

BREATHING AIR CATALOG

High-Pressure Systems for Safety & Sports Applications



WORLDWIDE

QUALITY

INNOVATION

RELIABILITY





is to provide the highest quality products and solutions for high-pressure air and gas. We are committed to using the latest technology, best materials, most qualified human resources, and the most efficient fabrication techniques. As a result, our equipment solutions offer superior performance along with best value, and are delivered on time, defect-free and are supported to achieve their maximum potential throughout their entire lifecycle.



DISTRIBUTOR NETWORK

BAUER COMPRESSORS

Supporting you after the sale is a global network of compressor specialists that is unmatched in the industry. Each of our trusted Distributor partners is staffed with BAUER Factory-Trained Technicians and is stocked with a full inventory of products and parts – insuring you receive unsurpassed 24/7 Customer Support, no matter where you are in the world.

Additionally, BAUER has U.S. Sales & Service operations that include branch offices in California and New York.

OUR EXPERIENCE. YOUR BENEFIT.

Our 75 years of experience continues to be a benefit to our worldwide customers by providing them with a diverse selection of field-proven high-pressure breathing air solutions. We are world renowned for reliability and durability, and BAUER as a company is recognized as the world's foremost innovative designer and manufacturer of high-pressure compressors of the very highest quality.

BAUER's state-of-the-art 250,000 square-foot facility in Norfolk, Virginia means we can stand behind all of the research and development in our breathing-air systems, which are made right here in the U.S.A.

BAUER Corporate Headquarters: North American Manufacturing - Norfolk, Virginia







• SINGLE SOURCE RESPONSIBILITY



LOW COST OF OWNERSHIP



LIFECYCLE PERFORMANCE



PURELY THE RIGHT CHOICE



CONTENTS

DIVE AND FIRE PRODUCTS

> VERTECON[®]......
 > VERTICUS[®]

FIRE PRODUCTS

- > 7k Systems
 > Plus Module......
 > O320-E/D
 > Engine Driven
 > TCOM[®] Trailer
 > DDTR25
 > TCOM LITE[®]
 > TCOM RC
 > TCOM-MS.......
 > Mobile Package
- > UNICUS[®] 4S
- > UNICUS[®] 4i
- Open Designs . . .

DIVE PRODUCTS

)	Porta	bl	es	;.	•	•	•	•	•
>	DMT	11.		•	•	•	•	•	•

ACCESSORIES

- > CFS5.5[®]
 > Air Storage
- > Auto Cascade
- > Hose Reels.....
- B-DETECTION
- BAUER CRC[™]
- Purification
- > BAUER B-Virus Free
- > BAUER RFIDPro[®].
- **>** BAUER CONNECT®
- > Quick Reference G

CUSTOMER SUPP

> Parts, Service, Sup

• •		•	•	•	•	•	•	•	•	٠	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	. 6
		•	•	•	•	•	•									•		•			•	•		•	•	•	•	•	•									. 8
																																						10
																																						16
																																						18
																																						20
																																						22
																																						24
																																						26
																																						28
• •		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	30
• •		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	32
		•	•	•	•	•	•	•	•	•			•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	34
		•	•																																			36
																																						40
																																						42
• •		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	44
• •		•	•	•	•	•	•	•	•	•			•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	46
		•	•				•															•							•									48
		•	•																																			50
																																						52
																																						53
																																						54
																																						56
																																						58
• •		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	60
) f	C	or	•	F	ir	e	fi	ig	gh	۱t	е	r	S	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	62
iu	i	d	е	•	•	•	•	•	•	•			•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	64
С)	R	2	Γ																																		
or)()!	rt		8,	٦	٢r	a	i	ni	'n	Į	F																							,	,	66
1.	1				1		-					C	,	Č.	Č.	ĵ.	ć	Č.	÷.	-	-	-	1	-	-	-	-	-			Ĩ.	1	-	Ĩ.,	-	-	Ĩ.,	



7000 PSIG ALL IN ONE SYSTEM: UNICUS[®]4S & 4i

BAUER COMPRESSORS, INC. is the first company to offer a fully unitized compressor system built for 7000 PSIG service. Let's start with continuous duty BAUER 7000 PSIG compressors, which were in existence well before others put pen to paper. We couple the compressor to a BAUER high pressure breathing air purification system that meets the rigorous CGA, NFPA, and many other global standards for high pressure breathing air. A sound attenuated cabinet enclosure incorporates a four (4) cylinder 7000 PSI ASME air storage system along with an NFPA compliant 3-positon containment SCBA fill station. Operations and systems functions are simplified with everything located on a centrally located and illuminated operations panel, including an ergonomic and intuitive HMI touchscreen.

Additionally, we are offering you two (2) modes of operation, analog or automatic. The UNICUS® 4S is your choice for all things manually controlled. Should your department wish the automated path, select the UNICUS® 4i. If you want to dress your unit in concert with the Fire Departments theme, ask about our Fire Edition package. Look to BAUER COMPRESSORS when your department needs the best all-in-one compressor system on the market today, backed by our global network of service partners.

