BBR

High pressure CNG compressors and refueling solutions

Dedicated to CNG and biomethane grid injection

All around the world, companies rely on Atlas Copco's expertise and innovations to contribute to their business growth. We help our customers cut costs and boost productivity while delivering sustainable solutions.

CNG/biomethane solution

Atlas Copco offers a range of CNG Bio-Methane grid injection solutions for various applications, including CNG fueling stations, mass transportation, and virtual pipeline systems.

Key Acquisitions

One of Atlas Copco's key acquisitions in the CNG industry was compressor specialist Intermech, which joined the Atlas Copco Group in 2006. Earlier, the company had acquired Crepelle in 1997 and then Greenfield in 2007, further enhancing its CNG portfolio.

Expertise in Compression Technology

Atlas Copco's roots are in compression technology, and the company has expanded its product portfolio through acquisitions of leading manufacturers for high-pressure vehicle refueling systems.

Global Reach

Founded in 1873 and based in Stockholm, Sweden, Atlas Copco now supports customers in more than 180 countries.


BBR

The pillars of productivity

Efficiency, safety, serviceability, and reliability are crucial factors at every CNG/Biomethane installation. They are the cornerstones of our entire natural gas product line. Our compressors are loaded with features that deliver benefits at every step of the CNG/ Biomethane delivery cycle.

Atlas Copco expertise

Service

Safety

Smart Energy

Reliability

- Energy Efficiency: These compressors use direct drive technology, saving around 2–6% of total energy costs compared to belt transmission compressors.
- Long Service Intervals: With approximately 15,000 hours between major services, maintenance worries are minimized.
- Fire-Resistant Canopy: The canopy is R90-rated, meaning it can withstand fire for 90 minutes before structural failure.
- Pressurized Crankcase: Ensures zero gas loss during operation.

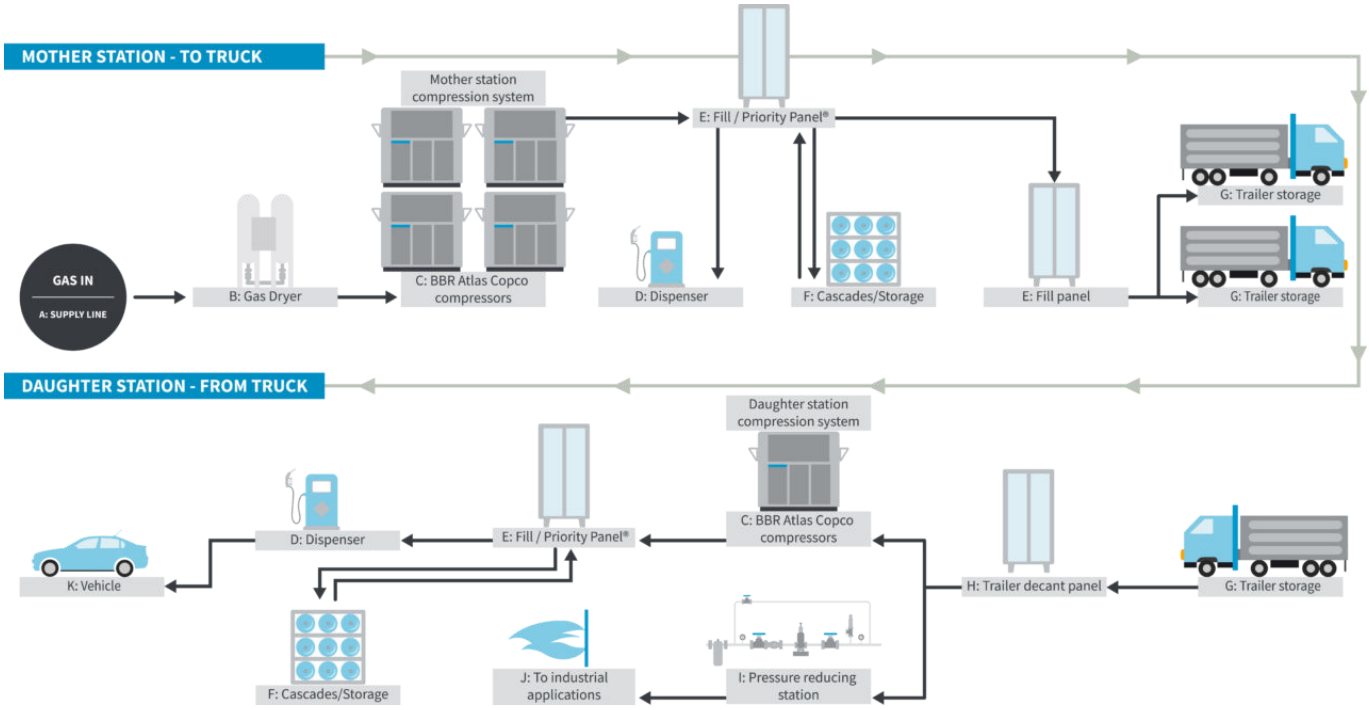
These compressors not only save energy with zero vent losses, but also deliver reliable performance, reducing overall ownership costs.

