

COMPRESSOR DATA SHEET

In Accordance with Federal Uniform Test Method for Certain Lubricated Air Compressors

Rotary Compressor: Fixed Speed

MODEL DATA - FOR COMPRESSED AIR

1	Manufacturer: BOGE Compressor		
2	Model Number: S 50-3 N	Date: 27.04.2021	
	<input checked="" type="checkbox"/> Air-cooled <input type="checkbox"/> Water-cooled	Type: Screw	
		# of Stages: 1	
3*	Rated Capacity at Full Load Operating Pressure ^{a, e}	240	acfm ^{a, e}
4*	Full Load Operating Pressure ^b	100	psig ^b
5	Maximum Full Flow Operating Pressure ^c	100	psig ^c
6	Drive Motor Nominal Rating	50	hp
7	Drive Motor Nominal Efficiency	93	percent
8	Fan Motor Nominal Rating (if applicable)	2	hp
9	Fan Motor Nominal Efficiency	84	percent
10*	Total Package Input Power at Zero Flow ^e	13,9	kW ^e
11	Total Package Input Power at Rated Capacity and Full Load Operating Pressure ^d	45,30	kW ^d
12*	Package Specific Power at Rated Capacity and Full Load Operating Pressure ^e	18,85	kW/100 cfm ^e
13	Isentropic Efficiency	70,51	Percent

*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:

- a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex C; ACFM is actual cubic feet per minute at inlet conditions.
- b. The operating pressure at which the Capacity (Item 3) and Electrical Consumption (Item 11) were measured for this data sheet.
- c. Maximum pressure attainable at full flow, usually the unload pressure setting for load/no load control or the maximum pressure attainable before capacity control begins. May require additional power.
- d. Total package input power at other than reported operating points will vary with control strategy.
- e. Tolerance is specified in ISO 1217, Annex C, 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
$\frac{m^3}{min}$	$\frac{ft^3}{min}$	%	%	%
Below 0.5	Below 17.6	+/- 7	+/- 8	
0.5 to 1.5	17.6 to 53	+/- 6	+/- 7	
1.5 to 15	53 to 529.7	+/- 5	+/- 6	+/- 10%
Above 15	Above 529.7	+/- 4	+/- 5	



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