



AUDION ELEKTRO®

Audionvac

VM 203-303

VMS 193-223-233-333



MANUAL

VM 203; 303; VMS 193 t-m 333 ENG. Rev.13



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INTRODUCTION

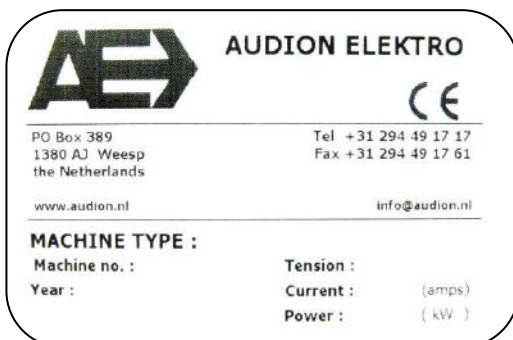
With the purchase of this vacuum chamber machine you will be able to pack a great variety of products. To use the vacuum chamber machines Audion made sure that all the machines, from the smallest to the biggest model, fulfill the greatest demands. Besides the superior quality of the machines they are all very easy to handle.

The machines are qualified for sealing Polyethylene (PE), Polypropylene (PP), Polyethylene/Polyamide (PEPA) or combinations of all the above. We recommend to use the proper materials for the Audionvac machines only.



The manual consists of two parts. In the first part, the user manual, all important information will be discussed like safety precautions or programming the machine. Also maintenance and possible solutions for eventual problems are discussed. The final section of the first part will discuss the guarantee and liability. In the second part, the technical part, all technical data, the pneumatic diagram, the electrical diagram and the exploded views will be discussed.

Make sure, during unpacking, all data on the identification plate are right (Fig. 1.1) and record the information you found on the identification plate in figure 1.1





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1380 AJ Weesp		Fax +31 294 49 17 61			
the Netherlands					
www.audion.nl		info@audion.nl			
MACHINE TYPE :					
Machine no. :		Tension :			
Year :		Current :		(amps)	
		Power :		(kW)	

Figure 1.1: Identification plate











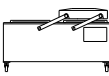







The Audionvac is packed in a carton box with a pallet. We advise you to store the box so you can transport the Audionvac, if necessary, safely in the future.



PART I: USER MANUAL

1 Precautions

1.1 Explanation of the clip arts

	Break contact between plug and socket
	The socket
	Identification plate with Voltage(V), Frequency(Hz) and Consumption(W)
OK	O.K.
	Fluid
	Long period
	Do not continue, this is dangerous
	Contact Audion Elektro BV or your dealer
	Watch out!
	Reparation/ Maintenance
	Audion Elektro BV
	Symbol for your Audionvac machine
	Temperature meter with boundary conditions
	Empty
	Oil replacement
	Gas-spring of the lid
	The oil level
	Vacuum meter
	Tension of the springs

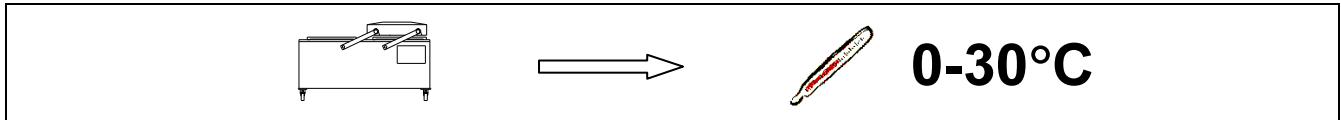
1.2 Prohibitions



2 Installation

2.1 Description of the workplace

Place the machine on a firm and stable table. The ambient surround temperature is 0 – 30 degrees Celsius. Do not place the machine in an environment exposed to direct sunlight, extreme temperatures, humidity, dust or sand, mechanical shocks and vibrations. Always leave room free around the machine.



The surrounding temperature must lie between 0-30 degrees Celsius

2.2 Checking the oil level

Before turning on the machine, check the oil level glass. It is possible that a table model is delivered without having pump filled with oil. If there is no oil in the pump, fill the vacuum pump with the oil supplied with the machine. See § 4.2.2 for instruction. The oil level must lie between the signs: “MIN” and “MAX”. The oil reservoir must be filled up to **80%**. A little less oil is better than a bit more. In practice this means that the oil in the oil reservoir must not be higher than 2mm above the measurement point in the middle of the measurement-glass.



When the oil reservoir is empty it must be filled with oil first

2.3 Connecting to the power supply

Make sure to check the specification of the machine and the power supply before making the electrical connection. The power supply must have an earth connection and fused. The connection must be done by an electrician with proper knowledge. After the machine has been properly connected to the power supply, check that the lid is open and turn the main breaker (fig. 2.3) to “I” position. By pressing in the ON/OFF switch (fig. 3.1, pos. 11) the machine starts up and the pump starts to run. If the pump is not running smooth, check the direction of the rotation.



Figure 2.3: Main breaker



Make sure the voltage, consumption and frequency of the power supply are the same as on the identification panel

2.4 Operating the machine

Place in or take away the insert plates from the chamber, so the bag is properly placed on the seal bars. If the machine is equipped with gas flush option, place the bag around the gas nozzles.

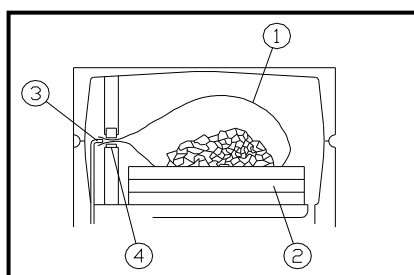
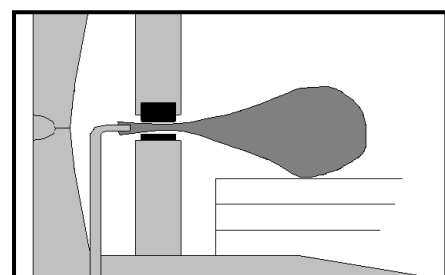


Figure 2.4: Bag inside chamber

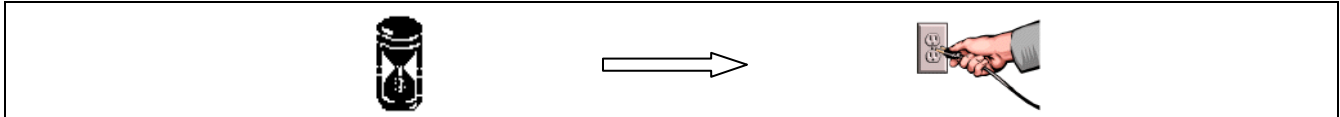
- 1: Vacuum bag
- 2: Insert plates
- 3: Gas nozzle
- 4: Seal bar



Select a program on the control panel and close the lid. After the vacuuming and sealing process the machine releases vacuum and the lid opens automatically. Check the vacuum and the produced seal. Increase vacuum time if the vacuum is too weak. If the seal is not strong enough, increase the sealing time. Decrease the sealing time if the seal is melting. Find out the appropriate settings by trial and error.

2.5 Turning off the machine

After finishing the operation, press out the ON/OFF switch and turn the main breaker to "O" position. Clean the chamber and close the lid. If the machine will not be used for a long period, disconnect the power cable from the power supply.



When the machine is not being used for a longer period, shut off the power supply

3 Programming

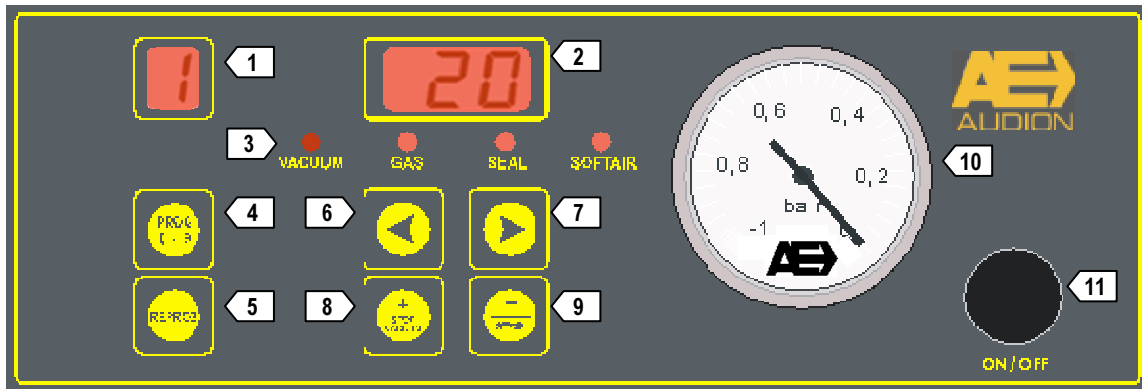








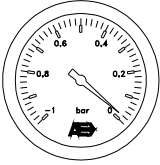



Figure 3.1 : Control panel

	<p>Display (1): This display shows the program number of the active program. When the program contains active gas flush setting, a dot will be indicated in the lower right hand corner.</p>
	<p>Display (2): In this display you can see the process times in seconds. When the machine has sensor control, the figure shows the vacuum level of the chamber in percentage. If Vacuum Plus Time is activated in sensor control, a dot will be indicated in the lower right hand corner when the relevant program is selected.</p>
	<p>Process LED (3): During the setting of programs or during the actual use of the machine, the LED of the active process turns on.</p>
	<p>Programming button (4): With this button you can select the program. Programs 1 - 9 can be re-programmed to desired packaging conditions. The program 0 is for servicing purpose and cannot be changed.</p>
	<p>Re-Programming button (5): This button is being used to change the settings of a program; and to save the new settings.</p>
	<p>Function select button (6 & 7): These buttons are used to select the processes in a program (vacuum, gas, seal or soft-air).</p>

	<p>Combination button [+]/[vacuum stop] (8): During programming, this button increases a setting value. For instance a longer vacuuming time. During operation, this button has the function to stop vacuuming process immediately and skip to the next process (gas or seal).</p>
	<p>Combination button [-]/[stop] (9): During programming, this button decreases a setting value. For instance a shorter vacuuming time. During operation, this button has the function to stop the whole cycle. The machine decompresses the chamber and the lid will open.</p>
	<p>Vacuum meter (10): The vacuum meter shows the level of vacuum inside the chamber. The maximum level of vacuum is about 99.95 percent and the vacuum meter points at '-1'. When the pressure inside the chamber is equal to the outside atmosphere, the vacuum meter points at '0'.</p>
	<p>ON/OFF switch (11):</p>

3.1 Programming with open lid

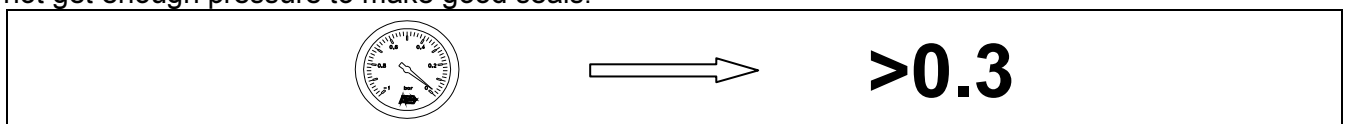
1)	Open the lid	
2)	Turn the machine on	
3)	Select program	
4)	Press [REPROG] to enter programming mode.	
5)	Select process	
6)	Set parameters with [+] and [-] buttons.	
7)	Press [REPROG] to save the setting.	

(*1) Gas flush is an option. When the option is not installed, the process cannot be selected.

3.1.1 Remarks about gas flush option

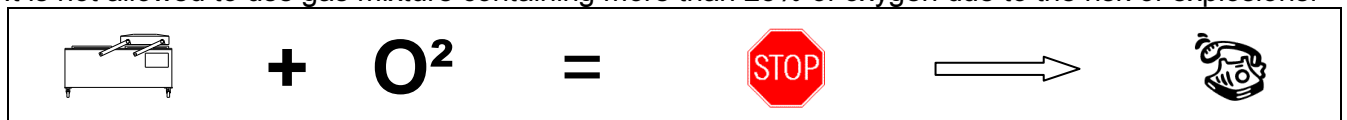
When gas flush is activated in a program, the display (1) shows a dot next to the program number.

The maximum gas flush setting is 99 seconds, but make sure not to let the chamber decompression level become lower than "0,3". If the chamber decompression level is lower than that, the seal bars do not get enough pressure to make good seals.



The percentage of vacuum has to be at least 30%.

It is not allowed to use gas mixture containing more than 25% of oxygen due to the risk of explosions.



Never use gas mixes containing over 25% of Oxygen.

3.1.2 Remarks about seal time setting

Do not operate the machine continuously in short cycles while the sealing time is set longer. The seal transformer shuts down when it is heated up too much. The maximum sealing time available for continuous operation is 10 % of the production cycle (for example, 2.5 seconds sealing time for 25 seconds cycle time).

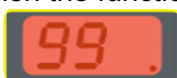
3.2 Programming with open lid in case of a sensor option

1)	Open the lid	
2)	Turn the machine on	
3)	Select program	
4)	Press [REPROG] to enter programming mode.	
5)	Select process 	
6)	Set parameters with [+] and [-] buttons.	
7)	Press [REPROG] to save the setting.	

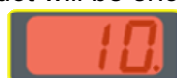
(*1) Gas flush is an option. When the option is not installed, the process cannot be selected.
 The value to be set for gas flush in percentage is the final decompression level of the chamber after flushing gas. For example, 60% gas flush means 39% of the chamber is filled with gas.
 When gas flush is activated in a program, the display (1) shows a dot next to the program number.



(*2) Vacuum plus time is an extra vacuum time (in seconds) after reaching 99% vacuum.
 The function is disabled when the vacuum is set to 98% or lower.
 When the function is enabled, a dot will be shown on the lower right hand corner of the display.











vacuum (%)



vacuum plus time (sec.)

(*3) It is not possible to store conflicting values. For example, gas cannot be set to 60% while vacuum is set only to 50%.

3.3 Programming with closed lid

1)	Open the lid	
2)	Turn the machine on	
3)	Select program 	
4)	Press [REPROG] to enter programming mode.	
5)	Close the lid.	
6)	<p>The machine starts to vacuum. Press [STOP VACUUM] when the vacuum has reached to the sufficient level. If full vacuum is required, wait for 5 seconds after the vacuum meter reaches “-1”, then press [STOP VACUUM].</p> <p>If the machine has the sensor control and 99% vacuum is set, the machine starts counting vacuum plus time (see § 3.2). Press [STOP VACUUM] again after sufficient vacuum plus time.</p>	 
7)	<p>The machine starts to flush gas into the chamber. (*1) Press [STOP] when sufficient gas has been inserted.</p> <p>The minimal gas level allowed to set is “0,3” on the vacuum meter. When the chamber decompression level is lower than that, the seal bars do not get enough pressure to make good seals.</p>	 
8)	The machine ventilates the chamber and finishes the programming (*2). The setting is stored in the program.	





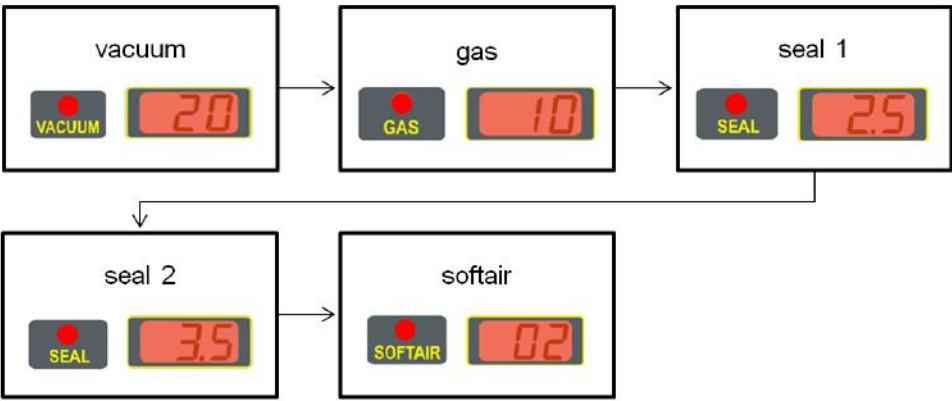





(*1) Gas flush is an option. When the option is not installed, the process cannot be selected.

(*2) Seal time and soft air time cannot be set with closed lid programming.

3.4 Programming seal 1-2 option

For vacuum packaging thick shrink bag with cut-off seal, seal 1-2 is recommendable. Seal 1-2 is an option that allows to set sealing times independently for two sealing wires. For example, sealing wire can be set at 2,5 seconds and cut-off wire at 3,5 seconds. In this way, the bag can be sealed and trimmed without having melted seal.

When programming with seal 1-2 option, 2 figures can be entered in seal process. The first figure is the seal time and the second figure is the cutting time.

1)	Open the lid	
2)	Turn the machine on	
3)	Select program 	
4)	Press [REPROG] to enter programming mode.	
5)	Select process 	 
6)	Set parameters with [+] and [-] buttons.	 
7)	Press [REPROG] to save the setting.	

(*1) Gas flush is an option. When the option is not installed, the process cannot be selected.

(*2) SEAL 1 is the sealing time for the sealing wire.

(*3) SEAL 2 is the sealing time for the cutting wire.

3.5 Special functions on request

The following functions are useful for certain special applications. Contact Audion or your local dealer if you wish to have these functions enabled.

3.5.1 Multi-cycle control

The multi-cycle is used for packaging applications which require very low oxygen rests in package. The operation of the multi-cycle control is automatically repeating vacuum and gas flush processes with a maximum of 5 times each before proceeding to seal process. Multi-cycle is also useful for packaging products containing air inside, which require rest times between vacuum cycles to let air out of itself.

1)	Open the lid	
2)	Turn the machine on	
3)	Select program	
4)	Press [REPROG] to enter programming mode.	
5)	Select process (for standard timer control) <div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">vacuum 1 </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">gas 1 </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">vacuum 2 </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">gas 2 </div> </div> <div style="margin: 5px 0;">↓</div> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">vacuum 3 </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">gas 3 </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">vacuum 4 </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">gas 4 </div> </div> <div style="margin: 5px 0;">↓</div> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">vacuum 5 </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">gas 5 </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">seal </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">softair </div> </div> </div>	
6)	Set parameters with [+] and [-] buttons.	
7)	Press [REPROG] to save the setting.	

(*1) 5 sub-cycles of vacuum and gas are described on the display as in below, with relevant values.

Sub-cycles (1) (2) (3) (4) (5)

(*2) If a process is set to OFF, the rest will be skipped and the cycle goes to the seal process directly.

(*3) In case of combining sensor control with multi-cycles, when the vacuum is set to 99%, the vacuum plus time is shown directly after that process. A dot will be shown on the right hand bottom corner if vacuum plus time (see § 3.2) is activated.

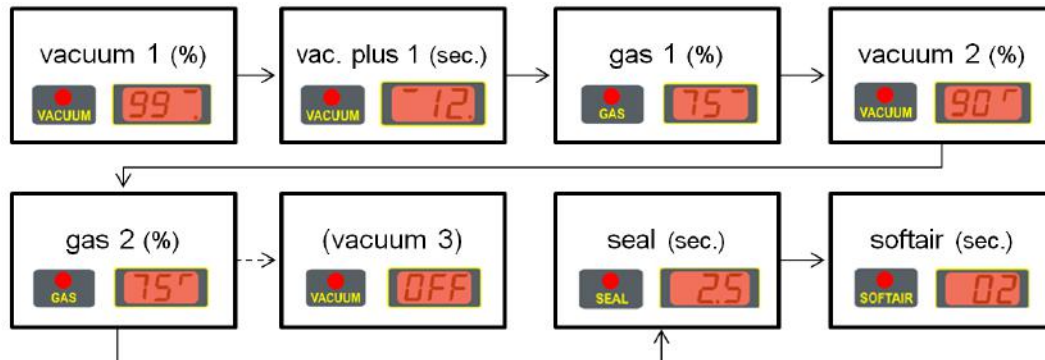


Figure 3.2: Process diagram for sensor control

3.5.2 Gas plus function

The gas plus function is an extra gas flushing time during the closing of the seal bars, allowing to put more gas inside the bag to make ballooning packages. This function is available only when the machine is equipped with the gas flush option.

3.5.3 Expansion reduction (for fresh meat product)

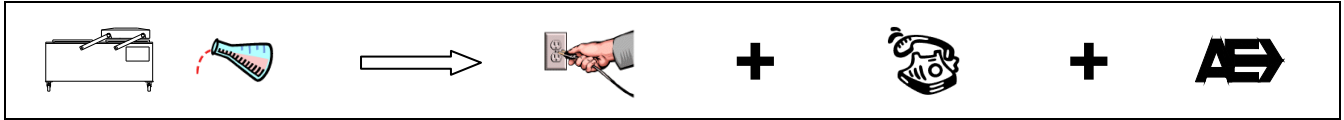
Expansion reduction is used to prevent bubbles appearing in the bag after vacuum packaging large piece of fresh meat. The bubbles are created by the gas trapped inside the cell of meat, which comes out of the meat due to low surrounding pressure. The gas stays inside the bag as the de-gassing occurs during sealing and cooling process. By using the expansion reduction, the decompression level in the chamber can be reduced by allowing external air to flow in for a short time (0.1 – 1.0 second) together with the closing of the seal bars, and it prevents the de-gassing of the meat, leaving no gas bubbles in the bag.

3.5.4 Sleeper time function

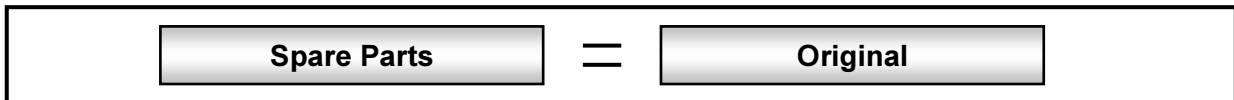
Sleeper time function enables to stop the vacuum pump from idling when a machine stays in stand-by for pre-set time. When the machine is used again by closing the lid, the vacuum pump starts running again automatically. Make sure to run the "Pump Conditioning Program" **every day** when working with this function enabled. (See § 4.2.1)

4 Maintenance

The Audionvac is a relatively simple machine which needs very little maintenance. There are a few reparations you can do by yourself. For all the other reparations please contact your local dealer or Audion Elektro BV. The schedule mentioned in § 4.1 is for normal use of the machine. When the machine is being used intensively or under extreme circumstances it is necessary to do more frequent maintenance.



When fluid enters the machine take socket out and call Audion Elektro BV.



In case the control panel needs to be removed, use the panel opening tools supplied with the machine. Insert the tools in the slots under the panel frame, lift and pull them out carefully.



Figure 4: Removing control panel

4.1 Regular maintenance

Daily maintenance	
Vacuum chamber and insert plates	Clean the lid, insert plates and chamber with a damp cloth. Treat the rubber strip in the lid with talk powder. Warning! The transparent lid should never be treated with synthetic cleaner as it weakens the material
Vacuum pump	Run the conditioning program "C" after you cleaned the machine
Weekly maintenance	
Seal bar	Check the condition. Repair if necessary
Rubber strip on the lid	Check the condition; replace if necessary
Oil reservoir	Check the oil level; replenish if necessary (see § 4.2.2)
Half year maintenance	
Oil reservoir and oil filter	Change the oil and the oil filter (see § 4.2.2)
One year maintenance	
Vacuum hose and pipes	Check the condition. Repair if necessary because a leak means vacuum loss
Silicone rubber of the press bar	Check the condition. A bad rubber can lead to a bad seal. Replace if necessary
Exhaust filter in the pump	Check the condition. Replace if necessary. Warning: If oil spray is at any time visible, replace the exhaust filter immediately. Do not wait until the 5-year maintenance check. This prevents damage to the pump.
Springs on the lid	Check the condition. Look for corrosion. Replace if necessary
Five year maintenance	
Gas springs on the lid	If these have not been replaced, they should be now. If the machine has been exposed to aggressive materials, then the spring should be replaced more often.
Electrical wiring	Let your dealer check these and repair if necessary

4.2 Maintenance of the vacuum pump

For optimal functioning of the vacuum chamber machine, the vacuum pump needs to be maintained periodically. If the machine is used regularly, it is advisable to fully inspect the pump once a year. Contact Audion or the supplier for advice and further information.

4.2.1 Conditioning program



If the machine is not used continuously for a certain time, the vacuum pump does not reach the ideal temperature. The moisture contained in the air sucked by the pump stays in the oil, and may lead to condensation inside the pump, which can eventually cause corrosion.

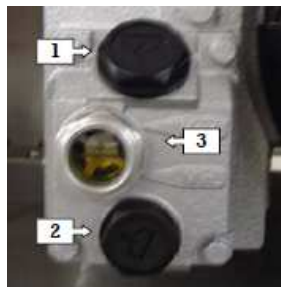
To keep the pump and oil in good condition, there is a pump conditioning program available in the control system, besides the 10 operation programs. The conditioning program repeats vacuum and de-vacuum processes continuously for 15 minutes. During the program, the pump and oil warm up and reach the operation temperature. The moisture and contaminants in the pump will be absorbed by oil and gets evaporated / filtered.

To start the conditioning program, press **[PROG]** button until "C" is shown on the display (1) and close the lid. The program runs automatically for 15 minutes and the display (2) shows the remaining time. When the program is finished, the lid opens and the display (1) shows "C". The program can be interrupted at any time with the **[STOP]** button, however, do not abort the program unless necessary as it is important to complete the full cycle for a good maintenance.

Run the conditioning program at least once a week. Also it is advisable to run it before replacing the oil, and before the using the machine for the first time after a long period the machine has not been used.

4.2.2 Changing /filling oil

The level and quality of oil must be checked every week. Fill up the oil if the level is too low. Replace the oil if it is turbid. Replace all the oil at least once every 6 months. Replace the oil filter together (see § 4.2.5).



1 : Oil filling plug
2 : Oil draining plug
3 : Oil level glass

Figure 4.2: Oil plugs and level glass

Replacing the oil

- Turn off the machine.
- Place an oil pan underneath the draining area.
- Loosen the oil drain plug (fig. 4.2 pos. 2) and drain the oil.
- In case the oil drain plug is behind the back plate, remove the back plate.
- When there is no oil drain plug present, the oil level glass (fig. 4.2 pos. 3) functions as drain plug.
- Close the oil drain plug.
- For further instructions see: "filling oil reservoir"

Filling oil reservoir

- Turn off the machine.
- Unscrew oil filling plug (fig. 4.2 pos. 1).
- In case the oil filling plug is behind the back plate, remove the back plate.
- Pour in new oil and let the oil level stabilize after every little bit.
- Repeat this until the oil level has reached the right level (look at the oil level glass).
- Close the oil filling plug

MODEL	PUMP CAPACITY	PUMP TYPE	STANDARD OIL			OIL FILTER		EXHAUST FILTER	
			Type	Article No.	Liters	Article No.	Q'ty	Article No.	Q'ty
VM(S) 203; 193; 223; 233	063 m³/h	50 Hz	VG 100	160-1550631	1.0	160-2050201	1	160-2050282	1
VM(S) 203; 193; 223; 233	063 m³/h	60 Hz	VG 100	160-1550631	2.0	160-2050201	1	160-2050281	2
VM(S) 303; 333	100 m³/h	50-60 Hz.	VG 100	160-1550631	2.0	160-2050201	1	160-2050281	2

4.2.3 Oil replacement alarm



Oil replacement alarm is a function to remind the operator to change the oil of the vacuum pump. After a certain time the machine had been used, the [oil] sign is shown on the display.

The default setting of this function is OFF. To activate the oil replacement alarm, press the function select button 6 (fig. 3.1) for 3 seconds. The display (2) shows "OFF". Using **[+]** and **[-]** buttons, the alarming time can be set between 10 and 990 hours (per 10 hours).

While the [oil] is shown, the machine can still be used as usual but the sign will be shown again when the machine is restarted. Replace the oil as early as possible and reset the alarming time. To reset the alarm, deactivate the function once by setting to OFF and press **[REPROG]** button. Press the function select button 6 for 3 seconds and set the appropriate alarming time again.

4.2.4 Changing exhaust filter

The exhaust filter absorbs and filters oil vapours. When the exhaust filter is saturated, the maximum vacuum level cannot be achieved. Refer to the table in § 4.2.2 for the type of the exhaust filter.



Figure 4.2a

- Remove the cover of the exhaust filter (fig. 4.2a).
- Remove the tensioner (fig. 4.2b).
- Remove the exhaust filter (fig. 4.2c).
- Make sure to remove the gasket (fig. 4.2d).
- Place the new exhaust filter, tension it, and put the cover on.



Figure 4.2b



Figure 4.2c



Figure 4.2d

4.2.5 Changing oil filter

The oil filter is mounted on the rear side of the exhaust filter. Replace the oil filter to a new one every time the oil is changed. Refer to the table in § 4.2.2 for the type of the oil filter. Drain the oil according to the instructions in § 4.2.2. Remove the filter by unscrewing and replace with a new one. Fill up the pump with new oil.



Figure 4.2e

4.3 Maintenance of the seal bar

The maintenance of the seal bar consists of:

- Cleaning the PTFE and controlling the PTFE for burned places.
- Check the seal wire and replace when necessary

4.3.1 Removing the seal bar

Before removing the seal bar, always switch off the machine.

VMS 173, VMS 193 and VMS 223 are equipped with seal bars that work with seal cylinders. (fig. 4.3 (1))

Lift the seal bar upwards to remove it.

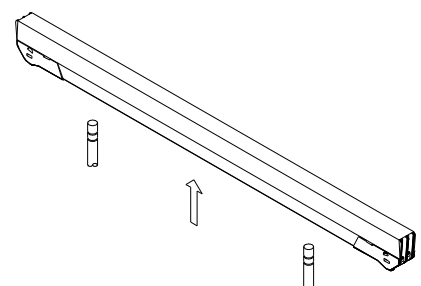


Figure 4.3 (1) : Seal bar for seal cylinder type

VM 203, VMS 233, VM 303 and VMS 333 are equipped with seal bars that work with seal bags.

Remove the fixing screw (fig. 4.3 (2) pos.1) and connection terminals (pos. 2) and pull the seal bar out of the holder.



Figure 4.3 (2) : Seal bar for seal bag type

4.3.2 Replacing the PTFE

When the PTFE is worn out, has burned marks or wrinkled it must be replaced.

- Remove the seal bar (as in § 4.3.1) and carefully remove the PTFE.
- Check the seal wire. When it is damaged directly replace it (see § 4.3.3)
- Remove all grease from the seal bar.
- Cut a piece of PTFE tape to length and place it evenly on the sealing bar. Rub the PTFE tape until the sealing wire can be seen clearly through the tape. Cut off the ends of tape.

4.3.3 Replacing the seal wire

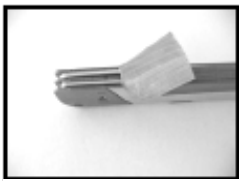


Figure 4.3a

- Remove the seal bar and PTFE (fig. 4.3a).
- Loosen the screws at both sides of the seal bar (fig. 4.3b) and remove the seal wire(s).
- Remove the old PTFE and clean the seal bar (fig. 4.3c).
- Cut the new seal wire with an extra 15 cm length.

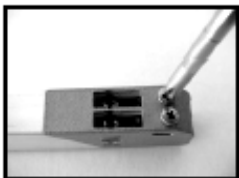


Figure 4.3b

- Place the seal wire in the clamp on the sealing bar and tighten the screws (fig. 4.3d).
- Put the sealing bar in a bench vice, with the sealing wire facing down and tighten the sealing wire (fig. 4.3e).



Figure 4.3c

- Stick the other end of the sealing wire into the clamp and tighten the clamp enough to hold the wire. First, use pliers to tighten the sealing wire, then use a wrench to tighten the screws of the clamp. The end of the sealing wire that stick out must be cut off (fig. 4.3f).

- Cut a piece of PTFE tape with a length of the seal bar + 5 cm.
- Place the new PTFE over the seal bar (fig. 4.3g).
- Put the seal bar back into the machine.

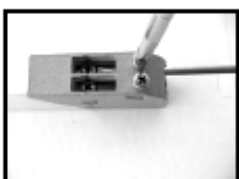


Figure 4.3d



Figure 4.3e



Figure 4.3f

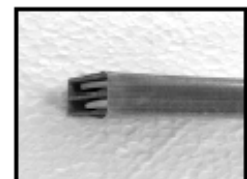


Figure 4.3g

4.4 Silicone rubber

When the silicone rubber has been damaged it has to be replaced. A damaged rubber results in a bad seal.

- Take the rubber out of the silicone holder.
- Cut the new rubber as long as the old rubber.
- Push the new rubber into the pressure.

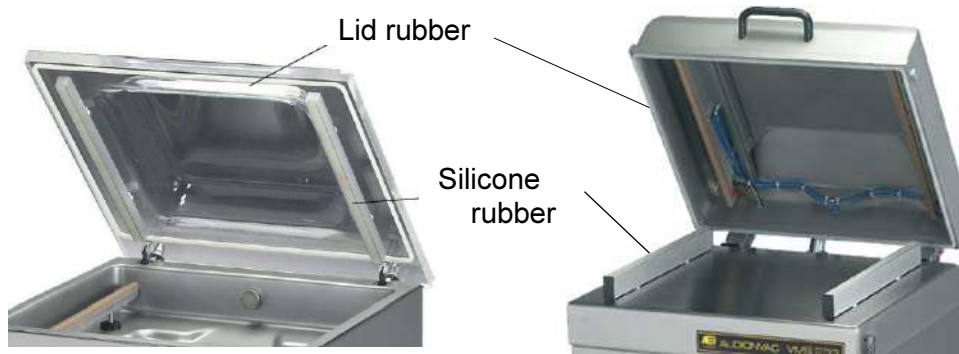


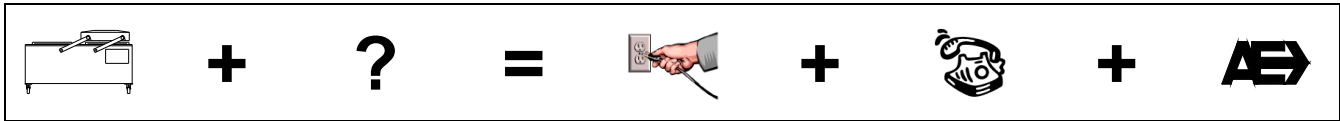
Figure 4.4: Silicone rubber & lid rubber

4.5 Lid rubber

The lid rubber prevents leaking of the chamber. The rubber should only be cleaned with a damp towel. Synthetic detergents could have the rubber being dried out. Regularly treat the rubber with talcum powder. When the lid rubber is in a bad condition it should be replaced.

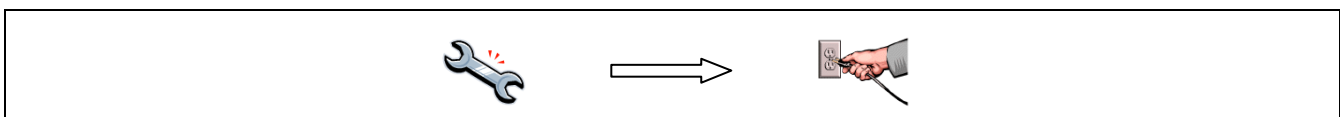
- Pull the rubber out of the lid.
- Cut the new rubber as long as the old rubber.
(Cut straight to prevent leaking.)
- Push the new rubber into the lid.
(Start in the middle of the backside).

5 Problem solving



For questions please disconnect the power and contact your dealer or Audion Elektro BV.

Problem	Possible cause	Solution
The machine does not work.	<ul style="list-style-type: none"> The plug is not inserted in the wall socket. The fuse in the wall socket is melted. Internal error 	<ul style="list-style-type: none"> Insert the plug in the socket. Replace the melted cartridge. <p>WARNING:</p> <ul style="list-style-type: none"> To prevent fire and/or other irreparable damage, replace fuses with fuses of the same type and ampere.
The vacuum bag has not sealed correctly.	<ul style="list-style-type: none"> The vacuum bag has not been placed correctly over the sealing beam. The sealing time is too high or too low. The silicone rubber in the counter beam is damaged or worn out. The PTFE tape is damaged. The opening of the vacuum bag is obstructed. 	<ul style="list-style-type: none"> Place the vacuum bag tightly and evenly over the sealing beam. Make sure the opening of the vacuum bag is always inside the vacuum chamber. Adjust the sealing time higher or lower as needed. Replace the silicone rubber. Replace the PTFE tape. Clear the opening of the vacuum bag of any obstructions and make sure it remains clear when filling.
The lid does not open automatically.	<ul style="list-style-type: none"> The gas damper is not working. 	<ul style="list-style-type: none"> Contact your dealer or Audion Elektro B.V.
Vacuum pump makes a lot of noise	<ul style="list-style-type: none"> Pump rotates the wrong way No oil in the pump Pump is defect 	<ul style="list-style-type: none"> Please connect the pump according to schedule Fill the pump with oil Contact your dealer or Audion Elektro B.V.
The vacuum is insufficient.	<ul style="list-style-type: none"> The vacuum time is too short. There is not enough oil in the vacuum pump. The ventilation opening on the back of the vacuum chamber is sealed off by a vacuum bag. The lid rubber strip is worn out. The oil is dirty and needs replacing. 	<ul style="list-style-type: none"> Lengthen the vacuum time Check the oil level and replenish oil as needed. In order for the vacuum pump to work correctly, the pump must be filled with the right type of oil. Contact your dealer. Place the vacuum bag closer to the sealing beam. Replace the lid rubber strip. Replace the oil with the prescribed oil type.
Insufficient vacuum in the package.	<ul style="list-style-type: none"> Vacuum bag is of a substandard quality. The product has hard protuberances. The space between the sealing beam and the counter beam is too small (this space should be at least 5 mm). 	<ul style="list-style-type: none"> Use a higher quality vacuum bag. Inspect the product and remove any parts sticking out. Loosen the safety screws on the sealing beam and push the sealing beam into the lowest position. Retighten the screws.
Machine vacuums too slowly	<ul style="list-style-type: none"> The suction filter of the pump is clogged. 	<ul style="list-style-type: none"> Contact your dealer or Audion Elektro B.V.



6 To discard the AUDIONVAC

In accordance with the directive 2002/96/CE, the logo below indicates that the equipment concerned is not to be disposed of as ordinary waste at the end of its useable life.

The equipment is to be delivered to a suitable depot that will dispose of the equipment in a proper way in accordance with the legislation on this subject, or to the supplier of new equipment in case of replacement.

The owner of the equipment is responsible for proper disposal of the equipment.

For further information we advise you to contact your local waste facility.



Appropriate disposal of Waste of Electric and Electronic Equipment prevents unnecessary pollution of the environment and negative influence on general health.

7 Conditions of guarantee

For official conditions, we refer to Dutch version.

7.1 Liability

- 1) We exclude any liability as far as it has not been arranged by law.
- 2) Our liability will never exceed the amount of the order.
- 3) Subject to the general valid regulations of the law, we are not obliged to any compensation of damage of which kind ever, directly or indirectly, under which company damage, to movables and immovables or to persons, both to the opposite party as to third parties.
- 4) In no way we are liable for damage arisen from or caused by the supplied or by the unsuitability of this for the purpose for which the opposite party has purchased the machine.

7.2 Guarantee

- 1) With due observance of the restrictions stated hereafter, we allow 12 months of guarantee to the products supplied by us. This guarantee is restricted to the occurring manufacture errors and does not imply interruptions caused by any form of wear spare parts subject to use.
- 2) To spare parts or enclosures obtained from third persons we do not give longer guarantee than this third supplier does.
- 3) Guarantee expires if the opposite party and/or third parties associated make improper use of the supplied.
- 4) Guarantee also expires if the opposite party and/or third parties associated execute activities and/or modifications to the supplied.
- 5) In case we replace spare parts to fulfill our guarantee engagement, the spare parts replaced become property of AUDION ELEKTRO
- 6) In case the opposite party does not come up completely, partially or does not come up in time to the obligations arisen from the engagement closed between the parties, we are not obliged to guarantee as long as the situation continues





PART 2: TECHNICAL MANUAL

8 Recommended spare parts

Spare parts list for VM203

Description	Size / Specification	Part numbers	Quantity per machine
PTFE tape	0.57 m	160-1416621	-
Seal wire (double seal 3.5mm width)	0.67 m	160-1416111	-
Seal wire (cut-off seal 1.1mm width)	0.67 m	160-1416121	-
Seal wire (8mm width)	0.67 m	160-1416136	-
Seal wire (bi-active 5mm width)	0.67 m	160-1416131	-
Silicone rubber	0.52 m	160-1431311	-
Lid rubber (lip 8mm)	2.5 m	160-1431321	-
Seal bar (double seal)	net seal length 510mm	160-1411443	2
Seal bar (cut-off seal)	net seal length 510mm	160-1411444	2
Seal bar (8mm seal)	net seal length 510mm	160-1411781	2
Seal bar (bi-active upper)	net seal length 510mm	160-1411463	2
Seal bar (bi-active lower)	net seal length 510mm	160-1411464	2
Seal bar (seal 1-2)	net seal length 510mm	160-1411460	2
Seal bag	440mm	160-1412551	2
Lid spring		160-1191139	2
Microswitch		160-2011576	1
Valve unit (consists of parts with #)		160-2011972	1
Vacuum valve (#)		160-2011961	(1)
De-vac valve (#)		160-2011963	(1)
Softair valve (#)		160-2011969	(1)
Seal valve		160-1391121	1
Gas valve (option)		160-1391153	(1)
Membrane for vacuum valve		160-1391313	(1)
Service kit for vacuum valve		160-2011981	(1)
Membrane for de-vac valve		160-1391313	(1)
Service kit for de-vac valve		160-2011983	(1)
PCB	digital 10 programs	160-1341202	1
Sensor PCB (option)		160-1341192	(1)
Panel complete (consists of parts with *)		160-2011352	1
Panel holder + panel sheet *		160-2011334	(1)
ON/OFF switch *		160-1331117	(1)
Vacuum meter *	63mm dia.	160-1921218	(1)
Panel opening tool set		160-1441226	1
Magnetic switch	BF09T4A	160-1332217	2
Main breaker	25A	160-1331171	1
Control transformer		160-1334122	1
Seal transformer	21.4V 900VA	160-1334143	2
Oil filter		160-2050201	1

Spare parts list for VM203

Description	Size / Specification	Part numbers		Quantity per machine
		220V-3P-60Hz	400V-3P-50Hz	
Thermal relay	9-14A (10A)	160-1332241	-	1
	4-6.5A (4A)	-	160-1332235	1
Automatic fuse	25A	160-1332170	-	1
	16A	-	160-1332171	1
Vacuum pump	63m3/h 2.2KW	160-1544811	-	1
	63m3/h 1.5KW	-	160-1544111	1
Exhaust filter	60Hz	160-2050281	-	2
	50Hz	-	160-2050282	1

Seal bar configurations



S/S (short / short)

Spare parts list for VM303

Description	Size / Specification	Part number	Quantity per machine
PTFE tape	0.61 m (short), 0.85 m (long)	160-1416621	-
Seal wire (double seal 3.5mm width)	0.71 m (short), 0.95 m (long)	160-1416111	-
Seal wire (cut-off seal 1.1mm width)	0.71 m (short), 0.95 m (long)	160-1416121	-
Seal wire (8mm width)	0.71 m (short), 0.95 m (long)	160-1416136	-
Seal wire (bi-active 5mm width)	0.71 m (short), 0.95 m (long)	160-1416131	-
Silicone rubber	0.56 m (short), 0.80 m (long)	160-1431311	-
Lid rubber (lip 8mm)	3.00 m	160-1431321	-
Seal bar (short for S/S : double)	net seal length 550mm	160-1411621	2
Seal bar (short for S/S : cut-off)	net seal length 550mm	160-1411626	2
Seal bar (short for S/S : 8mm)	net seal length 550mm	160-1411921	2
Seal bar (short for S/S : bi-active upper)	net seal length 550mm	160-1411627	2
Seal bar (short for S/S : bi-active lower)	net seal length 550mm	160-1411628	2
Seal bar (short for S/S : seal 1-2)	net seal length 550mm	160-1411629	2
Seal bar (short for L/S : double)	net seal length 490mm	160-1411448	1
Seal bar (short for L/S : cut-off)	net seal length 490mm	160-1411449	1
Seal bar (short for L/S : 8mm)	net seal length 490mm	160-1411821	1
Seal bar (short for L/S : bi-active upper)	net seal length 490mm	160-1411468	2
Seal bar (short for L/S : bi-active lower)	net seal length 490mm	160-1411469	2
Seal bar (short for L/S : seal 1-2)	net seal length 490mm	160-1411450	2
Seal bar (long : double)	net seal length 790mm	160-1411445	1 (L/S), 2 (L/L)
Seal bar (long : cut-off)	net seal length 790mm	160-1411446	1 (L/S), 2 (L/L)
Seal bar (long : 8mm)	net seal length 790mm	160-1411811	1 (L/S), 2 (L/L)
Seal bar (long : bi-active upper)	net seal length 790mm	160-1411465	1 (L/S), 2 (L/L)
Seal bar (long : bi-active lower)	net seal length 790mm	160-1411466	1 (L/S), 2 (L/L)
Seal bar (long : seal 1-2)	net seal length 790mm	160-1411447	1 (S/L), 2 (L/L)
Seal bag (short for S/S)	490mm	160-1412601	2
Seal bag (short for L/S)	410mm	160-1412521	1
Seal bag (long)	740mm	160-1412851	1 (L/S), 2 (L/L)
Gas spring	2600N	160-1921339	1
Lid spring (right)		160-1191146	1
Lid spring (left)		160-1191147	1
Microswitch		160-2011576	1
Valve unit (consists of parts with #)		160-2011972	1
Vacuum valve (#)		160-2011961	(1)
De-vac valve (#)		160-2011963	(1)
Softair valve (#)		160-2011969	(1)
Seal valve		160-1391163	1
Gas valve (option)		160-1391153	(1)
Membrane for vacuum valve		160-1391313	(1)
Service kit for vacuum valve		160-2011981	(1)
Membrane for de-vac valve		160-1391313	(1)
Service kit for de-vac valve		160-2011983	(1)

Spare parts list for VM303

Description	Size / Specification	Part number	Quantity per machine
PCB	digital 10 programs	160-1341202	1
Sensor PCB (option)		160-1341192	(1)
Panel complete (consists of parts with *)		160-2011352	1
Panel holder + panel sheet *		160-2011334	(1)
ON/OFF switch *		160-1331117	(1)
Vacuum meter *	63mm dia.	160-1921218	(1)
Panel opening tool set		160-1441226	1
Magnetic switch	BF09T4A	160-1332217	2
Main breaker	25A	160-1331171	1
Control transformer		160-1334122	1
Exhaust filter		160-2050281	2
Oil filter		160-2050201	1

		220V-3P-60Hz	400V-3P-50Hz	
Thermal relay	9-14A (13A)	160-1332241	-	1
	4-6.5A (5A)	-	160-1332235	1
Automatic fuse	25A	160-1332181	-	1
	16A	-	160-1332171	1
Seal transformer	21.4V 900VA	160-1334143 (S/S & L/S)	160-1334143 (S/S & L/S)	2
	33.1V 1150VA	160-1334145 (L/L)	160-1334146 (L/L)	2
Vacuum pump	100m3/h 3.0KW	160-1545151	-	1
	100m3/h 2.2KW	-	160-1545111	1

Seal bar configurations



S/S (short / short)



L/L (long / long)



L/S (long / short)



S/L/S (short / long / short)

Spare parts list for VMS193

Description	Size / Specification	Part numbers	Quantity per machine
PTFE tape	0.37 m (short), 0.94 m (long)	160-1416621	-
Seal wire (double seal 3.5mm width)	0.46 m (short), 1.04 m (long)	160-1416111	-
Seal wire (cut-off seal 1.1mm width)	0.46 m (short), 1.04 m (long)	160-1416121	-
Seal wire (8mm width)	0.46 m (short), 1.04 m (long)	160-1416136	-
Silicone rubber	0.32 m (short), 0.90 m (long)	160-1431311	-
Lid rubber (lip 8mm)	2.9 m	160-1431321	-
Lid (short/short)		160-1761121	1
Lid (short/long)		160-1761123	1
Seal bar (short : double seal)	net seal length 310mm	160-1411221	2 (S/S) / 1 (S/L)
Seal bar (short : cut-off seal)	net seal length 310mm	160-1411231	2 (S/S) / 1 (S/L)
Seal bar (short : 8mm seal)	net seal length 310mm	160-1411721	2 (S/S) / 1 (S/L)
Seal bar (short : seal 1-2)	net seal length 310mm	160-1411232	2 (S/S) / 1 (S/L)
Seal bar (long : double seal)	net seal length 970mm	160-1411456	1 (Long)
Seal bar (long : cut-off seal)	net seal length 970mm	160-1411457	1 (Long)
Seal bar (long : 8mm seal)	net seal length 970mm	160-1411740	1 (Long)
Seal bar (long : seal 1-2)	net seal length 970mm	160-1411453	1 (Long)
Seal bar (long for S/L : double seal)	net seal length 920mm	160-1411439	1 (S/L)
Seal bar (long for S/L : cut-off seal)	net seal length 920mm	160-1411440	1 (S/L)
Seal bar (long for S/L : 8mm seal)	net seal length 920mm	160-1411739	1 (S/L)
Seal bar (long for S/L : seal 1-2)	net seal length 920mm	160-1411451	1 (S/L)
Seal bar (long for S/L/S : double seal)	net seal length 870mm	160-1411454	1 (S/L/S)
Seal bar (long for S/L/S : cut-off seal)	net seal length 870mm	160-1411455	1 (S/L/S)
Seal bar (long for S/L/S : 8mm seal)	net seal length 870mm	160-1411738	1 (S/L/S)
Seal bar (long for S/L/S : seal 1-2)	net seal length 870mm	160-1411452	1 (S/L/S)
Seal cylinder (for short seal bar)		160-1397121	4 (S/S) / 2 (S/L)
Seal cylinder (for long seal bar)		160-1397131	3 (S/L)
Membrane for seal cylinder (short bar)	80mm dia.	160-2042516	4 (S/S) / 2 (S/L)
Membrane for seal cylinder (long bar)	110mm dia.	160-2042521	3 (S/L)
Gas spring	500N	160-1921326	2
Microswitch		160-2011576	1
Valve unit (consists of parts with #)		160-2011972	1
Vacuum valve (#)		160-2011961	(1)
De-vac valve (#)		160-2011963	(1)
Softair valve (#)		160-2011969	(1)
Seal valve		160-1391121	1
Gas valve (option)		160-1391153	(1)
Membrane for vacuum valve		160-1391313	(1)
Service kit for vacuum valve		160-2011981	(1)
Membrane for de-vac valve		160-1391313	(1)
Service kit for de-vac valve		160-2011983	(1)
PCB	digital 10 programs	160-1341202	1
Sensor PCB (option)		160-1341192	(1)

Spare parts list for VMS193

Description	Size / Specification	Part numbers	Quantity per machine
Panel complete (consists of parts with *)		160-2011357	1
Panel holder + panel sheet *		160-2011334	(1)
ON/OFF switch *		160-1331117	(1)
Vacuum meter *	63mm dia.	160-1921217	(1)
Panel opening tool set		160-1441226	1
Magnetic switch	BF09T4A	160-1332217	2
Main breaker	25A	160-1331171	1
Control transformer		160-1334122	1
Oil filter		160-2050201	1

