

# WEBOMATIC®

Vacuum Packaging Systems

## USER'S MANUAL

Model PNC 20 / PNC 30

- Roots pump
- Automatic discharger
- Cut off knife
  
- Computer 4000

Voltage: 200 V/ 60 Hz/ 3~ \_\_\_\_\_  
220 /380 V /50 Hz/ 3~ \_\_\_\_\_  
240 /415 V /50 Hz/ 3~ \_\_\_\_\_  
230 /460 V /60 Hz/ 3~ \_\_\_\_\_  
208-230/415-460 V \_\_\_\_\_  
50-60 Hz/ 3~ \_\_\_\_\_

WEBOMATIC®  
Maschinenfabrik GmbH  
Hansastraße 119  
44866 Bochum (Germany)

Phone No. (02327) 10081  
Telex 820429  
Fax No. (02327) 17161

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# READ THIS FIRST

## 1.1 Introduction

This manual refers to machines with serialno.'s since 569AI2125 .

To connect your machine to the mains supply check cover of this manual for correct voltage.

Your WEBOMATIC® vacuum packaging machine is designed to pack food and all sorts of other products into bags that can be sealed.

This allows a longer storage of product without using additional substances. The product is hygenically packed and keeps its natural look.

Easiest operation and fully automatic working sequences are the main features of a modern electronic card.

If you have any questions concerning your WEBOMATIC® vacuum packaging machine, do not hesitate to ask, we will be happy to help you.

# READ THIS FIRST

## 1.2 Important security instructions

Your WEBOMATIC® Vacuum Packaging Machine is designed carefully in order to guarantee a secure and reliable operation throughout many years.

Like all electrical units there are a few basic precautions to pay attention to.

These precautions are for your own safety and protects your vacuum packaging machines against possible damages.

- ▶ **Take care that the sensors of the security installations are in proper condition. If the sensors are not in proper condition, the security installations may not work properly and there is a risk of injury for the operator.**
- ▶ The security installations have to be checked regularly - at least once a year - by qualified technician.
- ▶ Do not use the machine, if security installations are defect.
- ▶ Read the operating instructions carefully and keep it for future reference.
- ▶ Read and pay attention to all warnings and instructions on the machine.
- ▶ Before cleaning the unit disconnect the mains plug or - if available - switch off the machine on the main switch.
- ▶ Place the machine on a stable plain surface. Do not place the machine under any circumstances - on a wobbly surface. The machine should be easily accessible for maintenance working..
- ▶ Keep the ventilation slots on the machine free.
- ▶ Never place the machine on or near a heating unit.
- ▶ The machine should never be in direct contact with water.
- ▶ The supply connection has to correspond with the rating plate. In case of doubt ask your dealer or a qualified electrician.
- ▶ Prevent damage to the supply cable. Place the supply cable carefully in order to prevent someone from tripping over it. Damaged cable has to be replaced immediate.
- ▶ Do not put anything into the ventilation slots of the machine, because of the threat of an electric shock.

# READ THIS FIRST

## 1.2 Important security instructions

- ▶ Do not service the machine in any other way but described in the operating instructions.
- ▶ Should the unit malfunction please disconnect the mains and call your authorized service agent in order to repair the unit.
- ▶ When using gas, the bottle has to be placed always in the upright position and secured with a chain (or similar) to guard against falling over. See chapter 2.2 " Connection of gas bottle ".
- ▶ Pay attention to the accident prevention regulations laid down for handling pressure gas bottle. Do not vacuum pack any explosive or easy flammable objects ( f. ex. petrol, oil etc.)

WEBOMATIC® has made every possible effort in order to guarantee correct specification and quality. But WEBOMATIC® will not be responsible for resultant damages caused by improper handling or by an act of God.

# OPERATING INSTRUCTION

## 2. CONNECTION

**ATTENTION !** Ensure that the vacuum pump has correct oil level. The oil must be in the middle of the sight glass which is installed on back of the machine.

### 2.1 ELECTRICAL CONNECTION

The electrical connection must be carried out by a qualified electrician in accordance with local regulations.

The mains connector has to be easily accessible at any time. Connect your pump to the proper pump cable at the machine.

On three phase machines the direction of rotation must be checked. To do this close the lid. If your WEBOMATIC® machine is equipped with a booster pump, you have to check the rotation of the Booster pump and of the main pump. To check rotation you need to open the front of your machine. Correct direction of rotation is indicated by an arrow on the pump. If rotation is incorrect exchange phases L1 and L2 inside the plug.

**ATTENTION! PROLONGED OPERATION OF INCORRECT ROTATION CAUSES DAMAGE TO THE VACUUM PUMP.**

Please read the electrical supply details on the rating plate fixed on the rear of the machine, make sure that your mains connection corresponds with the value on the rating plate.

**INCORRECT MAINS VOLTAGE CAUSES DAMAGE TO THE UNIT.**

### 2.2 CONNECTION OF THE GAS BOTTLE

The WEBOMATIC® machine can be equipped with the option to produce vacuum packs with gas flushing. The connection for the gas bottle is on the right side of the machine. The connection to the gas bottle should only be done with a pressure regulator and a pressure hose ( max. 17 bar, Code.No. 7.100-3 ).

Adjust the inlet pressure to maximum 1 bar. The gas bottle should be secured in the upright position by chain etc..

# OPERATING INSTRUCTIONS

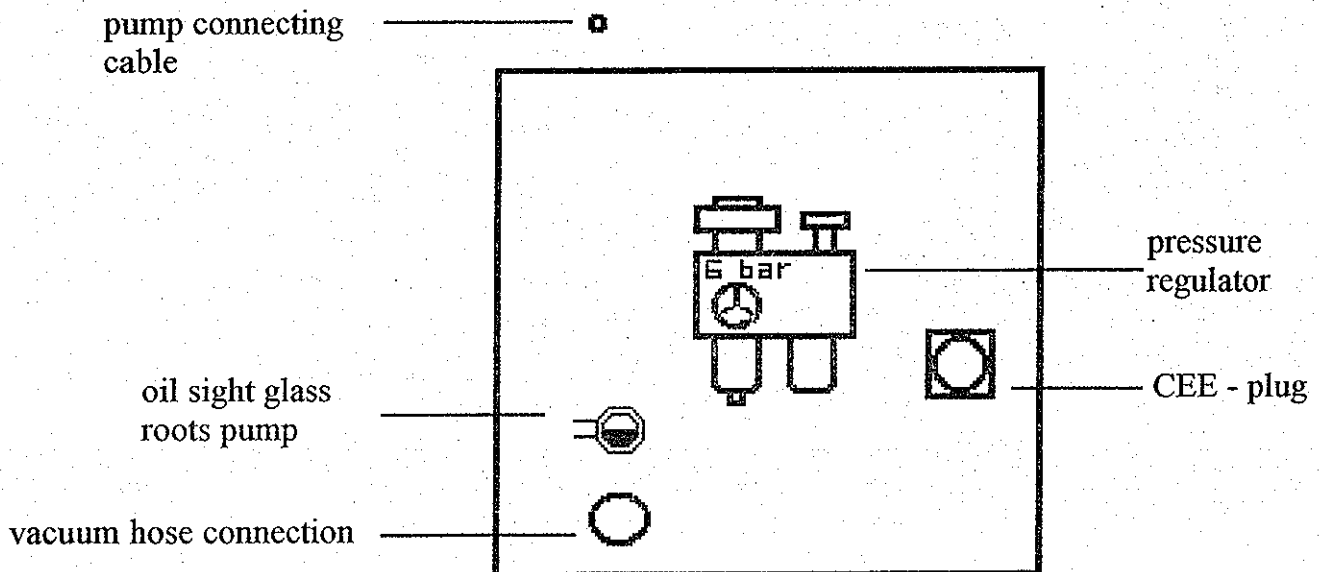
## 2. CONNECTIONS

### 2.3 CONNECTION OF COMPRESSED AIR

Your WEBOMATIC® Vacuum packaging machine needs compressed air to work properly. You will find the connection for compressed air on the right side of the machine (picture 1). Use a suitable air pressure hose ( max.17 bar , Code-No.:7.100-3 ). Adjust the pressure to 6 bar.

### 2.4 CONNECTION OF VACUUM HOSE

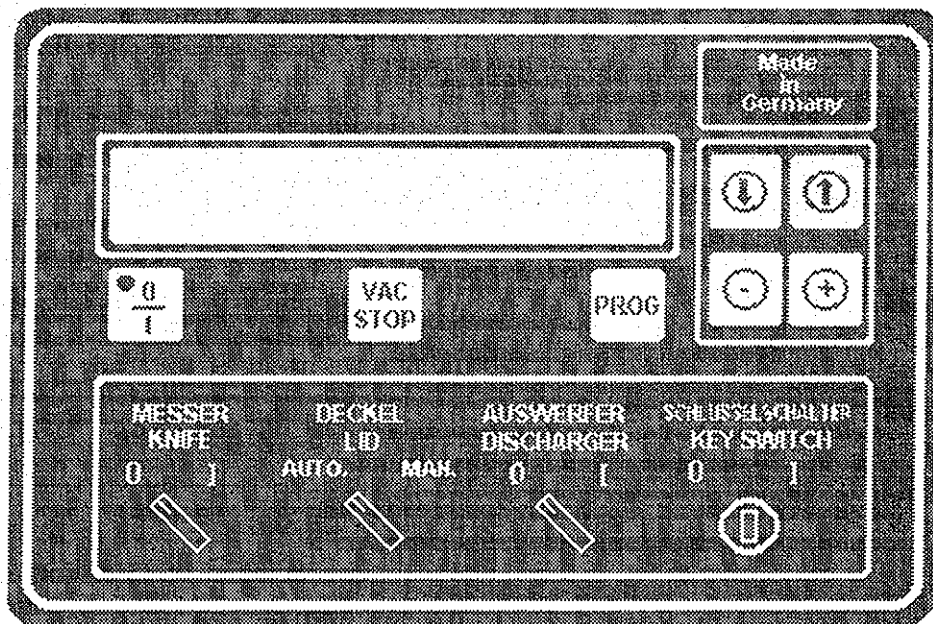
Connect your vacuum pump and your WEBOMATIC®-Vacuum Packaging machine with a 2 inch vacuum spiral hose (Code.-No.: 7.106) to the right side of the machine ( picture 1 ). Fasten the hose with a 2 inch hose clamp.