) PRESSURE: Up to 7000 PSIG (483 BAR)

> CHARGING RATE: 13 to 20 SCFM (368 to 566 L/MIN)

> POWER: 15 to 20 HP (11 to 15 kW)



>UNICUS® 4i /7K



UNICUS[®] 4i FIRE EDITION **OPTIONAL FIRE EDITION PAINT SCHEME** (SHOWN HERE)

STANDARD SCOPE OF SUPPLY

- > BAUER breathing air purification system with B-SECURUS
- > BAUER PLC based controller with 7" color HMI touchscreen on 4S; 15" HMI on 4i
- > NEMA 4 rated electrical enclosure with UL® listed control
- > Compressor low oil pressure and high temperature shutdowns
- > Emergency stop push button
- > Hinged cascade fill control panel with Lexan lamina flow/fill schematic
- > Audible alarm on safety shutdowns
- Inlet filter maintenance indicator
- Automatic condensate drain system with non-corrosive cond reservoir and integrated float sensor and automatic "Full" inc and compressor shutdown
- > Four (4) ASME 7000 PSI code stamped air cylinders; Cy are rated with a 3:1 SF
- > Sound attenuating enclosure with 1/4" latches and type hinges
- NFPA 1901 2016 edition compliant 3 position containm station accommodates SCBA or SCUBA cylinders up to 31" length
- Manually controlled dual-function 4 bank cascade control air direction valve are standard on the 4S models; Auto cascade controlled logic is standard on the 4i models
- > RFID SCBA data logging integrated into fill station (UNICUS 4i)

TECHNICAL DATA

Model	Chargir	ng Rate ¹	Number of Stages	Мо	otor	FAD ²	RPM	Purification System
	SCFM	L/MIN		HP	kW			
7000 PSIG (483 BAR)								
UN 4S-15/7K	13	368	4	15	11	10.8	960	P5 B-SECURUS
UN 4S-20/7K	20	566	5	20	15	17	1300	P5 B-SECURUS
UN 4i-15/7K	13	368	4	15	11	10.8	960	P5 B-SECURUS
UN 4i-20/7K	20	566	5	20	15	17	1300	P5 B-SECURUS

1) Based on recharging an 80 cubic foot tank from 500 to 3000 psig. 2) Compressor capacity referenced to standard inlet conditions. E3=Three phase electric, 208/230/460 VAC/60 Hz. Other voltages available on request. Dimensions and weight are approximate and are subject to change.

OPTIONAL ACCESSORIES - 7000 SERIES UNICUS 4S & UNICUS 4I

Item	Description	
0001	BAUER Gas-Tek™ Electronic carbon monoxide monitor complete with calibration kit wired for alarm and shutdown. (calibration gas included)	GT/CO/III
0002	Panel mounted remote fill hose connection. Includes bulkhead fitting, adjustable regulator for up to 6000 PSIG service, gauge, isolation valve and quick connect/disconnect fitting (hose no included)	/RF/REG
0003	UN4 remote fill hose connection including adjustable regulator for up to 6000 PSIG service, gauge and isolation valve connected to a cabinet enclosed hose reel with 100 feet of hose rated for 6000 PSIG service	UN4/RF/REL-12
0004	DUAL-FILL, high/low, quick connect fill system (specify fill presures)	DUAL-FILL/3 position
0005	TRI-FILL, high/low/SCUBA, quick connect fill system (specify fill pressures)	TRI-FILL/3 position
0006	Fire Edition paint scheme	
0007	RFID SCBA Data Logging (For UNICUS 4i only)	RFID4i
0008	RFID DATA TAGS Each Kit inclues 25-each tags	KIT-0557

AVAILABLE ACCESSORIES (FACTORY INSTALLED)

n display ol panel e safety nate air	 CO monitoring system 100 ft high pressure cabinet enclosed hose reel Panel mounted remote fill hose connection Dual Fill/3 position Tri Fill/3 position B-VIRUS FREE[®] (Dealer Installed) H2S monitoring system
idensate idication	
ylinders	
l lift-off	SYSTEM FOOTPRINT
ment fill " overall	DIMENSIONS L x W x H inches (mm) > 101" x 38" x 80" (2565mm x 965mm x 2032mm)
ols with tomatic	 WEIGHT pounds (kg) 4350 - 4550 lb (1973 - 2064 kg)

UNICUS[®] 4S

4- AND 5-STAGE ALL-IN-ONE HIGH-PRESSURE BREATHING AIR COMPRESSORS

A modern upgrade with the simplicity of analog controls; Aesthetically pleasing yet robust design found only in the UNICUS® 4S All-In-One platform. The system is available in either 5000 or 6000 PSIG with discharge capacities ranging from 13 SCFM charge rate to 26 SCFM charge rate. Unsurpassed maintenance accessibility abounds as we have provided all access doors with snap pin technology - pull the pin and lift the door; no hand tools are required. Should you require access to the back of the operations panel, no problem; we have your back, the panel tilts forward. All requisite panels are equipped with sound attenuated material. An integral rack built to accommodate four (4) storage cylinders is standard, along with the piping. Additionally, we provide two (2) ASME-coded air storage cylinders as a part of the standard scope of supply. If you want to dress your unit up in concert with the Fire Department theme, ask about our Fire Edition package. When your department needs the best All-In-One compressor system on the market today and backed by our global network of service partners, look to BAUER.



