

## THE AIR-COOLED INDUSTRIAL RANGE

Efficient compressor systems for air and gases

- › 25 – 500 bar
- › 39 – 408 m<sup>3</sup>/h
- › AIR-COOLED
- › V-BELT DRIVEN
- › FOR AIR, NITROGEN,  
AND RARE GASES



Companies that rely on absolute operating safety and investment security in their inspection or production processes have confidence in 65 years of BAUER-experience in **High-Pressure Systems Technology**. Whatever application you want to realize with medium or high pressure air or nitrogen, we support you in every respect. Our service includes project planning, installation of complete turn-key systems, certifications of all kinds and, of course, a reliable after sales service as well as a guaranteed spare parts supply for decades - worldwide.

## The unit ranges K22 to K28

For more than 65 years, BAUER KOMPRESSOREN as a specialist provider has offered complete turn-key compressor systems in the high and medium pressure range. Owing to the modular construction and innumerable configuration possibilities, the systems from BAUER can be perfectly adapted to nearly every customer requirement and enlarged later as required.

### Comprehensive standard equipment

- › Air-cooled compressor block with force-feed lubrication, interstage and after coolers, interstage separators after each stage, final oil and water separator
- › Final pressure safety valve, pressure maintaining and check valve
- › Automatic condensate drain device with unloaded start and 40 liter condensate collecting system
- › V-belt drive with energy-efficient electric motor in accordance with IE3 standard
- › All components mounted on a common base frame with shock absorbers for free-standing installation
- › Fully automatic and programmable compressor control B-CONTROL II
- › Gas intake line is required if nitrogen is supposed to be compressed.<sup>1)</sup>
- › Ease of maintenance, best access and user friendliness are all integral to the machine design.
- › BAUER compressor units are delivered to the customer completely tested and ready for operation.



IK22 unit



IK23 unit

### Optional

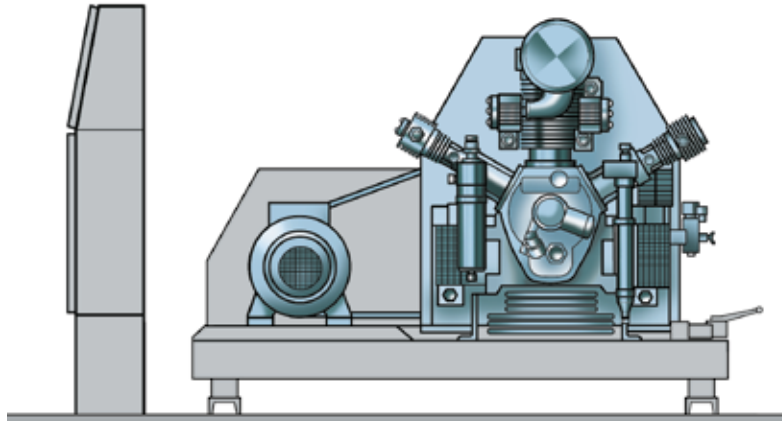
- › The Super Silent Version includes a noise abating closed cabinet.
- › The B-MESSENGER transfers information from the B-CONTROL II to the customer.

<sup>1)</sup> consisting of: particle filter, non-return/solenoid valve, sensors for intake pressure monitoring



IK25 unit

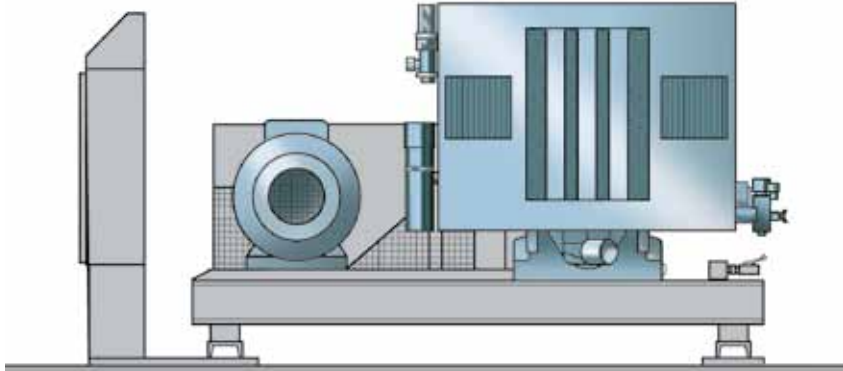
## Dimensions and configurations



### K22 range

Dimensions in mm (approx.):

