerance is specified in ISO 1217, Annex E, as shown in table below:  
NOTE: The terms "power" and "energy" are synonymous for purposes of this document.

Member



Volume Flow Rate at specified conditions		Volume Flow Rate	Specific Energy Consumption	No Load / Zero Flow Power
m <sup>3</sup> / min	ft <sup>3</sup> / min	%	%	
Below 0.5	Below 15	+/- 7	+/- 8	+/- 10
0.5 to 1.5	15 to 50	+/- 6	+/- 7	
1.5 to 15	50 to 500	+/- 5	+/- 6	
Above 15	Above 500	+/- 4	+/- 5	