

COMPRESSOR DATA SHEET

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

Rotary Compressor: Fixed Speed

MODEL DATA - FOR COMPRESSED AIR			
1	Manufacturer: Ingersoll Rand		
	Model Number R7.5i-A110	Date:	4/8/2020
2	x Air-cooled Water-cooled	Type:	Screw
		# of Stages:	1
3*	Rated Capacity at Full Load Operating Pressure a, e	39.8	acfm ^{a, e}
4*	Full Load Operating Pressure ^b	100	psig ^b
5	Maximum Full Flow Operating Pressure ^c	110	psig ^c
6	Drive Motor Nominal Rating	10	hp
7	Drive Motor Nominal Efficiency	90.2	percent
8	Fan Motor Nominal Rating (if applicable)	0.4	hp
9	Fan Motor Nominal Efficiency	71.0	percent
10*	Total Package Input Power at Zero Flow ^e	4.9	kW ^e
11	Total Package Input Power at Rated Capacity and Full Load Operating Pressure ^d	9.4	kW^{d}
12*	Specific Package Input Power at Rated Capacity and Full Load Operating Pressure ^e	23.49	kW/100 cfm ^e
13	Isentropic Efficiency	56.6	Percent

^{*} 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 program: 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 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 ISO 1217, Annex C, as shown in table below.

NOTE: The terms "power" and "energy" are synonymous for purposes of this document.

Specific Energy No Load / Zero Volume Flow Rate Consumption Flow Power at specified conditions Volume Flow Rate \underline{m}^3 / \min ft3 / min Below 0.5 Below 17.6 +/- 7 +/- 8 0.5 to 1.5 +/- 7 +/- 10% 17.6 to 53 +/- 6 1.5 to 15 53 to 529.7 +/- 5 +/- 6 Above 15 Above 529.7 +/- 4 +/- 5



Member

ROT 030.1

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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.