



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: Ingersoll Rand		
2	Model Number	R90N-W145	Date: 4/28/2020
	<input type="checkbox"/> Air-cooled	<input checked="" type="checkbox"/> Water-cooled	Type: Screw
			# of Stages: 1
3*	Full Load Operating Pressure ^b	135	psig ^b
4	Drive Motor Nominal Rating	125	hp
5	Drive Motor Nominal Efficiency	95.4	percent
6	Fan Motor Nominal Rating (if applicable)	1.1	hp
7	Fan Motor Nominal Efficiency	86.6	percent
8*	Input Power (kW)	Capacity (acfm) ^{a,d}	Specific Power (kW/100 acfm) ^d
	114.5	545.0	21.01
	107.5	513.4	20.93
	99.5	472.4	21.06
	92.5	432.1	21.41
	85.6	391.9	21.84
	79.1	353.1	22.40
	72.7	317.0	22.93
9*	Total Package Input Power at Zero Flow ^{c,d}	0.0	kW
10	Isentropic Efficiency	0.7	percent
11	<p>Note: Graph is only a visual representation of the data in section 8 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

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 ³ / min	ft ³ / 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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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.