Blackmer

Spec Sheet 502-002Section:502Effective:October 2017Replaces:September 2014

LBO81 Oil-Free Reciprocating Gas Compressor



Market

Blackmer[®] oil-free gas compressors deliver high efficiency in handling propane, butane, anhydrous ammonia and other liquefied gases.

Construction

At about half the capacity of the Blackmer LB161, the LB081 is well suited to small plants or vessels. Equipped with high efficiency valves, steel pistons, self-adjusting piston rod seals and other robust features, these compressors are designed to provide maximum performance and reliability under the most severe service conditions and offer the best combined characteristics of sustained high level performance, energy efficiency, trouble-free operation and low maintenance cost.

High efficiency valves move more gas volume

The heart of any compressor is its valve assembly and Blackmer valves are specifically designed for non-lubricated gas applications. With precisely engineered clearances, spring tension, and a special finish, these valves seat more positively so more gas is moved with each piston stroke. Blackmer valves offer greater strength, quiet operation, and long life.

Applications

- Small tank unloading
- Line stripping
- Portable evacuation skids
- Vapor recovery

Pressure lubricated bearings

Blackmer's unique rotary oil pump ensures positive oil distribution to all running gear components for maximum lubrication.

Unlike "splash" lubrication systems, the Blackmer advantage is reduced wear and longer life with fewer repairs, even on heavily loaded continuous-duty applications.

LB081 Oil-Free Reciprocating Gas Compressor

Standard Compressor Packages

Blackmer offers a variety of factory assembled compressor packages to fit most application requirements.

CO - COMPRESSOR ONLY Includes basic compressor with flywheel.

B - BASE MOUNTED UNIT Includes compressor, pressure gauges, formed steel base, V-belt drive with belt guard, and adjustable motor base, less motor.

TU – TRANSFER UNIT Includes compressor, pressure gauges, formed steel base, liquid trap assembly with a mechanical float, V-belt drive with belt guard, and adjustable motor base, less motor.

TC or TW - TRANSFER UNIT Includes compressor, pressure gauges, steel base, ASME code stamped liquid trap assembly (complete with relief valve and a NEMA 7 electric float switch for Propane service), V-belt drive with belt guard, and adjustable motor slide base. TW units feature welded and flanged piping.

LU – LIQUID TRANSFER/VAPOR RECOVERY UNIT

Includes compressor, pressure gauges, formed steel base, liquid trap assembly with a mechanical float, inlet strainer, interconnecting piping, 4-way valve, V-belt drive with belt guard, and adjustable motor base, less motor.

LC or LW - LIQUID TRANSFER/VAPOR RECOVERY UNIT

Includes compressor, pressure gauges, steel base, ASME code stamped liquid trap assembly (complete with relief valve and a NEMA 7 electric float switch for Propane service), inlet strainer, interconnecting piping, 4-way valve, V-belt drive with belt guard, and adjustable motor base, less motor. LW units feature welded and flanged piping.

Compressor Selection Data: Propane and Anhydrous Ammonia

Model	Speed	Approximate Liquid Transfer Delivery ¹		Piston Displacement		Driver Size ²		Pipe Diameter ³			
	sheen							Vapor		Liquid	
	rpm	U.S. gpm	L/min	CFM	M³/H	hp	kW	in.	mm	in.	mm
LB081	425	25	93	4.2	7.2	1.5	1.1	0.75	19	1.5	38
	560	32	123	5.6	9.5	3	2	0.75	19	1.5	38
	715	41	157	7.2	12.2	3	2	1	25	1.5	38
	780	45	171	7.8	13.3	5	4	1	25	1.5	38
	810	46	174	8.1	13.8	5	4	1	25	1.5	38

Delivery will depend on proper system design, pipe sizing and valve capacity.

Horsepower is for liquid transfer and vapor recovery in moderate climates. For liquid transfer without vapor recovery, horsepower will be lower. For severe climates, contact your Blackmer representative for horsepower required.

3 Use next larger pipe size if piping exceeds 100 feet (30 meters).

Sales Information and Equipment Application Assistance

Blackmer has a world wide distribution network to assist you in specifying any of our family of pumps, compressors and other equipment for your application. For more information or to find the distributor nearest you, please contact us or visit our web site.



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