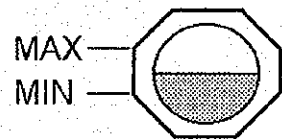
picture 1

# OPERATING INSTRUCTIONS

## 3. Operating



- Ensure the correct mains supply is connected to the machine.
- Ensure that the vacuum pump has correct oil level. The oil must be in the middle of the sight glass which is installed if the pump is installed inside of the machine on back of the machine or if you are using an external pump on the pump.
- Switch on the main switch. Both emergency buttons and the key switch should be in position off. The Standby signal turns on. Press button marked "0/I".



Standby signal turns off. Display illuminates and shows the last installed programme.



- Programme selection**  
Up to 50 programmes are available.  
Press button "+" or "-" to select programme.
- Place the product to be packed into a suitable size pouch and place it into a chamber laying the mouth of the bag over the sealing bar.  
Make sure that overlapping bag material is placed inside of the chamber.  
If your machine is equipped with knives, overlapping bag material may be placed outside of the chamber. The knives will cut the bag material off (**only if switch "KNIFE" is in "I" position - otherwise bag may burst**).  
Care should be taken to avoid contaminating or creasing the mouth of the bag.  
Filler plate height should be adjusted so that the sealing bar is approx. half the height of the product.



# OPERATING INSTRUCTIONS

## 3. Operating

- f) To start an automatic cycle, switch " LID " must be in " AUTO " position. The cycle will start immediately after the green button in the middle of the machine is pressed . The lid swivels to the other side and starts packaging. When machine has packed the product the lid swivels back and starts packaging. This sequence is repeated continuously. If switch " LID " is on " MAN. ", the green button has to be pressed for each packaging process.  
If your machine is equipped with cut off knives and the switch " KNIFE " is in position " I " the overleaping bag material will be cut off automatically.  
**ATTENTION ! If the switch is in position " 0 " the overleaping bag material has to be inside of the chamber to ascertain a proper vacuum packaging.**  
If your machine has an automatic discharger and you switched it on ( switch " DISCHARGER " in " I " position), the ready packed products are transported out of the machine onto a conveyor belt ( e.g. WEBOMATIC TB 2.5, Code-No. TB2.5 ).  
**ATTENTION ! Do not put your hands under the lid or the rolls. Danger of injury !**
- g) Remove the packed product and inspect the two sealing seams - they should be clear and distinct. If the mouth of the bag can be easily opened then the sealing time requires increasing. If the seal seam is cloudy (milky) then reduce the sealing time (see chapter 4).
- h) Check that there is no air left inside of the bag. If pack is slack increase the vacuum setting.
- i) Sequence of automatic operation:

1. *Evacuation* - After lid is closed, display shows:

VAKUUM	00%
--------	-----

Digital rises from " 0 " to preset value ( maximum "99.9" )

VAKUUM	99%
--------	-----

If the cut off knife is switched on after 20% Vakuum the display shows:

VAKUUM + MESSER	
-----------------	--

2. *Gas flushing* - Display :  
( OPTION ) Digital rises up to preset

GAS	00%
-----	-----

gas setting. Actual gas flushing is shown in volume percentages. If set to 0% there will be no gas flushing.

# OPERATING INSTRUCTIONS

## 3.2 Operating

### i) Sequence of automatic operation:

#### 3. Sealing - /Cut off

Sealing and cut off time can be adjusted in steps of 0.1 seconds.

During the sealing and cut off process the display shows:

SEALING

Temp 1 controls sealing time,  
Temp 2 controls cut off time.

TEMP1 1,2 TEMP2 0,4

PNC machines with mechanical cut off have 2 seal wires as standard.

#### option bi aktive sealing

If Your machine is equipped with bi active sealing, Temp 1 controls sealing time of the left chamber and Temp 2 controls sealing time of the right chamber. If Your machine is a single chamber machine, Temp 1 is the valid sealing time.

#### 4. Cooling - down

Display :

During this time, seal bars will remain together without heating.

COOLING 1 SEC

#### 5. Soft air -

Machine ventilates slowly until preset value is reached. Display :  
When machine reaches the value, ventilation will rise to maximum.

SOFT-AIR 5%

Display:

If machine is in automatic mode, following message will

VENTILATION

appear in the display when machine has packed the product:

LID SWIVEL

If machine is in manual mode, following message will be displayed:

HAND SWITCH

If " VAC STOP " button is pressed immediatley after the working cycle, display shows the time of the working cycle.

RUN TIME 29 SEC

If " VAC STOP " button is repressed, the programme selection is displayed.

### k) Ready meals:

When packaging products with a high liquid content, the liquid will boil in a high vacuum , so proceed as folloing:

- set only 98% vacuum

- a. observe the product during the evacuation cycle

b. when bubbles are seen to rise from the liquid press button " VAC STOP ".

c. machine will seal bag and ventilate the chamber

### l) Cycle stop

Should it be necessary to interrupt the cycle at any stage whilst the lid is closed, then press button " 0/I " and the machine will automatically stop, ventilate the chamber and open the lid. Display:

VENTILATION

# OPERATING INSTRUCTIONS

## 3.2 Operating

### **ERROR HANDLING:**

#### ERROR VACUUM

If step "VACUUM" is processing and the computer recognizes a problem step "SOFTAIR" will be processed.

Afterwards program will be interrupted until error message is quit.

#### ERROR GAS

If program step "GAS" is processed and the computer recognizes a problem step "SOFTAIR" will be processed. Afterwards program will be interrupted until error message is quit.

#### ERROR SOFTAIR

If program step "SOFTAIR" is processed and the computer recognizes a problem program will be stopped and the error message will be displayed until you quit it.

#### ERROR VENTILATION

If program step "VENTILATION" is processed and the computer recognizes a problem program will be interrupted until error message is quit.

After you quit the error message, the program will continue with step "VENTILATION".

#### ERROR PRESSURE SENSOR

If the lid is opened, but the computer still measures a vacuum, it is most likely that the vacuum sensor is broken. The computer displays "ERROR PRESSURE SENSOR".

#### QUIT AN ERROR MESSAGE

Press one of the buttons <up>, <dn>, <+>, <-> to quit an error.

Buttons <0/1>, <VACSTOP>, <PMODE> will not quit the error message.

# OPERATING INSTRUCTIONS

## 4. Programming Computer 4000

How to change or to write a programm

1. The switch "LID" has to be in position "MAN.". If the switch was in position "AUTO" the machine will finish one more working cycle.

2. Select programme that you like to edit by using the button "+" or "-".

3. Press button "PROG" twice very quickly. Display will flush.

4. Press button "↑" or "↓" to select function that you want to edit.

Display shows for example:

GAS	20%
-----	-----

5. Press button "+" or "-" to adjust to desired value.

(e.g. 35%). Display:

GAS	35%
-----	-----

6. Select next function to edit ( repeat steps 3 and 4 ).

7. When all functions have the desired values press button "PROG". Display will stop to flush and the new settings are stored in the computer's memory.

The display shows:

Values stored
Press any key to
continue

Pressing any key will bring you back to your original program.

If this step is omitted then functions will remain their old values and all new settings are lost.

To get better information about the content of a programme, you may give your programme a name, that will appear behind each programme number. Please request your dealer.

If machine is not used for over 60 mins., the machine automatically switches to standby mode.

After approx. 500 operating hours the display shows:

Change the oil.

CHANGE OIL
------------

If you do not want to change the oil now, you may bypass the message by pressing any key.

The message will appear again after another 500 hours.

Standby time and oilchange intervals can be altered. If your product contains a high percentage of liquid, please reduce oilchange interval. Your dealer will give you information on how to do this.

# OPERATING INSTRUCTIONS

## 4. Programming Computer 4000

### Programme check

To check each programme proceed as following:

1. Connect machine to mains supply.
2. Press button "0 / I".
3. Select programme to be checked by pressing button "+" or "-".
4. Press button "↑" or "↓" to select function.

**VACUUM**

Function: Vacuum range from 10% up to 99%

**VACUUMPLUS**

Function: High vacuum range from 99.1 up to 99.9%

**TEMPERATUR I**

Function: Sealing time: Range from 0.5 up to 3.0 seconds in steps of 0.1 seconds

**TEMPERATUR II**

Function: Cut off time. Range from 0 up to 3.0 seconds in steps of 0.1 seconds

**COOLING**

During this time seal bars remain together, but are not heated. Adjustable from 1.0 to 3.0 seconds.

