



COMPRESSOR DATA SHEET

Rotary Screw Compressor

MODEL DATA - FOR COMPRESSED AIR			
1	Manufacturer: Ingersoll Rand	Date: October 2009	
2	Model Number: R90IU-W-140 <input type="checkbox"/> Air-cooled <input checked="" type="checkbox"/> Water-cooled <input checked="" type="checkbox"/> Oil-injected <input type="checkbox"/> Oil-free	# of Stages: 1	
		VALUE	UNIT
3	Rated Capacity at Full Load Operating Pressure ^{a, f}	511	acfm ^{a, f}
4	Full Load Operating Pressure ^b	140	psig ^b
5	Maximum Full Flow Operating Pressure ^c	143	psig ^c
6	Drive Motor Nameplate Rating	125	hp
7	Drive Motor Nameplate Nominal Efficiency	94.5	percent
8	Fan Motor Nameplate Rating (if applicable)	1.0	hp
9	Fan Motor Nameplate Nominal Efficiency	81.0	percent
10	Total Package Input Power at Zero Flow ^e	27.5	kW ^e
11	Total Package Input Power at Rated Capacity and Full Load Operating Pressure ^d	109.5	kW ^d
12	Specific Package Input Power at Rated Capacity and Full Load Operating Pressure ^g	21.4	kW/100 cfm ^g

NOTES:

- a. Measured at the discharge terminal point of the compressor package in accordance with the CAGI/PNEUROPN2CPTC2 Test Code (Annex C to ISO 1217). 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 the CAGI/PNEUROPN2CPTC2 Test Code (Annex C to ISO 1217).
- f, g. Tolerance is specified in the CAGI/PNEUROPN2CPTC2 Test Code (Annex C to ISO 1217) as follows:

Volume Flow Rate at specified conditions		Volume Flow Rate ^f	Specific Energy Consumption ^g
<u>m³ / min</u>	<u>ft³ / min</u>	%	%
Below 0.5	Below 15	+/- 7	+/- 8
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



This form was developed by the Compressed Air and Gas Institute for the use of its members. CAGI has not independently verified the reported data.