Technical Data Sheet

Series:

CAPITANO 140

Mobile High Pressure Compressor for Compressing Air and Breathing Air

Types:

CAPITANO 140-E | CAPITANO 140-B

Production status: F01

CAPITANO 140-E

General	
Medium	Air
Intake pressure	Atmospheric
Filling pressure	PN200 / PN300
Pressure setting, final pressure SIV	225 bar / 330 bar / 350 bar
Working pressure	220 bar / 320 bar / 340 bar
Permissible ambient temperature range	+5...+45°C
Permissible altitude	0...1,500 m AMSL
Max. permissible tilt	15°
System type	Open
Standard operating voltage	400 V; 50 Hz
Other operating voltage	On request
Compressor oil, standard	Synthetic
Oil change interval	Synthetic : every 2 years / 2,000 h Mineral: 1x annually / 1,000 h
Finish	CYAN (front) / RAL 7024 (sides)

Status: 30/01/2015

CAPITANO 140

Compressor system	CAPITANO 140-E	CAPITANO 140-B
Charging rate [1]	140 l/min	
Purification System	P 21	
Cooling air flow, min.	1,080 m³/h	
Sound pressure level	80 dB(A)	83 dB(A)
Weight in kg [2]	102 kg	95 kg
Dimensions (LxWxH) [2]	1,150 x 590 x 550 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	CAPITANO 140-E	CAPITANO 140-B
Motor	Three-phase	Pertrol 4-stroke
Power	3.0 kW	4.0 kW
Operating voltage/frequency [1]	400 V, 50 Hz	400 V, 50 Hz
Speed	2,880 1/min	3,600 1/min
Protection class	IP55	IP55

1 Different voltage / different frequency available at extra charge on request.

Status: 30/01/2015

STANDARD SCOPE OF SUPPLY:

Compressor block with following features:

- Oil pump for pressure lubrication
- Micronic intake filter: 10 µm
- Intermediate coolers, air cooled
- Aftercooler, air cooled, outlet temperature approx. 10-15 °C above cooling air temperature
- Intermediate separators after each stage (except 1st stage)
- Final separator for oil and water condensate after last stage
- Sealed safety valves after each stage
- TÜV approved final pressure safety valve
- Pressure maintaining and check valve after the final stage

Compressor block	**IK100**
Charging rate [1]	140 l/min
Speed	1,300 1/min
Number of stages	3
Number of cylinder	3
Cylinder bore 1st stage	70 mm
Cylinder bore 2nd stage	36 mm
Cylinder bore 3rd stage	14 mm
Stroke	40
Direction of rotation (from flywheel side)	Left
Drive type	V-belt
Intermediate pressure 1st stage	4 bar
Intermediate pressure 2nd stage	37 bar
Amount of oil	2.8 l
Oil pressure	Ca. 5 bar
Intake pressure	1.0 bar_a

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

ON/OFF switch with motor protection

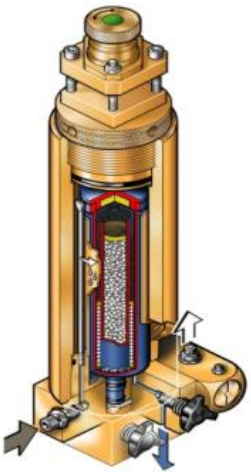
Consisting of:

- On/off switch
- Cable, length 5 m
- CEE – plug (only with operating voltage 400 V / 50 Hz)

Status: 30/01/2015

Purification system P 21 - Filter with integrated oil and water separator

- final mechanical separator for the removal of oil-/ water condensate
- TRIPLEX long-life filter cartridge processing in 4 stages (drying, neutralization, CO-removal, micro filtering)
- final safety valve, fitted to filter housing
- Pressure maintaining / non return valve, fitted to filter housing



Purification System P 21

Air quality as per DIN/EN 12021:

Contamination	Maximum content as per DIN EN 12021	Air quality by BAUER
H_2O	25 mg/m³	≤ 10 mg/m³
CO	5 ppm(v)	Depends on cartridge [1]
CO_2	500 ppm(v)	Depends on intake air [2]
Oil	0.5 mg/m³	≤ 0.5 mg/m³

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 The level of CO_2 in the intake air must not exceed the maximum level of CO_2 as per DIN EN 12021**!**

Purification System	P 21
Operating pressure (Standard)	PN200 / PN300
Operating pressure max (PS)	330 bar
Pressure dew point	< -20 °C, equivalent to 3 mg/m³ at 300 bar
Piping connections	G 1/4“ (condensate drain G 1/8“)
Filter housing volume	0.57 l
DGRL 97/23/EG	Vessel category II
Processable air capacity (at ambient temperature 20°C and 300 bar)[1]	130 m³

1 When using a BAUER P 21 filter cartridge without hopcalite. When using a cartridge with CO-removal, the processable air capacity is reduced by ca. 4 %

Status: 30/01/2015

PN200 filling device

Filling Device	PN 200
Nominal pressure (PN)	200 bar
Valve type	1 filling valve with integrated air bleeder, with German cylinder connector G 5/8" DIN 477 and manometer, PN200
Filling hose	1 Unimam high pressure filling hose, 1 m length
International cylinder connector	1 international cylinder connector

Or

PN300 filling device

Filling Device	PN 300
Nominal pressure (PN)	300 bar
Valve type	1 filling valve with integrated air bleeder, with German cylinder connector G 5/8" DIN 477 and manometer, PN300
Filling hose	1 Unimam high pressure filling hose, 1 m length

International filling connector

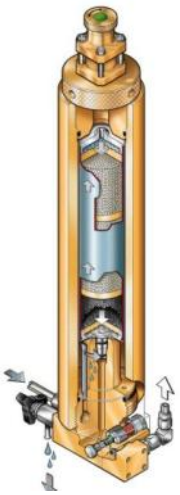
Filling device PN200 (black) and PN300 (red)