		220V-3P-60Hz	400V-3P-50Hz	
Thermal relay	9-14A (10A)	160-1332241	-	1
	4-6.5A (4A)	-	160-1332235	1
Automatic fuse	25A	160-1332181 (S/L)	-	1
	16A	160-1332171 (S/S)	160-1332171	1
Seal transformer	20V 600VA	160-1334137 (S/S)	160-1334137 (S/S)	1
	24V 1150VA	160-1334159 (S/L)	160-1334160 (S/L)	2
Vacuum pump	63m3/h 2.2KW	160-1544811	-	1
	63m3/h 1.5KW	-	160-1544111	1
Exhaust filter	60Hz	160-2050281	-	2
	50Hz	-	160-2050282	1

Seal bar configurations



S/S (short / short)



Long



S/L (short / long)



S/L/S (short / long / short)

Spare parts list for VMS223

Description	Size / Specification	Part numbers	Quantity per machine
PTFE tape	0.57 m (short), 0.65 m (long)	160-1416621	-
Seal wire (double seal 3.5mm width)	0.67 m (short), 0.75 m (long)	160-1416111	-
Seal wire (cut-off seal 1.1mm width)	0.67 m (short), 0.75 m (long)	160-1416121	-
Seal wire (8mm width)	0.67 m (short), 0.75 m (long)	160-1416136	-
Silicone rubber	0.52 m (short), 0.60 m (long)	160-1431311	-
Lid rubber (lip 8mm)	2.5 m	160-1431321	-
Lid (short/short)		160-1761116	1
Lid (long)		160-1761111	1
Seal bar (short : double seal)	net seal length 510mm	160-1411431	2
Seal bar (short : cut-off seal)	net seal length 510mm	160-1411436	2
Seal bar (short : 8mm seal)	net seal length 510mm	160-1411735	2
Seal bar (short : seal 1-2)	net seal length 510mm	160-1411432	2
Seal bar (long : double seal)	net seal length 590mm	160-1411421	1
Seal bar (long : cut-off seal)	net seal length 590mm	160-1411426	1
Seal bar (long : 8mm seal)	net seal length 590mm	160-1411734	1
Seal bar (long : seal 1-2)	net seal length 590mm	160-1411427	1
Seal cylinder		160-1397128	2 (long), 4 (S/S)
Membrane for seal cylinder	110mm dia.	160-2042521	2 (long), 4 (S/S)
Gas spring	500N	160-1921326	2
Microswitch		160-2011576	1
Valve unit (consists of parts with #)		160-2011972	1
Vacuum valve (#)		160-2011961	(1)
De-vac valve (#)		160-2011963	(1)
Softair valve (#)		160-2011969	(1)
Seal valve		160-1391121	1
Gas valve (option)		160-1391153	(1)
Membrane for vacuum valve		160-1391313	(1)
Service kit for vacuum valve		160-2011981	(1)
Membrane for de-vac valve		160-1391313	(1)
Service kit for de-vac valve		160-2011983	(1)
PCB	digital 10 programs	160-1341202	1
Sensor PCB (option)		160-1341192	(1)
Panel complete (consists of parts with *)		160-2011357	1
Panel holder + panel sheet *		160-2011334	(1)
ON/OFF switch *		160-1331117	(1)
Vacuum meter *	63mm dia.	160-1921217	(1)
Panel opening tool set		160-1441226	1
Magnetic switch	BF09T4A	160-1332217	2
Main breaker	25A	160-1331171	1
Control transformer		160-1334122	1
Seal transformer	21.4V 900VA	160-1334143	1 (long), 2 (S/S)
Oil filter		160-2050201	1

Spare parts list for VMS223

Description	Size / Specification	Part numbers		Quantity per machine
		220V-3P-60Hz	400V-3P-50Hz	
Thermal relay	9-14A (10A)	160-1332241	-	1
	4-6.5A (4A)	-	160-1332235	1
Automatic fuse	25A	160-1332170 (S/S)	-	1
	16A	160-1332171 (long)	160-1332171	1
Vacuum pump	63m3/h 2.2KW	160-1544811	-	1
	63m3/h 1.5KW	-	160-1544111	1
Exhaust filter	60Hz	160-2050281	-	2
	50Hz	-	160-2050282	1

Seal bar configurations



S/S (short / short)



Long

Spare parts list for VMS233

Description	Size / Specification	Part numbers	Quantity per machine
PTFE tape	0.57 m	160-1416621	-
Seal wire (double seal 3.5mm width)	0.67 m	160-1416111	-
Seal wire (cut-off seal 1.1mm width)	0.67 m	160-1416121	-
Seal wire (8mm width)	0.67 m	160-1416136	-
Seal wire (bi-active 5mm width)	0.67 m	160-1416131	-
Silicone rubber	0.52 m	160-1431311	-
Lid rubber (lip 8mm)	2.50 m	160-1431321	-
Seal bar (double seal)	net seal length 510mm	160-1411443	2
Seal bar (cut-off seal)	net seal length 510mm	160-1411444	2
Seal bar (8mm seal)	net seal length 510mm	160-1411781	2
Seal bar (bi-active upper)	net seal length 510mm	160-1411463	2
Seal bar (bi-active lower)	net seal length 510mm	160-1411464	2
Seal bar (seal 1-2)	net seal length 510mm	160-1411460	2
Seal bag	440mm	160-1412551	2
Oil spring		160-1921336	1
Lid spring		160-1191201	2
Microswitch		160-2011576	1
Valve unit (consists of parts with #)		160-2011972	1
Vacuum valve (#)		160-2011961	(1)
De-vac valve (#)		160-2011963	(1)
Softair valve (#)		160-2011969	(1)
Seal valve		160-1391163	1
Gas valve (option)		160-1391153	(1)
Membrane for vacuum valve		160-1391313	(1)
Service kit for vacuum valve		160-2011981	(1)
Membrane for de-vac valve		160-1391313	(1)
Service kit for de-vac valve		160-2011983	(1)
PCB	digital 10 programs	160-1341202	1
Sensor PCB (option)		160-1341192	(1)
Panel complete (consists of parts with *)		160-2011352	1
Panel holder + panel sheet *		160-2011334	(1)
ON/OFF switch *		160-1331117	(1)
Vacuum meter *	63mm dia.	160-1921218	(1)
Panel opening tool set		160-1441226	1
Magnetic switch	BF09T4A	160-1332217	2
Main breaker	25A	160-1331171	1
Control transformer		160-1334122	1
Seal transformer	21.4V 900VA	160-1334143	2
Oil filter		160-2050201	1

Spare parts list for VMS233

Description	Size / Specification	Part numbers		Quantity per machine
		220V-3P-60Hz	400V-3P-50Hz	
Thermal relay	9-14A (10A)	160-1332241	-	1
	4-6.5A (4A)	-	160-1332235	1
Automatic fuse	25A	160-1332170	-	1
	16A	-	160-1332171	1
Vacuum pump	63m3/h 2.2KW	160-1544811	-	1
	63m3/h 1.5KW	-	160-1544111	1
Exhaust filter	60Hz	160-2050281	-	2
	50Hz	-	160-2050282	1

Seal bar configurations



Spare parts list for VMS333

Description	Size / Specification	Part number	Quantity per machine
PTFE tape	0.61 m (short), 0.85 m (long)	160-1416621	-
Seal wire (double seal 3.5mm width)	0.71 m (short), 0.95 m (long)	160-1416111	-
Seal wire (cut-off seal 1.1mm width)	0.71 m (short), 0.95 m (long)	160-1416121	-
Seal wire (8mm width)	0.71 m (short), 0.95 m (long)	160-1416136	-
Seal wire (bi-active 5mm width)	0.71 m (short), 0.95 m (long)	160-1416131	-
Silicone rubber	0.56 m (short), 0.80 m (long)	160-1431311	-
Lid rubber (lip 8mm)	3.00 m	160-1431321	-
Seal bar (short for S/S : double)	net seal length 550mm	160-1411621	2
Seal bar (short for S/S : cut-off)	net seal length 550mm	160-1411626	2
Seal bar (short for S/S : 8mm)	net seal length 550mm	160-1411921	2
Seal bar (short for S/S : bi-active upper)	net seal length 550mm	160-1411627	2
Seal bar (short for S/S : bi-active lower)	net seal length 550mm	160-1411628	2
Seal bar (short for S/S : seal 1-2)	net seal length 550mm	160-1411629	2
Seal bar (short for S/L : double)	net seal length 490mm	160-1411448	1
Seal bar (short for S/L : cut-off)	net seal length 490mm	160-1411449	1
Seal bar (short for S/L : 8mm)	net seal length 490mm	160-1411821	1
Seal bar (short for S/L : bi-active upper)	net seal length 490mm	160-1411468	2
Seal bar (short for S/L : bi-active lower)	net seal length 490mm	160-1411469	2
Seal bar (short for S/L : seal 1-2)	net seal length 490mm	160-1411450	2
Seal bar (long : double)	net seal length 790mm	160-1411445	1 (S/L), 2 (L/L)
Seal bar (long : cut-off)	net seal length 790mm	160-1411446	1 (S/L), 2 (L/L)
Seal bar (long : 8mm)	net seal length 790mm	160-1411811	1 (S/L), 2 (L/L)
Seal bar (long : bi-active upper)	net seal length 790mm	160-1411465	1 (S/L), 2 (L/L)
Seal bar (long : bi-active lower)	net seal length 790mm	160-1411466	1 (S/L), 2 (L/L)
Seal bar (long : seal 1-2)	net seal length 790mm	160-1411447	1 (S/L), 2 (L/L)
Seal bag (short for S/S)	490mm	160-1412601	2
Seal bag (short for S/L)	410mm	160-1412521	1
Seal bag (long)	740mm	160-1412851	1 (S/L), 2 (L/L)
Oil spring		160-1921336	1
Lid spring		160-1191201	2
Microswitch		160-2011576	1
Valve unit (consists of parts with #)		160-2011972	1
Vacuum valve (#)		160-2011961	(1)
De-vac valve (#)		160-2011963	(1)
Softair valve (#)		160-2011969	(1)
Seal valve		160-1391163	1
Gas valve (option)		160-1391153	(1)
Membrane for vacuum valve		160-1391313	(1)
Service kit for vacuum valve		160-2011981	(1)
Membrane for de-vac valve		160-1391313	(1)
Service kit for de-vac valve		160-2011983	(1)
PCB	digital 10 programs	160-1341202	1
Sensor PCB (option)		160-1341192	(1)

Spare parts list for VMS333

Description	Size / Specification	Part number	Quantity per machine
Panel complete (consists of parts with *)		160-2011352	1
Panel holder + panel sheet *		160-2011334	(1)
ON/OFF switch *		160-1331117	(1)
Vacuum meter *	63mm dia.	160-1921218	(1)
Panel opening tool set		160-1441226	1
Magnetic switch	BF09T4A	160-1332217	2
Main breaker	25A	160-1331171	1
Control transformer		160-1334122	1
Exhaust filter		160-2050281	2
Oil filter		160-2050201	1

		220V-3P-60Hz	400V-3P-50Hz	
Thermal relay	9-14A (13A)	160-1332241	-	1
	4-6.5A (5A)	-	160-1332235	1
Automatic fuse	25A	160-1332181	-	1
	16A	-	160-1332171	1
Seal transformer	21.4V 900VA	160-1334143 (S/S & S/L)	160-1334143 (S/S & S/L)	2
	33.1V 1150VA	160-1334145 (L/L)	160-1334146 (L/L)	2
Vacuum pump	100m3/h 3.0KW	160-1545151	-	1
	100m3/h 2.2KW	-	160-1545111	1

Seal bar configurations



S/S (short / short)



L/L (long / long)



S/L (short / long)



L/S (long / short)



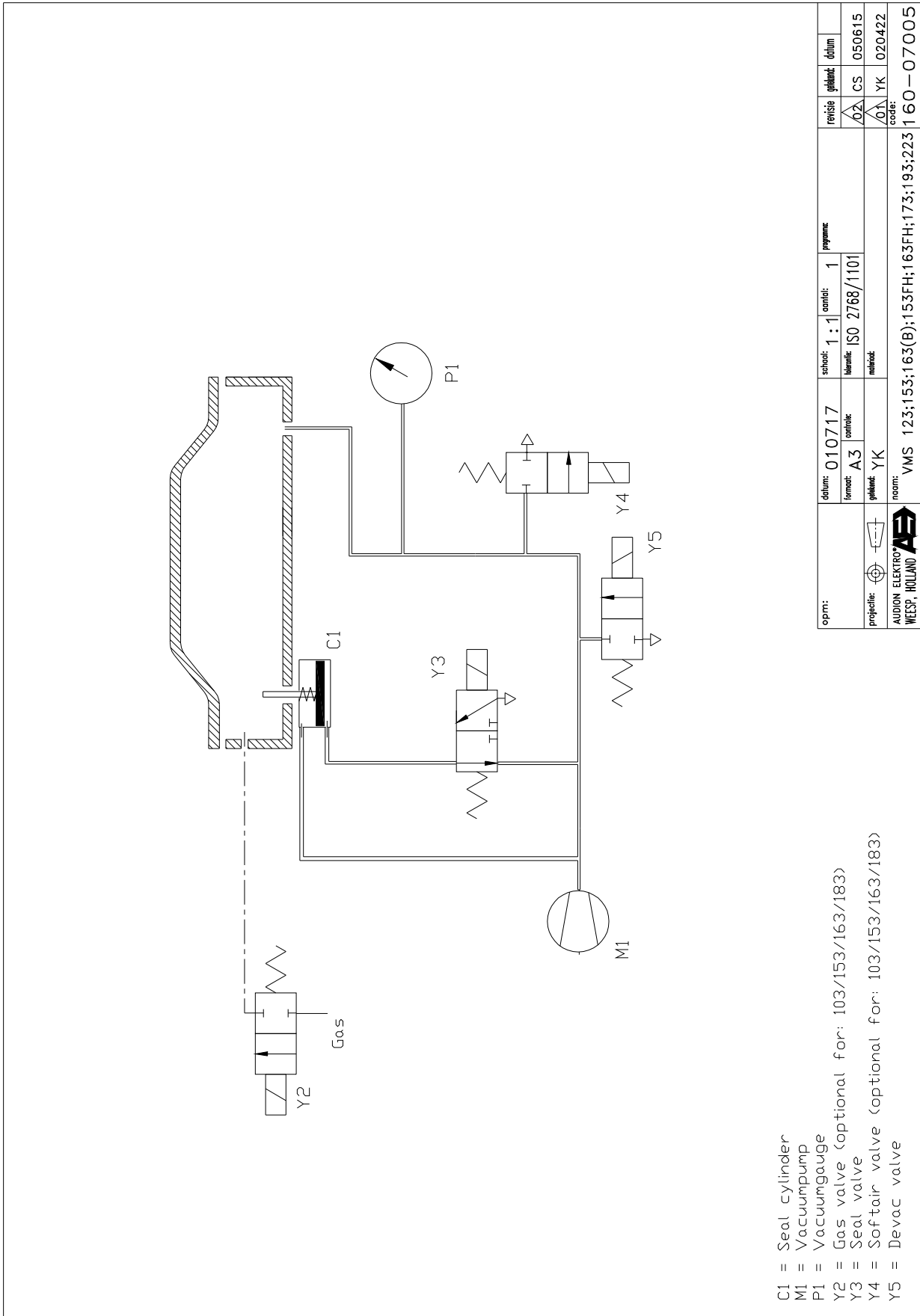
S/L/S (short / long / short)

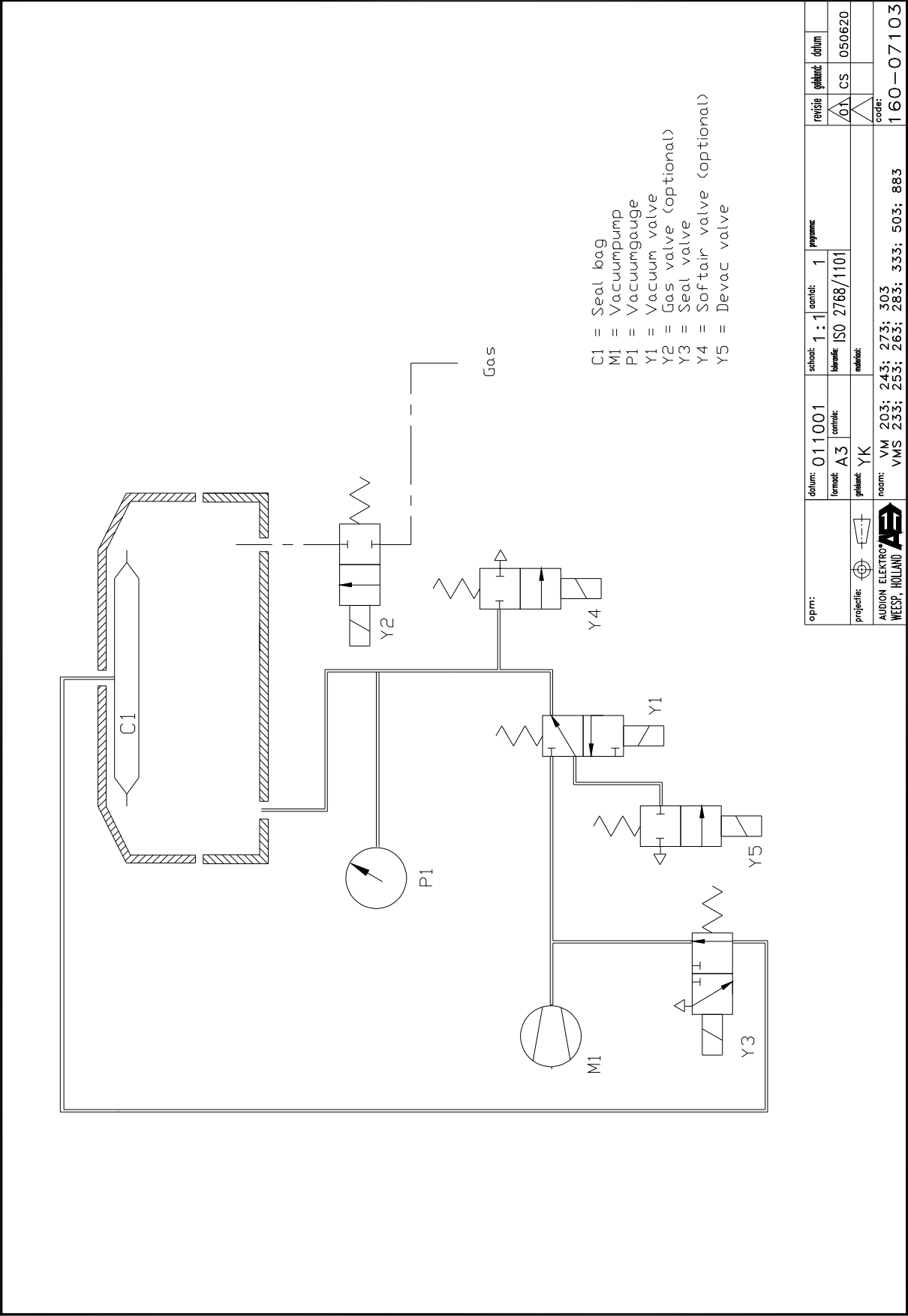
9 Technical specifications

TYPE	VM 203	VM 303	VMS 193
Machine size (W x D x H) in mm.	680x700x1060	900x820x1060	1065x480x960
Effective chamber size in mm.	500x510	790x460 (L/L) 710x550 (S/S) 750x490 (S/L) 710x490 (S/L/S)	970x270 (Long) 890x310 (S/S) 920x270 (S/L) 870x270 (S/L/S)
Net. Sealing bar length in mm.	2x 510	2x 790 (L/L) 2x 550 (S/S) 1x 790 + 1x 490 (S/L) 1x 790 + 2x 490 (S/L/S)	1x 970 (Long) 2x 310 (S/S) 1x 310 + 1x 920 (S/L) 2x 310 + 1x 870 (S/L/S)
Chamber height in mm.			
Absolute chamber size in mm.	610x520x230	820x560x240	990x320x100
Tabletop model			
Floor model	X	X	X
Double chamber			
Stainless steel housing	X	X	X
Stainless steel chamber			X
Stainless steel flat working table			
Stainless steel lid			
Aluminum chamber	X	X	
Aluminum lid with window	X	X	
Flat transparent lid			X
High transparent lid			
Pump capacity in m³/h	63 m³/h	100 m³/h	63 m³/h
Capacity / min.	Ca. 2	Ca. 2	Ca. 2
Voltage, phase and frequency	400V-3-50Hz.	400V-3-50Hz.	400V-3-50Hz.
Power	2.4 - 3.5 kW	3.0 – 5.0 kW	2.4 – 3.1 kW
Control	Digital	Digital	Digital
Packed size (W x D x H)			
Number of gas pipes	3 per sealing bar	3 on the short bar and 4 on the long bar	2 on the short bar and 6 on the long bar

TYPE	VMS 223	VMS 233	VMS 333
Machine size (W x D x H) in mm.	700x710x1030	700x730x1030	920x825x1125
Effective chamber size in mm.	590x475 (Long) 500x510 (S/S)	500x510	790x460 (L/L) 710x550 (S/S) 750x490 (S/L) 710x490 (S/L/S)
Net. Sealing bar length in mm.	1x 590 (Long) 2x 510 (S/S)	2x 510	2x 790 (L/L) 2x 550 (S/S) 1x 790 + 1x 490 (S/L) 1x 790 + 2x 490 (S/L/S)
Chamber height in mm.			
Absolute chamber size in mm.	600x520x200	630x540x200	840x580x200
Tabletop model			
Floor model	X	X	X
Double chamber			
Stainless steel housing	X	X	X
Stainless steel chamber	X		
Stainless steel flat working table		X	X
Stainless steel lid		X	X
Aluminum chamber			
Aluminum lid with window			
Flat transparent lid			
High transparent lid	X		
Pump capacity in m³/h	63 m³/h	63 m³/h	100 m³/h
Capacity / min.	Ca. 2	Ca. 2	Ca. 2
Voltage, phase and frequency	400V-3-50Hz.	400V-3-50Hz.	400V-3-50Hz.
Power	2.4 – 3.5 kW	2.4 – 3.5 kW	3.0 – 5.0 kW
Control	Digital	Digital	Digital
Packed size (W x D x H)			
Number of gas pipes (optional)	3 per sealing bar	3 per sealing bar	3 on the short bar and 4 on the long bar

10 Pneumatic diagram







11 Electric diagrams and index sheets

The electric diagrams shown in this manual are basic/concept drawings. The details of the electric components are described in the index sheets.

Find the correct index sheet and the electric drawings by:

- machine model (VMS 173, 193, ...)
- seal configuration (S/S, L/L, ...)
- voltage (230V, 400V, ...)

Model, seal configurations, voltage

VMS 173 400V - 3P - 50Hz

Control diagram	003-PCB	Revision (From - Until)	0.101-01-2011 =>
Main circuit diagram	024	Seal configuration	Left and Right
Machine serie	VMS 173	Seal type	Double / Cut-off / 8mm
Power (V/Hz)	400-3-50		
Pump capacity	040 m³/h		

Main electrical supply:			
L1	Phase 1		
L2	Phase 2		
L3	Phase 3		
PE	Ground connection		

Overload devices:			
Circuit breaker	FA	Part number	160-1332171
		Specification:	3 x 16 Amp
Thermal overload pump	Q1	Part number	160-1332234
		Range:	2.5-4
		Set	3
Fuse seal transformer	F5	Part number	160-1345134
		Specification:	2.5 Amp Slow
		Size	6.3 x 32 mm
		FT	130 °C
Fuse control transformer	F6	Part number	160-1343128
		Specification:	2.5 Amp Slow (24 Volt)
		Size	5 x 20 mm
		Part number	160-1343127
		Specification:	2.5 Amp Slow (0 Volt)
		Size	5 x 20 mm
Fuse PCB	F8	Part number	160-1343122
		Specification:	250 mAmp, Slow
		Size	5 x 20 mm
		Part number	160-1343123
		Specification:	4 Amp, Slow
		Size	5 x 20 mm

Pump:			
Pump type	040 m³/h		
Capacity	1.5 kW		

Transformers:			
Seal transformer	Tr1	Part number	160-1334137
		Input:	400 Volt
		Capacity:	600 VA
		Output:	20 Volt
		ED:	10 %
Used transformers	Tr1	Connection	Stand alone
Control transformer	Tb1	Part number	160-1334122
		Input:	400 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:			
Used sealbars	R1, R2	Connection	Stand alone

Contactors:			
Pump	K1		
Seal	K2		

Switches:			
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:			
Switch start cycle	MS1	Electrical connections:	2

Valves:			
Vacuum valve	Y1		
Gas valve	Y2		
Seal valve	Y3		
Soft-air valve	Y4		
Decompression valve	Y5		

Index sheet

Concept diagram for PCB

Concept diagram for circuit



VMS 193 (S/S) 200V - 3P - 50/60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	006-2S	Seal configuration	Left and Right
Machine serie	VMS 193	Seal type	Double / Cut-off / 8mm
Power (V/-/Hz)	200-3-50/60		
Pump capacity	063 m³/h		

Main electrical supply:	
L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:			
Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	10
Fuse seal transformer	F4	Part number:	160-1343131
		Specification:	4 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:	
Pump type	063 m³/h
Capacity	2,2 kW

Transformers:			
Seal transformer	Tr1	Part number:	160-1334137
		Input:	200 Volt
		Capacity:	600 VA
		Output:	20 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	200 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

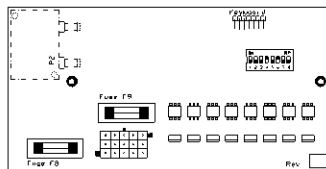
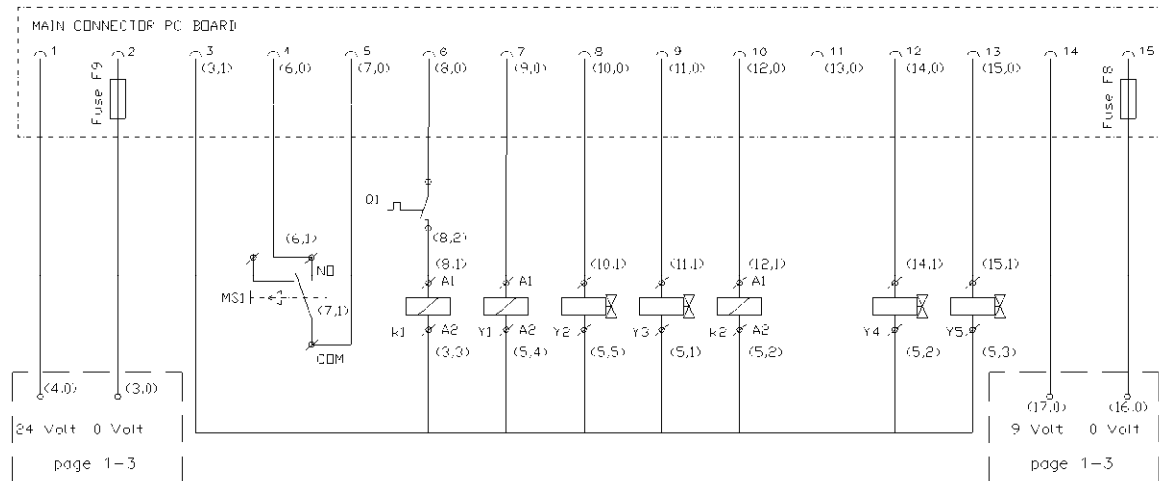
Sealbars:	
Used sealbars	R1, R2
Connection:	R1 & R2 - Serie




Contactors:	
Pump	K1
Seal	K2

Switches:			
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117
Microswitches:			
Switch start cycle	MS1	Electrical connections:	2

Valves:	
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5

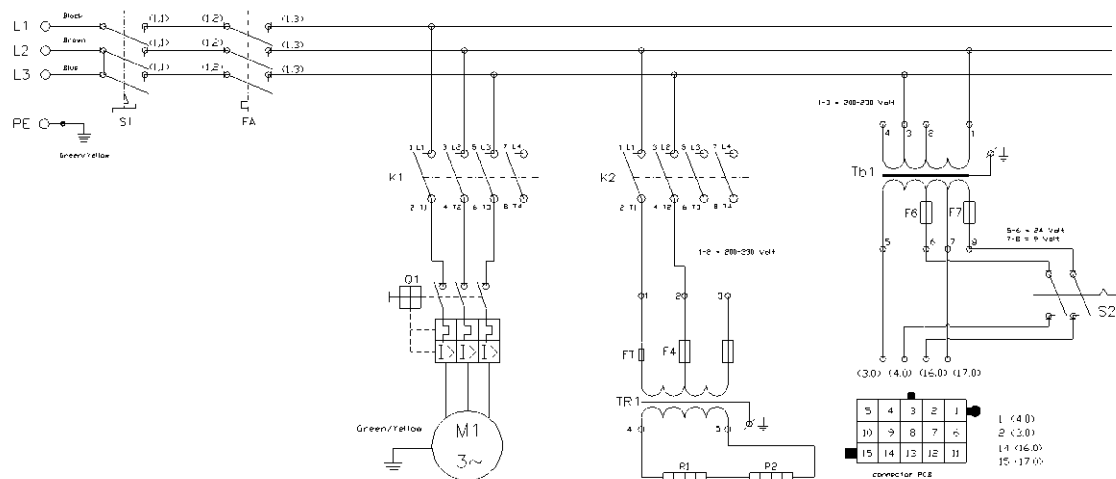
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24_VOLT	0_VOLT		MS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_F8
					CONTACTOR									



sgnr:	dimen: 101126	schets: 1:1	positief: 1	pagina:	revise	gemaakt	datum
	formaat: A3	model: 003	EN ISO 2768/110	003-PCB			
projectie: 	gemaakt: TY	revisie: DIV.					
AUKHOFF ELECTRONICS BEEFS, HOLLAND 	noort: 003-PCB				codes:		
						160-003-PCB	

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1	2	3	4	5	6
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR	CONTACTOR SEAL	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	Tb1	S2
MAIN SWITCH		THERMAL OVERLOAD	SEAL TRANSFORMER	MAIN PCB CONNECTOR	
S1		Q1	TR1		
		MOTOR	SEAL BAR		
		M1	R1, R2		



partnr:	descript:	101126	schacht:	1	positief:	1	reparatie:		verval:	plaat:	doos:
	type:	A3	merk:	DIN EN ISO 2768/110			006-2S				
projectaf:		plaatnr:	TY			rubriek:	DIV.				
ALUMINUM ELECTROO NIEUW, HOLLAND		partnr:	006-2S			codes:		160-006-2S			

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VMS 193 (S/S) 208V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	006-2S	Seal configuration	Left and Right
Machine serie	VMS 193	Seal type	Double / Cut-off / 8mm
Power (V/-/Hz)	208-3-60		
Pump capacity	063 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	10
Fuse seal transformer	F4	Part number:	160-1343131
		Specification:	4 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	063 m³/h
Capacity	2,2 kW

Transformers:

Seal transformer	Tr1	Part number:	160-1334137
		Input:	208-230 Volt
		Capacity:	600 VA
		Output:	20 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	208-230 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	R1 & R2 - Serie
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

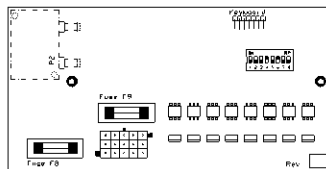
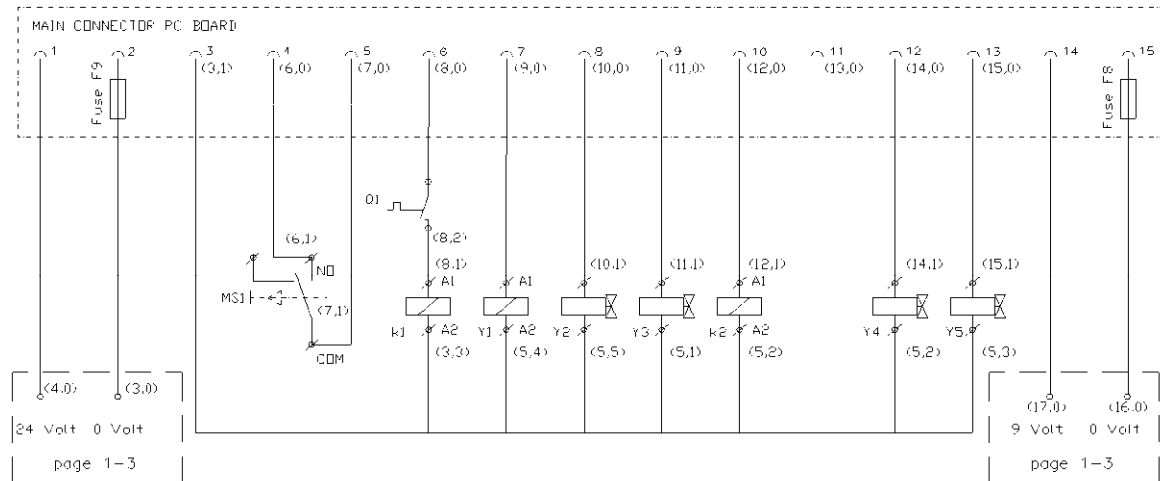
Microswitches:




Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5

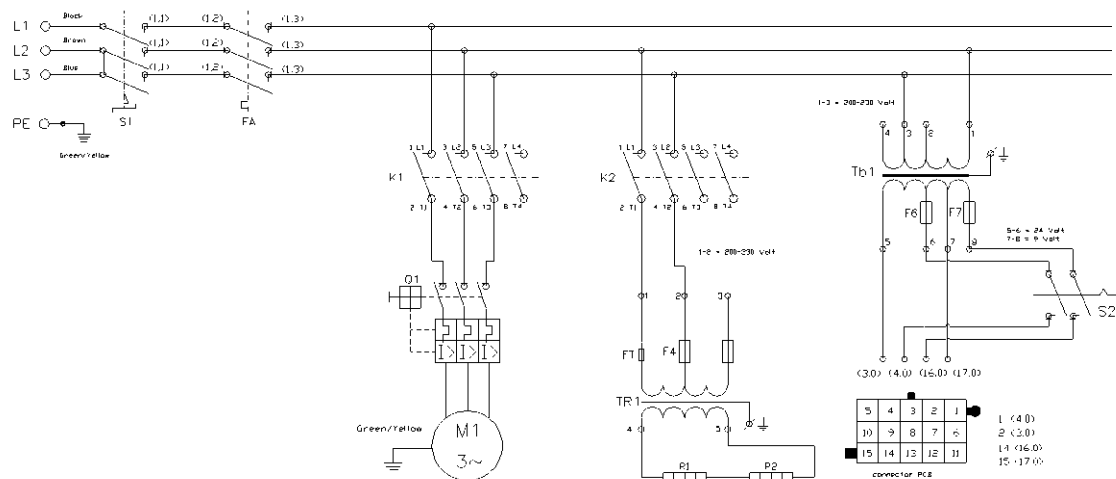
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		MS1	COM	Q1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_F8
					CONTACTOR									



sgmr:	delen: 101126	schied: 1:1	aanstg: 1	opname:	reviz:	gemaakt:	datum:
	formaat: A3	matricle: 000 EN 100 2760/1100	003-PCB				
projectie: 	gemaakt: TY	revisie: DIV.					
AUKHOFF ELECTRONICS BEEFS, HOLLAND 	noort: 003-PCB			codes:		160-003-PCB	

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1	2	3	4	5	6
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR	CONTACTOR SEAL	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	Tb1	S2
MAIN SWITCH		THERMICAL OVERLOAD	SEAL TRANSFORMER	MAIN PCB CONNECTOR	
S1		Q1	TRI		
		MOTOR	SEAL BAR		
		M1	R1, R2		



partnr:	descript:	101126	schacht:	1	positief:	1	reparatie:		verval:	plaat:	doos:
	type:	A3	merk:	DIN EN ISO 2768/110			006-2S				
projectnr:		plaatnr:	TY	merk:	DIV.						
ALUMINUM ELECTROOP BRESS, HOLLAND		partnr:	006-2S					codes:			
									160-006-2S		

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VMS 193 (S/S) 220V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	006-2S	Sealconfiguration	Left and Right
Machine serie	VMS 193	Seal type	Double / Cut-off / 8mm
Power (V/-/Hz)	220-3-60		
Pump capacity	063 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	10
Fuse seal transformer	F4	Part number:	160-1343131
		Specification:	4 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	063 m³/h
Capacity	2,2 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334137
		Input:	220 Volt
		Capacity:	600 VA
		Output:	20 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	220 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	R1 & R2 - Serie
---------------	--------	-------------	-----------------

Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

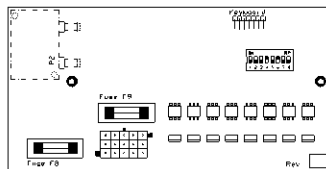
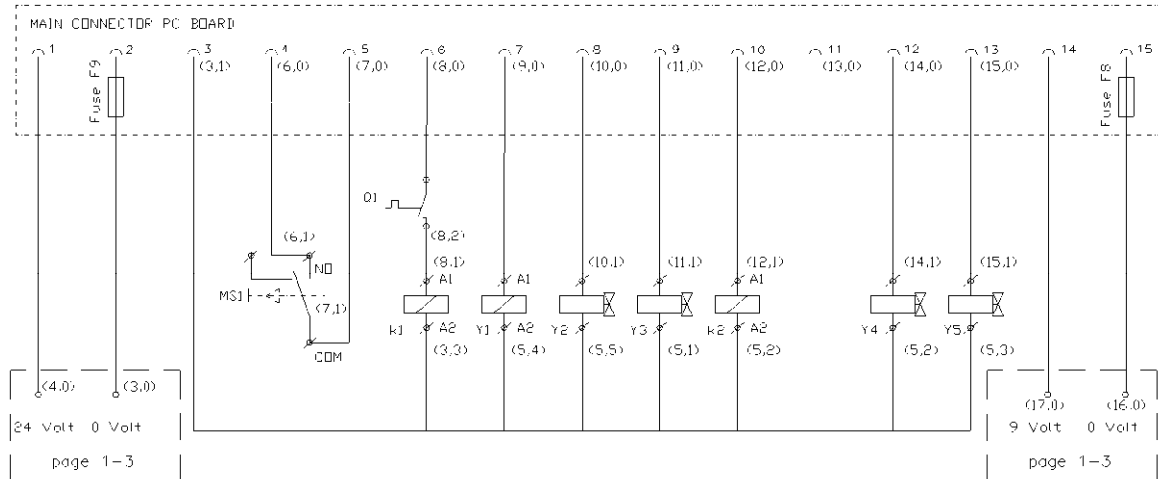
Microswitches:





Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5

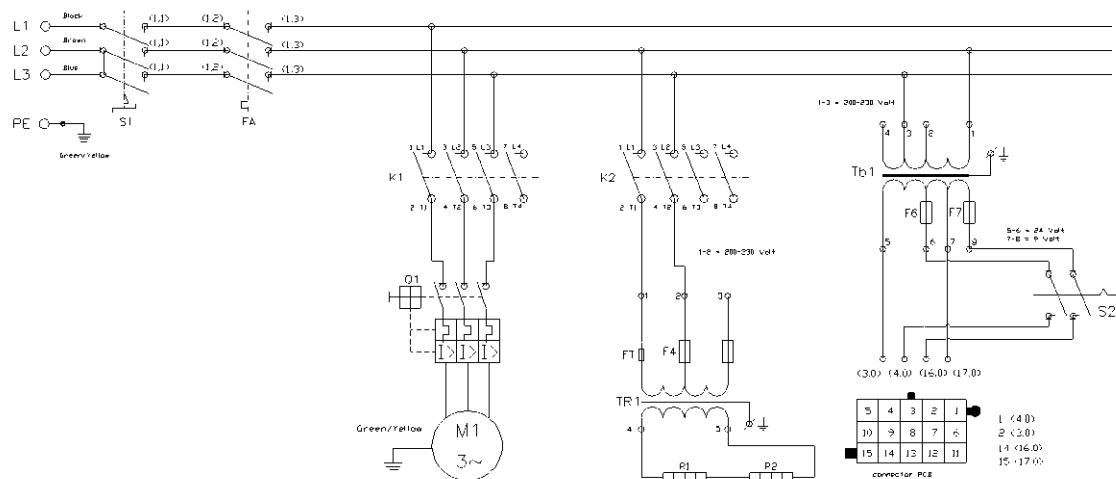
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		MS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_F8
					CONTACTOR									



datum: 101126 project: A3 project: 		schied: 1:1 versie: 1 versie: 003-PCB revisie: DIV.		review:  	
AUTOMON ELECTRONICS ROTTERDAM 		naam: 003-PCB		code: 160-003-PCB	

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1	2	3	4	5	6
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR	CONTACTOR SEAL	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	Tb1	S2
MAIN SWITCH		THERMICAL OVERLOAD	SEAL TRANSFORMER	MAIN PCB CONNECTOR	
S1		Q1	TR1		
		MOTOR	SEAL BAR		
		M1	R1, R2		

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VMS 193 (S/S) 230V - 3P - 50Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	006-2S	Seal configuration	Left and Right
Machine serie	VMS 193	Seal type	Double / Cut-off / 8mm
Power (V/~ /Hz)	230-3-50		
Pump capacity	063 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332240
		Range:	6,3-10
		Set:	7
Fuse seal transformer	F4	Part number:	160-1343131
		Specification:	4 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	063 m³/h
Capacity	1,5 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334137
		Input:	220-230 Volt
		Capacity:	600 VA
		Output:	20 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	220-230 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	R1 & R2 - Serie
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Contactors:

Pump	K1
Seal	K2

Switches:

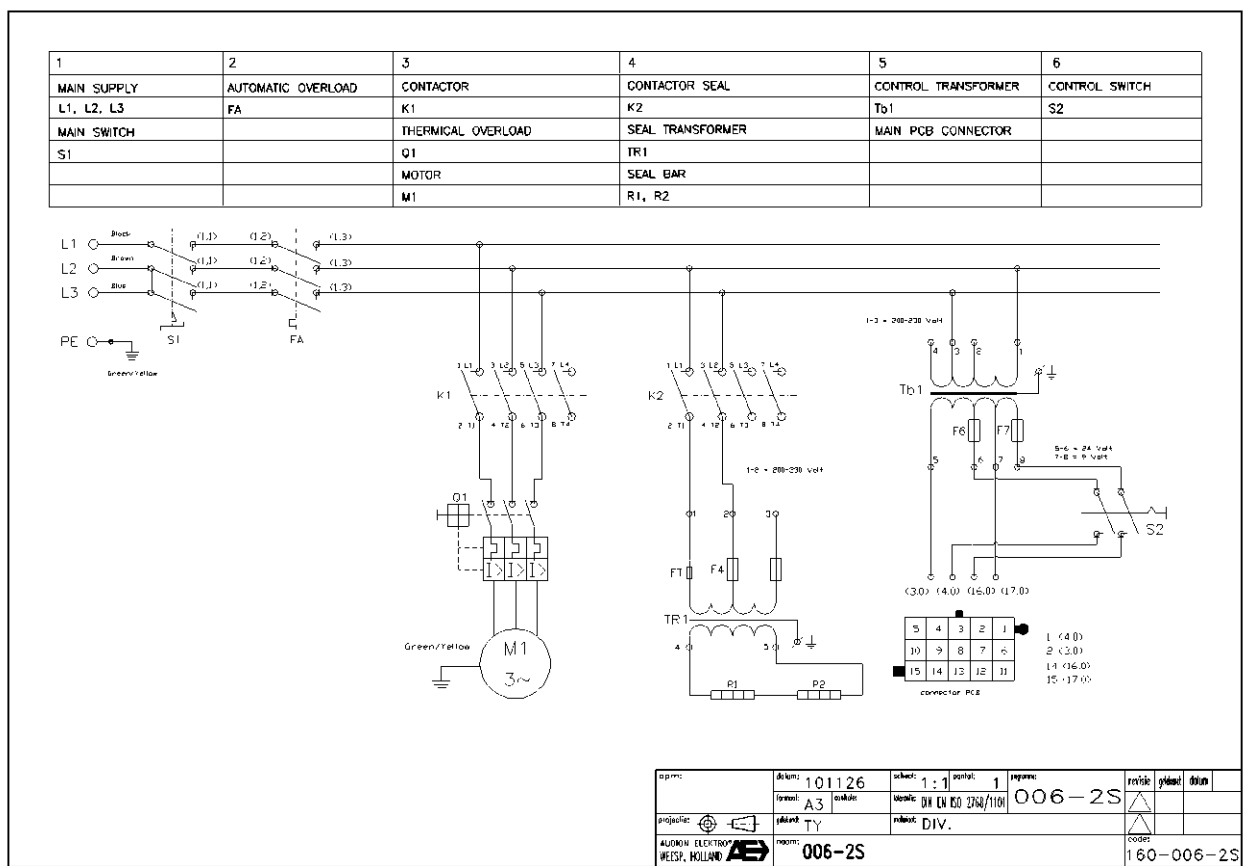
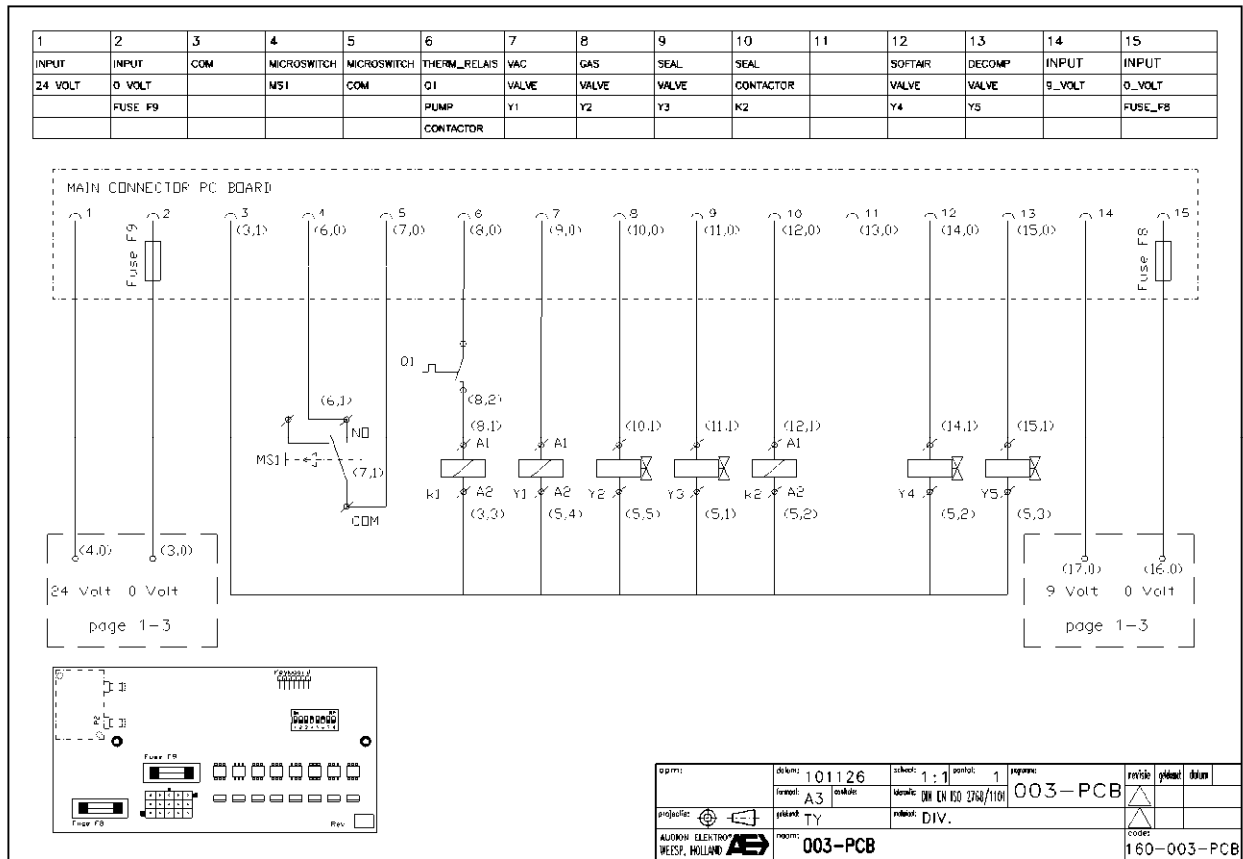
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:

Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5





VMS 193 (S/S) 380V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	008-2S	Sealconfiguration	Left and Right
Machine serie	VMS 193	Seal type	Double / Cut-off / 8mm
Power (V/~/Hz)	380-3-60		
Pump capacity	063 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332235
		Range:	4-6,5
		Set:	5,5
Fuse seal transformer	F5	Part number:	160-1343134
		Specification:	2,5 Amp Slow
		Size:	6,3 x 32 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	063 m³/h
Capacity	2,2 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334137
		Input:	380 Volt
		Capacity:	600 VA
		Output:	20 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	380 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	R1 & R2 - Serie
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Contactors:

Pump	K1
Seal	K2

Switches:

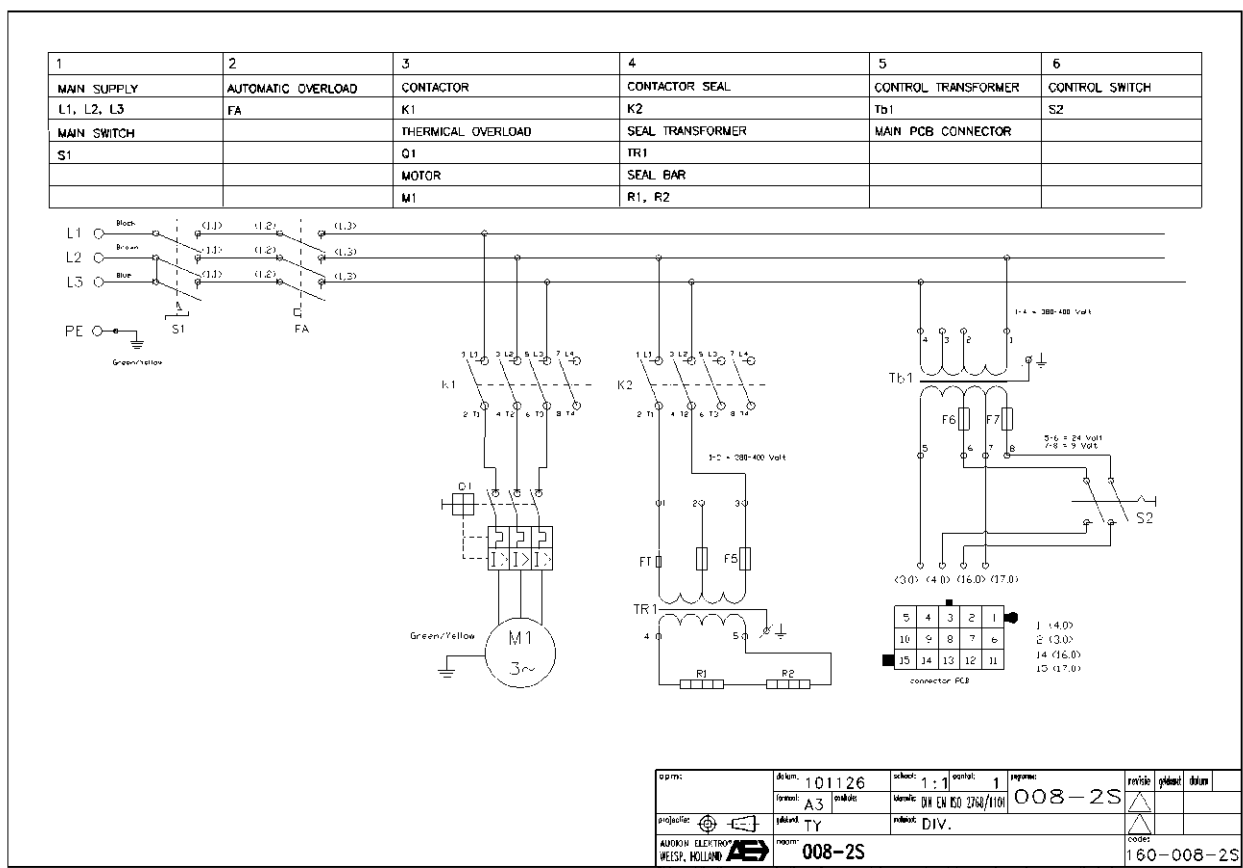
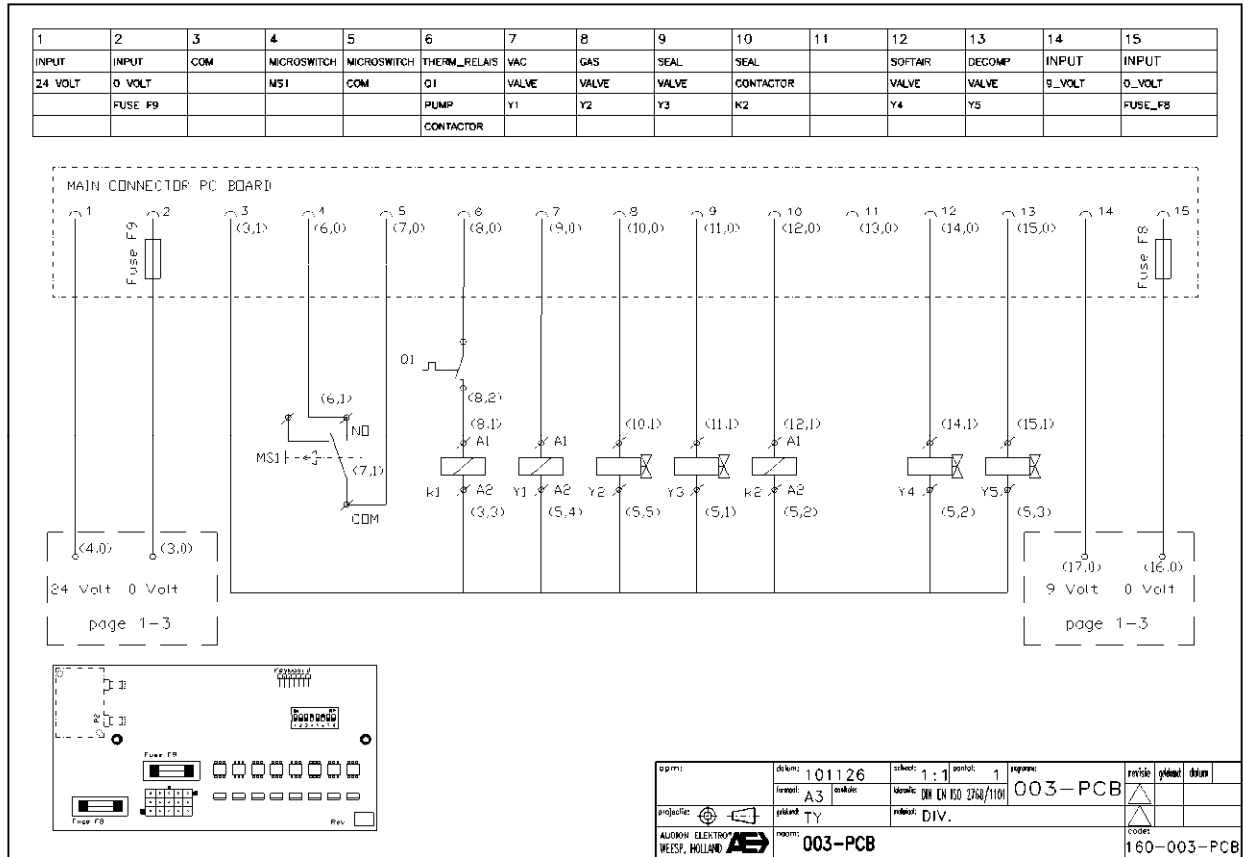
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:

Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5





VMS 193 (S/S) 400V - 3P - 50Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	008-2S	Sealconfiguration	Left and Right
Machine serie	VMS 193	Seal type	Double / Cut-off / 8mm
Power (V/~f/Hz)	400-3-50		
Pump capacity	063 m³/h		

Main electrical supply:	
L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:			
Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332235
		Range:	4-6,5
		Set:	4
Fuse seal transformer	F5	Part number:	160-1343134
		Specification:	2,5 Amp Slow
		Size:	6,3 x 32 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:	
Pump type	063 m³/h
Capacity	1,5 kW

Transformers:			
Sealtransformer	Tr1	Part number:	160-1334137
		Input:	400 Volt
		Capacity:	600 VA
		Output:	20 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	400 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

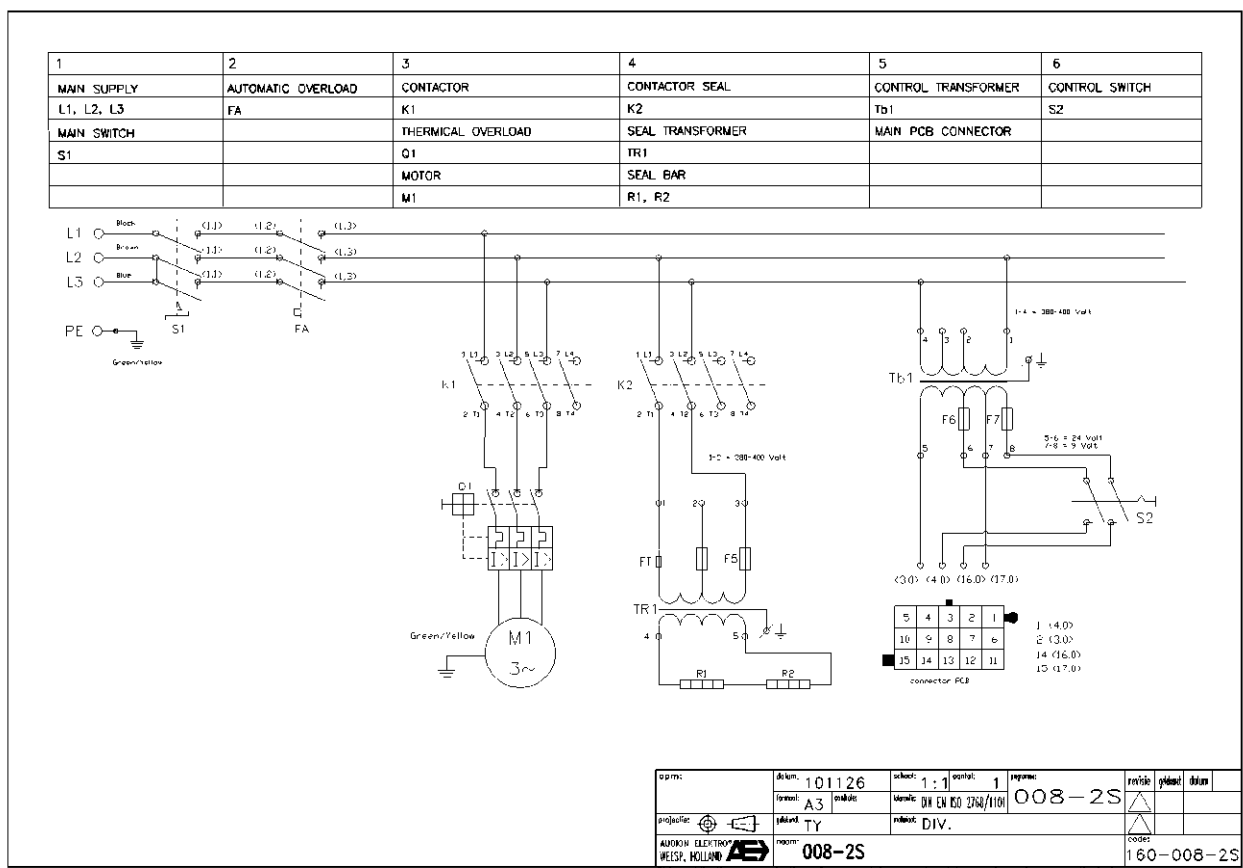
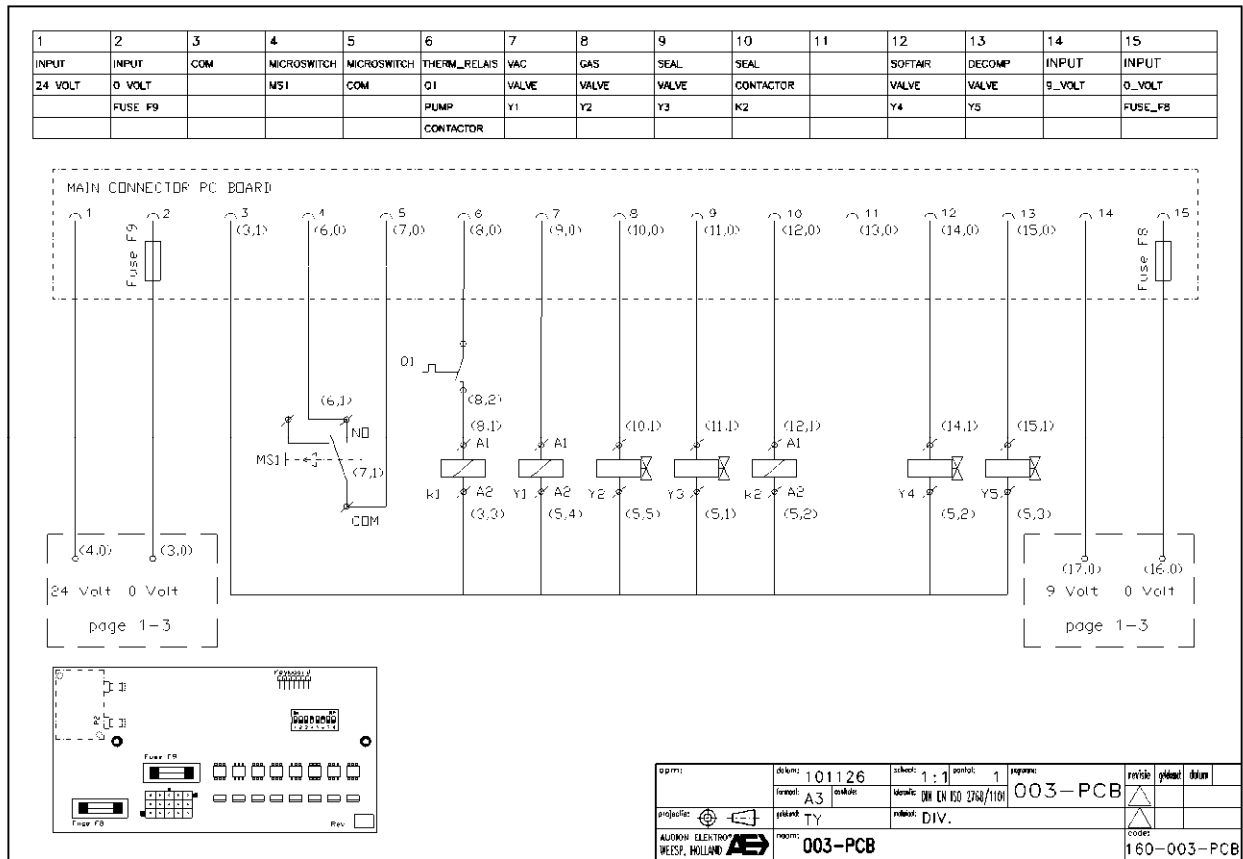
Sealbars:	
Used sealbars	R1, R2
Connection:	R1 & R2 - Serie

Contactors:	
Pump	K1
Seal	K2

Switches:			
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:			
Switch start cycle	MS1	Electrical connections:	2

Valves:	
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5





VMS 193 (S/L) 200V - 3P - 50/60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	021-2S	Sealconfiguration	Right and Front
Machine serie	VMS 193	Seal type	Double / Cut-off / 8mm
Power (V/~f/Hz)	200-3-50/60		
Pump capacity	063 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332181
		Specification:	3 x 25 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	10
Fuse seal transformer	F4	Part number:	160-1343136
		Specification:	8 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	063 m³/h
Capacity	2,2 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334159
		Input:	200 Volt
		Capacity:	1150 VA
		Output:	24 Volt
		ED:	10 %
Used transformers	Tr1 & Tr1.1	Connection:	Serie
Control transformer	Tb1	Part number:	160-1334122
		Input:	200 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	R1 & R2 - Serie
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Contactors:

Pump	K1
Seal	K2

Switches:

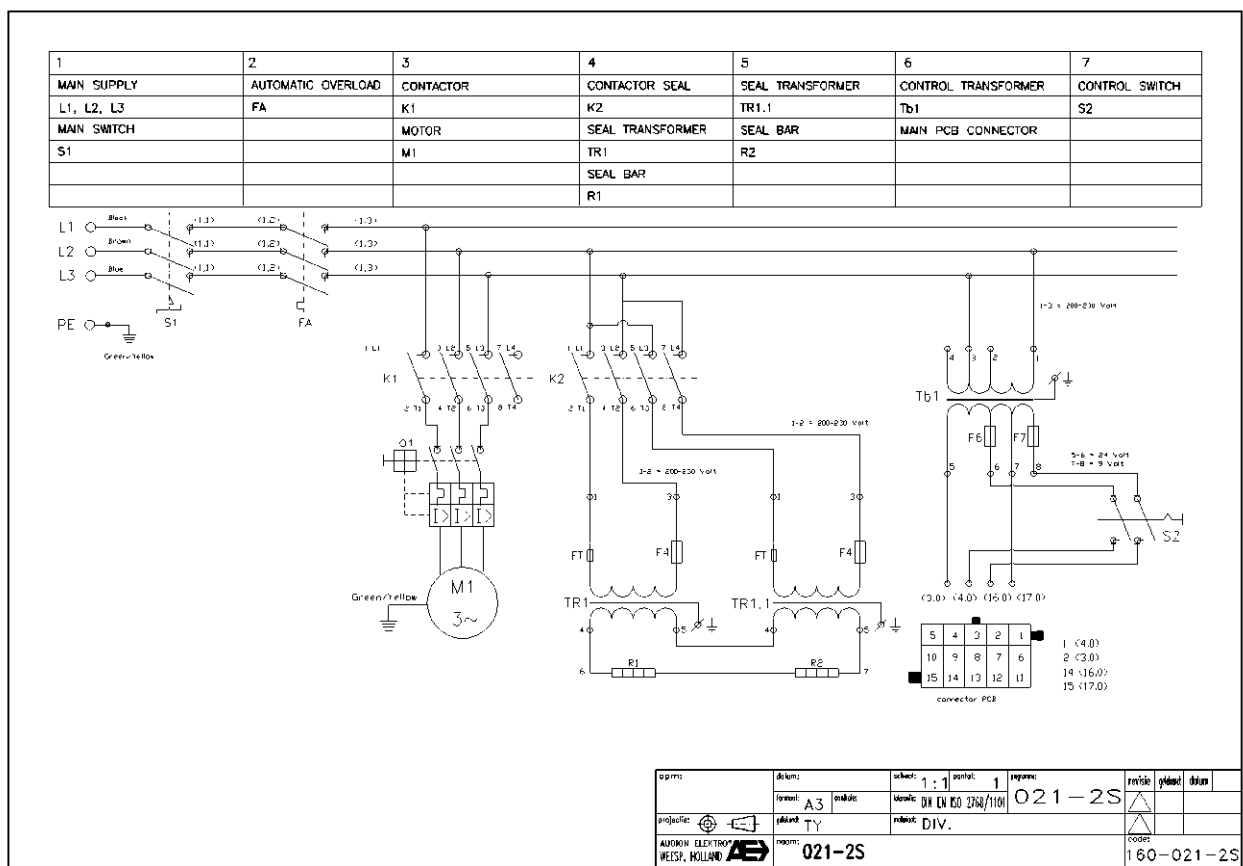
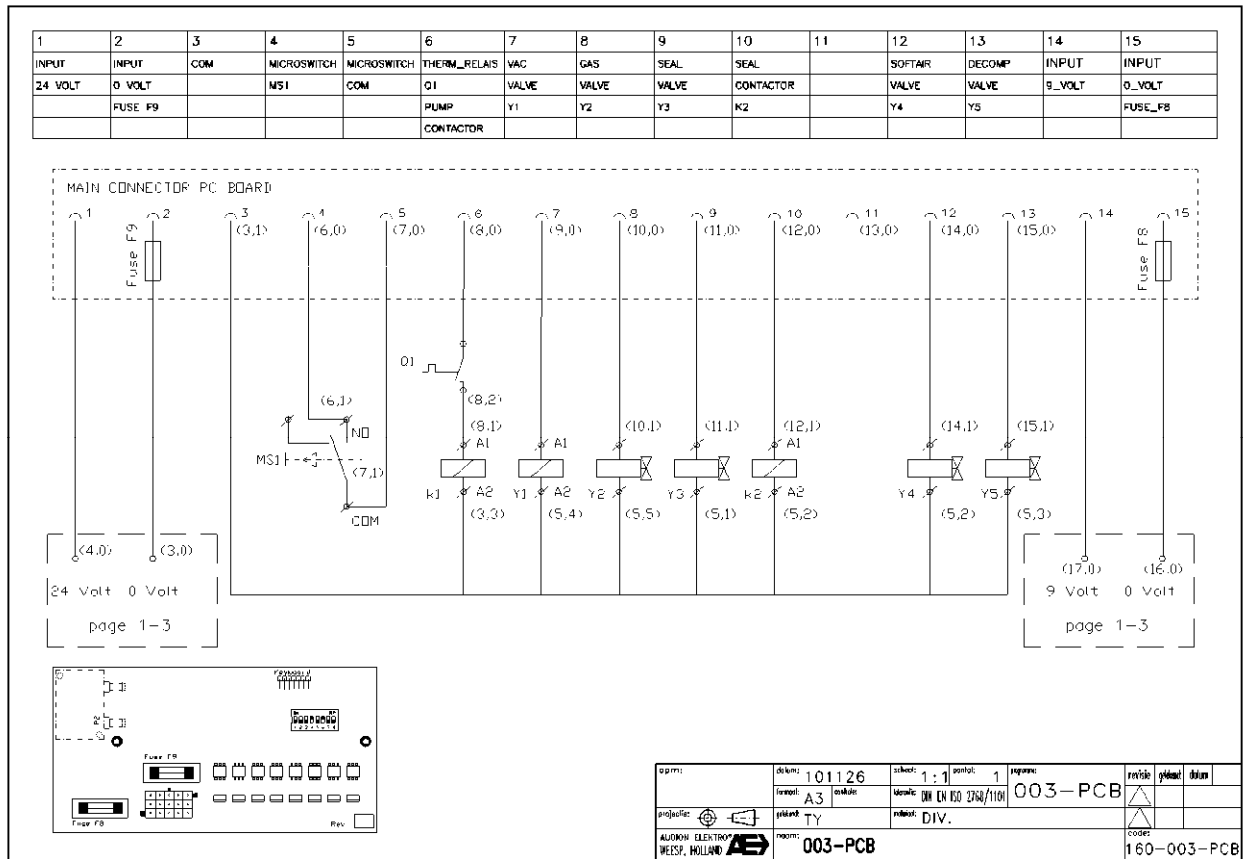
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:

Switch start cycle	MS1	Electrical connections:	2
--------------------	-----	-------------------------	---

Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5





VMS 193 (S/L) 208V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	021-2S	Sealconfiguration	Right and Front
Machine serie	VMS 193	Seal type	Double / Cut-off / 8mm
Power (V/-/Hz)	208-3-60		
Pump capacity	063 m³/h		

Main electrical supply:	
L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:			
Circuit breaker	FA	Part number:	160-1332181
		Specification:	3 x 25 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	10
Fuse seal transformer	F4	Part number:	160-1343136
		Specification:	8 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:	
Pump type	063 m³/h
Capacity	2,2 kW

Transformers:			
Sealtransformer	Tr1	Part number:	160-1334159
		Input:	208-230 Volt
		Capacity:	1150 VA
		Output:	24 Volt
		ED:	10 %
Used transformers	Tr1 & Tr1.1	Connection:	Serie
Control transformer	Tb1	Part number:	160-1334122
		Input:	208-230 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

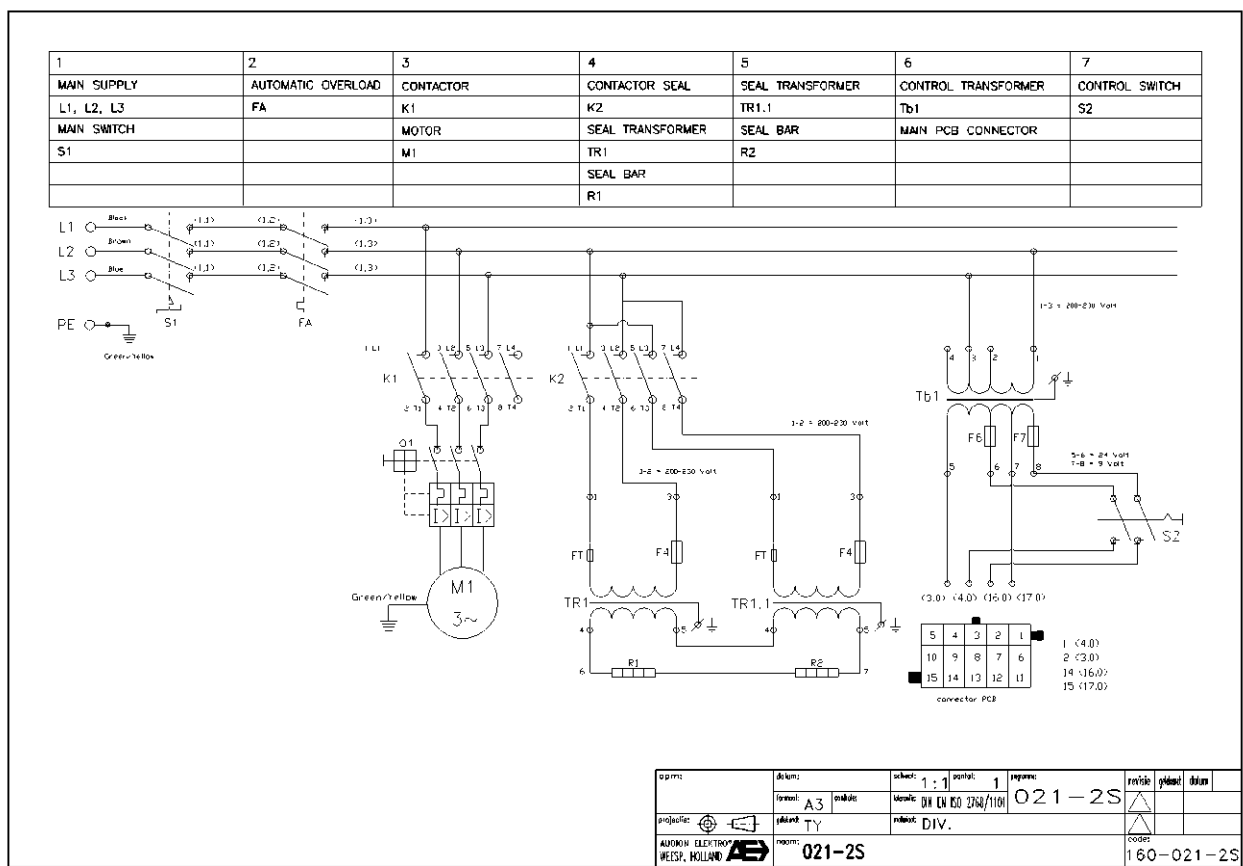
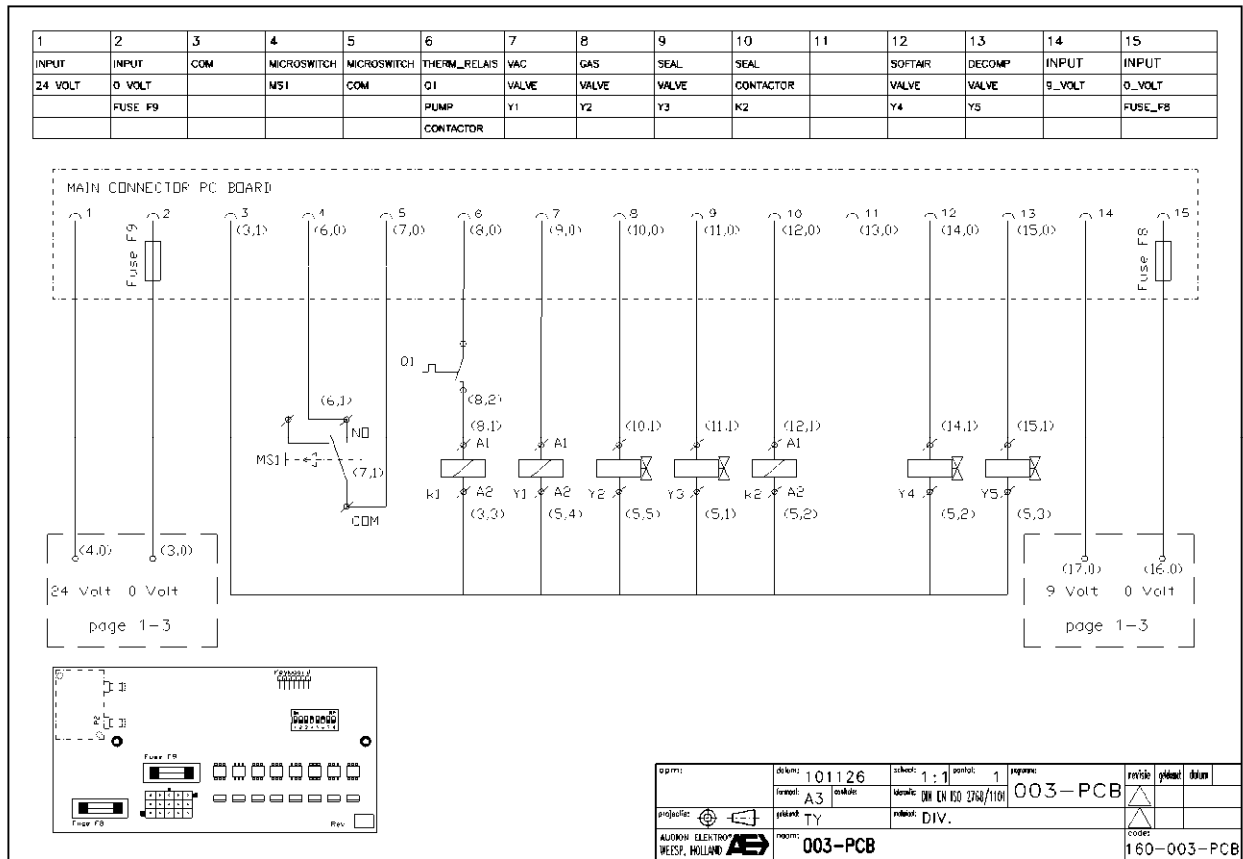
Sealbars:	
Used sealbars	R1, R2
Connection:	R1 & R2 - Serie

Contactors:	
Pump	K1
Seal	K2

Switches:			
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:			
Switch start cycle	MS1	Electrical connections:	2

Valves:	
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5





VMS 193 (S/L) 220V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	021-2S	Sealconfiguration	Right and Front
Machine serie	VMS 193	Seal type	Double / Cut-off / 8mm
Power (V/~/Hz)	220-3-60		
Pump capacity	063 m³/h		

Main electrical supply:	
L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:			
Circuit breaker	FA	Part number:	160-1332181
		Specification:	3 x 25 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	10
Fuse seal transformer	F4	Part number:	160-1343136
		Specification:	8 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:	
Pump type	063 m³/h
Capacity	2,2 kW

Transformers:			
Sealtransformer	Tr1	Part number:	160-1334159
		Input:	220 Volt
		Capacity:	1150 VA
		Output:	24 Volt
		ED:	10 %
Used transformers	Tr1 & Tr1.1	Connection:	Serie
Control transformer	Tb1	Part number:	160-1334122
		Input:	220 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

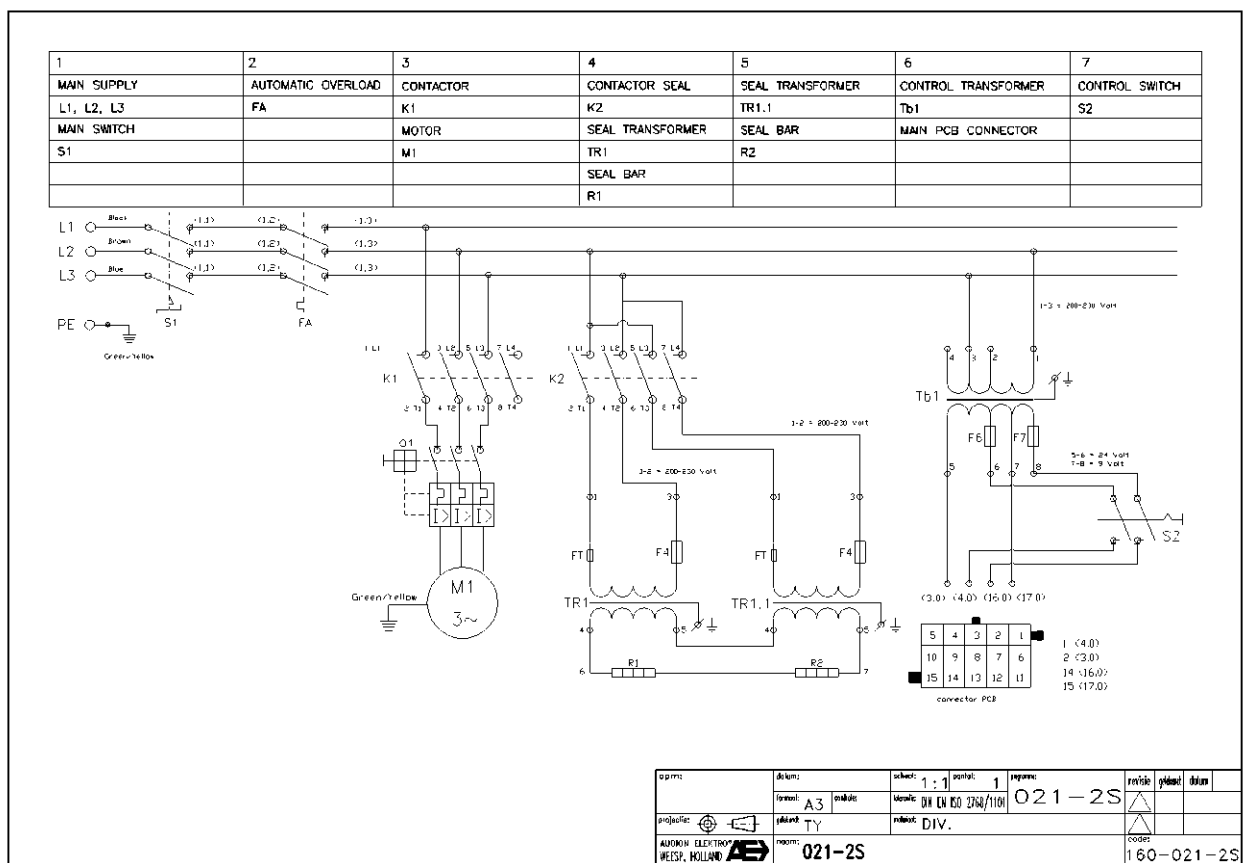
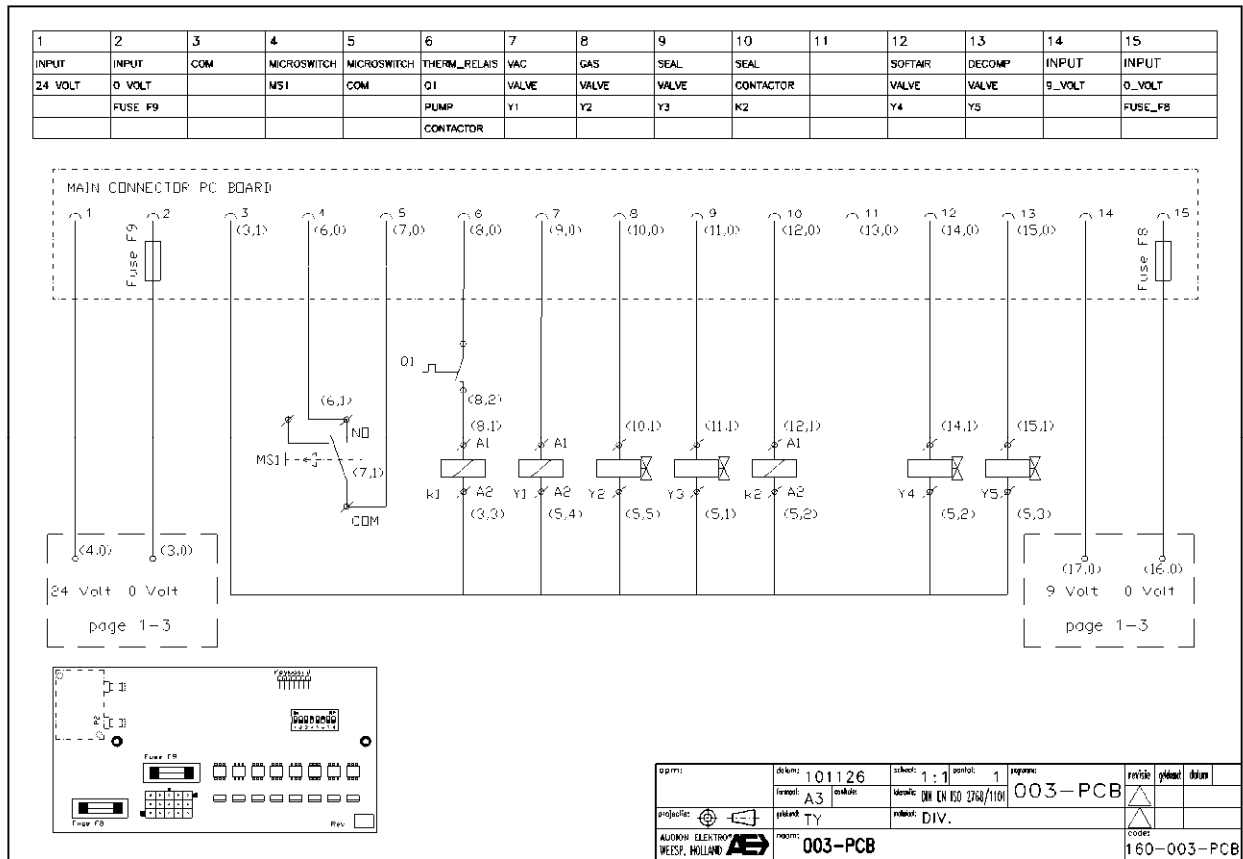
Sealbars:	
Used sealbars	R1, R2
Connection:	R1 & R2 - Serie

Contactors:	
Pump	K1
Seal	K2

Switches:			
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:			
Switch start cycle	MS1	Electrical connections:	2

Valves:	
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5





VMS 193 (S/L) 230V - 3P - 50Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	021-2S	Sealconfiguration	Right and Front
Machine serie	VMS 193	Seal type	Double / Cut-off / 8mm
Power (V/~/Hz)	230-3-50		
Pump capacity	063 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332181
		Specification:	3 x 25 Amp
Termical overload pump	Q1	Part number:	160-1332240
		Range:	6,3-10
		Set:	7
Fuse seal transformer	F4	Part number:	160-1343136
		Specification:	8 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	063 m³/h
Capacity	1,5 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334159
		Input:	220-230 Volt
		Capacity:	1150 VA
		Output:	24 Volt
		ED:	10 %
Used transformers	Tr1 & Tr1.1	Connection:	Serie
Control transformer	Tb1	Part number:	160-1334122
		Input:	220-230 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	R1 & R2 - Serie
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

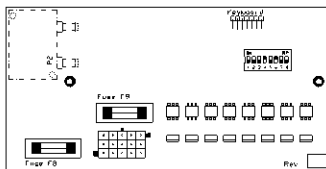
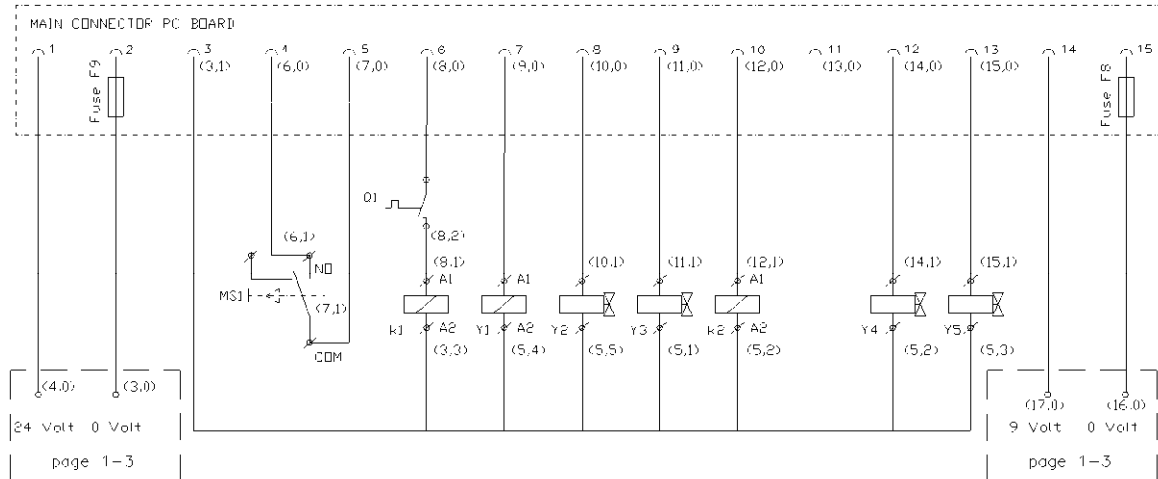
Microswitches:

Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5

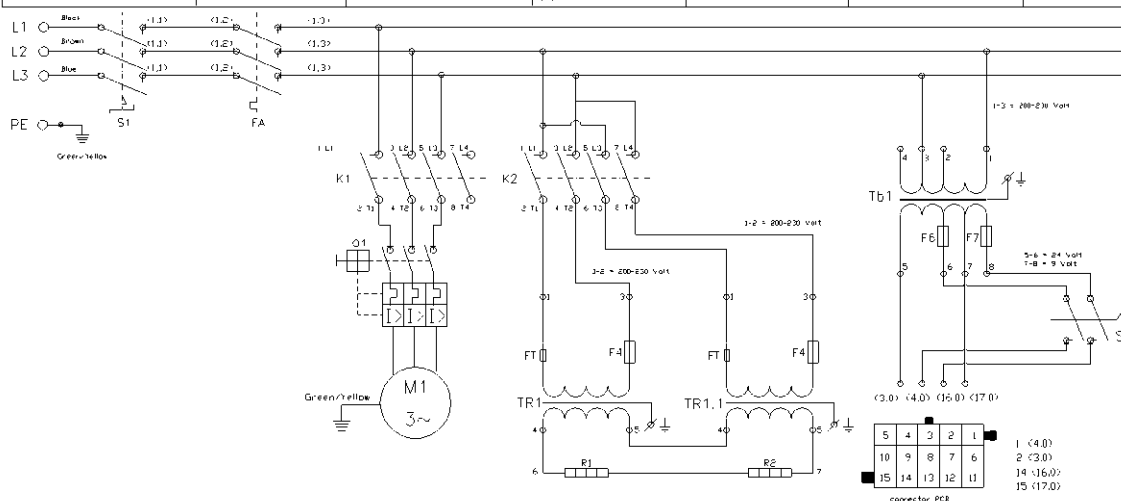
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INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		MS1	COM	Q1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_FB
					CONTACTOR									



spec:	dimen: 101126	sheet: 1	total: 1	page: 1	revise	phase	draw
	format: A3	module:	descri: 003-PCB				
project:	project: Y	release: DIV.					
AUTOMON ELECTRONIC WEISS, HOLLAND					code: 160-003-PCB		

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1	2	3	4	5	6	7
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR	CONTACTOR SEAL	SEAL TRANSFORMER	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	TR1.1	Tb1	S2
MAIN SWITCH		MOTOR	SEAL TRANSFORMER	SEAL BAR	MAIN PCB CONNECTOR	
S1		M1	TR1	R2		
			SEAL BAR			
			R1			



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	TY	rubric:	DIV.					
AUTOMATON ELECTROT BESCH. HOLLAND	noor:	021-2S						160-021-2S



VMS 193 (S/L) 380V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	023-2S	Seal configuration	Right and Front
Machine serie	VMS 193	Seal type	Double / Cut-off / 8mm
Power (V/~/Hz)	380-3-60		
Pump capacity	063 m³/h		

Main electrical supply:	
L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:			
Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332235
		Range:	4-6,5
		Set:	5,5
Fuse seal transformer	F5	Part number:	160-1343133
		Specification:	4 Amp Slow
		Size:	6,3 x 32 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:	
Pump type	063 m³/h
Capacity	2,2 kW

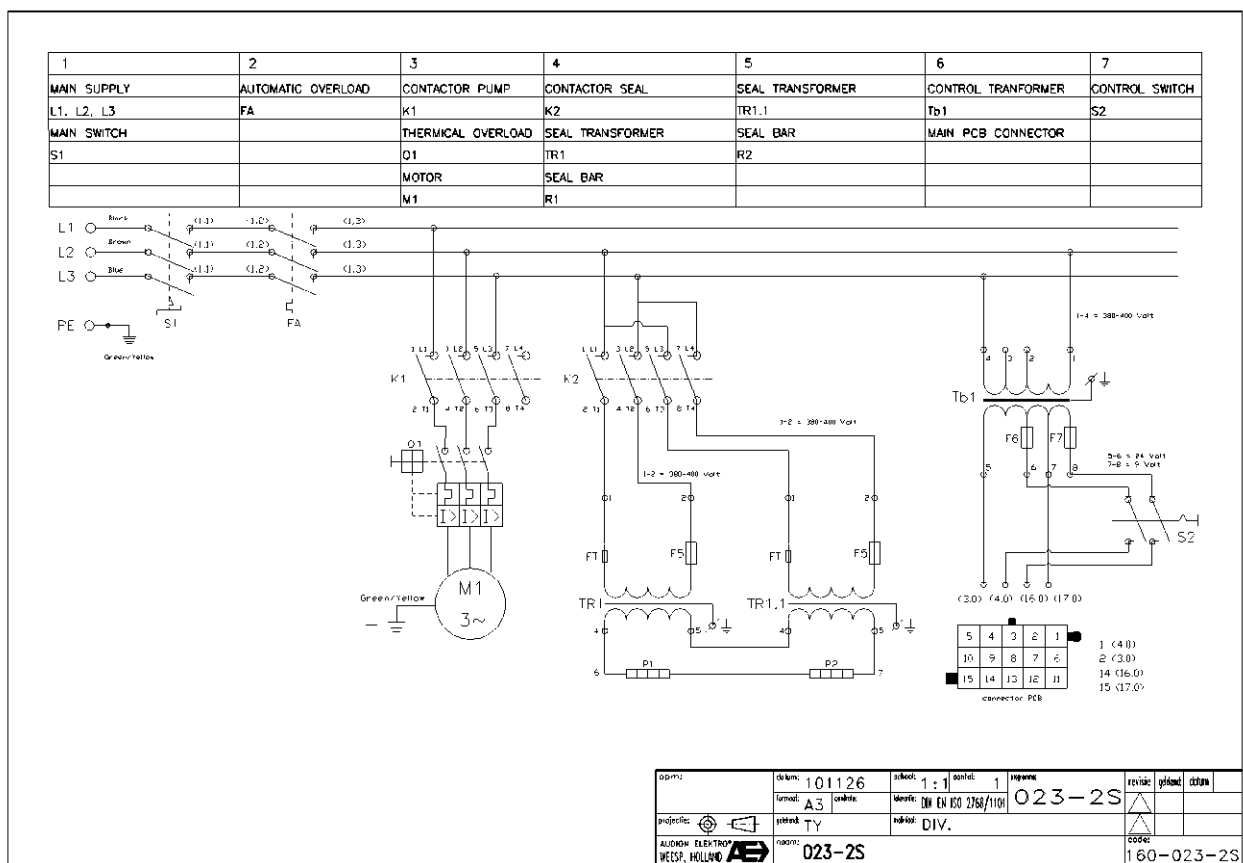
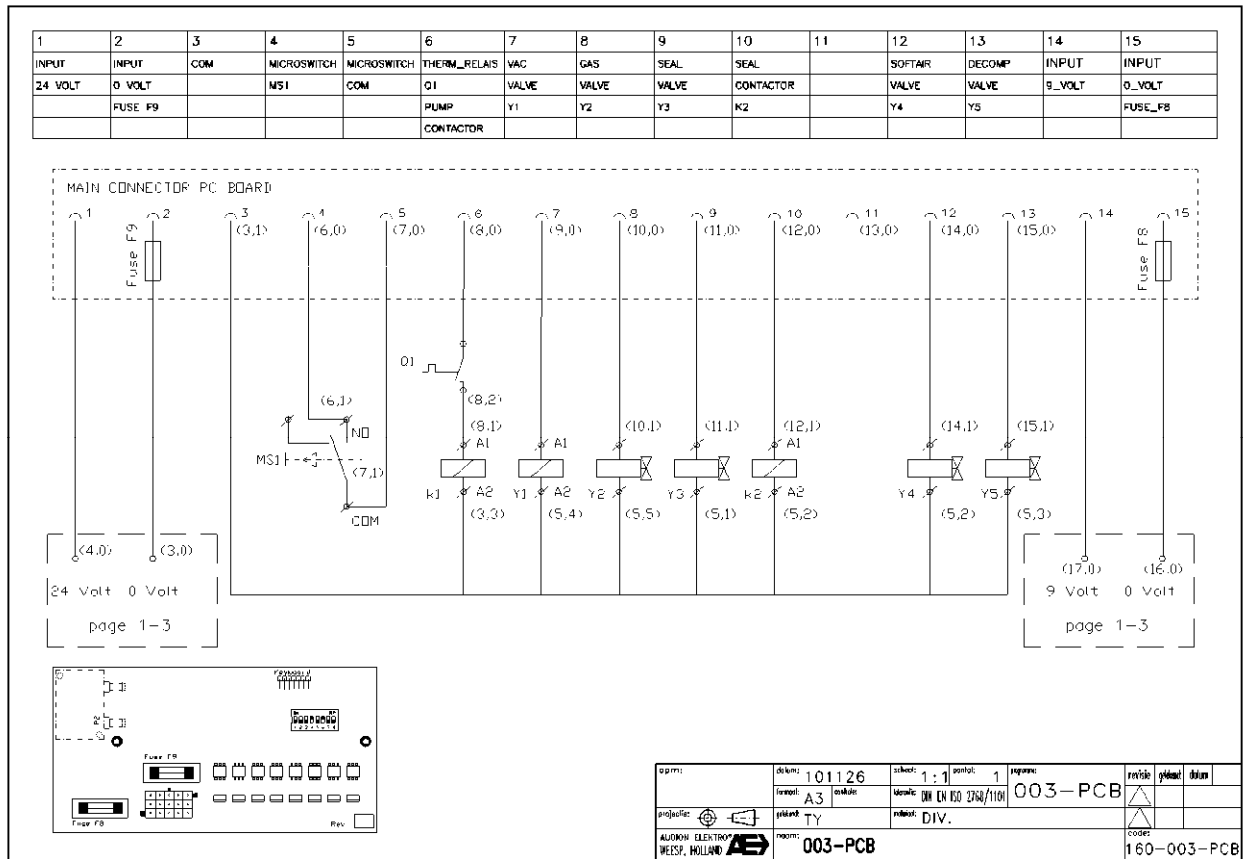
Transformers:			
Seal transformer	Tr1	Part number:	160-1334160
		Input:	400 Volt
		Capacity:	1150 VA
		Output:	24 Volt
		ED:	10 %
Used transformers	Tr1 & Tr1.1	Connection:	Serie
Control transformer	Tb1	Part number:	160-1334122
		Input:	400 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:	
Used sealbars	R1, R2
Connection:	R1 & R2 - Serie

Contactors:	
Pump	K1
Seal	K2

Switches:			
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117
Microswitches:			
Switch start cycle	MS1	Electrical connections:	2

Valves:	
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5





VMS 193 (S/L) 400V - 3P - 50Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	023-2S	Sealconfiguration	Right and Front
Machine serie	VMS 193	Seal type	Double / Cut-off / 8mm
Power (V/-/Hz)	400-3-50		
Pump capacity	063 m³/h		

Main electrical supply:	
L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:			
Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332235
		Range:	4-6,5
		Set:	4
Fuse seal transformer	F5	Part number:	160-1343133
		Specification:	4 Amp Slow
		Size:	6,3 x 32 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:	
Pump type	063 m³/h
Capacity	1,5 kW

Transformers:			
Sealtransformer	Tr1	Part number:	160-1334160
		Input:	400 Volt
		Capacity:	1150 VA
		Output:	24 Volt
		ED:	10 %
Used transformers	Tr1 & Tr1.1	Connection:	Serie
Control transformer	Tb1	Part number:	160-1334122
		Input:	400 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:	
Used sealbars	R1, R2
Connection:	R1 & R2 - Serie

