

PERFORMANCE VERIFICATION PROGRAMME DATA SHEET



ROTARY COMPRESSOR: VARIABLE SPEED / FREQUENCY DRIVE

MODEL DATA - FOR COMPRESSED AIR								
1	Manufacturer:	Champion						
2	Model No:	FM7RS				Date:	01.08.2024	
	X Air Cooled					Type:	Regulated Speed	
	Water Cooled				# of Stages:	1		
		Other	Please State:					
3	Full Load Opera	ating Pressure		10	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 Nom	an Motor Nominal Efficiency n/a % (percent)						
	Range		Input Power (kW)	Capacity (m3/min)	Specific Powe (kW/m³/min)	Efficiency		
8	8.		9.64	0.95	10.15	56.56%		
			8.86	0.86	10.30	55.71%		
			7.81	0.75	10.41	55.12%		
			7.01	0.64	10.95	52.40%		
	Minimum Speed		5.45	0.43	12.67	45.28%		
9	Total Package Input Power at Zero Flow		2.1	kW				
			'		-			
	1	0.00						
	g	9.00						
	_	8.00						
	Specific (KW/mS)	7.00						
10		6.00						
10								
		5.00						
		0 0.1	0.2	0.3 0.4 Capacity (m³/min)	0.5 0.6	0.7 0.8	0.9 1	
	Note: Graph is only a visual representation of the data in Section 8 Note: Y-Axis Scale, 4 to 10, + 1kW/m³/min increments X-Axis Scale, 0 to 25% over maximum capacity							

^{*}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	+/- 10					
Above 15	+/- 4	+/- 5						