

Stationary High Pressure Compressor for Air and Breathing Air Compression

Types:

KAP220-20-E | KAP220-25-E | KAP220-30-E | KAP23-40-E | KAP23-50-E



KAP220 and KAP23 with B-CONTROL II (optional)

General	
Medium	Air
Intake pressure	atmospheric
Filling pressure	PN200 / PN300
Pressure setting, final pressure SIV	225 bar / 330 bar / 350 bar
Pressure setting, pressure sensor	220 bar / 320 bar / 340 bar
Permissible ambient temperature range	+5...+45°C
Permissible altitude	0...1500 m AMSL
Max. permissible tilt	5°
System type	Open / Super-Silent
Compressor oil, standard	Synthetic
Oil change interval	Synthetic : every year / 2,000 h
Finish	CYAN (front) / RAL 7024 (frame)

KAP 220, KAP 23

Compressor system	KAP220-20-E	KAP220-25-E	KAP220-30-E	KAP23-40-E	KAP23-50-E
Charging rate ¹	650 l/min	800 l/min	930 l/min	1.300 l/min	1.480 l/min
Purification system	P80/350	P80/350	P100/350	P120/350	P120/350
Cooling air flow, min.	5.400 m ³ /h	6.660 m ³ /h	7.920 m ³ /h	10.800 m ³ /h	13.320 m ³ /h
Weight (open version) ²	490 kg	510 kg	570 kg	760 kg	780 kg
Weight (Super-Silent) ²	740 kg	760 kg	820 kg	1060 kg	1060 kg
Dimensions (LxWxH) open ²	2140 x 720 x 1250 mm	2140 x 720 x 1250 mm	2140 x 720 x 1250 mm	2260 x 865 x 1315 mm	2260 x 865 x 1315 mm
Dimensions (LxWxH) Super-Silent ²	2200 x 1100 x 1820 mm	2200 x 1100 x 1820 mm	2200 x 1100 x 1820 mm	2400 x 1460 x 1410 mm	2400 x 1460 x 1410 mm

¹ Measured during cylinder filling from 0-200 bar tolerance +/- 5% at + 20°C ambient temperature.

² Standard model. Weight and dimensions may vary depending on accessories.

Drive system: e-motor	KAP220-20-E	KAP220-25-E	KAP220-30-E	KAP23-40-E	KAP23-50-E
Motor	three-phase electric power				
Power	15 kW	18,5 kW	22 kW	30 kW	37 kW
Type of construction	B3	B3	B3	B3	B3
Type	Käfigläufer 50/60 Hz	Käfigläufer 50/60 Hz	Käfigläufer 50/60 Hz	Käfigläufer 50/60 Hz	Käfigläufer 50/60 Hz
Operating voltage / Frequency ¹	400 V, 50 Hz	400 V, 50 Hz	400 V, 50 Hz	400 V, 50 Hz	400 V, 50 Hz
Speed	980 1/min	1.180 1/min	1.320 1/min	1.200 1/min	1.400 1/min
Safety class	IP55 (TEFC)				

¹ Special voltage / special frequency for additional charge

STANDARD SCOPE OF SUPPLY:

Compressor block

- Oil pump for forced-feed lubrication with oil filter
- Oil sump content: For blocks 22.x: 8.5 l; 23.x: 10.6 l; 25.x: 34 l; 28.x: 34 l
- Micronic intake filter (compression of atmospheric air)
- Interstage coolers, air cooled after each stage
- Aftercooler, air cooled, outlet temperature approx. 10-15 K above ambient temperature
- Intermediate oil/water separators after each stage
- Final oil/water separator
- Safety valves after each stage
- Final pressure safety valve
- Pressure maintaining and check valve before compressor outlet
- First fill of oil with BAUER compressor oil (synthetic) N28355

