

DIAPHRAGM



907Z SERIES

PRESSURE/VACUUM
(BLDC MOTOR)

BASE MODEL

DC Voltage

(24V DC)

907ZC18/24



907 BLDC Series

FEATURES (BENEFITS)

- Oil-less operation (Clean air stream, less maintenance)
- Permanently lubricated bearings (Optimum life)
- Stainless steel valves (Optimum life, consistent performance, corrosion resistance)
- Durable diaphragm design (Optimum life)
- Die-cast aluminum components (Strong, lightweight, durable)
- Wetted parts treated for corrosion resistance (Optimum life, consistent performance)
- Dynamically balanced (Low operating vibration)
- Designed and tested per Agency standards (Fail-safe operation)
- Brushless DC motor (Variable output, long life, low energy consumption)
- RoHS compliant (Green, eco-friendly)

CUSTOMER REQUIREMENTS

- 100 cfm supplemental cooling air flow for compressor to be integrated into thermal management system
- BLDC motor requires motor controller - SK604530 optional Thomas controller available in sample quantities

**Qualified OEM designers should
consult factory for evaluation quantities**

- 920-457-4891 or td.usa@gardnerdenver.com

Aftermarket Service Kit
SK927

Thomas Division is an ISO 9001 registered company

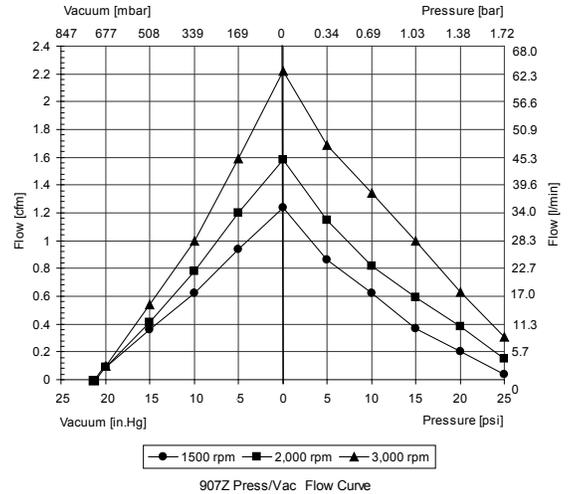
THOMAS
A Gardner Denver Product



Diaphragm 907Z Series (BLDC)



Flow 2.22 cfm (62.86 l/min)
Max. pressure 25 psi (1.72 bar)
Max. vacuum 72% local barometer



Model Number

907ZC18/24

Performance Data

Head configuration	Pressure/vacuum parallel flow		
Stroke	0.18 in (4.57 mm)		
Nominal voltage input	24V DC	24V DC	24V DC
Variable output speed	1,500 rpm	2,000 rpm	3,000 rpm
Maximum open air flow	1.24 cfm (35.1 l/min)	1.58 cfm (44.7 l/min)	2.22 cfm (62.9 l/min)
Maximum operating pressure	25 psi (1.72 bar)	25 psi (1.72 bar)	25 psi (1.72 bar)
Current at rated pressure	2.8A	3.3A	4.3A
Power at rated pressure	67W	80W	103W
Maximum pressure restart	25 psi (1.72 bar)	25 psi (1.72 bar)	25 psi (1.72 bar)
Maximum vacuum	21.2 in.Hg (717 mbar)	21.2 in.Hg (717 mbar)	21.2 in.Hg (717 mbar)
Maximum vacuum restart	21.2 in.Hg (717 mbar)	21.2 in.Hg (717 mbar)	21.2 in.Hg (717 mbar)

Electrical Data

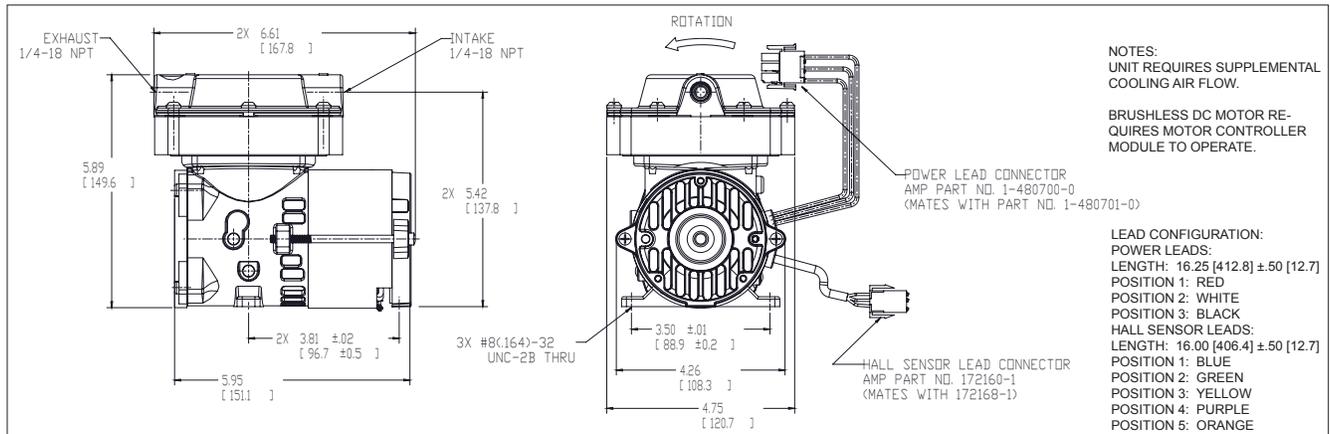
Motor type	8 Pole BLDC, 3 phase		
Motor insulation class	F		
Motor protection	Not included - Customer to integrate into system controller		
Optional Motor Controller	SK604530		
Motor lead wire color, gauge	Red (phase A), white (phase B), black (phase C), 18AWG		
Hall sensor wire color, gauge	Purple (Hall +), blue (HS1), green (HS2), yellow (HS3), orange (Hall -) 22 AWG		
Thermistor wire color, gauge	N/A		

General Data

Operating ambient air temperature	50° to 104°F (10° to 40°C)
Safety certification	Consult factory
Net weight	5.5 lbs (2.49 kg)

Product Dimensions

Dual Dimensions: in[mm]



907Z SERIES

The information presented in this material is based on technical data and test results of nominal units. It is believed to be accurate and reliable and is offered as an aid to help in the selection of Thomas Division products. It is the responsibility of the user to determine the suitability of the product for its intended use and the user assumes all risk and liability whatsoever in connection therewith. Thomas Division does not warrant, guarantee or assume any obligation or liability in connection with this information. **NOTE:** Models pictured are representative of the series and do not represent a specific model number. Consult factory for detailed physical description.

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