

PERFORMANCE VERIFICATION PROGRAMME DATA SHEET



ROTARY COMPRESSOR: VARIABLE SPEED / FREQUENCY DRIVE

			MODEL D	ATA - FOR COMPI	RESSED AIR		
1	Manufacture	er: Gardner De	nver				
2	Model No: VS7e X Air Cooled			Date: Type:			01.08.2024 Regulated Speed
	Water Cooled				# of Stages:	1	
	Other		Please State:				
3	Full Load Operating Pressure		9	barg			
4	Drive Motor Nominal Rating		7.5	kW			
5	Drive Motor Nominal Efficiency			90.1	% (percent)		
6	Fan Motor Nominal Rating (if applicable)			n/a	kW		
7	Fan Motor Nominal Efficiency			n/a	% (percent)		
	Range		Input Power (kW)	Capacity (m3/min)	Specific Power (kW/m³/min)	Isentropic Efficiency (%)	
8	Maximum Speed 100% 8.80 8.09 7.39 6.71		8.80	1.02	8.63	62.92%	
			8.09	0.91	8.89	61.06%	
			0.80	9.24	58.77%		
			6.71	0.68	9.87	55.02%	
	Minimum Speed		5.42	0.46	11.78	46.07%	
9	Total Package Input Power at Zero Flow		1.3	kW			
10	Specific Power (KW/m3/min)	10.00 9.00 8.00 7.00 6.00 5.00 4.00	0.2 Note: Graph is or	0.4 Capacity (m³/min) and a visual representation of the dat m³/min increments X-Axis Scale, 0 to	0.6 0.8 a in Section 8	1	1.2

^{*}For models that are tested in the BCAS Data Sheet & Verification Programme, these items are verified by the third party administrator. Consult BCAS website for a list of participants in the third party verification programme: www.bcas.org.uk

Notes:

- a. Measured at the discharge terminal point of the compressor in accordance with ISO1217, Annex E; m³/min is cubic metres 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 ISO1217, 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 ISO1217, Annex E, as shown in table below:
- e. The terms "power" and "energy" are synonymous for purposes of this document.

Volume Flow Rate at specified conditions	Volume Flow Rate	Specific Energy Consumption	No Load / Zero Flow Power						
m³/min	%	%	%						
Below 0.5	+/- 7	+/- 8	+/- 10						
0.5 to 1.5	+/- 6	+/- 7							
1.5 to 15	+/- 5	+/-6							
Above 15	+/- 4	+/- 5							