

**COMPRESSOR DATA SHEET**  
**Rotary Compressor: Variable Frequency Drive**

**MODEL DATA - FOR COMPRESSED AIR**

1	Manufacturer: <b>Mattei Compressors Inc.</b>		
2	Model Number: <b>OPTIMA 45</b>	Date:	<b>Oct-09</b>
	<input checked="" type="checkbox"/> Air-cooled <input type="checkbox"/> Water-cooled	Type:	<b>Vane</b>
	<input checked="" type="checkbox"/> Oil-injected <input type="checkbox"/> Oil-free	# of Stages:	<b>1</b>
3	Rated Operating Pressure	<b>125</b>	psig <sup>b</sup>
4	Drive Motor Nominal Rating	<b>60</b>	hp
5	Drive Motor Nominal Efficiency	<b>94.0</b>	percent
6	Fan Motor Nominal Rating (if applicable)	<b>n/a</b>	hp
7	Fan Motor Nominal Efficiency	<b>n/a</b>	percent
8*	Input Power (kW)	Capacity (acfm) <sup>a,d</sup>	Specific Power (kW/100 acfm) <sup>d</sup>
	58.3 Max	<b>265.9</b>	<b>21.94</b>
	54.1	<b>251.0</b>	<b>21.54</b>
	45.8	<b>220.9</b>	<b>20.75</b>
	38.1	<b>190.8</b>	<b>19.94</b>
	34.3 Min	<b>175.7</b>	<b>19.54</b>
9*	Total Package Input Power at Zero Flow <sup>c, d</sup>	<b>5.5</b>	kW
10	<p align="center"><b>Note: Graph is only a visual representation of the data in Section 8</b>          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 program administrator

Consult CAGI website for a list of participants in the third party verification program: [www.cagi.org](http://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 and Electrical Consumption 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 <sup>3</sup> / min	ft <sup>3</sup> / min	%	%	
Below 0.5	Below 15	+/- 7	+/- 8	+/- 10%
0.5 to 1.5	15 to 50	+/- 6	+/- 7	
1.5 to 15	50 to 500	+/- 5	+/- 6	
Above 15	Above 500	+/- 4	+/- 5	

ROT 031