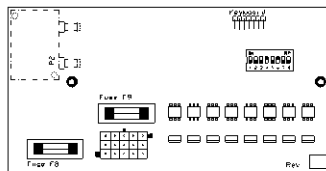
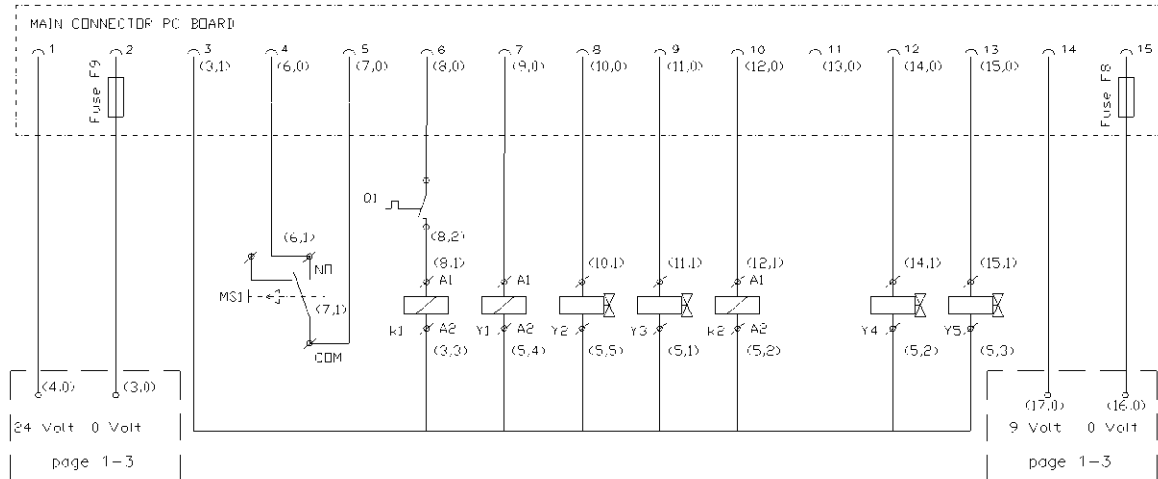
Contactors:	
Pump	K1
Seal	K2



Switches:			
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:			
Switch start cycle	MS1	Electrical connections:	2

Valves:	
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5

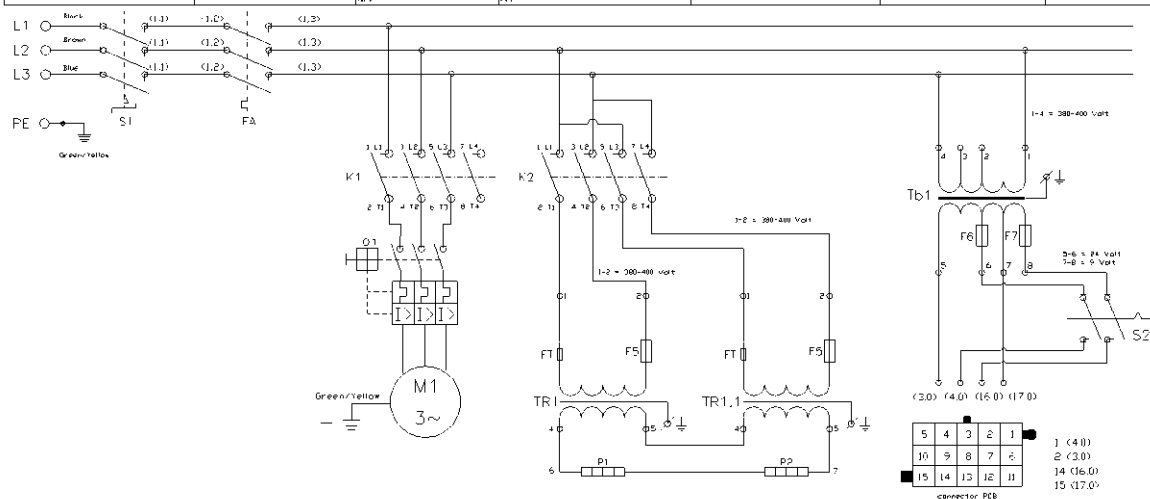
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		MS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_F8
					CONTACTOR									





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ALUMON ELEKTRO MEP, HOLLAND 	name: 003-PCB				code:		
					160-003-PCB		

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1	2	3	4	5	6	7
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR PUMP	CONTACTOR SEAL	SEAL TRANSFORMER	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	TR1.1	Tb1	S2
MAIN SWITCH		THERMICAL OVERLOAD	SEAL TRANSFORMER	SEAL BAR	MAIN PCB CONNECTOR	
S1		O1	TR1	R2		
		MOTOR	SEAL BAR			
		M1	R1			



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	formaat: A3	omvang:	identificatie: DW K50 2768/110	023-2S	△		
projectie: 	tekening: TY	indeling:	DIV.		△		
AUSTRON ELECTROT WEEST HOLLAND 	aanpak: 023-2S				code:		
							160-023-2S

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VM(S) 203 - 223 - 233 (S/S) 200V - 3P - 50/60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	022	Sealconfiguration	Left and Right
Machine serie	VM 203, VMS 223, VMS 233	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	200-3-50/60		
Pump capacity	063 m³/h		

Main electrical supply:	
L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:			
Circuit breaker	FA	Part number:	160-1332170
		Specification:	3 x 25 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	10
Fuse seal transformer	F4	Part number:	160-1343131
		Specification:	4 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:	
Pump type	063 m³/h
Capacity	2,2 kW

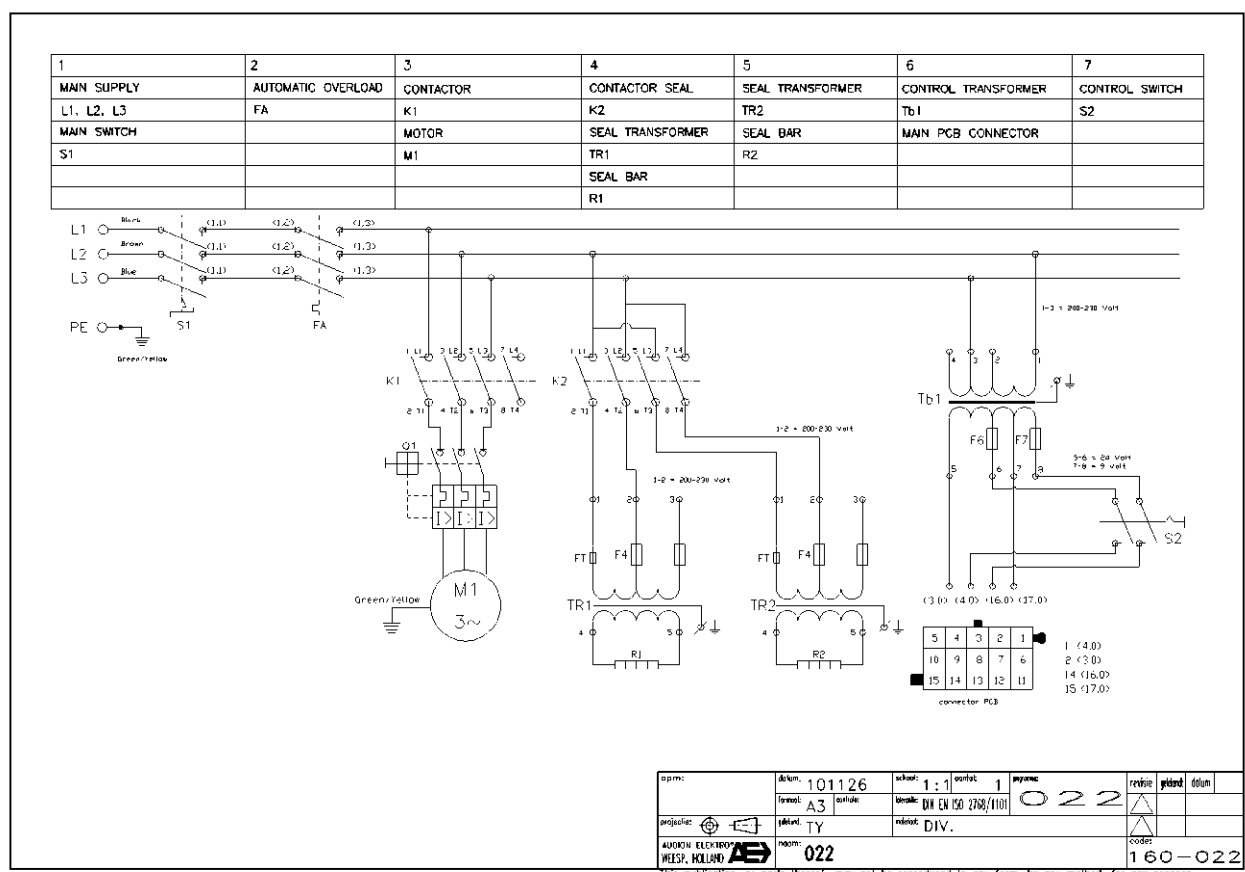
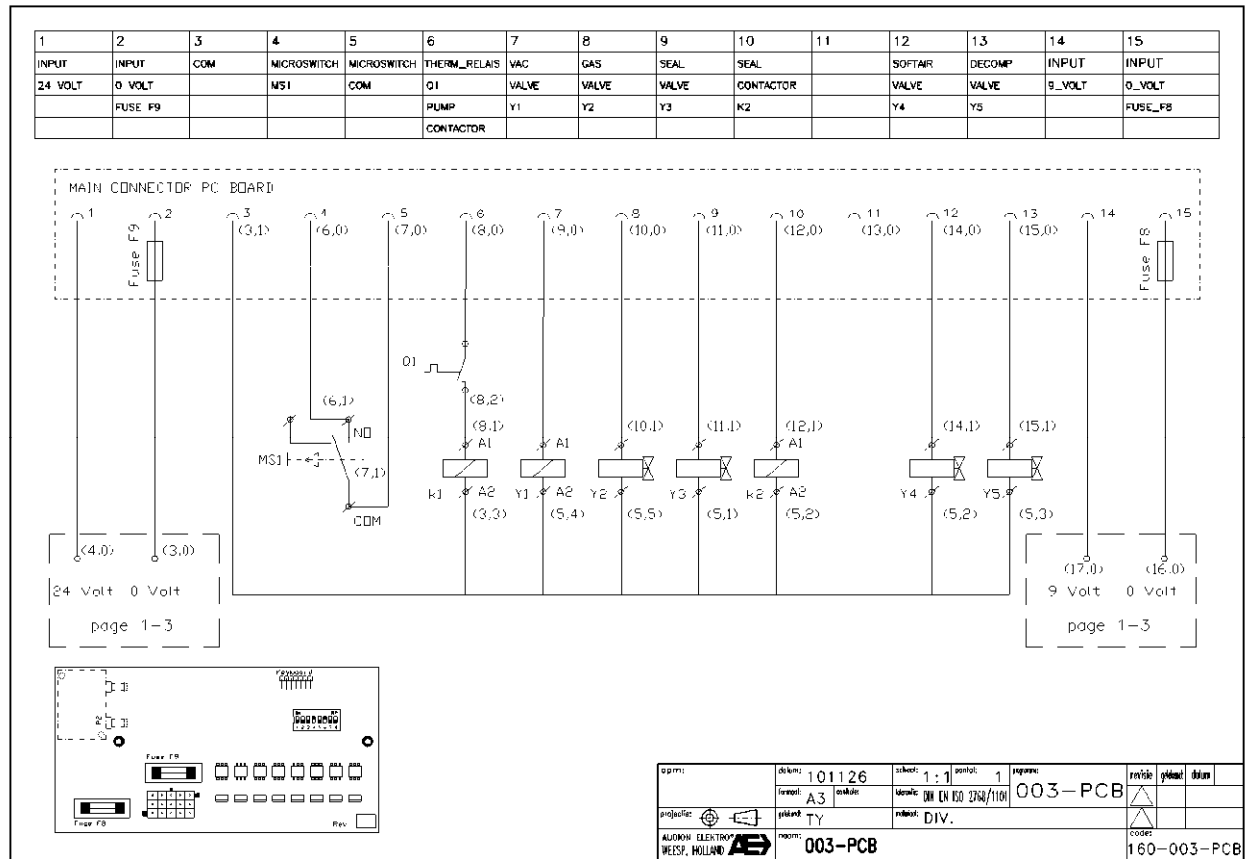
Transformers:			
Sealtransformer	Tr1	Part number:	160-1334143
		Input:	200 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	200 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:	
Used sealbars	R1, R2
Connection:	Stand alone

Contactors:	
Pump	K1
Seal	K2

Switches:			
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117
Microswitches:			
Switch start cycle	MS1	Electrical connections:	2

Valves:	
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5





VM(S) 203 - 223 - 233 (S/S) 208V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	022	Sealconfiguration	Left and Right
Machine serie	VM 203, VMS 223, VMS 233	Seal type	Double / Cut-off / 8mm
Power (V~/Hz)	208-3-60		
Pump capacity	063 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332170
		Specification:	3 x 25 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	10
Fuse seal transformer	F4	Part number:	160-1343131
		Specification:	4 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	063 m³/h
Capacity	2,2 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334143
		Input:	208-230 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	208-230 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:

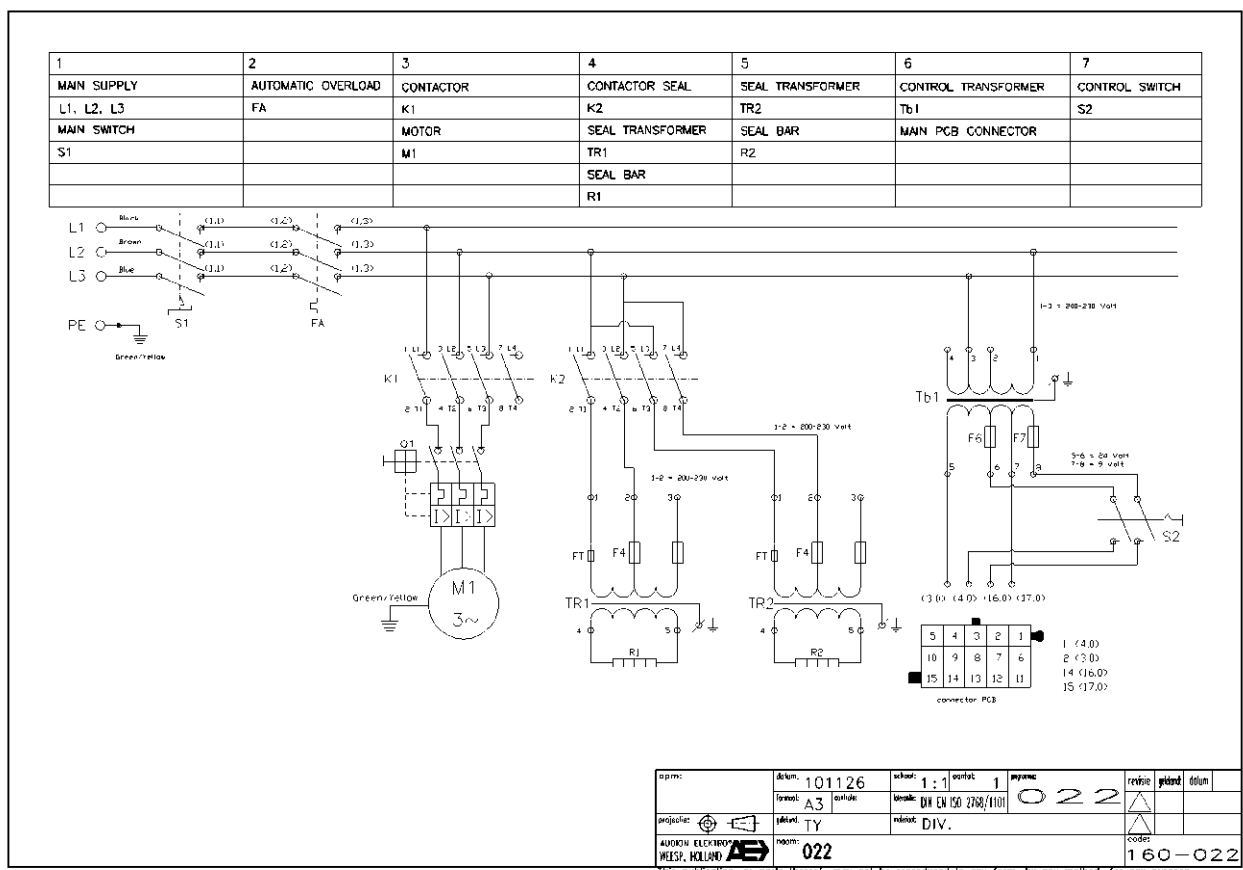
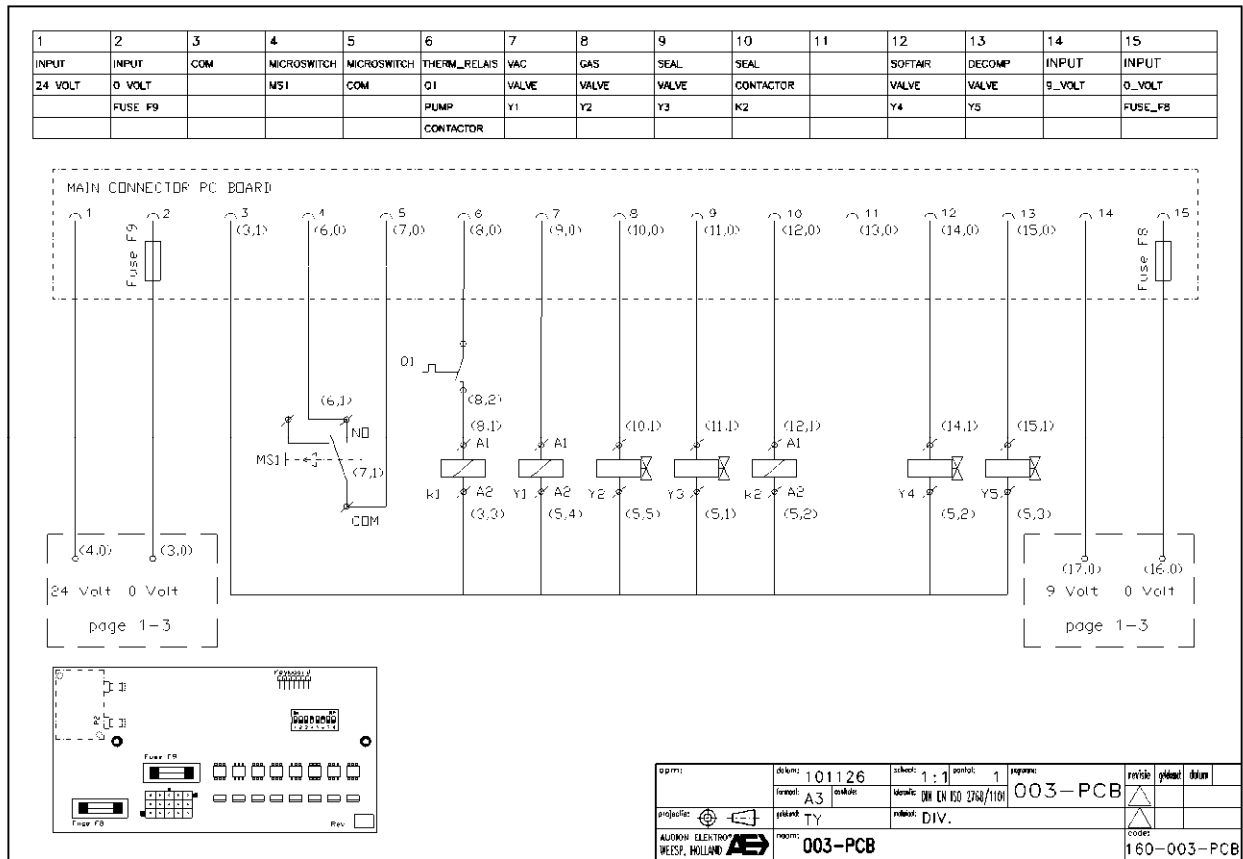
Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5



VM(S) 203 - 223 - 233 (S/S) 208V - 3P - 60Hz





VM(S) 203 - 223 - 233 (S/S) 220V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	022	Sealconfiguration	Left and Right
Machine serie	VM 203, VMS 223, VMS 233	Seal type	Double / Cut-off / 8mm
Power (V/~/Hz)	220-3-60		
Pump capacity	063 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332170
		Specification:	3 x 25 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	10
Fuse seal transformer	F4	Part number:	160-1343131
		Specification:	4 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	063 m³/h
Capacity	2,2 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334143
		Input:	220 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	220 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

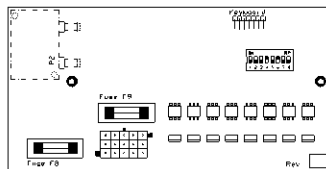
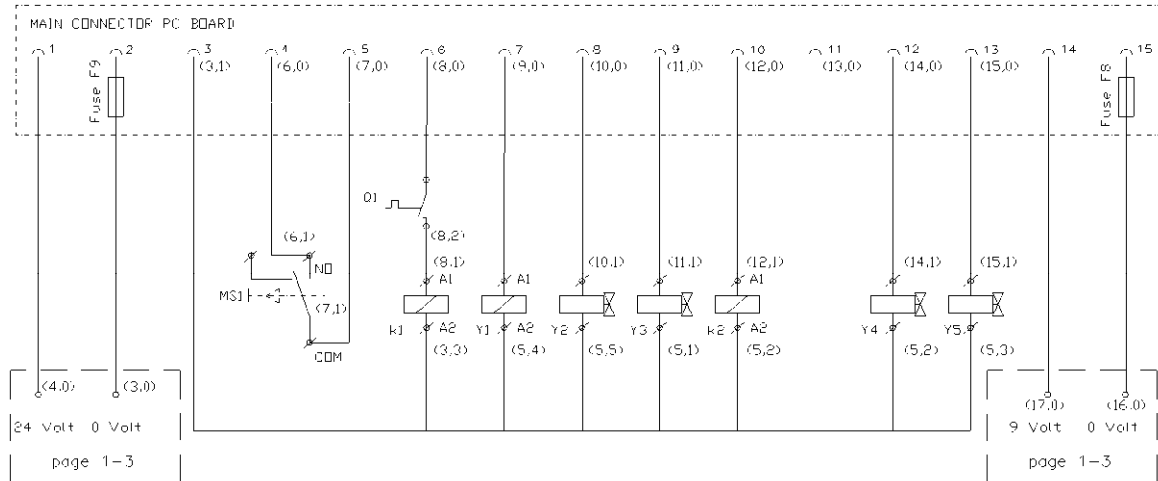
Microswitches:







Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5

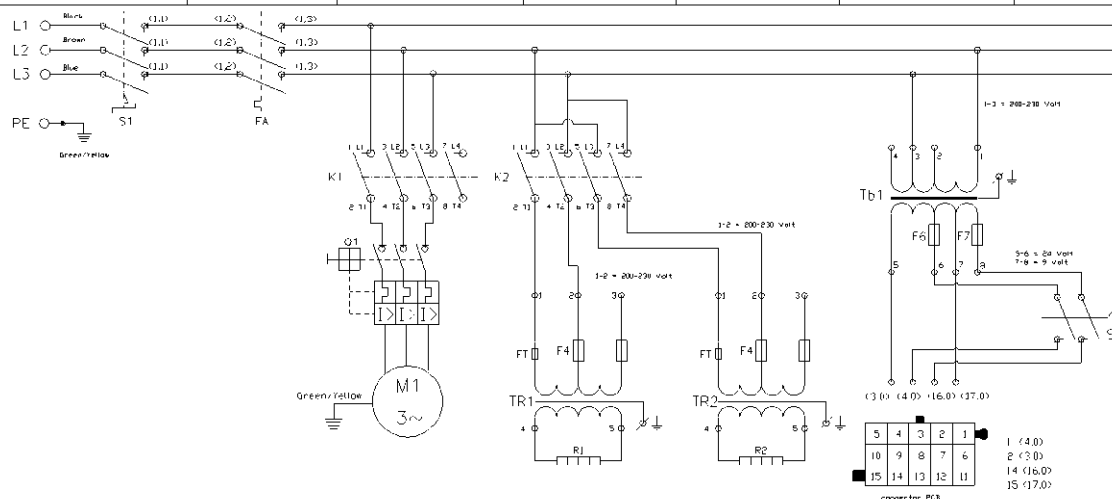
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24_VOLT	0_VOLT		MS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_F8
					CONTACTOR									





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project: 	format: Y	medium: DIV.					
ALUMINUM ELECTRONIC WEEF, HOLLAND  003-PCB					CODE: 160-003-PCB		

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1	2	3	4	5	6	7
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR	CONTACTOR SEAL	SEAL TRANSFORMER	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	TR2	Tb1	S2
MAIN SWITCH		MOTOR	SEAL TRANSFORMER	SEAL BAR	MAIN PCB CONNECTOR	
S1		M1	TR1	R2		
			SEAL BAR			
			R1			



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400000 ELECTRO HEEST, HOLLAND 	room: 022						
							code: 160-022



VM(S) 203 - 223 - 233 (S/S) 230V - 3P - 50Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	022	Sealconfiguration	Left and Right
Machine serie	VM 203, VMS 223, VMS 233	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	230-3-50		
Pump capacity	063 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332170
		Specification:	3 x 25 Amp
Termical overload pump	Q1	Part number:	160-1332240
		Range:	6,3-10
		Set:	6,5
Fuse seal transformer	F4	Part number:	160-1343131
		Specification:	4 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	063 m³/h
Capacity	1,5 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334143
		Input:	220-230 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	220-230 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

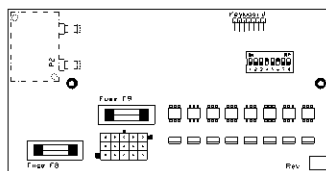
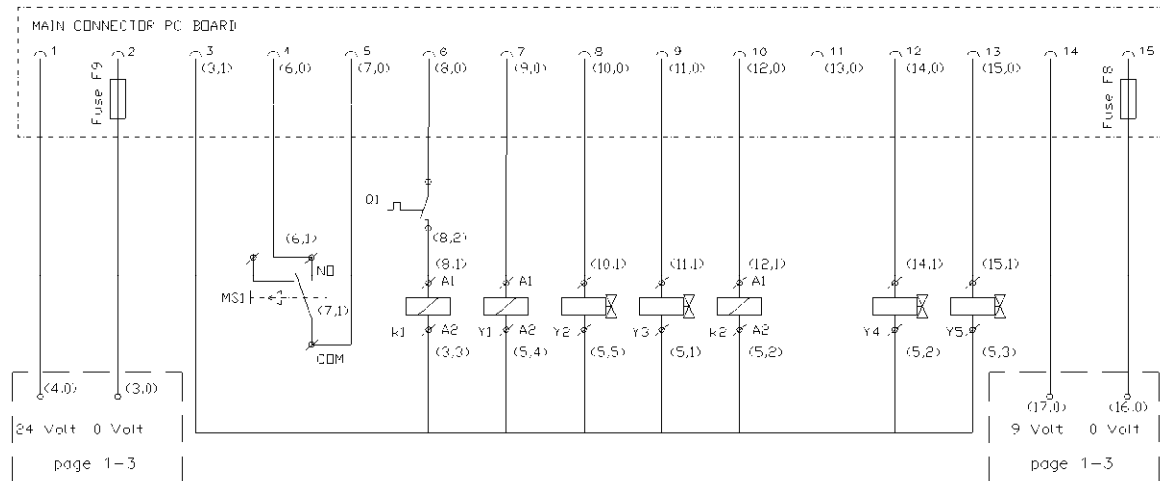
Microswitches:

Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5

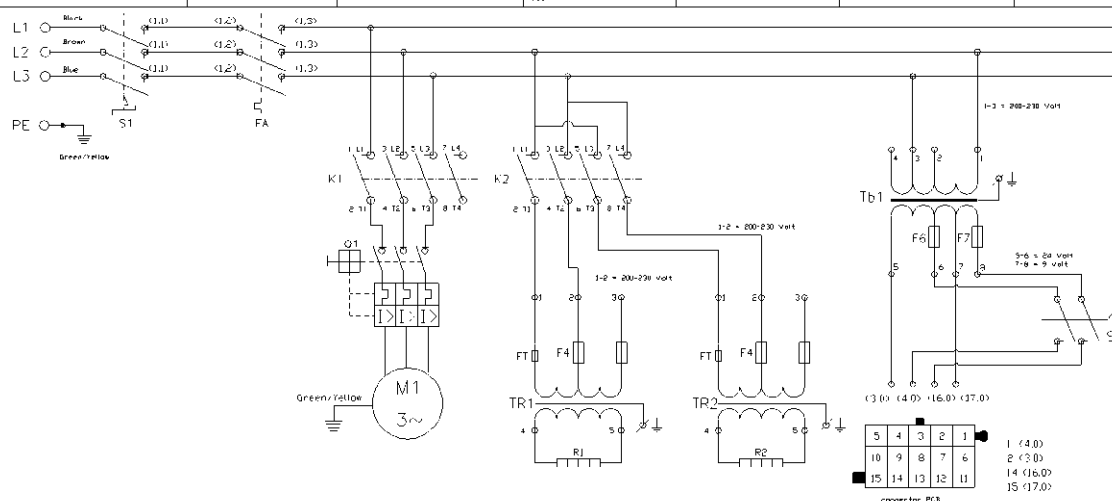
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		MS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_F8
					CONTACTOR									





part:	dim:	101126	sheet:	1	page:		rev:			
	form:	A3	descr:	003-PCB						
product:	prod:	Y	revis:	DIV.						
ALUMINUM ELECTRO DESS, HOLLAND AE							codes 160-003-PCB			

THIS PUBLICATION OR ANY PART THEREOF MAY NOT BE REPRODUCED IN ANY FORM BY ANY METHOD FOR ANY PURPOSE.

1	2	3	4	5	6	7
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR	CONTACTOR SEAL	SEAL TRANSFORMER	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	TR2	Tb1	S2
MAIN SWITCH		MOTOR	SEAL TRANSFORMER	SEAL BAR	MAIN PCB CONNECTOR	
S1		M1	TR1	R2		
			SEAL BAR			
			R1			



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	format: A3 outside	locat: D18 EN ISO 2780/1101		0 2 2	△		
project: 	plaat: TY	relust: DIV.			△		
400000 ELEKTRON HEEST, HOLLAND 	room: 022				code:		
					160-022		



VM(S) 203 - 223 - 233 (S/S) 380V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	024	Seal configuration	Left and Right
Machine serie	VM 203, VMS 223, VMS 233	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	380-3-60		
Pump capacity	063 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332235
		Range:	4-6,5
		Set:	5,5
Fuse seal transformer	F5	Part number:	160-1343130
		Specification:	3,15 Amp Slow
		Size:	6,3 x 32 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	063 m³/h
Capacity	2,2 kW

Transformers:

Seal transformer	Tr1	Part number:	160-1334143
		Input:	400 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	400 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:

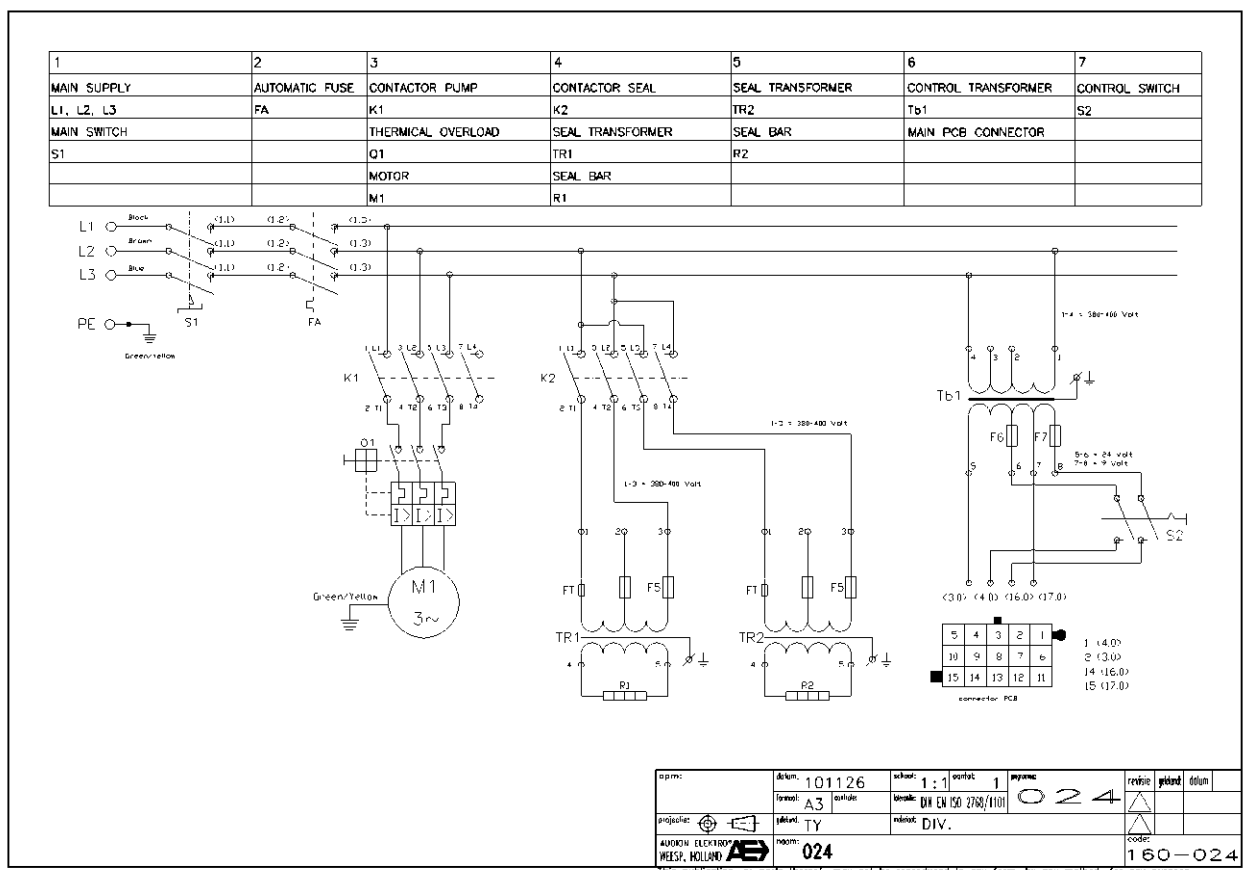
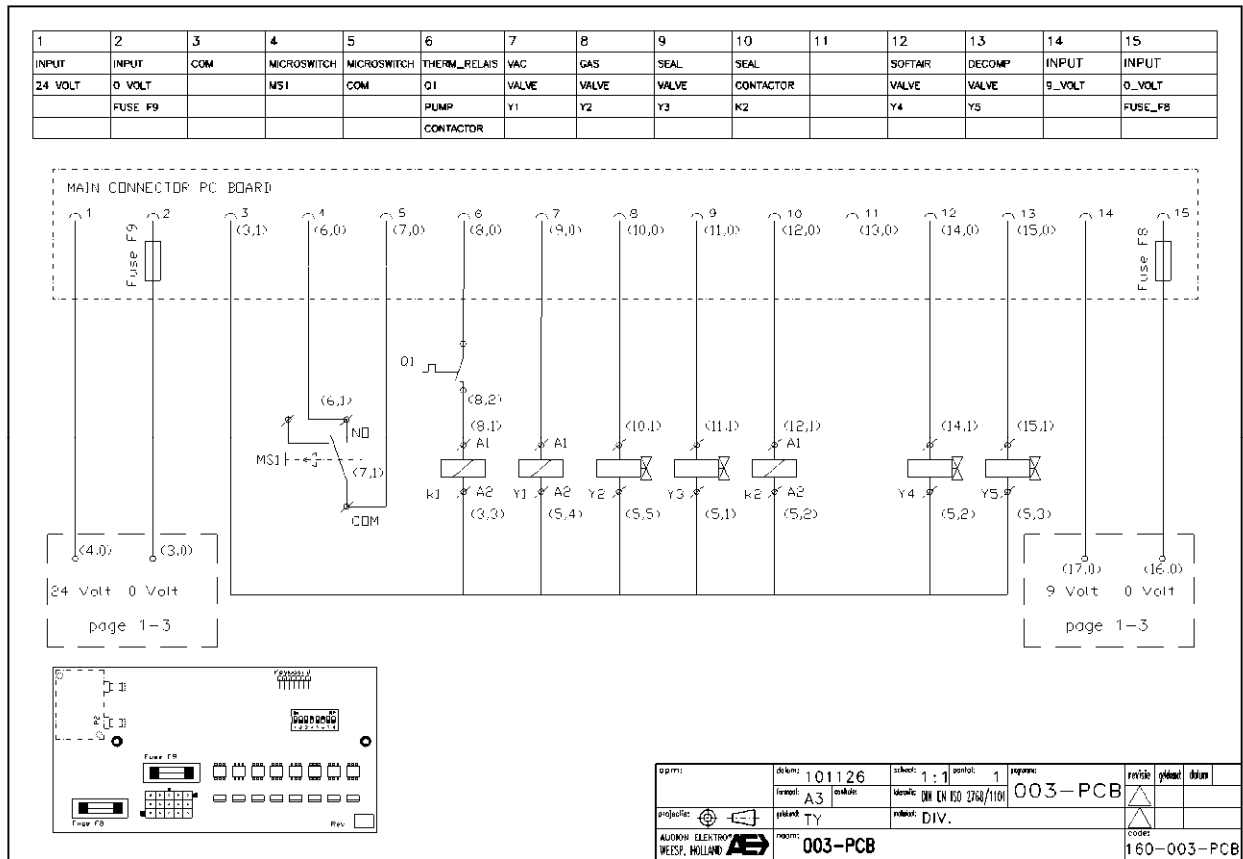
Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5



VM(S) 203 - 223 - 233 (S/S) 380V - 3P - 60Hz





VM(S) 203 - 223 - 233 (S/S) 400V - 3P - 50Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	024	Sealconfiguration	Left and Right
Machine serie	VM 203, VMS 223, VMS 233	Seal type	Double / Cut-off / 8mm
Power (V/-/Hz)	400-3-50		
Pump capacity	063 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332235
		Range:	4-6,5
		Set:	5,5
Fuse seal transformer	F5	Part number:	160-1343130
		Specification:	3,15 Amp Slow
		Size:	6,3 x 32 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	063 m³/h
Capacity	2,2 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334143
		Input:	400 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	400 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:

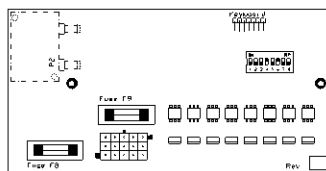
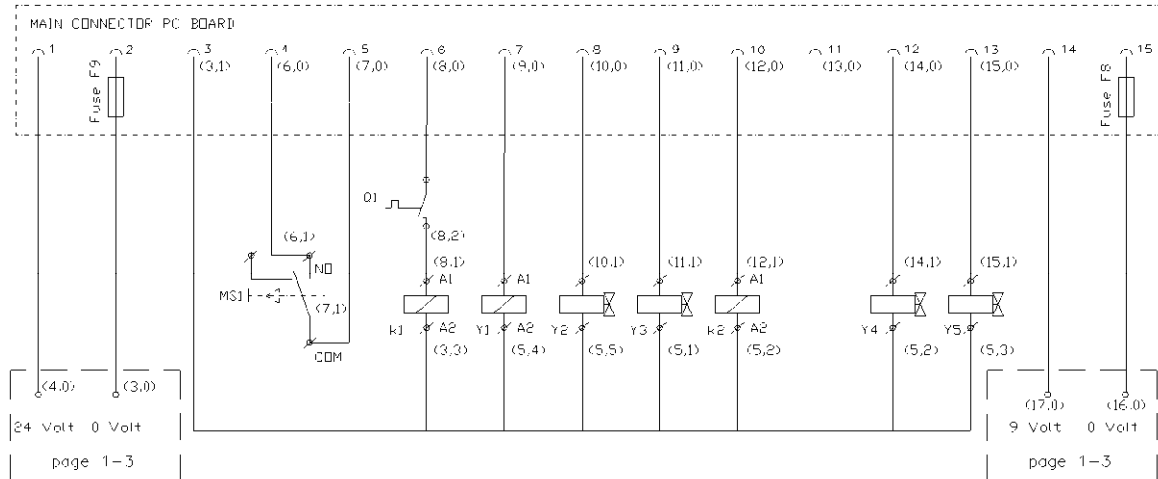
Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5

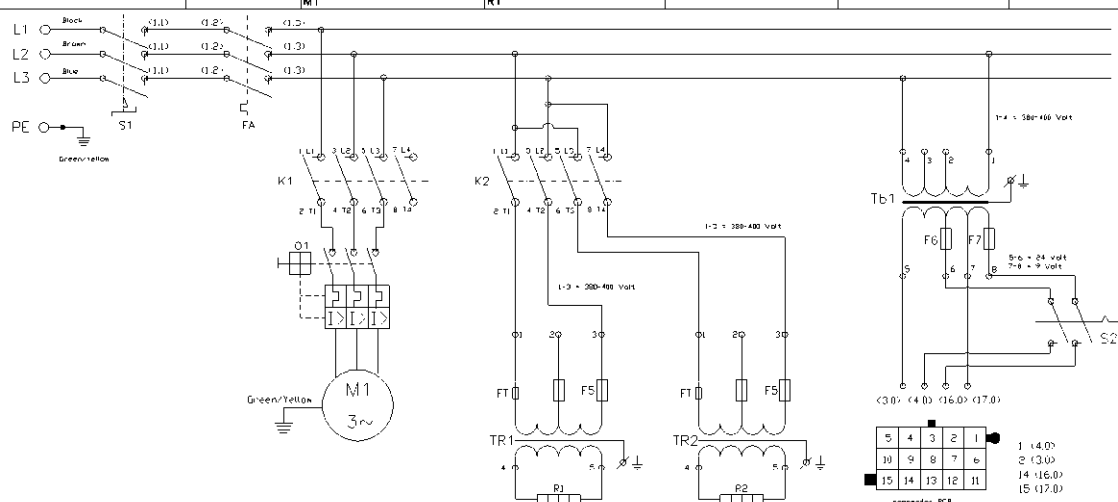
VM(S) 203 - 223 - 233 (S/S) 400V - 3P - 50Hz

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		MS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_F8
					CONTACTOR									



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	formaat: A3	model: 003-PCB	003-PCB				
projectie: 	gemaakt: TY	revisie: DIV.					
AUKHOFF ELECTRONICS BEEFS, HOLLAND 	noort: 003-PCB				codes:		
						160-003-PCB	

1	2	3	4	5	6	7
MAIN SUPPLY	AUTOMATIC FUSE	CONTACTOR PUMP	CONTACTOR SEAL	SEAL TRANSFORMER	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	TR2	Tb1	S2
MAIN SWITCH		THERMAL OVERLOAD	SEAL TRANSFORMER	SEAL BAR	MAIN PCB CONNECTOR	
S1		Q1	TR1	R2		
		MOTOR	SEAL BAR			
		N1	R1			

[illegible]



VMS 223 (Long) 200V - 3P - 50/60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	006	Sealconfiguration	Front
Machine serie	VMS 223	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	200-3-50/60		
Pump capacity	063 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	10
Fuse seal transformer	F4	Part number:	160-1343131
		Specification:	4 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	063 m³/h
Capacity	2,2 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334143
		Input:	200 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	200 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

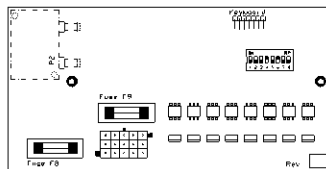
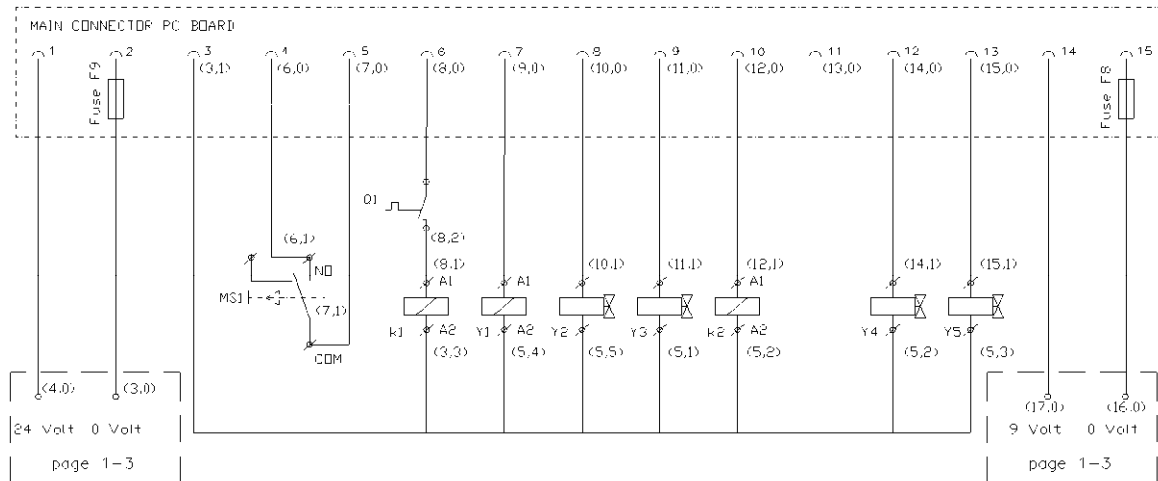
Microswitches:



Switch start cycle	MS1	Electrical connections:	2
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Valves:

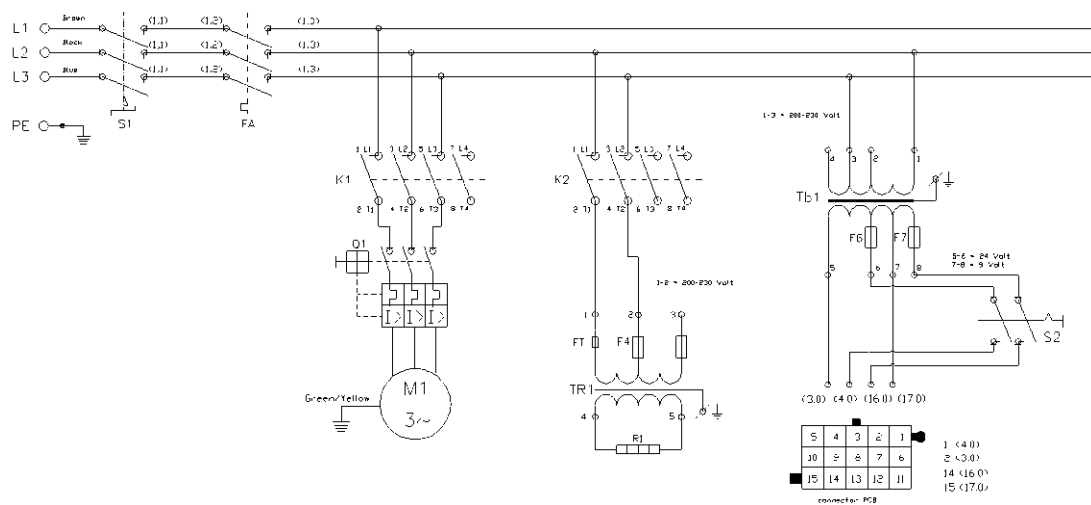
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5






1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		MS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_F8
					CONTACTOR									



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projectie: 	grootte: TY	remerk: DIV.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AUROMA ELECTRONICS BEEFF, HOLLAND 	noemr: 003-PCB				code:	160-003-PCB	

1	2	3	4	5	6
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR	CONTACTOR SEAL	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	Td1	S2
MAIN SWITCH		THERMAL OVERLOAD	SEAL TRANSFORMER	MAIN PCB CONNECTOR	
S1		Q1	TR1		
		MOTOR	SEAL BAR		
		M1	R1		



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	formaat: A3	matr: 000	UW: 124 2762/110				
opgesteld: 	plaatst: TY	rubriek: DIV.					
AUDION ELECTRON WEES, HOLLAND 	numm: 006				code:		
					16Q-006		



VMS 223 (Long) 208V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	006	Sealconfiguration	Front
Machine serie	VMS 223	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	208-3-60		
Pump capacity	063 m³/h		

Main electrical supply:	
L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:			
Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	10
Fuse seal transformer	F4	Part number:	160-1343131
		Specification:	4 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:	
Pump type	063 m³/h
Capacity	2,2 kW

Transformers:			
Sealtransformer	Tr1	Part number:	160-1334143
		Input:	208-230 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	208-230 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:	
Used sealbars	R1
Connection:	Stand alone

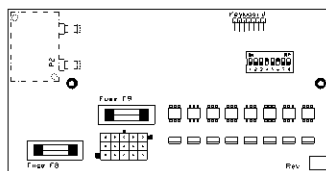
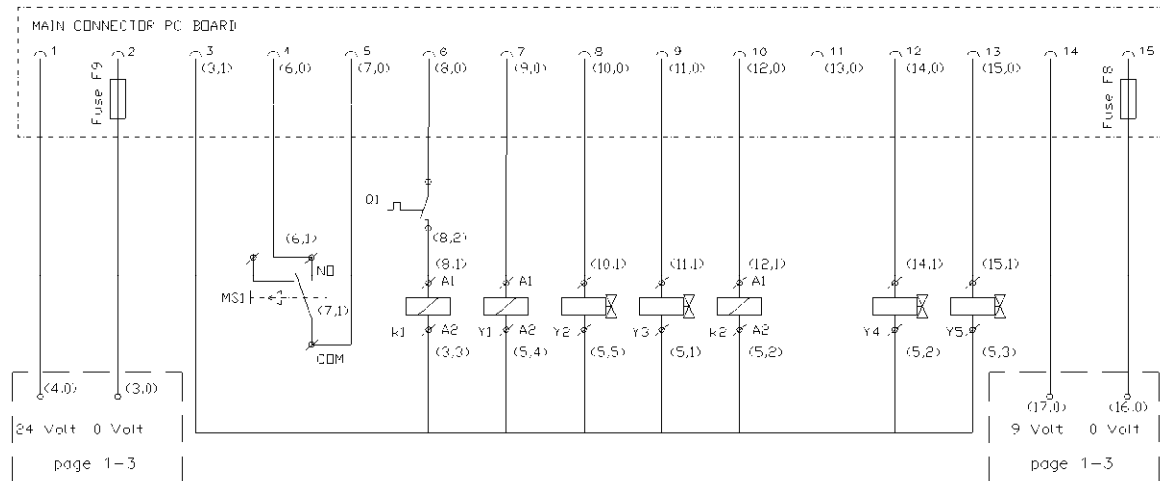
Contactors:	
Pump	K1
Seal	K2




Switches:			
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:			
Switch start cycle	MS1	Electrical connections:	2

