

Rotary Compressor: Variable Frequency Drive

MODEL DATA - FOR COMPRESSED AIR			
1	Manufacturer: Atlas Copco		
2	Model Number: GA37VSD-175 C80	Date: 3/17/2022	
	<input checked="" type="checkbox"/> Air-cooled <input type="checkbox"/> Water-cooled	Type: Screw	
	# of Stages: 1		
3	Full Load Operating Pressure ^b	102	psig ^b
4	Drive Motor Nominal Rating	50	hp
5	Drive Motor Nominal Efficiency	95.6	percent
6	Fan Motor Nominal Rating (if applicable)	1.8	hp
7	Fan Motor Nominal Efficiency	80	percent
8*	Input Power (kW)	Capacity (acfm) ^{a,d}	Specific Power (kW/100 acfm) ^d
	47.0 Max	244.9	19.2
	33.4	186.3	17.9
	29.9	168.7	17.7
	24.4	139.0	17.6
	14.4	78.8	18.3
	7.1 Min	27.7	25.6
9*	Total Package Input Power at Zero Flow ^{c, d}	0.0	kW
10	Isentropic Efficiency	74.32	%
11	<p>Note: Graph is only a visual representation of the data in Section 8 Note: Y-Axis Scale, 10 to 35, + 5kW/100acfm increments if necessary above 35 X-Axis Scale, 0 to 25% over maximum capacity</p>		

*For models that are tested in the CAGI Performance Verification Program, these items are verified by the third party administrator.
 Consult CAGI website for a list of participants in the third party verification program: 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 (Item 8) and Electrical Consumption (Item 8) 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.

Volume Flow Rate at specified conditions		Volume Flow Rate	Specific Energy Consumption	No Load / Zero Flow Power
m ³ / min	ft ³ / min	%	%	
Below 0.5	Below 17.6	+/- 7	+/- 8	+/- 10%
0.5 to 1.5	17.6 to 53	+/- 6	+/- 7	
1.5 to 15	53 to 529.7	+/- 5	+/- 6	
Above 15	Above 529.7	+/- 4	+/- 5	



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	# of Stages: 1		
3	Full Load Operating Pressure ^b	138	psig ^b
4	Drive Motor Nominal Rating	50	hp
5	Drive Motor Nominal Efficiency	95.6	percent
6	Fan Motor Nominal Rating (if applicable)	1.8	hp
7	Fan Motor Nominal Efficiency	80	percent
8*	Input Power (kW)	Capacity (acfm) ^{a,d}	Specific Power (kW/100 acfm) ^d
	45.8 Max	217.9	21.0
	38.0	185.4	20.5
	34.2	167.9	20.3
	28.1	138.2	20.3
	17.0	77.8	21.8
	8.4 Min	27.4	30.6
9*	Total Package Input Power at Zero Flow ^{c, d}	0.0	kW
10	Isentropic Efficiency	76.40	%
11	<p>Note: Graph is only a visual representation of the data in Section 8 Note: Y-Axis Scale, 10 to 35, + 5kW/100acfm increments if necessary above 35 X-Axis Scale, 0 to 25% over maximum capacity</p>		

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Below 0.5	Below 17.6	+/- 7	+/- 8	+/- 10%
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3	Full Load Operating Pressure ^b	181	psig ^b
4	Drive Motor Nominal Rating	50	hp
5	Drive Motor Nominal Efficiency	95.6	percent
6	Fan Motor Nominal Rating (if applicable)	1.8	hp
7	Fan Motor Nominal Efficiency	80	percent
8*	Input Power (kW)	Capacity (acfm) ^{a,d}	Specific Power (kW/100 acfm) ^d
	44.2 Max	184.2	24.0
	39.8	166.8	23.9
	33.0	137.2	24.1
	26.6	107.1	24.8
	14.3	47.4	30.2
	10.1 Min	27.0	37.2
9*	Total Package Input Power at Zero Flow ^{c, d}	0.0	kW
10	Isentropic Efficiency	73.66	%
11	<p>Note: Graph is only a visual representation of the data in Section 8 Note: Y-Axis Scale, 10 to 35, + 5kW/100acfm increments if necessary above 35 X-Axis Scale, 0 to 25% over maximum capacity</p>		

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