

Instruction Manual and Spare Parts Catalogue

P Filter Systems

P60
P80
P100
P120
P140
Securus

P61
P81
P101



Instruction Manual SECURUS Purification Systems

INTRODUCTION

This manual contains operating and maintenance instructions for the filter systems DIN Standard and DIN Standard with SECURUS monitoring, manufactured by Bauer Kompressoren GmbH, Munich.

P60	P61
P80	P81
P100	P101
P120	
P140	



All instructions should be observed and carried out in the order laid down to prevent damage and premature wear to the equipment and the units served by it. The company voids all warranties for malfunction and damage resulting from failing to follow these instructions.

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Applicable parts list:	
Filter system P60 / P61	G2 / B7
Filter system P80 / P81	G3 / B8
Filter system P100 / P101	G4 / B9
Filter system P120	G11
Filter system P140	G12

Change notice

Change no.	Change date
0	November 1987, basic edition
1	August 1990
2	January 1993
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6	January 2003



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1. APPLICATION, TECHNICAL DATA, OPERATING CHARACTERISTICS

1.1. APPLICATION

The filter systems **P60** (Fig. 1), **P80** (Fig. 3 and Fig. 4), **P100** (Fig. 5), **P120** (Fig. 6) and **P140** are used both as an initial system component as well as an add-on air regeneration system for existing compressor installations.

The filter systems **P61**, **P81** and **P101** correspond to the filter systems P60 to P100 with respect to the technical data. However, they are not mounted on their own console and do not comprise a condensate drain cock because they are built into the respective compressor unit.

On the filter systems with optional **SECURUS** monitoring unit, the air regeneration process and the degree of dryness of the air are continuously monitored by measuring the filter cartridge saturation directly in the purifier filter head.

1.2. DESIGN

The filter systems consist of the following main assemblies:

Standard features:

- Oil and water separator
- Non-return valve with venting valve between separator and dryer or purifier
- High pressure drying filter with molecular sieve filter cartridge (except P60)
- High pressure purifier
- Pressure maintaining/non-return valve
- Outlet pressure gauge
- Tubing in stainless steel, fittings in galvanized steel
- Filter console fitted with mounting rails and 30 mm lifting eyelets

Optional components:

- Oil and water separator with final pressure safety valve
- SECURUS indicator unit or SECURUS CT for use with a COMP-TRONIC compressor control unit
- Separate CO filter or CO filter cartridge in the purifier
- Automatic condensate drain unit
- Special helium design with Swagelok fittings in stainless steel, non-return valve with Whitey venting valve

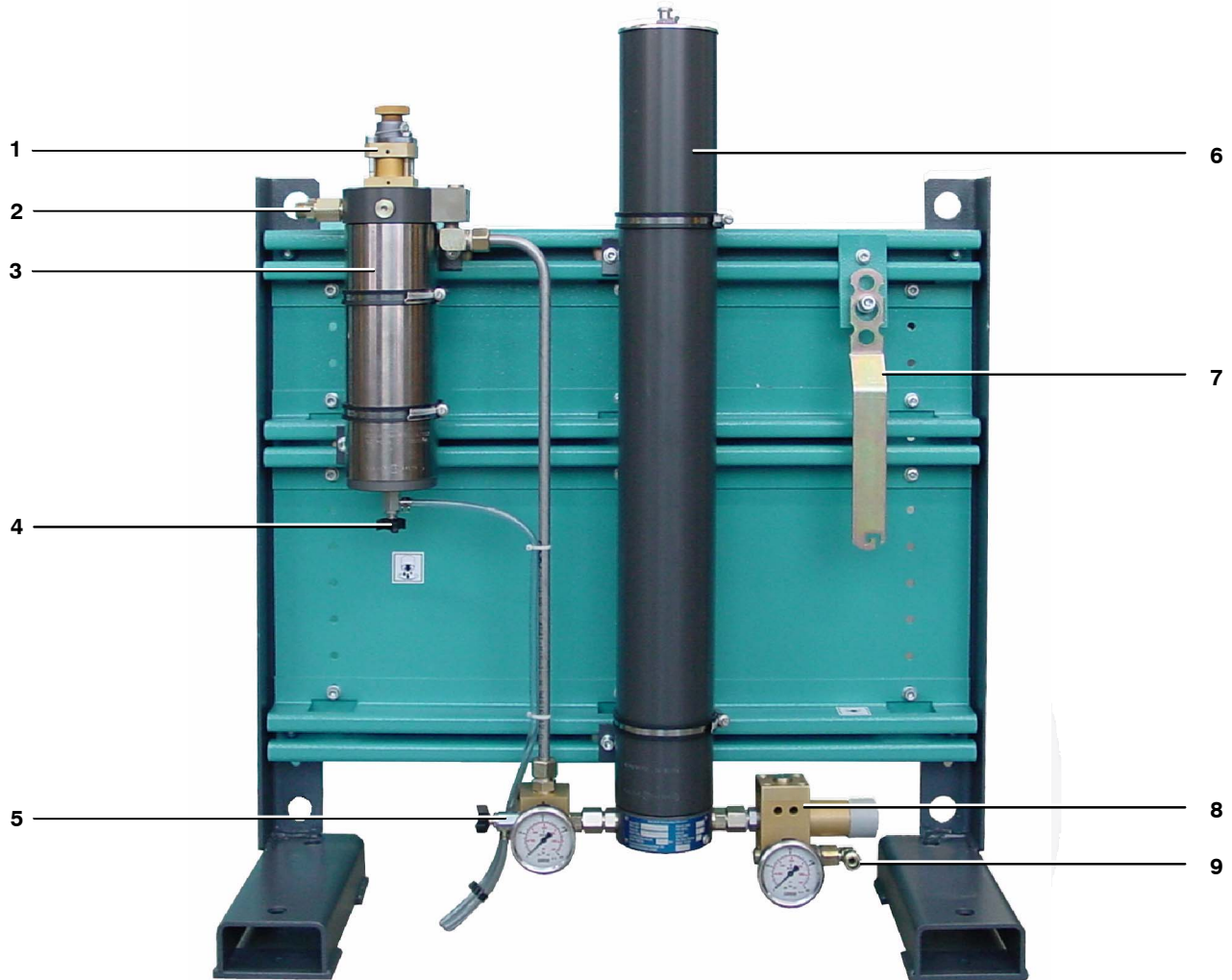


Fig. 1 Filter system P60 standard

- 1 Final pressure safety valve
- 2 Air inlet
- 3 Oil and water separator
- 4 Condensate drain tap
- 5 Venting valve with pressure gauge
- 6 Purifier
- 7 Filter key
- 8 Pressure maintaining/non-return valve
- 9 Air outlet