**GAS**

Amount of pre-mix gas ( N, CO<sub>2</sub> etc) that will be back flushed into chamber.

**SOFT-AIR**

Slow ventilation of chamber. Adjustable from 0% up to 90%.

# OPERATING INSTRUCTIONS

## 4. Programming Computer 4000

The Computer 4000 is delivered with 20 programmes already installed ( see chart 1 ).  
 These programmes resulted from the daily use with vacuum packagings.  
 These programmes can be ( like all other programmes ) adjusted to your personal requirements.

Prg. No.	Programme name	Vacuum	Vacuum+	Gas	Temp 1	Temp 2	Cooling	Soft Air	Intervall I	Intervall II
1	STANDARD VAC 1	99	5	0	1,5	1,5	1,0	5		
2	STANDARD VAC 2	99	5	0	1,5	2,1	1,0	5		
3	STANDARD VAC 3	99	5	0	1,5	2,1	1,0	15		
4	HOCH VAC 1	99	9	0	1,5	1,5	1,0	5		
5	HOCH VAC 2	99	9	0	1,5	2,1	1,0	5		
6	HOCH VAC 3	99	9	0	1,5	2,1	1,0	15		
7	SCHRUMPFB. STD 1	99	5	0	1,0	1,0	2,0	5		
8	SCHRUMPFB. STD 2	99	5	0	1,0	1,9	2,0	5		
9	SCHRUMPFB. STD 3	99	5	0	1,0	1,9	2,0	15		
10	SCHRUMPFB. HOCH 1	99	9	0	1,0	1,0	2,0	5		
11	SCHRUMPFB. HOCH 2	99	9	0	1,0	1,9	2,0	5		
12	SCHRUMPFB. HOCH 3	99	9	0	1,0	1,9	2,0	15		
13	SCHUTZGAS STD 1	99	5	15	1,5	1,5	1,0	0		
14	SCHUTZGAS OPT 1	99	5	15	1,5	2,1	1,0	0		
15	SCHUTZGAS OPT 2	99	9	20	1,5	2,1	1,0	0		
16	FLÜSSIG PRODUKT 1	98	0	0	2,0	2,0	1,0	10		
17	FLÜSSIG PRODUKT 2	98	0	0	2,0	2,3	1,0	15		
18	INTERVALL VAC 1	99	5	0	1,6	1,6	1,5	10	4,0	4,0
19	INTERVALL VAC 2	99	5	0	1,6	2,0	1,5	10	6,0	7,5
20	INTERVALL VAC 3	99	5	0	1,6	2,0	1,5	10	9,9	9,9

# OPERATING INSTRUCTIONS

## 5. CLEANING / MAINTENANCE

If Your machine is equipped with discharger, the cleaning programme included with Your Computer 4000 should be used, that ensures a safe and riskless cleaning of the machine. Ensure that switch " LID " is in " MAN." position before starting cleaning programme. When lid is closed and a new working cycle has started, press buttons "↑" and "↓" at the same time to start the programme.

The display shows:

**CLEANING PROGRAMME**

To clean the chamber underneath the discharger, the discharger must be switched on.

Machine evacuates the chamber to ensure the lid is pressed down. The discharger goes up.

The following message runs through the display :

**PLEASE TURN THE KEY SWITCH**

Turn the key switch. The machine is now

disconnected from all its power sources and may be cleaned without risk of an electrical shock. Remove filler plates from chamber and clean the chamber using a damp cloth.

Wipe the sealing bar teflon with a damp cloth to remove film build up ( the dicharger has to be down ). If the silicone is used up ( burnt ) it has to be exchanged.

To clean the chamber use only water and natural soaps, never use any abrasive cleaner.

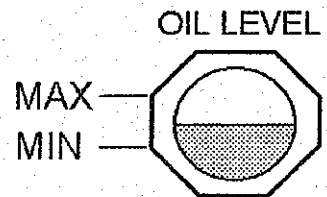
**This machine should not be cleaned down with a steam or water hose.**

## 6. MAINTENANCE/ SERVICE

### 6.1. Oil level

#### 6.1.1 Control of oil level

Check oil level regularly, if possible daily. If the pump is installed inside the machine the oil sight glass is installed in the back of the machine. If you are using an external pump the oil sight glass is installed on the pump. Oil level should be between minimum and maximum. If your machine is equipped with a Roots pump, oil level can be checked on the right side of the packaging machine.



#### 6.1.2 Control of oil quality

Oil quality depends on the operation of the machine. With products which have a high liquid content then this liquid will be mixed with the oil in the pump causing the oil to go cloudy (milky) and raising its level. In this case an immediate oil change is necessary. Otherwise the very first oil change should be done after 100 operating hours, following in intervals of 100 - 500 operating hours, depending on the products packed but at least every six months. After 500 operating hours the machine displays:

**CHANGE OIL**

**PRESS 0/I TO START MACHINE**

**PRESS 0/I + VAC STOP AFTER CHANGING OIL**

# OPERATING INSTRUCTIONS

## 6.1.2 Control of oil quality (continuation)

If you cannot change the oil immediately, but you want to continue working, opress button "0/I". The message will appear every time you switch the machine on until you changed the oil. After you changed the oil, press buttons "0/I" and "VAC STOP".

## 6.1.3 Oil change

Operate the pump to warm the oil then switch off. Remove oil drain plug (picture 1, No.1) and open oil drain tap (picture 1, No.2). Collect the old oil in a special container and dispose correctly.

### CAUTION!

Dangerous substances may escape out of the oil and pump. Therefore please pay attention to saftey regulations!

Replace drain plug and close tap.

Remove oil filler cap (picture 1, No.3) and fill with fresh oil.

Watch oil level (picture 1, No. 7).

With heavy contamination we recommend to rinse the pump. Fill oil up to the top of the oil sight glass and operate the pump for a short while. Afterwards change the oil as above.

- 1 Oil Fill Plug
- 2 Oil Sight Glass with Oil Level label
- 3 Drain Plug
- 5 Inlet Flange with Check Valve
- 7 Oil Return Line
- 8 Exhaust Box/ Exhaust Filter
- 9 Fan Cover
- 10 Arrow Label
- 11 Nameplate of Motor
- 12 Nameplate of Pump

Picture 1

**Transport your vacuum packaging machine or the pump without oil.**



# OPERATING INSTRUCTIONS

## ATTENTION !

Use compressor oil according to DIN 51506, ISO VC 100 (SAE30) at a surrounding temperature up to 40°C. We recommend the following oil:

<b>BP</b>	<b>ARAL</b>	<b>Mobil</b>	<b>Shell</b>	<b>DEA</b>
Energol RC 100	Montanol GM 100	Heavy	V 9930	Ursa P100

Oils can be purchased in specialist shops

### Chart 2

#### 6.1.4. Change of exhaust filter

Depending on the pollution of the evacuated gas the exhaust filters have to be exchanged after 3000-20000 operating hours.

Remove the cover plate with the pressure spring behind it.

Exchange the exhaust filters and replace the pressure spring and the cover plate.

Make sure it is tight.

#### 6.1.5. Cleaning of the inlet filter

In order to avoid reduced vacuum the inlet filter should be removed and cleaned at regular intervals (picture 1, No.5). Remove the 4 screws and clean the filter. When reinstalling it make sure the seals are placed correctly. If necessary replace the seal.

# OPERATING INSTRUCTIONS

## 6.2 SEALING BARS

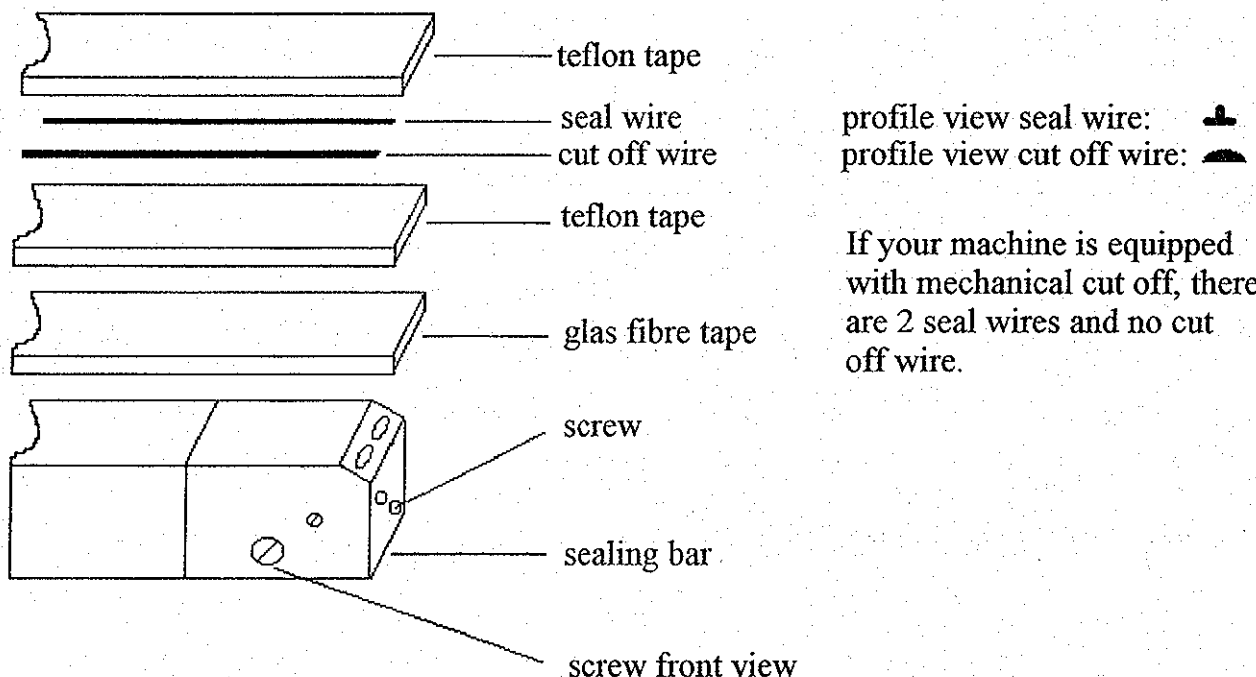
### 6.2.1 Maintenance of the sealing bars

The sealing bar is coated with a teflon tape. When this teflon is damaged it has to be replaced.

