

Mobile High Pressure Compressor Unit for Compressing Air and Breathing Air

Types

PE100-TB | PE100-TE | PE100-TW

Production status: F03



PE100-TE

General	
Medium	Air
Intake Pressure	Atmospheric
Filling pressure	PN200 or PN300
Nominal pressure	225 bar or 330 bar
Working pressure	220 bar or 320 bar
Permissible ambient temperature range	+5...+45°C
Permissible altitude ¹	0...1000 m AMSL
Max. permissible tilt	5°
System design	Open
Standard operating voltage	400 V; 50 Hz
Other operating voltage	On request
Compressor oil standard	Synthetic
Oil change interval	Every 2 years/ 1,000 h
Colouring	RAL 7024, RAL 1028

¹ Operating compressors in altitudes > 1000 m AMSL on request

Compressor system	PE100-TB	PE100-TE	PE100-TW ³
Charging rate ¹	100 l/min		
Purification System	P11/350		
Cooling air flow, min.	660 m ³ /h	660 m ³ /h	660 m ³ /h
Sound pressure level	86 dB[A]	84 dB[A]	83 dB[A]
Weight in kg ²	42 kg	44 kg	44 kg
Dimensions (LxWxH) ²	770 x 350 x 430 mm	675 x 370 x 430 mm	675 x 380 x 430 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.

3 Breathing air and shooting version.

Drive system	PE100-TB	PE100-TE	PE100-TW ³
Type	Petrol 4-stroke	Three-phase	Mono-phase
Power	4.2 kW	2.2 kW	2.2 kW
Fuel consumption ¹	367g / kW h	-	-
Operating voltage / frequency ²	-	400 V, 50 Hz	230 V, 50 Hz
Speed approx.	3,600 1/min	2,870 1/min	2,820 1/min
Protection class	-	IP55	IP54

1 With consistent power usage of 3,5kW

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

3 Breathing air and shooting version.

STANDARD SCOPE OF SUPPLY

› Compressor block with following features

- Splash lubrication
- Micronic intake filter: 10 µm
- Intermediate coolers, air cooled
- Aftercooler, air cooled, outlet temperature approx. 10-15 °C above cooling air temperature
- Enlarged last stage cooler for improved cooling air flow and lower temperatures
- 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	
Charging rate ¹	100 l/min
Speed approx.	2,300 1/min
Number of stages	3
Number of cylinder	3
Cylinder bore 1st stage	60 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
Oil quantity	360 ml
Oil pressure	4.5 bar ± 1.5 bar

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

➤ **Purification System P11/350**

- Final mechanical separator for the removal of oil-/ water condensate
- TRIPLEX long-life filter cartridge for drying & de-oiling, optional CO-removal (standard for combustion engine driven versions)
- Final safety valve, fitted to filter housing
- Pressure maintaining / non return valve, fitted to filter housing



Purification System P11/350

Air quality as per DIN/EN 12021:2014

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

1 Only with BAUER special filter cartridge with Hopcalite and 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	P11/350
Operating pressure (Standard)	PN200 or PN300
Operating pressure max. (PS)	330 bar
Pressure dew point	< -20 °C, equivalent 3 mg/m ³ at 300 bar
Filter housing volume	0.57 l
DGRL 2014/68/EU (PED)	Art. 4 / Par. 3
Air purification capacity (at ambient temperature 20°C and 300 bar) ¹	130 m ³

1 When using a BAUER P11/350 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 design	1 filling valve with integrated ventilation, 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 connection



International cylinder connection

Or

➤ **PN300 filling device**

Filling device	PN 300
Nominal pressure (PN)	300 bar
Valve design	1 filling valve with integrated ventilation, with German cylinder connector G 5/8" according to DIN EN 144-2 and DIN 477 and manometer, PN300
<Filling hose	1 high pressure filling hose, 1 m length



Filling hose PN200 (black), PN300 (red)

Or

➤ **Filling device shooting sports PE100-TW**

When choosing the shooting sports version the filling valve will be without automatic vent and an adapter for connecting cartridge adapters will be supplied in the standard scope of supply.

Filling device shooting sports	PN200 or PN300
Nominal pressure (PN)	200 bar or 300 bar
Valve design	1 filling valve without ventilation, with German cylinder connector G 5/8" (200 bar) and R 5/8" (300 bar) according to DIN EN 144-2 and DIN 477 and manometer, PN200 or PN300
Filling hose	1 high pressure filling hose, 1 m length
Adapter shooting sports	1 Adapter 2 x G5/8

OPTIONS

› ON/OFF switch with motor protection for PE 100

Consisting of:

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



Motor protection switch

RULES, STANDARDS AND GENERAL INFORMATION

Relevant EU Directives (where applicable)

- › Machinery Directive 2006/42/EC
- › Pressure Equipment Directive 2014/68/EU
- › Low voltage directive 2014/35/EU
- › Directive on electromagnetic compatibility 2014/30/EU
- › Outdoor directive 2000/14/EC

Documentation: 1 x 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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