Optimized Solutions for CNG Stations

Atlas Copco oversees various aspects of CNG station construction, we specialize in providing tailored, efficient, and reliable equipment that seamlessly integrates into any CNG station setup.

Our commitment to excellence begins with our BBR series compressors, designed specifically to compress natural gas or biomethane to high pressures for efficient transportation and storage. Renowned for their superior efficiency and versatility, BBR compressors are suitable for both “fast-fill” stations and as part of larger mother stations, facilitating the rapid filling of CNG trucks for use in virtual pipelines.

At Atlas Copco, we ensure that every step of your CNG delivery chain is supported by top-of-the-line solutions that prioritize efficiency, reliability, and safety.



A: Supply line B: Gas dryer C: BBR compressor D: Dispenser E: Fill/priority panel F: Cascades G: Trailer storage H: Trailer decant panel I: Pressure reduction station (PRS) J: To industrial applications K: Vehicle

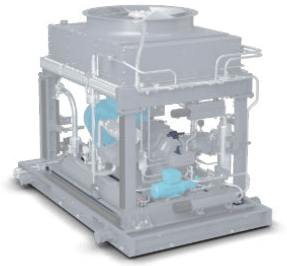
BBR compressor

A favorite at fueling stations and in CNG transportation networks around the world, the BBR compressor is an ideal solution for reliable and energy-efficient CNG refueling and biomethane grid injection that makes no compromises on safety. The compressor is equipped with a zero-leakage pressured crankcase, direct drive and thoroughly referenced and tested technology


BBR
Atlas Copco

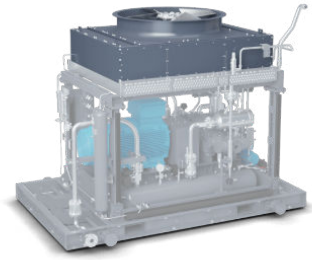
1 Long-life mini lube design

• Metered drop lubrication of cylinders through separate lubricator divider system reduces ring wear
• Restricted piston speeds for longer ring and valve life
• Synthetic rings also lessen friction and wear



2 Efficient cooling

• Air-cooled machines for trouble-free operation; avoids stoppages due to scaling, pump and cooling tower failures
• Low discharge temperatures thanks to proper staging and large, efficient intercoolers

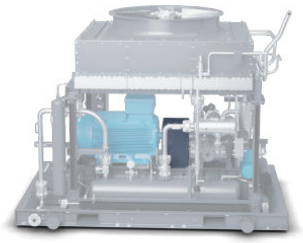


3 Pressurized crankcase

• Pressurized crankcase up to 35 bar(g) results in zero gas loss to atmosphere
• Gas savings of up to 3 % versus unsealed compressors at first startup.
• Compressor pays for itself within a few months of operation

4 Smooth direct drive

• No lateral loads on crankshaft and bearings, requiring less maintenance
• No transmission losses unlike belt driven compressor ensures better operational efficiency
• Reduced hassle of belt replacement and belt tensioning during operation
• Avoids belt-related servicing; belts typically must be replaced every six months
• Up to 1 800-rpm compressor running speed for direct coupling to gas or electric motor

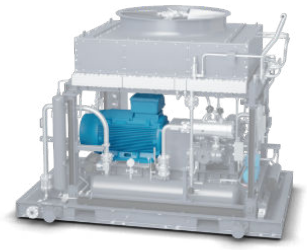


5 Control systems and other safety features

• Comes with Electrical & mechanical safeties to ensure safe & reliable operation
• Control systems monitor critical points
• Meets all major international codes and standards
• Fully performance and safety tested with natural gas at designed capacity prior to installation
• Extensive track record of safe operation extending over millions of hours of runtime
• Optional independent third-party design verification of all pressure vessels, welding procedures and hydrostatic pressure tests