Configuration and style of the unit

- Horizontal arrangement of the unit on solid base frame
- Shock absorbers for free standing installation
- Control panel and display installed at the front of the unit
- Electrical connection: Compression fitting in control cabinet
- The compressor can be loaded using a lift truck and forklift
- Colour:
 - Compressor block: Silver
 - Base frame: RAL 7024 graphite grey
 - Compressor housing: RAL 9006 white aluminium/cyan
- Powder coating resp. liquid paint for indoor installation in accordance with corrosivity category C2-C3

➤ P80/350 Purification System

Standard scope of delivery for KAP22-20-E and KAP22-25-E

SCOPE OF DELIVERY:

- Oil and water separator with Micronic intake filter
- condensate drain valve
- automatic condensate drain (optional)
- final pressure safety valve (optional)
- Air bleeder valve with manometer
- 2x filter housing with long-life filter cartridge 27"
- Pressurizer / check valve
- Filter key for cartridge renewal
- Filling of filter cartridges (AC, MS) according to customer requirement



P80/350 / 550 bar with automatic condensate drain

TECHNICAL DATA:

- Dimensions (LxWxH in mm): 780 x 260 x 980
- Weight: 70 kg
- Air / Gas connection: fitting Ø 10 mm

Air quality as per DIN/EN 12021:2014

Contamination with	Maximum content as per DIN EN 12021:2014	Air quality by BAUER
H ₂ O	25 mg/m ³	≤ 10 mg/m ³
CO	5 ppm(v)	Depends on cartridge ¹
CO ₂	500 ppm(v)	Depends on intake air ²
Oil	0.5 mg/m ³	≤ 0.1 mg/m ³

1 Only with BAUER special filter cartridge with hopcalite up to a maximum concentration of 25 ppm CO in intake air.

The compressed clean breathing air then contains a maximum of 5 ppm CO.

2 Where the intake air exceeds the maximum permissible level of CO₂ as per DIN EN 12021:2014, use of a BAUER AERO-GUARD system is **urgently recommended!**

Purification system	P80/350
Operating pressure (Standard)	PN200 / PN300
Operating pressure max (PS)	350 bar
Pressure dew point	< -20 °C, equivalent to 3 mg/m ³ at 300 bar
Piping connections	G 1/4" (final separator), G 3/8" (Purification system)
Filter housing volume	2.85 l
DGRL 2014/68/EU	Vessel category II
Processable air capacity (at ambient temperature 20°C and 300 bar) ¹	2,475 m ³

1 When using a BAUER filter cartridge without hopcalite. Deviating values for SECURUS-cartridges.

➤ **P 100/350 Purification System**

Standard scope of delivery for KAP220-30-E

SCOPE OF DELIVERY:

- Oil and water separator with Micronic intake filter
- Condensate drain valve.
- Automatic condensate drain (optional)
- Final pressure safety valve (optional)
- Air bleeder valve with manometer
- 3x filter housing with long-life filter cartridge 27"
- Pressurizer / check valve
- Filter key for cartridge renewal
- Filling of filter cartridges (AC, MS) according to customer requirement



P100/350 / 350 bar with automatic condensate drain and SECURUS

TECHNICAL DATA:

- Dimensions (LxWxH in mm): 1080 x 260 x 980
- Weight: 90 kg
- Air / Gas connection: fitting Ø 10 mm

Air quality as per DIN/EN 12021:2014 (see table for purification system P80/350)

Purification system	P 100/350
Operating pressure (standard)	PN200 / PN300
Operating pressure max (PS)	350 bar
Pressure dew point	< -20 °C, equivalent to 3 mg/m ³ at 300 bar
Piping connections	G 1/4" (final separator), G 3/8" (Purification system)
Filter housing volume	2.85 l
DGRL 2014/68/EU	Vessel category II
Processable air capacity (with ref. 20°C and 300 bar) ¹	3.513 m ³

¹ When using a BAUER filter cartridge without hopcalite. Deviating values for SECURUS-cartridges.

