

PERFORMANCE VERIFICATION PROGRAMME DATA SHEET

ROTARY COMPRESSOR: VARIABLE SPEED / FREQUENCY DRIVE



MODEL DATA - FOR COMPRESSED AIR					
1	Manufacturer:	ELGi			
2	Model No:	EN 77		Date:	24/06/2025
	✓	Air Cooled		Type:	Screw
	-	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)	0.063	kW		
7	Fan Motor Nominal Efficiency	NA	% (percent)		
8	Range	Input Power (kW)	Capacity (m ³ /min)	Specific Power (kW/m ³ /min)	Isentropic Efficiency (%)
	Maximum Speed 100%	9.27	1.2	7.73	61.27%
		8.60	1.08	7.96	59.44%
		7.90	0.99	7.98	59.31%
		7.30	0.91	8.02	59.00%
	Minimum Speed	5.00	0.54	9.26	51.12%
9	Total Package Input Power at Zero Flow	0	kW		
10	<p>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</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

Notes:

- 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.
- The operating pressure at which the capacity (item 8) and Electrical Consumption (Item 8) were measured for this data sheet.
- 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.
- Tolerance is specified in ISO1217, Annex E, 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 ³ /min	%	%	%
Below 0.5	+/- 7	+/- 8	+/- 10
0.5 to 1.5	+/- 6	+/- 7	
1.5 to 15	+/- 5	+/- 6	
Above 15	+/- 4	+/- 5	