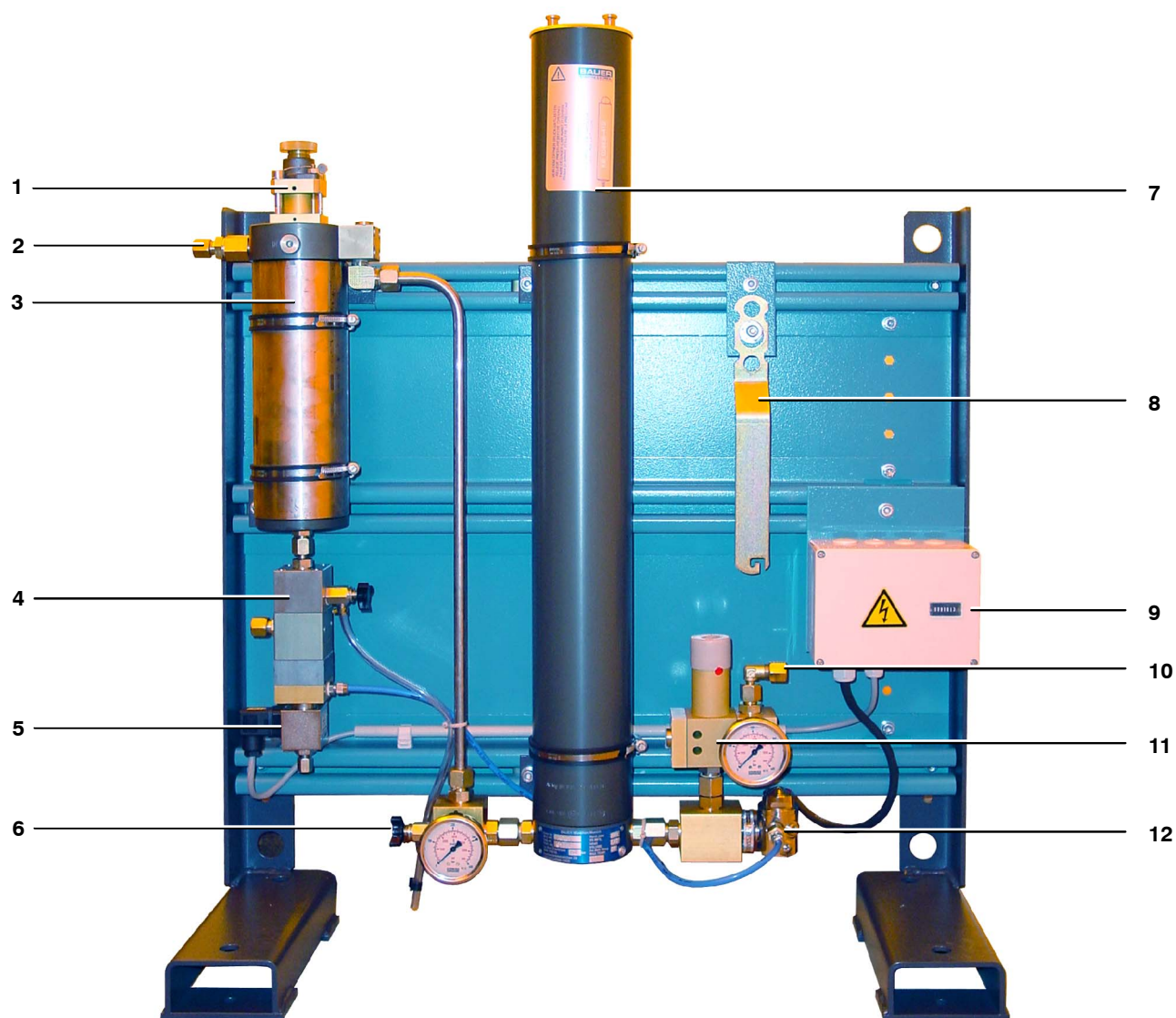


Fig. 2 Filter system P60 with automatic condensate drain unit

- 1 Final pressure safety valve
- 2 Air inlet
- 3 Oil and water separator
- 4 Condensate drain valve
- 5 Solenoid valve
- 6 Venting valve with pressure gauge
- 7 Purifier
- 8 Filter key
- 9 Terminal box with cycle counter
- 10 Air outlet
- 11 Pressure maintaining/non-return valve
- 12 Pressure reducer for control air

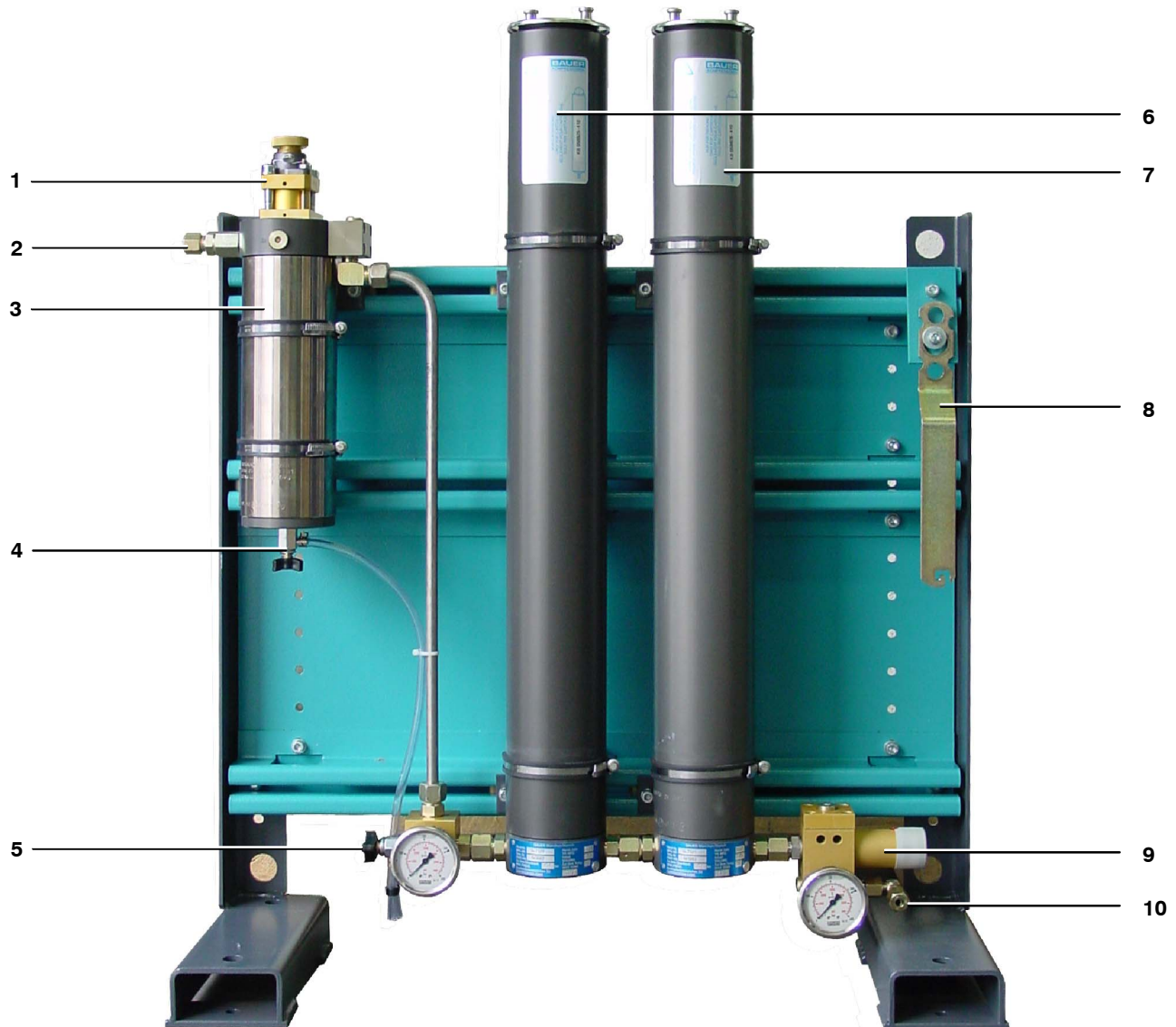


Fig. 3 Filter system P80 standard

- 1 Final pressure safety valve
- 2 Air inlet
- 3 Oil and water separator
- 4 Condensate drain tap
- 5 Venting valve with pressure gauge
- 6 Dryer
- 7 Purifier
- 8 Filter key
- 9 Pressure maintaining/non-return valve
- 10 Air outlet

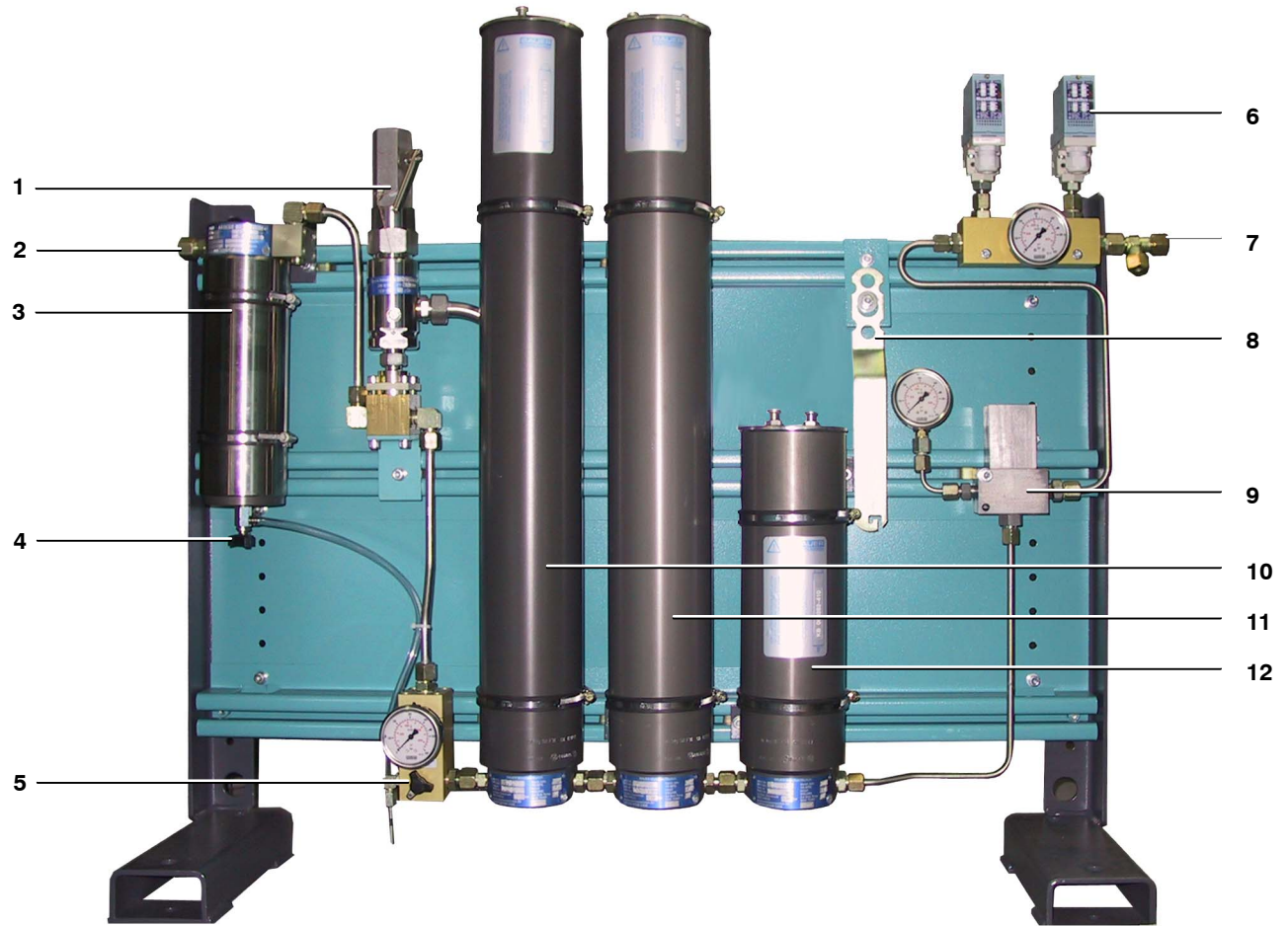


Fig. 4 Filter system P80, 420 bar model with CO filter

- 1 Final pressure safety valve
- 2 Pressure air input
- 3 Oil and water separator
- 4 Condensate drain valve
- 5 Venting valve with pressure gauge
- 6 Pressure switch
- 7 Pressure air outlet
- 8 Filter key
- 9 Pressure maintaining/non-return valve
- 10 Drying filter
- 11 Purifier
- 12 CO filter

