

## PERFORMANCE VERIFICATION PROGRAMME DATA SHEET

## **ROTARY COMPRESSOR: FIXED SPEED**



MODEL DATA - FOR COMPRESSED AIR							
1	Manufacturer:	Champion					
2	Model No: FM7						01.08.2024
	х	Air Cooled					Fix Speed
		Water Cooled				# of Stages:	1
		Other	Please State:				
3*	Rated Capacity	at Full Load Ope	erating Pressur	e <sup>a,e</sup>	0.99	9 m³/min <sup>a,e</sup>	
4*	Full Load Operating Pressure b 8.00				8.00	bar g <sup>b</sup>	
5	Maximum Full Flow Operating Pressure <sup>c</sup> 8.5				8.50	bar g <sup>b</sup>	
6	Drive Motor Nominal Rating 7.8				7.50	kW	
7	Drive Motor Nominal Efficiency 90.10				90.10	% (percent)	
8	Fan Motor Nominal Rating (if applicable) n/a				kW		
9	Fan Motor Nominal Efficiency n/a				n/a	% (percent)	
10*	Total Package Input Power at Zero Flow <sup>e</sup> 2.70				kW <sup>e</sup>		
11	Total Package Input Power at Rated Capacity and Full Load  Operating Pressure d  8.13				kW <sup>d</sup>		
12	Package Specific Power at Rated Capacity and Full Load Operating Pressure <sup>e</sup> 8.21				kW/m3/min <sup>e</sup>		
13	Isentropic Efficiency 62.00				% (percent)		

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 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:

  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		

<sup>\*</sup>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