6 Electric motor & soft starter technology

• Reduces electrical shock loads resulting in longer operational life
• Compressor will be unloaded in closed loop circuit in combination with blowdown vessel and ensure no-load start of compressor reducing starting currents requirements and increased the reliability

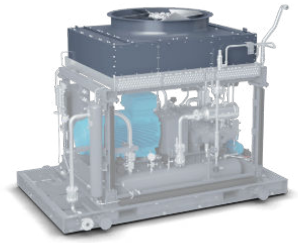


7 Gauges Panel

• Gauge panel provides information which helps to monitor compressor parameters during running conditions
• BBV helps hassle free and quick calibration without venting out the gas from complete system

Customer benefits

- Energy savings – Lower power costs and operating expenses pay off initial investment within a few months of operation
- High reliability – Low piston speeds and interstate temperatures maintain internal parts
- Safety – References all international standards and designed for zoned area application using explosion proof motors and suitable instruments
- Pressurized crankcase – Up to 35 bar(g) crankcase pressure results in zero gas loss and offers gas savings of 2–6% versus unsealed compressors



BBR compressor package and options

BBR compressors are used widely across CNG/biomethane grid injections filling stations around the world. They are available as either packaged, ready-to-install units or custom loaded with optional features.
1. Star delta – starter – as per customer needs ⟶ Optional feature
2. Bleed and – block valves for instruments ⟶ Package scope

	Package scope	Standard Features	Optional Features
Inlet filter to compressor block	*		
Pressurized crankcase BBR up to 35 bar(g)			
Electric motor/gas engine drive			
Flexible direct coupling with coupling guard			
Air cooled intercooler/aftercooler and air cooled oil cooler			
Piping/stainless steel tubing			
Integrated moisture separator/pulsation dampener			
Duplex final filtration using coalescing filters to remove aerosols to less than 5 ppm			
Integrated blowdown vessel			
Lubricating system including gear pump, oil filter			
Acoustic canopy suitable for 70 dBA/meter			
Necessary instrumentation as per area classification		*	
Standalone PLC based control panel			
Soft starter above 110 kW			
Star delta starter 110 kW and below			
Weatherproof canopy			*
3rd-party certification gas detector			
Flame detector			
Bleed and block valves for instruments			
Flameproof lighting			
Remote monitoring			
VSD soft starter			
Chain hoist system			

Product ranges & Technical specifications

Main specifications (metric)

Compressor model	Frequency	Suction pressure	Discharge Pressure	Rotation speed	Gas flow at discharge	Motor	Sound pressure (1)	Weight
	Hz	bar(g)	bar(g)	rpm	Nm^3/h	KW	dBA	Kg
BBR4-10015	50	0,7	250	995	287,6	100	70	13000
		2	250	995	517,8	100		
		0,7	250	1485	423	160		
		2	250	1485	763	160		
BBR4-9017		2	250	995	379	120		
		4	250	995	715	120		
		2	250	1485	633	200		
		4	250	1485	1056	200		
BBR4-6016		4	250	995	333	100		
		9	250	995	728	100		
		4	250	1485	494	160		
		9	250	1485	1079	160		
BBR3-5018		5	250	995	395	120		
		12	250	995	951	120		
		5	250	1485	606	200		
		12	250	1485	1272	200		
BBR3-4216		6	250	995	324	100		
		16	250	995	909	100		
		6	250	1485	499	160		
		16	250	1485	1269	160		

Main specifications (imperial)

Compressor model	Frequency	Suction pressure	Discharge pressure	Rotation speed	Gas flow at discharge	Motor	Sound pressure (1)	Weight
	Hz	psi(g)	psi(g)	rpm	SCFM	HP	dBA	Lbs
BBR4-10715	60	8	4500	1190	214	200	70	28600
		21	4500	1190	379	200		
		8	4500	1780	329	300		
		21	4500	1780	529	300		
BBR4-9017		33	4500	1190	319	200		
		59	4500	1190	532	200		
		33	4500	1780	502	300		
		59	4500	1780	785	300		
BBR4-8016		33	4500	1190	286	200		
		73	4500	1190	533	200		
		33	4500	1780	422	300		
		73	4500	1780	789	300		
BBR4-6016		55	4500	1190	267	150		
		134	4500	1190	535	150		
		55	4500	1780	428	300		
		134	4500	1780	793	300		
BBR3-4216		90	4500	1190	262	200		