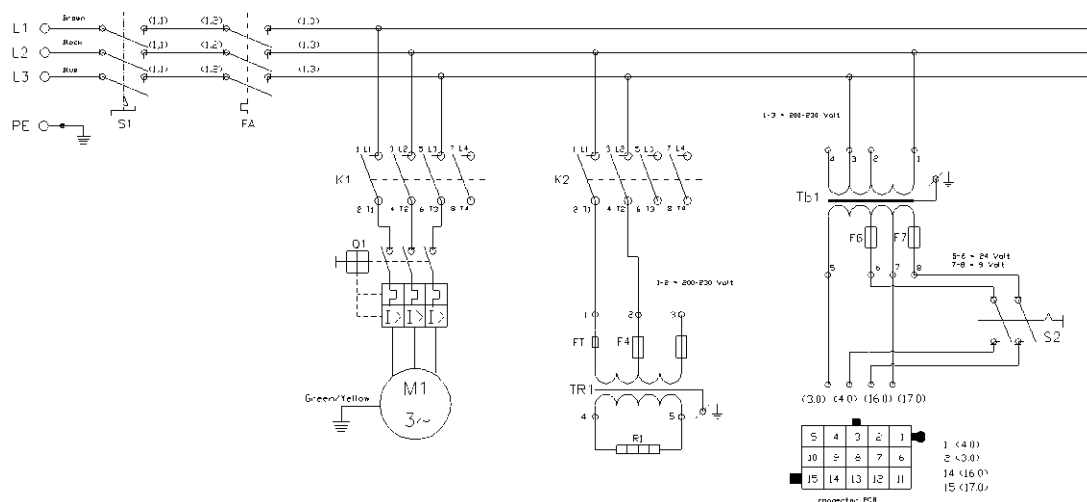
Valves:	
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5






1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		MS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_F8
					CONTACTOR									



sgnr:	dimen: 101126	schets: 1:1	positief: 1	pagina:	revise	gemaakt	datum
	formaat: A3	merk: mobile	titel: 003-PCB				
projectie: 	gemaakt: TY	revisie: DIV.					
AUKHOFF ELECTRONICS BEEFS, HOLLAND 	noor: 003-PCB				code:		
						160-003-PCB	

1	2	3	4	5	6
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR	CONTACTOR SEAL	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	Td1	S2
MAIN SWITCH		THERMAL OVERLOAD	SEAL TRANSFORMER	MAIN PCB CONNECTOR	
S1		Q1	TR1		
		MOTOR	SEAL BAR		
		M1	R1		



oprit:	datum: 101126	schied: 1	postcijl: 1	requis:	revisie	plaat:	duur:
formaat: A3	matr:	tekst: DIN EN ISO 2704/100					
projectief: 	plaatnr: TY	rubric: DIV.					
ALUMINIUM ELEKTROOP DEFSF. HOLLAND 					code: 16Q-006		



VMS 223 (Long) 220V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	006	Sealconfiguration	Front
Machine serie	VMS 223	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	220-3-60		
Pump capacity	063 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	10
Fuse seal transformer	F4	Part number:	160-1343131
		Specification:	4 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	063 m³/h
Capacity	2,2 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334143
		Input:	220 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	220 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

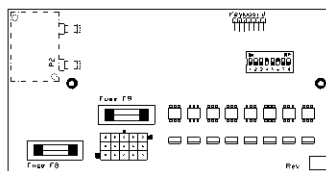
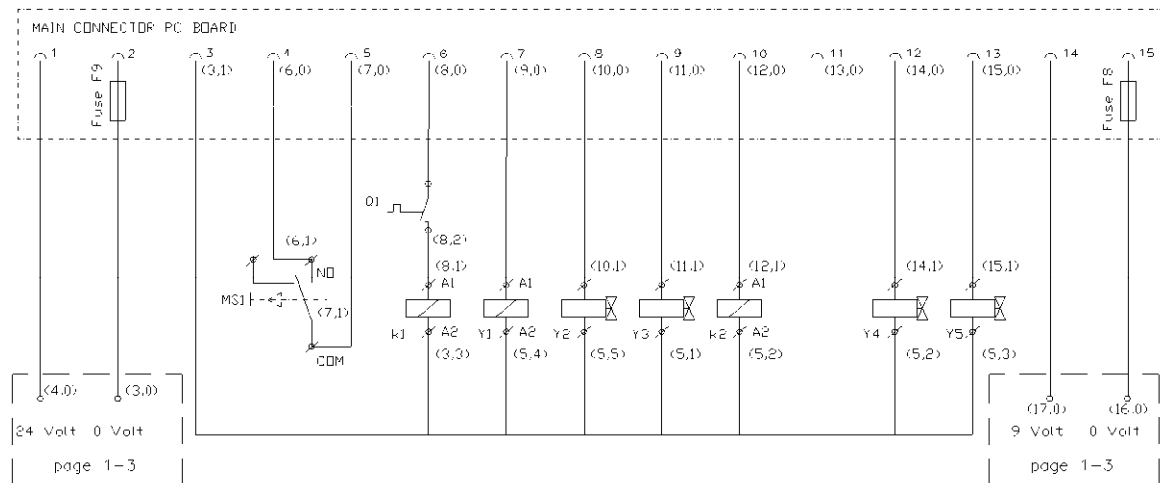
Microswitches:




Switch start cycle	MS1	Electrical connections:	2
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Valves:

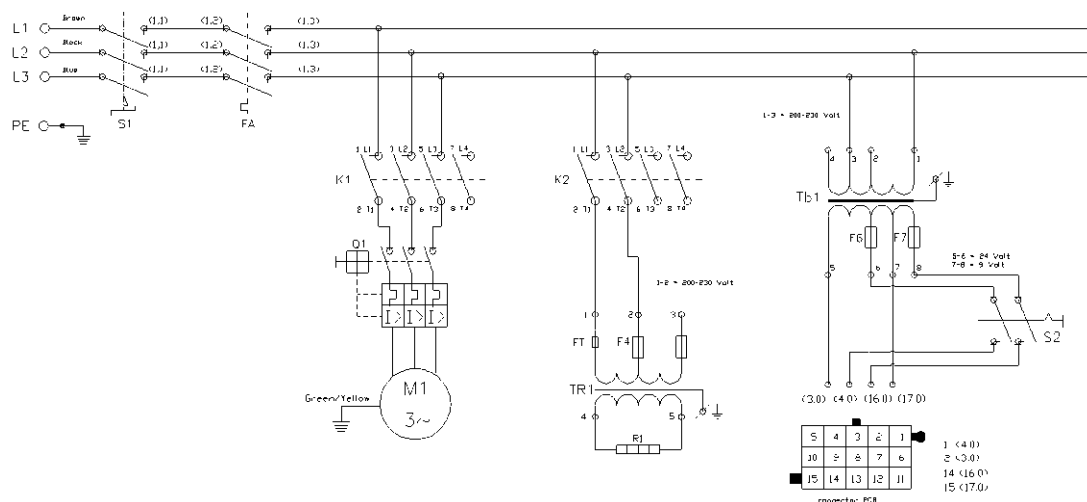
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5







1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		WS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_FB
					CONTACTOR									



sgnr:	dimen: 101126	schets: 1:1	positief: 1	pagina:	revise	gemaakt	datum
	formaat: A3	merk: mobile	titel: 003-PCB				
projectie: 	gemaakt: TY	revisie: DIV.					
ALUKON ELECTRONICS BEEPS, HOLLAND 	noor: 003-PCB				code:		
						160-003-PCB	

1	2	3	4	5	6
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR	CONTACTOR SEAL	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	Td1	S2
MAIN SWITCH		THERMAL OVERLOAD	SEAL TRANSFORMER	MAIN PCB CONNECTOR	
S1		Q1	TR1		
		MOTOR	SEAL BAR		
		M1	R1		



oprit:	datum: 101126	schied: 1	postcijl: 1	requis:	revisie	plaat:	duur:
formaat: A3	matr:	tekst: DIN EN ISO 2704/100					
projectief:  	plaatnr: TY	rubriek: DIV.					
ALUMINIUM ELEKTROOP BESCH. HOLLAND 	numm: 006				code:	16Q-006	



VMS 223 (Long) 230V - 3P - 50Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	006	Sealconfiguration	Front
Machine serie	VMS 223	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	230-3-50		
Pump capacity	063 m³/h		

Main electrical supply:	
L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:			
Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332240
		Range:	6,3-10
		Set:	6,5
Fuse seal transformer	F4	Part number:	160-1343130
		Specification:	3,15 Amp Slow
		Size:	6,3 x 32 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:	
Pump type	063 m³/h
Capacity	1,5 kW

Transformers:			
Sealtransformer	Tr1	Part number:	160-1334143
		Input:	220-230 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	220-230 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

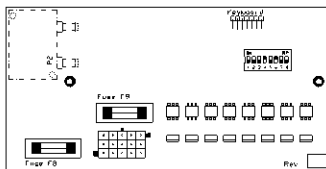
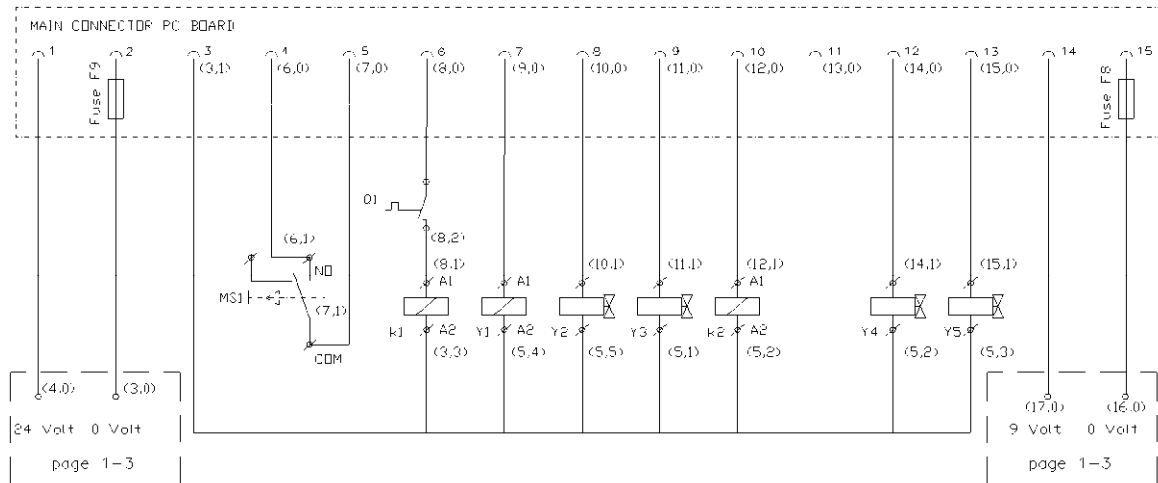
Sealbars:			
Used sealbars	R1	Connection:	Stand alone



Contactors:	
Pump	K1
Seal	K2

Switches:			
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117
Microswitches:			
Switch start cycle	MS1	Electrical connections:	2

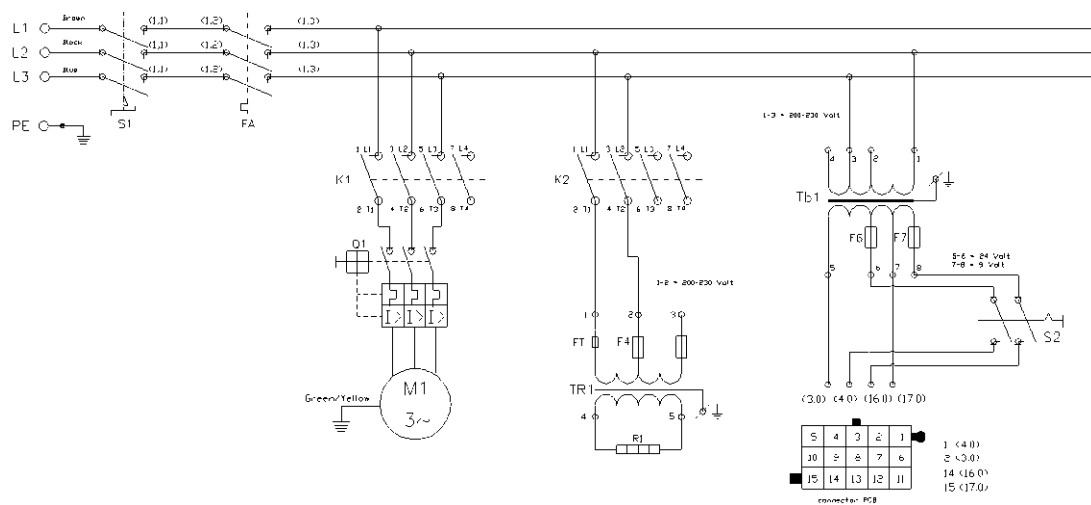
Valves:	
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5






1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		MS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_FB
					CONTACTOR									



sgnr:	dimen: 101126	schets: 1:1	positief: 1	pagina:	revizie	plaat	blaat
	type: A3	matr: 000	UW 150 2736/1100	003-PCB	△		
projectie: 	grootte: TY	reduct: DIV.					
AUROMA ELECTRONICS BEEFS, HOLLAND 	noem: 003-PCB				code:		
					160-003-PCB		

1	2	3	4	5	6
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR	CONTACTOR SEAL	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	Td1	S2
MAIN SWITCH		THERMICAL OVERLOAD	SEAL TRANSFORMER	MAIN PCB CONNECTOR	
S1		Q1	TR1		
		MOTOR	SEAL BAR		
		M1	R1		



opmer:	datum: 101126	schied: 1:1	posttijd: 1	programma:	retride	plaatst	duur
	formaat: A3	resolutie:	Monit: 800 x 600 2768/1100				
opstelling: 	plaatst: TY	retride: DIV.					
ALUMIN ELECTRON WESPE, HOLLAND 					code: 16Q-006		



VMS 223 (Long) 380V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	008	Seal configuration	Front
Machine serie	VMS 223	Seal type	Double / Cut-off / 8mm
Power (V/~/Hz)	380-3-60		
Pump capacity	063 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332235
		Range:	4-6,5
		Set:	5,5
Fuse seal transformer	F5	Part number:	160-1343130
		Specification:	3,15 Amp Slow
		Size:	6,3 x 32 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	063 m³/h
Capacity	2,2 kW

Transformers:

Seal transformer	Tr1	Part number:	160-1334143
		Input:	400 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	400 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

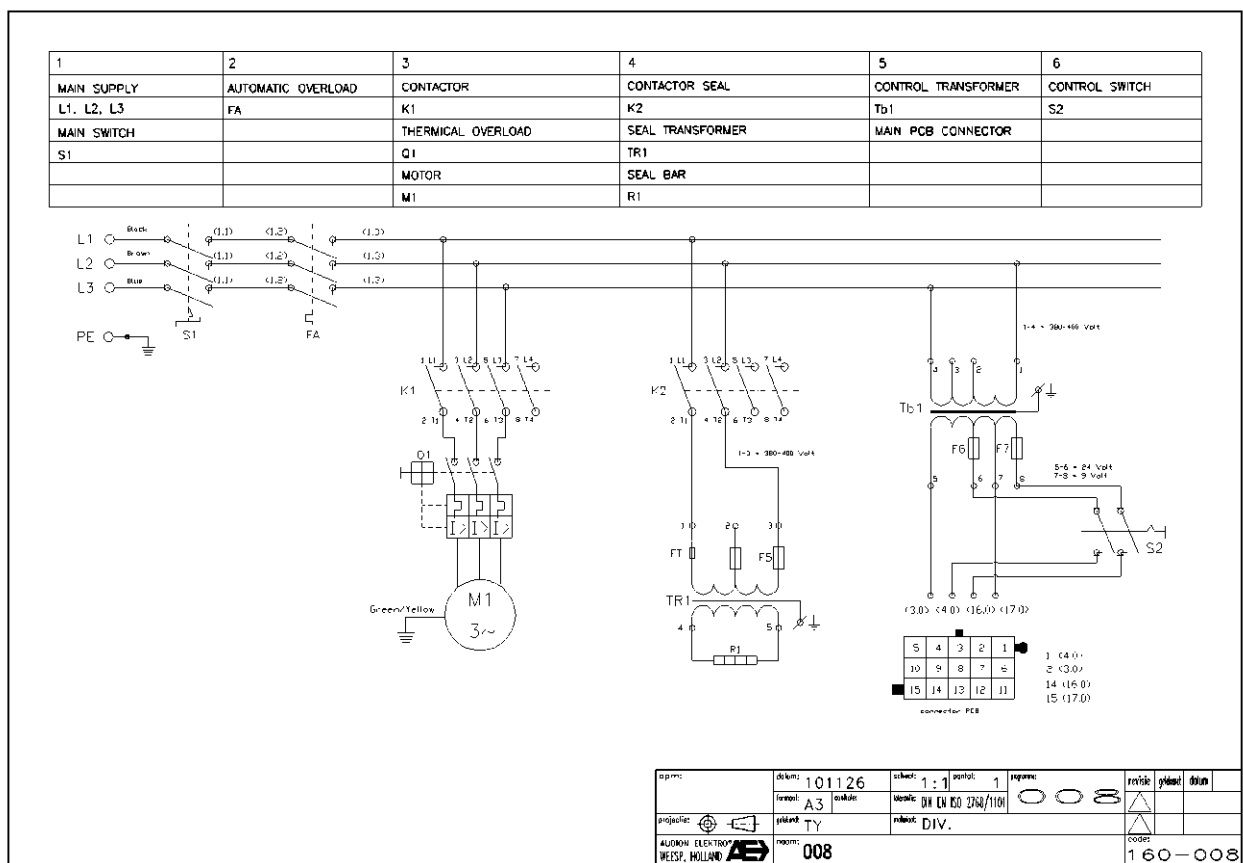
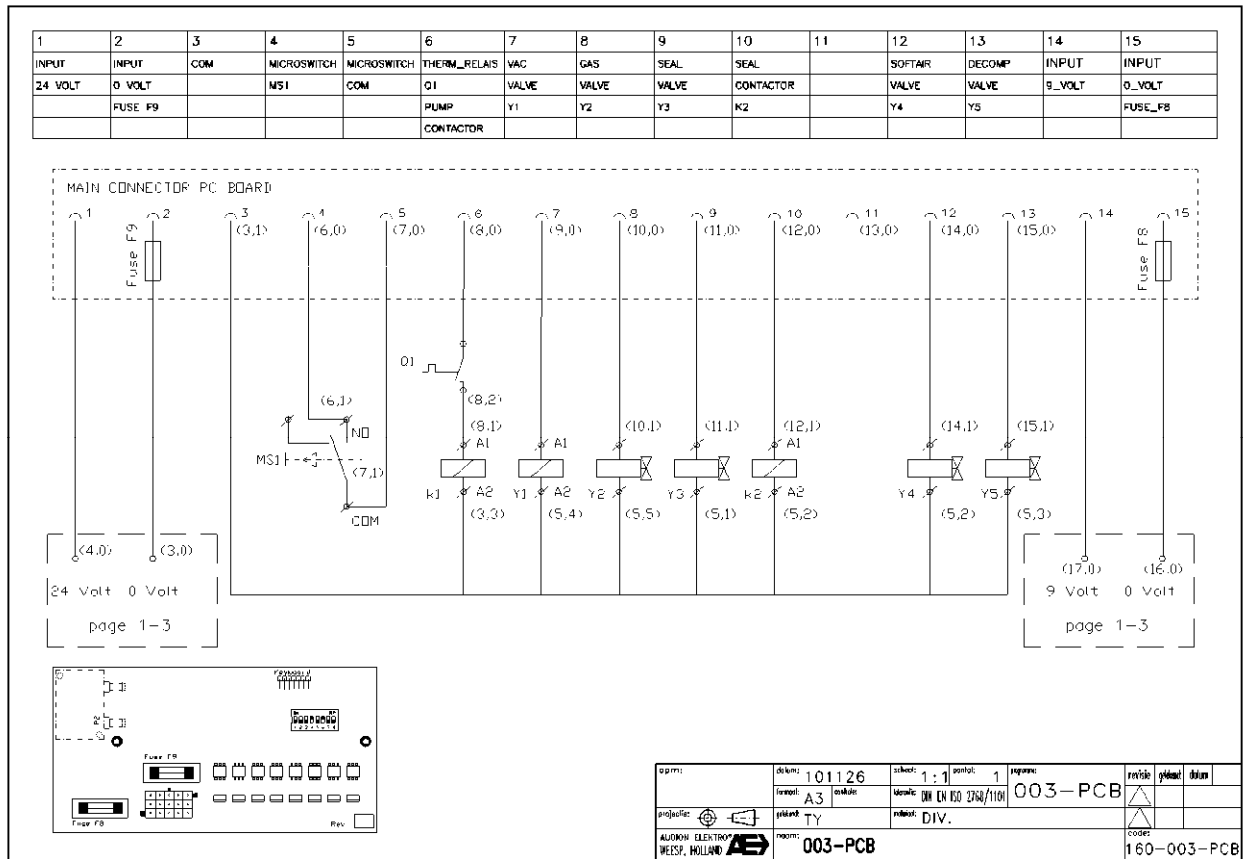
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:

Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5





VMS 223 (Long) 400V - 3P - 50Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	008	Sealconfiguration	Front
Machine serie	VMS 223	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	400-3-50		
Pump capacity	063 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332235
		Range:	4-6,5
		Set:	4
Fuse seal transformer	F5	Part number:	160-1343130
		Specification:	3,15 Amp Slow
		Size:	6,3 x 32 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	063 m³/h
Capacity	1,5 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334143
		Input:	400 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	400 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

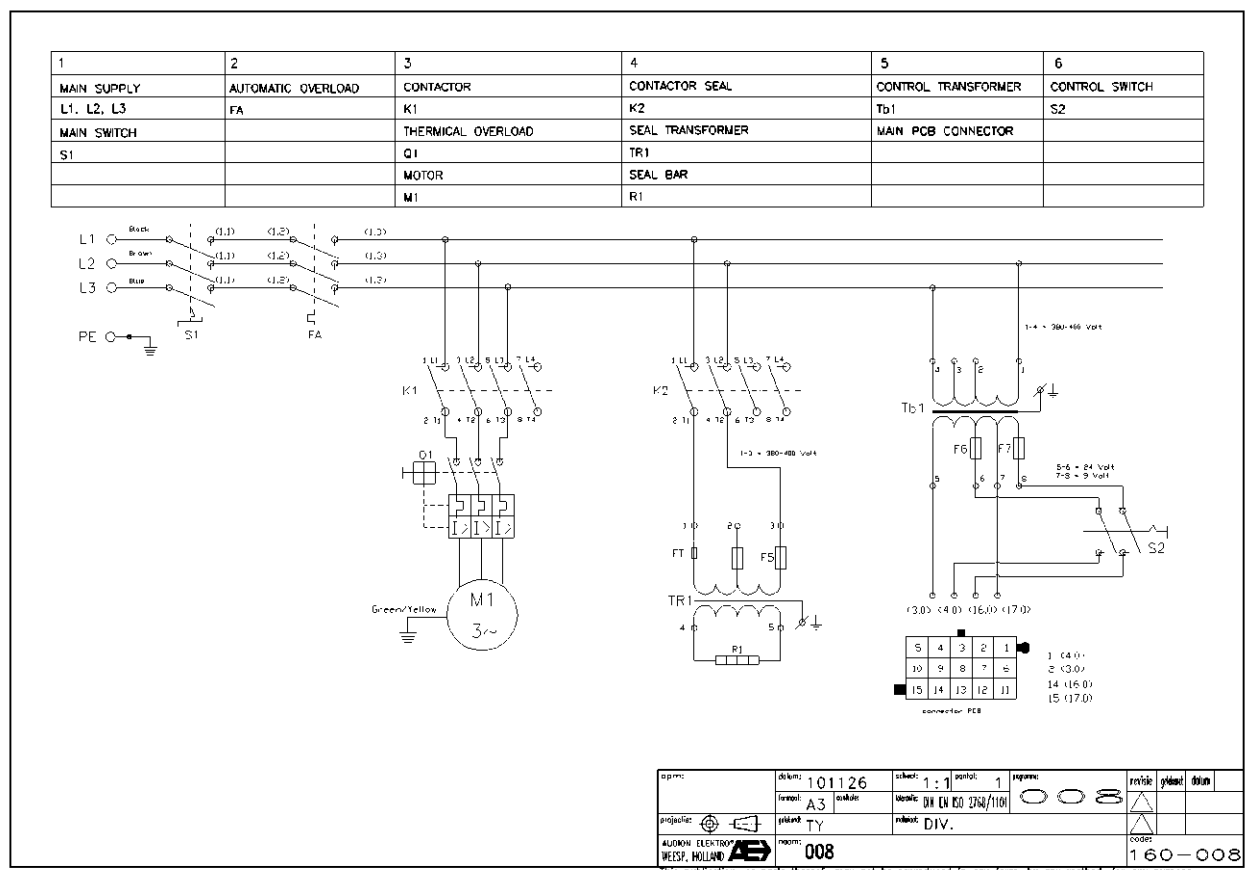
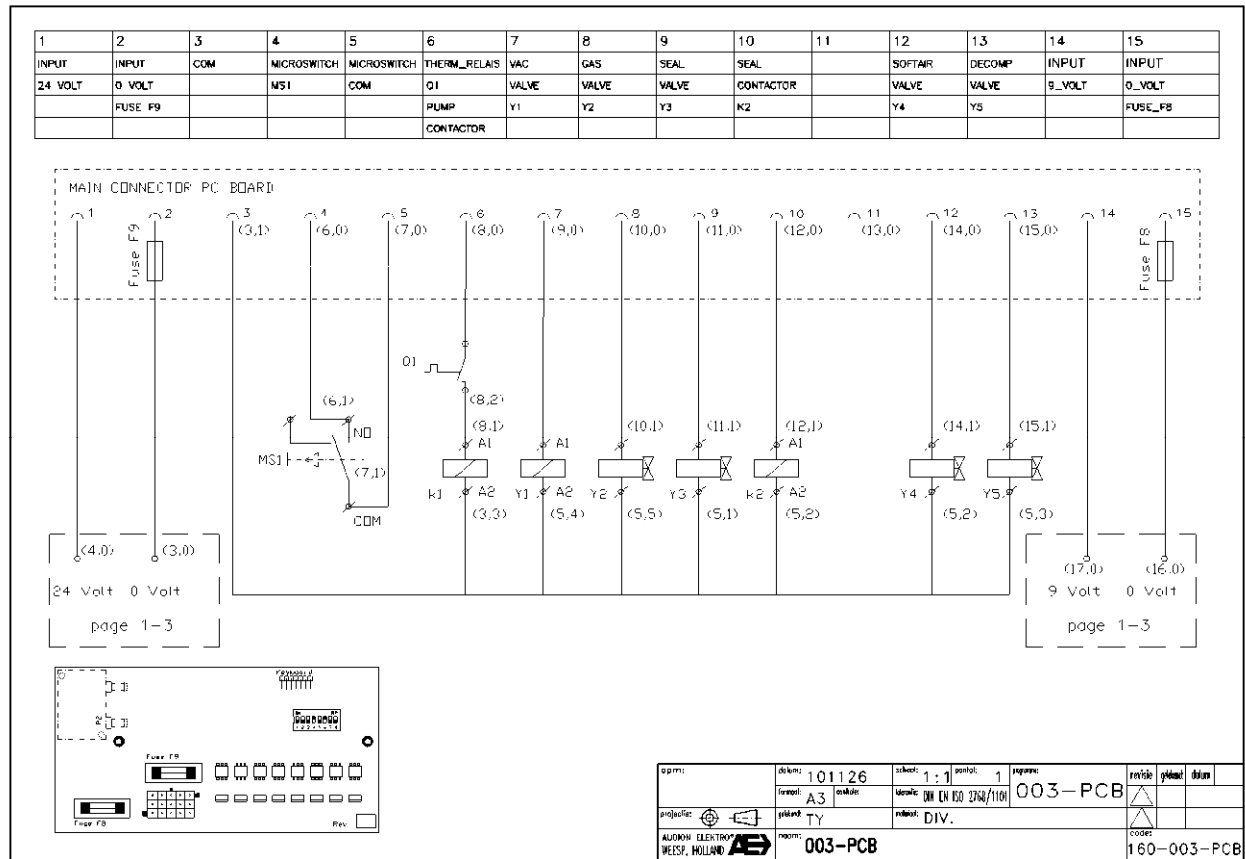
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:

Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5





VM(S) 303 - 333 (S/S) 200V - 3P - 50/60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	022-2P	Sealconfiguration	Left and Right
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V/-/Hz)	200-3-50/60		
Pump capacity	100 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332181
		Specification:	3 x 25 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	13
Fuse seal transformer	F4	Part number:	160-1343129
		Specification:	5 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	100 m³/h
Capacity	3 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334143
		Input:	200 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	200 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:

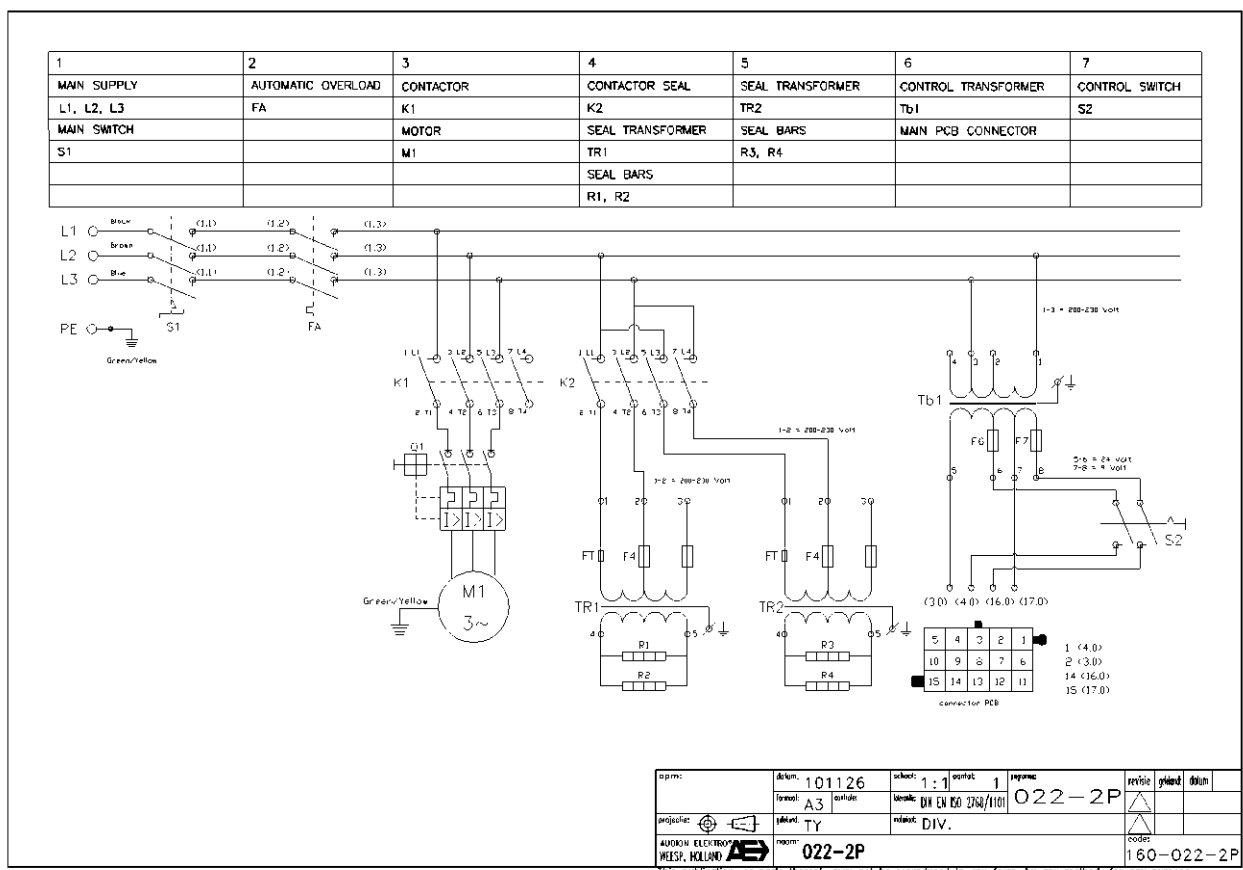
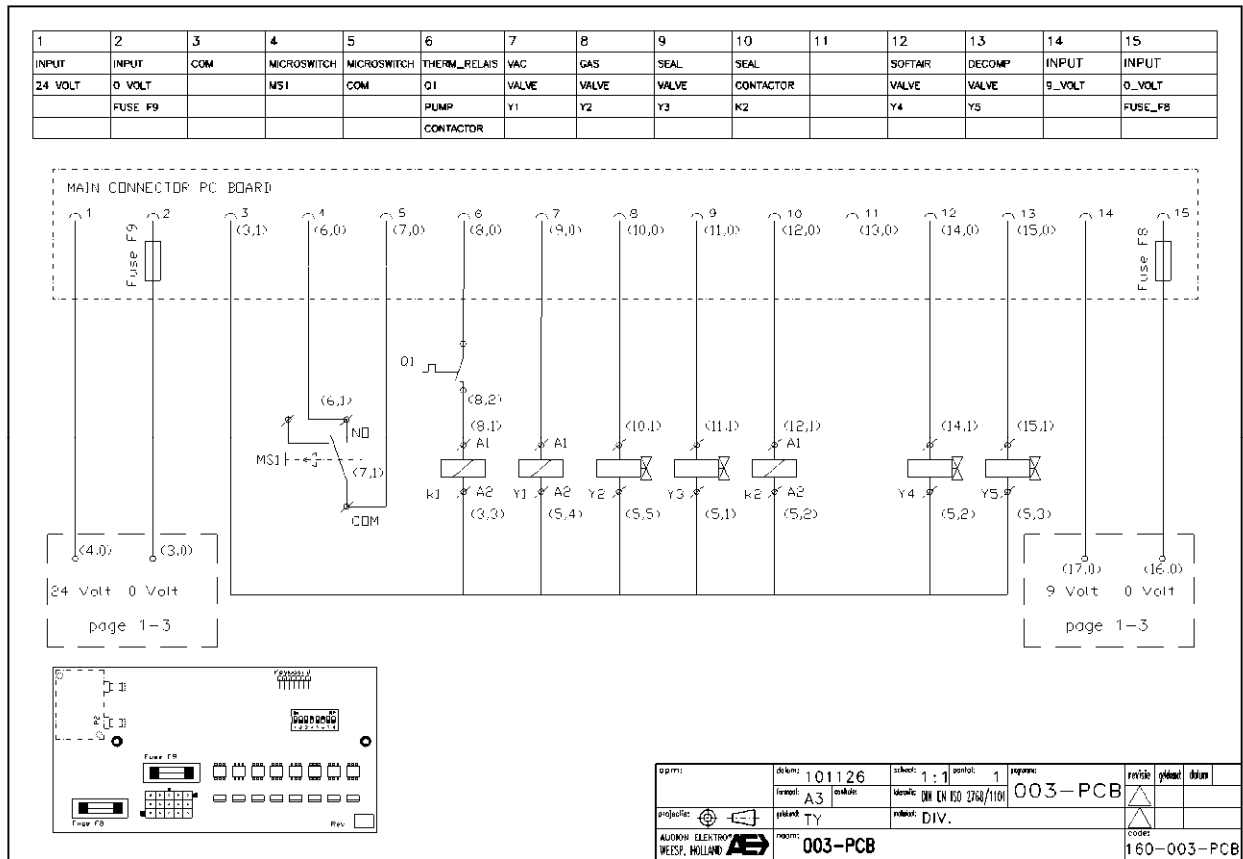
Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5



VM(S) 303 - 333 (S/S) 200V - 3P - 50/60Hz





VM(S) 303 - 333 (S/S) 208V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	022-2P	Sealconfiguration	Left and Right
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	208-3-60		
Pump capacity	100 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332181
		Specification:	3 x 25 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	13
Fuse seal transformer	F4	Part number:	160-1343129
		Specification:	5 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	100 m³/h
Capacity	3 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334143
		Input:	208-230 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	208-230 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:

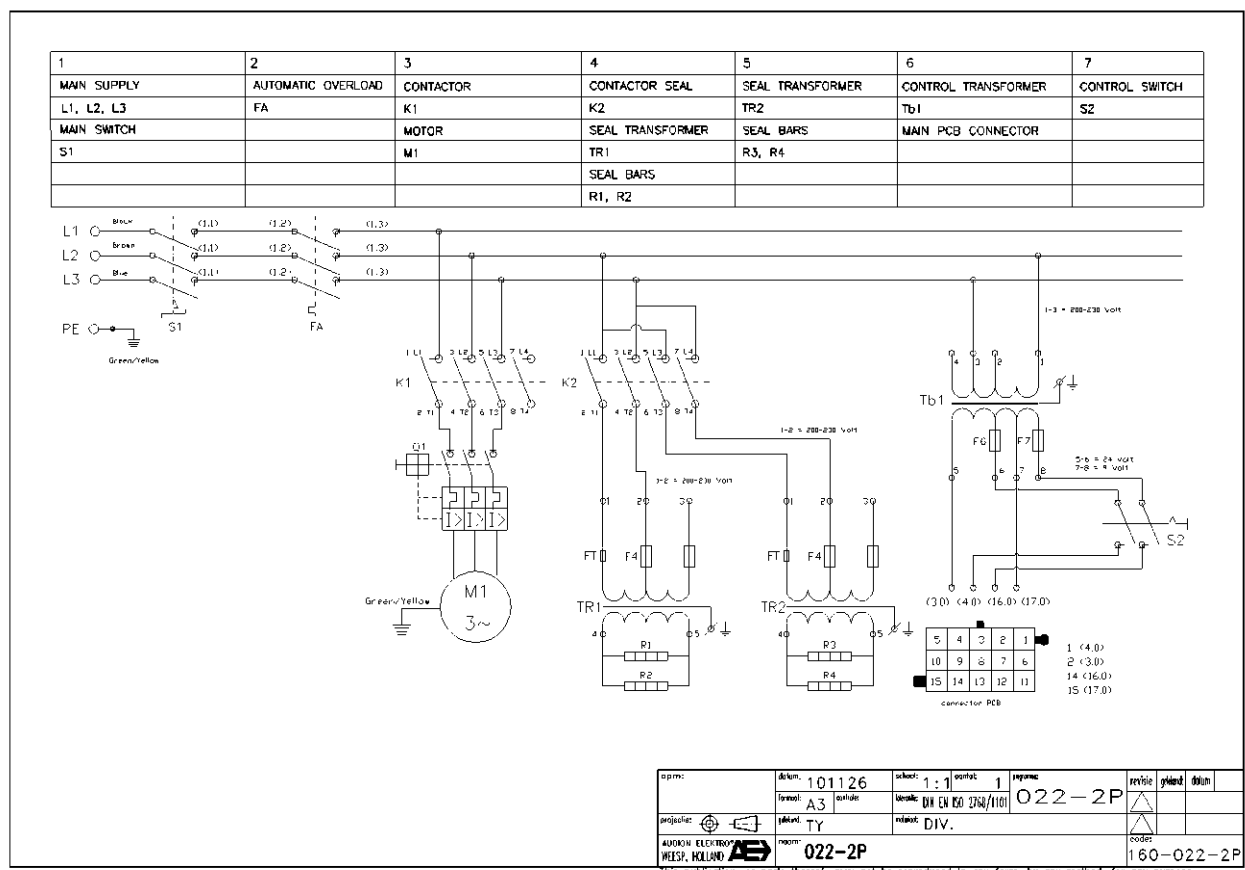
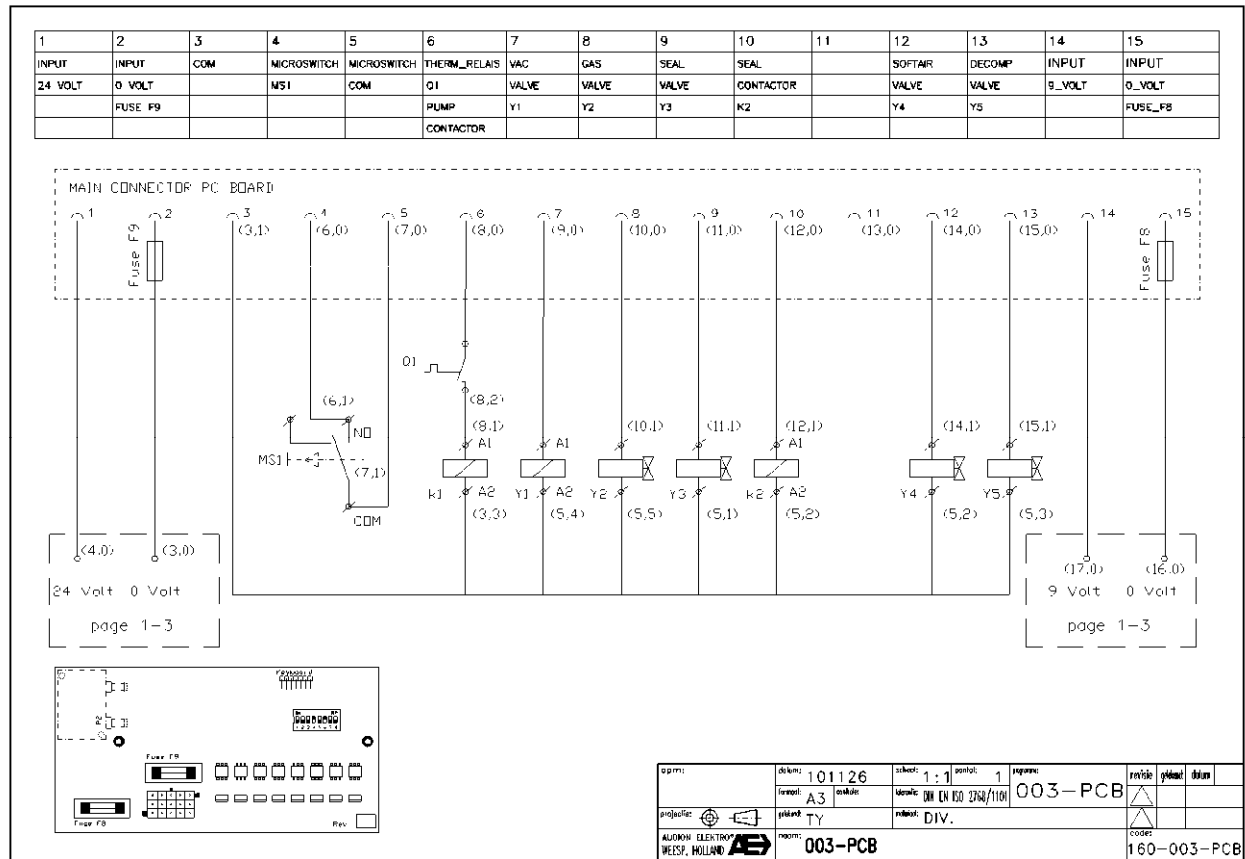
Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5



VM(S) 303 - 333 (S/S) 208V - 3P - 60Hz





VM(S) 303 - 333 (S/S) 220V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	022-2P	Sealconfiguration	Left and Right
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	220-3-60		
Pump capacity	100 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332181
		Specification:	3 x 25 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	13
Fuse seal transformer	F4	Part number:	160-1343129
		Specification:	5 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	100 m³/h
Capacity	3 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334143
		Input:	220 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	220 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

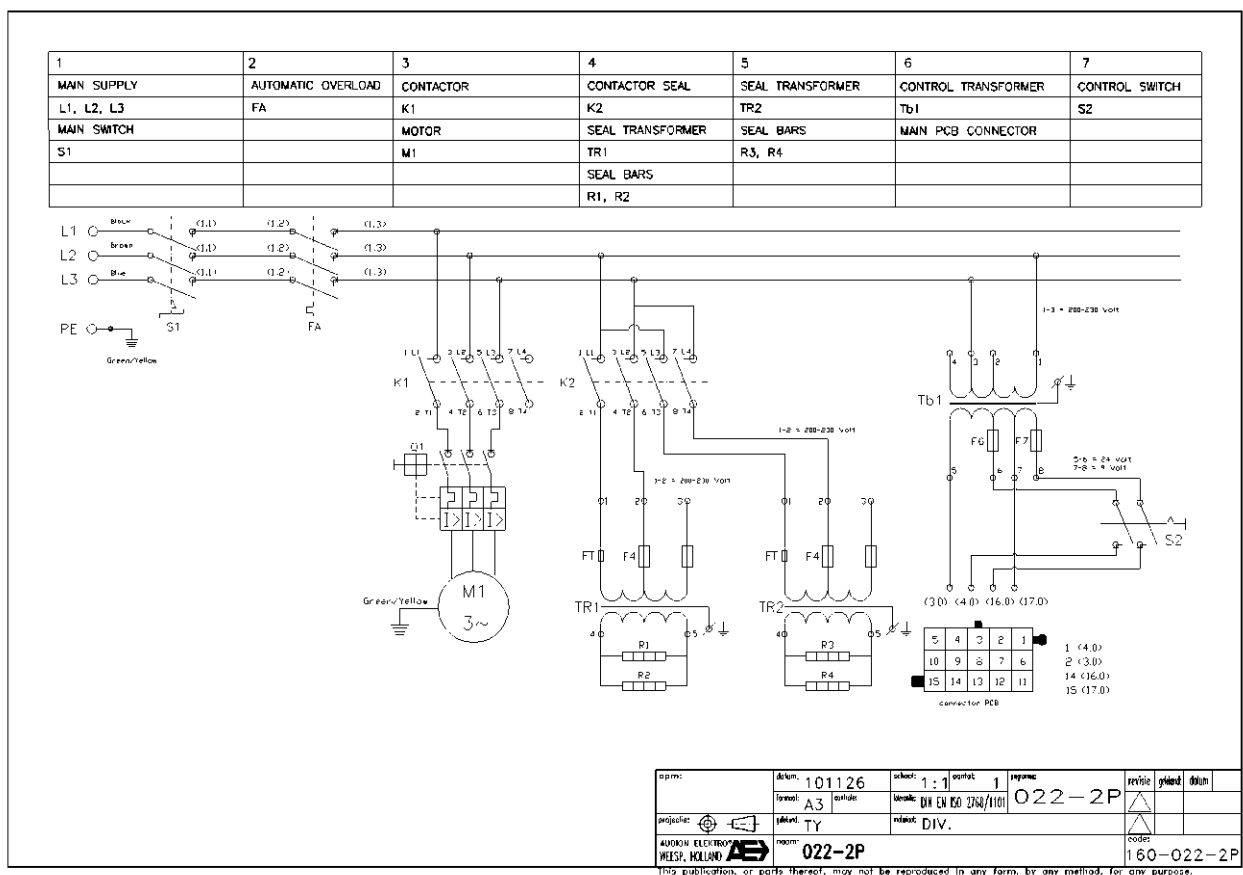
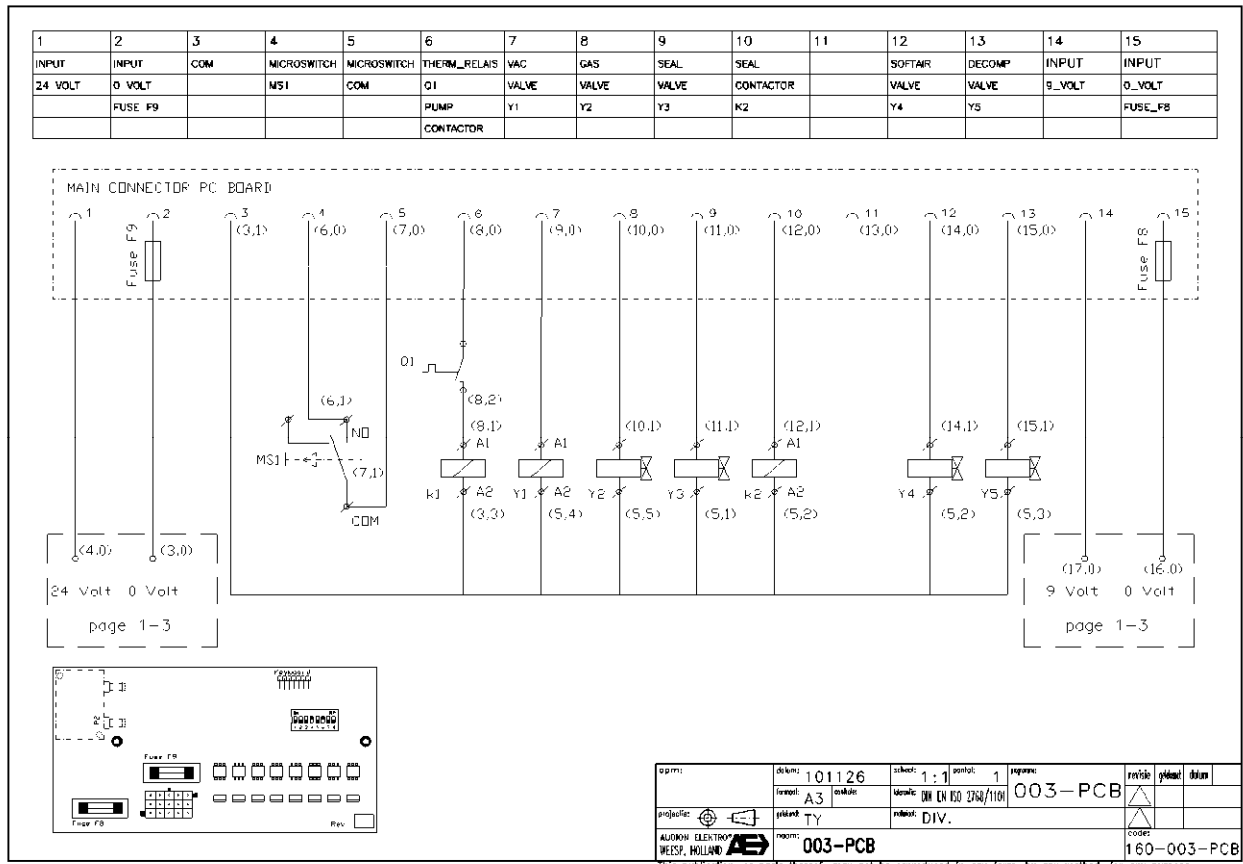
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:

Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5





VM(S) 303 - 333 (S/S) 230V - 3P - 50Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	022-2P	Seal configuration	Left and Right
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	230-3-50		
Pump capacity	100 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332181
		Specification:	3 x 25 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	9
Fuse seal transformer	F4	Part number:	160-1343129
		Specification:	5 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	100 m³/h
Capacity	2,2 kW

Transformers:

Seal transformer	Tr1	Part number:	160-1334143
		Input:	220-230 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	220-230 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

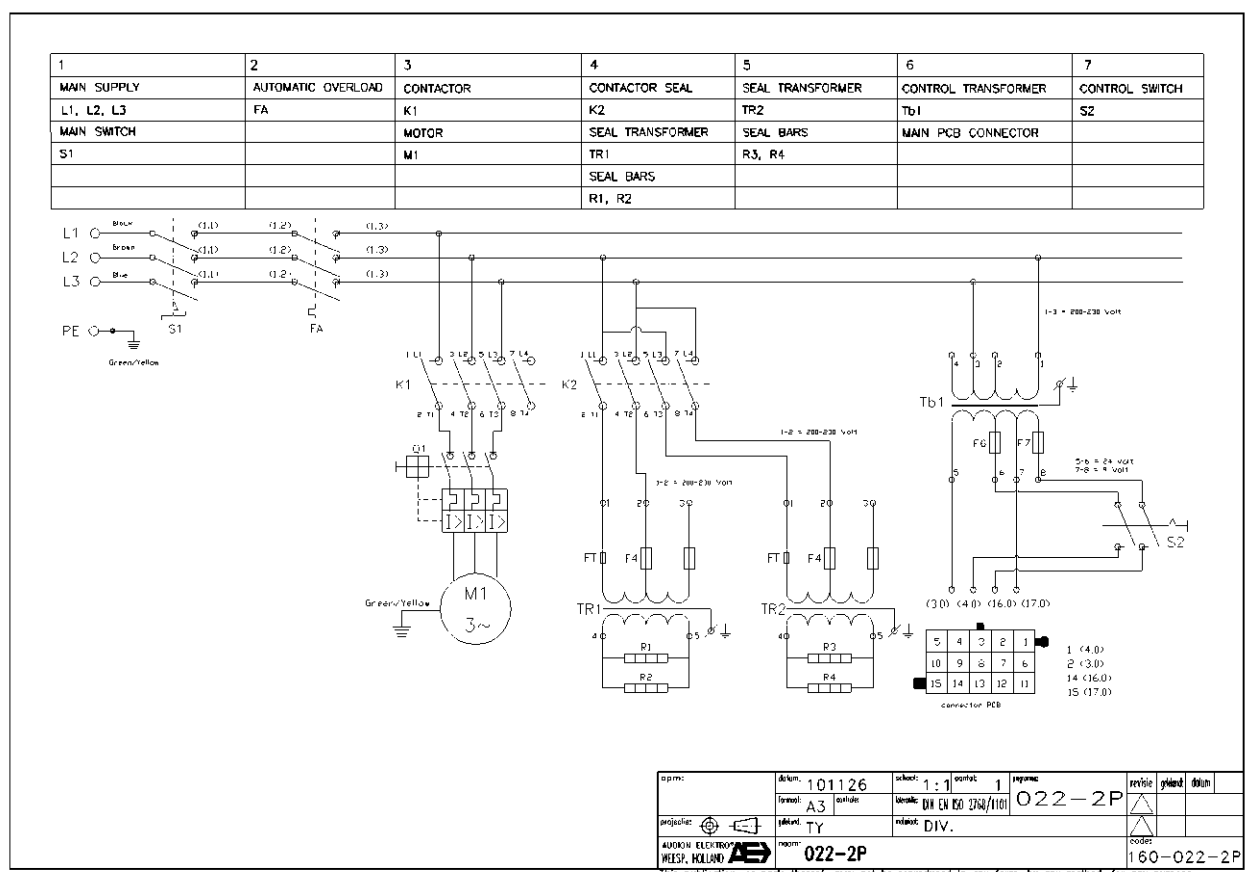
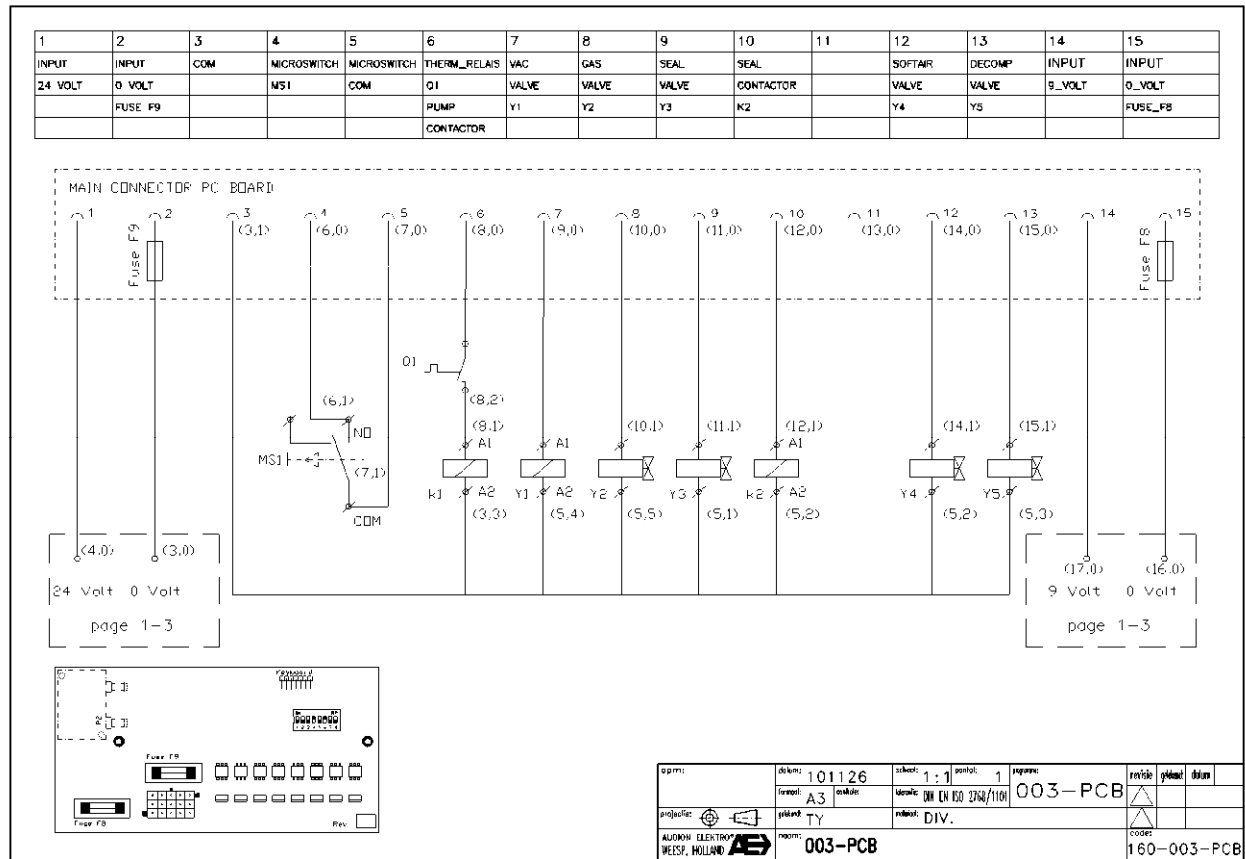
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:

Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5





VM(S) 303 - 333 (S/S) 380V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	024-2P	Sealconfiguration	Left and Right
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V~/Hz)	380-3-60		
Pump capacity	100 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332235
		Range:	4-6,5
		Set:	6,5
Fuse seal transformer	F5	Part number:	160-1343130
		Specification:	3,15 Amp Slow
		Size:	6,3 x 32 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	100 m³/h
Capacity	3 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334143
		Input:	400 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	400 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
---------------	--------	-------------	-------------

Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

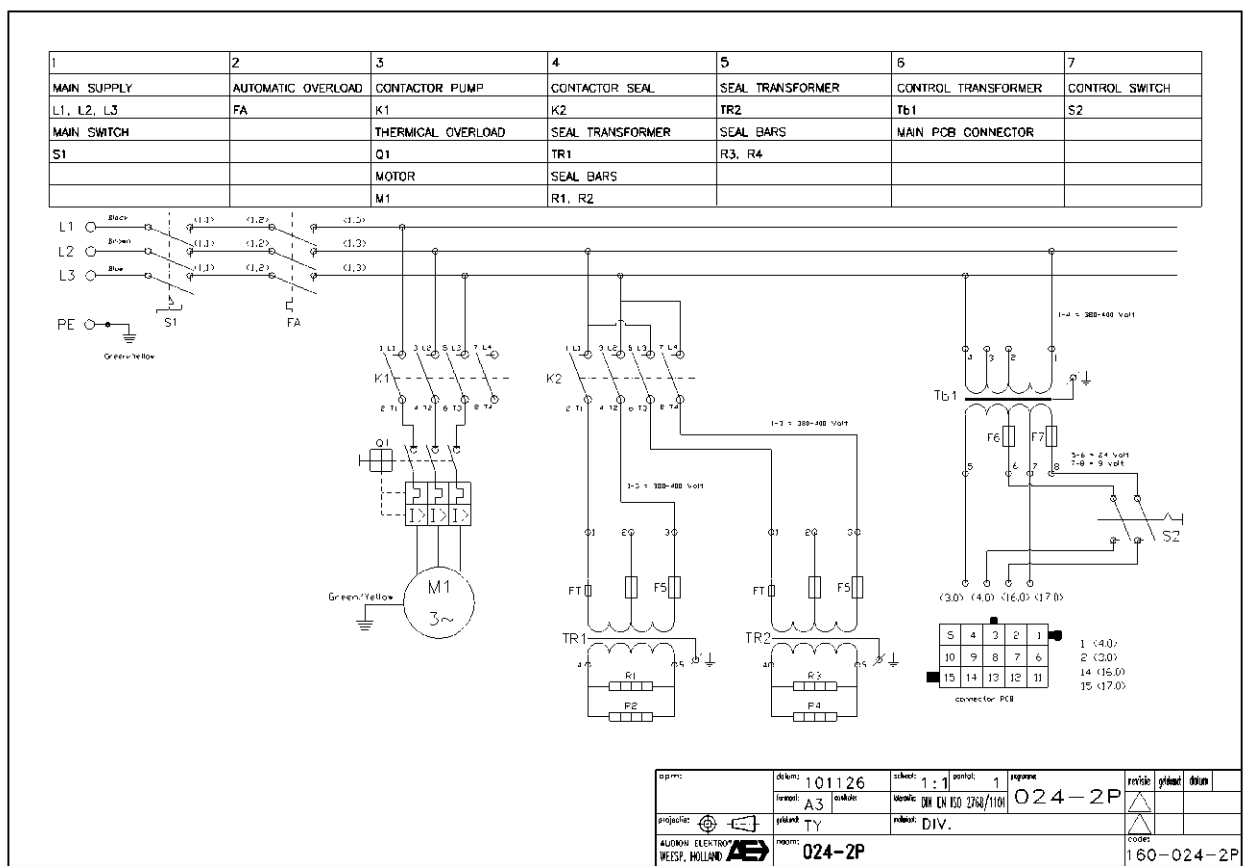
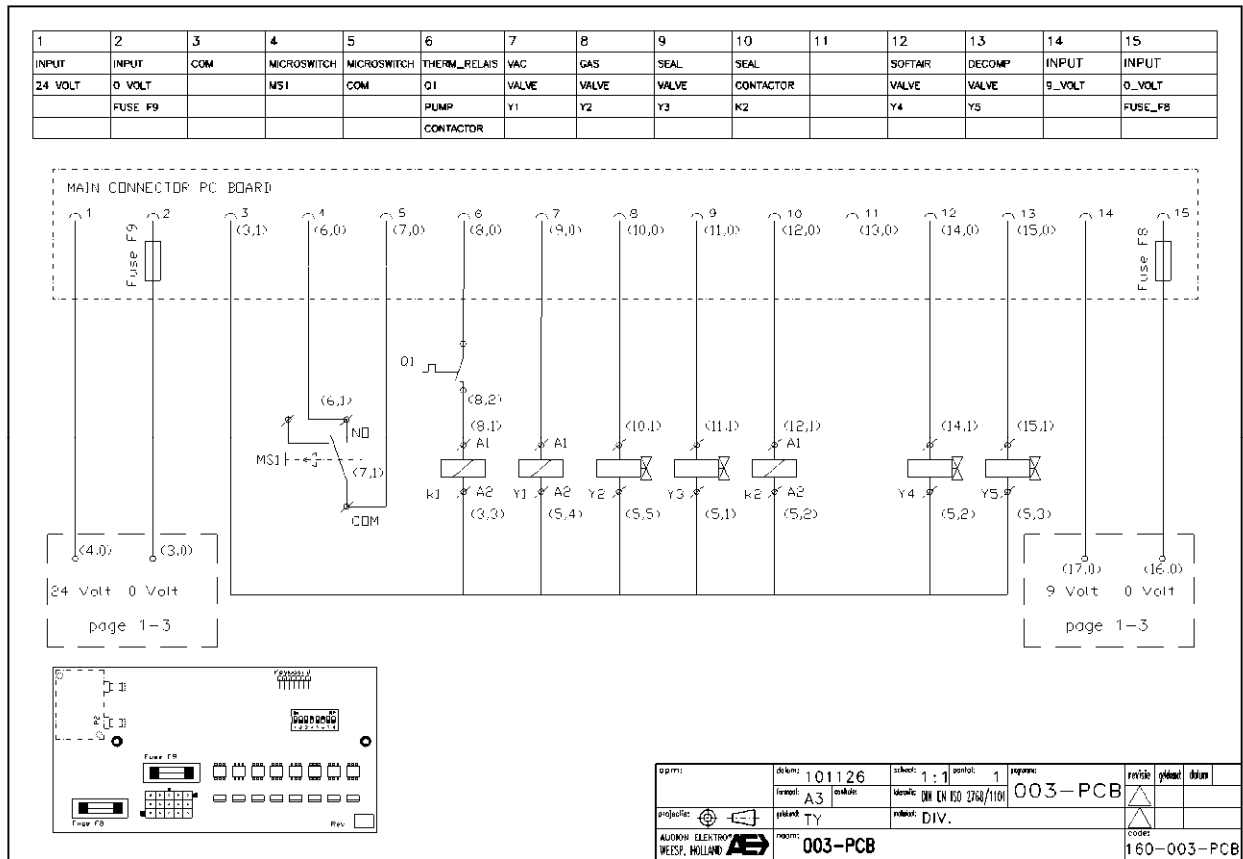
Microswitches:

Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5

VM(S) 303 - 333 (S/S) 380V - 3P - 60Hz





VM(S) 303 - 333 (S/S) 400V - 3P - 50Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	024-2P	Sealconfiguration	Left and Right
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	400-3-50		
Pump capacity	100 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332235
		Range:	4-6,5
		Set:	5
Fuse seal transformer	F5	Part number:	160-1343130
		Specification:	3,15 Amp Slow
		Size:	6,3 x 32 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	100 m³/h
Capacity	2,2 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334143
		Input:	400 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	400 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

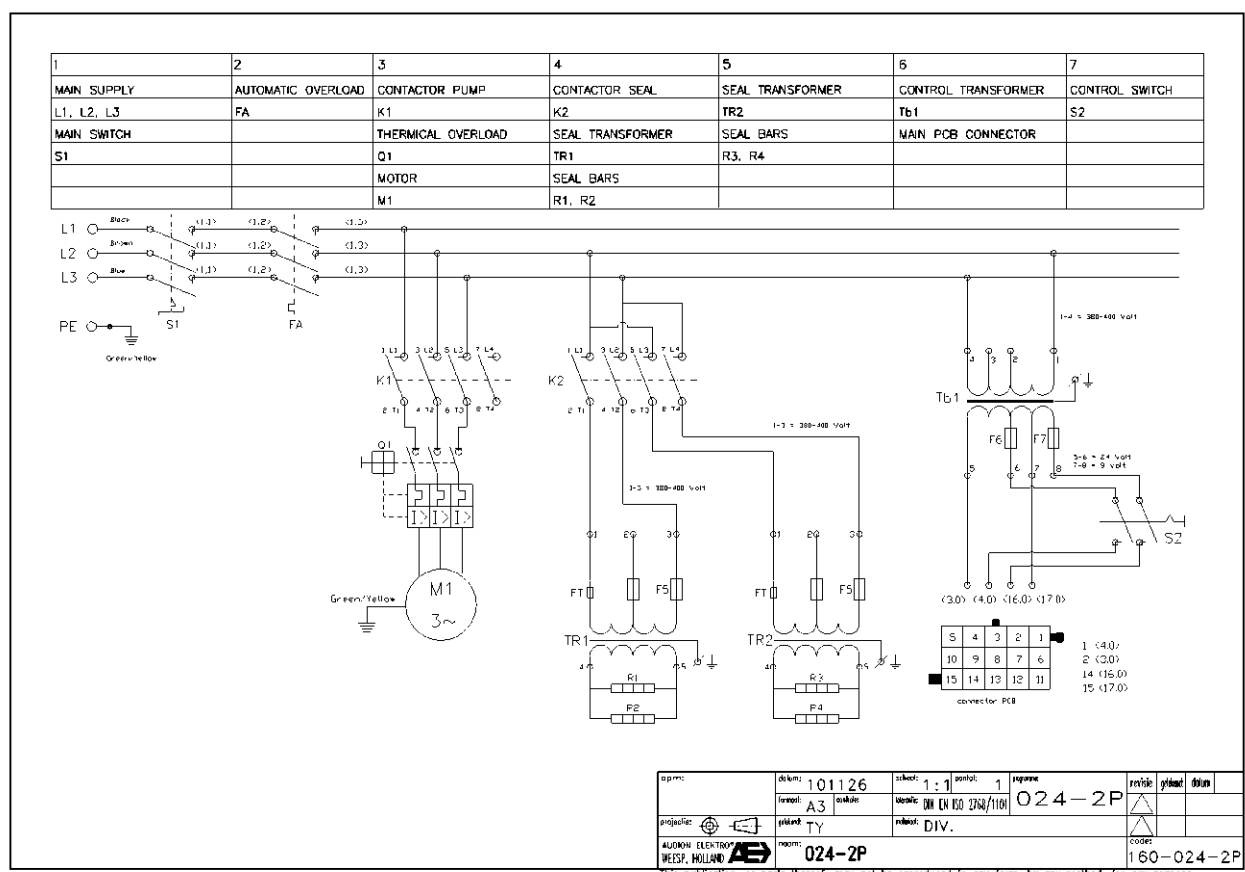
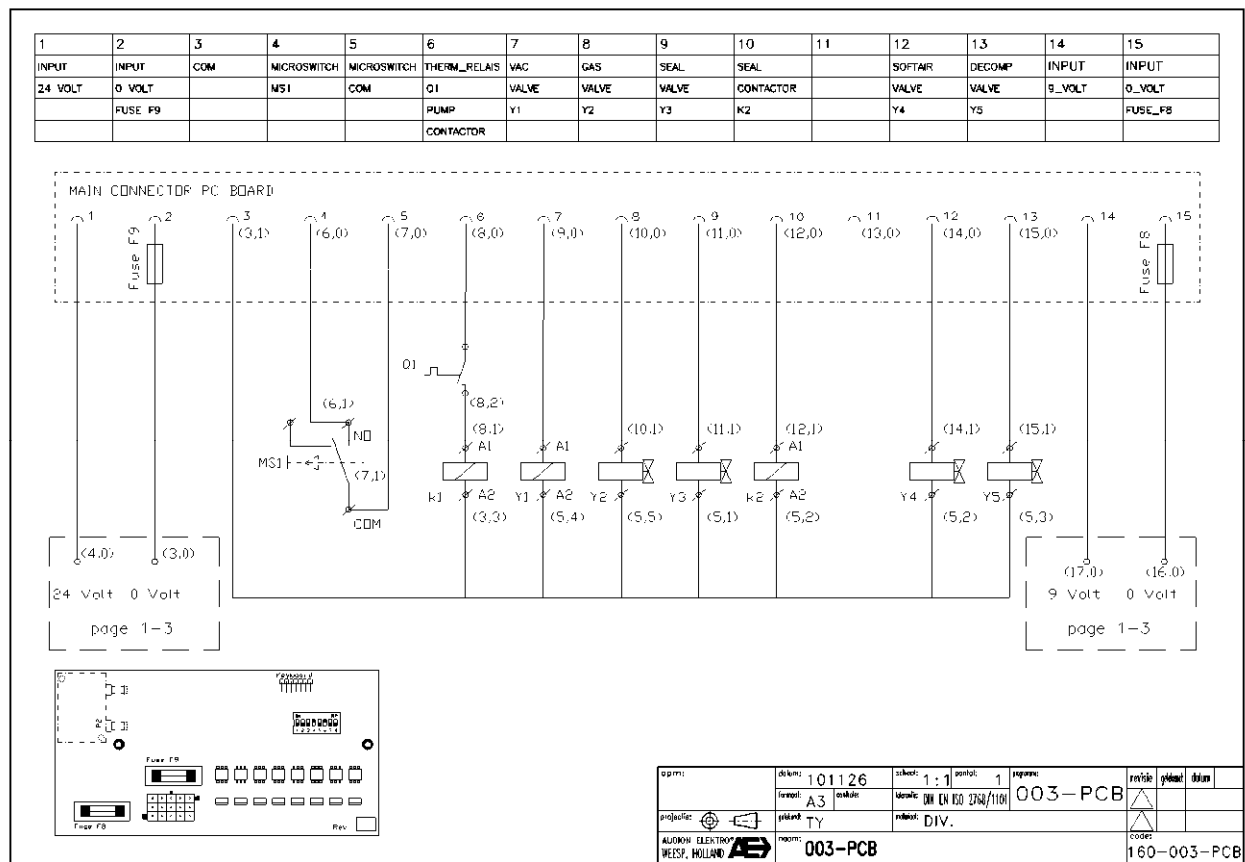
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:

Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5





VM(S) 303 - 333 (L/L) 200V - 3P - 50/60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	021	Sealconfiguration	Front and Rear
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	200-3-50/60		
Pump capacity	100 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332191
		Specification:	3 x 40 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	13
Fuse seal transformer	F4	Part number:	160-1343136
		Specification:	8 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	100 m³/h
Capacity	3 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334157
		Input:	200 Volt
		Capacity:	1150 VA
		Output:	33,1 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	200 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331173
		Specification:	40 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

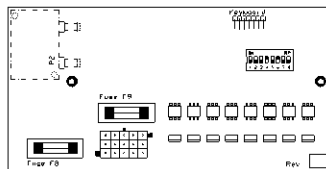
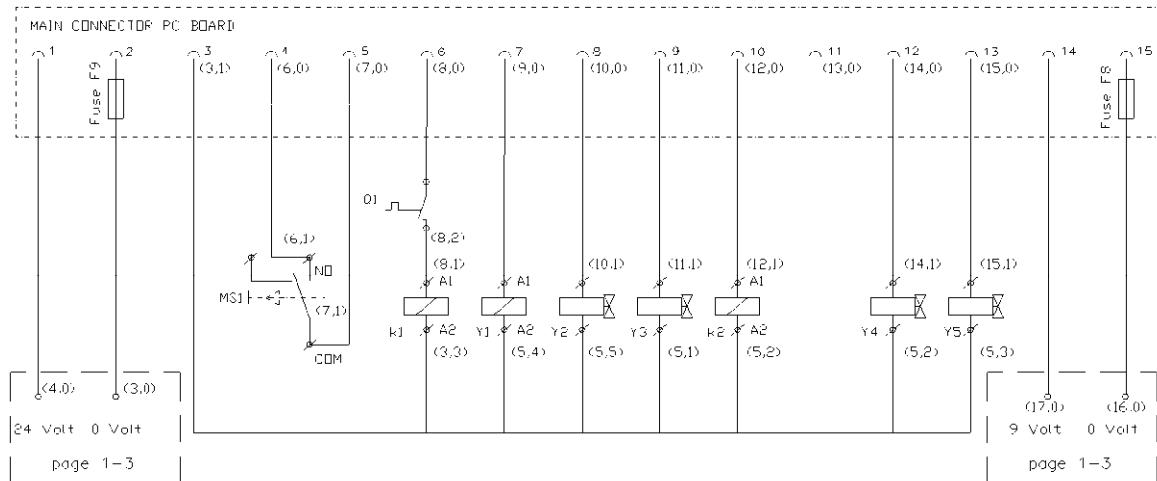
Microswitches:




Switch start cycle	MS1	Electrical connections:	2
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Valves:

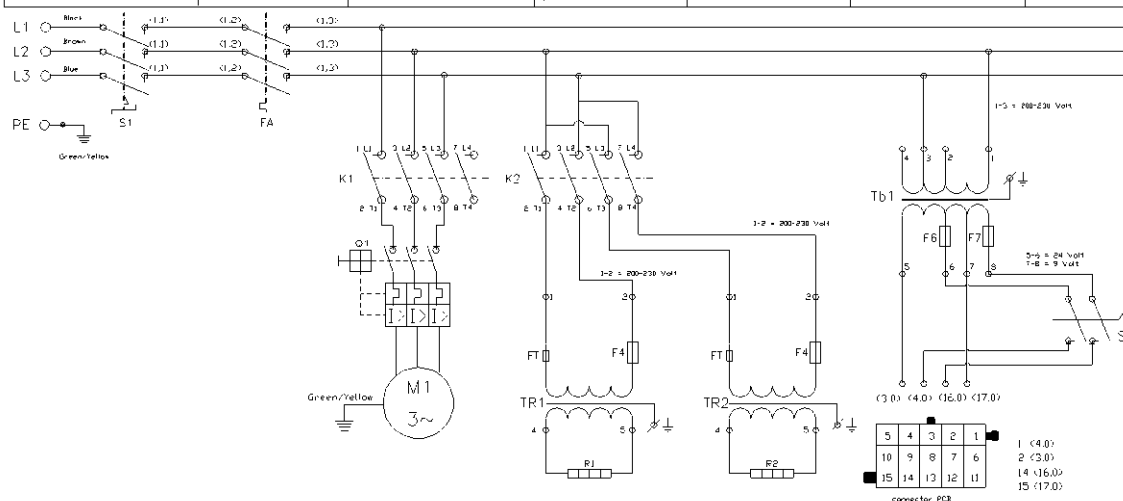
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		MS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_F8
					CONTACTOR									



sgnr:	dimen: 101126	schets: 1:1	aanstg: 1	opname:	revise	gemaakt	datum
	formaat: A3	merk: mobile	titel: 003-PCB				
projectie: 	gemaakt: TY	revisie: DIV.					
AUKHOFF ELECTRONICS BEEFS, HOLLAND 	noort: 003-PCB				codes:		
						160-003-PCB	

1	2	3	4	5	6	7
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR	CONTACTOR SEAL	SEAL TRANSFORMER	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	TR2	Tb1	S2
MAIN SWITCH		MOTOR	SEAL TRANSFORMER	SEAL BAR	MAIN PCB CONNECTOR	
S1		M1	TR1	R2		
			SEAL BAR			
			R1			

[illegible]



VM(S) 303 - 333 (L/L) 208V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	021	Sealconfiguration	Front and Rear
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V/~/Hz)	208-3-60		
Pump capacity	100 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332191
		Specification:	3 x 40 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	13
Fuse seal transformer	F4	Part number:	160-1343136
		Specification:	8 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	100 m³/h
Capacity	3 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334145
		Input:	208-230 Volt
		Capacity:	1150 VA
		Output:	33,1 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	208-230 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331173
		Specification:	40 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:

Switch start cycle	MS1	Electrical connections:	2
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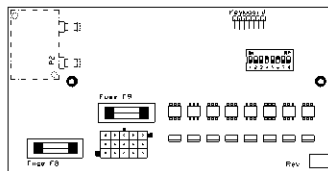
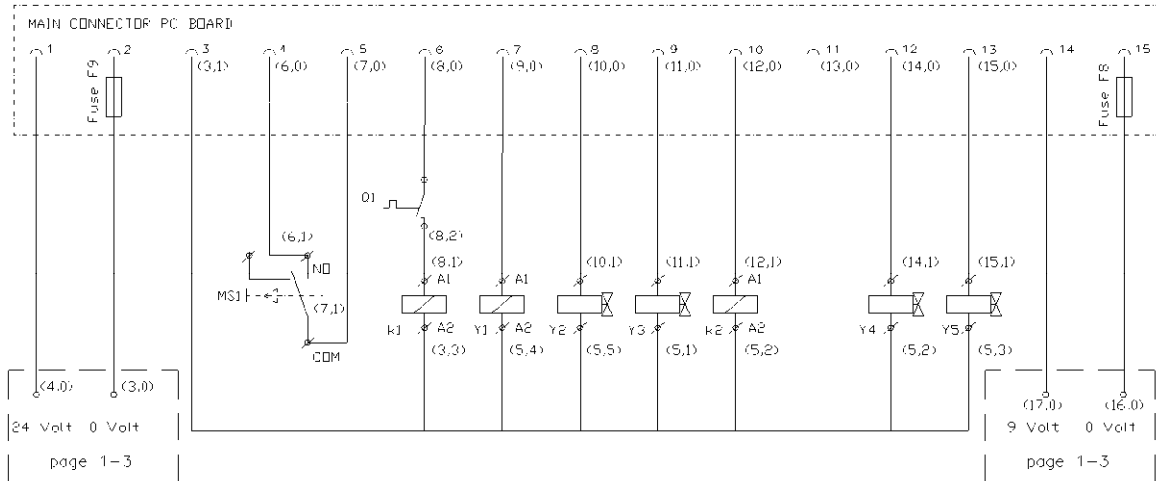
Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5



VM(S) 303 - 333 (L/L) 208V - 3P - 60Hz

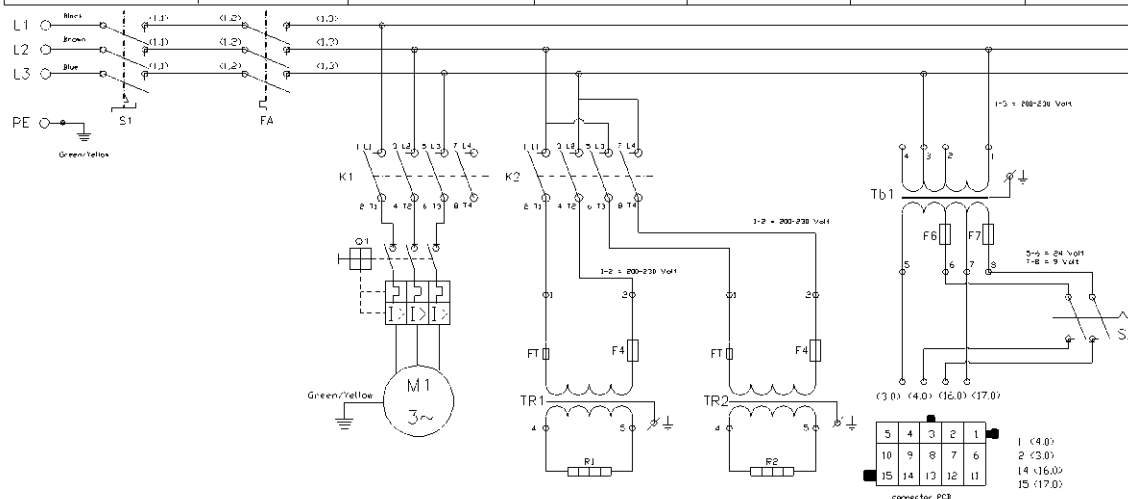
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24 VOLT	0 VOLT		MS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_F8
					CONTACTOR									



ppm:	detum:	101126	school:	1:1	project:	1	revisions:	003-PCB	revisie:	gemaakt:	datum:
projectie:	A3	metode:	DN EN ISO 2768/1101	003-PCB							
project:	TY	revisie:	DIV.								
revisions:	003-PCB										
revisions:	160-003-PCB										

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1	2	3	4	5	6	7
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR	CONTACTOR SEAL	SEAL TRANSFORMER	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	TR2	Tb1	S2
MAIN SWITCH		MOTOR	SEAL TRANSFORMER	SEAL BAR	MAIN PCB CONNECTOR	
S1		M1	TR1	R2		
			SEAL BAR			
			R1			



ppm:	detum:	101126	school:	1:1	project:	1	revisions:	021	revisie:	gemaakt:	datum:
projectie:	A3	metode:	DN EN ISO 2768/1101	021							
project:	TY	revisie:	DIV.								
revisions:	021										
revisions:	160-021										

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VM(S) 303 - 333 (L/L) 220V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	021	Sealconfiguration	Front and Rear
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	220-3-60		
Pump capacity	100 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332181
		Specification:	3 x 25 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	13
Fuse seal transformer	F4	Part number:	160-1343136
		Specification:	8 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	100 m³/h
Capacity	3 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334145
		Input:	220 Volt
		Capacity:	1150 VA
		Output:	33,1 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	220 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

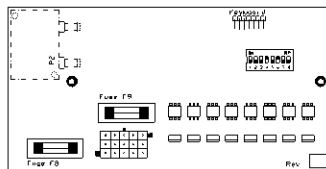
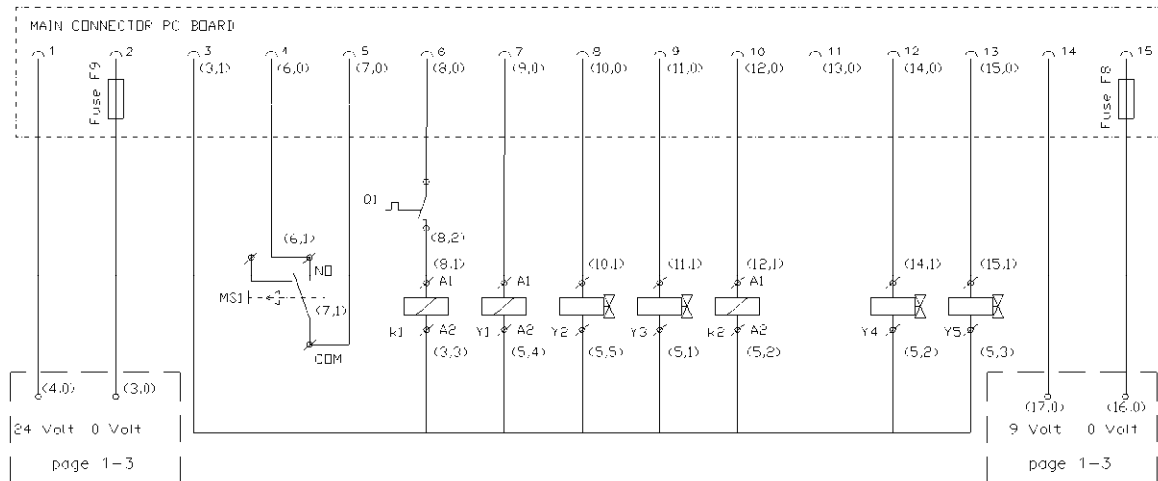
Microswitches:









Switch start cycle	MS1	Electrical connections:	2
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Valves:

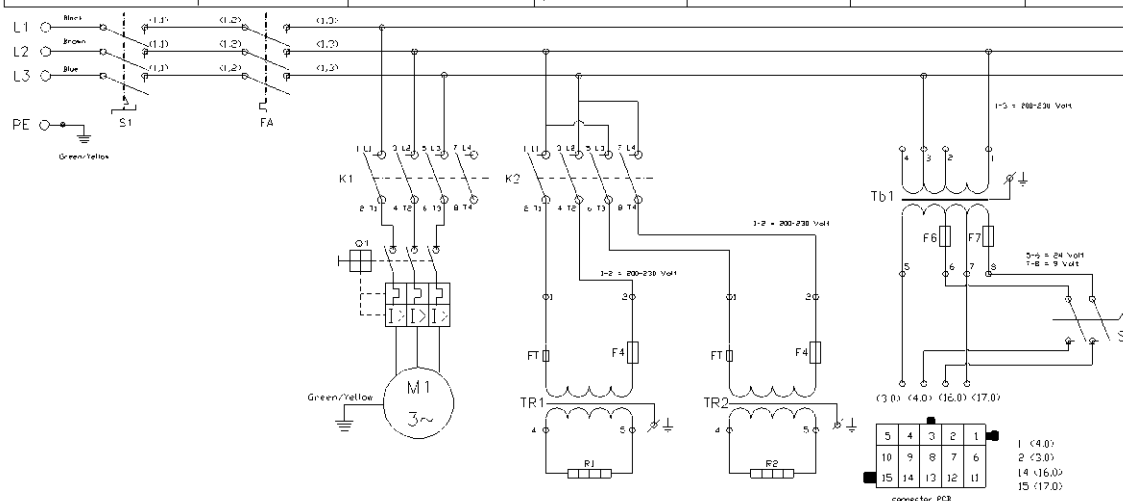
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		MS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_F8
					CONTACTOR									



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	format: A3	module:	descri: 003-PCB				
project: 	project: Y	release: DIV.					
AUTOMON ELECTRONIC WEISS, HOLLAND  003-PCB					CODE: 160-003-PCB		

1	2	3	4	5	6	7
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR	CONTACTOR SEAL	SEAL TRANSFORMER	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	TR2	Tb1	S2
MAIN SWITCH		MOTOR	SEAL TRANSFORMER	SEAL BAR	MAIN PCB CONNECTOR	
S1		M1	TR1	R2		
			SEAL BAR			
			R1			



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AUDISON ELECTRO INCEST. HOLLAND 	projekt: 021				00000	160-021	



VM(S) 303 - 333 (L/L) 230V - 3P - 50Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	021	Sealconfiguration	Front and Rear
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V~/Hz)	230-3-50		
Pump capacity	100 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332181
		Specification:	3 x 25 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	9
Fuse seal transformer	F4	Part number:	160-1343136
		Specification:	8 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	100 m³/h
Capacity	2,2 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334145
		Input:	220-230 Volt
		Capacity:	1150 VA
		Output:	33,1 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	220-230 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

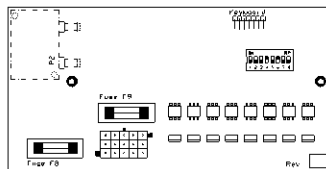
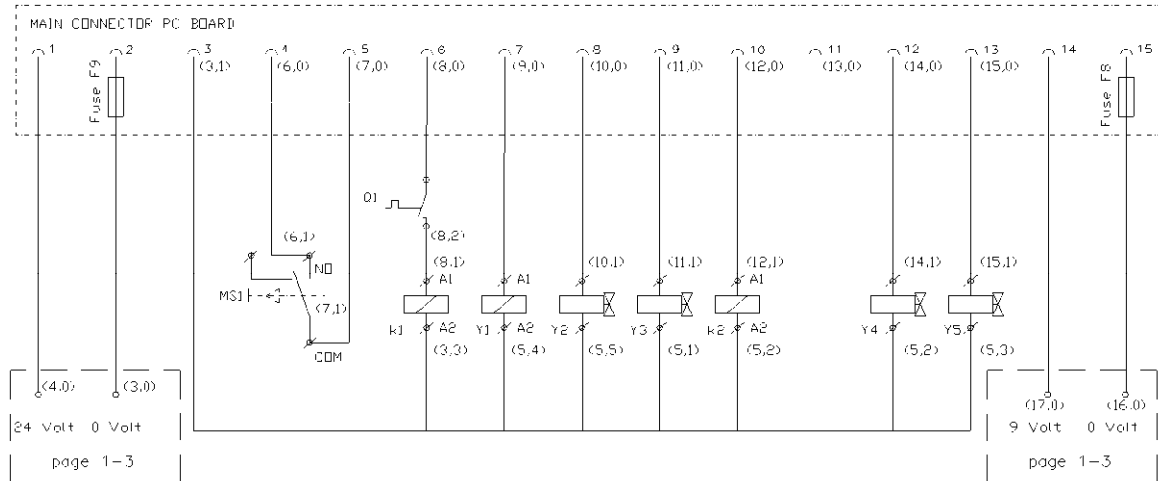
Microswitches:









Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5

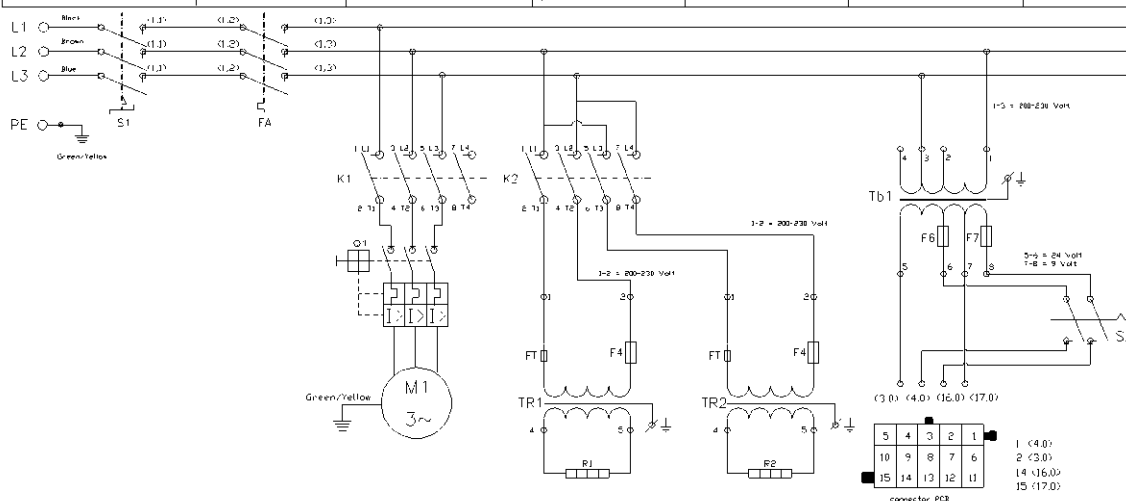
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INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		MS1	COM	Q1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_FB
					CONTACTOR									





specimen:	date: 101126	sheet: 1	total: 1	page: 003-PCB	revise	cancel	draw
	format: A3	medium: 001	001	003-PCB			
project: 	format: Y	medium: DIV.					
ALUMINUM ELECTRONIC WESPE, HOLLAND  003-PCB					CODE: 160-003-PCB		

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1	2	3	4	5	6	7
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR	CONTACTOR SEAL	SEAL TRANSFORMER	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	TR2	Tb1	S2
MAIN SWITCH		MOTOR	SEAL TRANSFORMER	SEAL BAR	MAIN PCB CONNECTOR	
S1		M1	TR1	R2		
			SEAL BAR			
			R1			



sign:	datum: 101126	schets: 1:1	positief: 1	opname:	revisie	gemaakt	datum
	formaat: A3	ontwerp:	titel: DIN EN ISO 2768/1101	021	1		
projectie: 	gelaat: TY	relatie:	DIV.				
40000 ELECTRO WELSP. HOLLAND 	noot: 021				code:		
						160-021	



VM(S) 303 - 333 (L/L) 380V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	023	Seal configuration	Front and Rear
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	380-3-60		
Pump capacity	100 m³/h		

Main electrical supply:	
L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:			
Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332235
		Range:	4-6,5
		Set:	6,5
Fuse seal transformer	F5	Part number:	160-1343135
		Specification:	6,3 Amp Slow
		Size:	6,3 x 32 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:	
Pump type	100 m³/h
Capacity	3 kW

Transformers:			
Sealtransformer	Tr1	Part number:	160-1334146
		Input:	400 Volt
		Capacity:	1150 VA
		Output:	33,1 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	400 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

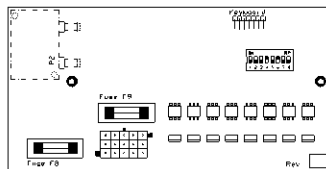
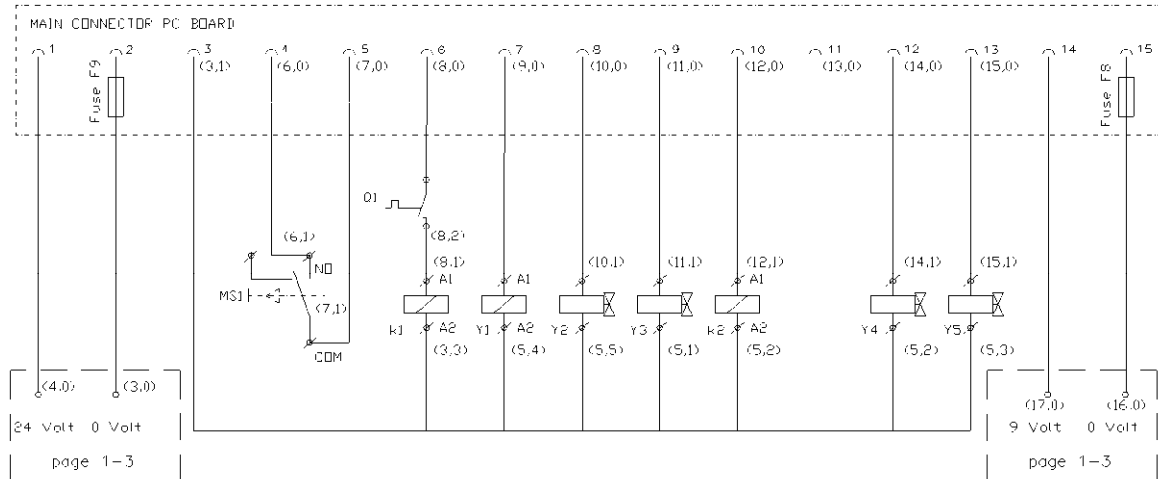
Sealbars:			
Used sealbars	R1, R2	Connection:	Stand alone

Contactors:	
Pump	K1
Seal	K2

Switches:			
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117
Microswitches:			
Switch start cycle	MS1	Electrical connections:	2

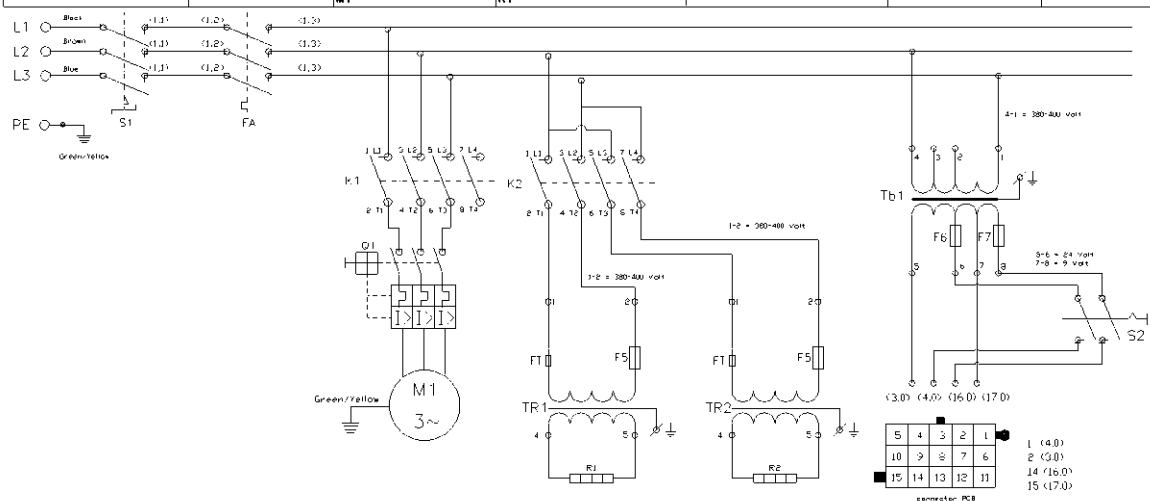
Valves:	
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		MS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_F8
					CONTACTOR									



part:	dim:	101126	sheet:	1	page:		rev:	date:	
	comp:	A3	descr:	003-PCB					
project:	proj:	Y	rel:	DIV.					
ALBION ELECTRON BEESE, HOLLAND							codes: 160-003-PCB		

1	2	3	4	5	6	7
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR PUMP	CONTACTOR SEAL	SEAL TRANSFORMER	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	TR2	Tb1	S2
MAIN SWITCH		THERMAL OVERLOAD	SEAL TRANSFORMER	SEAL BAR	MAIN PCB CONNECTOR	
S1		Q1	TR1	R2		
		MOTOR	SEAL BAR			
		M1	R1			

[illegible]



VM(S) 303 - 333 (L/L) 400V - 3P - 50Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	023	Seal configuration	Front and Rear
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	400-3-50		
Pump capacity	100 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332235
		Range:	4-6,5
		Set:	5
Fuse seal transformer	F5	Part number:	160-1343135
		Specification:	6,3 Amp Slow
		Size:	6,3 x 32 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	100 m³/h
Capacity	2,2 kW

Transformers:

Seal transformer	Tr1	Part number:	160-1334146
		Input:	400 Volt
		Capacity:	1150 VA
		Output:	33,1 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334122
		Input:	400 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
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Contactors:

Pump	K1
Seal	K2

Switches:

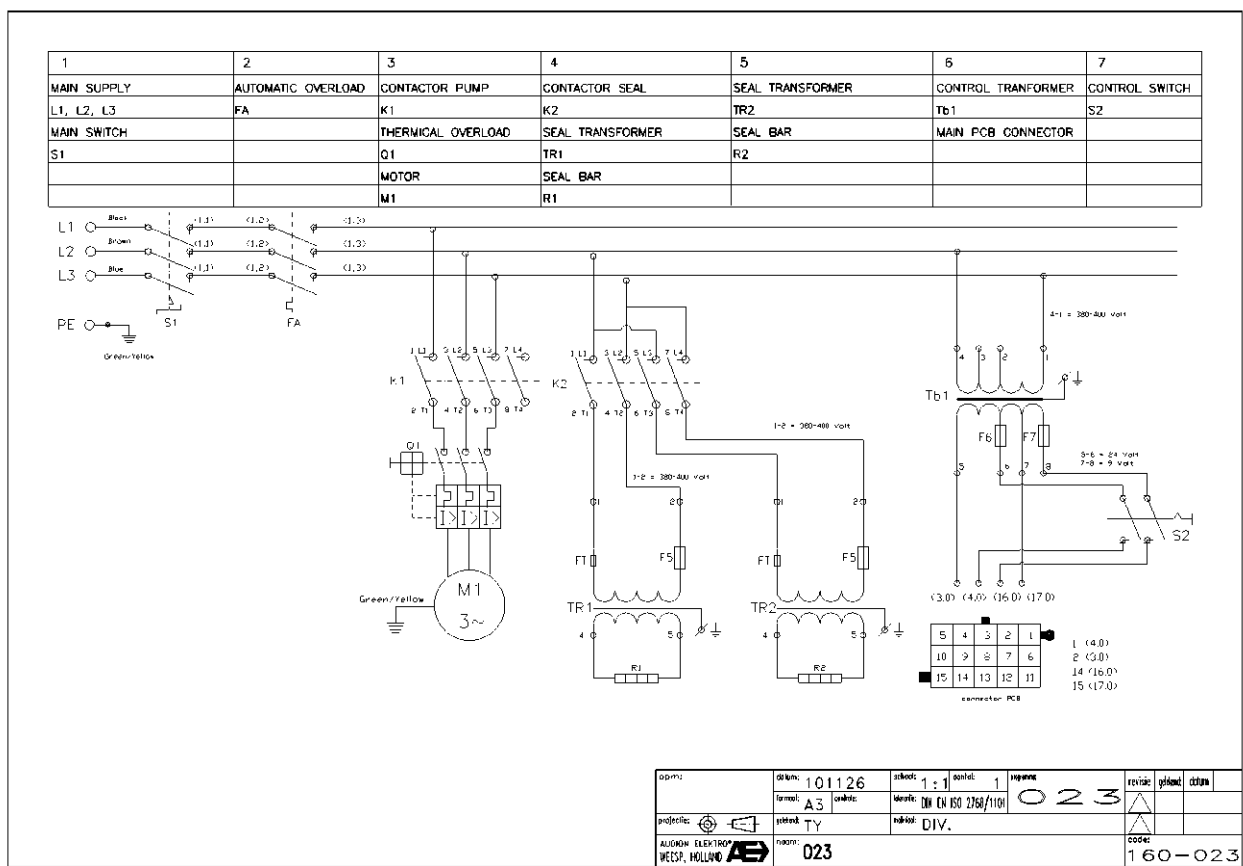
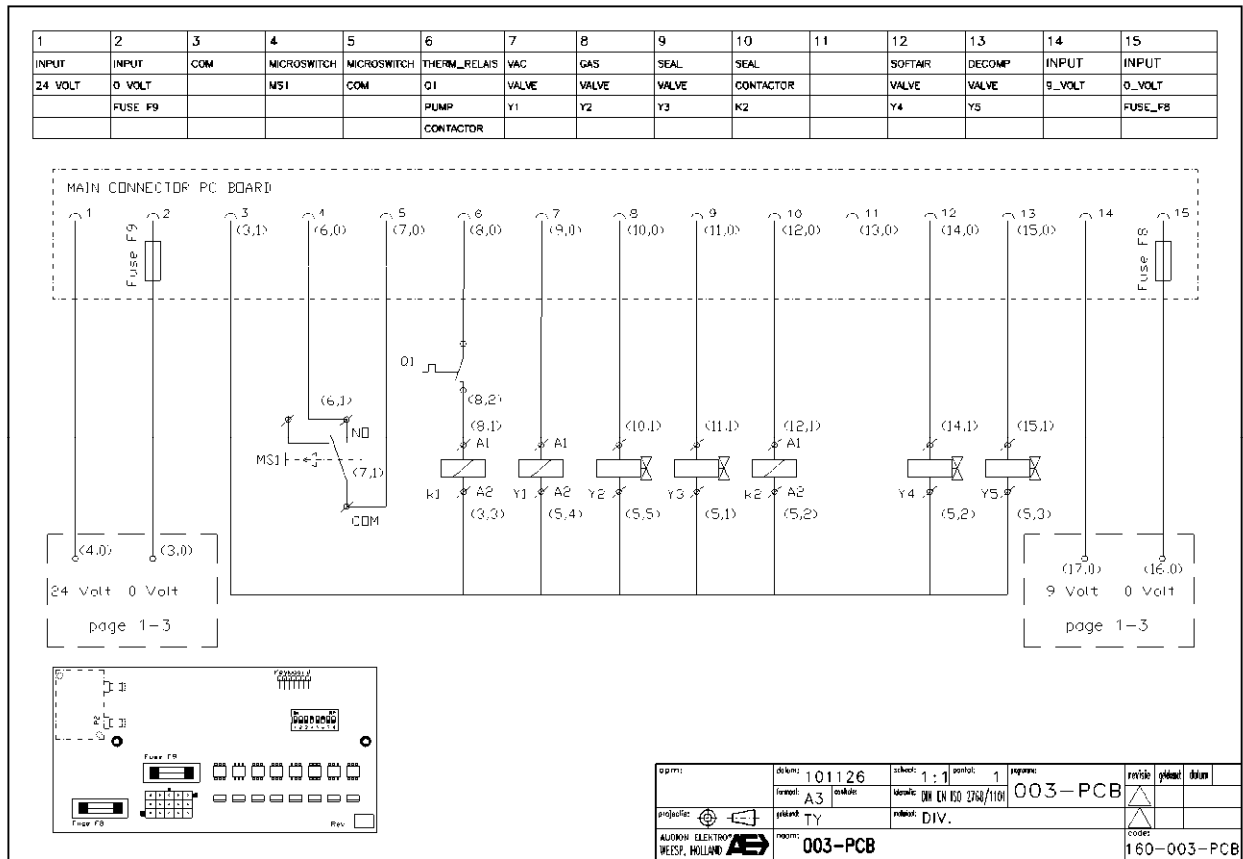
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:

Switch start cycle	MS1	Electrical connections:	2
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Valves:

Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5





VM(S) 303 - 333 (S/L) 200V - 3P - 50/60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	021-2S	Sealconfiguration	Right and Front
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V/~ /Hz)	200-3-50/60		
Pump capacity	100 m³/h		

Main electrical supply:	
L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:			
Circuit breaker	FA	Part number:	160-1332191
		Specification:	3 x 40 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	13
Fuse seal transformer	F4	Part number:	160-1343136
		Specification:	8 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:	
Pump type	100 m³/h
Capacity	3 kW

Transformers:			
Sealtransformer	Tr1	Part number:	160-1334159
		Input:	200 Volt
		Capacity:	1150 VA
		Output:	24 Volt
		ED:	10 %
Used transformers	Tr1 & Tr1.1	Connection:	Serie
Control transformer	Tb1	Part number:	160-1334122
		Input:	200 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

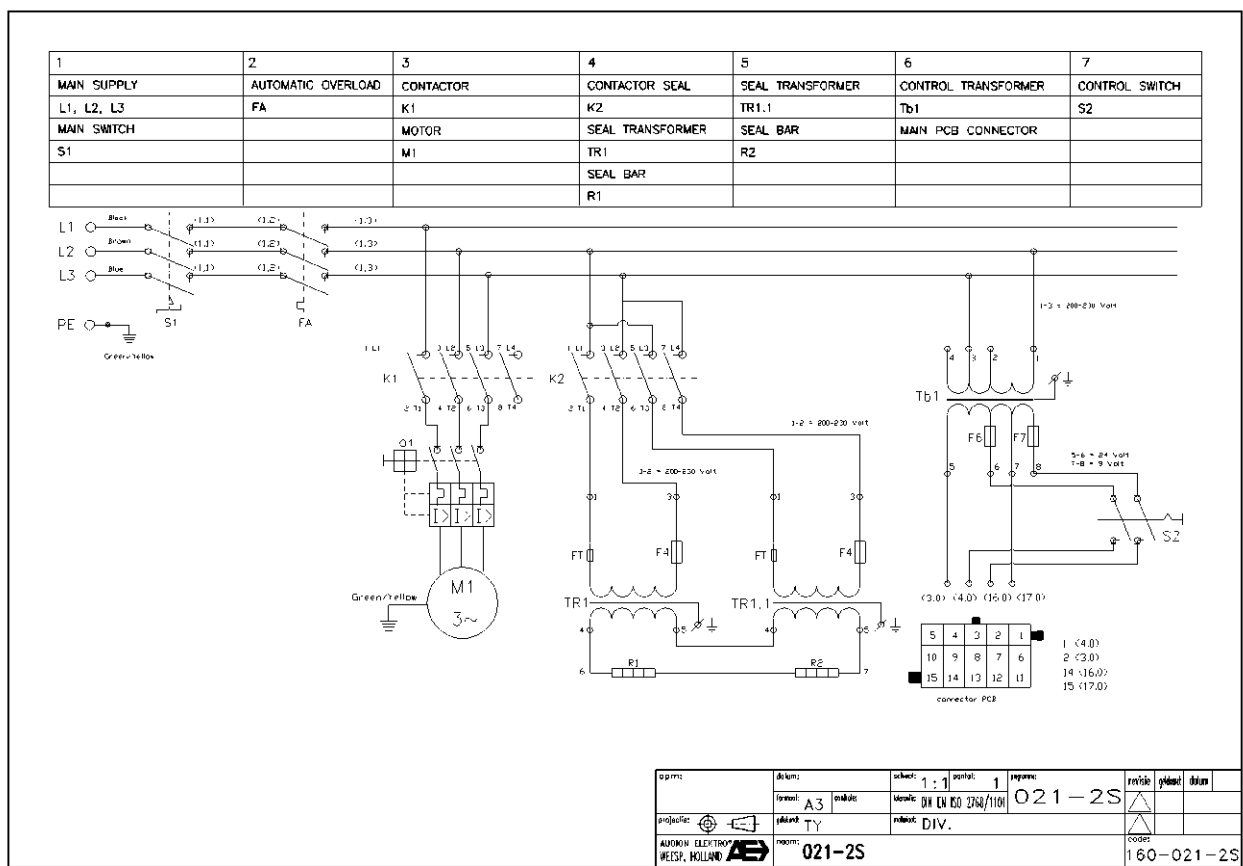
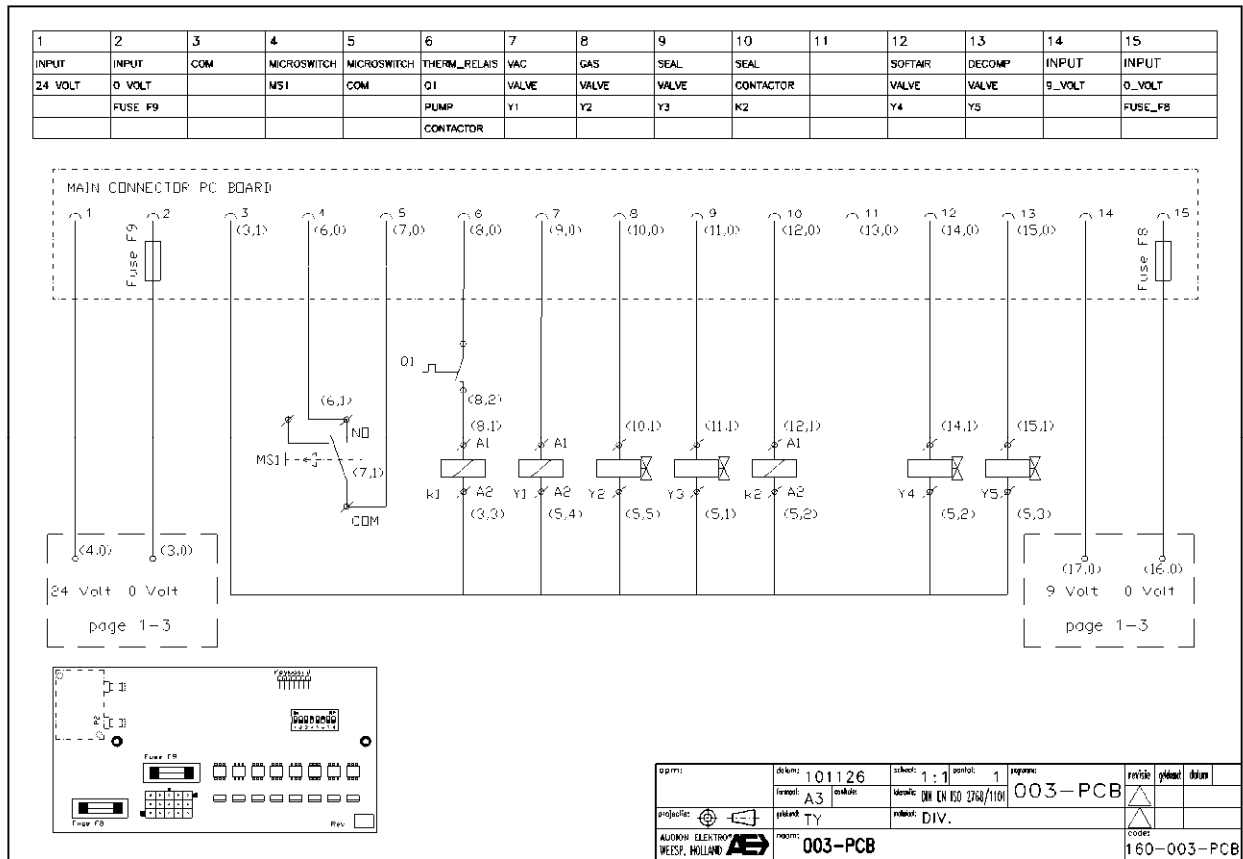
Sealbars:	
Used sealbars	R1, R2
Connection:	R1 & R2 - Serie

Contactors:	
Pump	K1
Seal	K2

Switches:			
Main switch	S1	Part number:	160-1331173
		Specification:	40 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:			
Switch start cycle	MS1	Electrical connections:	2

Valves:	
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5





VM(S) 303 - 333 (S/L) 208V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	022-2S	Sealconfiguration	Right and Front
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V/~/Hz)	208-3-60		
Pump capacity	100 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332191
		Specification:	3 x 40 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	13
Fuse seal transformer	F4	Part number:	160-1343129
		Specification:	5 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	100 m³/h
Capacity	3 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334143
		Input:	208-230 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1 & Tr1.1	Connection:	Serie
Control transformer	Tb1	Part number:	160-1334122
		Input:	208-230 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	R1 & R2 - Serie
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331173
		Specification:	40 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

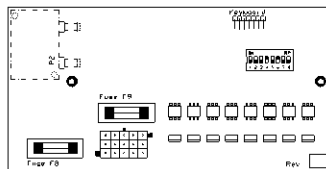
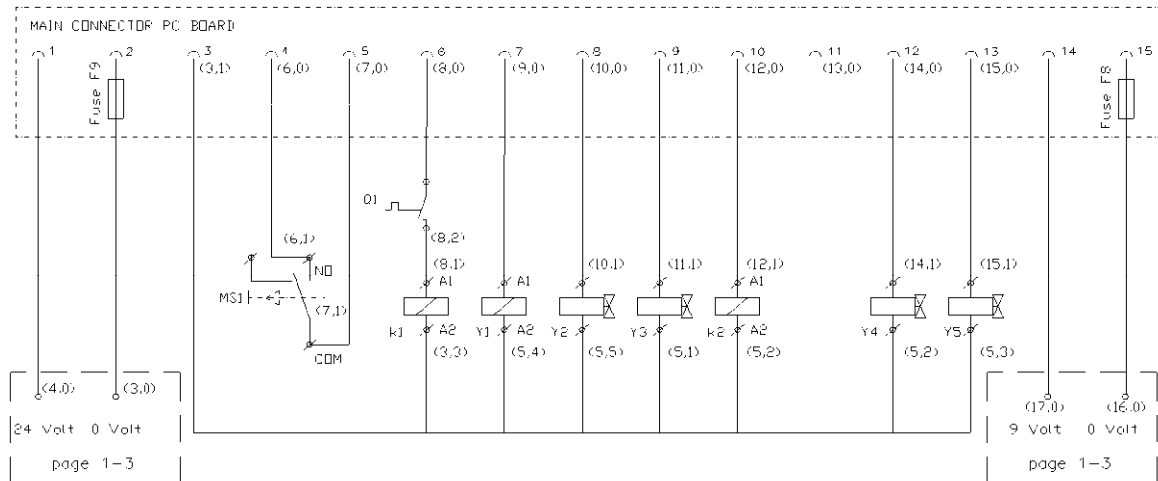
Microswitches:

Switch start cycle	MS1	Electrical connections:	2
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Valves:

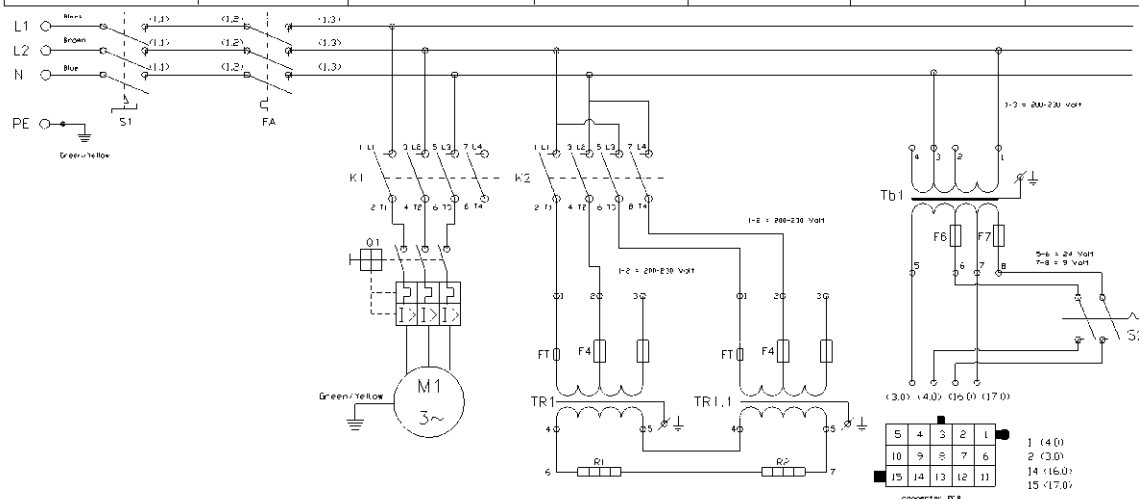
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		MS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_F8
					CONTACTOR									



part:	dim:	101126	sheet:	1	page:		rev:	date:	
	comp:	A3	descr:	003-PCB					
project:	proj:	Y	rel:	DIV.					
ALBION ELECTRON BRES, HOLLAND							codes: 160-003-PCB		

1	2	3	4	5	6	7
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR	CONTACTOR SEAL	SEAL TRANSFORMER	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	TR1.1	Tb1	S2
MAIN SWITCH		MOTOR	SEAL TRANSFORMER	SEAL BAR	MAIN PCB CONNECTOR	
S1		M1	TR1	R2		
			SEAL BAR			
			R1			



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	formaat: A3	maten: 420x594	klein: DIN EN ISO 2746/110	022-2S			
project:	grootte: Y	reductie: DIV.					
ALUMINUM ELECTRICITY WEEST, HOLLAND	opmerking: 022-2S				code:		
					160-022-2S		



VM(S) 303 - 333 (S/L) 220V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	022-2S	Sealconfiguration	Right and Front
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	220-3-60		
Pump capacity	100 m³/h		

Main electrical supply:	
L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:			
Circuit breaker	FA	Part number:	160-1332181
		Specification:	3 x 25 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	13
Fuse seal transformer	F4	Part number:	160-1343129
		Specification:	5 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:	
Pump type	100 m³/h
Capacity	3 kW

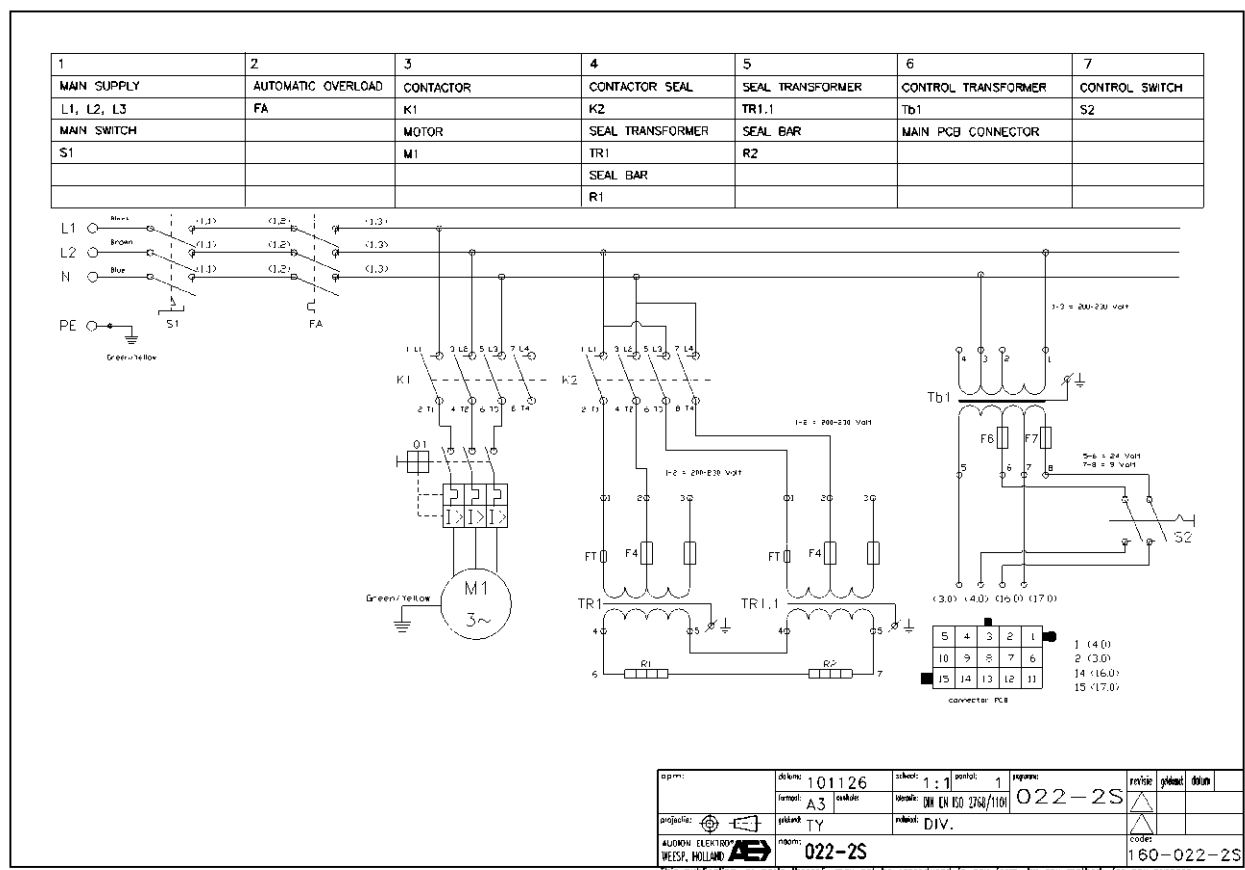
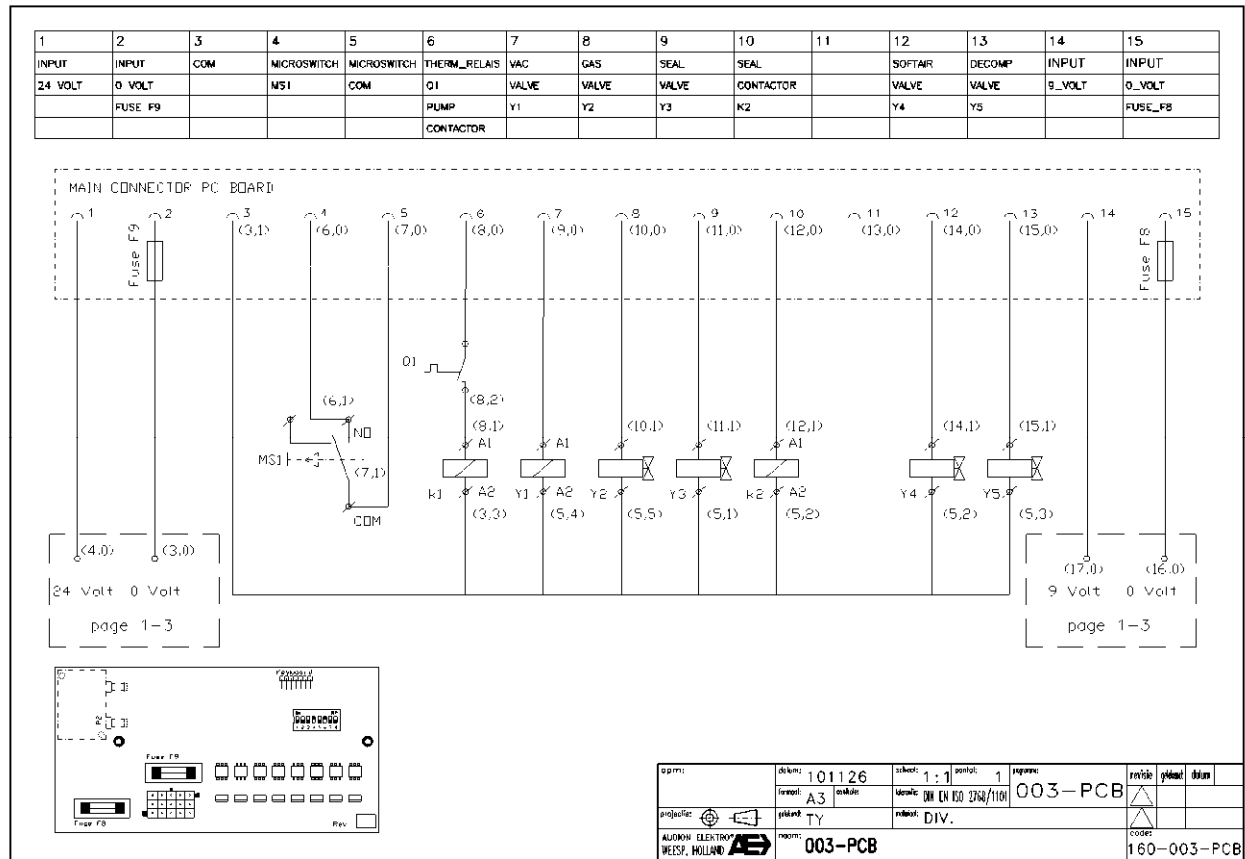
Transformers:			
Sealtransformer	Tr1	Part number:	160-1334143
		Input:	220 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1 & Tr1.1	Connection:	Serie
Control transformer	Tb1	Part number:	160-1334122
		Input:	220 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:	
Used sealbars	R1, R2
Connection:	R1 & R2 - Serie

Contactors:	
Pump	K1
Seal	K2

Switches:			
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117
Microswitches:			
Switch start cycle	MS1	Electrical connections:	2

Valves:	
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5





VM(S) 303 - 333 (S/L) 230V - 3P - 50Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	022-2S	Sealconfiguration	Right and Front
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V/~Hz)	230-3-50		
Pump capacity	100 m³/h		

Main electrical supply:	
L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:			
Circuit breaker	FA	Part number:	160-1332181
		Specification:	3 x 25 Amp
Termical overload pump	Q1	Part number:	160-1332241
		Range:	9-14
		Set:	9
Fuse seal transformer	F4	Part number:	160-1343129
		Specification:	5 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:	
Pump type	100 m³/h
Capacity	2,2 kW

Transformers:			
Sealtransformer	Tr1	Part number:	160-1334143
		Input:	220-230 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1 & Tr1.1	Connection:	Serie
Control transformer	Tb1	Part number:	160-1334122
		Input:	220-230 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:	
Used sealbars	R1, R2
Connection:	R1 & R2 - Serie

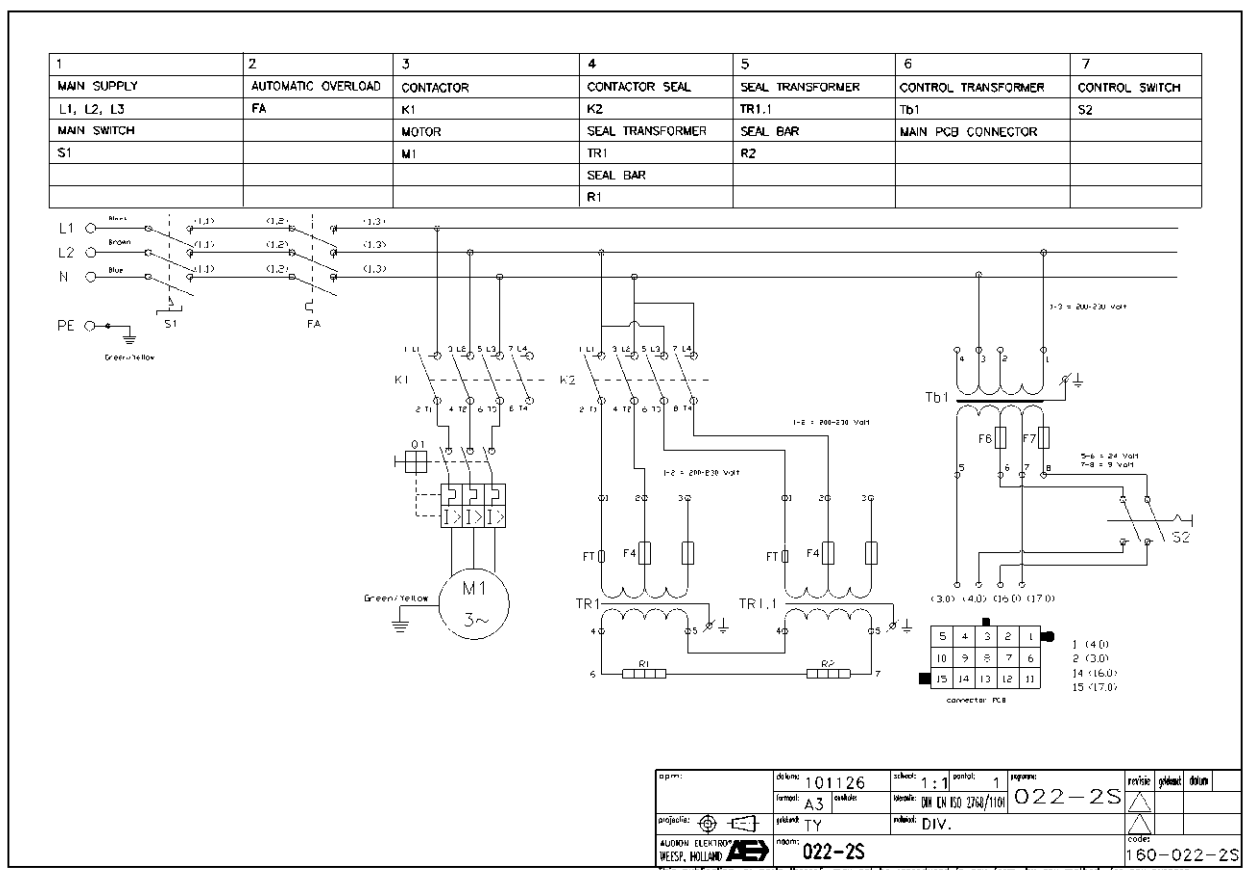
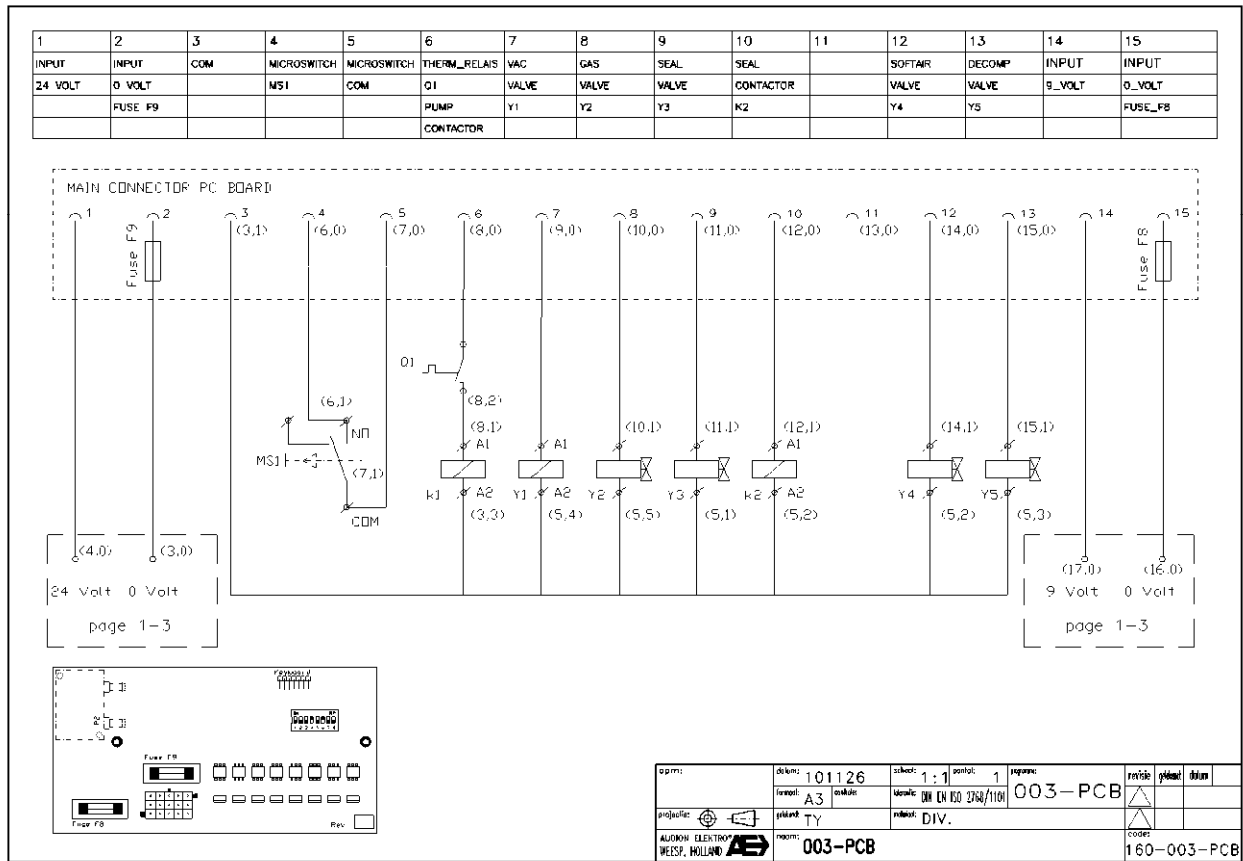
Contactors:	
Pump	K1
Seal	K2

Switches:			
Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117
Microswitches:			
Switch start cycle	MS1	Electrical connections:	2

Valves:	
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5



VM(S) 303 - 333 (S/L) 230V - 3P - 50Hz





VM(S) 303 - 333 (S/L) 380V - 3P - 60Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	024-2S	Sealconfiguration	Right and Front
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V/~ /Hz)	380-3-60		
Pump capacity	100 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332235
		Range:	4-6,5
		Set:	6,5
Fuse seal transformer	F5	Part number:	160-1343130
		Specification:	3,15 Amp Slow
		Size:	6,3 x 32 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	100 m³/h
Capacity	3 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334143
		Input:	400 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1 & Tr1.1	Connection:	Serie
Control transformer	Tb1	Part number:	160-1334122
		Input:	400 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	R1 & R2 - Serie
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

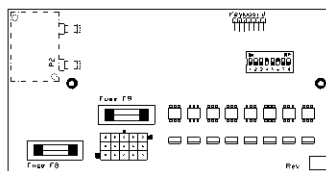
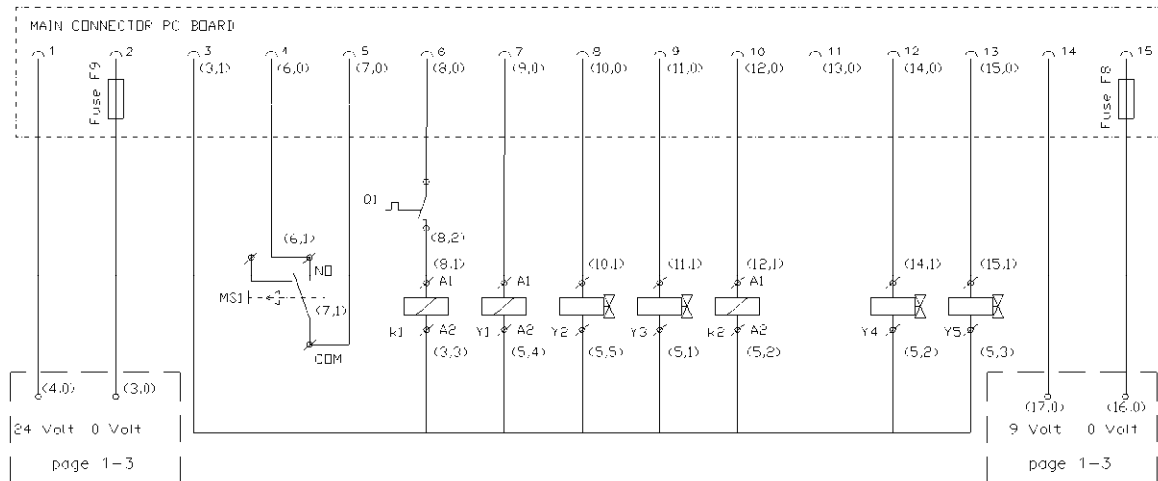
Microswitches:





Switch start cycle	MS1	Electrical connections:	2
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Valves:

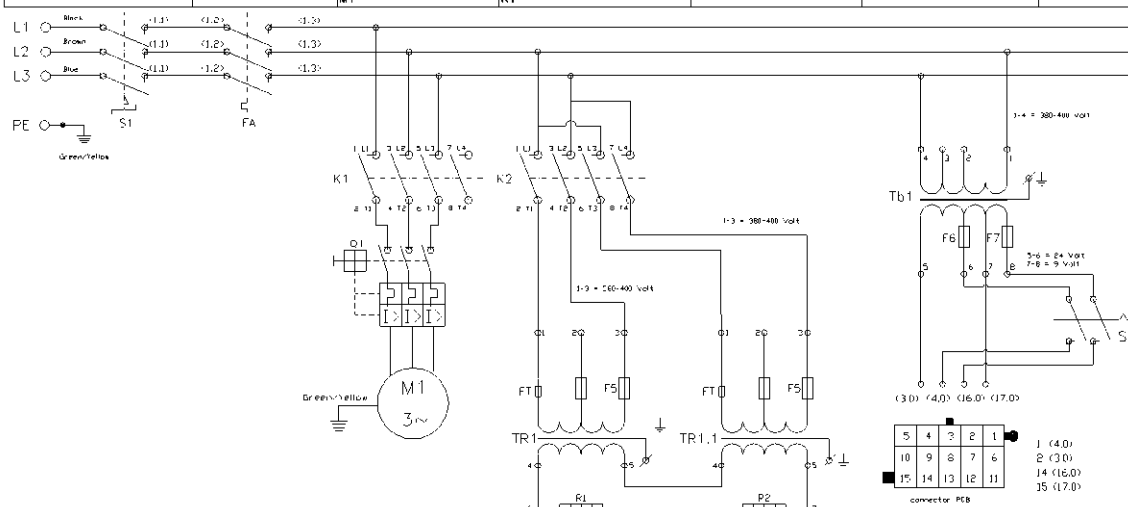
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		MS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_F8
					CONTACTOR									



sign:	dimens: 101126	schets: 1:1	positief: 1	pagina:	reviz:	gemaakt:	datum:
formaat: A3	matricle:	titel:	003-PCB				
projectie: 	gemaakt: TY	revisie: DIV.					
ALUMIN ELECTRONICS BEEFS, HOLLAND 	noort: 003-PCB			CODES:		160-003-PCB	

1	2	3	4	5	6	7
MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR PUMP	CONTACTOR SEAL	SEAL TRANSFORMER	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	TR1.1	Tb1	S2
MAIN SWITCH		THERMAL OVERLOAD	SEAL TRANSFORMER	SEAL BAR	MAIN PCB CONNECTOR	
S1		Q1	TR1	R2		
		MOTOR	SEAL BAR			
		M1	R1			



opmerking:	datum: 101126	schied: 1	soort: 1	regime:	revisie:	gemaakt:	afgekeurd:
	formaat: A3	omvang:	identificatie: DIN EN ISO 2768/110	024-2S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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AUCTION ELECTRON WESPEL HOLLAND 	nummer: 024-2S				code:		
						160-024-2S	



VM(S) 303 - 333 (S/L) 400V - 3P - 50Hz

Control diagram	003-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	024-2S	Sealconfiguration	Right and Front
Machine serie	VM 303, VMS 333	Seal type	Double / Cut-off / 8mm
Power (V/~ /Hz)	400-3-50		
Pump capacity	100 m³/h		

Main electrical supply:

L1	Phase 1
L2	Phase 2
L3	Phase 3
PE	Ground connection

Overload devices:

Circuit breaker	FA	Part number:	160-1332171
		Specification:	3 x 16 Amp
Termical overload pump	Q1	Part number:	160-1332235
		Range:	4-6,5
		Set:	5
Fuse seal transformer	F5	Part number:	160-1343130
		Specification:	3,15 Amp Slow
		Size:	6,3 x 32 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343128
		Specification:	2,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
	F7	Part number:	160-1343127
		Specification:	0,5 Amp Slow (9 Volt)
		Size:	5 x 20 mm
Fuse PCB	F8	Part number:	160-1343122
		Specification:	250 mAmp, Slow
		Size:	5 x 20 mm
	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	100 m³/h
Capacity	2,2 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334143
		Input:	400 Volt
		Capacity:	900 VA
		Output:	21,4 Volt
		ED:	10 %
Used transformers	Tr1 & Tr1.1	Connection:	Serie
Control transformer	Tb1	Part number:	160-1334122
		Input:	400 Volt
		Capacity:	60 VA
		Output 1:	24 Volt
		Output 2:	9 Volt
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	R1 & R2 - Serie
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Contactors:

Pump	K1
Seal	K2

Switches:

Main switch	S1	Part number:	160-1331171
		Specification:	25 Amp
Control switch ON/OFF	S2	Part number:	160-1331117

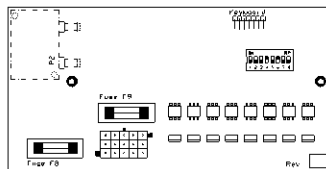
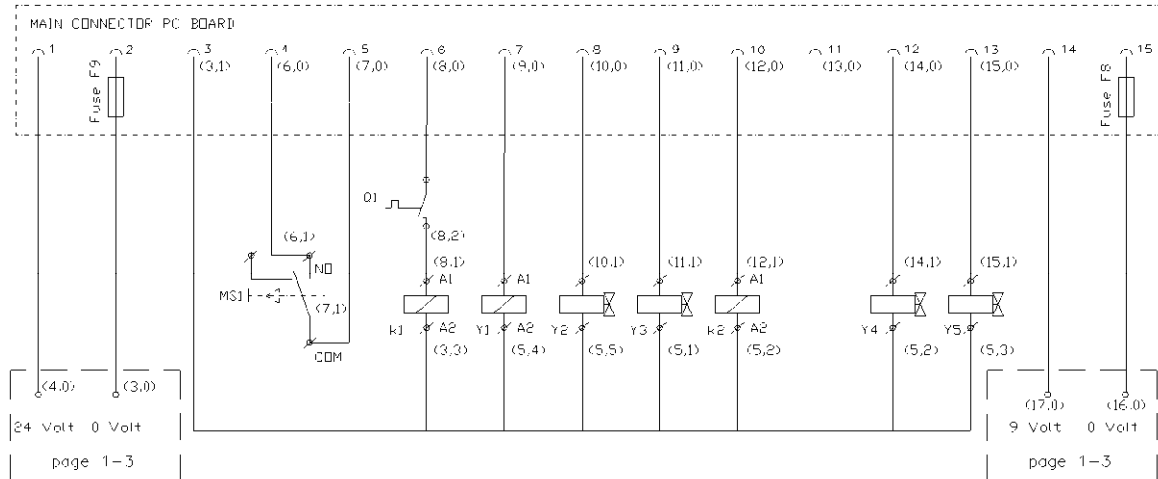
Microswitches:




Switch start cycle	MS1	Electrical connections:	2
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Valves:

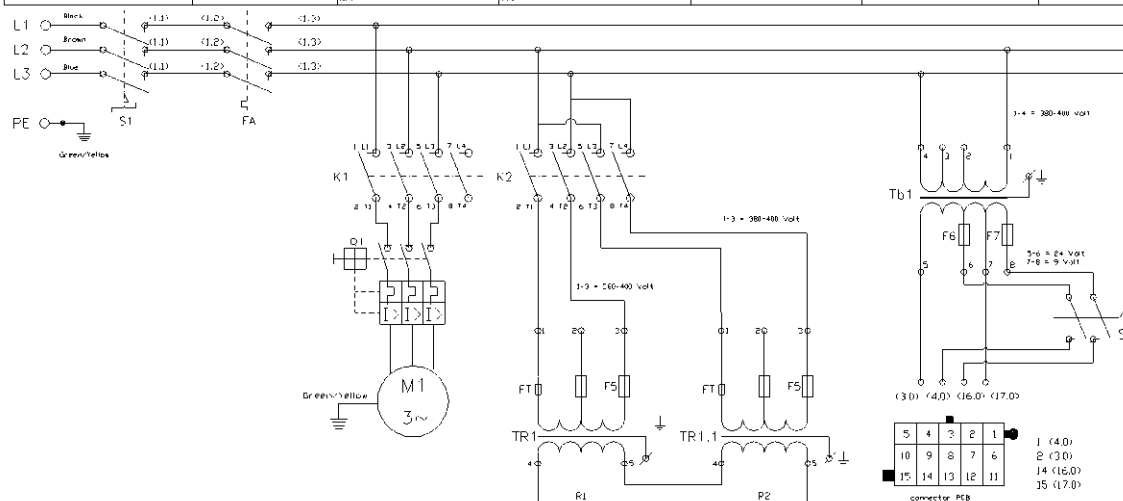
Vacuum valve	Y1
Gas valve	Y2
Seal valve	Y3
Soft-air valve	Y4
Decompression valve	Y5



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INPUT	INPUT	COM	MICROSWITCH	MICROSWITCH	THERM_RELAYS	VAC	GAS	SEAL	SEAL		SOFTAIR	DECOMP	INPUT	INPUT
24_VOLT	0_VOLT		MS1	COM	O1	VALVE	VALVE	VALVE	CONTACTOR		VALVE	VALVE	9_VOLT	0_VOLT
	FUSE_F9				PUMP	Y1	Y2	Y3	K2		Y4	Y5		FUSE_F8
					CONTACTOR									



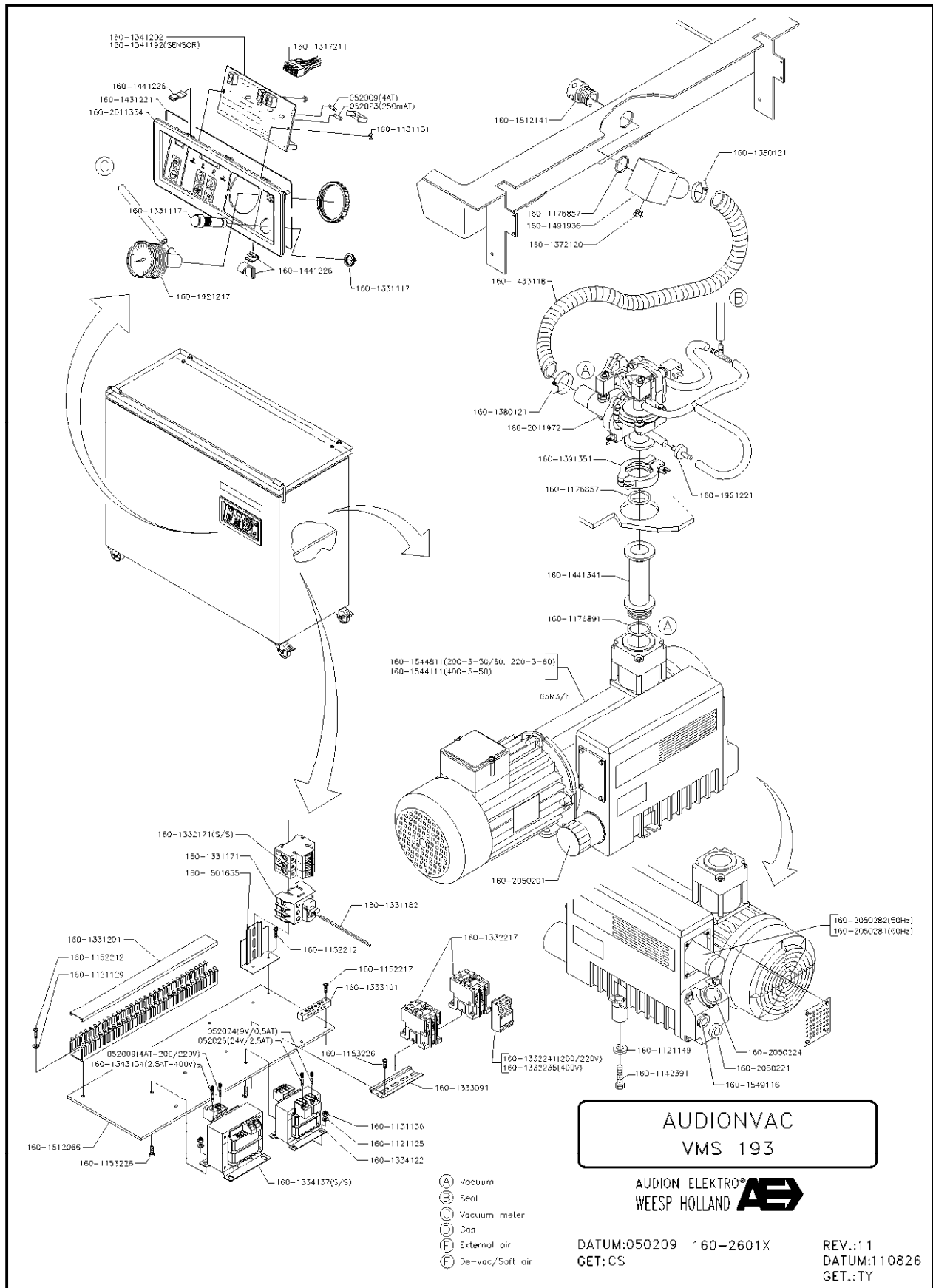
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projectie: 	gemaakt: TY	revisie: DIV.					
AUKHOFF ELECTRONICS BEEFS, HOLLAND 	noor: 003-PCB				code:		
						160-003-PCB	

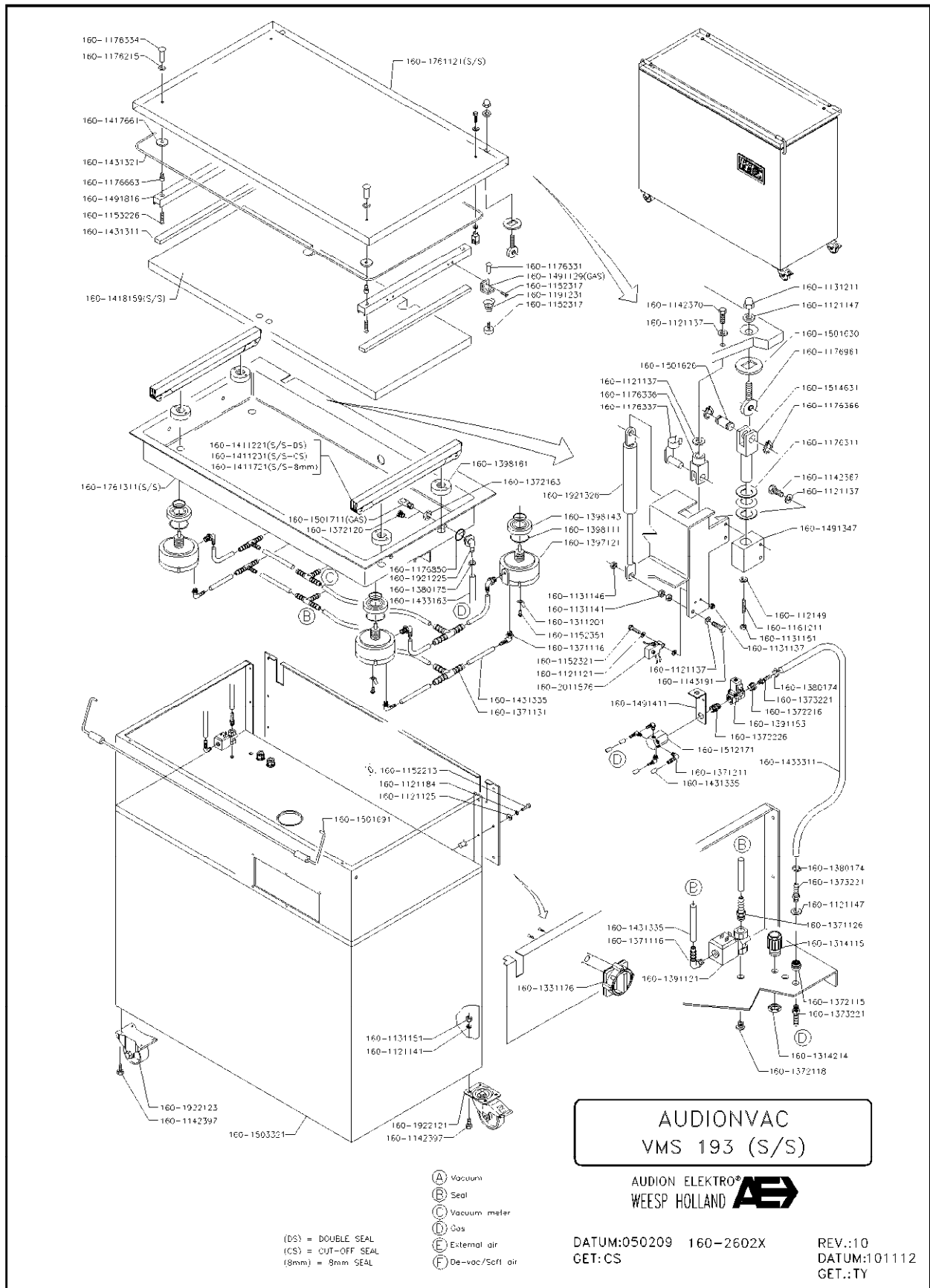
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MAIN SUPPLY	AUTOMATIC OVERLOAD	CONTACTOR PUMP	CONTACTOR SEAL	SEAL TRANSFORMER	CONTROL TRANSFORMER	CONTROL SWITCH
L1, L2, L3	FA	K1	K2	TR1.1	Tb1	S2
MAIN SWITCH		THERMAL OVERLOAD	SEAL TRANSFORMER	SEAL BAR	MAIN PCB CONNECTOR	
S1		Q1	TR1	R2		
		MOTOR	SEAL BAR			
		M1	R1			