➤ P 120/350 Purification System

Standard scope of delivery for KAP23-40-E and KAP23-50-E

SCOPE OF DELIVERY:

- Oil and water separator with Micronic intake filter
- Condensate drain valve.
- Automatic condensate drain (optional)
- Final pressure safety valve (optional)
- Air bleeder valve with manometer
- 2x filter housing with long-life filter cartridge 27"
- Pressurizer / check valve
- Filter key for cartridge renewal
- Filling of filter cartridges (AC, MS) according to customer requirement



P120-He/350 bar with automatic condensate drain and SECURUS

TECHNICAL DATA:

- Dimensions (LxWxH in mm): 1080 x 260 x 1000
- Weight: 140 kg
- Air / Gas connection: fitting Ø 10 mm

Air quality as per DIN/EN 12021:2014 (see table for purification system P80/350)

Purification system	P 120/350
Operating pressure (standard)	PN200 / PN300
Operating pressure max (PS)	350 bar
Pressure dew point	< -20 °C, equivalent to 3 mg/m ³ at 300 bar
Piping connections	G 1/4" (final separator), G 3/8" (Purification system)
Filter housing volume	9.85 l
DGRL 2014/68/EU	Vessel category II
Processable air capacity (with ref. 20°C and 300 bar) ¹	10.645 m ³

¹ When using a BAUER filter cartridge without hopcalite. Deviating values for SECURUS-cartridges.

➤ **Compressor control B-CONTROL MICRO**

The B-CONTROL MICRO is a modern, easy-to-operate compressor control unit with colour display that intelligently controls and all basic compressor functions and monitors their safety. User-friendly navigation and clear display of all main compressor parameters.



B-CONTROL MICRO Display

- Fully automatic monitoring of all relevant compressor data
- 3.5" colour display with clear text
- Displays service and maintenance intervals and maintenance information
- Log stores incident history
- Password protection for various menu levels

Compressor control unit	B-CONTROL-MICRO
Ambient temperature:	-10°C to + 60°C (5-90% humidity; non-condensing)
Standard operating voltage	24 V DC
Protection class, control cabinet:	IP 55
Protection class, display:	IP 65
Type, display	3.5" colour display with clear text

FEATURES

- Displays current operating pressure, operating hours and operation type
- Semiautomatic and fully automatic operation options
- Standard SI unit selection for pressure and temperature
- User-friendly navigation and display (user interface)
- Displays service and maintenance intervals and maintenance information
- Log stores incident history
- Simple software update uses SD card
- For software upload no B-Manager required
- Cycle counter and operating hours counter
 - Safety: Information when pressure vessels require replacement
- Numerous language options (German, English, French, Chinese, Czech, Danish, Dutch, Finnish, Italian, Japanese, Norwegian, Polish, Portuguese, Russian, Swedish, Spanish, and more)

SUPERVISION OR CONTROL OF

- Compressor start/stop by final pressure or level indicator of an helium balloon (digital signal)
- Oil pressure monitoring
 - Protection from incorrect rotation direction
- B-SECURUS monitoring (via CAN bus)
 - Safety: Shuts down compressor when filter cartridge is fully saturated
- Temperature monitoring
 - Safety: Monitors temperature (final stage)
- Intake pressure (gas version only)
 - To prevent the compressor from too high or low inlet pressure
- Motor overcurrent (indirect by PTC)

INTERFACES

- CAN bus for internal use
- Remote Start/Stop (dry contact)
- External emergency off switch
- Centralised alarm (dry contact)
- External connection options for: B-SECURUS, SECCANT, B-KOOL , external display, external operating field, gas measurement systems, 40 litre condensate collector

OPERATING MODE

- Fully automatic operation / semi automatic operation
- Leakage test / final safety valve test

SCOPE OF SUPPLY & INFORMATION B-CONTROL MICRO:

GENERAL

- Direct online or star-delta contactor combination
- Regulated power supply
- Switchbox with all necessary auxiliary relays and terminal boards
- Combined main switch / emergency off switch
- Main circuit breaker
- B-CONTRO MICRO with 3.5" colour display and with key pad

BASIS-VERSION

- The B-CONTROL MICRO is loosely supplied in the control box for wall mounting. Cable to the sensors, solenoid valves, motor etc. are not included in the standard scope of supply.
- The software is pre-installed, but must be set on site in accordance with the customer's requirement.
- The wiring, assembly and final inspection is carried out on site by a suitably qualified and trained person in accordance with the manufacturer's instructions and local laws and guidelines.

STANDARD-VERSION

- As "basic version", but completely wired and ready for use
- Control for wall mounting, with 5 m cable

PREMIUM-VERSION

- As "standard version", however, with B-CONTROL II fixed on the compressor.
- Monitoring pressure and temperature of all stages possible
- Software customization possible
- Using gas balloon with analog signal (4-20mA)
- Active ininterconnection operation (Master)

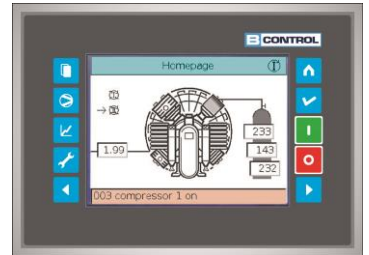
› AUTOMATIC CONDENSATE DRAIN DEVICE

- Drains all oil/water separators during compressor operation
- (loss of gas approx. 2 % of delivery per stage respectively separator)
- Draining interval is adjustable according to local situation (factory setting: operation every approx. 15 min for 6 sec (sequential))
- Unloaded start integrated (automatic drain during shut-down of the unit)

➤ **Compressor control B-CONTROL II**

Die B-CONTROL II ist eine speicher-programmierbare Steuerung (SPS) mit Farb-Touchscreen-Display:

- Fully automatic operation in line with customer-specific parameters
- Monitors all relevant operating data
- Shuts down the system in the case of deviation from defined operating parameters
- Displays operating data, maintenance information, fault messages and trends



B-CONTROL II display

Technical data	
Ambient temperature:	0°C to + 50°C (10-90 %, non condensing)
Standard operating voltage	24 VDC
Protection class, control cabinet:	IP 55
Protection class, display:	IP 65

SCOPE OF SUPPLY

- Star-delta contactor combination with therm. overload relay respectively soft starter from 75 kW motor power
- Control transformer with primary and secondary fuse protection
- Switchbox with all necessary auxiliary relays and terminal boards; including integrated ventilation
- Contactor for motor of fan (only Super Silent Version)
- Emergency Stop pushbutton
- Main circuit breaker
- HMI Control panel with touch screen display and 10 key pads

DISPLAY

- 5,7" QVGA colour TFT display touch screen
- 10 function keys

INDICATION OF

- Operating messages / Status of compressor unit
- Hours run meter
- Configuration parameters
- Trends (start cycles, pressure; for max. 10 hours)
- Data logger (6 analogue channels, free selectable + compressor operation)
Data storage on internal CF card, read-out by FTP
- Maintenance survey
- Error indications / error logbook (1000 entry; can be copied to USB)

AVAILABLE UNITS

- Pressure: bar, MPa, psi, psig
- Temperature: °C, K, F

OPERATING MODE

- Fully automatic operation / semi automatic operation (based on final pressure)
- Operation via signal (digital/analogue) from level indicator gas balloon (only applicable with rare gas recovery systems; please specify in case of order: digital or analogue)
- Operation based on intake pressure (booster w/o inlet pressure reduction); in case of compressor and/or with inlet pressure reduction – on request.
- Leakage test / valve test
- Lead/lag operation for up to 4 compressor units (active / passive or mixed)
Working hour catch up possible for active lead/lag operation (communication by CANbus)
Passive lead/lag operation: start/stop + operation signal (potential free)
 - In case of passive lead/lag, please mention this in your order (not standard scope of supply)
 - For the master compressor we recommend to order the option “maintenance switch”; in case of master maintenance/failure the B-Control II will remain active, but the motor power will be disconnected which allows maintenance/repair without disconnection of the interconnected operation.

SUPERVISION OR CONTROL OF

- Intake pressure (only rare gas and nitrogen units)
- Final pressure
- Oil pressure
- Ambient (=cooling) air temperature
- Motor overcurrent
- Maintenance interval
- Signal for automatic condensate drain device incl. cycle registration
- Signal for solenoid valve at intake line (only rare gas and nitrogen units)
- Signal for solenoid valve between condensate tank and inlet buffer vessel (only gas tight rare gas units)

EXCHANGE CONNECTION FOR

- Remote start/stop (dry contact)
- Collective fault report (dry contact)
- 2 x USB 2.0
- Ethernet 10/100 (RJ45 twisted pair) (for e.g. connection to PC, network or Internet)
- CF – card for operating system, program and settings/user data (128 Mb)
- Interface: CAN bus layer 2 (standard), Modbus RTU RS485 (standard), Profibus DP slave (option)
- B-Messenger (GSM, analogue)

AVAILABLE LANGUAGES

- German, English, French, Chinese, Czech, Danish, Dutch, Finnish, Italian, Japanese, Polish, Portuguese, Russian, Swedish, Taiwanese, Turkish, further languages upon request.

OPTIONS

- Monitoring of interstage pressure of all stages
(via pressure sensor, actual values shown in the B-CONTROL II display, compressor switch off in case of too high interstage pressure).
- Monitoring of temperature of all stages
(via Pt1000, actual values shown in the B-CONTROL II display, compressor switch off exceeding / underrun the allowed temperature range).

› SOFT-STARTER

- Gentle start-up of the (directly coupled) compressors
- Recommended upwards of 75 kW motor output, standard in combination with B-CONTROL II (from 75 kW motor output)
- Starting current approx. 4.5- to 6.5-fold

SCOPE OF SUPPLY

- Soft-starter, integrated inside the control box* of the compressor control

* Given the large size of the components (soft starter) a larger control box is required for B-CONTROL when ordering a soft starter.

➤ **ADDITIONAL PRESSURE & TEMPERATURE MODULE**

- Pressure sensors for supervising inter stage pressures
- Temperature sensors for supervising the temperature of all stages
- Values will be displayed on the B-CONTROL II display
- Shut down of compressors in case of deviation from specified values

➔ **Only in combination with B-CONTROL II**

➤ **Interstage manometer set**

- Manometer displays intermediate pressure and oil pressure
- Diameter: 63 mm
- With shut-off valve
- The pressure gauges are mounted at suitable position



Interstage manometer

➤ **SUPER SILENT housing**

Super Silent compressor housing is fully noise-insulated with optimised cooling air intake. The Super Silent soundproofed housing is recommended for applications where reduced noise is a priority, e.g. work environments.

- Closed design features targeted cooling air intake.
- Big doors (Partly removable), ensuring fast access for maintenance.
- An exhaust air duct is easy to fit.
- Reduces acoustic pressure to:
 - 76 dB(A) ± 2 (ISO 3744) to 15 kW
 - 78 dB(A) ± 2 (ISO 3744) to 18,5 kW
 - 79 dB(A) ± 2 (ISO 3744) to 22 kW
- Finish: Basic frame RAL 7024, housing RAL 9006, Control Cyan

Super Silent housing only available in combination with compressor control B-CONTROL III!



Compressor K 22.x with Super Silent housing

➤ **OFFSHORE-PAINTING**

BAUER OFFSHORE

- For aggressive and salty environments the compressor frame, compressor block, compressor control and attachment parts are painted following BAUER Offshore quality.
- Painting according to BAUER standard BS-coat-5001

For especially challenging applications painting can be executed acc. to C5M-quality as well. Details on request.