- ▶ Switch machine off. ( mains switch )
- ▶ Place the lid manually to middle position and make secure it against swinging.
- ▶ Loosen both of the sealbar's ES-bolts. You will find them underneath of the lid. They can be easily removed by splicing plates.  
ATTENTION! Always remember the knives directly behind the seal bars. Wear protective gloves for all these works.
- ▶ Plug off the electrical connection of the seal bars.
- ▶ Remove the old damaged teflon tape and clean the sealing bar with acetone.
- ▶ Stick the new teflon tape without wrinkles on top of the sealing and cut off wires.

### 6.2.2 Change of seal - and cut off wires

- ▶ Remove the seal bar as described in 6.2.1
- ▶ Remove the teflon tape.
- ▶ Loosen the side lower threaded bolts (picture 3) and remove the wires .
- ▶ Clean the bar from oil and grease.  
Should the fibre glass tape be burnt it has to be exchanged, too.
- ▶ Install the glass fibre tape with the threaded bolts on one side.
- ▶ Tighten the wires with a pair of flat nosed pliers and tighten also the threaded bolt.
- ▶ Pull the teflon tape on top of the sealbar and install the sealing bar on the cylinder.



**Picture 3: Seal bar**

# OPERATING INSTRUCTIONS

## 6.3 Change of the sealing cover

The sealing bar presses the product against a silicon rubber. This silicon rubber has to be exchanged when it is damaged. Pull out the rubber from the slot. Press the new silicon rubber into the slot.

## 6.4 Change of knives

If the knife is broken or blunt it has to be exchanged.

- ▶ Remove seal bar as described in 6.2.1
- ▶ Hold the knife bar with a protective glove and loosen both screws of the knife.
- ▶ Remove the knife out of the chamber and clean the silicone.
- ▶ Install the new knife by following the last steps back.
- ▶ Check function of seal bar and knife.

## 6.5 Change of lid gasket

If the lid gasket is pressed completely inside of the lid-groove or if it is damaged, it has to be exchanged.

Remove the old lid gasket completely!

Clean the groove very carefully! (Caution! Do not use any dilution). Apply as even as possible black silicon (code-no. 10.081) into the groove. Install the new lid gasket into the groove without tension. Leave the lid open for approx. 2 hours in order to dry.

# OPERATING INSTRUCTIONS

## 7. Error diagnosis

<b>Error</b>	<b>Possible reasons</b>	<b>Remedial action</b>
Machine does not run. No digital function	<ul style="list-style-type: none"> <li>- No mains power supply</li> <li>- Mains switch switched off</li> <li>- Key switch switched on</li> </ul>	<ul style="list-style-type: none"> <li>- Connect the machine to the mains power supply *</li> <li>- Switch on mains switch</li> <li>- Switch off key switch</li> </ul>
Machine does not run but display illuminates	<ul style="list-style-type: none"> <li>- Overload relay has tripped</li> <li>- Overload relay is on manual</li> <li>- Lid contact broken</li> <li>- Error indication on display</li> </ul>	<ul style="list-style-type: none"> <li>- Check if overload relay is on "auto" and let it cool off for 1-2 mins.</li> <li>- Change lid contact *</li> <li>- Fix error and press a button</li> </ul>
Machine runs, but no vacuum	<ul style="list-style-type: none"> <li>- Vacuum valve broken/ dirty</li> <li>- Vacuum hose closed</li> <li>- No operation signal</li> <li>- Sensor hose broken</li> <li>- Incorrect rotation</li> <li>- Broken lid gasket</li> </ul>	<ul style="list-style-type: none"> <li>- Change valve, clean it</li> <li>- Clean vacuum hose</li> <li>- Check connection to computer or change * computer</li> <li>- Exchange sensor hose</li> <li>- change L1 and L2 *</li> <li>- change lid gasket</li> </ul>
Poor vacuum	<ul style="list-style-type: none"> <li>- Hose closed</li> <li>- Not enough oil in pump</li> <li>- Old oil in pump</li> <li>- Broken lid seal</li> <li>- Blocked exhaust filters</li> </ul>	<ul style="list-style-type: none"> <li>- Clean or change hose</li> <li>- Fill oil in (Check oil level)</li> <li>- Make oil change</li> <li>- Change lid seal</li> <li>- Replace exhaust filters</li> </ul>
Programme sequence error	<ul style="list-style-type: none"> <li>- Computer not programmed correctly</li> <li>- Connection to the computer is loose</li> <li>- Broken computer</li> </ul>	<ul style="list-style-type: none"> <li>- Review values of computer</li> <li>- Check connection *</li> <li>- Exchange computer *</li> </ul>
Oil inside of the vacuum chamber	<ul style="list-style-type: none"> <li>- Too much oil in pump</li> <li>- Recoil-valve in pump is broken</li> </ul>	<ul style="list-style-type: none"> <li>- Oil level must be between "Min" and "Max"</li> <li>- exchange it ( see pump, No.9)</li> </ul>

# OPERATING INSTRUCTIONS

Error	possible reasons	Remedial action
no sealing	<ul style="list-style-type: none"> <li>- Sealing relay broken</li> <li>- Cut off- and seal wire broken</li> <li>- Contact cable broken</li> <li>( Only Elektronic - Models )</li> </ul>	<ul style="list-style-type: none"> <li>- Replace relay *</li> <li>- Replace wire</li> <li>- Replace cable *</li> </ul>
No cut off	<ul style="list-style-type: none"> <li>- Cut off relay broken</li> <li>- Cut off wire broken</li> </ul>	<ul style="list-style-type: none"> <li>- Replace relay *</li> <li>- Replace wire</li> </ul>
Sealing and cut off ok, seal seam opens up, no cut off	<ul style="list-style-type: none"> <li>- Sealing temperature programmed too low</li> </ul>	<ul style="list-style-type: none"> <li>- Adjust value see section 4 to raise until sealing OK</li> </ul>
Sealing OK No cut off on bag	<ul style="list-style-type: none"> <li>- Temperature for cut off too low</li> <li>- Switch Knife in " O " position</li> <li>- Cylinder broken</li> </ul>	<ul style="list-style-type: none"> <li>- Programme a cut off time</li> <li>- Switch on</li> <li>- Replace cylinder</li> </ul>
Gas flushing does not operate	<ul style="list-style-type: none"> <li>- Gas supply interrupted</li> <li>- No gas flush programmed</li> <li>- Broken gas valve</li> <li>- Gas nozzle closed</li> <li>- Gas bottle empty</li> </ul>	<ul style="list-style-type: none"> <li>- Check gas supply</li> <li>- Program gas flush value</li> <li>- Exchange gas valve</li> <li>- Clean it</li> <li>- Replace gas bottle</li> </ul>
Discharger does not work	<ul style="list-style-type: none"> <li>- Switch " Discharger " in " O " position</li> </ul>	<ul style="list-style-type: none"> <li>- Switch on</li> </ul>

**Please call our maintenance service for more help!**

\*) Should be done by a qualified technician.