Compressor model	Frequency	Suction pressure	Discharge pressure	Rotation speed	Gas flow at discharge	Motor	Sound pressure (1)	Weight
	Hz	psi(g)	psi(g)	rpm	SCFM	HP	dBA	Lbs
		227	4500	1190	660	200		
		97	4500	1780	412	300		
		200	4500	1780	851	300		

Dimensions

Model	Length (mm)	Width (mm)	Height (mm)
BBR3-4	3700	2300	3600

Dimensions

Model	Length (in)	Width (in)	Height (in)
BBR3-4	118	78,7	118

Reference conditions:
1. 1 bar(g) (14.5 psi) ambient temperature 20°C (68°F), gas inlet temperature 20 (68°F)
2. Specific gravity: 0.6
3. Due to continuous improvement we reserve the right to change these capacity
4. Capacity given above are for standard models. Please contact Atlas Copco for other capacity

Our aftermarket parts and services

Global presence – local service
At Atlas Copco, our services do not stop when our products are delivered. Guaranteed Atlas Copco serviceability ensures the optimal availability and reliability of your CNG system while keeping operating costs to a minimum.

Our Aftermarket specialists are here to make sure that your machinery delivers top performance throughout its long lifetime. And, our Aftermarket Service plans offer full price transparency, fast maintenance and a forward-looking time-saving approach designed for your products' long life.

Performance checks by Atlas Copco technicians, who adhere to original factory standards, minimize the risk of breakdowns and production downtime. Through an audit of your production process, we can help optimize equipment operation. All the while, our Aftermarket service specialists keep a keen eye on maximum equipment availability at low possible cost.

We deliver this complete service guarantee through our extensive service network established in over 180 countries around the world.

The value of aftermarket services:
- Low energy consumption of your equipment
- Cost-effective, transparent pricing
- Longer operational life for your compressor
- Global presence, local service, never more than a phone call away
- Assured quality and productivity
- Dedicated local support in your language
- Around-the-clock support
- World-class logistics
- Complete diagnostic reports after every inspection
- Proactive planning that takes your scheduled maintenance routine into account
- Guaranteed Atlas Copco replacement parts
- Service by committed service personnel, who know your machinery inside and out

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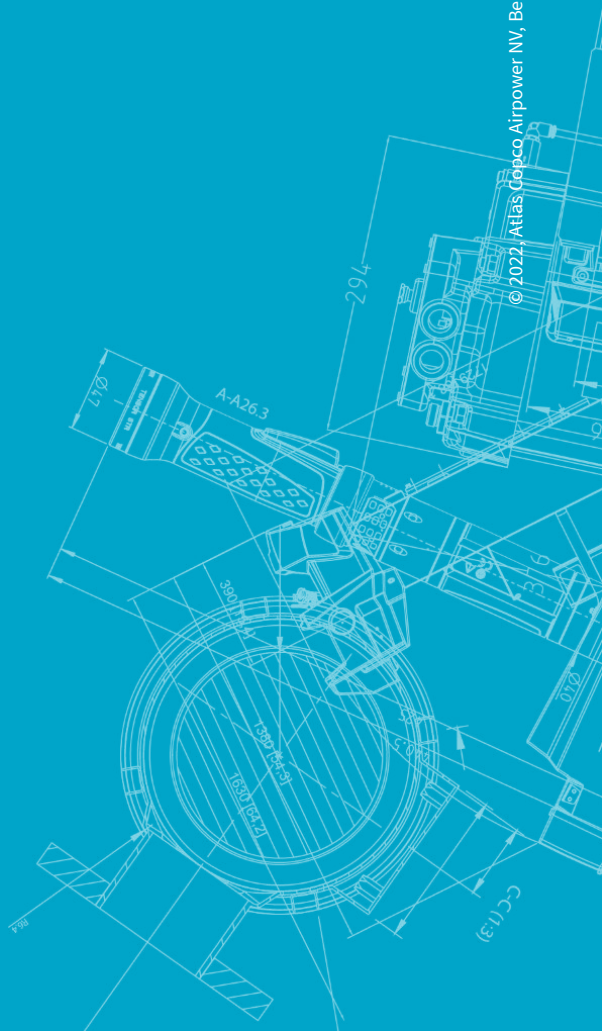

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