Corrosivity category of the environment	Loss of thickness in the 1st year [µm]		Examples of typical environments	
	Carbon steel	Zinc	Outdoor	Indoor
C 1 inoffensive	≤ 1.3	≤ 0.1	-	≤ 60% relative air humidity, heated buildings (with neutral atmosphere)
C 2 light	> 1.3 - 25	> 0.1 – 0.7	slightly polluted atmosphere, dry climate, e.g. rural areas	non insulated buildings with intermittent condensation
C 3 moderate	> 25 - 50	> 0.7 – 2.1	atmosphere in towns and industry with moderate SO ₂ pollution or temperate coastal climate	room with high relative air moisture and some pollution
C 4 strong	> 50 - 80	> 2.1 – 4.2	industrial atmosphere and coastal atmosphere with moderate salt load	e.g. production halls in chemical industry, swimming baths
C 5 very strong I	> 80 - 200	> 4.2 – 8.4	industrial atmosphere with high relative air moisture and aggressive atmosphere	buildings or areas with almost permanent condensation and high pollution
C 5 very strong M	> 80 - 200	> 4.2 – 8.4	coastal and offshore areas with high salt load	

Environmental condition according to DIN EN ISO 12944-2

➤ **Condensate collection system**

- 60-litre PVC tank, capacity approx. 40 litres
- Exhaust air is filtered by a soundproofed active charcoal filter
- Filling level display with visual warning when the collector requires emptying (optionally with signal for B-CONTROL)
- Drain tap for condensate, connector thread G ½"
- Dimensions: Ø 400 mm x 1.000 mm, weight approx. 15 kg



40 l Condensate collection system

Status: 08/02/2017

➤ REGENERATION TYPE DRYER SECCANT-III

Up to 1500 l/min flow

Regenerative drying system assembled onto panel for wall mounting or floor installation

SCOPE OF SUPPLY

- Electrical control B-CONTROL
- Oil and water separator with micronic filter insert
- Automatic condensate drain
- Automatic switch-over-device with pressure compensation
- 2x Filter housing with molecular sieve cartridges
- Final pressure safety valve
- Particle filter
- Pressure maintaining- and check valve
- Gauges to show operation pressure and regeneration pressure
- For air units: exhaust silencer to reduce noise during purge cycle
- For gas units: recycling of purge gas to compressor inlet



TECHNICAL DATA

- Dimensions (LxWxH in mm): 1150 x 260 x 1260 resp. 1350 x 260 x 126 (SECIII–A)
- Weight: 150 kg resp. 180 kg (SEC III–A)
- Air / Gas connection: Fitting Ø 10mm
- Condensate connection: Fitting Ø 15mm
- Power supply: 50/60 Hz, 230V or 24V DC
- Air/gas loss due to regeneration: approx. 5 % of air/gas inlet flow
- Total air/gas consumption: approx. 10-12 % of air/gas inlet flow

GAS QUALITY

Values refer to ambient temperature: 20°C		Quality class according to ISO8573-1:2010
Pressure dew point (90 bar – 350 bar):	- 20°C	3
Oil content (droplets, aerosols, moisture)*:	< 0.1 mg/Nm ³	2
Particles	1 µm	2

Different gas quality upon request

** Refers to SECCANT with activated carbon cartridge*

All filter housings are designed, manufactured and tested in accordance with AD 2000-Data Sheets and PED. Pricing for non-standard housing certification can be provided upon request.

VERSIONS

	Max. flow rate [l/min]	Max. working pressure*	
		350 bar	420 bar
SECCANT III	1500	•	•
SECCANT III-A	1500	•	•
SECCANT III-AH	1500	•	--

* Safety Valve Set Pressure; working pressure approx. 20 bar less

OPTIONS

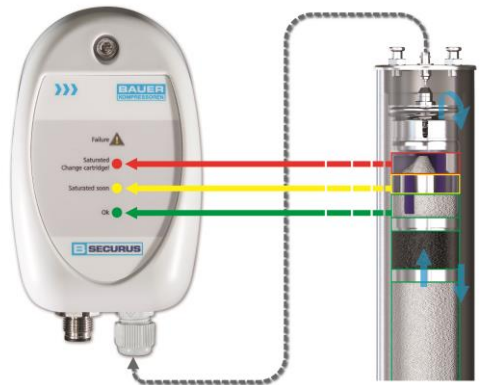
- **-A:** additional cartridge with activated carbon for oil removal (add. filter housing)

› B-SECURUS filter cartridge monitoring system

The B-SECURUS System continuously monitors filter cartridge saturation levels by measuring the moisture in the molecular filter and showing a warning in the display of the B-CONTROL MICRO unit when it is time to change the cartridge. When the dryer cartridge is 100% saturated the B-SECURUS automatically shuts down the system.