STANDARD SCOPE OF SUPPLY

- > BAUER breathing air purification system with **B-SECURUS**
- > BAUER PLC based controller with 7" color HMI touchscreen display
- > NEMA 4 rated electrical enclosure with UL[®] listed control panel
- Compressor low oil pressure and high temperature safety shutdowns
- > Emergency stop push button
- > Hinged cascade fill control panel with Lexan laminate air flow/fill schematic
- > Audible alarm on safety shutdowns
- > Inlet filter maintenance indicator
- > Automatic condensate drain system with non-corrosive condensate reservoir and integrated float sensor and automatic "Full" indication and compressor shutdown
- > Two (2) ASME code stamped air cylinders installed in an integral rack designed to hold four cylinders
- > Sound attenuating enclosure with 1/4" turn latches and lift-off type hinges
- > NFPA 1901 2016 edition compliant 3 position containment fill station accommodates SCBA or SCUBA cylinders up to 31" overall length

TECHNICAL DATA

Model	Charg	ing Rate ¹	Number of Stages	Мо	tor	FAD ²	RPM	Purification System
	SCFM	L/MIN		HP	kW			
5000 PSIG (345 BAR	2)							
UN 4S/20-E3	21	595	4	15	11	17.5	1300	P5 B-SECURUS
UN 4S/26-E3	26.4	748	4	20	15	22	1350	P5 B-SECURUS
6000 PSIG (414 BAR	2)							
UN 4S/13H-E1/E3	13	368	4	10	7.5	10.8	1420	P2 B-SECURUS
UN 4S/18H-E3	18	510	4	15	11	15	1325	P5 B-SECURUS
UN 4S/25H-E3	25.2	714	5	20	15	21	1300	P5 B-SECURUS

1) Based on recharging an 80 cubic foot tank from 500 to 3000 psig. 2) Compressor capacity referenced to standard inlet condition

E1-Single phase electric, 230 VAC/60 Hz. E3=Three phase electric, 208/230/460 VAC/60 Hz. Other voltages available on request. Dimensions and weight are approximate and are subject to change.

OPTIONAL ACCESSORIES

Item	Description	Part Number
0001	BAUER Gas-Tek™ Electronic carbon monoxide monitor complete with calibration kit wired for alarm and shutdown. (calibration gas included)	GT/CO/III
0002	Each additional ASME 5000 PSIG cylinder with relief valve and mounting clamps	/CYL-9/5K
0003	Each additional ASME 6000 PSIG cylinder with relief valve and mounting clamps	/CYL-9/6K
0003	Panel mounted remote fill hose connection. Includes bulkhead fitting, adjustable regulator for up to 6000 PSIG service, gauge, isolation valve and quick connect/disconnect fitting (hose no included)	/RF/REG
0004	UN4 remote fill hose connection including adjustable regulator for up to 6000 PSIG service, gauge and isolation valve connected to a cabinet enclosed hose reel with 100 feet of hose rated for 6000 PSIG service	UN4/RF/REL-12
0005	DUAL-FILL, high/low, quick connect fill system (specify fill presures)	DUAL-FILL/3 position
0006	TRI-FILL, high/low/SCUBA, quick connect fill system (specify fill pressures)	TRI-FILL/3 position
0007	Fire Edition paint scheme	

SYSTEM FOOTPRINT

UN 4S/13H-E1/E3 - UN 4S/26-E3:

DIMENSIONS L X W X H inches (mm)

> 101" x 38" x 80" (2565mm x 965mm x 2032mm) WEIGHT pounds (kg) > 4350 - 4550 lb (1973 - 2064 kg)

AVAILABLE ACCESSORIES (FACTORY INSTALLED)

- > CO monitoring system
- > H₂S monitoring system with audible alarm
- > 100 ft high pressure cabinet enclosed hose reel
- > Additional air storage cylinders
- > Panel mounted remote fill hose connection
- Dual Fill/3 position
- Tri Fill/3 position
- > B-VIRUS FREE[®] (Dealer Installed)

INNOVATION **AT YOUR FINGERTIPS**



NEWLY REDESIGNED



INCREASED UPTIME QUICKER AND SECURE ACCESS

Our auto cascade system has replaced all operations panel-mounted valves and pressure gauges which help reduce human error when filling SCBA and SCUBA cylinders.

All system controls are within the panel-mounted HMI and include:

- > Air storage controls
- > Independent SCBA fill pressures
- Independent SCBA fill speed
- > Automatic cascade control system rated for 7000 psi service
- > Secure and quicker way to log into the unit with a BAUER key fob
- NFPA 1989 data collection requirements

Optional Features:

- Motor ratings from 10 to 20 hp
- Discharge capacity from 13 to 26.4 scfm charge rate
- Industrial grade 15"-HMI/Interactive Touchscreen
- Operational pressures from 5000 to 7000 psig

> RFID Reader interface, automatically read & records the SCBA fill event in accordance with

Manual cascade bypass control comes standard to fill cylinders in case of a system power loss.

> Gas-Tek monitoring systems allow you to tailor the system to your departments specific requirements

UNICUS®4i

4- AND 5-STAGE HIGH-PRESSURE BREATHING AIR COMPRESSORS

This game-changing filling station employs our state-of-the-art control system centered around a 15-inch HMI touch screen interface, which allows the operator to manage the entire system from the single-point touch screen. UNICUS®4i has several innovative optional features including BAUER Gas-Tek[™] monitoring system to customize the unit to your departments particular needs.



F

R

Ε



> UNICUS® 4i



> UNICUS[®] 4i (SHOWING INSIDE FRONT)



) UNICUS[®] 4i (SHOWING INSIDE BACK)

STANDARD SCOPE OF SUPPLY

- > BAUER breathing air purification system with **B-SECURUS**
- > BAUER 15-inch HMI touch-screen interface
- > Solid state auto cascade system
- Compressor low oil pressure and high temperature safety shutdowns
- > Emergency stop push button
- > Ergonomic system-operations panel
- > Ergonomically designed stainless steel fill adaptors with integral bleed valve
- Automatic condensate drain system with non-corrosive condensate reservoir and integrated float sensor and automatic "Full" indication and compressor shutdown
- Two (2) ASME code stamped air cylinders installed in an integral rack designed to hold four cylinders
- > NFPA 1901 2016 edition compliant 3 position containment fill station accommodates SCBA or SCUBA cylinders up to 31" overall length
- > RFID Reader which reads and records data from the RFID equipped cylinders

TECHNICAL DATA

Model	Charg	ging Rate ¹	Number of Stages	Мо	otor	FAD ²	Purification System
	SCFM	L/MIN		HP	kW		
5000 PSIG (345 BAR)							
UNICUS 4i - 26 - E3	26.4	748	4	20	15	22	P5 B-SECURUS
UNICUS 4i - 20 - E3	21	595	4	15	11	17.5	P5 B-SECURUS
6000 PSIG (414 BAR)							
UNICUS 4i - 13- E1/E3	13	368	4	10	7.5	10.8	P2 B-SECURUS
UNICUS 4i - 18- E3	18	510	4	15	11	15	P5 B-SECURUS
UNICUS 4i - 25- E3	25.2	714	5	20	15	21	P5 B-SECURUS

1) Based on recharging an 80 cubic foot tank from 500 to 3000 psig. 2) Compressor capacity referenced to standard inlet conditions. Tolerance + /- 5%

OPTIONAL ACCESSORIES

ltem	Description	Part Number
0001	BAUER Gas-Tek™ electronic carbon monoxide monitor complete with calibration kit wired for alarm and shutdown. (calibration gas included)	GT/CO/III
0002	Each additional ASME 5000 PSIG cylinder with relief valve and mounting clamps	/CYL-9/5K
0003	Each additional ASME 6000 PSIG cylinder with relief valve and mounting clamps	/CYL-9/6K
0004	Panel mounted remote fill hose connection. Includes bulkhead fitting, adjustable regulator for up to 6000 PSIG service, gauge, isolation valve and quick connect/disconnect fitting (hose no included)	/RF/REG
0005	UN4 remote fill hose connection including adjustable regulator for up to 6000 PSIG service, gauge and isolation valve connected to a cabinet enclosed hose reel with 100 feet of hose rated for 6000 PSIG service	UN4/RF/REL-12
0006	DUAL-FILL, high/low, quick connect fill system (specify fill presures)	DUAL-FILL/3 position
0007	TRI-FILL, high/low/SCUBA, quick connect fill system (specify fill pressures)	TRI-FILL/3 position
8000	Fire Edition paint scheme	
FOR UN	ICUS® 4i ONLY	
0009	RFID SCBA Data Logging	RFID4i
0010	RFID DATA TAGS Each Kit inclues 25-each tags	KIT-0557
0011	Cloud Storage for RFIDPro [®] SCBA cylinder management system. Price based upon number of SCBA's	TBD

SYSTEM FOOTPRINT

DIMENSIONS L x W x H inches (mm)

> 101" x 38" x 80" (2565mm x 965mm x 2032mm)

WEIGHT pounds (kg)

> 4350 - 4550 lb (1973 - 2064 kg) *Weights are based on a unit equipped with 4 ASMEs

AVAILABLE ACCESSORIES (FACTORY INSTALLED)

- > CO monitoring system
- Hose reel for 100' of high pressure breathing air hose
- Reg/RF
- Dual Fill/3 position
- Tri Fill/3 position
- > Additional air storage cylinders
- > B-VIRUS FREE[®] (Dealer Installed)
- > H2S monitoring system

BAUER COMPRESSORS

AIR STORAGE

A

UN AND ASME STORAGE SYSTEMS

BAUER high pressure air storage systems meet the code requirements of both the United Nations Model Regulations and the American Society of Mechanical Engineers. Storage cylinders and storage systems are offered for 5000, 6000 and 7000 PSIG applications. Optional mounting racks are available.

REFERENCE ASY-0759 FOR VERTICAL CONFIGURATIONS AND ASY-0758 FOR HORIZONTAL CONFIGURATIONS







> UN STORAGE

> ASME STORAGE



> BULK STORAGE SYSTEM ASME 4/BANK

Model		eight der Rack
	lbs	kg
UN 5000	475	215
UN 6000	525	238
ASME	935	424



TYPICAL SYSTEMS SHOWN BELOW



> FOUR BANK CASCADE STORAGE SYSTEM ASME 4/BANK/1-1-1-1

AUTO CASCADE

SAFE AND AUTOMATIC CASCADE SCBA FILLING

The world leader in high pressure breathing air is proud to offer the premier method of automatically cascading your air storage system. The system utilizes our patent pending manifold block with integral valve bodies. Couple this with a commercially available PLC controller and you have the simplest cascade system available in the marketplace today.

> FOUR TO ONE SAFETY FACTORS:

All components are manufactured for 7000 PSIG service

- > 12 OR 115 VOLT OPERATED: Simply specify at the time of order
- > MANIFOLD INTEGRATION: On any manufacturers cascade system



STANDARD SCOPE OF SUPPLY

- > Corrosion resistant high strength aluminum alloy manifold block
- Programmable Logic Controller for simplistic operation and heightened accuracy
- > No adjustable shuttle valves
- > HMI indication as to which cascade cylinder is being utilized
- The system can be utilized on either stationary or mobile cascade systems
- A preset pressure bias of 300 PSIG can be adjusted to allow for quicker switch over time from one bank to another
- > Pressure sensing by transducers rather than sequential valves, provides greater accuracy without leaks or pressure drift
- A bypass circuit is incorporated into the system allowing the storage system to be bypassed. This enhancement allows for more effective hose reel operation or possibly filling a mobile cascade system from a stationary system

SAFETY AND ADDED VALUE



HOSE REELS

ORGANIZATION FOR CONVENIENT REMOTE SYSTEM AIR FILLING

BAUER offers an optional hose reel to keep fill lines organized, eliminating clutter and potential trip hazards. Available in 75' or 100' hose lengths, no matter the layout of your facility or the configuration of your setup, your remote filling needs are covered. Our durable, long-lasting filling hoses are rated for the high pressures of SCBA filling, and the reel itself has high-quality construction, with guide rollers and a ball stop for convenience. Users can choose standard reels without controls or opt for full controls with a regulator, line valve, and inlet/outlet gauges.



B-DETECTION

CONTINUOUS AIR QUALITY MONITORING

B-DETECTION PLUS monitors the quality of the breathing air you produce: measuring CO, CO2, O2 as standard and offering options for absolute humidity and residual oil (VOS)'. Automatic, continuous and ultrareliable.

The B-CONTROL compressor control unit enables you to monitor compliance with the values of the NFPA and DIN EN Breathing Air Standard at all times'. If limit values are exceeded, the control unit displays a visual warning and shuts down the system before contaminated air can pass into the cylinders being filled.

Automatic shutdown if flow is blocked: To ensure continuous flow of air and guarantee correct measurement values, an integrated flow monitor automatically shuts down the compressor if the flow is interrupted or reduced, e.g. caused by piping kinks or blocked filter elements.

B-DETECTION FOR INTEGRATION INTO COMPRESSOR SYSTEMS

If desired, B-DETECTION can be integrated into your new control unit at the factory². To ensure optimum operating conditions for the sensors and maximize service life, B-DETECTION is installed in the cold air flow. Both the gas measurement system itself and the gas extraction unit that regulates the inlet pressure of the B-DETECTION PLUS are integrated into the compressor.

A single control unit for all components: So convenient - simply read off the current air quality values from your compressor control unit. You can also make any changes to your B-DETECTION PLUS settings there too.

B-DETECTION FOR RETROFITTING AND FURTHER COMPRESSOR SYSTEMS

The new gas measurement system is also available as a standalone model, B-DETECTION PLUS s. Offering the same range of functions, it is designed for separate wall mounting and can be used with further BAUER systems or retrofitted to existing systems.

Air quality levels are displayed on the BAUER CONNECT control unit of the standalone gas measurement system, which can also log measurement values, The B-DETECTION can also automatically shut down the compressor system contamination levels rise. Measurement values can be transmitted to the control unit, depending on the model..





BAUER COMPRESSORS

BAUER CRC™ CHARGE RATE CONTROL

The BAUER Charge Rate Controller (CRC[™]) has been designed to automatically fill SCBA and SCUBA cylinders to their maximum allowable pressure as well as allow the operator performing the fill to control the charge rate avoiding hot fills and maximize stored air in the cylinders.



BENEFITS:

- > Reduce complexity No more fidgeting with regulator valves and pressure gauges; the BAUER CRC[™] automatically charges SCBA and SCUBA cylinders to the right pressure with the push of a button.
- > Avoid "hot fills", maximize stored air Filling SCBA or SCUBA cylinders too fast will decrease the stored air in the cylinder when the cylinder cools down after charging. The BAUER CRC[™] avoids this by controlling the rate of charge.
- Allows for three different charge rate settings with the push of a button
-) Can be adapted to existing BAUER compressor systems

OPERATION:

A

- The BAUER CRC[™] makes automatic filling of an SCBA or SCUBA cylinder easy with these three steps:
- >Step 1: From the main menu select the SCBA or SCUBA cylinder you wish to fill
- > Step 2: Select the desired charge rate from one of three options: Normal, Hot Fill or Custom
- > Step 3: Press "Start Fill"





STATUS SCREEN Indicates Fill Rate & Cylinder Pressure

FEATURES

- > PLC controlled with color HMI touchscreen
- > Select from up to 10 customizable SCBA or SCUBA cylinder configurations, each with their own name designation and max fill pressure
- > Select from up to three customizable charge rates
- > Fill rate is accurately controlled with BAUER's proprietary technology
- > Compatible with cascade storage and containment fill stations
- > Field retrofit to existing BAUER compressor systems
- > Easy installation: wall mountable; requires only two high pressure hose connections and plug-in 110V power

SYSTEM SPECIFICATIONS

 DIMENSIONS L x W x H 7.5" x 21" x 26" (190.5mm x 533.4mm x 660.4mm) 	
WEIGHT > 40 lbs (18 kg)	
MAXIMUM INLET PRESSURE6000 PSIG (414 BAR)	
MAXIMUM FILL PRESSURE > 5500 PSIG (379 BAR)	

	0:43 PM		ING RATE CO	NTROLLER (C FILES 1 - 5		PRESSOR
Select Profile: Number	Enter Dottle Manufacturer Information	Select pre ar bair	Enter Max Dottle Fill Prossure	Enter NORMAL Charging Butter	Enter HOT Charging Rater	Enter CLISTOM Changing Ra
- 1	MSA-4500	T pai	4500 psi	1000 psi/min	1200 psi/min	800 psi/m
2	MSA-2216	a pul	2216 pul	600 psi/min	1200 pul/min	800 psi/mi
3	DRAEGER	bar 1	200 ber	50 ber/min	68 bar/min	00 bar/ma
4	SCOTT-5500	in pol	5500 pai	1000 psi/min	1200 psi/min	B00 psi/mi
5	Profile 5	T pu	0 psi	0 psi/min	0 psi/min	0 pei/min
	MADN	FRL	STATUS	PROFESS 95	6-10 COM	

CUSTOMIZABLE CYLINDER PROFILE SCREEN

HIGH-PRESSURE CONTROL PRESSURE PORT:

> 1/4" NPT female

HIGH-PRESSURE FILLING INLET PORT: > 1/4" NPT female

HIGH-PRESSURE FILLING OUTLET PORT:

> 1/4" NPT female

PURIFICATION



HIGH-PRESSURE BREATHING AIR PURIFICATION FOR BAUER SYSTEMS

BAUER Air Purification Systems purify high-pressure air to a quality that meets or exceeds the requirements of CGA Pamphlet G-7, Compressed Air for Human Respiration, ANSI/CGA G-7.1, Commodity Specification for Air, Grade E, and all other recognized standards for breathing air. Recognizing that filtration systems are unfortunately one of the most often overlooked systems, BAUER always utilizes the highest quality components to protect the system operator. Every BAUER high-pressure breathing air purification system final separator, from the P41 to the P10, is manufactured from high-strength chromium steel alloy, which never requires hydrotesting! All BAUER 6,000 PSI purification chambers are manufactured from a high-strength aluminum alloy that satisfies the 4:1 structural safety factor requirements specified within NFPA-1900 and NFPA-1989 codes. Our purification systems can also be retrofitted for integration into most brands of high-pressure breathing air compressor systems manufactured today!

> WORLDWIDE LEADER:

- Compressors

A

- Purification and filtration

> ANODIZED ALUMINUM FILTER HOUSING:

- Filter cartridge end caps are machine crimped
- Eliminating glues/friction welding

> ANODIZED ALUMINUM FILTER CHAMBERS:

- Each chamber and plug assembly are serialized to ensure system traceability

> CHROMIUM STEEL FINAL SEPARATOR



> SECURUS Images shown may have optional features.



B-TIMER

> P0 TRIPLEX



> P2













BAUER *B-VIRUS FREE®

*THE B-VIRUS FREETM FILTER ELIMINATES UP TO 99.9% OF CORONAVIRUSES, BACTERIA AND CERTAIN MOLDS FROM INTAKE AIR. COMPRESSOR INTAKE AIR FILTRATION SYSTEM FOR SAFETY WITHOUT COMPROMISE



PROTECTING YOUR HEALTH IS OUR NUMBER ONE PRIORITY

Science has shown that viruses and bacteria can spread rapidly over great distances through aerosol dispersion. Mixed in the ambient air, they can pass through any commercially available standard air purification system which is part of the typical breathing air compressor system. Even the high temperatures and pressures of a typical high- pressure breathing air compressor have little effect on viruses and bacteria because of their short- duration exposure to the process.

The new BAUER B-VIRUS FREE[®] breathing air filtration system (patent-pending) inactivates up to 99.9% of viruses including coronaviruses, bacteria, and molds at the air intake section of your BAUER breathing-air-compressor. The system is designed to protect firefighters, divers, hazardous-location-workers, military personnel, or anyone who breathes compressed breathing air through SCBA or SCUBA cylinders. EPA Est. No. 100175-VA-1



INTAKE PARTICULATE FILTER

Underpressure in the compressor draws in air through the intake filter opening. Normal dust particles and even pollen are removed from the air by the intake filter.



UV PURIFICATION

The specially deigned UV light source emits high-energy UVC radiation that destroys the molecular bonds in the DNA of bacteria and molds and in the RNA of viruses. This prevents the pathogens from reproducing.



OZONE FREE

The B-VIRUS FREE[®] filter system produces no harmful ozone.

CONTROL AND DISPLAY

The control unit of the B-VIRUS FREE® protective filter system monitors functions and controls the UV light source. Operational status information is provided by visual (LED) and acoustic signals.

CONNECTION TO COMPRESSOR



The B-VIRUS FREE[®] protective filter system is connected to a specially sealed intake hose, which eliminates any potential new contamination from leaks between the protective filter and the compressor block.

EFFECTIVE INACTIVATION OF CORONA VIRUSES, BACTERIA AND MOLDS

Free of chemicals and ozone, the B-VIRUS FREE® system uses a specially designed UVC light source to destroy the pathogens before the intake air section of the compressor. The highly effective wavelength in the B-VIRUS FREE® system is absorbed by the pathogens' DNA, where the photons destroy the bonds between the DNA strands of the viruses, bacteria, and mold spores and effectively prevent them from reproducing.

LOW MAINTENANCE, LOW OPERATING COSTS

The B-VIRUS FREE[®] compressor intake air filter system has long maintenance intervals to keep operating costs down. The filter does not require replaceable filter cartridges. The UVC light source has an extremely long service life of approx. 2,000 hours and is simple to replace.

EASY INTEGRATION INTO YOUR BAUER COMPRESSOR SYSTEM

The B-VIRUS FREE[®] compressor air intake filter system can be ordered for any new model BAUER VERTECON[®], VERTICUS[®], BAUER LEGACY[®], and UNICUS[®] 4S & 4i breathing air compressor systems. B-VIRUS FREE[®] will also be available as a retrofit kit for older BAUER breathing air compressor systems.

TECHNICAL DATA

	B-
APPLICATION	
Pressure Range	
Compressor Charge Rate Range	
FUNCTIONS	
Required Warm-Up Time	
Visual Indicators	
Audible Signal	
TECHNICAL DATA	
Permissible operating temperature range	
Operating voltage	
UV lamp service life	
Weight filter unit	
Weight control box	
Dimensions W x D x H	

The B-VIRUS FREE® filter eliminates up to 99.9% of coronaviruses, bacteria and certain molds from intake air.



> VERTECON[®] The B-VIRUS FREE[®] system shown integrated into the BAUER VERTECON[®] Breathing Air Compressor System

Values

Atmospheric Intake Air

3.5-30 scfm (100 - 850 l/min)

60 secs

Warm-up/Normal/Fault

in case of fault

+41°F(+5°C) to +105°F (+40°C)

110/220 volts, ac, single phase (60/50Hz)

2,000 hrs or every 2 years

approx.17.5 lbs (7kg)

approx.12.5 lbs (5kg)

36x10x18 in (905x250x450 mm)

BAUER RFIDPro[®]

The BAUER RFIDPro SCBA Cylinder Management System is a subscription service which provides Fire Departments with a system designed to improve the safety of the SCBA cylinder filling process as well as provide compliance with all of the governmental reporting requirements such as NFPA-1989 and OSHA-1910.134 associated with the cylinder management process.

The system also serves as a powerful inventory management tool, helping fire departments identify the status and track the location of their entire SCBA cylinder inventory in real-time.





STANDARD FUNCTIONALITY

BAUER RFIDPro HANDHELD DEVICE

- > Allows new SCBA cylinder registration through the BAUER RFIDPro handheld device or directly through the **BAUER RFIDPro customer portal**
- > Guides the cylinder fill operator through the entire SCBA cylinder fill process to assure that all required steps are followed in sequence and performed in a safe manner
- > Alerts the cylinder fill operator if an SCBA cylinder is expired, past due on hydro testing or inactive due to failed inspection.
- > Sends push and e-mail notifications to responsible fire department personnel in advance of cylinder expiration or hydro past due date as well as when a cylinder fails inspections
- > Automatically logs every aspect of the SCBA cylinder fill process and documents all required NFPA-1989 criteria including time and date stamp, operator ID, cylinder inspection process and recorded fill pressure
- > Allows for "Guest Fill" logging of cylinders which are the property of another fire department

- > Handheld device can read both bar code and RFID tags. BAUER provides an RFID tag retrofit kit for cylinders which do not have embedded RFID tags. There is no limit to the number of SCBA cylinders or decentralized locations
- > Standard WIFI or optional LTE connectivity provides real-time communications with the BAUER RFIDPro[™] Cloud
- Offline functionality allows recording of data when WIFI or LTE signal is not available

BAUER REIDPro CLOUD

- Provides all required documentation and reports required by NFPA-1989 and OSHA-1910.134
- > Easy-to-use customer portal provides full administrative functionality including complete SCBA inventory management and reporting
- Secure cloud-based data storage unique to each customer assures data integrity and compliance with data retention requirements. SSL data communication encryption between the RFIDPro server and client along with SHA-256 password encryption with optional two-factor password authentication provide the latest in state-of-the art network security

1 The BAUER RFIDPro handheld device performs all of the required fuctions in the field pertaining to the fill process

2 SCBA cylinder managment is made easy through the user-friendly BAUER RFIDPro customer portal

SYSTEM BENEFITS

- > Assures fire department compliance with NFPA-1989 and OSHA-1910.134 associated with the SCBA cylinder fill documentation requirements
- through manual data entry
- cylinder expirations, hydrotesting and repairs
- workload associated with manually logging SCBA fills and inspections
- Greatly reduces liability for fire departments associated with no or incomplete records, erroneous data or unsafe SCBA filling

> Facilitates 100% data accuracy by automatically recording and uploading all SCBA fill data to the cloud thus eliminating errors

> Allows fire department administrators keep track and manage every aspect of their valuable SCBA cylinders in real-time including

> Increases fire department personnel safety and efficiency by guiding them through the proper fill process and eliminating the





BAUER Reports is a function that generates custom reports tailored to the specific needs of the customer.

(iii)

SCBA Management Report

- Generate a report per NFPA 1989 data logging requirements
- > Show when your cylinders were last filled and by who etc.
- > Fill Status Warning: Lists the SCBA the cylinder in inventory that have not been filled within the year
- > Fill activity: Lists the SCBA cylinders serial number, Person filling, RFID serial, cylinder pressure and dates of fill
- > Personnel: List or edit admin. users with privilege to log in to BAUER CONNECT®

MOBILE DASHBOARDS

(Ca

- > Quick reference of all of your BAUER compressors at your fingertips
- > Does not require password validation every time app is used
- > Total visual without the Remote HMI control capability (view-only option)
- > Dashboards can be customized to specific customer needs 龠

NOTIFICATIONS

- > Fault on machine
- SCUBA Cylinders
- taken if needed





BAUER CONNECT® IoT SOLUTIONS FOR FIREFIGHTERS YOUR STATION CONNECTED

BAUER CONNECT REMOTE TELEMETRY AND CONTROL VIA MOBILE APP

For over 75 years, BAUER has been the leader in breathing air products for firefighters. So we understand that every wasted minute leads to injury, smoke exposure, or worse. That's why we developed BAUER CONNECT IoT Solutions for Firefighting – our all-in-one, mobile telemetry solution for optimal ease-of-use and efficiency. Now you can view your SCBA fill data logs, get notifications about your compressor, and remotely control and monitor your BAUER compressor. The best part is that BAUER CONNECT can be tailored to fit your station's needs.

Security Features:

- > Multiple logical & physical security layers
- Privilege and separation rights
- > AI/ML threat assessment & analysis
- > Transport layer encryption and encryption at rest
- > Extensive logging and monitoring of network,
- system and application events

BAUER CONNECT - Connection that matters.

A



Compressor Reports

- > Temperature Trendline Report:
- Reports ambient temperature as
- well as temperature of every stage
- in the compressor



- Live connect and remotely control any BAUER compressor(s) in your station
- > Secure log-ins Only approved team members can access and control your compressor system
- > Saves time and money with instant control no matter your location





- Out of Date or Expired SCBA or
- > Text, email or push notification alarm(s) > Allows for instant, proactive steps to be



BAUER PREDICTIVE ANALYTICS

The BAUER Predictive Analytics capability provides a new proactive 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 breathing air system information on the BAUER Cloud to predict upcoming maintenance requirements and preventive actions to avoid unplanned shutdowns.





BAUER COMPRESSORS

PARTS



QUALITY AND RELIABILITY

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

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

<image>



GLOBAL SERVICE GLOBAL SERVICE REACH

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.

BAUER HELPDESK



MECHANICAL & ELECTRICAL

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

TRAINING

ON SITE/OFF SITE TRAINING

FACTORY TRAINED TECHS

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

TRAINING TOPICS

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

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



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.



BAUER'S TRUSTED DISTRIBUTOR PARTNER:



U.S. HEADQUARTERS: BAUER COMPRESSORS, INC. 1328 Azalea Garden Road Norfolk, VA 23502 Tel. +1 (757) 855-6006 Fax +1 (757) 857-1041 SLS@BauerComp.com www.BauerComp.com

U.S. BRANCHES: **BAUER MIAMI** Tel. +1 (954) 746-2504 Fax +1 (954) 746-2510 BFLSales@BauerComp.com

BAUER SAN FRANCISCO 1216 Stealth Street Livermore, CA 94551 Tel. +1 (925) 449-7210 Fax +1 (925) 449-7201 BauerSF@BauerComp.com

BAUER NORTHEAST

2124 State Route 89 Seneca Falls, NY 13148 Tel. +1 (315) 568-5520 Fax +1 (315) 568-5520

Tim.Burgess@BauerComp.com 1174.03.25.2500 RP

SCAN TO DOWNLOAD THE PDF

www.BauerBreathingAir.com

Subject to technical changes