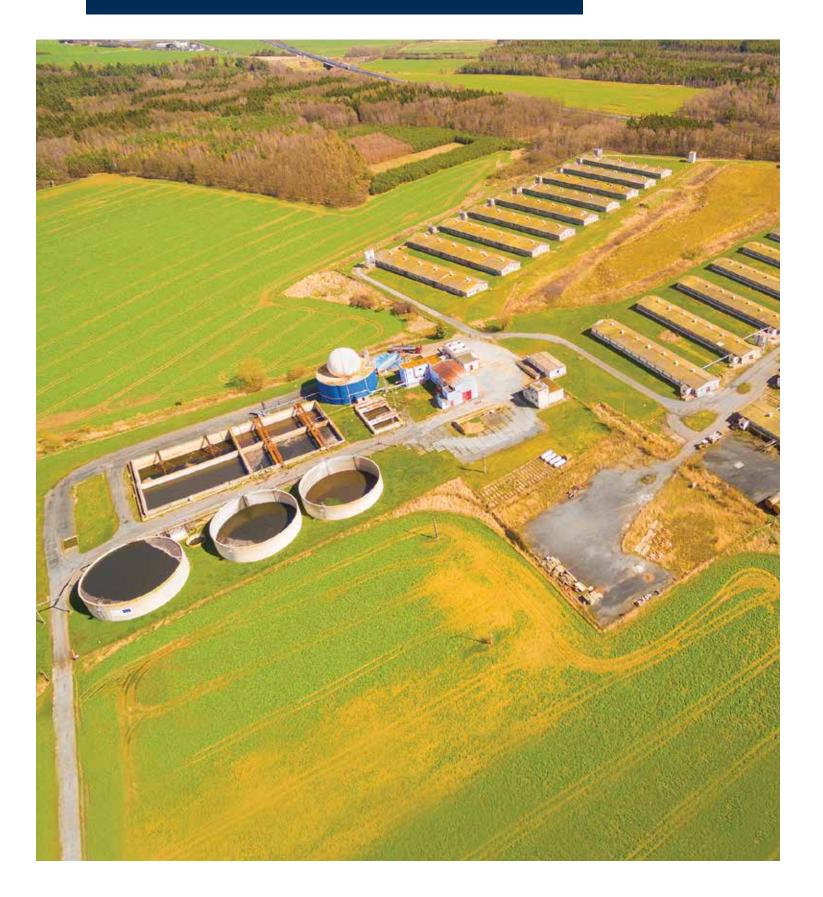


## **BAUER GRU**<sup>®</sup> Compressor Solutions for Biogas and RNG



## PURELY THE RIGHT CHOICE



# CONTENTS

#### THE CASE FOR BIOGAS

- > The Problem..... > The Solution: Generating RNG As
- Complete Solutions

#### **TURNKEY SOLUTIONS F**

- > 75 Years Of Experience In Gas Co

#### **BAUER GRU®**

Biogas Compressors For Injection Into
> BAUER GRU® Overview
> BAUER GRU <sup>®</sup> 3
BAUER GRU <sup>®</sup> 6
> BAUER GRU <sup>®</sup> 9
BAUER GRU <sup>®</sup> 15
BAUER GRU <sup>®</sup> 28
> BAUER GRU <sup>®</sup> 42
> BAUER GRU <sup>®</sup> Duplex
> BAUER GRU <sup>®</sup> XL Duplex

#### BAUER GRU<sup>®</sup> MB5

#### BAUER CNG COMPRESSOR SYSTEMS

Full Line Of Reciprocating Piston Compressor Systems For High Pressure CNG Applications Up To 5000 PSIG Final Pressure

> BAUER CNG Compressor System > BAUER Micro Series<sup>™</sup> C120 . . . > BAUER Compact Series<sup>™</sup> C15/2 > BAUER M-Series<sup>™</sup> Simplex . . . . > BAUER M-Series<sup>™</sup> Duplex . . . . . > BAUER C26 X-FILL<sup>®</sup> ..... > BAUER C52 X-FILL ..... > BAUER XXL Series ..... > BAUER C23 XXL System ..... > BAUER C26 XXL System ..... > BAUER C52 XXL System .....

#### **BAUER CONNECT®**

Remote Telemetry and Control Via Mol **)** BAUER CONNECT<sup>®</sup> .....

#### PARTS & CUSTOMER SL

Parts
> Training
• Global Service
BAUER Helpdesk

The Problem.	4
> The Solution: Generating RNG As An Alternative Clean Energy Source	5
Complete Solutions	6
RNKEY SOLUTIONS FOR BIOGAS AND BIOMETHANE	
> 75 Years Of Experience In Gas Compression And Processing	8
Turnkey Solutions For RNG Generation	9

#### PSA or Membrane Gas Upgrading Systems

 10
 13
 14
 15
 16
 17
20

Rotary Screw Gas Booster Compressor For Pipeline Injection And High Pressure Gas Turbine Applications

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																																				20	
22				•			•	•	•	 		•	•					•							•	• •					•		•	• •		27	7
							•	•	•	 		•	•	• •	•	•		•		•			•	•	•	• •	 •			•	•		•			28	3
				•			•	•	•	 		•	•					•							•	• •					•		•	• •		29	9
																																				30	
																																				3	
							•	•	•	 		•	•	• •	•	•		•		•			•	•	•	• •	 •			•	•		•			32	2
				•			•	•	•	 		•	•					•							•	• •					•		•	• •		34	4
				•			•	•	•	 		•	•					•							•	• •					•		•	• •		34	4
									•	 			•					•		•			•		•	• •							•	• •		35	ō

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		0	F	)	C	)	F	2	T	-																																										
•			•																										•						•			•		•	•			•		•					3	8
•		•	•	•	•	•			•					•			•		•	•				•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•				3	8
•	•	•	•	•	•	•			•					•			•		•	•				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	3	9
•																																																			3	9



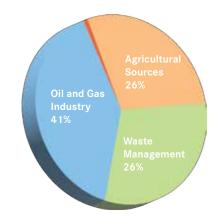
#### **THE PROBLEM**

Decomposing organic material releases methane into the atmosphere. Methane is a short-lived climate pollutant with an atmospheric lifetime of around 12 years. While its lifetime is much shorter than carbon dioxide (CO<sub>2</sub>), it is much more efficient at trapping radiation, which makes the impact of methane on climate change over 80 times greater than CO<sub>2</sub> (Environmental Defense Fund, 2021).

Globally, over 60% of total methane emissions come from human activities. Agriculture is a key emitting sector, responsible for about 30%, and is the number one source of methane emissions in the U.S. (N.O.A.A., 2020)

Top three super-emitters contributing to 93% of methane emissions to be:

Oil and Gas Industry	41%
Waste Management	26%
Agricultural Sources	26 %
Other	1%



#### **THE PRESSURES**

Due to methane's high greenhouse gas (GHG) impact but low human-based emission source, in comparison to CO<sub>2</sub>, it has become the main focus of government regulation across the globe. In the U.S., the pressure on the government and private sector regulations of methane emissions has come to the forefront in the social efforts to fight climate change. According to the E.P.A., regulations, once finalized, will reduce 41 million tons of methane emissions from 2023 to 2035, the equivalent of 920 million metric tons of carbon dioxide.

#### **THE SOLUTION**

Technology has evolved, which makes capturing and processing biogas from anaerobic fermentation more economically viable. Methane emitted from decomposing waste when captured and upgraded on-site into renewable natural gas (RNG) is a valuable energy source that is significantly more environmentally friendly than diesel fuel, gasoline, or coal. RNG can be injected into a natural gas pipeline in exchange for revenue from the local utility, compressed for fleet fuel instead of diesel, or used as fuel to generate electricity (power co-generation). Also, the producers of RNG can be eligible for significant tax credits through their respective states.

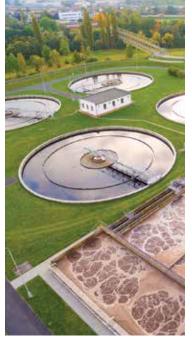
## **4 SOURCES OF METHANE EMISSIONS FROM ANAEROBIC DECOMPOSITION**



> Methane Gas Emissions from Landfills

Methane Gas Emissions from Dairy and Animal Waste

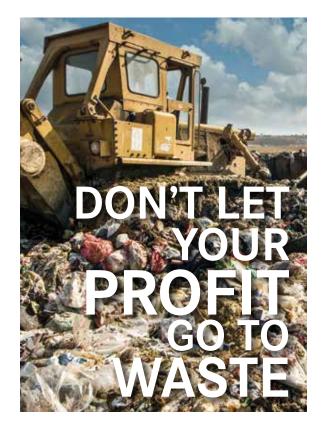




Methane Gas Emissions from Waste Treatment Plants



Organic Food Waste



#### COMPLETE SOLUTIONS For On-Site Biogas Recovery and Upgrading

Generating RNG from landfills, dairies, and wastewater facilities through anaerobic decomposition not only eliminates methane emissions into the atmosphere, but can also be a source of additional revenue for the operator by:

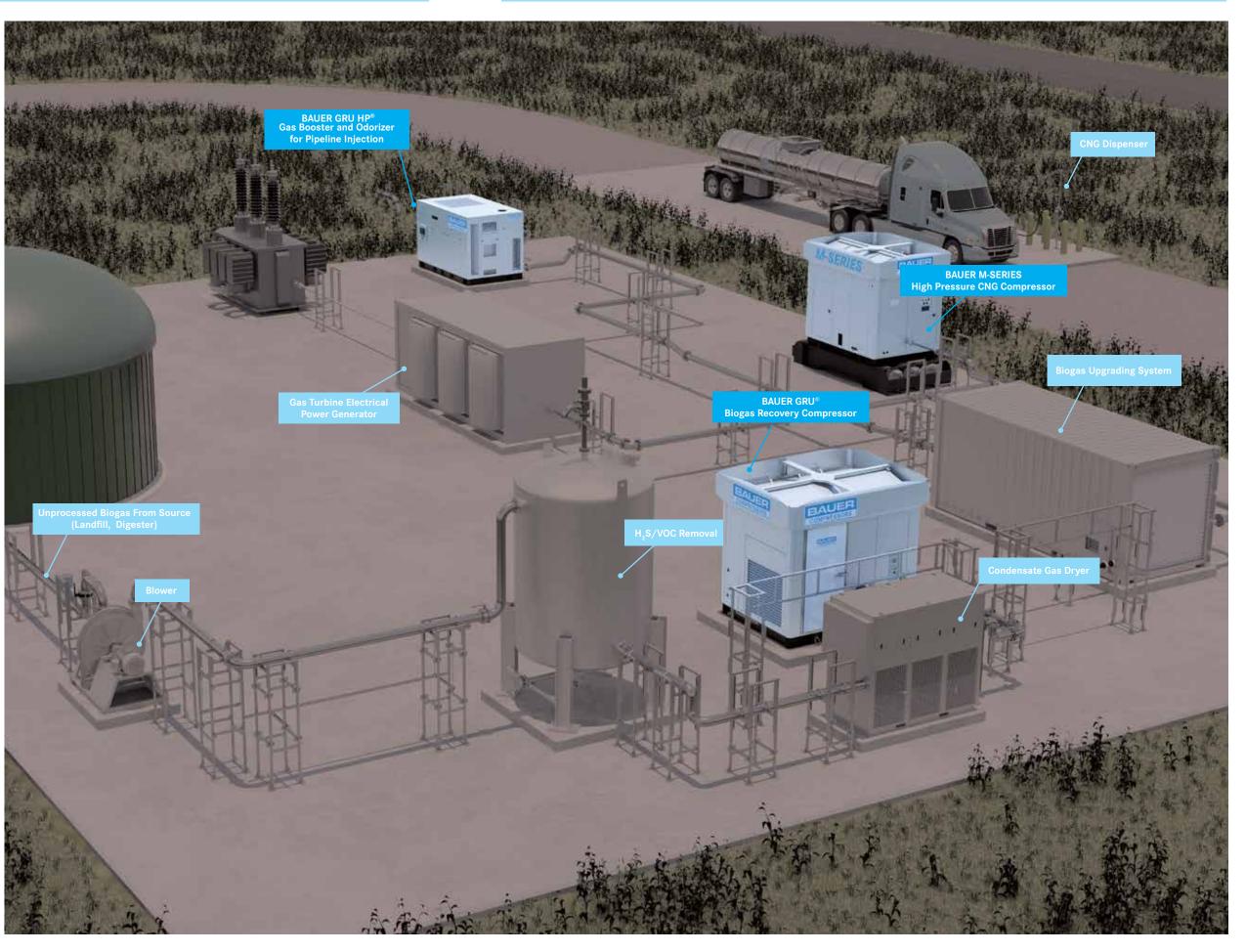
- Selling the gas to a utility through pipeline injection
- Offsetting costs associated with purchasing fuel for vehicles by producing their own fuel (compressed natural gas, or CNG)
- Producing their own electricity through cogeneration

BAUER is known globally for its expertise in manufacturing gas compression systems. To provide our customers with a complete turnkey solution for upgrading, BAUER has partnered with highly experienced companies which are specialized in various aspects of biogas generating RNG.

#### BAUER COMPRESSORS Solutions include:

- Biogas Feed Compression
- > Pipeline injection Compression
- > Virtual Pipeline/CNG Station Compression

BAUER COMPRESSORS



## **RELIABLE SUPPORT IN BIOGAS SYSTEMS**



## 75 YEARS OF EXPERIENCE IN GAS COMPRESSION AND PROCESSING

For the past 75 years, BAUER has been the global market leader in low- and high-pressure compressor systems for a wide variety of applications. BAUER compressors are known around the world for their extreme durability and reliability. All BAUER compressors are backed by BAUER's unmatched 2-year comprehensive warranty, as well as a lifetime support guarantee. Combined with BAUER's global reach (35 offices in 20 countries, and over 600 distributors worldwide), no one in the industry can match BAUER's dedication to supporting our customers. BAUER not only makes the most reliable and durable compressor in the world, but BAUER also designs and manufactures the entire compression solution in-house. Most other compressor manufacturers rely on outside packagers to provide the end-user compression solution. At BAUER, we manufacture both the compressor and complete compression system, which allows us to take full responsibility for every step of the process. BAUER also has extensive experience in providing compression solutions for specifically biogas applications. To date, we have completed over 150 compressor installations in biogas upgrading, and over 2,000 successful installations in CNG applications.

BAUER is a proud member of the Renewable Natural Gas Coalition (RNG Coalition), BiogasWorld, and the American Biogas Council (ABC).

#### Biogas upgrading facilities require compression systems for the following processes:

- Compressors for Feeding Biogas Upgrading Systems
- > Compressors for Compression of Gas into the Utility Grid (Pipeline Injection)
- > Compressors for Feeding Gas Turbine Generators
- > Compressors for High Pressure CNG Systems

#### RELIABLE PARTNERS FOR BIOGAS UPGRADING SYSTEMS

Compression is only one part of biogas generation. BAUER can draw on over 25 years of experience in the biogas industry to advise customers on the best biogas upgrading technology for specific applications. BAUER works with a number of leading technology providers who are capable of providing turnkey biogas upgrading solutions.



> ENGINEERING, PROCUREMENT CONSTRUCTION BAUER has worked with reputable EPC companies and licensed biogas contractors to help provide a complete turnkey solution for the entire biogas processing plant, from feasibility, to concept, to engineering, and then to procurement, including turnkey construction and complete project execution.





> VOC/H<sub>2</sub>S REMOVAL

#### **> BIOGAS UPGRADING SYSTEMS**

Biogas produced in a digester or coming from a landfill contains excess moisture, VOC's, as well as high amounts of CO<sub>2</sub> (up to 35%). The biogas upgrading process involves removing these undesirable elements in order to produce biomethane which consists of 97% pure methane. In simple terms, a typical biogas upgrading system consists of a condensate dehydration system to remove excess moisture, an activated carbon system to strip out VOC's and a hollow fiber membrane system to separate the CO, from the methane. BAUER has strategic alliances with the leading biogas upgraders in the industry and as such can make techinical partner recommendations to the end user based on the size and technical scope of the project.



**>** POWER GENERATION SOLUTIONS To help biogas plant operators maximize their profits by fully utilizing the potential of their compressed gas, BAUER alliances with technology providers for on-site for power generation. These include natural gas engine power generators as well as gas turbine power generators.

## **BAUER GRU**<sup>®</sup>

**Biogas Feed Compressors For Feeding Into PSA or Membrane Biogas Upgrading Systems** 

The BAUER GRU<sup>®</sup> Biogas Compressor range has been specifically designed for feeding biogas upgrading systems. The function of the biogas feed compressor is to elevate the pressure of the incoming biogas, from 1-7 PSIG to 90-230 PSIG, which is the operating pressure required for most PSA/membrane type gas upgrading systems. BAUER offers a complete GRU system size range from 5 to 350 hp (3.7 to 260 kW). At the heart of every GRU compressor system is the legendary BAUER Rotorcomp® rotary screw compressor, world-renowned for exceptional durability and reliability. The sophisticated control system in the GRU senses pressure upstream of the unit, and automatically adjusts compressor speed to modulate output based on the availability of biogas from the source (landfill or digester). If there is an insufficient amount of gas available upstream for compression, the system automatically goes into standby mode, for instantaneous compression capability when upstream gas pressure suddenly increases. This significantly reduces the occurrences of venting gas into the atmosphere, because the compressor is ready to operate instantaneously (compared to ramping up through normal start-up sequences after being completely shut down).

#### THE MOST COMPREHENSIVE SIZE AND PERFORMANCE RANGE IN THE INDUSTRY

BAUER offers many sizes and models of pre-engineered biogas compressors ranging from 15 to 350 hp (11 to 260 kW) This allows BAUER to size the compressor system specific to the performance needs of each project

- > Inlet pressure range: 0.1 to 35 PSIG (0.007 to 2.41 BARG)
- **Horsepower range:** 5 to 350 hp (3.7 to 260 kW)
- **Biogas Flow Rate:** 10 to 2193 scfm (17 to 3725 Nm<sup>3</sup>/hr)
- **Final Pressure:** 100 to 232 PSIG (6.9 to 16 BARG)

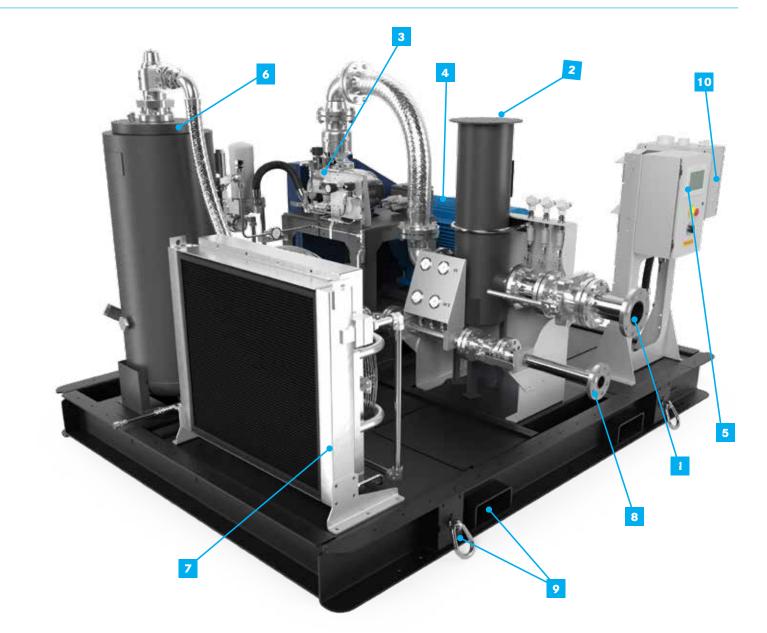
#### STANDARD SCOPE OF SUPPLY

- > Heavy-duty rotary screw compressor manufactured by BAUER's ROTOCOMP® division at the heart of the system
- > Variable speed control of compressor to modulate the flow of biogas based on the incoming supply of gas (VF drive located remote from skid as defined by Class 1, Div 2 code requirements per NEC NFPA 70, Article 500)
- > Heavy-duty TEFC electric motor
- > Stainless steel construction of piping and major P&ID components
- > PLC control of all major system components with on board HMI
- > BAUER CONNECT<sup>®</sup> remote telemetry IoT with Modbus TCP/IP or Profinet connection capability
- > Fully integrated system built on a heavy-duty steel skid, designed for plug and play installation
- > Pressure Sensors, Temperature Transmitters, Gauges and Valves

- > Air cooled oil cooler w / TEFC motor and controlled by VFD for efficient oil temperature control
- > Stainless Steel Oil / Gas separator w/ Pressure Safety Valve

#### **AVAILABLE OPTIONS**

- Gas inlet particulate filter
- Gas aftercooler (air-cooled)
- Sound attenuation
- Heat recovery
- Cold weather package
- > 575 Volt drive equipment for Canada



#### CODES AND STANDARDS

- > Hazardous Area Classification: Class 1, Div 2 as defined per NEC, NFPA70
- > Pressure Vessel Code Compliance: ASME
- > Electrical Code Compliance: UL/Control panels and assemblies
- > Certified manufacturing organization: ISO 9001-2015
- > UL 508A, Standard for Industrial Control Panels
- > UL 698A, Standard for Industrial Control Panels Relating to Hazardous (Classified) Locations
- > NFPA, Vehicular Natural Gas Fuel Systems Code
- > NFPA 70 National Electric Code
- > NFPA 497, Recommended Practice for the Classification of Flammable Liquids, Gases, or Vapors and of Hazardous (Classified) Locations for Electrical Installations in Chemical **Process Areas**
- > ASME B31.3, Process Piping

1	GAS INLET CONNECTION (FLANGED)
2	OPTIONAL INLET PARTICULATE FILTER
3	BAUER EVO® GAS ROTARY SCREW COMPRESSOR
4	TEFC ELECTRIC MOTOR
5	HMI/PLC CONTROL PANEL (NEMA4)
6	OIL/GAS SEPARATOR
7	AIR COOLED OIL COOLER
8	GAS OUTLET CONNECTION (FLANGED)
9	HEAVY DUTY SKID WITH INTEGRATED FORKLIFT POCKETS AND LIFTING RINGS
10	ELECTRIC JUNCTION BOX TO ENABLE CONNECTION TO REMOTE MOUNTED VARIABLE FREQUENCY MOTOR CONTROLLER

#### BAUER GRU<sup>®</sup> 3 BIOGAS FEED COMPRESSOR SYSTEM

Compact Design For Low Flow Applications

- > 15 to 25 hp (11 to 18.5 kW)
- > 20 to 104 scfm (34 to 176 Nm<sup>3</sup>/hr)
- > 232 PSIG (16 BARG) maximum discharge pressure



> BAUER GRU<sup>®</sup> 3 Available with optional enclosure

#### SYSTEM FOOTPRINT

> 51" W X 64" L X 85" H (1295.4mm W X 1625.6mm X2159mm H)



#### **TECHNICAL DATA**

	BAUER GR	U <sup>®</sup> 3 PERFORMANC	CE AT VARIOUS HORS	EPOWER AND SUC	TION PRESSURE C	OMBINATIONS	
М	otor	Suctior	Pressure		et 150 PSIG Pressure		at 232 PSIG ge Pressure
HP	KW	PSIG	BAR	SCFM	M³/H	SCFM	M³/H
GRU® 3 (15hp/	11kw)						
15	11	1.0	0.069	43	73	32	54
15	11	5	0.34	50	84	36	61
15	11	10	0.7	58	99	41	70
GRU® 3 (20hp/	15kw)						
20	15	1.0	0.069	55	93	43	73
20	15	5	0.34	68	115	50	85
20	15	10	0.7	78	132	59	100
GRU® 3 (25hp/	18.5kw)						
25	18.5	1.0	0.069	63	107	54	91
25	18.5	5	0.34	80	136	66	112
25	18.5	10	0.7	104	176	75	127

All performance values referenced in the table above are based on the following conditions: Referenced to ISO 1217 (14.50 psi (100 kPA), 68°F (20°C), 0% RH), Biogas temperature at compressor inlet: 86°F (30°C). Biogas Composition: 52% CH4, 46% CO2, 1% N2, 1% O2. Discharge pressure at compressor skid edge. Any deviations from these conditions will modify the stated performance results. Consult with your BAUER representative for conditions other than referenced herein.

## BAUER GRU<sup>®</sup> 6 BIOGAS FEED COMPRESSOR SYSTEM

#### Compact Design For Low To Medium Flow Applications

- > 30 to 50 hp (22 to 37 kW)
- > 31 to 218 scfm (53 to 371 Nm<sup>3</sup>/hr)
- > 232 PSIG (16 BARG) maximum discharge pressure



Available with optional enclosure

#### SYSTEM FOOTPRINT

> 51" W X 64" L X 85" H (1295.4mm W X 1625.6mm X2159mm H)

#### **TECHNICAL DATA**

	BAUEF	R GRU <sup>®</sup> 6 PERFORM	ANCE AT VARIOUS	HORSEPOWER AND	SUCTION PRESSU	RE COMBINATIONS	
	Motor	Suctio	on Pressure	Max Flow a Discharge		Max Flow a Discharge	
HP	KW	PSIG	BAR	SCFM	M <sup>3</sup> /H	SCFM	M³/H
GRU® 6 (30h	p/22kw)						
30	22	1.0	0.069	86	145	57	97
30	22	5	0.34	99	168	66	112
30	22	10	0.7	112	190	71	121
GRU® 6 (40h	p/30kw)						
40	30	1.0	0.069	116	196	85	144
40	30	5	0.34	147	250	97	165
40	30	10	0.7	178	302	110	187
GRU® 6 (50h	p/37kw)						
50	37	1.0	0.069	155	263	109	185
50	37	5	0.34	186	316	128	217
50	37	10	0.7	218	371	150	255

All performance values referenced in the table above are based on the following conditions: Referenced to ISO 1217 (14.50 psi (100 kPA), 68°F (20°C), 0% RH), Biogas temperature at compressor inlet: 86°F (30°C). Biogas Composition: 52% CH4, 46% CO2, 1% N2, 1% O2. Discharge pressure at compressor skid edge. Any deviations from these conditions will modify the stated performance results. Consult with your BAUER representative for conditions other than referenced herein.



#### BAUER GRU<sup>®</sup> 9 BIOGAS FEED COMPRESSOR SYSTEM

Compact Design For Low To Medium Flow Applications

- > 60 to 75 hp (45 to 55 kW)
- > 61 to 328 scfm (104 to 557 Nm<sup>3</sup>/hr)
- > 232 PSIG (16 BARG) maximum discharge pressure



> BAUER GRU<sup>®</sup> 9 Available with optional enclosure

#### SYSTEM FOOTPRINT

> 55" W X 97" L X 85" H (1397mm W X 2463.8mm L X 2159mm H)



#### **TECHNICAL DATA**

	BAUER GRU	J <sup>®</sup> 9 PERFORMAN	CE AT VARIOUS HO	RSEPOWER AND S	SUCTION PRESSUR	E COMBINATIONS	
М	otor	Suction	Pressure		t 150 PSIG Pressure		at 232 PSIG e Pressure
HP	KW	PSIG	BAR	SCFM	M³/H	SCFM	M³/H
GRU® 9 (60hp/4	5kw)						
60	45	1.0	0.069	194	329	139	236
60	45	5	0.34	227	386	164	279
60	45	10	0.7	264	448	192	326
GRU® 9 (75hp/5	5kw)						
75	55	1.0	0.069	238	405	179	304
75	55	5	0.34	284	482	215	365
75	55	10	0.7	328	557	248	421

All performance values referenced in the table above are based on the following conditions: Referenced to ISO 1217 (14.50 psi (100 kPA), 68°F (20°C), 0% RH), Biogas temperature at compressor inlet: 86°F (30°C). Biogas Composition: 52% CH4, 46% CO2, 1% N2, 1% O2. Discharge pressure at compressor skid edge. Any deviations from these conditions will modify the stated performance results. Consult with your BAUER representative for conditions other than referenced herein.

#### BAUER GRU<sup>®</sup> 15 BIOGAS FEED COMPRESSOR SYSTEM

**Designed For Medium To High Flow Applications** > 100 to 125 hp (75 to 90 kW)



#### **TECHNICAL DATA**

	BAUER GI	RU <sup>®</sup> 15 PERFORM	ANCE AT VARIOUS I	HORSEPOWER AND	SUCTION PRESSUR	E COMBINATIONS		
Мо	otor	Suction	Pressure	Max Flow a Discharge		Max Flow at 232 PSIG Discharge Pressure		
HP	KW	PSIG	BAR	SCFM	M <sup>3</sup> /H	SCFM	M³/H	
GRU® 15 (100h	p/75kw)							
100	75	1.0	0.069	337	573	248	421	
100	75	5	0.34	406	689	304	516	
100	75	10	0.7	470	799	356	605	
GRU® 15 (125h	p/90kw)							
125	90	1.0	0.069	419	712	321	545	
125	90	5	0.34	498	846	385	654	
125	90	10	0.7	587	997	443	753	

All performance values referenced in the table above are based on the following conditions: Referenced to ISO 1217 (14.50 psi (100 kPA), 68°F (20°C), 0% RH), Biogas temperature at compressor inlet: 86°F (30°C). Biogas Composition: 52% CH4, 46% CO2, 1% N2, 1% O2. Discharge pressure at compressor skid edge. Any deviations from these conditions will modify the stated performance results. Consult with your BAUER representative for conditions other than referenced herein.

#### **BAUER GRU® 28 BIOGAS FEED COMPRESSOR SYSTEM**

Designed For High Flow Applications

- > 150 to 250 hp (110 to 185 kW
- > 219 to 1096 scfm (372 to 1,863 Nm<sup>3</sup>/hr)
- > 232 PSIG (16 BARG) maximum discharge pressure



> BAUER GRU<sup>®</sup> 28 Available with optional enclosure

#### SYSTEM FOOTPRINT

> 100" W X 130" L X 117" H (2540mm W X 3886mm L X 2971mm H)

#### **TECHNICAL DATA**

	BAUER GRU <sup>®</sup> 28	8 PERFORMANC	E AT VARIOUS HOP	RSEPOWER AND SUC	TION PRESSURE	COMBINATIONS	
Mo	tor	Suction	Pressure	Max Flow at Discharge F		Max Flow a Discharge	t 232 PSIG Pressure
HP	KW	PSIG	BAR	SCFM	M³/H	SCFM	M³/H
GRU® 28 (150hp/11	0kw)						
150	110	1.0	0.069	507	862	385	654
150	110	5	0.34	617	1049	463	787
150	110	10	0.7	712	1210	517	878
RU <sup>®</sup> 28 (200hp/15	i0kw)						
200	150	1.0	0.069	680	1156	515	875
200	150	5	0.34	810	1376	627	1065
200	150	10	0.7	957	1625	725	1232
GRU® 28 (250/185k	sw)						
250	185	1.0	0.069	789	1340	601	1021
250	185	5	0.34	948	1610	737	1252
250	185	10	0.7	1,096	1863	864	1468

All performance values referenced in the table above are based on the following conditions: Referenced to ISO 1217 (14.50 psi (100 kPA), 68°F (20°C), 0% RH), Biogas temperature at compressor inlet: 86°F (30°C). Biogas Composition: 52% CH4, 46% CO2, 1% N2, 1% O2. Discharge pressure at compressor skid edge. Any deviations from these conditions will modify the stated performance results. Consult with your BAUER representative for conditions other than referenced herein.

#### BAUER GRU® 42 BIOGAS FEED COMPRESSOR SYSTEM Designed For High Flow Applications

- > 300 to 350 hp (220 to 260 kW)
- > 469 to 1608 scfm (796 to 2,732 Nm<sup>3</sup>/hr)
- > 232 PSIG (16 BARG) maximum discharge pressure



#### SYSTEM FOOTPRINT

> 96" W X 240" L X 102" H (2438mm W X 6096mm L X 2591mm H) Approximate dimensions

#### **TECHNICAL DATA**

	BAUER GRU <sup>®</sup> 42 PERFORMANCE AT VARIOUS HORSEPOWER AND SUCTION PRESSURE COMBINATIONS														
Ν	lotor	Suction	Pressure	Max Flow a Discharge		Max Flow at Discharge									
HP	KW	PSIG	BAR	SCFM	M <sup>3</sup> /H	SCFM	M³/H								
GRU <sup>®</sup> 42 (300h	p/220kw)														
300	220	1.0	0.069	999	1697	796	1352								
300	220	5	0.34	1191	2023	971	1650								
300	220	10	0.7	1407	2390	1126	1913								
GRU <sup>®</sup> 42 (350h	p/260kw)														
350	260	1.0	0.069	1121	1905	922	1566								
350	260	5	0.34	1348	2290	1092	1855								
350	260	10	0.7	1608	2732	1333	2265								

All performance values referenced in the table above are based on the following conditions: Referenced to ISO 1217 (14.50 psi (100 kPA), 68°F (20°C), 0% RH), Biogas temperature at compressor inlet: 86°F (30°C). Biogas Composition: 52% CH4, 46% CO2, 1% N2, 1% O2. Discharge pressure at compressor skid edge. Any deviations from these conditions will modify the stated performance results. Consult with your BAUER representative for conditions other than referenced herein.

BAUER COMPRESSORS

#### BAUER GRU® DUPLEX BIOGAS FEED COMPRESSOR SYSTEM

Designed For High Flow Applications Where Redundancy and/or >50% Turndown is Required

#### 5 Different HP Size Ranges

- > 200-500 hp (150-370 kW) (100-250 hp (75 -185 kW) per compressor)
- > 144-2193 scfm (245 3725 m<sup>3</sup>/hr)
- > 75% turn-down capability to 25% of max
- > Built-in redundancy



The BAUER GRU® DUPLEX biogas compressor is designed for larger flow applications where extreme turn-down and redundancy is required.



#### SYSTEM FOOTPRINT

- 216.5" L x 96.5" W x 154.3" H (5499mm W X 2451mm L X 3919mm H) (w/ enclosure and vent stacks)
- 216.5" L x 96.5" W x 96.1" H (5499mm W X 2451mm L X 2441mm H) (w/out enclosure and vent stacks)

#### **TECHNICAL DATA**

	BAUER GRU <sup>®</sup> D	JPLEX PERFORM	ANCE AT VARIOUS	HORSEPOWER AND	SUCTION PRESSU	RE COMBINATIONS	;
М	otor	Suction	Pressure	Max Flow a Discharge		Max Flow at Discharge	
HP	KW	PSIG	BAR	SCFM	M <sup>3</sup> /H	SCFM	M³/H
GRU <sup>®</sup> Duplex (1	00hp/75 kW x2)						
100 (x2)	75 (x2)	1.0	0.069	675	1145	496	843
100 (x2)	75 (x2)	5	0.34	812	1379	608	1033
100 (x2)	75 (x2)	10	0.7	940	1598	712	1210
GRU <sup>®</sup> Duplex (1	25hp/75 kW x2)						
125 (x2)	90 (x2)	1.0	0.069	838	1424	642	1091
125 (x2)	90 (x	5	0.34	996	1692	770	1308
125 (x2)	90 (x2)	10	0.7	1174	1995	886	1505
GRU <sup>®</sup> Duplex (1	50hp/110 kW x2)						
150 (x2)	110 (x2)	1.0	0.069	1014	1723	770	1308
150 (x2)	110 (x2)	5	0.34	1234	2097	926	1573
150 (x2)	110 (x2)	10	0.7	1425	2420	1034	1757
GRU <sup>®</sup> Duplex (2	00hp/150 kW x2)						
200 (x2)	150 (x2)	1.0	0.069	1361	2312	1030	1750
200 (x2)	150 (x2)	5	0.34	1620	2752	1254	2130
200 (x2)	150 (x2)	10	0.7	1913	3251	1450	2463
GRU <sup>®</sup> Duplex (2	50hp/185 kW x2)						
250 (x2)	185 (x2)	1.0	0.069	1577	2679	1202	2042
250 (x2)	185 (x2)	5	0.34	1895	3220	1474	2504
250 (x2)	185 (x2)	10	0.7	2193	3725	1728	2936

All performance values referenced in the table above are based on the following conditions: Referenced to ISO 1217 (14.50 psi (100 kPA), 68°F (20°C), 0% RH), Biogas temperature at compressor inlet: 86°F (30°C). Biogas Composition: 52% CH4, 46% CO2, 1% N2, 1% O2. Discharge pressure at compressor skid edge: 230 psig. Any deviations from these conditions will modify the stated performance results. Consult with your Bauer representative for conditions other than referenced herein.

# PLUG AND PLAY ALL ONBOARD **TURNKEY SYSTEM**

Including: Electrical components (VFD) and optional gas aftercooler, heat recovery, and hot start system.



<b>BAUER GRU®</b>	
<b>XL DUPLEX BIOGAS</b>	
CONTAINEDIZED BIOGAS EEED COMDDESSOD	cv

## CONTAINERIZED BIOGAS FEED COMPRESSOR SYSTEM

Designed For High-Flow Applications Where Redundancy and/or >50% Turndown is Required

#### **5 Different HP Size Ranges**

#### SYSTEM FOOTPRINT

- > 250-500 HP (150-370 kW)
- > 500-1600 SCFM (850-2790 m<sup>3</sup>/hr)
- > 75% TURN-DOWN CAPABILITY TO 25% OF MAX
- **>** BUILT-IN REDUNDANCY

> 40' L x 8' W x 9.5' H (12,192mm x 2,438mm X2,896mm)

> Separate Gas-tight Electrical Compartment\*

\*In accordance with NFPA/NEC CLASS I, DIV II hazardous location classification

> Separate Compressor Compartment\*

	BAUER GRU <sup>®</sup> Duplex Flow Performance Table at 230 PSIG (16 BARG) Final Pressure														
					Fl	ow Rate a	at Variou	is Inlet Su	ction Pre	essures S	CFM/(m	3/hr)			
Compresor Model	Мо	tor		0 PSIG	/0 BAR			7 PSIG/	′0.5 BAR		10 PSIG/0.7 BAR				
			SC	FM	Ma	/Hr	SCFM		M³/Hr		SCFM		M³/Hr		
	HP	KW	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	
GRU 15-100 Duplex	100 x2	75 x2	154	498	262	846	228	666	387	1132	260	730	442	1240	
GRU 15-125 Duplex	125 x2	93 x2	154	610	262	1036	228	826	387	1403	260	906	442	1539	
GRU 28-150 Duplex	150 x 2	112 x2	228	710	387	1206	340	1016	578	1726	388	1108	659	1883	
GRU 28-200 Duplex	200 x 2	149 x2	354	1024	601	1740	528	1380	897	2345	602	1510	1022	2566	
GRU 28-250 Duplex	250 x 2	186 x2	354	1110	601	1886	528	1498	897	2545	602	1642	1023	2790	

All performance values referenced in the table above are based on the following conditions: Referenced to ISO 1217 (14.50 psi (100 kPA), 68°F (20°C), 0% RH), Biogas temperature at compressor inlet: 86°F (30°C). Biogas Composition: 52% CH4, 46% CO2, 1% N2, 1% O2. Discharge pressure at compressor skid edge: 230 psig (15.8 bar). Any deviations from these conditions will modify the stated performance results. Consult with your Bauer representative for conditions other than referenced herein.

#### **BAUER GRU®** MB5

Rotary Screw Gas Booster Compressor For Pipeline Injection And High Pressure Gas Turbine Applications

The BAUER GRU<sup>®</sup> MB5 Gas Booster utilizes rotary screw compressor technology and has been specifically designed for biomethane injection into the pipeline grid for applications where higher pressures (up to 1100 PSIG) are required. The BAUER GRU<sup>®</sup> MB5 rotary screw booster is also suitable for large gas turbine power generators that require higher gas inlet injection pressures.

All BAUER GRU<sup>®</sup> Booster units are equipped with variable frequency speed control which allows the compressor to adjust to the incoming flow of gas. Utilizing a rotary screw booster compressor is advantageous over reciprocating piston compressors due to the higher reliability and lower cost of ownership of rotary screw compressors especially in continuous duty applications.

#### **BROAD PERFORMANCE RANGE**

The BAUER GRU<sup>®</sup> MB5 is the perfect match-up to the GRU biogas recovery compressor system since the GRU MB5 utilizes the outlet pressure generated by GRU Biogas Recovery Compressor to boost the pressure of the biogas up to pipeline pressure or pressure required by the gas turbine generator system.

- > Inlet pressure range: 73 363 PSIG (5 25 BAR)
- > Horsepower range: 50-350 HP (37-260 kW)
- > Biogas Flow Rate: 321 2300 SCFM (545.4 3907.6 nm<sup>3</sup>/hr)
- **Final pressure:** 300-1100 PSIG (21 76 BAR)

#### STANDARD SCOPE OF SUPPLY

- > Heavy-duty rotary screw booster compressor at the heart of the system
- Variable speed control of compressor to modulate the flow of biogas based on the incoming supply of gas (VF drive located remote from skid as defined by Class 1, Div 2 code requirements per NEC NFPA70)
- > Heavy-duty TEFC electric motor
- Stainless steel construction of piping and major P&ID components
- > PLC control of all major system components
- BAUER CONNECT<sup>®</sup> remote telemetry IoT with Modbus TCP/IP or Profinet connection capability
- Fully integrated system built on a heavy-duty steel skid designed for plug and play installation

#### CODES AND STANDARDS

- > Hazardous area classification: NFPA 52 / 70, Class 1, Division 2
- > Pressure vessel code compliance: ASME
- > Electrical code compliance: NEC , UL/control panels and assemblies
- > Certified manufacturing organization: ISO 9001-2015

#### **AVAILABLE OPTIONS**

- > Gas inlet particulate filter
- > Gas after-cooler (air-cooled)
- > Shell and tube heat exchanger for heat regeneration
- > Heavy-duty weatherproof enclosure
- Sound attenuation



> BAUER GRU® ROTARY SCREW HIGH-PRESSURE BOOSTER COMPRESSOR

**SYS1** > 96" W

#### **TECHNICAL DATA**

FOR GAS BOOSTING APPLICATIONS AT ELEVATED SUCTION PRESSURE AND FINAL PRESSURES UP TO 600 PSIG (ROTARY SCREW COMPRESSOR BOOSTER)														
At Stated Max RPM														
IVI	otor	Compressor Model	Suction	Pressure	Max Fina	I Pressure	SCFM	M³/HR						
HP	KW		PSIG	BAR	PSIG	BAR								
50	37	MB5	73	5	300	20	321	545						
200	150	MB5	174	12	435	30	2052	3486						
300	220	MB5	247	17	870	60	2117	3597						
350	260	MB5	363	25	1088	75	2322	3944						
	M HP 50 200 300	Motor           HP         KW           50         37           200         150           300         220	(RO1 Motor Compressor Model HP KW 50 37 MB5 200 150 MB5 300 220 MB5	KW         Compressor Model         Suction           100         KW         PSIG           50         37         MB5         73           200         150         MB5         174           300         220         MB5         247	(ROTARY SCREW COMPRESSO           Motor         At           Compressor Model         Suction Pressure           HP         KW         PSIG         BAR           50         37         MB5         73         5           200         150         MB5         174         12           300         220         MB5         247         17	(ROTARY SCREW COMPRESSOR BOOSTER)           Motor         At Stated Max R           Compressor Model         Suction Pressure         Max Fina           HP         KW         PSIG         BAR         PSIG           50         37         MB5         73         5         300           200         150         MB5         174         12         435           300         220         MB5         247         17         870	(ROTARY SCREW COMPRESSOR BOOSTER)           At Stated Max RPM           Motor         Compressor Model         Suction Pressure         Max Final Pressure           HP         KW         PSIG         BAR         PSIG         BAR           50         37         MB5         73         5         300         20           200         150         MB5         174         12         435         30           300         220         MB5         247         17         870         60	(ROTARY SCREW COMPRESSOR BOOSTER)           At Stated Max RPM           Motor         Compressor Model         Suction Pressure         Max Final Pressure         SCFM           HP         KW         PSIG         BAR         PSIG         BAR         SCFM           50         37         MB5         73         5         300         20         321           200         150         MB5         174         12         435         30         2052           300         220         MB5         247         17         870         60         2117						

Note: 1) All performance data for compressed gas inlet (suction conditions) is stated at Standard Conditions: Suction Pressure as Indicated, Gas Temperature of 68° F (20°C) and RH of 0% 2) All performance data for compressed gas outlet is stated at ISO 1217 Reference Conditions: Absolute Pressure at 364 ft (111m) elevation = 14.5 PSIG (1 Bar), Gas Temperature of 68° F (20°C) and RH of 0% 3) All performance data are based on a typical well gas composition based on the following MoI percentages: Methane 97%, Nitrogen 1.0%, Carbon Dioxide 2% All BAUER GRU® systems are built to Class 1, Div2 NFPA standard

#### SYSTEM FOOTPRINT

 96" W X 240" L X 96" H (2438mm W X 6096mm L X 2438mm H) estimated dimensions

#### **BAUER CNG COMPRESSOR SYSTEMS**

Full Line Of Reciprocating Piston Compressor Systems For High Pressure CNG Applications Up To 5000 PSIG Final Pressure

BAUER offers a full line of reciprocating piston compressor systems that are capable of compressing biomethane up to 5000 PSIG final pressure which is the pressure required for use in CNG vehicles. At the heart of every BAUER, CNG compressor system is the highly reliable BAUER reciprocating compressor which is designed and manufactured by BAUER. BAUER has been producing CNG systems for over 35 years and is considered the golden standard in the CNG Industry. BAUER CNG systems are world-renowned for exceptional durability and reliability which translates into the lowest cost of ownership for the operator. Furthermore, BAUER compressors' negligible oil carry-over compared to other reciprocating compressors in the industry protects today's highly sophisticated but sensitive CNG vehicle engines from costly breakdowns.







#### RANGE AND FLEXIBILITY FOR ANY SIZE FLEET

BAUER offers a full line of CNG compressor systems to fit any size fleet. The BAUER CNG compressor system is the perfect matchup to the GRU Biogas Compressor system because the BAUER CNG booster compressors can utilize the outlet pressure generated by GRU Biogas Compressor to boost the pressure of the cleaned and conditioned biogas up to 5000 PSIG which is required for CNG vehicle use.

- **) Inlet pressure range:** 5 230 PSIG (0.35 15.8 BAR)
- **Horsepower range:** 5 350 HP (3.7 260 kW)
- **Biogas Flow Rate:** 6.3 875 SCFM (37 1487 m<sup>3</sup>/hr)
- > Final Pressure: 5000 PSIG (345 BAR)

#### STANDARD SCOPE OF SUPPLY

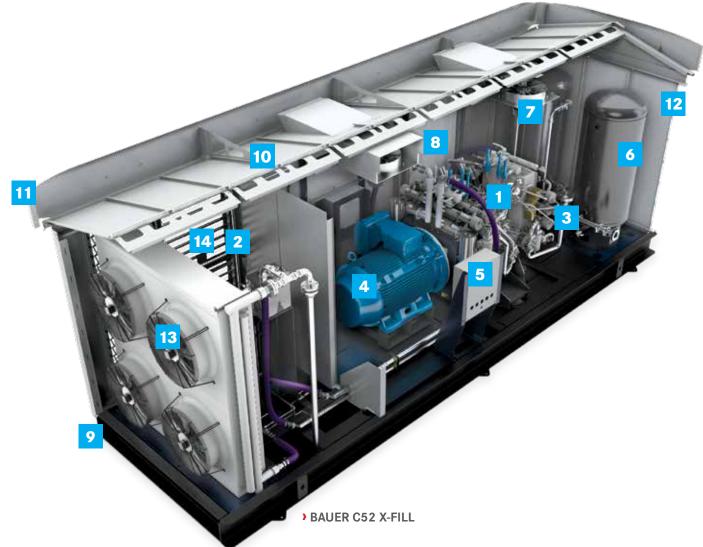
- > BAUER's heavy-duty reciprocating booster compressor at the heart of the system
- > PLC control of all major system components (Control systems equipped with VF drive are located remote from skid as intented by Class 1, Div 2 requirements per NEC, NFPA 10)
- > Heavy-duty TEFC electric motor
- > Stainless steel construction of piping and major P&ID components
- > Gas after-cooler
- > Automatic condensate drain system
- BAUER CONNECT<sup>®</sup> remote telemetry IOT with Modbus TCP/IP or Profinet connection capability
- > Fully integrated system built on a heavy-duty steel skid designed for plug and play installation

#### **OPTIONAL FEATURES**

- > Heavy-duty weatherproof enclosure
- > Sound attenuation
- > Passivation of piping
- > Ultrasonic testing of piping welds
- > Hydro testing of piping and relevant components
- > Special certifications and documentation
- > CE electrical code, CRN pressure vessel code

#### CODES AND STANDARDS

- **Hazardous area classification:** NFPA 52 / 70, Class 1, Division 2
- > Pressure vessel code compliance: ASME
- > Electrical code compliance: NEC / UL
- > Certified manufacturing organization: ISO 9001-2015



- BAUER C52 COMPRESSOR WITH CLOSED LOOP GLYCOL WATER-COOLED CIRCUIT
- SEPARATE COMPARTMENT FOR COMPRESSOR COOLING GLYCOL WATER HEAT EXCHANGER
- 3 SHELL AND TUBE HEAT EXCHANGERS
- HIGH EFFICIENCY TEFC MOTOR
- NEMA 4 CONTROL PANEL WITH INTEGRATED HMI
- INLET BUFFER/VAPOR RECOVERY TANKS
- COMPRESSOR COMPARTMENT EXHAUST FAN (x2)

8	INTERIOR LIGHTING AND INFRARED GAS DETECTOR
9	PRECISION FORMED AND WELDED STEEL SKID
10	PITCHED METAL ROOF (OBSCURED BY LOGO AWNING)
11	CUSTOMIZABLE LOGO AWNING
12	WEATHERPROOF AND RUSTPROOF POWDER-COATED GALVANNEAL ENCLOSURE (10 YEAR WARRANTY)
13	HEAT EXCHANGER COOLING FANS
14	COOLING AIR INTAKE LOUVERS

BAUER COMPRESSORS

> 20-30 HP (13.3-21.7 kW)

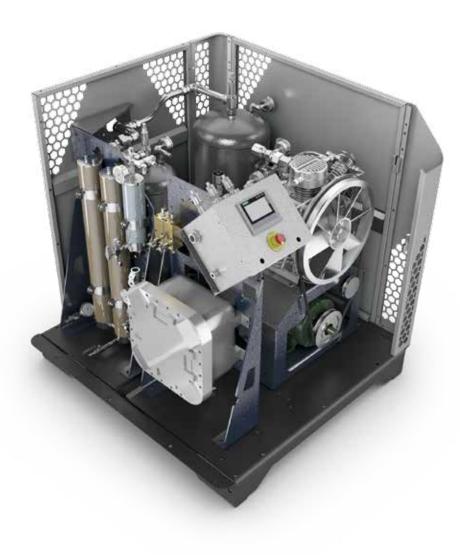
> 22-40 SCFM (37-68 m<sup>3</sup>/hr)

#### BAUER MICRO SERIES<sup>®</sup> C120 CNG Systems for Small Fleets

- > 5-7.5 HP (3.7-5.5 kW)
- > 6.3-9.0 SCFM (11-15 m<sup>3</sup>/hr)
- > 5000 PSIG (345 BAR) max discharge pressure



• BAUER MICRO SERIES® C120 Available with optional enclosure





BAUER COMPACT SERIES<sup>®</sup> C15/22

CNG Systems for Small to Medium Fleets

> 5000 PSIG (345 BAR) max discharge pressure



#### SYSTEM FOOTPRINT

> 97" x 58" x 85" (2464mm x 1473mm x 2159mm)

#### TECHNICAL DATA (FOR DUPLEX: THE INLET & FINAL PRESSURES ARE THE SAME. CAPACITY & HP x2 )

Model	Inlet Pressure			9	Fir Pres				Сар	acity			Number of Stages	Running Speed	Мс	otor
	PS	IG	В	AR	PSIG	BAR										
	MIN	MAX	MIN	MAX	MAX	MAX	CFM	M³/H	DGE/H	DLE/H	GGE/H	GLE/H		RPM	ΗP	KW
C15.2 Simplex	1	5	0.07	0.34	5000	345	22	37	9	34	11	42	4	1350	20	13.3
C15.4 Simplex	_	60		4.14	5000	345	27	46	12	45	14	53	3	1350	15	10.9
C22.0 Simplex	1	5	0.07	0.34	5000	345	40	68	17	64	20	76	4	1250	30	21.7

Note: All capacities are referenced to maximum inlet pressure. Capacity is reduced if inlet pressure is less than maximum. Performance tolerance +/- 5%. Please contact your BAUER representative for details about our warranty. 1) + or - 5% dB

#### **SYSTEM FOOTPRINT 55**" x 57" x 52" (1397mm x 1448mm x 1321mm)

## TECHNICAL DATA

Model*		Inlet Pi	ressure		Final P	ressure			Сара	acity	Number of Stages	Running Speed	Motor			
	PS	SIG	B/	AR	PSIG	BAR										
	MIN	MAX	MIN	MAX	MAX	MAX	CFM	M³/H	DGE/H	DLE/H	GGE/H	GLE/H		RPM	ΗP	KW
C120-6	1	5	0.07	0.34	5000	345	6.3	11	2.7	10.2	3.2	12.1	3	965	5	3.7
C120-9	1	5	0.07	0.34	5000	345	9	15	4	15.1	4.5	17	3	1350	7.5	5.5

Note: All capacities are referenced to maximum inlet pressure. Capacity is reduced if inlet pressure is less than maximum. Performance tolerance +/- 5%. \*C120-6=230 V, 1 Phase, 60 Hz; C120-9=230-460 V, 3 Phase, 60 Hz



BAUER COMPRESSORS

#### BAUER M-SERIES SIMPLEX

#### CNG Systems for Medium to Large Fleets

- > 50 HP (37 kW)
- > 75-125 SCFM (125-212 m<sup>3</sup>/hr)
- > 5000 PSIG (345 BAR) max discharge pressure



**>** BAUER M-SERIES SIMPLEX Available with optional enclosure

#### SYSTEM FOOTPRINT

> 133" x 104" x 115" (3378mm x 2642mm x 2921mm)

#### **TECHNICAL DATA**

Model								Сара	acity		Number of Stages	Running Speed	Мо	otor		
	PS	IG	B	AR	PSIG	BAR										
	MIN	MAX	MIN	MAX	MAX	MAX	CFM	$M^3/H$	DGE/H	DLE/H	GGE/H	GLE/H		RPM	HP	KW
C23.2	10	15	0.7	1	5000	345	75	127	32	121	38	144	4	1425	50	37
C23.10	55	65	3.8	4.5	5000	345	90	153	39	148	45	170	4	1200	50	37
C23.12	115	145	8	10	5000	345	115	195	49	185	58	220	4	1200	50	37
C23.13	175	200	12	14	5000	345	125	212	54	204	63	238	4	1200	50	37

Note: All capacities are based on pipeline quality natural gas supplied at the maximum allowable inlet pressure to the compressor and 3600 psig discharge pressure. For all models lower inlet pressure is possible but with reduced capacity and possibly reduced discharge pressure. Motor power is reference to maximum allowable inlet pressure and 4500 psig discharge pressure. Consult BAUER for performance at other conditions. Performance tolerance +/- 5% 1) + or - 5% dB. Please contact your BAUER representative for details about our warranty.



#### **BAUER M-SERIES DUPLEX** CNG Systems for Medium to Large Fleets

- > 100 HP (75 kW)
- > 150-250 SCFM (254424 m<sup>3</sup>/hr)
- > 5000 PSIG (345 BAR) max discharge pressure



> 192" x 90" x 113" (4877mm x 2286mm x 2870mm)

#### **TECHNICAL DATA**

Model	I	nlet P	ressur	e	Final Pi	ressure		Capacity					Number of Stages	Running Speed	Мо	otor
	PS	IG	B	AR	PSIG	BAR										
	MIN	MAX	MIN	MAX	MAX	MAX	CFM	M³/H	DGE/H	DLE/H	GGE/H	GLE/H		RPM	HP	KW
C23.2 Duplex	10	15	0.7	1	5000	345	150	254	64	242	76	288	4	1425	50 (x2)	37 (x2)
C23.10 Duplex	55	65	3.8	4.5	5000	345	180	306	78	295	90	341	4	1200	50 (x2)	37 (x2)
C23.12 Duplex	115	145	8	10	5000	345	230	390	98	370	116	439	4	1200	50 (x2)	37 (x2)
C23.13 Duplex	175	200	12	14	5000	345	250	424	108	409	126	477	4	1200	50 (x2)	37 (x2)

Note: All capacities are based on pipeline quality natural gas supplied at the maximum allowable inlet pressure to the compressor and 3600 psig discharge pressure. For all models lower inlet pressure is possible but with reduced capacity and possibly reduced discharge pressure. Motor power is reference to maximum allowable inlet pressure and 4500 psig discharge pressure. Consult BAUER for performance at other conditions. Performance tolerance +/- 5%. 1) + or - 5% dB. Please contact your BAUER representative for details about our warranty.

BAUER COMPRESSORS

#### BAUER C26 X-FILL<sup>®</sup> CNG Systems for Large Fleets

- > 150-175 HP (40-132 kW)
- > 200-440 SCFM (340-748 m<sup>3</sup>/hr)
- > 5000 PSIG (345 BAR) max discharge pressure

#### BAUER C52 X-FILL CNG Systems for Large Fleets

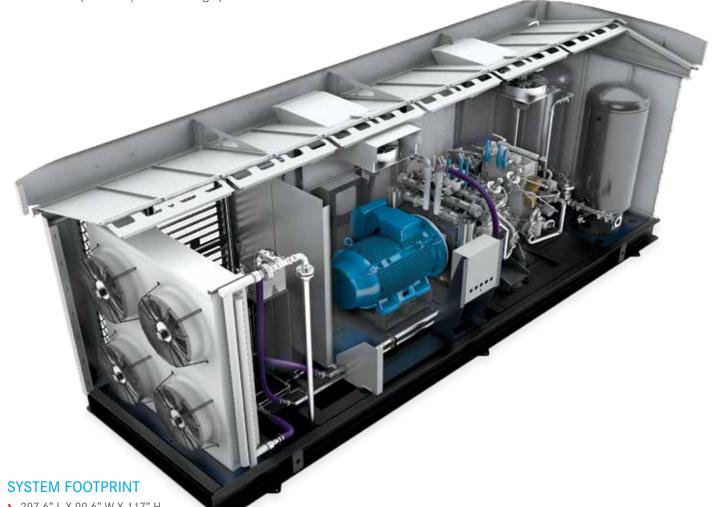
- > 250-350 HP (185-260 kW)
- > 340-875 SCFM (578-1487 m<sup>3</sup>/hr)
- > 5000 PSIG (345 BAR) max discharge pressure



## TECHNICAL DATA

Model	Inlet Pressure			Final Pr		Capacity						Running Speed	Мо	tor		
	PS	SIG	BA	AR	PSIG	BAR										
	MIN	MAX	MIN	MAX	MAX	MAX	CFM	M³/H	DGE/H	DLE/H	GGE/H	GLE/H		RPM	ΗP	KW
C26.2	10	15	0.7	1	5000	345	200	340	86	325.5	100	378.5	4	1500	150	110
C26.10	45	65	3.1	4.5	5000	345	360	612	154	583	180	681.4	4	1500	175	132
C26.12	90	145	6.2	10	5000	345	425	722	182	689	213	806.3	4	1500	175	132
C26.13	150	215	10.3	15	5000	345	440	748	189	715.4	220	832.8	4	1500	175	132

Note: All capacities are based on pipeline quality natural gas supplied at the maximum allowable inlet pressure to the compressor and 3600 psig discharge pressure. For all models lower inlet pressure is possible but with reduced capacity and possibly reduced discharge pressure. Motor power is reference to maximum allowable inlet pressure and 4500 psig discharge pressure. Consult BAUER for performance at other conditions.



297.6" L X 99.6" W X 117" H
 (297.6mm x 2529.84mm x 2971.8mm)

#### **TECHNICAL DATA**

Model		Inlet P	ressure		Final P	ressure			Capacity					Running Speed	Мо	otor
	PS	SIG	B	AR	PSIG	BAR										
	MIN	MAX	MIN	MAX	MAX	MAX	CFM	M³/H	DGE/H	DLE/H	GGE/H	GLE/H		RPM	ΗP	KW
C52.0	1	5	0.07	0.34	5000	345	340	578	146	553	170	644	4	1500	250	185
C52.2	10	15	0.7	1	5000	345	405	688	174	659	203	768	4	1500	300	220
C52.10	45	65	3.1	4.5	5000	345	715	1215	306	1158	358	1355	4	1500	350	260
C52.12	90	145	6.2	10	5000	345	850	1445	364	1378	425	1609	4	1500	350	260
C52.13	150	215	10.3	15	5000	345	875	1487	375	1420	438	1658	4	1500	350	260

Note: All capacities are based on pipeline quality natural gas supplied at the maximum allowable inlet pressure to the compressor and 3600 psig discharge pressure. For all models lower inlet pressure is possible but with reduced capacity and possibly reduced discharge pressure. Motor power is reference to maximum allowable inlet pressure and 4500 psig discharge pressure. Consult BAUER for performance at other conditions.

## BAUER XXL<sup>™</sup> **SERIES CNG SYSTEMS** High CNG FLOW At Low Inlet Pressures

> Gas Tight Electrical Control Room

> BAUER C26 X-FILL® 4-Stage Reciprocating Booster Compresssor

**HMI Control Panel** 

## DIAGRAM OF BAUER XXL<sup>™</sup> SERIES CNG SYSTEM

Low Inlet Pressure Utility Natural Gas 5 – 25\* PSIG





BAUER GRU® Rotary Screw compressor

\*Higher gas inlet presure is possible but requires an inlet pressure regulator

The BAUER XXL<sup>™</sup> series CNG systems have been designed to provide maximum flow at very low inlet pressures ranging from 5 PSIG up to 25 PSIG although the systems are also capable of taking higher inlet pressures.

Maximizing CNG flow at low inlet pressures is accomplished by adding another stage of compression in front of our standard C23.12 M-Series, C26.12 X-Fill and C52.12 X-Fill CNG booster compressor systems.

The first compressor stage in the BAUER XXL series CNG compressor systems is a standard BAUER GRU<sup>®</sup> rotary screw gas compressor system. BAUER GRU® rotary screw compressor systems have been used extensively in Biogas applications around the world with a track record of extreme reliability. The BAUER GRU<sup>®</sup> compressor boosts the available utility gas inlet pressure to maximize the performance of BAUER's standard M-Series and X-Fill series reciprocating booster compressors.

**BAUER GRU® 9-75** Rotary Screw Compresssor

**VFD Motor Control Panel** 

#### BAUER C26 XXL<sup>™</sup> MOBILE

Self-contained transportable CNG System configured for plug-and-play operation with instant site set-up. Flexible inlet pressure range from 5-215 PSIG.

- > 250-275 HP (187-205 KW)
- > 360 SCFM (612 M<sup>3</sup>/HR)
- > 5000 PSIG (345 BAR) max discharge pressure

#### System Footprint:

> 40'L x 8'W x 9.5'H (12,192mm x 2,438mm X2,896mm)

> Electrical Juntion Box

> GLYCOL - Air and Heat Exchanger





Gas boosted to 5000 PSIG

BAUER Standard M-Series<sup>™</sup> / X-Fill<sup>™</sup> Series 4-Stage Reciprocating Booster Compressor

#### BAUER C23 XXL SYSTEM

- > 75-90 HP (56-67 KW)
- > 115 SCFM (195 M<sup>3</sup>/HR)
- > 5000 PSIG (345 BAR) max discharge pressure

#### SYSTEM FOOTPRINT

#### GRU 3/6

> 133" x 104" x 115" (3378mm x 2642mm x 2921mm)

#### C.23.12 M-SERIES®

) 133" x 104" x 115" (3378mm x 2642mm x 2921mm)



#### BAUER C26 XXL SYSTEM

- > 250-275 HP (187-205 KW)
- > 360 SCFM (612 M<sup>3</sup>/HR)
- > 5000 PSIG (345 Bar) max discharge pressure

#### SYSTEM FOOTPRINT

#### **BAUER GRU® 9**

> 55" W X 97" L X 85" H (1397mm W X 2463.8mm L X 2159mm H)

#### C26.12 X-FILL®

> 216" L X 87.6" W X 117" H (5486.4mm x 2225.04mm x 2971.8mm)



#### BAUER C52 XXL SYSTEM

- > 475-550 HP (355-410 KW)
- > 720 SCFM (1244 M<sup>3</sup>/HR)
- > 5000 PSIG (345 BAR) max discharge pressure

#### SYSTEM FOOTPRINT

#### GRU15/28

> 100" W X 130" L X 117" H (2540mm W X 3886mm L X 2971mm H)

#### C.52.12 X-FILL

> 297.6" L X 99.6" W X 117" H (297.6mm x 2529.84mm x 2971.8mm)



#### **TECHNICAL DATA**

Model	Gas Inlet Pressure Range (See Note 1 and 4)			Final Discharge Pressure			CNG Flow Capacity (See Note 2)					Number of Stages	Combine Pov (See N	ver	
	P	SIG	BA	AR	PSIG	BAR	SCFM	M³/H	DGE/H	DLE/H	GGE/H	GLE/H			
	MIN	MAX	MIN	MAX										HP	KW
C23-XXL	5	25	0.35	1.72	5000	345	115	195	49	186	58	219	5	75 - 90	56 - 67
C23-XXL Duplex	5	25	0.35	1.72	5000	345	230	390	98	371	116	439	5	150 - 180	112 - 135
C26-XXL	5	25	0.35	1.72	5000	345	360	612	153	579	182	689	5	250 - 275	187 - 205
C26-XXL Mobile	5	25	0.35	1.72	5000	345	360	612	153	579	182	689	5	250 - 275	187 - 205
C52-XXL	5	25	0.35	1.72	5000	345	720	1244	307	1162	363	1374	5	475 - 550	355 - 410

Note 1: The volumetric capacity stated in the table can be achieved for all inlet pressure scenarios upwards of 5 psig inlet pressure. The size for the first stage GRU compressor varies with available gas inlet pressure. Note: Volumetric performance stated in ISO1217 Standard Conditions: 14.5 psia, 68°F, 0%RH (100,000 kPA, 20°C, 0%RH) Note 3:Motor power (HP / KW) requirement depends on inlet pressure which determines the size of the GRU rotary screw booster used for the application Note 4: Gas inlet pressures above 25 psig require a gas inlet regulator

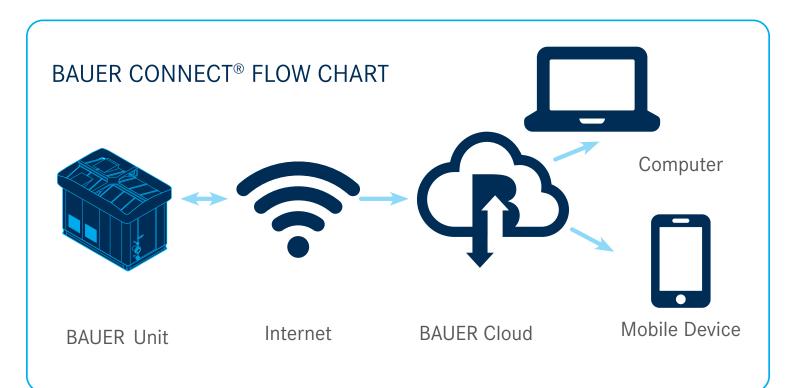
# BAUER CONNECT

## **10T REMOTE TELEMETRY AND CONTROL**

BAUER CONNECT<sup>®</sup> is an app and internet-based IoT solution that allows BAUER customers to remotely monitor - and control - the performance of the entire BAUER system through any wireless mobile device or computer; anytime, anywhere.

**Key Features:** allow customers to increase efficiency and productivity, save time, do more with fewer resources, enjoy lower operational costs, and have total flexibility with a solution tailored specifically for the end-user.

BAUER CONNECT<sup>®</sup> - Connection that matters.



## BAUER REMOTE HMI

The BAUER Remote HMI function allows factory-trained technical personnel to remotely control the BAUER system via the BAUER CONNECT<sup>®</sup> App with the same functionality as if one were standing in front of the actual unit.

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## MOBILE DASHBOARDS

BAUER CONNECT<sup>®</sup> App will also display a real-time graphical display of the entire system (SCADA view). The Mobile Dashboard feature provides information such as compressor system status, error log, critical pressures and temperatures, and volume of air dispensed in storage information, etc.



The BAUER CONNECT<sup>®</sup> Mobile App will send push notifications if certain critical parameters of the BAUER system fall outside of normal operating range, or if triggered by a system alert. This ensures that essential personnel is notified immediately, thus allowing for pro-active intervention in a situation that could potentially be detrimental to the BAUER system as well as the customer's operation.





The BAUER Reports feature is a function that generates custom reports tailored to the specific needs of the customer. Customers can have access to historical data via a multitude of standard and customized reports.



This feature of BAUER CONNECT<sup>®</sup> provides a new pro-active dimension to perpetually maintaining customers' compressor systems at peak conditions with minimum downtime. BAUER's predictive analytics algorithm uses artificial intelligence to analyze the collected system information on the BAUER Cloud to predict upcoming maintenance requirements and preventative actions to avoid unplanned shutdowns.

# to LEARN MORE VISIT **bauer-connect.com**

## LIFECYCLE PERFORMANCE

BAUER is committed to the lifecycle performance of its customers

#### PARTS



RAPID DELIVERY

#### QUALITY AND RELIABILITY

Our factory-original replacement parts assure you that when maintenance or repair is performed, you are restoring the unit to its original specifications and performance.

#### PARTS: COMPATIBILITY

We configure our designs with interchangeability and our end user in mind. You can count on parts being available for all BAUER models.

#### PartsSales@BauerComp.com or +1 (844) 500-5822



1. Purification	5. Valves
2. Gaskets and Seals	6. Air Intake Filters
3. Lubricants	7. All 10,000+ Parts
4. Fill Hose and Assemblies	

# GLOBAL SERVICE GLOBAL SERVICE REACH FACTORY TRAINED TECHS BAUER Germany & BAUER Norfolk BAUER Branches BAUER Service Centers/Distributors

#### SERVICE AND SUPPORT

Our compressors are designed with you in mind. Easy-to-use manuals guide you through clear, mechanically-accessible repairs. Our worldwide distribution network was developed to assist in after-sales support, along with product and maintenance parts assistance.

#### TRAINING



FACTORY TRAINED TECHS

BAUER COMPRESSORS INC. offers a variety of on-site and offsite Training Schools. Our on-site classes are held at our BAUER Training Facility and are taught by the same people who help manufacture, test, and service our products. From electrical systems to hands-on breakdowns, we cover all areas of compressor operation.

#### TRAINING TOPICS

Basic mechanical theory and control system theory (electric and pneumatic), along with troubleshooting for all BAUER systems.

Class schedule and course registration at: www.BauerCustomerTraining.com



#### BAUER HELPDESK



LIFECYCLE PERFORMANCE

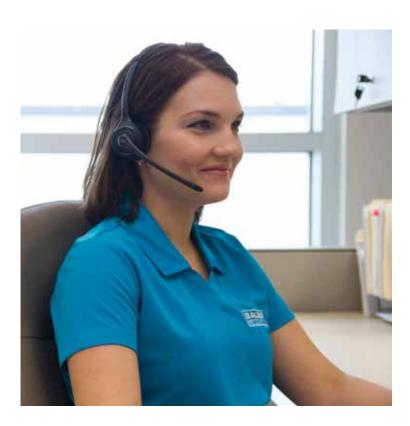
#### **TRAINING TOPICS**

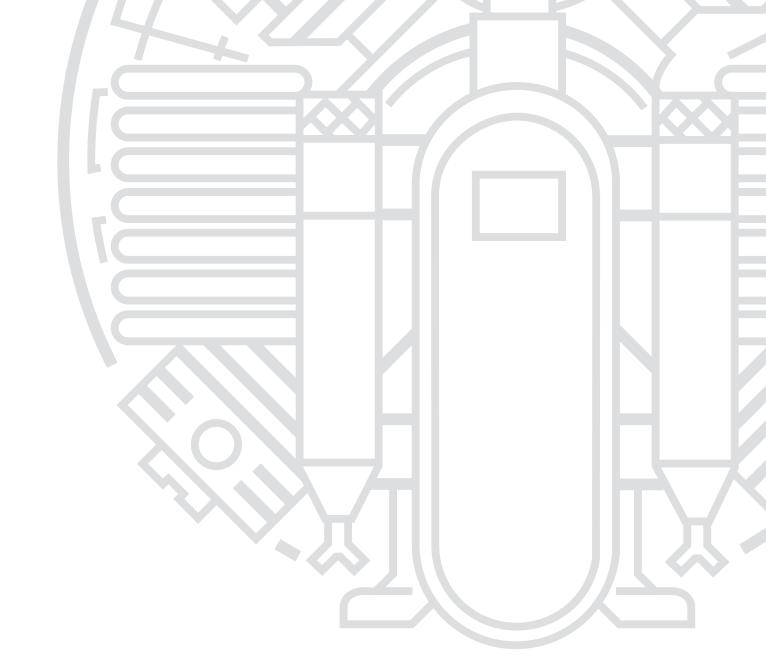
Total customer satisfaction is our top priority. BAUER provides 24/7 phone tech and troubleshooting support at our BAUER Helpdesk. Our support continues throughout our warranty period and beyond.



#### FROM THE SOURCE

BAUER COMPRESSORS INC. is certified with **ISO 9001:2015** quality processes providing you with confidence that cannot be duplicated by sub-standard after-market parts and service.







#### U.S. HEADQUARTERS:

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