Technical Data Sheet

Series:

PE-TB

Mobile High Pressure Compressor Unit for Compressing Air and Breathing Air

Types:

PE200-TB | PE250-TB | PE300-TB

Production status: F02

PE200-TB with carrying handles (optional equipment)

General	
Medium	Air
Intake Pressure	Atmospheric
Filling pressure	PN200 / PN300
Nominal pressure	225 bar / 330 bar / 350 bar
Working pressure	220 bar / 320 bar / 330 bar
Permissible ambient temperature range	+5...+45°C
Permissible altitude[1]	0...1,000 m AMSL
Max. permissible tilt	15°
System design	Open
Compressor oil standard	Synthetic
Oil change interval	Synthetic: every 2 years/ 2,000 h
Finish	RAL 7024 (base plate and front), orange

1 Operating compressors in altitudes > 1000 m AMSL on request

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Compressor system	PE200-TB	PE250-TB	PE300-TB
Charging rate [1]	200 l/min	250 l/min	300 l/min
Purification System	P21/350	P31/350	P31/350
Cooling air flow, min.	1,200 m³/h	1,650 m³/h	2,250 m³/h
Weight in kg [2]	120 kg	125 kg	135 kg
Dimensions (LxWxH) [2]	1,270 x 592 x 570 mm	1,270 x 592 x 650 mm	1,270 x 592 x 650 mm

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

2 Dimensions standard version with handles. Length without handles approx. 1100 mm. Weight and dimensions may vary depending on accessories.

Drive system petrol engine	PE200-TB	PE250-TB	PE300-TB
Power	5.9 kW [1]	6.6 kW	8.7 kW

1 6.6 kW motor in combination with option B-DRAIN condensate automatics and final pressure shut-off.

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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, stainless steel
- Aftercooler, air cooled, outlet temperature approx. 10-15 °C above cooling air temperature
- Intermediate separators after each stage (except 1st stage)
- Sealed safety valves after each stage
- TÜV approved final pressure safety valve
- Pressure maintaining and check valve after the final stage

Compressor block	**IK120**
Charging rate [1]	200 - 300 l/min
Speed approx.	1,250 1/min (PE200-TB), 1,450 1/min (PE250-TB), 1,800 1/min (PE300-TB)
Number of stages	3
Number of cylinder	3
Cylinder bore 1st stage	88 mm
Cylinder bore 2nd stage	36 mm
Cylinder bore 3rd stage	14 mm
Stroke	40 mm
Direction of rotation (from flywheel side)	Left
Drive type	V-belt
Intermediate pressure 1st stage	Approx. 6 – 7.8 bar
Intermediate pressure 2nd stage	Approx. 39.5 – 51.4 bar
Amount of oil	2.8 l
Oil pressure	4.5 bar ± 1.5 bar
Intake pressure	1.0 – 1.3 bar_a

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

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Purification system P21/350 - Filter with integrated oil and water separator for PE200-TB

- 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 of BAUER
H_2O	25 mg/m³	≤ 10 mg/m³
CO	5 ppm(v)	Depending on filter cartridge [1]
CO_2	500 ppm(v)	Depending on intake air [2]
Oil	0.5 mg/m³	≤ 0.1 mg/m³

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 CO_2 in the intake air must not exceed the maximum level of CO_2 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, equals 3 mg/m³ at 300 bar
Pipe connection	G 1/4“ (condensate drain G 1/8“)
Filter housing volume	0.57 l
DGRL 2014/68/EU	Vessel category II
Processable air capacity (at ambient temperature 20°C and 300 bar)[1]	130 m³

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

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Purification System P31/350 - Filter with separate oil and water separator for PE250-TB and PE300-TB

P31/350 purification system (picture similar)

SCOPE OF DELIVERY:

- 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

Air quality as per DIN/EN 12021:2014

(see purification system in standard scope of delivery)

Purification System	P31/350
Operating pressure (Standard)	PN200 / PN300
Operating pressure max (PS)	330 bar
Pressure dew point	< -20 °C, equivalent 3 mg/m³ at 300 bar
Pipe connection	G 3/8“ (condensate drain G ¼“)
Filter housing volume	1.3 l
DGRL 2014/68/EU	Container category II
Processable air capacity (at ambient temperature 20°C and 300 bar)[1]	615 m³

1 When using a BAUER P31/350 filter cartridge without hopcalite. When using a cartridge with CO-, the air purification capacity is reduced by ca. 26 %.

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 filling connection	1 international cylinder connection

or

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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 Unimam high pressure filling hose, 1 m length

International filling connector

Filling device PN200 (black) and PN300 (red)

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OPTIONS:

› Automatic condensate drain system B-DRAIN and automatic switch off at final pressure

SCOPE OF SUPPLY:

- 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)

B-DRAIN automatic condensate drain system

OPTION: Condensate collecting tank 10 litre, about 5 litre capacity, for the environmentally friendly disposal of the condensate

› P41 Purification System - Filter with separate final oil and water separator

available for PE250-TB and PE300-TB

SCOPE OF DELIVERY:

- 1x filter housing with long-life filter cartridge
- Separator unit with final pressure safety valve
- Check valve between separator and micro filter
- Micro filter
- Air bleeder valve with manometer
- Pressure maintaining / check valve
- Filter key for cartridge renewal

P41 purification system (picture similar)

Air quality as per DIN/EN 12021:2014

(see purification system in standard scope of delivery)

Purification System	P41
Operating pressure (Standard)	PN200/PN300
Operating pressure max	330 bar
Pressure dew point	< -20 °C, equivalent to 3 mg/m³ at 300 bar
Pipe connection	G 3/8“ (condensate drain G ¼“)
Filter housing volume	2.1 l
DGRL 2014/68/EU	Vessel category II
Air purification capacity (at ambient temperature 20°C and 300 bar)[1]	1,595 m³

1 When using a BAUER P41 filter cartridge without hopcalite. When using a cartridge with CO-removal the air purification capacity is reduced by ca. 8 %. Different values for SECURUS cartridges.

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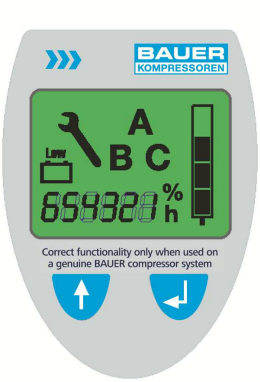
B-TIMER

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.
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

Additional PN 200 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 filling connection	1 international cylinder connection

Additional PN 300 filling device

Filling device	PN300
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, PN200
Filling hose	1 Unimam high pressure filling hose, 1 m length

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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

Handles

The optional carrying handles allow easy and comfortable transport.

PE200-TB with handles

Trolley

The trolley provides an easy and convenient mode of transport for mobile compressor units. Fitted with pneumatic tires, the trolley maximizes mobility.

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Relevant EU Directives (where applicable)

- EC Machinery Directive (2006/42/EC)
- EU Pressure Equipment Directive (2014/68/EU)
- EU Low Voltage Directive 2014/35/EU
- EU Electromagnetic Compatibility (EMV) 2014/30/EU

Applied national standards and technical specifications, in particular

- Betriebssicherheitsverordnung - BetrSichV (German Industrial Safety Regulation) of 1 June 2015
- AD 2000
- 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 DGRL2014/68/EU.

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.

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