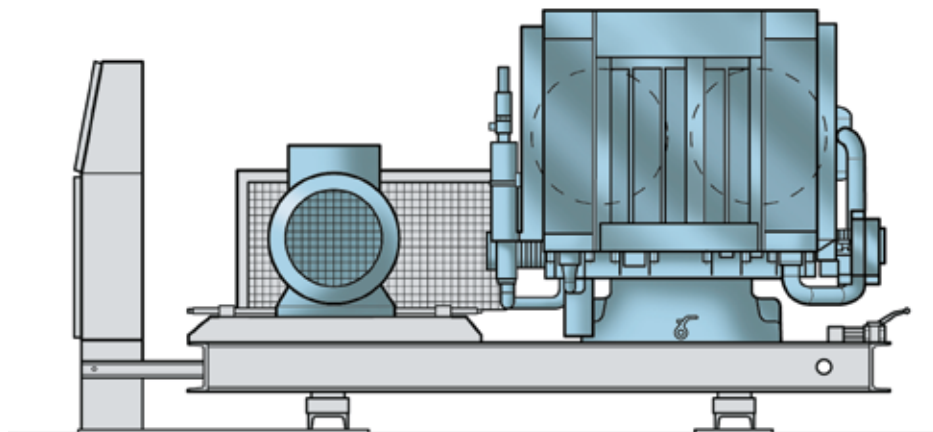
Length: 2140 Width: 720 Height: 1250



### K23 range

Dimensions in mm (approx.):

Length: 2260 Width: 865 Height: 1315



### K25/28 range

Dimensions in mm (approx.):

Length: 3020 Width: 1300 Height: 1525

## BAUER system technology - safe and economical

Simple operation and low maintenance costs can only be achieved through intelligent unit design. The engineering team at the BAUER Research and Development Center strives to ensure that BAUER keeps at the forefront of technology.

Our product portfolio includes a complete range of machines to suit standard applications and is complimented by our ability to design and construct special compressor units for customer defined applications.



*IK22 super silent unit*

- › Maximum space saving through compact design. All BAUER components are mounted on a common base frame and arranged with forethought and care to ensure space saving is at a premium.
- › Smooth unit running for maximum machine life. Considerable time and engineering goes into the design of the generously dimensioned shock absorbers and rigid base frames fitted to BAUER compressors to guarantee the best possible isolation of vibration. This minimizes the effect on the environment and assures maximum machine life with greatly reduced stresses on component parts.
- › Simple operation saves money. The principles behind the design of BAUER compressor units are logic and simplicity. Ease of maintenance, best access and user friendliness are all integral to the machine design. Simple operation, simple maintenance and easy adaptation to special requirements saves time and saves money.
- › Ready to use with turn-key systems. BAUER compressor units are delivered to the customer completely pretested and ready for operation. This guarantees a quick, simple and safe commissioning.



## UNCOMPROMISED QUALITY

through perfect control. BAUER ensures maximum quality by extensive quality assurance monitoring during production according to the requirements defined in DIN EN ISO 9001.

- › Each single compressor block is tested in a continuous test run.
- › The final unit test is done under real operating conditions.
- › Each compressor unit undergoes an extensive function- and safety test.
- › All units are built to satisfy customer requirements.



*B-CONTROL II compressor control*



*Highly efficient cooling system*

## VARIABLE USE

Several drive variants and container solutions allow for tailor-made systems for a wide variety of applications.