Status: 30/01/2015

OPTIONS:

Purification System P 31 - Filter with integrated oil and water separator

- Filter housing with long-life filter cartridge
- final mechanical separator for the removal of oil-/ water condensate
- Final safety valve, fitted to filter housing
- Pressure maintaining / non return valve, fitted to filter housing



Purification System P 31

Air quality as per DIN/EN 12021:

(see purification system in standard scope of delivery)

Purification System	P 31
Operating pressure (Standard)	PN200 / PN300
Operating pressure max (PS)	330 bar
Pressure dew point	< -20 °C, equivalent to 3 mg/m³ at 300 bar
Piping connections	G 3/8“ (condensate drain G ¼“)
Filter housing volume	1.3 l
DGRL 97/23/EG	Vessel category II
Processable air capacity (with ref. 20°C and 300 bar)[1]	615 m³

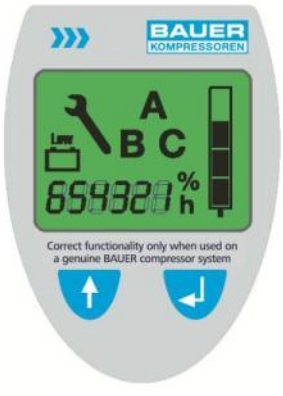
1 When using a BAUER P 21 filter cartridge without hopcalite. When using a cartridge with CO-removal, the processable air capacity is reduced by ca. 26 %.

B-TIMER

Cartridge change and maintenance becomes safe and comfortable like never before with the B-TIMER!
The mini-computer counts the operating hours and measures accurately the cartridge saturation.

On the four-part segment display the status of saturation of the cartridge can be followed up. If a cartridge change is required, the B-TIMER is flashing conspicuously and the order number of the cartridge is indicated.

The key symbol indicates that a maintenance is due. The letters A to C inform about the necessary maintenance kit.



B-TIMER Display

The robust housing resists sand, salt, sea water, high humidity and strong UV-radiation. Start/stop automatic and power save mode make operation comfortable and save the lithium cell.

Status: 30/01/2015

Compressor control incl. automatic condensate drain system

Compressor control including automatic condensate drain system and automatic switch off at final pressure

SCOPE OF SUPPLY:

- ON/OFF Switch with protective motor switch and signal-lamp operation
- Star-Delta contactor
- Transformer
- Hour meter, electrical
- Pressure switch stops the compressor unit at final pressure
- Drainage of all separators between the individual stages and also the final separator during compressor operation (standard draining interval every 15 minutes for a 6 second period)
- Timer for automatic condensate drain device
- Unloaded start integrated (automatically draining at every shut-down of the unit)
- Condensate collecting tank 10 liter, with silencer; about 5 liter capacity, for the environmentally friendly disposal of the condensate

Compressor control

Automatic condensate drain system

For petrol version, the automatic condensate drain system is supplied without control!

Status: 30/01/2015

Additional PN 200 filling device

Filling Device	PN 200
Nominal pressure (PN)	200 bar
Valve type	1 filling valve with integrated air bleeder, with German cylinder connector G 5/8" DIN 477 and manometer, PN200
Filling hose	1 Unimam high pressure filling hose, 1 m length
International cylinder connector	1 international cylinder connector

Additional PN 300 filling device

Filling Device	PN 300
Nominal pressure (PN)	300 bar
Valve type	1 filling valve with integrated air bleeder, with German cylinder connector G 5/8" DIN 477 and manometer, PN300
Filling hose	1 Unimam high pressure filling hose, 1 m length

Switch-over device PN 300 / PN 200

The switch-over device enables breathing air cylinders to be filled with both 200 bar and 300 bar. For optimum limiting of the maximum operating pressure, each of the two pressure ranges is protected with a type-tested final pressure safety valve.

High-quality high-pressure filling hoses made from food-safe and long-life hose material make for flexible and safe handling. Swivel hose connections enable the filling valve to be connected to the breathing air cylinder quickly, easily and safely.

Switch-over device

Crash frame with handles

The corrosion-resistant crash frame provides additional protection for the unit and can accommodate additional accessories such as a compressor control or a larger filter system. The handles make moving the unit easy and convenient.

Crash frame incl. handles

Telescopic intake tube

The telescopic intake tube is highly recommended when operating compressor units in locations with increased concentrations of hazardous substances such as CO or CO2.
It enables the intake range of the compressor to be moved to a suitable location.

Status: 30/01/2015

Trolley

The trolley provides an easy and convenient mode of transport for mobile compressor units. Fitted with pneumatic tyres, the trolley maximises mobility. Complete with 1 axle, 2 wheels and towbar mounted on the compressor frame.

CAPITANO-B with trolley

Additional intermediate separator after the first stage

In the case of operation in locations where air humidity is high (tropical regions, for example), we recommend installing a separator downstream of the first compressor stage. This can extend the service life of the unit and reduce maintenance costs.

Intermediate separater after 1st stage

Status: 30/01/2015

Relevant EC Directives (where applicable)

- EC Machinery Directive (2006/42/EC)
- EC Pressure Equipment Directive (97/23/EC)
- 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
- Technische Regeln Druckgase (TRG; **Technical Regulations for Compressed Gases**):TRG 400, 401, 402 (w/o permanent premises) and TRG 790
- 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 DGRL97/23EG.

Documentation:	1x operating manual and parts list with exploded view drawing on DVD
Design:	In line with the state of the art according to DIN, VDE, TÜV and Accident Prevention regulations
Testing:	In line with Bauer Standard as per DIN EN 10204 - 3.1

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

Status: 30/01/2015