Folgende Meldungen werden in der B-CONTROL Steuerung angezeigt:

- Green segment: Filter cartridge OK
- Yellow segment: Cartridge nearing saturation
- Red segment: Cartridge saturated or contact fault. Compressor is shut down



B-SECURUS Filter Cartridge Monitoring System

Filter cartridge monitoring	B-SECURUS
Supply voltage	24 V DC
Power consumption	3 VA
Contact switching power	6 A/250 V
Protection class	IP 65

➤ **Pressure dew point monitoring**

Dew point sensor for continuous measuring of the pressure dew point; installed downstream after the purification cylinders. Consisting of dew point sensor, mounting adapter, cable and installation.



Dew point sensor

Technical Data	
Measurement range:	-100 ... +20 °C (Dew point)
Accuracy:	± 2 °C
Pressure range:	max. 450 bar
Operating humidity:	0-100 %
Temperature range:	-40...+60 °C
Protection class:	IP 66

The dew point is shown in the B-CONTROL display of the SECCANT.

➤ **High-pressure storage systems**

Modular high-pressure storage system for storage of air / gases, extendable. The storage units can be set up separately or on an extended basic frame (to be ordered separately).

The extended basic frame enables the compressor and up to 2 storage cylinders with a geometric volume of 50 / 80 litres each to be combined in a turnkey system.



B50

B100

SCOPE OF DELIVERY:

▪ **B 80 S / B 160 S – Standard module**

Storage cylinder(s) upright, mounted on console, connection at bottom, with safety valve and manometer, globe valve and condensate drain / air bleeder valve.

▪ **B 80 A / B 160 A – Extension module**

To extend the above standard modules as required for storage of high volumes. Scope of delivery as standard module but without safety valve and manometer; where multiple storage cylinders are to be added, a connection is required for each additional extension module.

- **B 80 B, without console**

Storage cylinder, with cylinder valve; excluding condensate drain valve

Option: Clamp for wall mounting, safety valve (supplied loose)

Where multiple storage cylinders are to be added, a connection is required for each additional extension module.

- **B 50 S / B 100 S - Standard module**

Storage cylinder(s) upright, mounted on console, connection at top (360 bar) or at bottom (420 bar), with safety valve and manometer, globe valve and condensate drain / air bleeder valve.

- **B 50 A / B 100 A - Extension module**

To extend the above standard modules as required for storage of high volumes.

Scope of delivery as standard module but without safety valve and manometer;

where multiple storage cylinders are to be added, a connection is required for each additional extension module.

COLOUR:

- Console RAL 7024 (grey) Storage container RAL9010 (white for B80/160) or RAL 7024 (grey for B50/100).

TECHNICAL SPECIFICATION

	330 bar		360 bar		420 bar	
	B 80	B 160	B 50	B 100	B 50	B 100
Numbers of storage bottles:	1	2	1	2	1	2
Storage medium:	Air, Nitrogen, Rare gases					
Geometric volume cylinder:	80 Litre		50 Litre		50 Litre	
Geometric volume storage:	80 Litre	160 Litre	50 Litre	100 Litre	50 Litre	100 Litre
Safety valve max.:	330 bar		360 bar		420 bar	
Storage pressure max.:	320 bar		350 bar		400 bar	
Weight:	145 kg		92 kg + console	184 kg + console	80 kg + console	160 kg + console
Design as per:	DGLR 97/23-EG und AD2000 ¹					

¹ Other certificates / approvals on request.

MODULE H/H1 CERTIFICATION

BAUER KOMPRESSOREN has H/H1 certification for the following high pressure storage cylinders: B50, B80, B100 und B160. Therefore individual TÜV approval is no longer required if the cylinders form part of the compressor system assembled exw. Munich.