- › In addition to electrical drives, units for mobile use can be equipped with diesel engines.
- › Container installations for mobile or stationary use are also part of our standard program, alternatively with electrical or diesel drive.

## TOTAL CONTROL

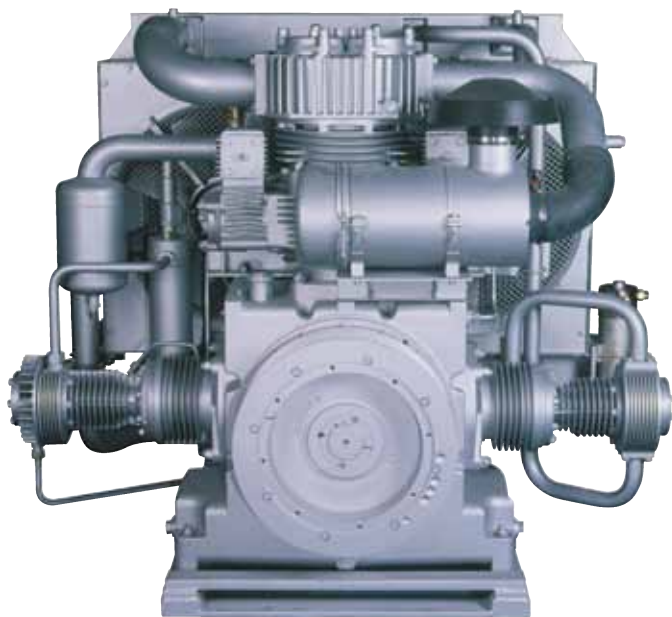
with B-CONTROL II. Many industrial processes require remote monitoring and fully automatic operation.

- › The BAUER B-CONTROL II with clear display controls the compressor, the motor as well as the automatic condensate drain.
- › Pressure and temperature monitoring of each stage ensure maximum operating safety.
- › Compressor operation can be regulated via integrated final pressure sensors in the storage cylinders.
- › B-CONTROL II comprises a maintenance management system. Due maintenance tasks are indicated. The operator can call up information about the current maintenance state of single components and security-relevant pressure vessels at any time.
- › B-MESSENGER (optional) informs the operator via SMS, e-mail or online access about all relevant compressor data, e.g. forthcoming maintenance work or filter changes.
- › The B-CONTROL II (PLC control) allows free programming acc. to customer's requirements.

## Heart of the unit - the air-cooled compressor blocks

More than 65 years of experience and the knowledge in our Research and Development Center are devoted to each BAUER compressor block. BAUER compressor blocks have a legendary world wide reputation for excellence due to their reliability and durability.

Our reputation has been well earned through considerable time and effort spent on the development of our machines with intelligent detailed solutions and the use of highest quality materials combined with uncompromised manufacturing quality.



BK28 compressor block

- › Designed for continuous operation. The intelligent cooling system with over-sized coolers combined with large-surface ribbed cylinders ensure optimum cooling of each compression stage.
- › The bearings in the BAUER compressor are designed and constructed for a working life of more than 30.000 operating hours. An efficient forced feed lubrication system with an oil micro filter guarantees minimum of wear of all moving parts.
- › Low costs for maintenance and operation. Long maintenance intervals for valve checking and oil change as well as piston ring check keep the operating costs for the unit at a minimum.
- › High efficiency guaranteed. Optimized cylinder design and gas flow characteristics provide the BAUER compressor with absolute maximum performance at minimum power consumption.
- › Trimmed for quiet running. All driving gears are dynamically balanced for a smooth and vibration-free running.

