2250Z Series

THOMAS
An Ingersoll Rand Business

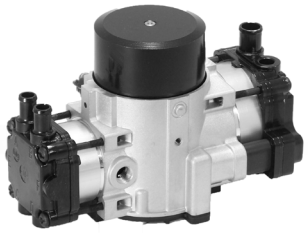
FEATURES

> Unique head/cylinder design
> Oil-less operation
> Permanently lubricated bearings
> Stainless steel valves
> High performance piston seal
> Die-cast aluminum & magnesium alloy components
> Thin wall, hard coated aluminum cylinder
> Wetted parts treated for corrosion resistance
> Dynamically balanced
> Designed and tested per Agency standards
> Brushless DC motor
> RoHS/REACH compliant

BASE MODEL

2250ZC35/24

THOMAS POWER



TYPICAL APPLICATIONS

> Portable Oxygen Concentrator
> Small Analytical Equipment
> Instrumentation
> Ambient Scenting
> Lab Automation
> Air Sampling

CUSTOMER REQUIREMENTS

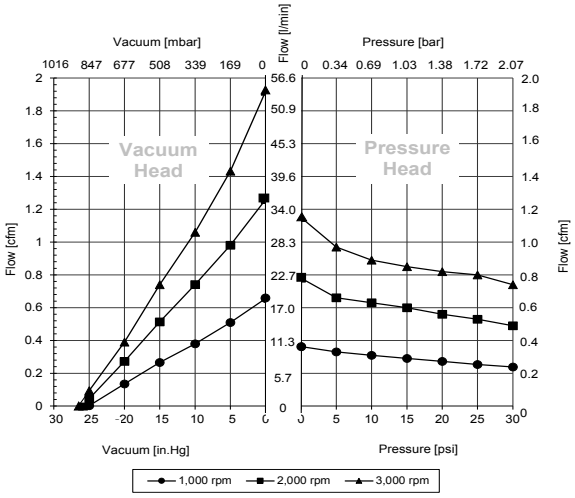
> Supplemental cooling air flow to compressor to be integrated into thermal management system to ensure that proper installation and operating environment is maintained in keeping with the product specifications

> BLDC motor requires separate motor controller (not included) - Optional ZB Series BLDC controller offers off-the-shelf integration, featuring variable speed PWM input signal for full speed range flexibility, and closed loop speed operation for consistent performance.

WOB-L

2250Z Series

Flow	**1.15/1.92 cfm (32.6/54.4 l/min)**
Max. pressure	30 psi (2.1 bar)
Max. vacuum	**88% local barometer**



2250 Vacuum/Pressure Flow

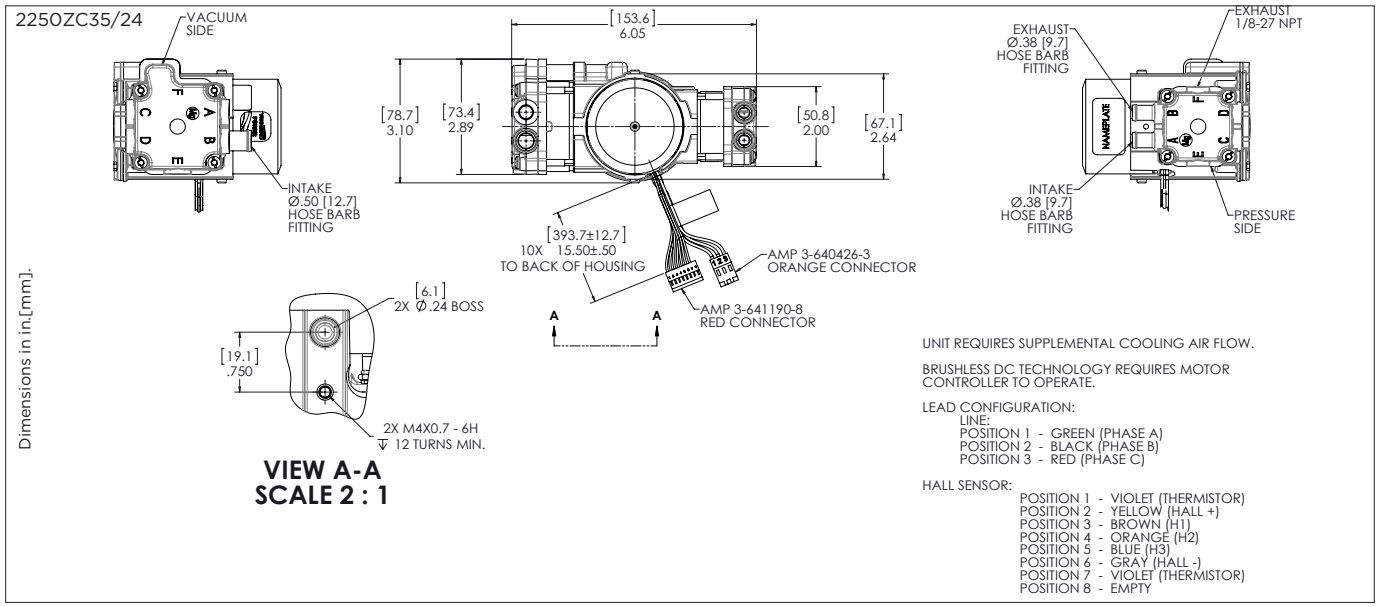
PERFORMANCE DATA			
Model Number	2250ZC35/24		
Head Configuration	Pressure/Vacuum		
Stroke	0.35/035 in. (8.9/8.9 mm)		
Nominal voltage input	24V DC	24V DC	24VDC
Variable output speed	1,000 rpm	2,000 rpm	3,000 rpm
Max. open air flow	0.36/0.66 cfm (10.2/18.7 l/min)	0.78/1.26 cfm (22.1 /35.7 l/min)	1.15/1.92 cfm (32.6/54.4 l/min)
Max. rated pressure	30 psi (2.1 bar)	30 psi (2.1 bar)	30 psi (2.1 bar)
Current at rated pressure	1.6A	3.1A	5.1A
Power at rated pressure	38W	75W	123W
Max. pressure restart	30 psi (2.1 bar)	30 psi (2.1 bar)	30 psi (2.1 bar)
Max. vacuum	25.3 in.Hg (857 mbar)	25.8 in.Hg (867 mbar)	25.9 in.Hg (870 mbar)
Max. vacuum restart	25.3 in.Hg (857 mbar)	25.8 in.Hg (867 mbar)	25.9 in.Hg (870 mbar)

ELECTRICAL DATA	
Motor type	10 pole brushless DC, 3 phase
Motor insulation class	F
Motor protection	No
	Optional Thomas ZB Series BLDC controller will provide stall protection
Power lead wire color, gauge	Green (phase A), black (phase B), red (phase C), 18 AWG
Hall sensor wire color, gauge	Yellow (Hall +), brown (HS1), orange (HS2), blue (HS3), gray (Hall -), 22 AWG
Thermistor wire color, gauge	Violet (Thermistor), 22 AWG

GENERAL DATA	
Operaring ambient temperature	50° TO 104° F (10° to 40°C)*
Safety Certification	Consult factory
Net weight	2.8 lbs (1.27 kg)

*Broader ambient operating ranges may be possible depending on your specific application. Please consult factory regarding your particular system needs.

PRODUCT DIMENSIONS



UNIT REQUIRES SUPPLEMENTAL COOLING AIR FLOW.

BRUSHLESS DC TECHNOLOGY REQUIRES MOTOR CONTROLLER TO OPERATE.

LEAD CONFIGURATION:
LINE:
POSITION 1 - GREEN (PHASE A)
POSITION 2 - BLACK (PHASE B)
POSITION 3 - RED (PHASE C)

HALL SENSOR:
POSITION 1 - VIOLET (THERMISTOR)
POSITION 2 - YELLOW (HALL +)
POSITION 3 - BROWN (H1)
POSITION 4 - ORANGE (H2)
POSITION 5 - BLUE (H3)
POSITION 6 - GRAY (HALL -)
POSITION 7 - VIOLET (THERMISTOR)
POSITION 8 - EMPTY

PUMP AND COMPRESSOR SOLUTIONS FOR OEMS WORLDWIDE

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