

ROTARY COMPRESSOR: FIXED SPEED

MODEL DATA - FOR COMPRESSED AIR			
1	Manufacturer:	Gardner Denver	
2	Model No:	ESM7e- 10 A	Date: 01.08.2024
	X	Air Cooled	Type: Fix Speed
		Water Cooled	# of Stages: 1
		Other Please State:	
3*	Rated Capacity at Full Load Operating Pressure ^{a,e}		1.06 m ³ /min ^{a,e}
4*	Full Load Operating Pressure ^b		10.00 bar g ^b
5	Maximum Full Flow Operating Pressure ^c		10.50 bar g ^b
6	Drive Motor Nominal Rating		7.50 kW
7	Drive Motor Nominal Efficiency		90.10 % (percent)
8	Fan Motor Nominal Rating (if applicable)		n/a kW
9	Fan Motor Nominal Efficiency		n/a % (percent)
10*	Total Package Input Power at Zero Flow ^e		2.20 kW ^e
11	Total Package Input Power at Rated Capacity and Full Load Operating Pressure ^d		9.35 kW ^d
12	Package Specific Power at Rated Capacity and Full Load Operating Pressure ^e		8.82 kW/m ³ /min ^e
13	Isentropic Efficiency		65.10 % (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

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 3) and Electrical Consumption (Item 11) were measured for this data sheet.
- 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.
- Total package input power at other than reported operating points will vary with control strategy.
- 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 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	

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.