## **COMPRESSOR DATA SHEET**

## Gardner Denver

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

**Rotary Compressor: Fixed Speed** 

## **MODEL DATA - FOR COMPRESSED AIR**

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1	Manufacturer: Gardner Denver						
	Model Number: STG2-50hp-100psi	Date:	1/4/2021				
2	Air-cooled X Water-cooled	Type:	Screw				
		# of Stages:	1				
3*	Rated Capacity at Full Load Operating Pressure a, e	251.0	acfm <sup>a,e</sup>				
4*	Full Load Operating Pressure <sup>b</sup>	100	psig				
5	Maximum Full Flow Operating Pressure <sup>c</sup>	110	psig <sup>c</sup>				
6	Drive Motor Nominal Rating	50	hp				
7	Drive Motor Nominal Efficiency	94.5	percent				
8	Fan Motor Nominal Rating (if applicable)	NA	hp				
9	Fan Motor Nominal Efficiency	NA	percent				
10*	Total Package Input Power at Zero Flow <sup>e</sup>	12.2	kW <sup>e</sup>				
11	Total Package Input Power at Rated Capacity and Full Load Operating Pressure <sup>d</sup>	44.00	$kW^d$				
12*	Package Specific Power at Rated Capacity and Full Load Operating Pressure <sup>e</sup>	17.53	kW/100 cfm <sup>e</sup>				
13	Isentropic Efficiency	75.82	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: <u>www.cagi.org</u>



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- 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			
Member	$\underline{m}^3 / \underline{min}$	<u>ft<sup>3</sup> / min</u>	%	%	%			
	Below 0.5	Below 17.6	+/- 7	+/- 8				
	0.5 to 1.5	17.6 to 53	+/- 6	+/- 7	+/- 10%			
	1.5 to 15	53 to 529.7	+/- 5	+/- 6	+/- 10%			
ROT 030.1	Above 15	Above 529.7	+/- 4	+/- 5				
12/19 Rev 3 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