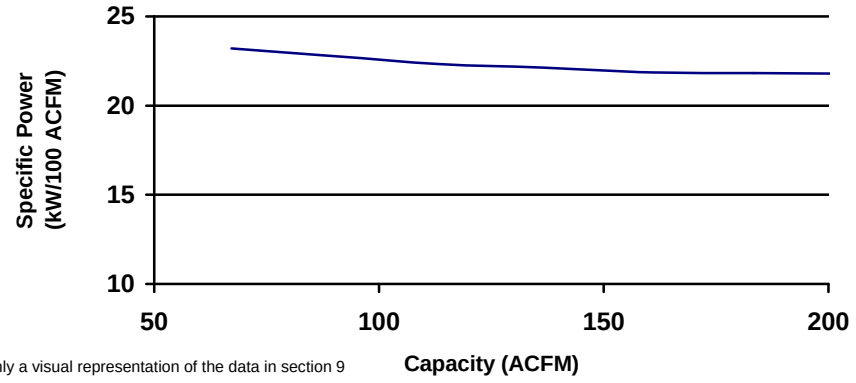
COMPRESSOR DATA SHEET

Rotary Screw Variable Frequency Drive Compressor

MODEL DATA - FOR COMPRESSED AIR

1	Manufacturer: **Ingersoll Rand**	Date: **Aug 11th 2009**	
2	Model Number: **IRN50H** ☐ Air-cooled ☒ Water-cooled ☒ Oil-injected ☐ Oil-free	# of Stages: **1** VALUE	UNIT
3	Full Load Operating Pressure [b]	**145**	psig[b]
4	Maximum Full Flow Operating Pressure [c]	**145**	psig[c]
5	Drive Motor Nameplate Rating	**50**	hp
6	Drive Motor Nameplate Nominal Efficiency	**95.0**	percent
7	Fan Motor Nameplate Rating (if applicable)	**0.5**	hp
8	Fan Motor Nameplate Nominal Efficiency	**74.0**	percent
9	Input Power (kW)	Capacity (acfm) [a,e]	Specific Power (kW/100 acfm)[e]
	44.9	**206.0**	21.79
	40.0	**183.3**	21.82
	35.1	**160.7**	21.86
	30.2	**136.6**	22.13
	25.4	**113.6**	22.32
	20.5	**89.9**	22.77
	15.6	**67.2**	23.20
10	Total Package Input Power at Zero Flow[d]	**0.0**	kW[d]
11			

Note: Graph is only a visual representation of the data in section 9

NOTES:

a. Measured at the discharge terminal point of the compressor package in accordance with the Annex E to ISO 1217. acfm is actual cubic feet per minute at inlet conditions.

b. The operating pressure at which the Capacity and Electrical Consumption 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. No Load Power. Total package input power at other than reported operating points will vary with control strategy.

e. Tolerance is specified in the Annex E to ISO 1217) as follows:

Volume Flow Rate at specified conditions		Volume Flow Rate[f]	Specific Energy Consumption[g]
m^3 / min	ft^3 / min	%	%
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

Member