

ROTARY COMPRESSOR: FIXED SPEED

MODEL DATA - FOR COMPRESSED AIR			
1	<b>Manufacturer:</b>	Champion	
2	<b>Model No:</b>	FM18-8B	<b>Date:</b> 20/03/2026
	<b>X</b>	Air Cooled	<b>Type:</b> Fix Speed
		Water Cooled	<b># of Stages:</b> 1
		Other Please State:	
3*	<b>Rated Capacity at Full Load Operating Pressure<sup>a,e</sup></b>		2.96 m <sup>3</sup> /min <sup>a,e</sup>
4*	<b>Full Load Operating Pressure<sup>b</sup></b>		8.00 bar <sub>g</sub> <sup>b</sup>
5	<b>Maximum Full Flow Operating Pressure<sup>c</sup></b>		8.50 bar <sub>g</sub> <sup>b</sup>
6	<b>Drive Motor Nominal Rating</b>		18.50 kW
7	<b>Drive Motor Nominal Efficiency</b>		92.40 % (percent)
8	<b>Fan Motor Nominal Rating (if applicable)</b>		n/a kW
9	<b>Fan Motor Nominal Efficiency</b>		n/a % (percent)
10*	<b>Total Package Input Power at Zero Flow<sup>e</sup></b>		7.90 kW <sup>e</sup>
11	<b>Total Package Input Power at Rated Capacity and Full Load Operating Pressure<sup>d</sup></b>		22.00 kW <sup>d</sup>
12	<b>Package Specific Power at Rated Capacity and Full Load Operating Pressure<sup>e</sup></b>		7.43 kW/m <sup>3</sup> /min <sup>e</sup>
13	<b>Isentropic Efficiency</b>		68.50 % (percent)

\*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 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
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	

This form was developed by the British Compressed Air Society (BCAS) for the use of its members participating in the DS&VP. BCAS has not independently verified the reported data.