The various types of high pressure storage cylinders will display the following label:

- Storage cylinder with safety valve: label with CE0036
- Storage cylinder without safety valve: label without CE0036

TECHNICAL INFORMATION

The pressure vessels comply with the German regulations for non-portable installation.
Gases: Group 2 (air, N₂, rare gases)

› INSTALLATION / COMMISSIONING

- All components of the unit are pre-assembled and ready for electrical connection.
- Our local agent will be eager to assist you with the following installation works against add. charges:
 - Installation and connection of all components
 - Placing of HP-piping
 - Test run with record
 - Training of operation personnel
- Please ask for a separate quotation.

Relevant EC Directives (where applicable)

- › EC Machinery Directive (2006/42/EC)
- › EC Pressure Equipment Directive (2014/68/EU)
- › EC Low Voltage Directive 2006/95/EC
- › EC Electromagnetic Compatibility (EMC) 2004/108/EC

Applied national standards and technical specifications, in particular

- › Betriebssicherheitsverordnung (German Industrial Safety Regulation) of 27 September 2002
- › AD 2000
- › Unfallverhütungsvorschrift (BGR; German Accident Prevention Regulations) BGR 500
- › All BAUER filter housings are designed, manufactured and tested in line with Accident Prevention Regulations and regulations under AD-2000 provisions and DGRL2014/68/EU.

Documentation:

Standard units:

- 1 × Instruction Manual (EC languages) and parts list with exploded drawings
- 1 × Declaration of conformity (CE) resp. EC manufacturer's declaration
- 1 × Pressure vessel documentation

Standards:

Manufacturing according to German Regulations and Standards

Testing:

Bauer Standard according to DIN EN 10204-3.1

TECHNICAL INFORMATION

Flow rates

The flow rates given are defined and specified in accordance with ISO 1217. In applications requiring continuous volume flow, please note that when condensate is drained at regular intervals, air / gas is released with the condensate and does not arrive at the compressor outlet. The actual flow rate is thus reduced by approx. 1-2% per stage or separator.

Intake pressure

Unless otherwise specified, the compressors are designed for atmospheric intake pressure. In gas compression or where intake pressure reduction is used, the intake pressure is set at a low number of mbarg. If higher intake pressure is required, please contact BAUER KOMPRESSOREN for support (where necessary, larger motor / limitation of intake pressure depending on the block, unit configuration and gas involved).

Power consumption

The power consumption of the compressors [kW] is given for atmospheric primary pressure and maximum final pressure. In gas compression (intake pressure reduction) primary pressure is several mbar higher, increasing power consumption. Energy consumption also increases at low temperatures, which may require a more powerful motor to be used.

Installation

The compressors are designed for an installation location at a maximum of 2000m above sea level. Higher locations are possible on request depending on the compressor.

Further important information on installation and location is given in the Installation Manual.

Weight specifications

Weight specifications are given for standard versions without optional features. The weight of the units will increase if optional extras, different voltages etc. are selected or if motors from different manufacturers are used.

Systems at 60 Hz - Applications

BAUER Compressors are designed for 50 Hz as standard.

V-belt drive: Different V-belt pulleys are used for operation at 60 Hz. This may result in deviations in FAD and power consumption.

Direct coupling: A frequency inverter is required for operation at 60 Hz to limit the speed to a maximum of 1485 rpm.

Dimensioning

For optimum lay-out of the complete system all components (compressor, purification, storage cylinders, etc.) shall be matched in the best possible way. The number of starting cycles (4 per hour up to 15 kW, 2 per hour from 18.5 kW) shall not be exceeded. Effective running time per cycle shall be min. 15 minutes (up to 15 kW) resp. 30 minutes (from 18.5 kW) in order to reach an optimum between exploitation of the unit and actual life time.

GENERAL INFORMATION:

Otherwise the **General Terms and Conditions of BAUER KOMPRESSOREN (AGB)** in the version valid at the time of contract conclusion apply. These Terms & Conditions can be viewed and downloaded at the website www.bauer-kompressoren.com, or sent by BAUER on request. All information is given without assumption of liability and subject to technical changes.