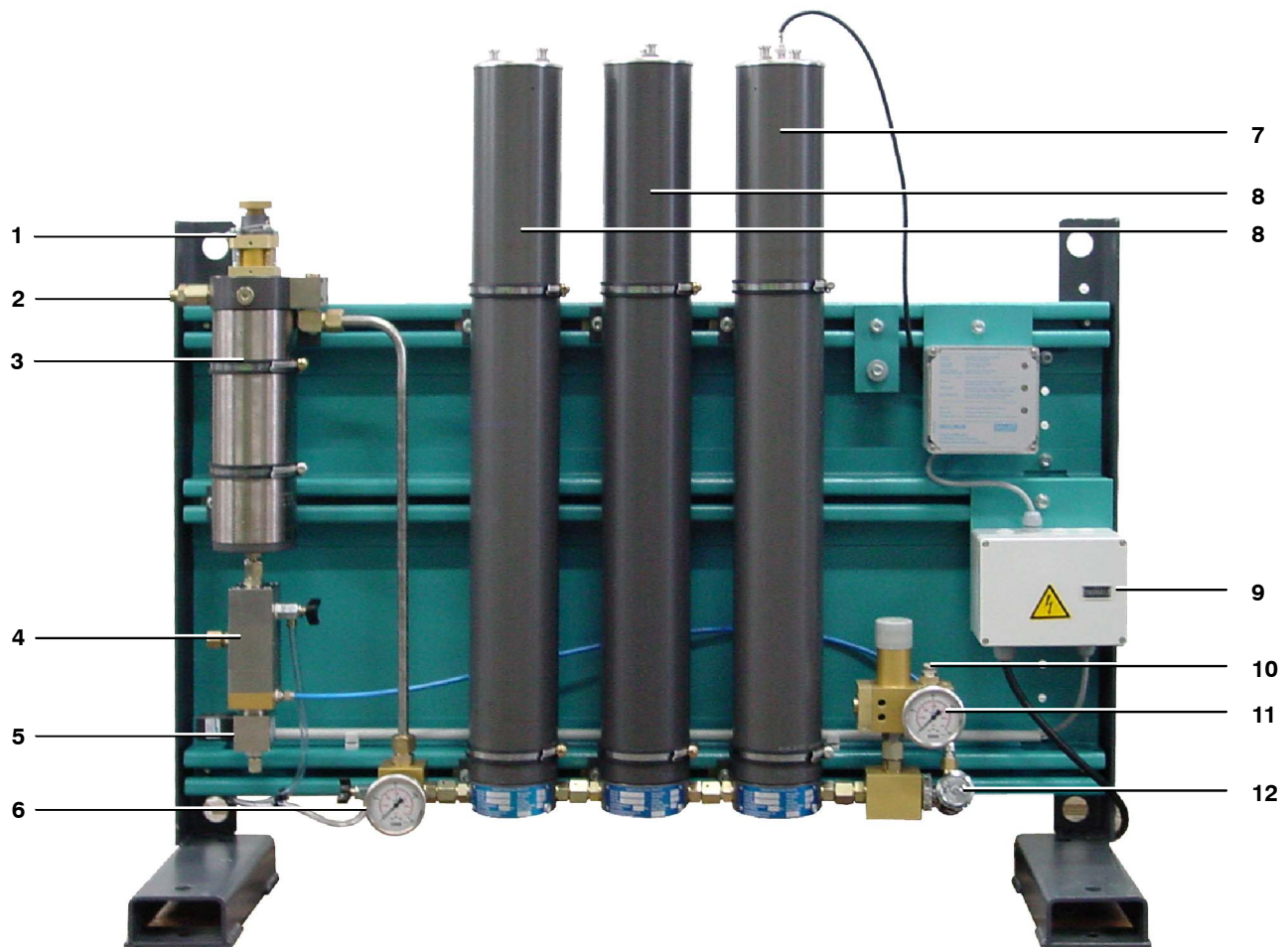


Fig. 5 Filter system P100 with automatic condensate drain unit

- 1 Final pressure safety valve
- 2 Air inlet
- 3 Oil and water separator
- 4 Condensate drain valve
- 5 Solenoid valve
- 6 Venting valve with pressure gauge
- 7 Purifier
- 8 Drying filter (2 ea.)
- 9 Terminal box with cycle counter
- 10 Air outlet
- 11 Pressure maintaining/non-return valve with outlet pressure gauge
- 12 Pressure reducer for condensate drain valve control air



Fig. 6 Filter system P120 with automatic condensate drain unit

- 1 Air inlet
- 2 Oil and water separator
- 3 Final pressure safety valve
- 4 Manual condensate drain tap
- 5 Condensate drain valve with solenoid valve
- 6 Venting valve with pressure gauge
- 7 Purifier
- 8 Drying filter
- 9 Terminal box with cycle counter
- 10 Filter keys
- 11 Air outlet
- 12 Pressure maintaining/non-return valve with outlet pressure gauge
- 13 Pressure reducer for condensate drain valve control air



Fig. 7 Filter system P140 with Automatic Condensate Drain unit and SECURUS monitoring

- 1 Final pressure safety valve
- 2 Air inlet
- 3 Oil and water separator
- 4 Manual condensate drain tap
- 5 Condensate drain valve with solenoid valve
- 6 Venting valve with pressure gauge
- 7 Purifier
- 8 Drying filter
- 9 Terminal box with cycle counter
- 10 Filter keys
- 11 SECURUS monitoring unit
- 12 Final pressure sensor
- 13 Pressure maintaining/non-return valve with outlet pressure gauge
- 14 Pressure reducer for condensate drain valve control air

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1.3. TECHNICAL DATA

1.3.1. Filter specifications

a. General

Operating pressure, max.	350 bar
Flow rate	P60: max. 600 l/min. (21 cfm)
.....	P80: max. 1,000 l/min. (35 cfm)
.....	P100: max. 1,000 l/min. (35 cfm)
.....	P120: max. 2,200 l/min. (77 cfm)
.....	P140: max. 3,500 l/min. (123 cfm)
Regenerated volume of air, referenced to 1 bar absolute,	P60: 1,612 m ³
30 °C ^{a)} , flow rate 200 l/min. against 200 bar (2,900 psi).	P80: 3,513 m ³
.....	P100: 5,414 m ³
.....	P120: 10,645 m ³
.....	P140: 16,421 m ³
Operating temperature range	+5 ... +50 °C (5 ... 50 °F)
Residual water contents	<10 mg/m ³
Residual oil vapour contents	<0.1 mg/m ³
Residual CO contents	5 ppm _v ^{b)}
Residual CO ₂ contents	400 - 500 ppm _v

Main dimensions:

System Type	P60	P80	P100	P120	P140
Length (mm)	780	780/1080	1080	1080	1230
Width (mm)	260	260	260	260	260
Height (mm)	1000	1000	1000	1000	1000
Weight (kg)	56	68/82	88/94	133/145	177/189

b. Oil and water separator

P40 to P100:

External diameter	95 mm
Length	300 mm
Filter volume	0.57 l
Weight	4.5 kg
Piping connections	G 1/4"
Max. load cycle number	see the "Load cycles-synoptical table for pressure vessels" in the pressure vessels instruction manual

P120 and P140:

External diameter	127 mm
Length	660 mm
Filter volume	3.5 l
Weight	37 kg
Piping connections	G 1/2"
Max. load cycle number	see the "Load cycles-synoptical table for pressure vessels" in the pressure vessels instruction manual

c. Drying and purifying filter assemblies

P60 to P100:

External diameter	100 mm
Length	835 mm
Filter volume	2.85 l
Weight	10.6 kg
Piping connections	G 3/8"

P120 and P140:

External diameter	175 mm
Length	900 mm
Filter volume	9.85 l
Weight	28 kg
Piping connections	G 1/2"

- a) Reference temperature is the separator inlet temperature
- b) for max. concentration of 25 ppm_v at compressor intake

TECHNICAL DATA (CONT.)

d. Filter cartridges for filter systems P60 to P140

Order n.	Name	Filter system	Cartridge filling	Removal	Size
058825	Multiplex	P60/P80/P100	MS/MS/MS/MS	H2O	27"
058826	Multiplex	P60/P80	MS/MS/AC/MS	H2O/Öl	27"
060036	Multisec	P60/P80/P100	MS/MS/AC/MS/SEC	H2O/Öl	27"
060037	Multisec	P60	MS/MS/AC/MS/HP/SEC	H2O/Öl/CO	27"
068622	Multiplex	P60/P80/P100	AC/AC/AC/MS	Öl/H2O	27"
063282	Multiplex	P80/P100	HP/HP/HP/HP	CO	10"
090984	Multisec	P60/P80/P100	AC/MS/SEC	Öl/H2O	27"
067097	Supersec	P120/P140	MS/AC/MS/MS/SEC	H2O/Öl	27"
067099	Super-Jumbo	P120/P140	MS/MS/MS/MS	H2O	27"
065562	Multiplex	P120/P140	HP/HP/HP/HP	CO	27"