# OPERATING INSTRUCTIONS

## Parts list

Codenr.	Description	Articleno.
1	chamber	1.011
2	lid	2.012
3	bullet proof sight glass	2.016
5	upper seal bar - normal	3.126
	- for compressed air cylinder	3.140
5a	teflon tape	3.021
5b	silicone ( 19x1 )	3.026
R2.1/R2.2	cut off wire	3.034
R1.1/R1.2/R1.3	seal wire ( half round )	3.030
5d	silicone ( 16x10 )	3.041
7	sealing cylinder Ø 80	7.031
8	knife cylinder Ø 50	7.030
15	stainless steel cut off knife	10.041
20	abor tension spring	4.013
21	cylinder ( lid )	7.010
24	foot	4.050
26	discharger lattice, with rolls	10.086
28	stainless steel roll complete with bearing	10.086-..... ( depends on length )
31	pressure regulator	9.015
	plastic panel Comp. 3000S	5.341
	plastic insertion Comp. 3000S-24V	5.350-24V
A1.1	Computer 4000	5.630-C
	Computer 3000S - 24V	5.620 - b - 24V
	Computer CT 100 - 24V	5.570 - 24V
A1.2	LCD display Computer 4000	5.630-D
F1-F3	cut-out 16A/50 Hz	5.046
	cut-out 16A/60 Hz	5.047
F5	fuse 10A	5.041
F6	bi-relay vacuum-pump	5.11.. ( depends on pump-type an
F7	bi-relay booster-pump	5.11.. voltage )
F8,F9	Fuse 1 A mT	5.042
K1	relay motor ( vacuum pump ) 50 Hz	5.134-50-24V
	relay motor ( vacuum pump ) 60 Hz	5.134-60-24V
K1.1	relay ventilator	5.138
K2	relay sealing	5.133-24V
K3	relay cut off	5.133-24V
K4	relay motor ( booster pump )	5.133-24V
K5	relay bi-active sealing	5.133-24V
K6	relay ventilator ( 60 Hz only )	5.121-24V

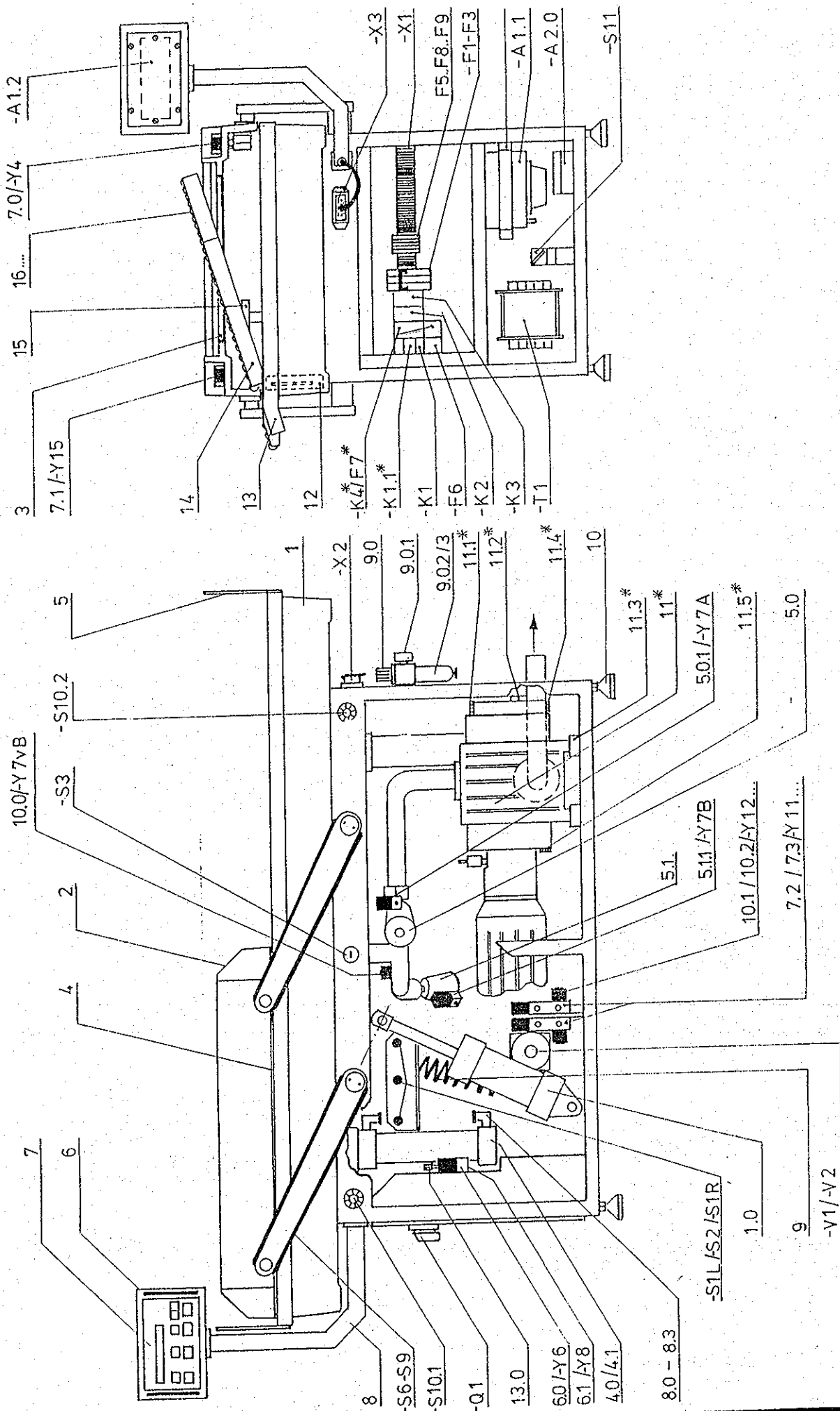
Upon ordering spare parts always mention machine type and machine-no. .

# OPERATING INSTRUCTIONS

## Parts list

Codenr.	Description	Articleno.
Q1	main switch	5.018
R	varystor transformer	5.554-24V
R1.0	varystor for relay K1-K5	5.554-4-24V
S1 L/R	lid roller-switch left/right	5.006
S2	lid-swivel roller-switch	5.006
S3	switch lid swivel	5.012
S5	switch ( AUTO - MAN )	5.015
S6	cylinder roller switch	5.006
S10.1 / S10.2	EMERGENCY-OFF switch	11.021
S11	switch discharger on/off	5.015
S12	key switch ( cleaning )	5.011
S15	switch knife on / off	5.015
T1	transformer KTT 1.5 thermo	5.205-24V
V1, V2	ventilator 220 V / 50-60 Hz	9.012
X1	clamp-bar	
Y4	4-way valve sealing	6.020-24V
Y6	valve cylinder	6.001-24V
Y6R	valve regulation lid swivel	6.004
Y7A	2-way-valve vacuum	6.015-24V
	spare coil with cable-head for Y7A	6.015-1-24V
Y7B	2-way-valve ventilation 24V / 50Hz	6.010-50-24V
	2-way-valve ventilation 24V / 60Hz	6.010-60-24V
Y7vB	2-way-valve Soft-Air 24V / 50 Hz	6.011-50-24V
	2-way-valve Soft-Air 24V / 60 Hz	6.011-60-24V
Y9 L/R	2-way-valve gas left / right 24V / 50Hz	6.011-50-24V
	2-way-valve gas left / right 24V / 60Hz	6.011-60-24V
	spare coil with cable-head for Y7vB, Y9 50 Hz	6.050-50-24V
	spare coil with cable-head for Y7vB, Y9 60 Hz	6.050-60-24V
Y11 L/R	4-way-valve discharger left/right	6.020-24V
Y12 L/R	2-way-security valve left/right 24V/50Hz	6.011-50-24V
	2-way-security valve left/right 24V/60Hz	6.011-60-24V
Y15	4-way valve knife	6.020-24V

Upon ordering spare parts always mention machine type and machine-no. .





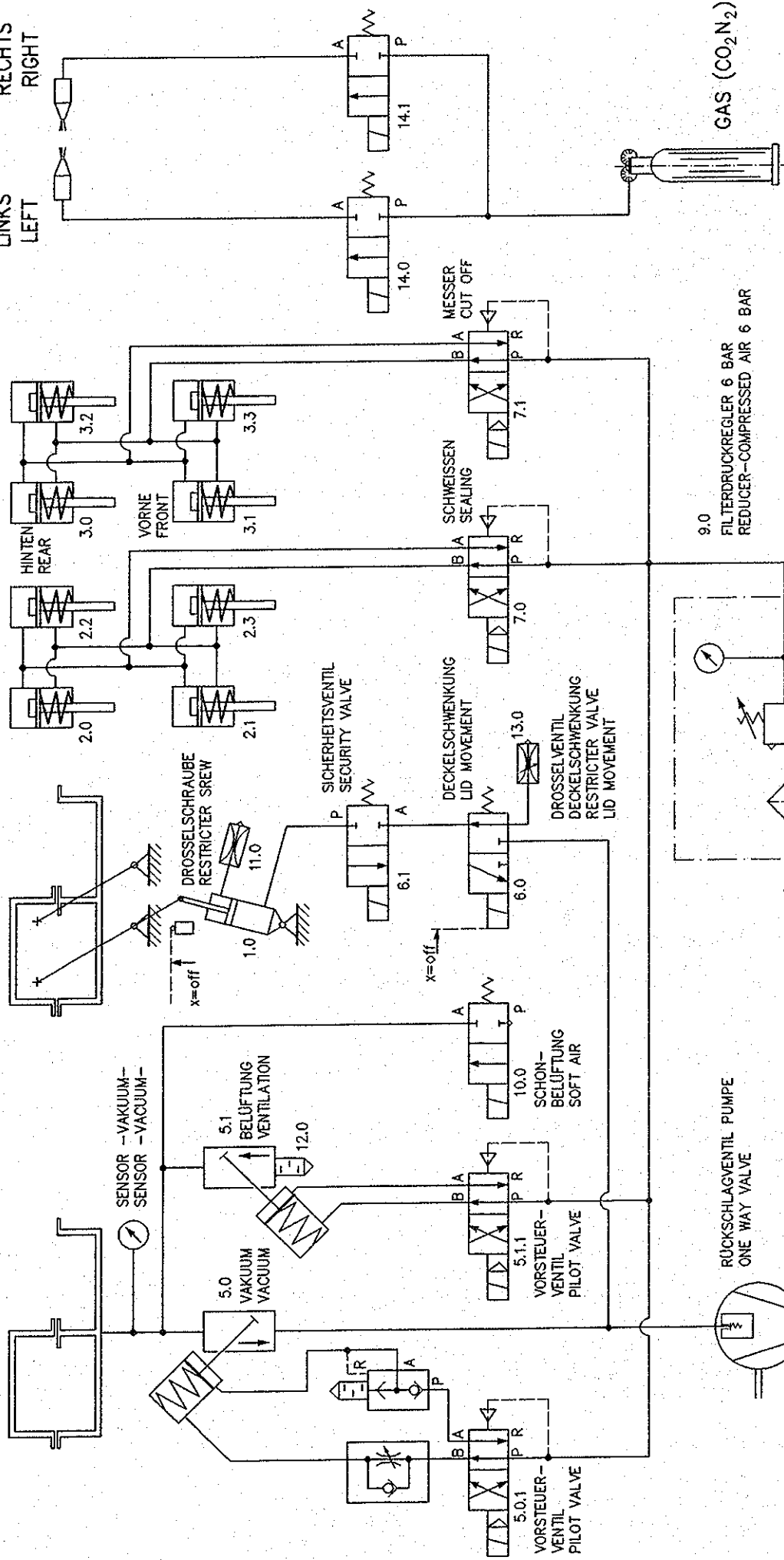
VAKUUM  
VACUUM

DECKELSCHWENKUNG  
LID MOVEMENT

SCHWEISSZYLINDER  
SEALING CYLINDER

MESSERZYLINDER  
CUT OFF CYLINDER

BEGASEN  
GAS FLUSHING  
LINKS LEFT  
RECHTS RIGHT



RÜCKSCHLAGVENTIL PUMPE  
ONE WAY VALVE

9.0  
FILTERDRUCKREGLER 6 BAR  
REDUCER-COMPRESSED AIR 6 BAR

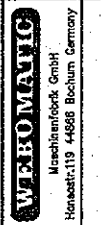
9.0  
FILTERDRUCKREGLER 6 BAR  
REDUCER-COMPRESSED AIR 6 BAR

GAS (CO<sub>2</sub>N<sub>2</sub>)

VAKUUMPUMPE  
VACUUMPUMP

BEGASEN MIT MAX. 21% O<sub>2</sub>  
GAS FLUSHING WITH MAX. 21% O<sub>2</sub>

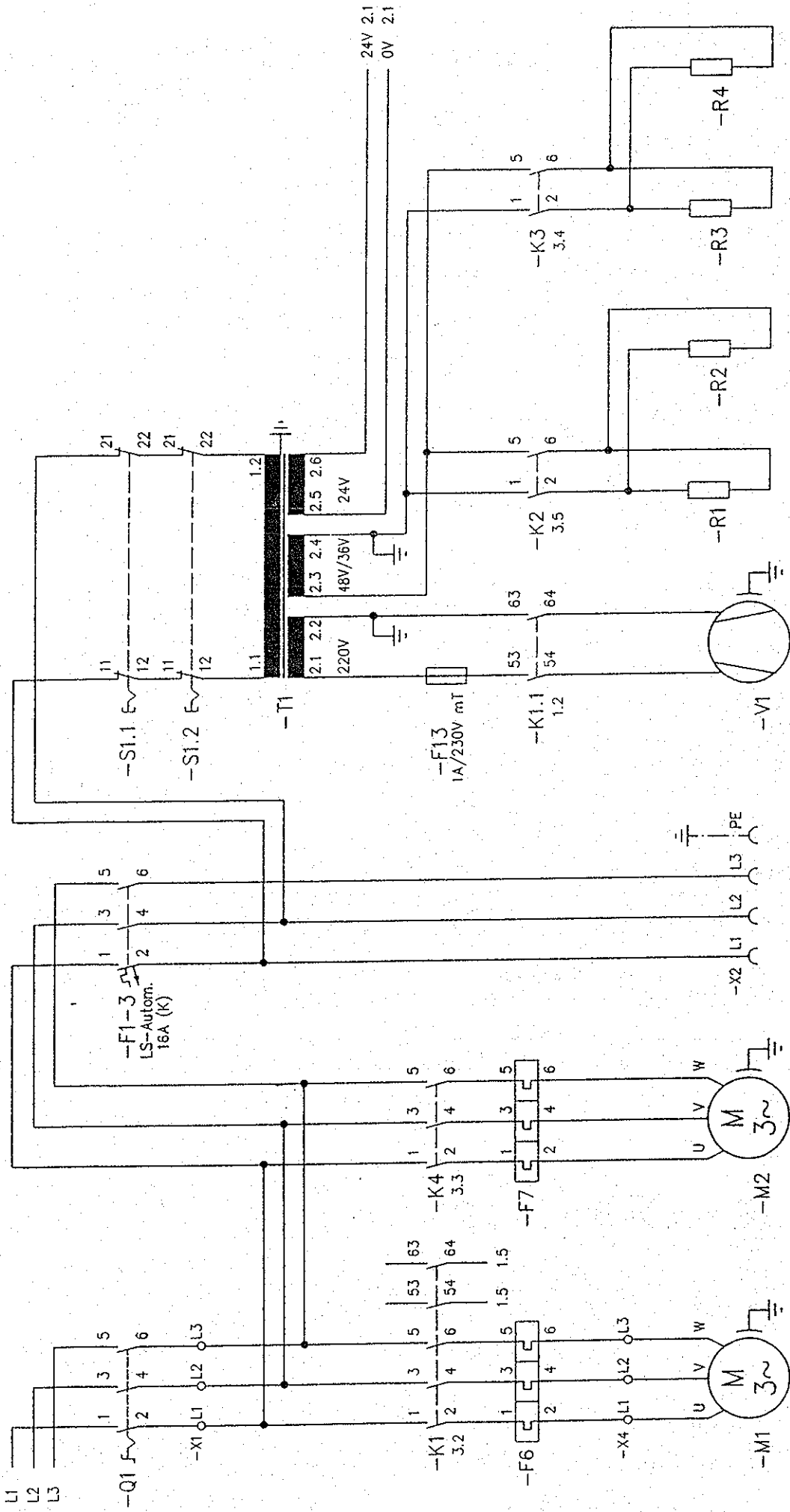
Gez.	Datum	Name
02.10.96	Granna	
02.10.96	Kie./Mü.	
M.-NR.: 55 9 EJ 2408		
u. 55 9 EK 2421		



PNC 20/30 D-G-M2-PR  
COMPUTER 4000  
PNEUMATIKPLAN/PNEUMATICPLAN

P 053 002

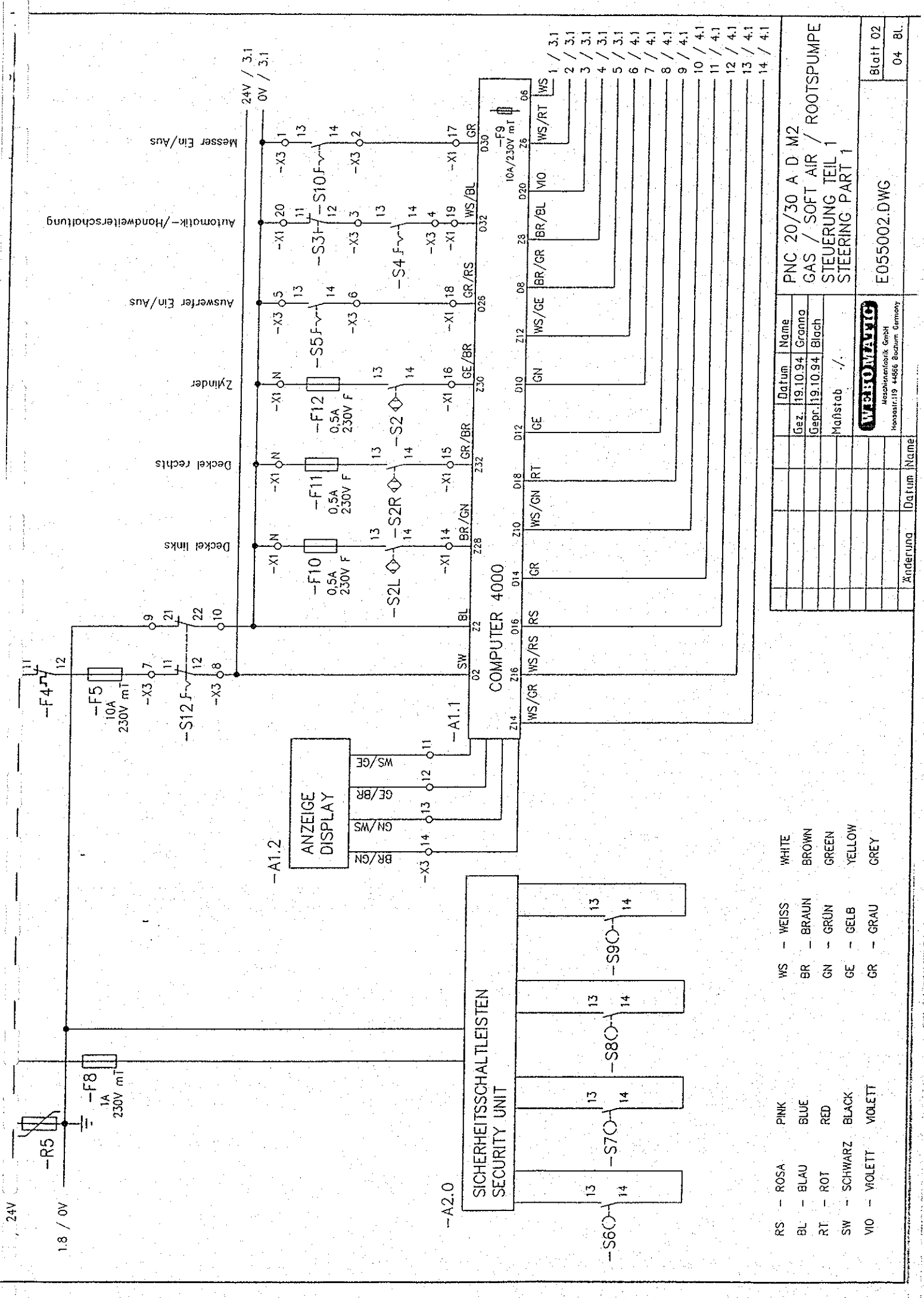
Blatt  
Bl.



VAKUUMPUMPE  
 WÄLZKOLBENPUMPE  
 TRANSPORTBAND  
 16A CEE-PLAG FOR  
 CONVEUOR BELT  
 VENTILATION  
 LUFTER  
 SCHW. LINKS  
 SEAL LEFT  
 SCHW. RECHTS  
 SEAL RIGHT  
 TRENNEN LI.  
 CUT LEFT  
 TRENNEN RI.  
 CUT RIGHT

Gez.		Datum		Name	
19.10.94		19.10.94		Granna	
19.10.94		19.10.94		Blaich	
Maßstab		/			
<b>WEBERMANITIC</b>					
Maschinenfabrik GmbH Hansstr.119 4488 Bochum-Germney					
Änderung		Datum		Name	
				E055001.DWG	
				Blatt 01	
				04 Bl.	

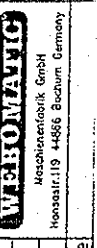
PNC 20/30 A D M2  
 GAS / SOFT AIR / ROOTSPUMPE  
 LEISTUNGSTEIL  
 POWER UNIT



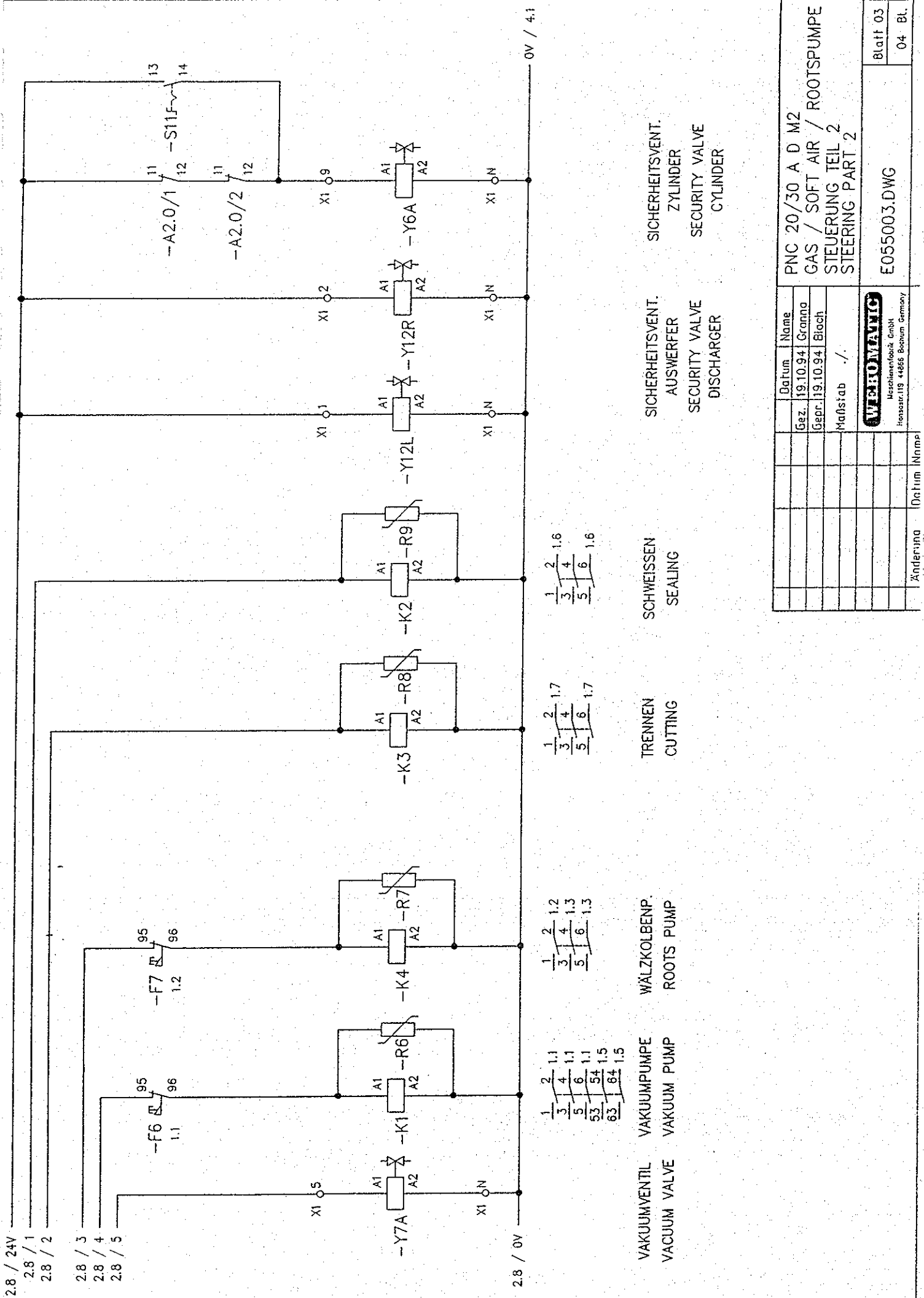
- RS - ROSA PINK
- BL - BLAU BLUE
- RT - ROT RED
- SW - SCHWARZ BLACK
- VIO - VIOLETT VIOLETT
- WS - WEISS WHITE
- BR - BRAUN BROWN
- GN - GRÜN GREEN
- GE - GELB YELLOW
- GR - GRAU GREY

