

PERFORMANCE VERIFICATION PROGRAMME DATA SHEET



ROTARY COMPRESSOR: VARIABLE SPEED / FREQUENCY DRIVE

			MODEL D	ATA - FOR COMI	PRESSED AIR		
1	Manufacturer	: Champion					
	Model No:	FM7RS				Date:	01.08.2024
2	X Air Cooled					Type:	Regulated Speed
		Water Cooled	_			# of Stages:	1
		Other	Please State:				
3	Full Load Operating Pressure		7	bar g			
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% 9.05 8.06 7.16 6.28		9.05	1.13	8.01	59.10%	1
			8.06	1	8.06	58.72%	
			0.88	8.14	58.17%		
			6.28	0.75	8.37	56.53%	
	Minimum Speed		4.33	0.45	9.62	49.19%]
9	Total Package Input Power at Zero Flow		t Zero Flow	2.1	kW		
10	Specific Power (kW/m3/min)	0.00 9.00 8.00 7.00 6.00 5.00 4.00	0.2 Note: Graph is on	0.4 Capacity (m³/min) Ily a visual representation of the 4 m³/min increments X-Axis Scale.	0.6 0.8 lata in Section 8 0 to 25% over maximum capacity	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		
0.5 to 1.5	+/-6	+/- 7	+/- 10	
1.5 to 15	+/- 5	+/- 6	17-10	
Above 15	+/- 4	+/- 5		