## Technical Data

Model	F.A.D. <sup>1)</sup>		Intake pressure	Final pressure		Number of stages	Speed	Motor power	Power consumption <sup>2)</sup>	Net weight
				min	max <sup>2)</sup>				at final pressure	approx.
	l/min	m <sup>3</sup> /h	bar (g)	bar	bar		min <sup>-1</sup>	kW	kW	kg
<b>Compressor, 25 to 35 bar</b>										
A 22.5-11	800	48	0-0,1	25	35	3	1050	11	10	450
A 22.5-15	1000	60				3	1310	15	12,6	460
A 23.4-18,5	1450	87				3	980	18,5	18,2	610
A 23.4-22	1700	102				3	1150	22	21,5	670
A 25.4-30	2100	126				3	940	30	26,5	1360
A 25.4-37	2800	168				3	1200	37	35,3	1430
A 28.2-45	3400	204				3	1050	45	43	1400
A 25.5-55	4200	252				3	940	55	53	1850
A 25.5-75	5500	330				3	1200	75	70	1990
A 28.3-90	6800	408				3	1050	90	86	2160

1) measured acc. to ISO 1217

2) possibly limitations through downstream components

Model	F.A.D <sup>1)</sup>		Intake pressure	Final pressure		Number of stages	Speed	Motor power	Power consumption <sup>2)</sup>	Net weight
				min	max <sup>2)</sup>				at final pressure	approx.
	l/min	m³/h	bar (g)	bar	bar		min <sup>-1</sup>	kW	kW	kg
Compressor, 30 to 63 bar										
B 22.5-11	670	40	0-0,1	30	63	3	920	11	10	450
B 22.5-15	950	57				3	1310	15	14,2	460
B 23.4-22	1350	81				3	920	22	20	670
B 23.4-30	1730	104				3	1200	30	26	740
B 25.4-37	2400	144				3	1070	37	36	1430
B 25.4-45	2850	171				3	1270	45	43	1460
B 28.2-55	3400	204				3	1050	55	51	1500
B 25.5-75	4700	282				3	1050	75	71	1990
B 28.3-90	5900	354				3	940	90	88	2080
B 28.3-110	6800	408				3	1050	110	102	2330
Compressor, 64 to 75 bar										
E 22.5-15	850	51	0-0,1	64	75	3	1150	15	13,7	460
E 23.4-22	1280	77				3	920	22	20	670
E 23.4-30	1700	102				3	1200	30	27,2	735
E 25.4-37	2000	120				3	940	37	33	1430
E 25.4-45	2600	156				3	1200	45	42	1460
E 28.2-55	3300	198				3	1050	55	53	1500
Compressor, 75 to 90 bar										
E 22.0-11	650	39	0-0,1	75	90	4	900	11	10,4	480
E 22.0-15	800	48				4	1100	15	13	490
E 22.0-18,5	950	57				4	1300	18,5	15,7	510
E 25.0-30	1600	96				4	1000	30	26	1650
E 25.0-37	2000	120				4	1250	37	33	1720
E 28.0-45	2500	150				4	800	45	40	1780
E 28.0-55	3300	198				4	1050	55	53	1800
Compressor, 90 to 350 bar										
I 22.0-15	650	39	0-0,1	90	340	4	980	15	14,5	610
I 22.0-18.5	800	48				4	1180	18,5	17,9	670
I 22.0-22	930	56				4	1320	22	20,5	690
I 23.0-30	1300	78				4	1200	30	28	1000
I 23.0-37	1480	89				4	1400	37	34	1050
I 25.0-45	1900	114				4	1180	45	41	1750
I 28.0-55	2500	150				4	830	55	50	1900
I 28.0-75	3500	210				4	1180	75	72	1950
Compressor, 350 to 420 bar										
I 22.0-22-420	800	48	0-0,1	350	420	4	1180	22	19	690
Compressor, 350 to 500 bar										
I 25.9-45	1900	114	0-0,05	350	500	5	1180	45	42	1930
I 25.18-55	2300	138	0-0,05	350	500	5	1100	55	51	1950

# The BAUER industrial program

**BAUER**  
KOMPRESSOREN

**THE WATER-COOLED INDUSTRIAL RANGE**

Energy-efficient compressor systems for air and gases

› 25 – 420 bar  
› 55 – 1716 m³/h

› WATER-COOLED  
› PRESSURE-RESISTANT CRANKCASES  
› FOR AIR, NITROGEN, CNG AND RARE GASES



The water-cooled industrial range from BAUER provides high F.A.D.s while requiring little space and offering a wide spectrum of primary pressures. The pressure-resistant crankcases of the block ranges K23, K24, K25 and K52 minimize the maintenance requirements and allow for an outstanding compact unit design. The external oil pump makes inclination angles of up to 30 degrees possible, which is a precondition for mobile use on vehicles and installation on ships.



www.bauer-kompressoren.de

**BAUER**  
KOMPRESSOREN

**THE G-RANGE**

Compressor units for rare gases

› 25 – 350 bar  
› 85 – 5360 l/min

› FOR HELIUM AND ARGON  
› AIR AND WATER-COOLED  
› FOR MEDIUM AND HIGH PRESSURE



High-performance complete system solutions for reliably compressing, purifying, storing, distributing and recovering of rare gases. The compressors from BAUER which are especially modified for the treatment of rare gases guarantee safe and reliable operation for your process. Filter systems from BAUER provide for a consistently high gas quality. The B-CONTROL compressor control and an optional noise absorbing construction offer high user convenience. For special application conditions, water-cooled compressors and boosters are available.



www.bauer-kompressoren.de

**BAUER**  
KOMPRESSOREN

**MINI - VERTICUS III**

Compact Air and Nitrogen Compressor

› 85 - 1550 l/min  
› 25 - 350 bar

› SOUNDPROOF  
› COMPACT AND POWERFUL



The new MINI-VERTICUS III. An approved unit in a new design, that sets new standards in technical excellence and ergonomics. The perfect unit for small rooms and industrial applications - either as a booster or compressor drawing air from the atmosphere. Designed for long life and low operating costs.



www.bauer-kompressoren.de

**BAUER**  
KOMPRESSOREN

**VERTICUS 5 INDUSTRY**

The Compressor System for Air and Nitrogen

› 85 – 1980 l/min  
› 25 – 500 bar

› FOR MEDIUM AND HIGH PRESSURE  
› PROVEN RELIABILITY  
› WIDE VARIETY OF USES



The heavy duty system with excellent reliability for compressing air and nitrogen. The BAUER B-CONTROL combines fully automatic start-stop operation with maximum user confidence. The optional BAUER purification systems offers high gas and air purity. Units available in standard open or Super Silent version.



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**BAUER**  
KOMPRESSOREN

**THE P-PURIFICATION SYSTEM**

For air and gas of the highest quality

› 200 – 3500 l/min  
› 140 – 420 bar

› FOR PURIFICATION OF AIR, N₂ AND RARE GASES  
› GENERATES PUREST BREATHING AIR, INDUSTRIAL AND MEDICAL AIR



The P-purification system from BAUER guarantees totally reliable air and gas purification for the application in question. No matter whether you count on the purest breathing air as a diver or firefighter or if you have to trust in perfectly purified process air in the industrial field: 65 years of BAUER experience in purification, intensive research and the toughest material tests guarantee uncompromising quality and absolute safety.



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**BAUER**  
KOMPRESSOREN

**THE SECCANT RANGE**

Regenerative dryer for air and gas

› 1500 – 3500 l/min  
› 90 – 420 bar

› EASY INTEGRATION  
› B-CONTROL COMPRESSOR CONTROL  
› OPTIONAL FILTER MONITORING  
› GAS-TIGHT HELIUM CONSTRUCTION



Drying air and gases economically. At high pressures and high throughput. This is the strong point of the SECCANT regenerative dryer from BAUER. For dehumidifying and purifying air, nitrogen and rare gases, the SECCANT regenerative dryers offer a tailor-made system solution for every application. For solutions requiring absolute continuous operation, where the process do not permit any interruption, can also be used in combination with a bypass filter system from BAUER. By means of an external control room, online control and online monitoring of SECCANT and the compressor unit can be implemented.



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