

Rotary Compressor: Variable Frequency Drive

MODEL DATA - FOR COMPRESSED AIR			
1	Manufacturer: Atlas Copco		
2	Model Number: GA22VSD-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	30	hp
5	Drive Motor Nominal Efficiency	94.2	percent
6	Fan Motor Nominal Rating (if applicable)	1.1	hp
7	Fan Motor Nominal Efficiency	80	percent
8*	Input Power (kW)	Capacity (acfm) ^{a,d}	Specific Power (kW/100 acfm) ^d
	28.6 Max	158.3	18.0
	22.2	124.0	17.9
	20.7	115.5	17.9
	19.5	109.0	17.9
	14.5	78.8	18.4
	7.0 Min	27.7	25.3
9*	Total Package Input Power at Zero Flow ^{c, d}	0.0	kW
10	Isentropic Efficiency	73.64	%
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	



ROT 030.1

Rotary Compressor: Variable Frequency Drive

MODEL DATA - FOR COMPRESSED AIR			
1	Manufacturer: Atlas Copco		
2	Model Number: GA22VSD-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	138	psig ^b
4	Drive Motor Nominal Rating	30	hp
5	Drive Motor Nominal Efficiency	94.2	percent
6	Fan Motor Nominal Rating (if applicable)	1.1	hp
7	Fan Motor Nominal Efficiency	80	percent
8*	Input Power (kW)	Capacity (acfm) ^{a,d}	Specific Power (kW/100 acfm) ^d
	27.9 Max	134.3	20.8
	25.7	123.2	20.9
	24.1	114.7	21.0
	22.8	108.1	21.1
	17.2	77.8	22.1
	8.3 Min	27.4	30.4
9*	Total Package Input Power at Zero Flow ^{c, d}	0.0	kW
10	Isentropic Efficiency	72.35	%
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	



ROT 030.1

Rotary Compressor: Variable Frequency Drive

MODEL DATA - FOR COMPRESSED AIR			
1	Manufacturer: Atlas Copco		
2	Model Number: GA22VSD-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	181	psig ^b
4	Drive Motor Nominal Rating	30	hp
5	Drive Motor Nominal Efficiency	94.2	percent
6	Fan Motor Nominal Rating (if applicable)	1.1	hp
7	Fan Motor Nominal Efficiency	80	percent
8*	Input Power (kW)	Capacity (acfm) ^{a,d}	Specific Power (kW/100 acfm) ^d
	28.5 Max	113.6	25.1
	27.1	107.1	25.3
	23.9	91.9	26.0
	20.7	76.7	27.0
	14.5	47.4	30.5
	10.1 Min	27.0	37.3
9*	Total Package Input Power at Zero Flow ^{c, d}	0.0	kW
10	Isentropic Efficiency	66.86	%
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	



ROT 030.1