SM = Sintered metal micro filter cartridge
 MS = Molecular sieve
 AC = Activated charcoal
 HP = Hopcalite
 SEC = Securus-sensor

1.3.2. **Electrical specifications (filter systems with SECURUS monitoring system only)**

Assemblies 1 **SECURUS** indicator
 1 filter housing with pressure resistant conductor bushing
 1 sensor inside the **SECURUS** cartridge
 Operating voltages of the **SECURUS** indicator unit 190 ... 250 V, 50 ... 60 Hz or
 110 ... 127 V, 50 ... 60 Hz or
 24 V, 50 ... 60 Hz or
 12 ... 24 V DC
 Power consumption of the **SECURUS** indicator unit AC version 50 VA
 DC version 2 W
 Contact components 3 N/O contacts for preliminary warning and for compressor shut-off
 Contact switching current 6 A/250 V
 Protection class for **SECURUS** indicator unit IP65
 Dimensions of the **SECURUS** indicator unit 120 x 120 x 55 mm (L x W x H)

Mains connections and switching outputs via terminals



For description of electrical equipment and SECURUS monitoring on units with COMP-TRONIC or B-Control compressor control see COMP-TRONIC, B-Control or compressor unit instruction manual.

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1.4. OPERATING CHARACTERISTICS

1.4.1. General

Unlike other filter systems the **SECURUS** filter system ensures a continuous monitoring of the purification parameters of the air while it is still in the regeneration process. The influences of

- ambient temperature
- temperatures of the compressor and regeneration system are taken into consideration.

The **SECURUS** cartridges are designed for

- drying of air
- adsorption of aromatic components (aerosols)
- partial conversion of CO into CO₂
- partial adsorption of CO₂

The quality of the breathing air produced conforms to the national and international

- DIN EN 12021
- STANAG 1079 MW
- British Standard 4001
- US CGA Spec. G.7.1
- Canada CSA Standard Z 180.1
- Australian Army Standard 5017

It is impossible to exceed the cartridge utilization time since a preliminary warning signal indicates the approaching saturation of the cartridge. Depending on the size of compressor used, the prewarning signal will appear between 1 and 7 hours prior to cartridge saturation.

If the cartridge is not replaced after illumination of the preliminary warning signal, the **SECURUS** filter system will automatically shut down the compressor as soon as the cartridge has been exhausted.

The compressor cannot be turned on as long as no cartridge has been inserted.

The **SECURUS** filter system operates in the FAIL-SAFE mode: the compressor will be shut down if the circuit between the control unit and the sensor is interrupted.



As soon as the preliminary warning signal appears or, at the latest, after the SECURUS indicator unit has shut down the system, the cartridges of all filters within the system must be changed. See chapter 2.4.

1.4.2. Oil and water separator

The air leaving the final stage is cooled in the after-cooler to approx. 10 to 15 °C (18–27 °F) above ambient temperature and then enters the oil and water separator (Fig. 9). The oil and water separator works by means of a sintered filter micro-cartridge (1), reliably separating liquid oil and water particles from the compressed air.

The maximum recommended amount of four load cycles per hour should not be exceeded.

If it is possible to regulate the operation of the unit to such a degree as to achieve four load cycles per hour, in our opinion this would be an optimum between usage and actual life.

1.4.3. Filter assemblies

The assembly consists of an anodized aluminium alloy pipe with 100 mm or 175 mm external diameter. Both ends are provided with fine threads on the inside. The screw-in filter bottom contains air intake and outlet. For connector threads refer to specifications, 1.2.

The filter head or - on filter systems P120 to P141 - the filter base, contains a pressure resistant bushing for the electrical connection. The coaxial cable which leads from the sensor to the control unit is connected to the BNC connector located there.

For description of the electrical operation see chapter 1.4.4.

For filter replacement intervals refer to chapter 2.3.

1.4.4. Securus indicator unit

The **SECURUS** indicator unit receives signals concerning the condition of the drying agent inside the filter cartridge from the attached sensors and furnishes appropriate control signals whenever the preset threshold values have been reached.

The annular sensor inside the filter cartridge head senses changes in capacitance caused by the saturation within the surrounding drying agent. The signal path from the sensor leads through a spring pin contact, which forms the connection between cartridge and filter head, to the pressure resistant bushing in the filter head and continues through the centre conductor of the coaxial cable to the indicator unit. The signal return is effected through the cable shield to the cartridge housing.

The four operating conditions of the **SECURUS** system are reported by three relays (normally open contacts). Simultaneously with the closing of the relay contacts, built-in luminescent diodes illuminate:

- | | |
|-----------------------------|---|
| 1. Continuous green: | Unit in operation |
| 2. Flashing yellow: | Cartridge change pre-warning |
| 3. Flashing red: | Compressor shut-down because cartridge is used up |
| 4. Continuous red: | Compressor shut-down because of missing cartridge or cable failure |

If yellow diode is flashing, the green diode will continue to illuminate because unit is still operational with the yellow light on. If no lamp is on, which means that no relay contact is closed, the **SECURUS** indicator unit is not receiving operating voltage or the electronics within the unit have failed.

After applying operating voltage to the unit it will take about 0.5 seconds to close the respective relay contact and to light the applicable diode. During this time the status of the cartridge is being checked.

1.4.5. Air flow diagram

Fig. 8 shows the air path through the **SECURUS** filter system. The filter assembly with the pressure resistant bushing for the filter cartridge with sensor is installed as the last filter before the pressure maintaining/non-return valve.

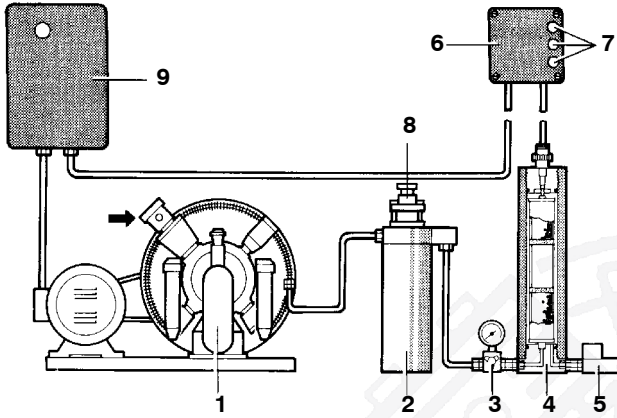


Fig. 8 Typical air flow diagram

- 1 Compressor
- 2 Separator
- 3 Venting valve with pressure gauge
- 4 Dryer
- 5 Pressure maintaining/non-return valve
- 6 **SECURUS** control unit
- 7 Indicator lights
- 8 Final pressure safety valve
- 9 Compressor control box

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2. SERVICING, MAINTENANCE

2.1. GENERAL INSTRUCTIONS FOR FILTER MAINTENANCE

- **Depressurize** system before starting any maintenance work.
- **Dry** inside of filter housing with a clean cloth before installing new cartridge and check for corrosion.
- **Lubricate** threads and O-rings as well as threaded part of cartridge with white petrolatum (DAB9) or Never-Seez White. Apply sparingly.
- **Observe** number of operating hours as indicated on hour meter to ensure exact compliance with the maintenance intervals.
- **Change** cartridge before reactivating a compressor unit which has been out of service for more than 6 months.
- **Leave** cartridge in the filter as long as unit is out of service, in order to absorb moisture in the filter system.
- **Keep** all condensate drain valves and shut-off valves closed. Keep a minimum pressure of approx. 50 to 80 bar (700 to 1,100 psig) within the system to prevent moisture entering the compressor piping and filter system.

2.2. OIL AND WATER SEPARATOR MAINTENANCE

The sintered filter micro-cartridge requires periodic maintenance. For maintenance intervals see chapter 16 of the compressor unit instruction manual.

2.2.1. Lifetime



The oil and water separator is subject to dynamic load. It is designed to withstand a certain no. of load cycles. (1 load cycle = 1 pressurization, 1 depressurization) at the specified pressure range. The oil and water separator must be replaced when the maximum permissible no. of load cycles has been reached. Refer to the pressure vessel operating manual delivered with the unit.

2.2.2. Changing micro filter cartridge

- Remove tubes connected to filter head (1).
- Screw off filter head (1) and remove.
- Unscrew micro-cartridge (3) from filter head (1).
- Remove centre-screw (4) to remove filter elements.
- Clean sintered filter elements using hot soapy water and blow dry with clean compressed air.

2.2.3. Condensate drain

The condensate produced by the re-cooling after the compression process has to be drained manually

- at start-up of the compressor unit
- during operation every 30 minutes, at high humidity every 15 minutes.

For units equipped with automatic condensate drain see chapter 3.

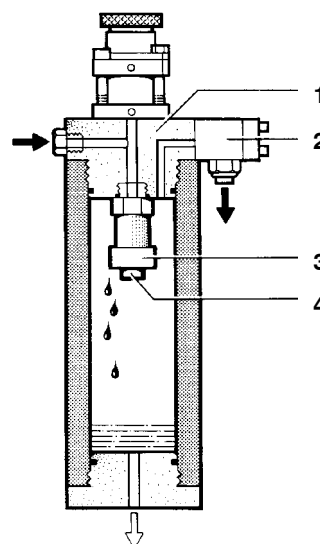


Fig. 9 Oil and water separator

- 1 Filter head
- 2 Non-return valve
- 3 Micro-cartridge
- 4 Centre-screw

2.3. SECURUS FILTER REPLACEMENT INTERVALS



To determine the number of operating hours as well as number of bottle fillings see the diagrams in Fig. 12 and Fig. 13 and the examples below. Please note that the temperature in the separator is 10 °C higher than ambient temperature.



The entities in the diagrams in Fig. 12 and Fig. 13 are based on estimated filter cartridge lifetime; on systems equipped with SECURUS monitoring unit, the actual saturation of the cartridge is reported by the electronic monitor.

The following examples refer to the diagrams in Fig. 12 and Fig. 13.

Examples:

- a. **Number of operating hours for a compressor unit with 1000 l/min delivery, operating pressure 200 bar, ambient temperature 20 °C with filter system P120 (see sheet 1/2).**
 - Choose separator temperature 30 °C for 200 bar (example) on right hand vertical axis.
 - Follow the bold horizontal line across the graph to the intersection with the line for the P120 filter system.
 - Follow the vertical line down from the intersection point to the 1000 l/min mark.
 - Result: approx. 180 operating hours.
- b. **Number of bottle fillings for a 10 litre bottle with P120 filter system, ambient temperature 20 °C (see sheet 2/2):**
 - Choose separator temperature 30 °C (example) on right hand vertical axis.
 - Follow the bold horizontal line across the graph to the intersection with the line for the P120 filter system.

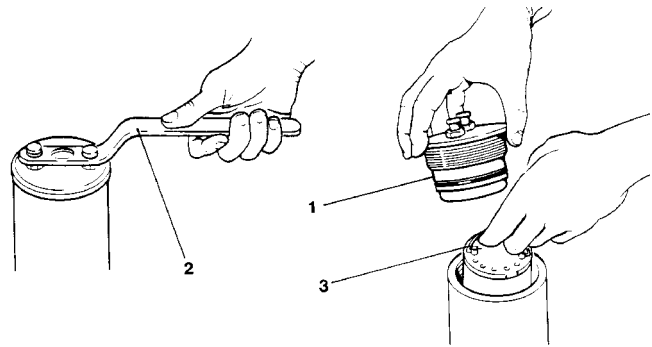
- Follow the vertical line down from the intersection point to the 10 litre bottle mark.
- Result: approx. 5200 bottle fillings.

2.4. CARTRIDGE CHANGE

2.4.1. General



As soon as the preliminary warning signal appears or, at the latest, after the SECURUS indicator unit has shut down the system, the cartridges of all filters within the system must be changed.



2.4.2. Cartridge change (P40 to P100)

- On all filters with SECURUS monitoring remove plug of the sensor cable from socket.
- Unscrew filter head (1) using the special spanner (wrench, 2) supplied (this tool has a recess to accommodate the socket on filter systems P40 to P100).



Do not use other tools in order to avoid damaging the BNC coaxial plug.

Fig. 11 Cartridge change P40 - P100

- Pull out used cartridge by means of its clip (3) and replace with a new cartridge.
- Replace filter head, screw in by hand and tighten with the special spanner (wrench).

2.4.3. Cartridge change (P120 - P141)

- Depressurize system completely and disconnect from electrical supply.
- Remove filter head with special spanner supplied with the unit (1, 2, Fig. 10).
- Screw cartridge removal tool supplied with the unit (3, 4) onto cartridge and pull out cartridge (5).
- Clean filter housing.
- Remove upper and lower cap of the new cartridge.
- Lubricate threads and O-ring with Never-Seez White NSW-14 (part no. N18112) or white petrolatum (DAB9).
- Insert cartridge into filter housing and press down firmly.
- Screw in filter head with special spanner. Torquing is not required since air-tightness is effected by means of an O-ring.

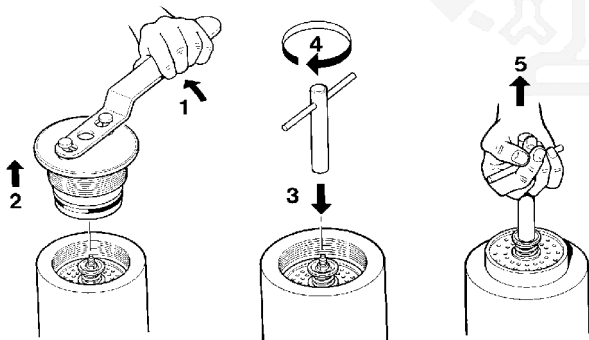


Fig. 10 Cartridge change P120 - P140

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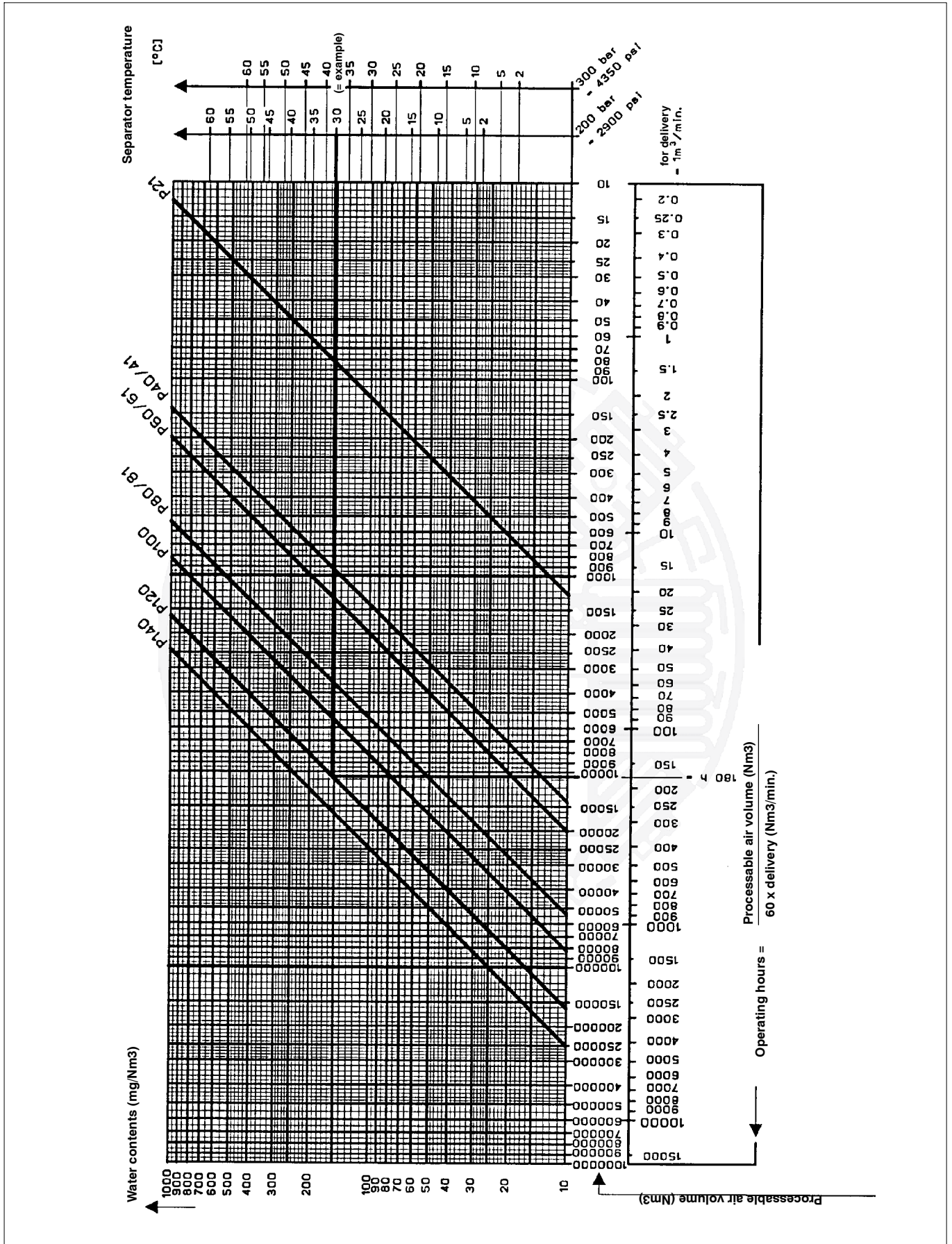


Fig. 12 Processing capacity of P-filter systems (sheet 1 of 2)

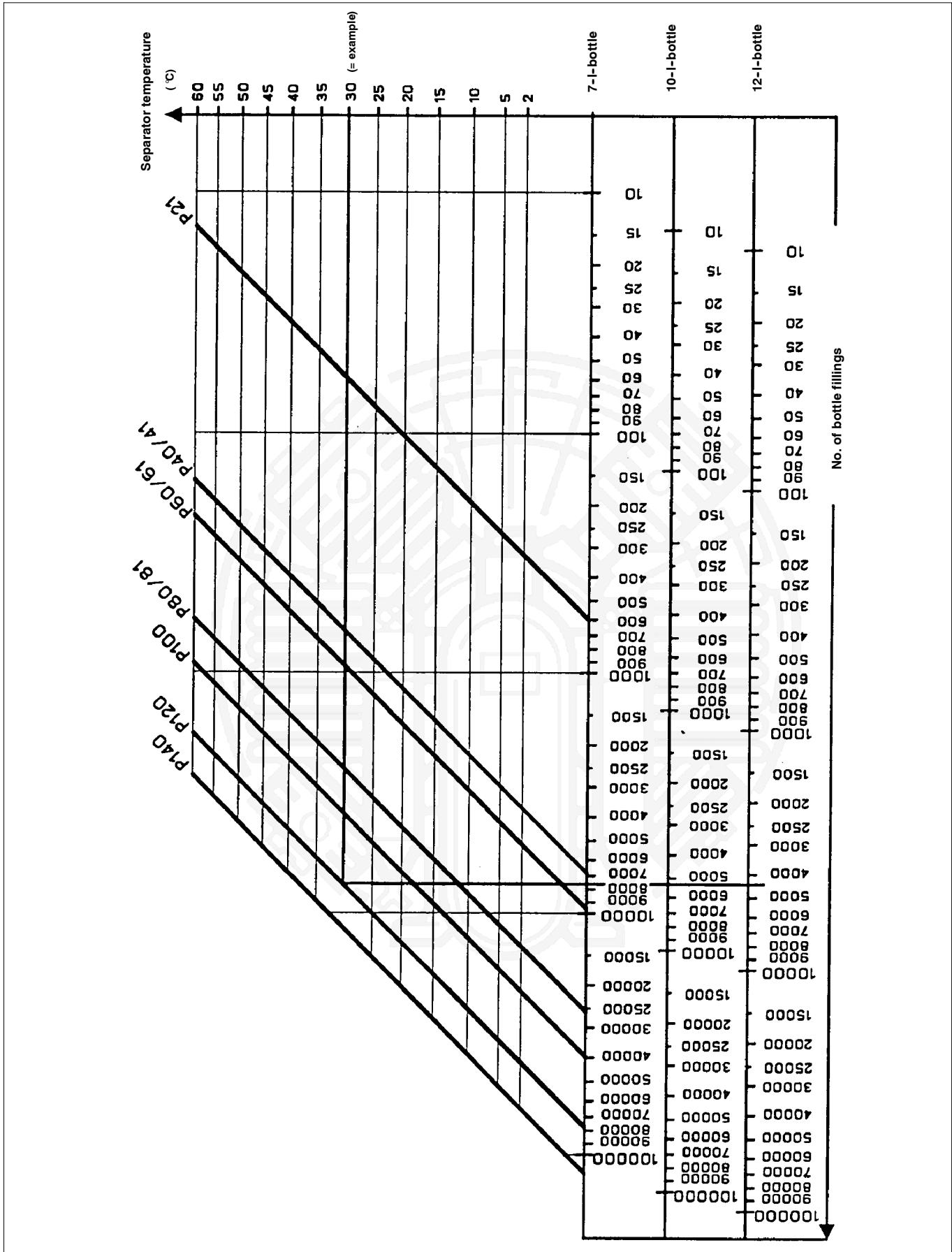


Fig. 13 Processing capacity of P-filter systems (sheet 2 of 2)

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3. AUTOMATIC CONDENSATE DRAIN (OPTION)

3.1. GENERAL

The automatic condensate drain unit drains the oil and water separator (1) every 15 minutes during operation.

The automatic condensate drain system operates electropneumatically and comprises the following main items:

- One pneumatically operated condensate drain valve (3) for the oil and water separator. The condensate drain valve for the oil and water separator is closed without control medium being applied.
- One solenoid valve (2) for control medium, normally closed type, mounted on top of the condensate drain valve.
- One pressure reducer (6) with integrated safety valve for producing the control medium.
- An electric control (5).

The solenoid valve of the condensate drain valve is controlled periodically by a time relay.

3.2. NORMAL OPERATION

(See Fig. 14). The condensate drain valve (5) is operated pneumatically via a normally closed 3-way solenoid valve (1) by an electrical signal.

The required control medium applied to the solenoid valve (1) is taken after the filter and reduced from a pressure reducer to the required operating pressure.

Before compressor start-up, condensate drain valve (5) is closed by spring pressure.

3/2-way solenoid valve (1) is not energized and remains closed. So no control medium is applied to condensate drain valve (5). The condensate drain valve remains closed.

3.3. CONDENSATE DRAIN

(See Fig. 15). Every 15 minutes 3/2-way solenoid valve (1) is energized for approx. 6 seconds and opens. The control pressure pushes down the servo-piston (2) of the condensate drain valve (5), the piston is raised from the valve seat (4) and the condensate from the oil and water separator (6) is drained. After 6 seconds, the solenoid valve closes again and shuts off the control medium path and the condensate drain valve is closed by spring pressure and the pressure from the separator.

3.4. CONDENSATE SEPARATOR MAINTENANCE

Due care must be taken to ensure that any oil which may be drained with the condensate will not pollute the environment. For example, the drain pipe can be directed into a collecting vessel or into drain facilities incorporating oil separators.



Dispose of the condensate according to local regulations!

The condensate drain valve is provided with a manual drain valve to check correct operation of the automatic system.

The automatic condensate drain system must be serviced as follows:

- Open manual drain valve once a week.

This must be carried out immediately after the automatic system has drained the condensate. Observe the drainage of condensate when opening the manual drain valve. If the system drains a lot of condensate this is a sign that the system or the corresponding condensate drain valve is not working properly.

Find the fault and remedy accordingly. If hardly any condensate emerges, the automatic system is operating properly. For fault correction, see section "Trouble-shooting".

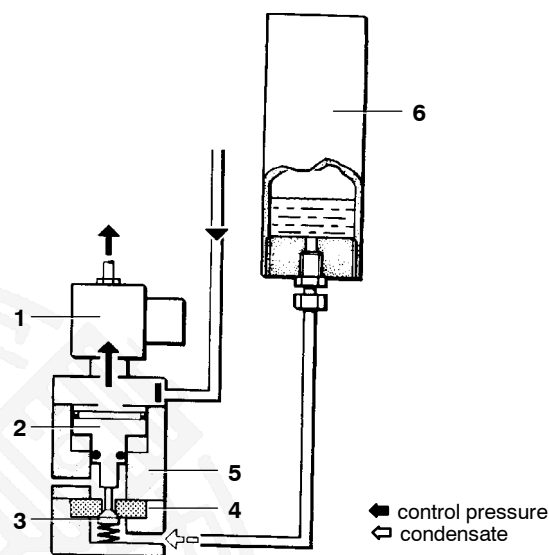


Fig. 14 Normal operation

- 1 3/2-way solenoid valve
- 2 Servo piston
- 3 Valve piston
- 4 Valve seat
- 5 Condensate drain valve
- 6 Oil and water separator

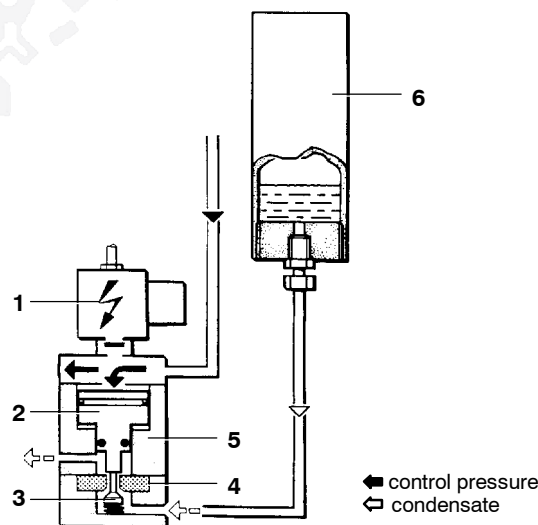
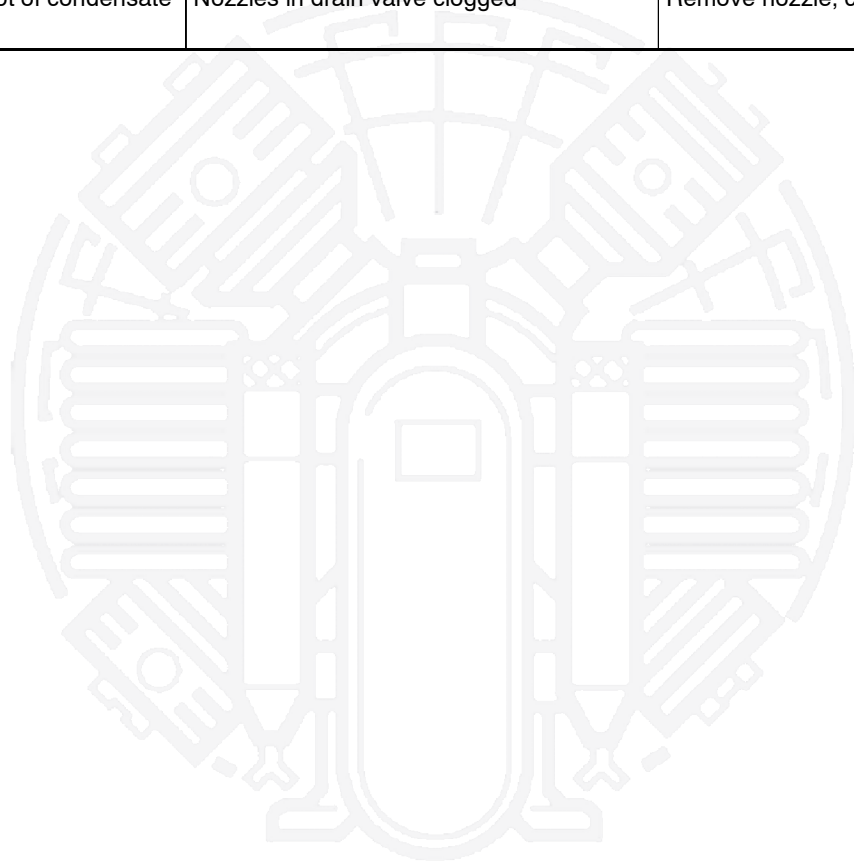