Anderung		Datum	Name
		Gez. 19.10.94	Granno
		Gepr. 19.10.94	Blach
		Maßstab	/-

PNC 20/30 A D M2  
 GAS / SOFT AIR / ROOTSPUMPE  
 STEUERUNG TEIL 1  
 STEERING PART 1

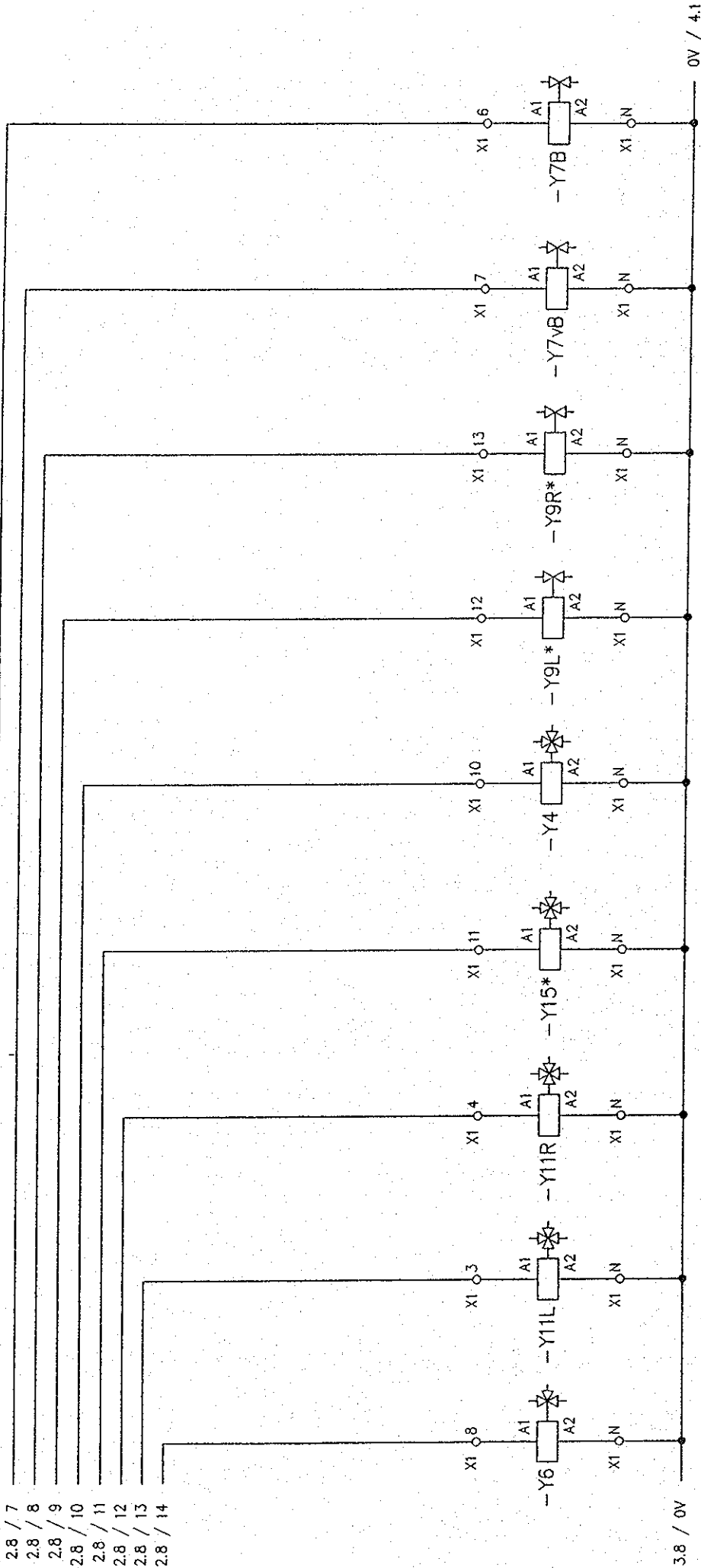


E055002.DWG



Datum		Name	
Gez.	19.10.94	Granno	
Gepr.	19.10.94	Bloch	
Mafstab		/.	
<b>WERBOMATIC</b>			
Maschinenfabrik GmbH Hansastr. 19 44668 Bochum Germany			
Änderung		Datum	Inhalt
PNC 20/30 A D M2 GAS / SOFT AIR / ROOTSPUMPE STEUERUNG TEIL 2 STEERING PART 2			
E055003.DWG			Blatt 03
			04 - Bl.

2.8 / 6  
 2.8 / 7  
 2.8 / 8  
 2.8 / 9  
 2.8 / 10  
 2.8 / 11  
 2.8 / 12  
 2.8 / 13  
 2.8 / 14



DECKEL-SCHWENKUNG LID SWING    AUSWERFER LINKS DISCHARGER LEFT    AUSWERFER RECHTS DISCHARGER RIGHT    MESSER KNIFE    SCHWEISSVENTIL SEALING VALVE    GASVENTIL LINKS GASVALVE LEFT    GASVENTIL RECHTS GASVALVE RIGHT    BELÜFTEN AERATION    SOFT AIR    ROOTSPUMPE STEUERUNG PART 3

\* = OPTION

Datum	Name
Gez. 19.10.94	Granna
Gepr. 19.10.94	Blach
Maßstab	/
<b>WEBOMATICS</b> Maschinenbank GmbH Hennsric.19 4486 Bochum Germany	
Aenderung	Datum


PNC 20/30 A D M2  
 GAS / SOFT AIR / ROOTSPUMPE  
 STEUERUNG TEIL 3  
 STEERING PART 3

E055004.DWG

Blatt 04  
 04 Bl.

# ANSCHLUSSLEISTE -X1

KABELTYP	QUERSCHNITT IN MM <sup>2</sup>	ZIEL	ZIEL	LASCHEVERBINDUNG	KLEMMEN-NUMMER	ANSCHLUSS	ANSCHLUSS
H07RN-F	4x4	-01	L1	o	L1	-K1	1
"	"	-01	L2	o	L2	-K1	3
"	"	-01	L3	o	L3	-K1	5
"	"	NETZ	PE	o	PE	-M1	
H07V-K	1x0,75	-F4	12	o	-F5	-X3	7
H07V-K	1x0,75	-T1	2.6	o	-F8	-A2.0	24V
H07V-K	1x0,75	-X3	10	o	-F10	-S2L	13
"	"			o	-F11	-S2R	13
"	"			o	-F12	-S2	13
H07V-K	1x0,75	-T1	2.1	o	-F13	-K1.1	53
H07V-K	2x0,75	-Y12L	A1	o	1		
"	"	-Y12L	A2	o	N	-X3	10
"	"	-Y12R	A1	o	2		
"	"	-Y12R	A2	o	N		
"	"	-Y11L	A1	o	3	A1.1	Z16 weiß/rosa
"	"	-Y11L	A2	o	N		
H07V-K	2x0,75	-Y11R	A1	o	4	A1.1	D16 rosa
"	"	-Y11R	A2	o	N		
"	"	-Y7A	A1	o	5	A1.1	D8 braun/grau
"	"	-Y7A	A2	o	N		
H07V-K	2x0,75	-Y7B	A1	o	6	A1.1	Z12 weiß/gelb
"	"	-Y7B	A2	o	N		
H07V-K	2x0,75	-Y7vB	A1	o	7	A1.1	D10 grün
"	"	-Y7vB	A2	o	N		
H07V-K	2x0,75	-Y6	A1	o	8	A1.1	Z14 weiß/grau
"	"	-Y6	A2	o	N		
H07V-K	2x0,75	-Y6A	A1	o	9	A2.0/2	12
"	"	-Y6A	A2	o	N		

Datum		Name	
Gez.	19.10.94	Granna	
Gepr.	19.10.94	Bloch	
Maßstab		/	
			
Wasserenologie GmbH Hansstr.19 4466 Bochum Germany			
PNC 20/30 A D M2	GAS / SOFT AIR / ROOTSPUMPE	KLEMMENPLAN	CONTACTPLAN
E055005K.DWG			Blatt 01
			02 Bl.

ANSCHLUSSLEISTE -X1

ZIEL		ZIEL		ANSCHLUSS		ANSCHLUSS		ANSCHLUSS		ANSCHLUSS	
KABELTYP	QUERSCHNITT IN MM <sup>2</sup>	ANSCHLUSS	ANSCHLUSS	LASCHENVERBINDUNG	KLEMMEN-NUMMER	ZIEL	ZIEL	LASCHENVERBINDUNG	KLEMMEN-NUMMER	ZIEL	ZIEL
H03V-K	2x0.75	sw	-Y4	A1	10	A1.1	Z10	o	10	A1.1	weiß/grün
"	"	bl	-Y4	A2	N			o	N		
H03V-K	2x0.75	sw	-Y15	A1	11	A1.1	D14	o	11	A1.1	grau
"	"	bl	-Y15	A2	N			o	N		
H03V-K	2x0.75	sw	-Y9L	A1	12	A1.1	D18	o	12	A1.1	rot
"	"	bl	-Y9L	A2	N			o	N		
H03V-K	2x0.75	sw	-Y9R	A1	13	A1.1	D12	o	13	A1.1	gelb
"	"	bl	-Y9R	A2	N	-X1:20		o	N		
H07V-K	1x0.75	sw	-S2L	14	14	A1.1	Z28	o	14	A1.1	braun/grün
H07V-K	1x0.75	sw	-S2R	14	15	A1.1	Z32	o	15	A1.1	grau/braun
H07V-K	1x0.75	sw	-S2	14	16	A1.1	Z30	o	16	A1.1	gelb/braun
			-X3	2	17	A1.1	D30	o	17	A1.1	grau
			-X3	6	18	A1.1	D26	o	18	A1.1	grau/rosa
			-X3	4	19	A1.1	D32	o	19	A1.1	weiß/blau
H07V-K	1x0.75	sw	-S3	11	20	-X1:N		o	20	-X1:N	
H07V-K	1x0.75	gr/ge	-T1	2.2	PE	-V1		o	PE	-V1	
H07V-K	1x2.5	gr/ge	-T1	2.4	PE	-X2		o	PE	-X2	
H07V-K	1x0.75	gr/ge	-T1	2.5	PE			o	PE		

PNC 20/30 A D M2		GAS / SOFT AIR / ROOTSPUMPE		KLEMMENPLAN		CONTACTPLAN		E055006K.DWG		Blatt 02	
Gez. 19.10.94		Name Granna		Gepr. 19.10.94		Blach		Maßstab /		W. BLOHMANN	
										Maschinenfabrik GmbH Hansstr.119 44866 Bochum Germany	
Änderung		Datum		Name							

# OPERATION INSTRUCTIONS

## Technical details PN 20 / PN 30

### PN 20 / PN 30

<b>Voltage</b>	:	220/380 V	240/415 V	230/460 V
<b>Current</b>	:	24.3/14.1 A	24.3/14.1 A	26.4/13.2 A
<b>Frequency</b>	:	50/60 Hz	50 Hz	60 Hz
<b>Power consumption</b>	:	( 7.9 kW )all machines 5.5 kW		
<b>Restricted area</b>	:	all machines IP 54		
<b>Sealing voltage</b>	:	36/48 V		
<b>Vacuum pump</b>	:	Busch R5250 ( 250 m <sup>3</sup> /h )		
<b>Environmental</b>				
<b>Rel. Humidity</b>	:	20% bis 80%		
<b>Temperature</b>	:	-10°C bis +60 °C		

### External dimension and weight

		PN 20	PN 30
<b>Hight</b>	:	1200 mm	1200 mm
<b>Width</b>	:	870 mm	870 mm
<b>Depth</b>	:	1865 mm	1865 mm
<b>Weight</b>	:	ca. 592 kg	ca. 613 kg

### Chamber dimension

<b>Hight</b>	:	200 mm	300 mm
<b>Width</b>	:	850 mm	850 mm
<b>Depth</b>	:	720 mm	720 mm
<b>Sealbar length</b>	:	830 mm	830 mm

Technical datas refer to recommended Busch vacuum pump R5250.  
Values in brackets refer to optional Busch Booster pump.



# WEBOMATIC®

Vacuum Packaging Systems

Your authorized agent: