

Mobile High Pressure Compressor for Compressing Air and Breathing Air

Types:

OCEANUS-B | OCEANUS-E | OCEANUS-W

Production status: F01



OCEANUS-W



OCEANUS-B

| General | |
|---|---|
| Medium | Air |
| Intake pressure | Atmospheric |
| Filling pressure | PN200 / PN300 |
| Pressure setting, final pressure safety valve | 225 bar / 330 bar |
| Working pressure | 220 bar / 320 bar |
| Permissible ambient temperature range | +5...+45°C |
| Permissible altitude | 0...2,000 m AMSL |
| Max. permissible tilt | 20° (for B-version), 30° (for E- and W-version) |
| System type | Open |
| Standard operating voltage | 400 V; 50 Hz |
| Other operating voltage | On demand |
| Compressor oil, standard | Synthetic |
| Oil change interval | Synthetic : every 2 years / 2,000 h Mineral: 1x annually / 1,000 h |
| Finish | CYAN (Front and back), RAL 7024 |

OCEANUS

| Compressor system | OCEANUS-B | OCEANUS-E | OCEANUS-W |
|--|--------------------------------------|-------------------------|-------------------------|
| Charging rate ¹ | 140 l/min | | |
| Purification System | P21/350 | | |
| Cooling air flow, min. | 1,836 m ³ /h | 1,080 m ³ /h | 1,080 m ³ /h |
| Sound pressure level | 87 dB(A) | 86 dB(A) | 86 dB(A) |
| Weight in kg ² | 47 kg | 52 kg | 52 kg |
| Dimensions (LxWxH) ² | 790 x 410 x 420 mm | 660 x 400 x 420 mm | 660 x 400 x 420 mm |
| Dimensions ((LxWxH) with automatic condensate drain system and control | 880 x 410 x 415 mm (without control) | 780 x 475 x 480 mm | 780 x 475 x 480 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 | OCEANUS-B | OCEANUS-E | OCEANUS-W |
|--|-----------------|----------------------|-------------------------|
| Motor | Petrol 4-Stroke | Three-phase | Single-phase |
| Power | 5.1 kW | 3.0 kW | 3.0 kW |
| Operating voltage/frequency ¹ | - | 400 V, 50 Hz | 230 V, 50 Hz |
| Rated current | - | 6 A (at 400 V/50 Hz) | 18.5 A (at 230 V/50 Hz) |
| Speed | 3,600 1/min | 2,870 1/min | 2,850 1/min |
| Protection class | IP55 (TEFC) | | |

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

STANDARD SCOPE OF SUPPLY:

› Compressor block with following features

- Oil pump for forced-feed 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 | OCEANUS-V001 |
|--|----------------------|
| Charging rate ¹ | 140 l/min |
| Speed | 2,300 1/min |
| Number of stages | 3 |
| Number of cylinder | 3 |
| Cylinder bore 1st stage | 70 mm |
| Cylinder bore 2nd stage | 28 mm |
| Cylinder bore 3rd stage | 12 mm |
| Stroke | 24 mm |
| Direction of rotation (from flywheel side) | Left |
| Drive type | V-belt |
| Intermediate pressure 1st stage | 10 bar |
| Intermediate pressure 2nd stage | 80 bar |
| Amount of oil | 1.3 l |
| Oil pressure | 4.5 bar ± 1.5 bar |
| Intake pressure | 1.0 bar _a |

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

➤ **Purification system P21/350 - Filter with separate oil and water separators**

- 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
P21/350

Air quality as per DIN/EN 12021:2014

| Contamination | 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 | ≤ 0.5 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 The level of CO₂ in the intake air must not exceed the maximum level of CO₂ as per DIN EN 12021:2014!

| Purification System | P21/350 |
|--|--|
| Operating pressure (Standard) | PN200 / PN300 |
| Operating pressure max (PS) | 330 bar |
| Pressure dew point | < -20 °C, equivalent to 3 mg/m ³ 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 |
| Air purification capacity (at ambient temperature 20°C and 300 bar) ¹ | 130 m ³ |

1 When using a BAUER P21/350 filter cartridge without hopcalite. When using a cartridge with CO-removal, the air purification capacity is reduced by ca. 4 %

➤ **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" according to DIN EN 144-2 and 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" according to DIN EN 144-2 and 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)

› B-TIMER

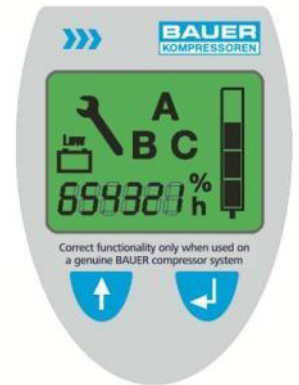
Cartridge change and maintenance becomes safe and comfortable like never before with the B-TIMER!

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.

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.



B-TIMER Display

› Stainless steel frame

Primary and supporting frame are in stainless steel for better corrosion resistance.



Stainless steel frame

OPTIONS:

› Additional 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" according to DIN EN 144-2 and DIN 477 and manometer, PN200 |
| Filling hose | 1 Unimam high pressure filling hose, 1 m length |
| International cylinder connector | 1 international cylinder connector |

› Additional 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" according to DIN EN 144-2 and 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

➤ **Automatic condensate drain system and automatic switch off at final pressure for units with petrol engine**

The automatic condensate drain removes water from the intermediate separator and the final separator automatically during both operation (every 15 minutes) and shutdown. In addition the compressor is switched off automatically when the final pressure is reached.



Automatic condensate drain system

Consisting of:

- 1x pressure switch
(2 x pressure switch when ordering with switch-over device)
- 1x condensate valve
- 1x solenoid valve

| Automatic condensate drain system | OCEANUS-B |
|-----------------------------------|--------------------|
| Principle | cascade |
| Version | 2-fold |
| Control voltage | 24- 48 V DC |
| Interval circuit (close / open) | 15 min / 6 sec |
| Solenoid valve | normally open (NO) |

➤ **Automatic condensate drain system and automatic switch off at final pressure for units with electric motor**

The automatic condensate drain removes water from the intermediate separator and the final separator automatically during both operation (every 15 minutes) and shutdown. In addition the compressor is switched off automatically when the final pressure is reached.



Automatic condensate drain system and control box

Consisting of:

- 1x control as per DIN EN 60204 (CE conformity is ensured)
- 1x pressure switch
(2 x pressure switch when ordering with switch-over device)
- 1x condensate valve
- 1x solenoid valve

| Automatic condensate drain system | OCEANUS-E, OCEANUS-W |
|-----------------------------------|----------------------|
| Principle | cascade |
| Version | 2-fold |
| Control voltage | 24 V DC |
| Interval circuit (close / open) | 15 min / 6 s |
| Solenoid valve | normally open (NO) |

| Compressor control | OCEANUS-E | OCEANUS-W |
|--------------------------|--|-------------------|
| Power | 3.0 kW | |
| Operating voltage | 380-440 V | 220 / 230 / 240 V |
| Control voltage | 24 V AC | |
| Frequency | 50/60 Hz | |
| Version | Semi-automatic | |
| Controls | On/off-switch | |
| Standard scope of supply | Timer for automatic condensate drain system, rotation monitoring | |

➤ Trolley

The trolley for the COMPACT-LINE units is designed for the simple and safe transportation of your compressor across any terrain. This is ensured by the large pneumatic tires and the stable manner in which the compressor is secured.

For maximum flexibility, you can either leave the compressor on the trolley or lift it down to operate it. Turning a handle on the trolley allows you to secure your JUNIOR or OCEANUS in place and lift it back down again.

The length of the handle can also be adjusted to make handling the trolley particularly easy. The handle can also simply be detached to allow for convenient transportation of the trolley by car.



Trolley

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.

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