

**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:	<b>Gardner Denver</b>	
2	Model Number:	<b>STG2-50hp-100psi</b>	Date: <b>1/4/2021</b>
	<input checked="" type="checkbox"/> Air-cooled <input type="checkbox"/> Water-cooled		Type: <b>Screw</b>
			# of Stages: <b>1</b>
3*	Rated Capacity at Full Load Operating Pressure <sup>a, e</sup>	<b>251.0</b>	acfm <sup>a, e</sup>
4*	Full Load Operating Pressure <sup>b</sup>	<b>100</b>	psig <sup>b</sup>
5	Maximum Full Flow Operating Pressure <sup>c</sup>	<b>110</b>	psig <sup>c</sup>
6	Drive Motor Nominal Rating	<b>50</b>	hp
7	Drive Motor Nominal Efficiency	<b>94.5</b>	percent
8	Fan Motor Nominal Rating (if applicable)	<b>1.2</b>	hp
9	Fan Motor Nominal Efficiency	<b>82.5</b>	percent
10*	Total Package Input Power at Zero Flow <sup>e</sup>	<b>13</b>	kW <sup>e</sup>
11	Total Package Input Power at Rated Capacity and Full Load Operating Pressure <sup>d</sup>	<b>44.80</b>	kW <sup>d</sup>
12*	Package Specific Power at Rated Capacity and Full Load Operating Pressure <sup>e</sup>	<b>17.85</b>	kW/100 cfm <sup>e</sup>
13	Isentropic Efficiency	<b>74.46</b>	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](http://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
m <sup>3</sup> / min	ft <sup>3</sup> / 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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12/19 Rev 2 This form was developed by the Compressed Air and Gas Institute for the use of its members participating in the PVP. CAGI has not independently verified the reported data.

Configurator: ST40-60G2C