# **PROFI-LINE Diesel**



# Mobile High Pressure Compressor for Compressing Air and Breathing Air

Types:

# **CAPITANO II-D | MARINER II-D**



General	
Medium	Air
Intake Pressure	Atmospheric
Filling pressure	PN200 / PN300
Nominal pressure	225 bar / 330 bar / 330 bar
Working pressure	220 bar / 320 bar / 320 bar
Permissible ambient temperature range	+5+45°C
Permissible altitude	01500 m AMSL
Max. permissible tilt	5°
System design	Open
Compressor oil, standard	Synthetic
Oil change interval	Synthetic: every 2 years / 2,000 h
	Mineral: annually / 1,000 h
Finish	RAL 5010

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Compressor system	CAPITANO II-D	MARINER II-D
Charging rate <sup>1</sup>	140 l/min	170 l/min
Purification system	P 21	
Cooling air flow, min.	1,800 m³/h	1,800 m³/h
Sound pressure level	82 dB(A)	82 dB(A)
Weight in kg <sup>2</sup>	158	3 kg
Dimensions (LxWxH) <sup>2</sup>	1100 x 580	x 630 mm

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

<sup>2</sup> Standard model. Weight and dimensions may vary depending on accessories.

Drive system	CAPITANO II-D	MARINER II-D
Motor	Diesel	
Power	5.0 kW	5.0 kW
Type of construction	1B30	1B30
Туре	4-stroke diesel engine	4-stroke diesel engine
Speed	2,850 1/min	3,600 1/min
Protection class	IP54	IP54

Unit incl. intake hose, length 3 m.

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#### 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	IK100	IK120
Unit	CAPITANO-II-D	MARINER II-D
Charging rate <sup>1</sup>	140 l/min	170 l/min
Speed	1,300 1/min	1,130 1/min
Number of stages	3	3
Number of cylinder	3	3
Cylinder bore 1st stage	70 mm	88 mm
Cylinder bore 2nd stage	36 mm	36 mm
Cylinder bore 3rd stage	14 mm	14 mm
Stroke	40 mm	40 mm
Direction of rotation (from flywheel side)	Left	Left
Drive type	V-belt	V-belt
Intermediate pressure 1st stage	6 bar	6 bar
Intermediate pressure 2nd stage	45 bar	45 bar
Amount of oil	1.6	2.8
Oil pressure	4.5 bar ± 1.5 bar	4.5 bar ± 1.5 bar
Intake pressure	1.0 bar <sub>a</sub>	1.0 bar <sub>a</sub>

<sup>1</sup> Measured during cylinder filling from 0-200 bar tolerance +/- 5% at +  $20^{\circ}$ C ambient temperature.

## **PROFI-LINE Diesel**



## Purification System P 21 - Filter with integrated final 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, COremoval, micro filtering)
- final safety valve, fitted to filter housing
- back pressure / non return valve, fitted to filter housing



#### Air quality as per DIN/EN 12021:

Purification System P 21

Contamination	Maximum content as per DIN EN 12021	Air quality by BAUER
H <sub>2</sub> O	25 mg/m³	≤ 10 mg/m³
СО	5 ppm(v)	Depending on filter cartridge <sup>1</sup>
CO <sub>2</sub>	500 ppm(v)	Depending on intake air <sup>2</sup>
Oil	0.5 mg/m³	≤ 0.5 mg/m³

<sup>1</sup> 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.

<sup>2</sup> 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
Pipe connection	G 1/4" (condensate drain G 1/8")
Filter housing volume	0.57
DGRL 97/23/EG	Vessel category II
Air purification capacity (at ambient temperature 20°C and 300 bar) <sup>1</sup>	130 m³

<sup>1</sup> When using a BAUER P 21 filter cartridge without hopcalite. When using a cartridge with CO-removal, the air purification capacity is reduced to ca. 125 m³. For units with combustion engine, a filter cartridge with CO removal is strongly recommended!

## **PROFI-LINE Diesel**



## Filling device PN200

Filling device PN200	CAPITANO II-D	MARINER II-D
Nominal pressure (PN)	200 bar	200 bar
Valve design	1 filling valve with integrated ventilation, with German cylinder connector G 5/8" DIN 477 and manometer, PN200	2 filling valve with integrated ventilation, with German cylinder connector G 5/8" DIN 477 and manometer, PN200
Filling hose	1 Unimam high pressure filling hose, 1 m length	2 Unimam high pressure filling hose, 1 m length
International cylinder connector	1 international cylinder connection	1 international cylinder connection

#### Or

## > Filling device PN 300

Filling device PN300	CAPITANO II-D	MARINER II-D
Nominal pressure (PN)	300 bar	300 bar
Valve design	1 filling valve with integrated ventilation, with German cylinder connector G 5/8" DIN 477 and manometer, PN300	2 filling valve with integrated ventilation, with German cylinder connector G 5/8" DIN 477 and manometer, PN300
Filling hose	<ul><li>1 Unimam high pressure filling hose,</li><li>1 m length</li></ul>	<ul><li>2 Unimam high pressure filling hose,</li><li>1 m length</li></ul>



Filling device PN200 (black) and PN300 (red)



International filling connector

## > Crash frame complete with handles

As well as providing additional protection for the unit, the crash frame with its integrated fold-out handles makes moving the unit easy and convenient.



Crash frame incl. handles

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#### **OPTIONS:**

#### 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 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.

## Additional filling device PN 200 (for CAPITANO II-D)

Filling device	PN 200
Nominal pressure (PN)	200 bar
Valve design	2 filling valve with integrated ventilation, with German cylinder connector G 5/8" DIN 477 and manometer, PN200
Filling hose	2 Unimam high pressure filling hose, 1 m length
International cylinder connector	1 international cylinder connection

## Additional filling device PN 300 (for CAPITANO II-D)

Filling device	PN 300
Nominal pressure (PN)	300 bar
Valve design	2 filling valve with integrated ventilation, with German cylinder connector G 5/8" DIN 477 and manometer, PN300
Filling hose	2 Unimam high pressure filling hose, 1 m length

## **PROFI-LINE Diesel**



#### 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

## 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 CO<sub>2</sub>.

It enables the intake range of the compressor to be moved to a suitable location.

## Trolley

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

## 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

## **PROFI-LINE Diesel**



#### 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

- Detriebssicherheitsverordnung (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 <a href="https://www.bauer-kompressoren.com">www.bauer-kompressoren.com</a>, or sent by BAUER on request.

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