Fig. 15 Condensate drain

3.5. TROUBLE-SHOOTING

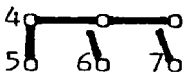
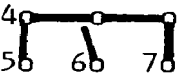


Trouble	Cause	Remedy
Drain valve does not close	No control air	Check control air line
	Drain valve leaking	Dismantle drain valve and clean
Drain valve does not open	Condensate drain valve piston jammed	Dismantle drain valve, clean or replace valve
Solenoid valve does not close	Solenoid valve faulty	Check solenoid valve and replace if necessary
	No electrical signal	Check for voltage from timer
Solenoid valve does not open	Solenoid valve faulty	Check solenoid valve and replace if necessary
	Continuous electrical signal	Check electrical control circuit and timer
Unsatisfactory drainage (lot of condensate from manual valve)	Nozzles in drain valve clogged	Remove nozzle, clean



Instruction Manual SECURUS Purification Systems

4. FUNCTIONAL CHECK

4.1. SECURUS INDICATOR UNIT

Mode	System status	Indicator light	Contact position
Normal	Cartridge serviceable	green continuous	
Pre-warning	Cartridge approaching saturation	green + yellow flashing	
Shut-off	Cartridge saturated	red flashing	
Shut-off	Cartridge missing or cable failure	red continuous	

4.2. ELECTRICAL CONNECTIONS

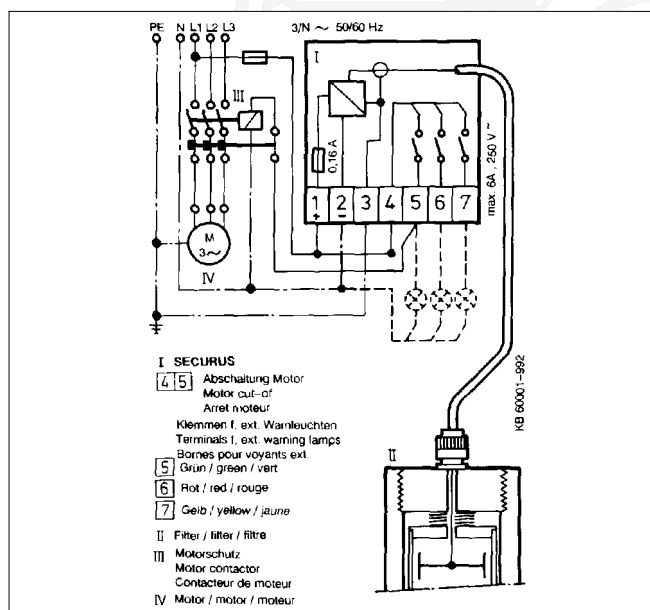


Fig. 16 Terminals, AC model

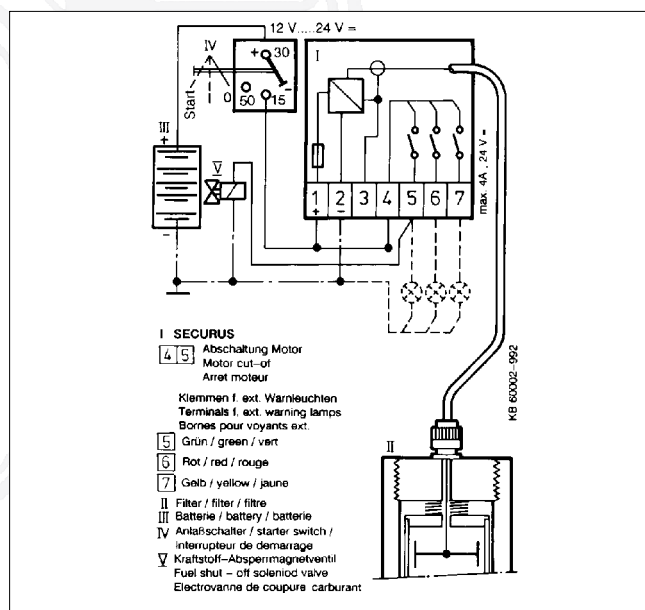


Fig. 17 Terminals, DC model

Terminal 1: Mains connection - phase
 Terminal 2: Mains connection - neutral
 Terminal 3: System ground wire
 Terminal 4: Common
 Terminal 5: Contact, green light
 Terminal 6: Contact, red light
 Terminal 7: Contact, yellow light
 Maximum permissible contact load is 250 VAC, 6 Amps.

Terminal 1: Positive polarity, power supply
 Terminal 2 or
 Terminal 3: Negative polarity, power supply
 (Terminals 2 and 3 are connected together inside the unit.)
 All other terminal utilization is the same as in the AC version.
 The cable shield is connected to terminal 3 inside the unit.



For description of electrical equipment and SECURUS monitoring on units with COMP-TRONIC compressor control see COMP-TRONIC or compressor unit instruction manual.

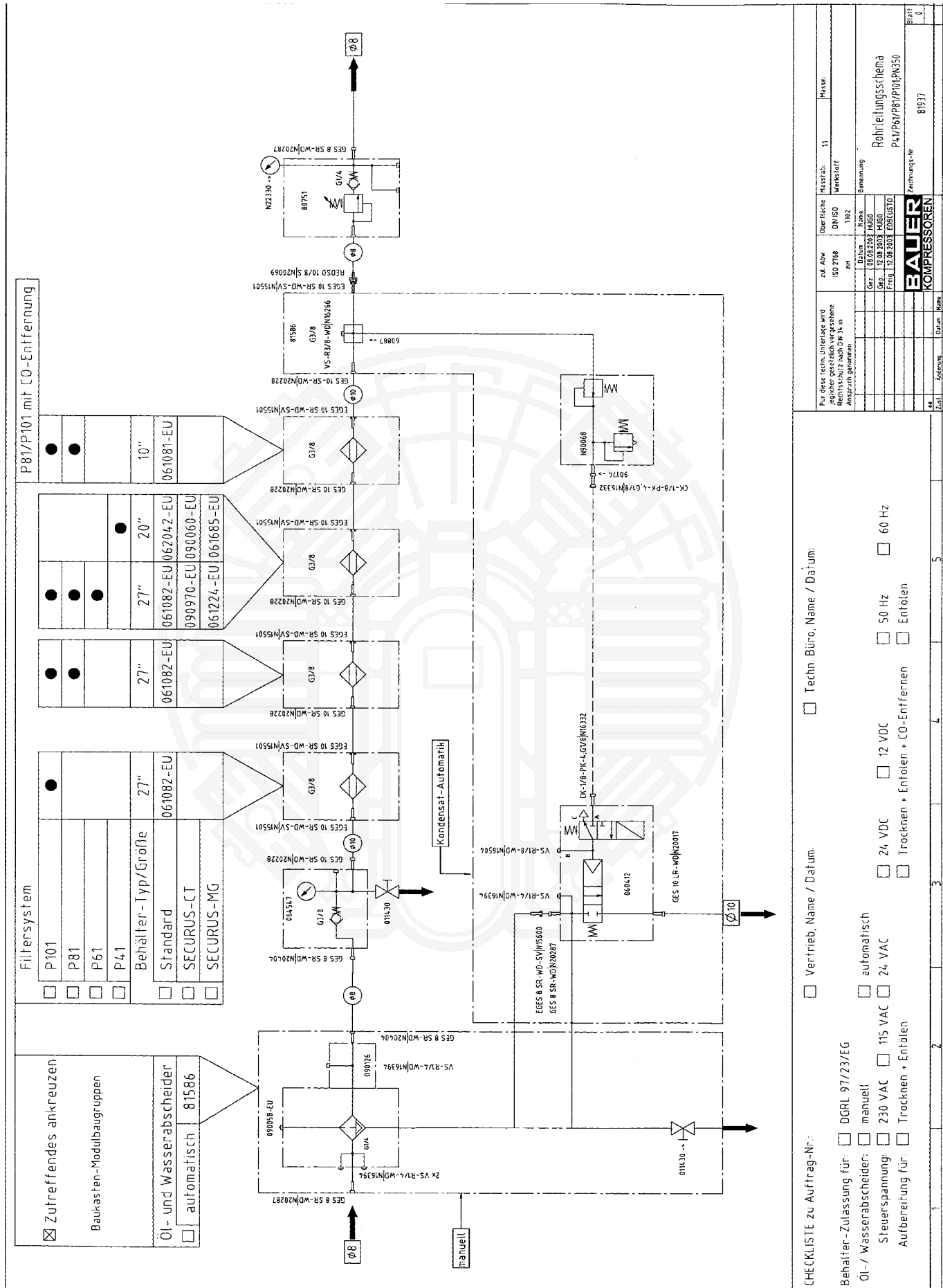


5. ANNEX

- **Configuration**
- **Parts lists**







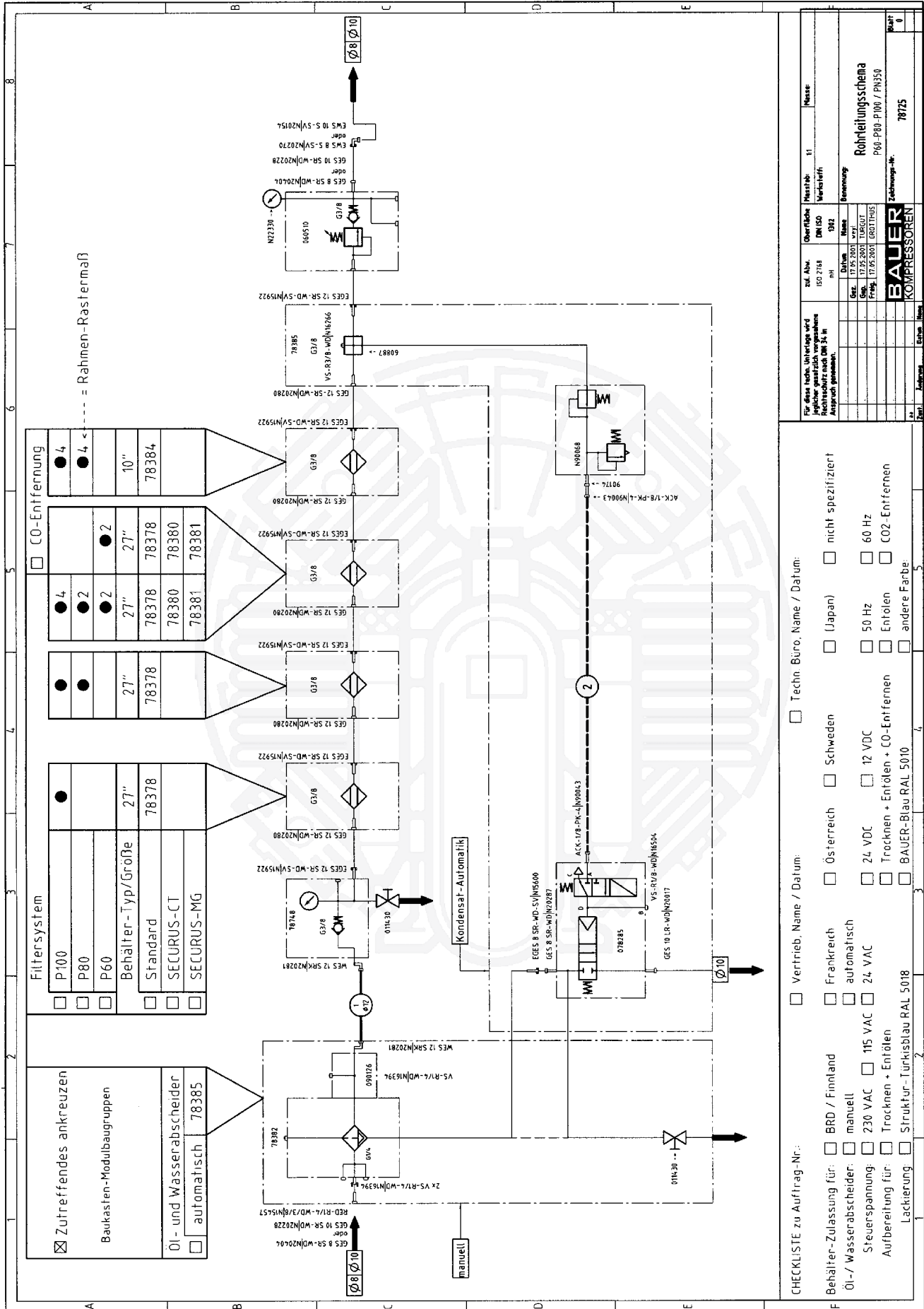


Fig. 4001. Nach Montage wird jeder Behälter einzeln nach dem Reichtschritt nach DIN 24, in Anspruch genommen.

zul. Abw.	ISO 7183	Übersicht	Dr. ISO	1992	Maße
Gen.	17.05.2001	Datum	17.05.2001	18.01.2001	18.01.2001
Rev.	03	Reise	03	03	03
Proj.	17.05.2001	Zeichnungs-Nr.	78125		

Rohteilungsschema
P60-P80-P100 / PH350

BAUER
KOMPRESSOREN

CHECKLISTE zu Auftrag-Nr.:

Vertrieb, Name / Datum: Techn. Büro, Name / Datum:

F Behälter-Zulassung für:

- BRD / Finnland
- Frankreich
- Österreich
- Schweden
- Japan
- nicht spezifiziert

Öl-/Wasserabscheider:

- manuell
- automatisch

Steuerspannung:

- 230 VAC
- 115 VAC
- 24 VAC
- 24 VDC
- 12 VDC

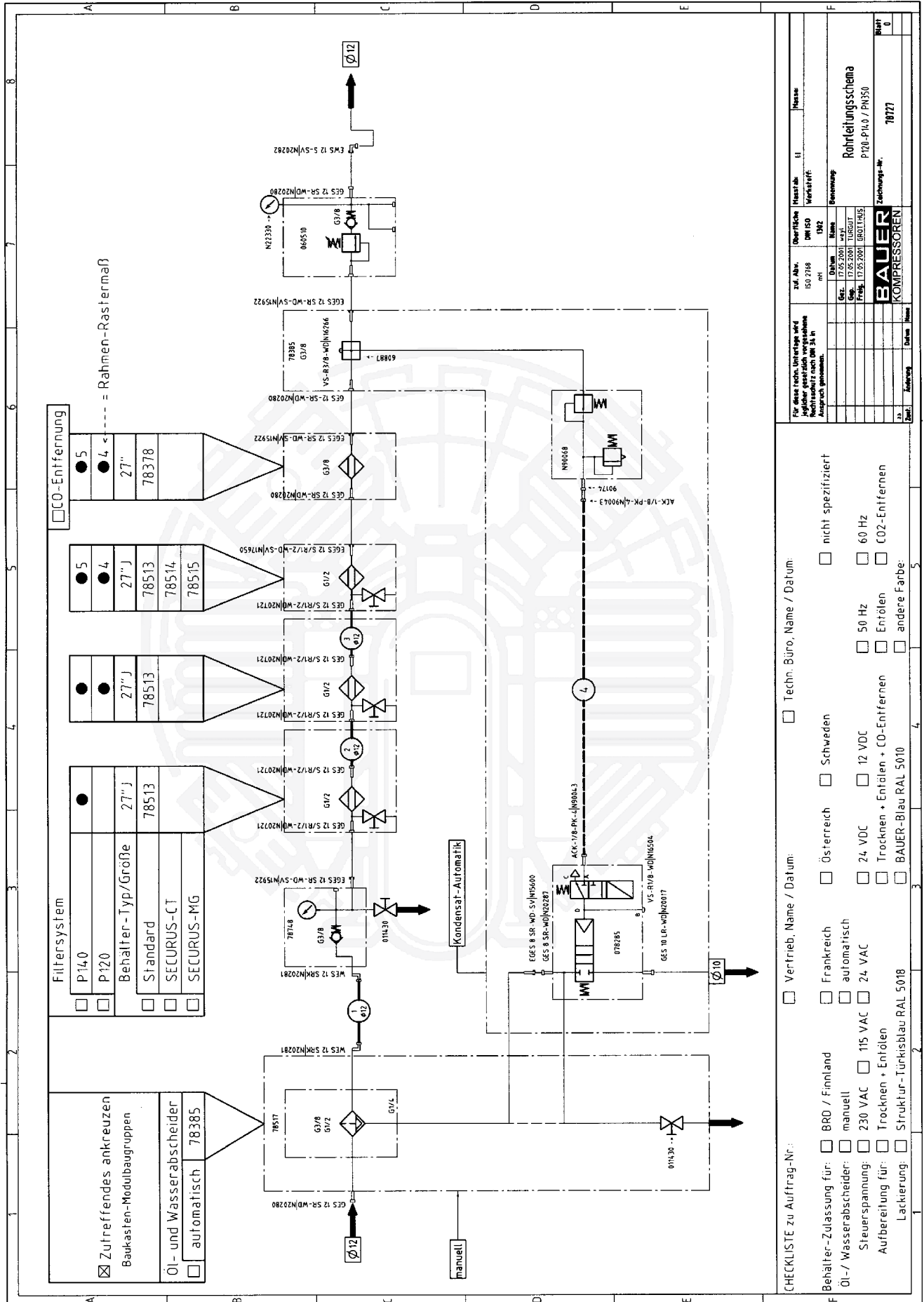
Aufbereitung für:

- Trocken + Entölen
- Trocken + Entölen + CO-Entfernen
- andere Farbe

Lackierung:

- Struktur-Turkisblau RAL 5018
- BAUER-Blau RAL 5010

Instruction Manual SECURUS Purification Systems



CHECKLISTE zu Auftrag-Nr.:

Vertrieb, Name / Datum:

Techn. Büro, Name / Datum:

Behälter-Zulassung für: BRD / Finnland Frankreich Österreich Schweden nicht spezifiziert

Öl-/Wasserabscheider: manuell automatisch

Steuerspannung: 230 VAC 115 VAC 24 VDC 24 VDC 50 Hz 60 Hz

Aufbereitung für: Trocken + Entölen Trocken + Entölen + CO-Entfernen Entölen CO2-Entfernen

Lackierung: Struktur-Türkisblau RAL 5018 BAUER-Blau RAL 5010 andere Farbe:



