



# COMPRESSOR DATA SHEET



## Rotary Compressor: Variable Speed

Date: March 1, 2021

A	Manufacturer:	<b>Quincy Compressor</b>	
B	Base Model:	<b>QGV-40</b>	
C	Cooling:	<b>Air-Cooled</b>	
D	Type:	<b>Oil-Injected Screw</b>	
E	Stages:	<b>1</b>	
F	Drive Motor Nominal Rating	<b>40</b>	hp
$\eta_{isen}$	Part Load Package Isentropic Efficiency at Rated Capacity and Full Load Operating Pressure <sup>e</sup>	<b>65.4</b>	Percent <sup>e</sup>
G	Rated Capacity at Full Load Operating Pressure <sup>a</sup>	<b>172.0</b>	acfm <sup>a</sup>
H	Full Load Operating Pressure <sup>b</sup>	<b>125</b>	psig <sup>b</sup>
I	Maximum Full Flow Operating Pressure <sup>c</sup>	<b>150</b>	psig <sup>c</sup>
J	Pressure Ratio <sup>f</sup>	<b>9.6</b>	
K	Total Package Input Power at Rated Capacity and Full Load Operating Pressure <sup>d</sup>	<b>35.8</b>	kW <sup>d</sup>
	Specific Package Input Power at Rated Capacity and Full Load Operating Pressure	<b>20.84</b>	kW/100 cfm

\* Quincy Compressors tests all models according to the U.S. Department of Energy (DOE) Energy Conservation Standards for Air Compressors. Consult the Final Rule (82 FR 1052) in the Federal Register for additional information <https://www.federalregister.gov>

NOTES:

- a. 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.
- b. The operating pressure at which the Capacity (Item G) and Electrical Consumption (Item K) 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.
- d. Total package input power at other than reported operating points will vary with control strategy.
- e. Isentropic Efficiency = theoretical power required divided by real measurement performance at same flow and pressure  
\*\*For Variable Speed, this value combines 3 Measured Points: (25% x 40%LOAD) + (50% x 70%LOAD) + (25% x 100%LOAD)
- f. Pressure Ratio = the ratio of discharge pressure to inlet pressure, as determined at full-load operating pressure  
For more information go to: <https://www.quincycompressor.com/resources/data-sheets/>



\*\*\*This form was developed by Quincy Compressor to publish equipment performance data in accordance with applicable energy conservation standards adopted under EPCA (42 U.S.C. 6295(s) and 6316(a))\*\*\*