



**COMPRESSOR DATA SHEET**

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

**Rotary Compressor: Variable Frequency Drive**

MODEL DATA - FOR COMPRESSED AIR			
1	Manufacturer: <b>Ingersoll Rand</b>		
2	Model Number	<b>R90N-A145</b>	Date: <b>8/18/2020</b>
	<input checked="" type="checkbox"/> Air-cooled <input type="checkbox"/> Water-cooled		Type: <b>Screw</b>
			# of Stages: <b>1</b>
3*	Full Load Operating Pressure <sup>b</sup>	<b>100</b>	psig <sup>b</sup>
4	Drive Motor Nominal Rating	<b>125</b>	hp
5	Drive Motor Nominal Efficiency	<b>95.4</b>	percent
6	Fan Motor Nominal Rating (if applicable)	<b>5.4</b>	hp
7	Fan Motor Nominal Efficiency	<b>88.6</b>	percent
8*	Input Power (kW)	Capacity (acfm) <sup>a,d</sup>	Specific Power (kW/100 acfm) <sup>d</sup>
	<b>114.4</b>	<b>665.0</b>	<b>17.20</b>
	<b>104.3</b>	<b>597.7</b>	<b>17.45</b>
	<b>93.8</b>	<b>538.2</b>	<b>17.43</b>
	<b>83.4</b>	<b>478.0</b>	<b>17.45</b>
	<b>73.5</b>	<b>417.7</b>	<b>17.60</b>
	<b>63.9</b>	<b>356.7</b>	<b>17.91</b>
	<b>55.4</b>	<b>299.0</b>	<b>18.53</b>
9*	Total Package Input Power at Zero Flow <sup>c,d</sup>	<b>0.0</b>	kW
10	Isentropic Efficiency	<b>74.8</b>	percent
11	<p><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 are the items verified by the third party program administrator

Consult CAGI website for a list of participants in the third party verification [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 8) and Electrical Consumption (item 8) were measured for this data sheet.
- c. 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.
- d. 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.



Member

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	
0.5 to 1.5	17.6 to 53	+/- 6	+/- 7	+/- 10%
1.5 to 15	53 to 529.7	+/- 5	+/- 6	
Above 15	Above 529.7	+/- 4	+/- 5	

ROT 031.1

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.