

ROTARY COMPRESSOR: VARIABLE SPEED / FREQUENCY DRIVE

MODEL DATA - FOR COMPRESSED AIR					
<b>1</b>	<b>Manufacturer:</b>	Champion			
<b>2</b>	<b>Model No:</b>	FM7RS	<b>Date:</b>	01/08/2024	
	<b>X</b>	Air Cooled	<b>Type:</b>	Regulated Speed	
		Water Cooled	<b># of Stages:</b>	1	
		Other <b>Please State:</b>			
<b>3</b>	<b>Full Load Operating Pressure</b>	<b>8.0</b>	bar g		
<b>4</b>	<b>Drive Motor Nominal Rating</b>	<b>7.5</b>	kW		
<b>5</b>	<b>Drive Motor Nominal Efficiency</b>	<b>90.1</b>	% (percent)		
<b>6</b>	<b>Fan Motor Nominal Rating (if applicable)</b>	<b>n/a</b>	kW		
<b>7</b>	<b>Fan Motor Nominal Efficiency</b>	<b>n/a</b>	% (percent)		
<b>8</b>	<b>Range</b>	<b>Input Power (kW)</b>	<b>Capacity (m<sup>3</sup>/min)</b>	<b>Specific Power (kW/m<sup>3</sup>/min)</b>	<b>Isentropic Efficiency (%)</b>
	<b>Maximum Speed 100%</b>	<b>8.54</b>	<b>0.98</b>	<b>8.71</b>	<b>58.46%</b>
		<b>7.67</b>	<b>0.88</b>	<b>8.72</b>	<b>58.45%</b>
		<b>6.90</b>	<b>0.77</b>	<b>8.96</b>	<b>56.85%</b>
		<b>6.11</b>	<b>0.66</b>	<b>9.26</b>	<b>55.03%</b>
	<b>Minimum Speed</b>	<b>4.68</b>	<b>0.46</b>	<b>10.17</b>	<b>50.08%</b>
<b>9</b>	<b>Total Package Input Power at Zero Flow</b>	<b>2.1</b>	kW		
<b>10</b>	<p style="text-align: center; font-size: small;">Note: Graph is only a visual representation of the data in Section 8 Note: Y-Axis Scale, 4 to 10, + 1kW/m<sup>3</sup>/min increments X-Axis Scale, 0 to 25% over maximum capacity</p>				

\*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](http://www.bcas.org.uk)

**Notes:**

- a. Measured at the discharge terminal point of the compressor in accordance with ISO1217, Annex E; m<sup>3</sup>/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
m <sup>3</sup> /min	%	%	%
Below 0.5	+/- 7	+/- 8	+/- 10
0.5 to 1.5	+/- 6	+/- 7	
1.5 to 15	+/- 5	+/- 6	
Above 15	+/- 4	+/- 5	