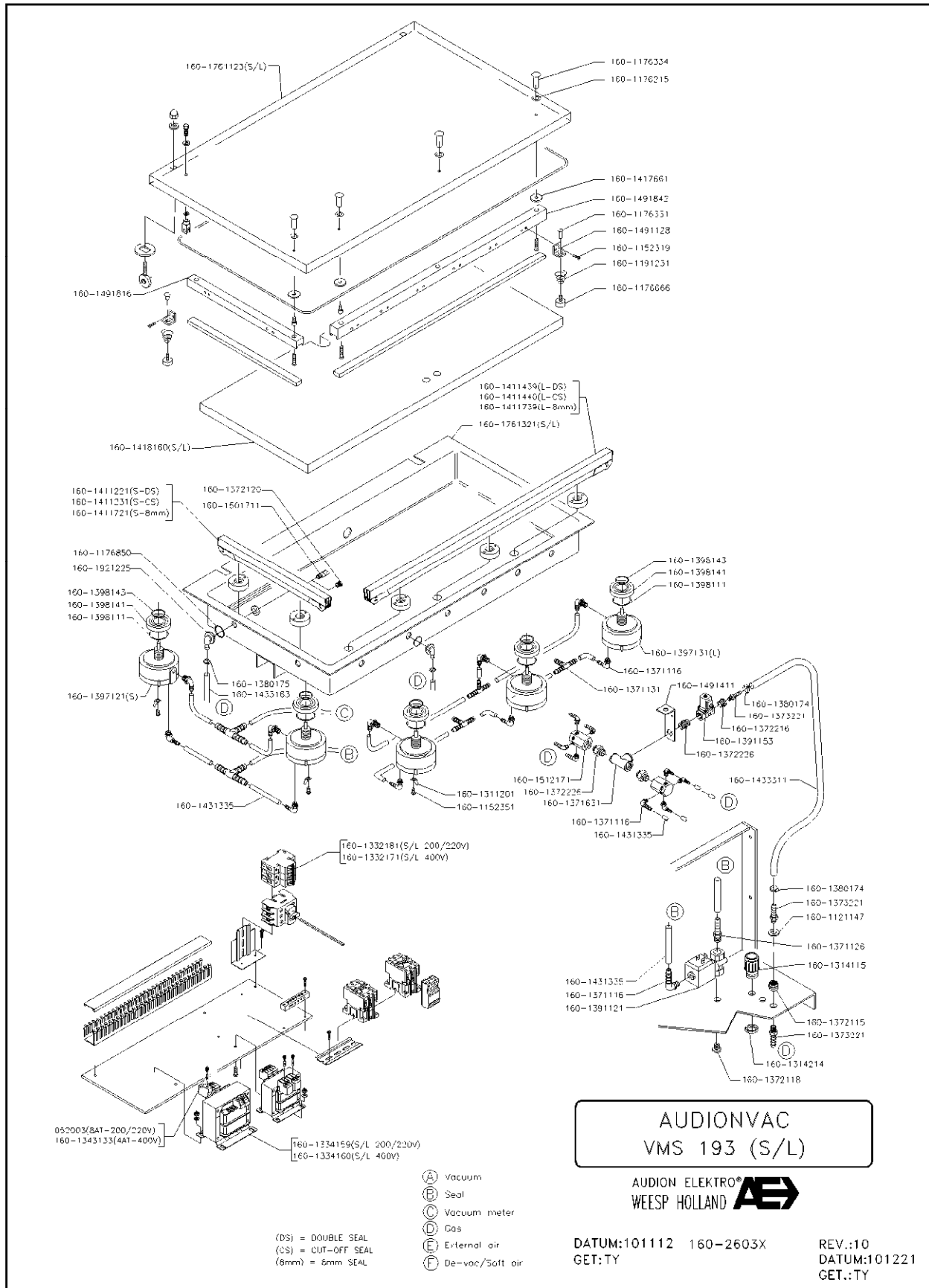


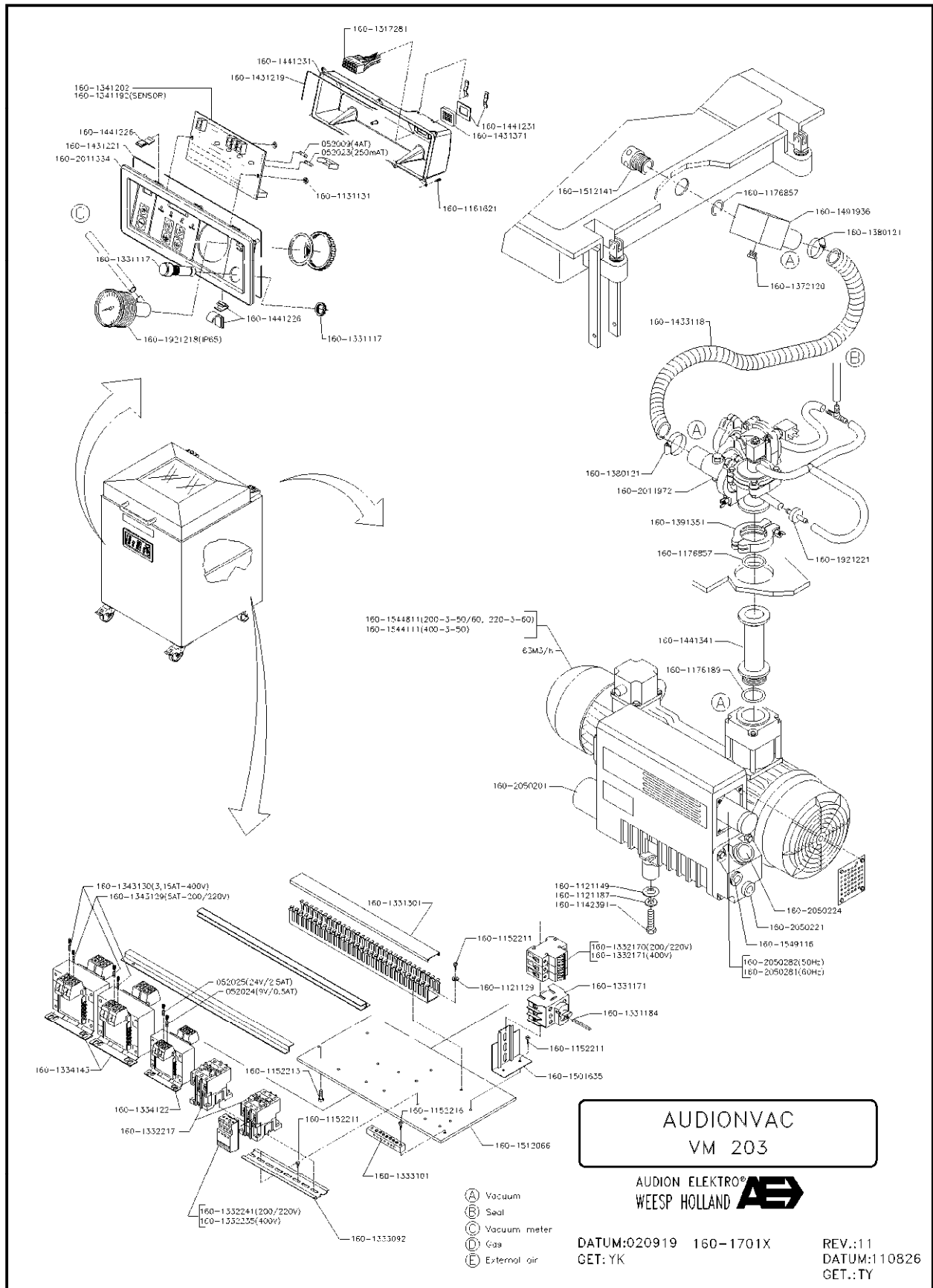
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AUSTRON ELEKTRO BESCH. HOLLAND 	aanpak: 024-2S			code:	160-024-2S		

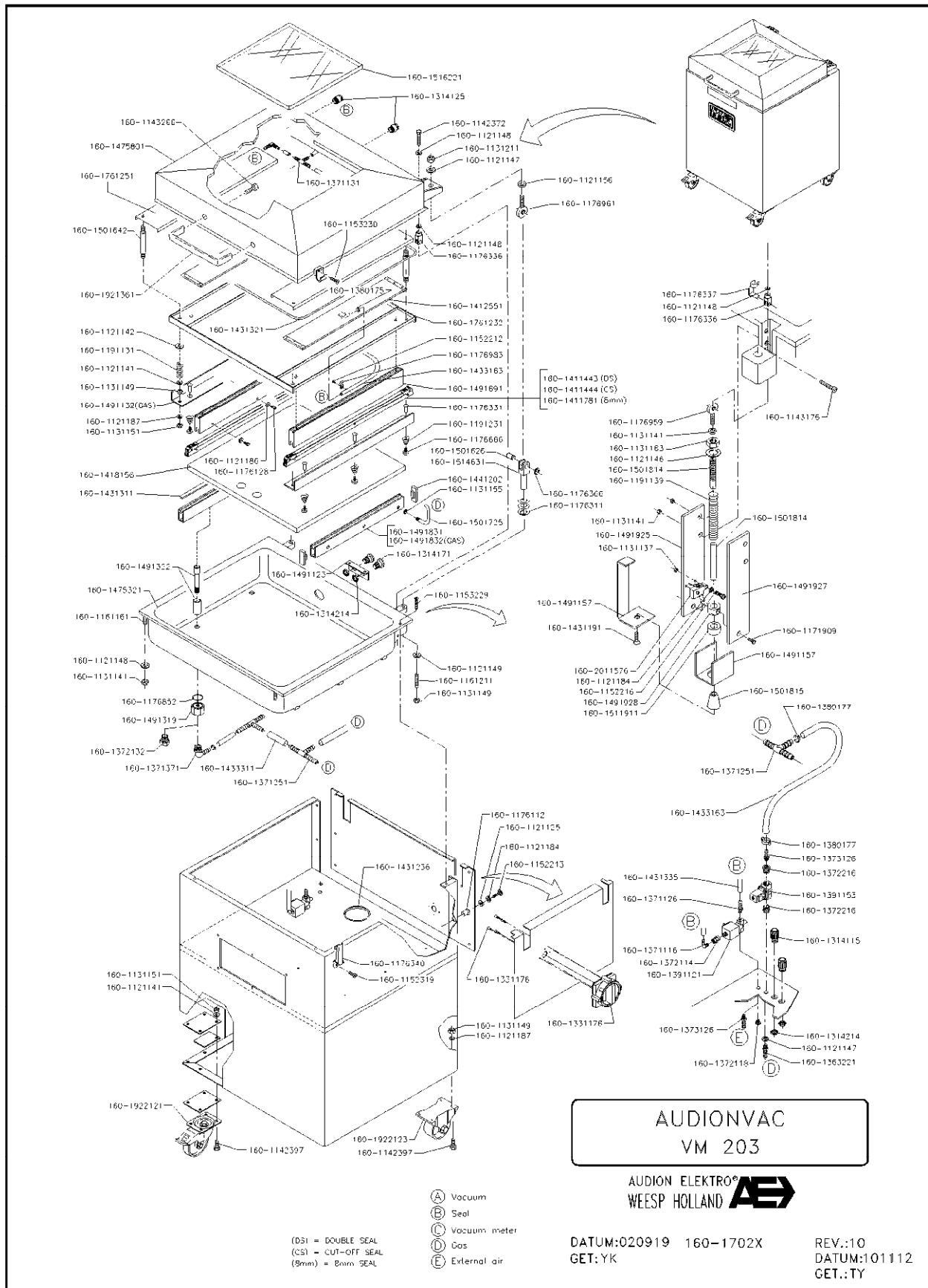
12 Exploded view machine

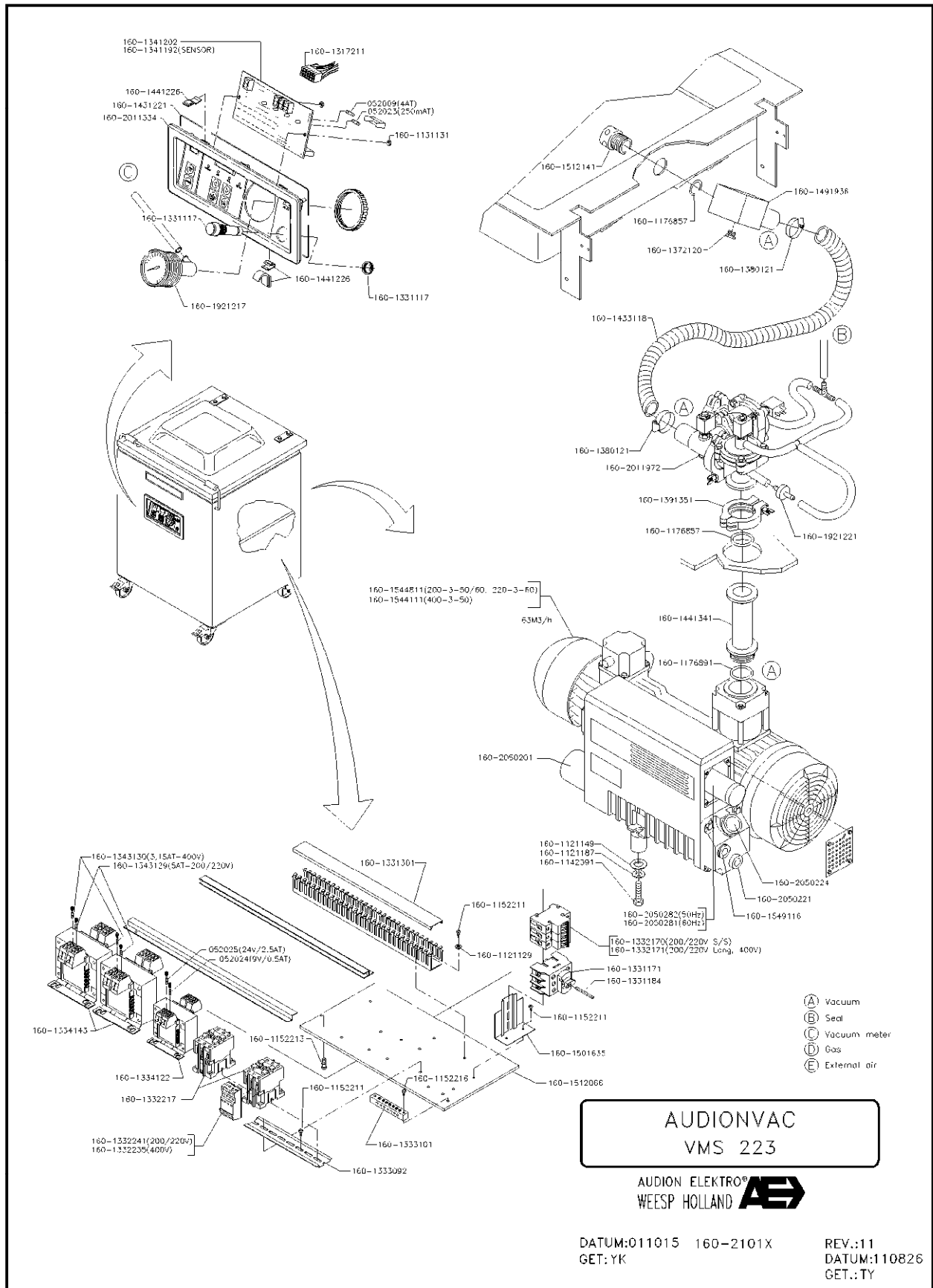


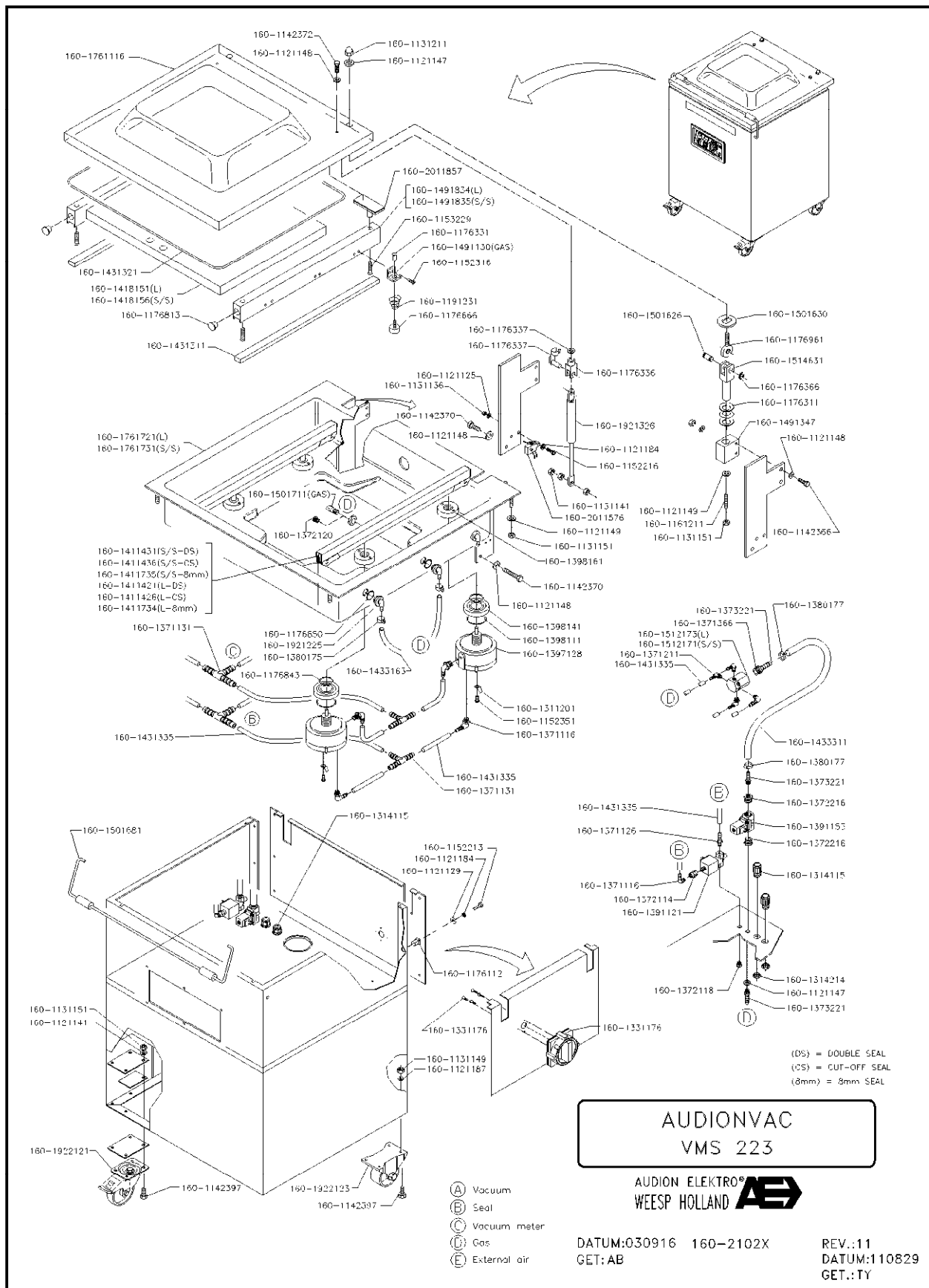


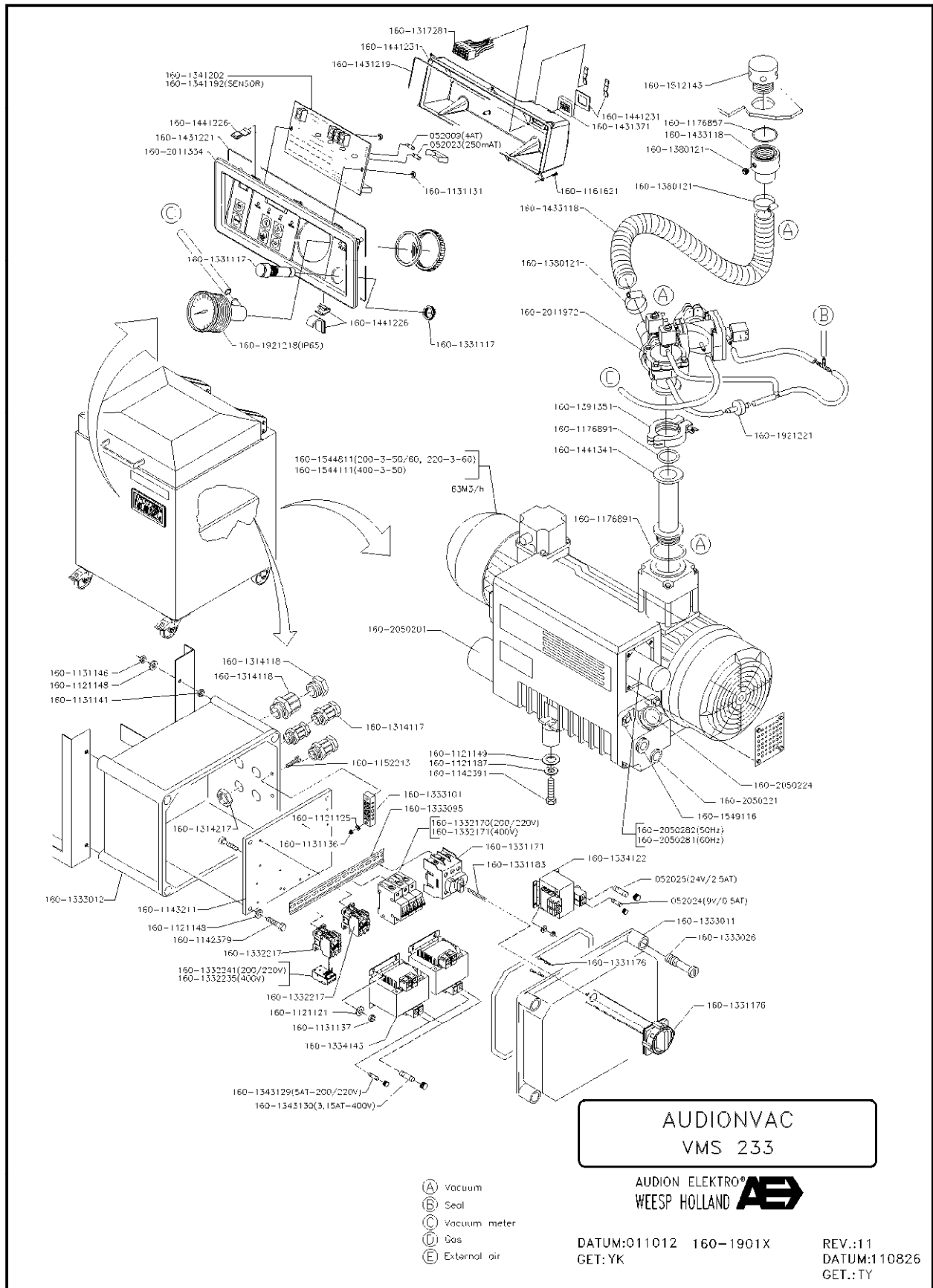


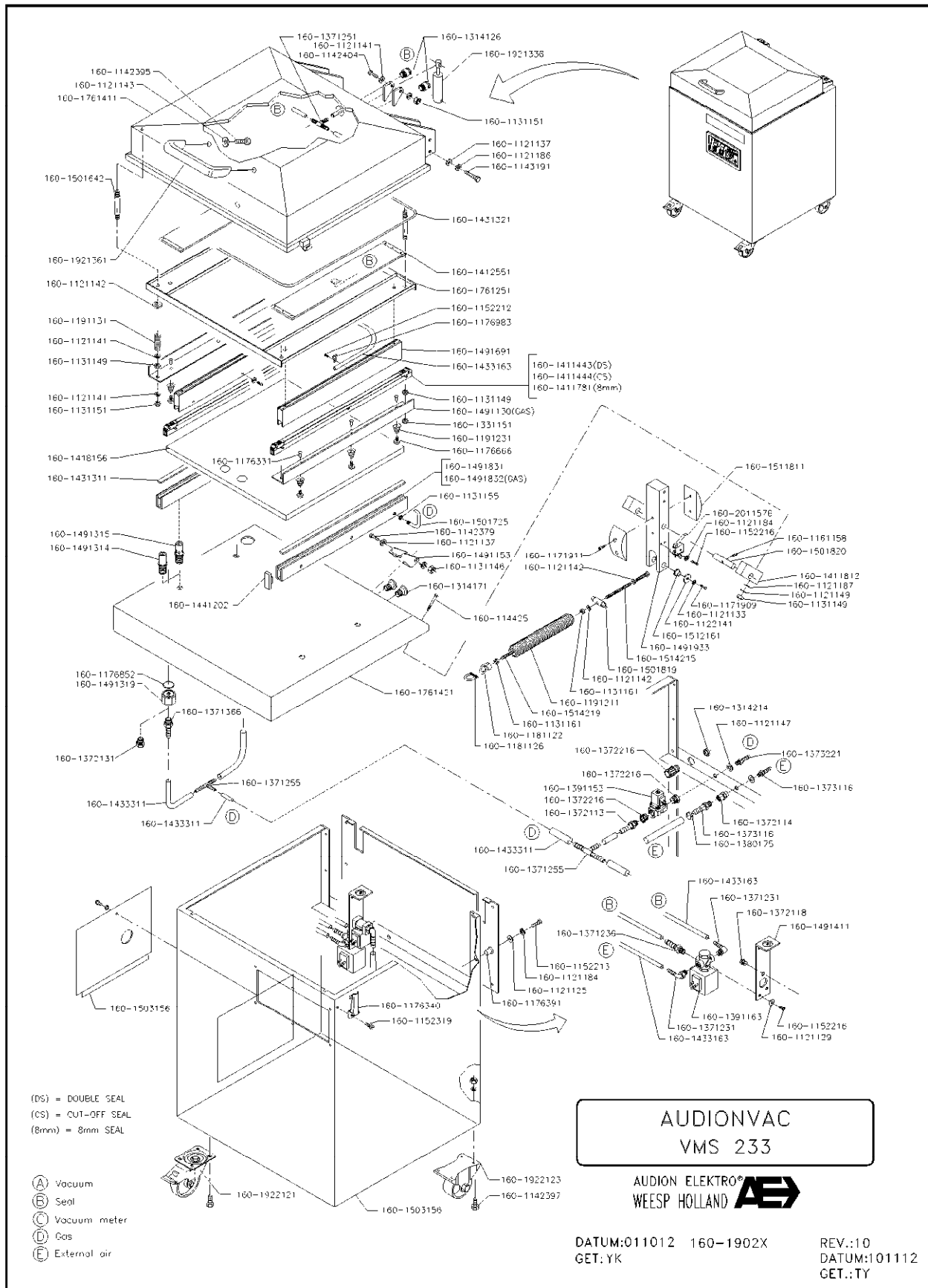


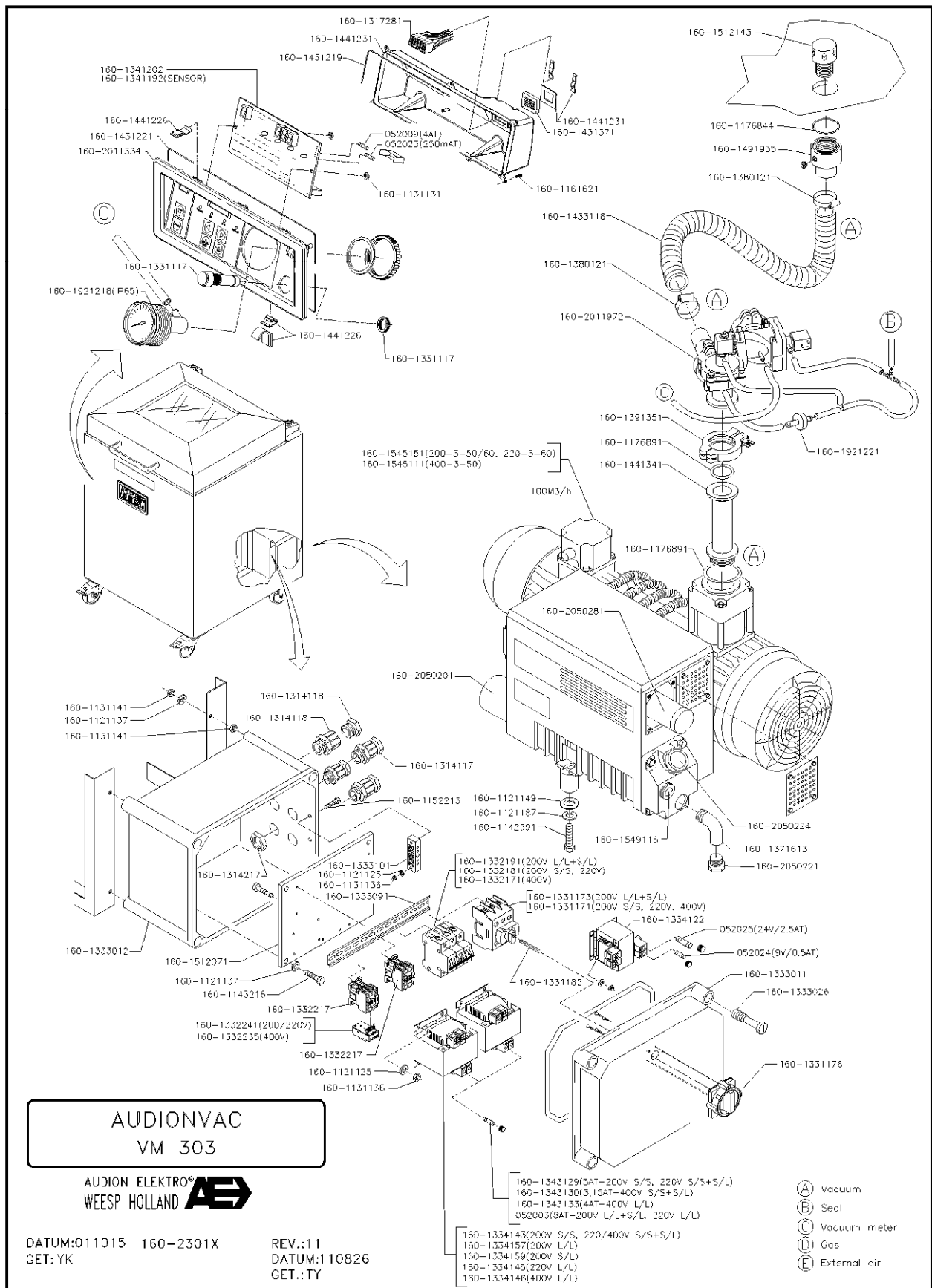


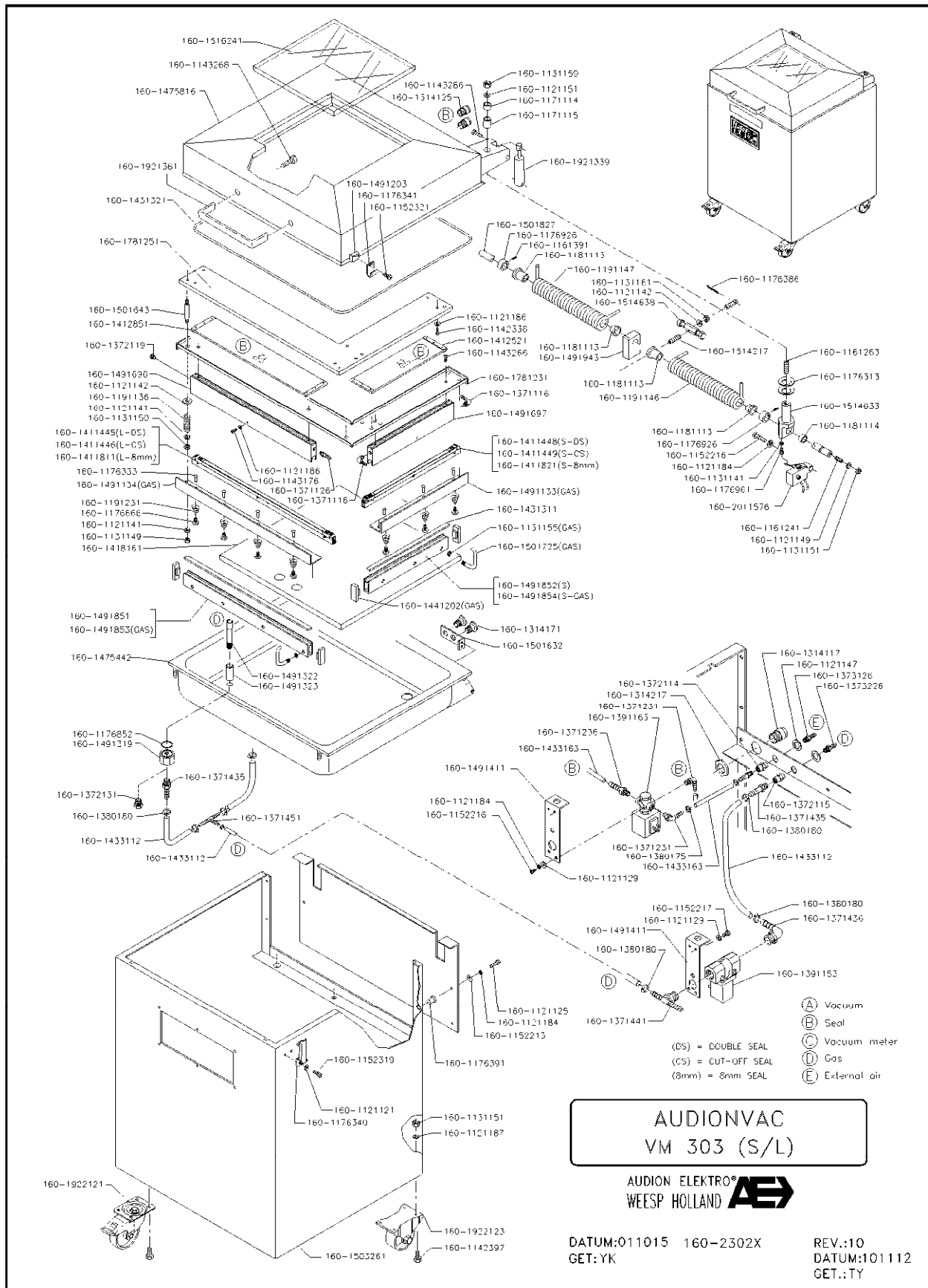


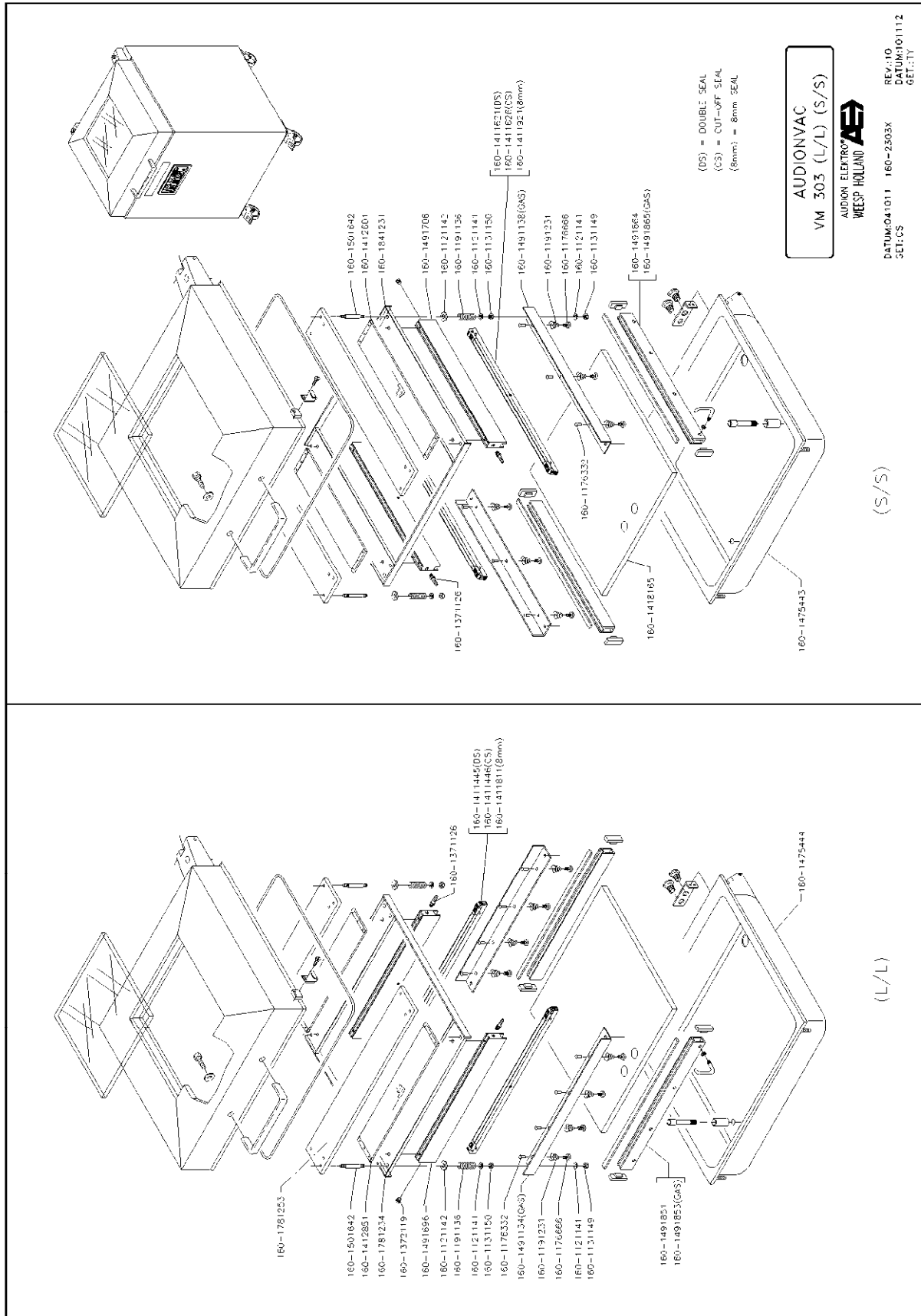


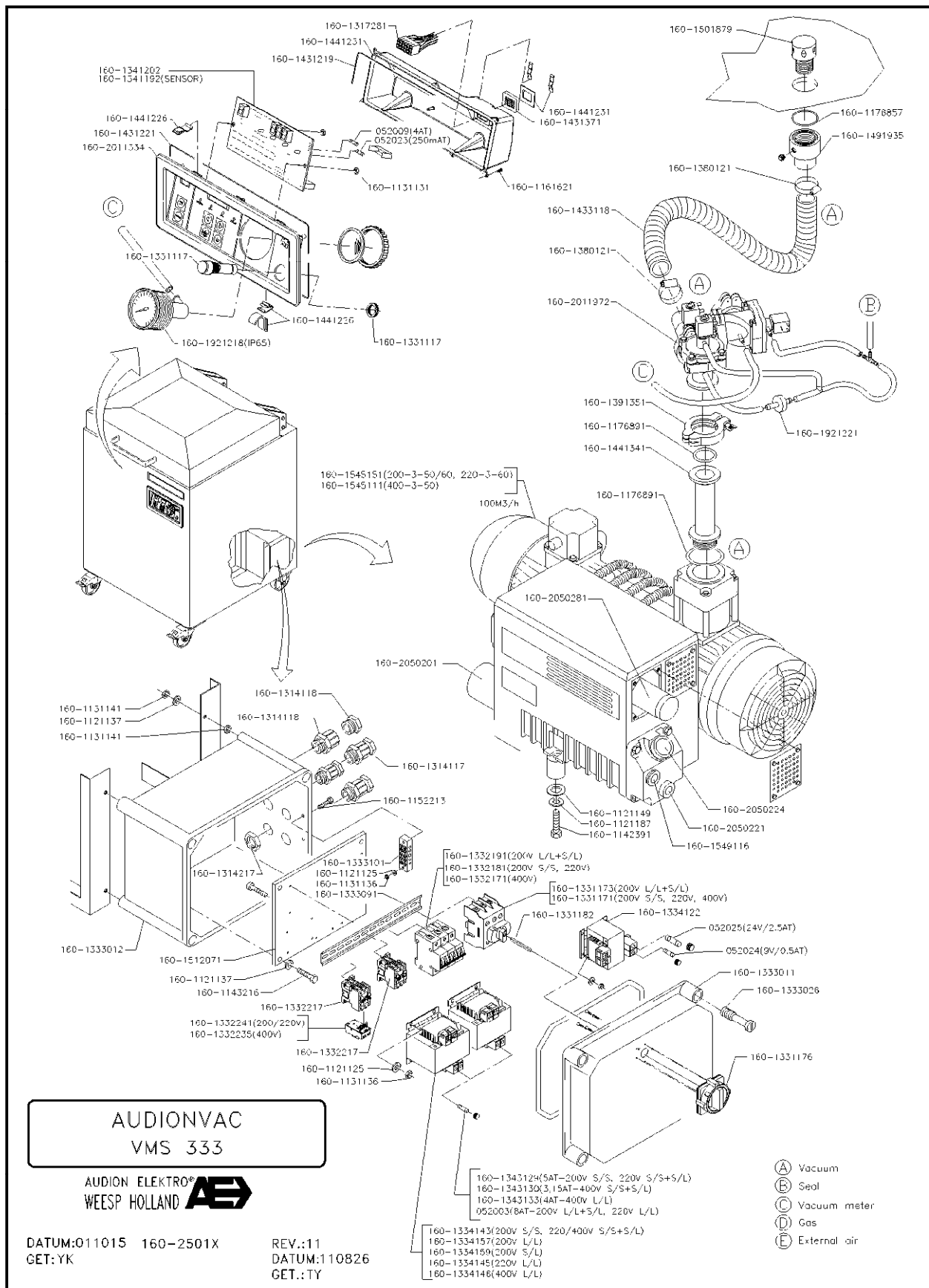


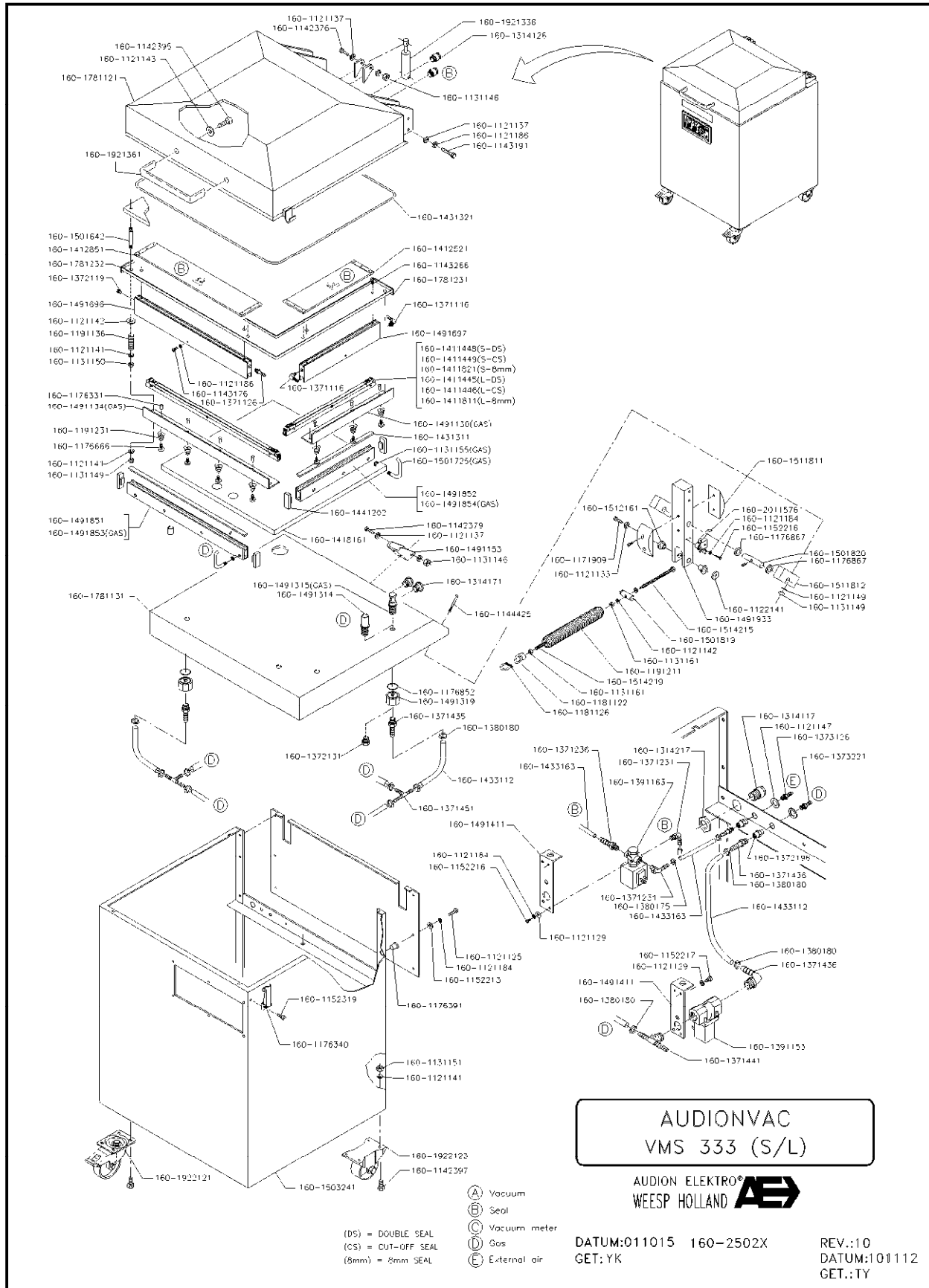


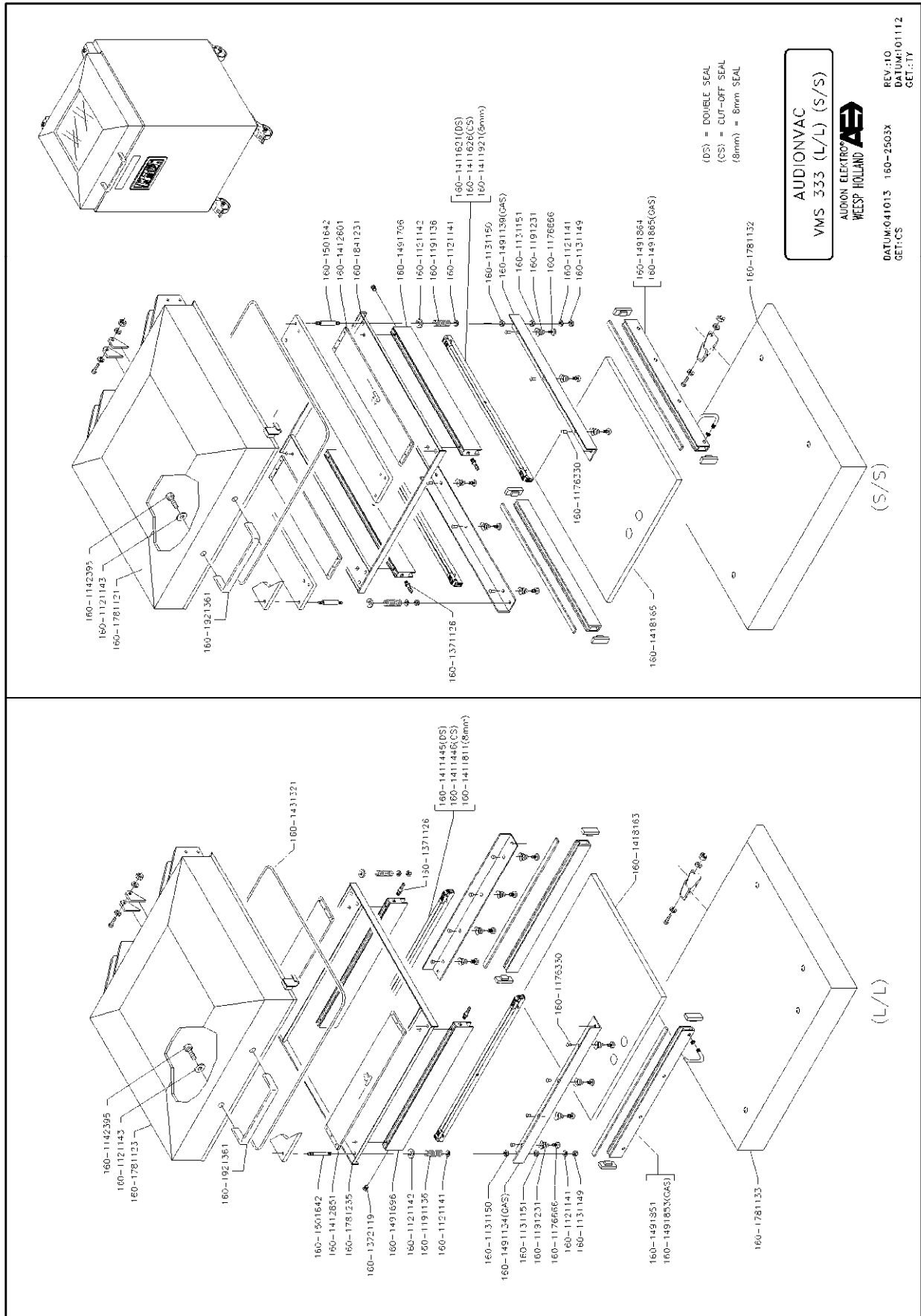




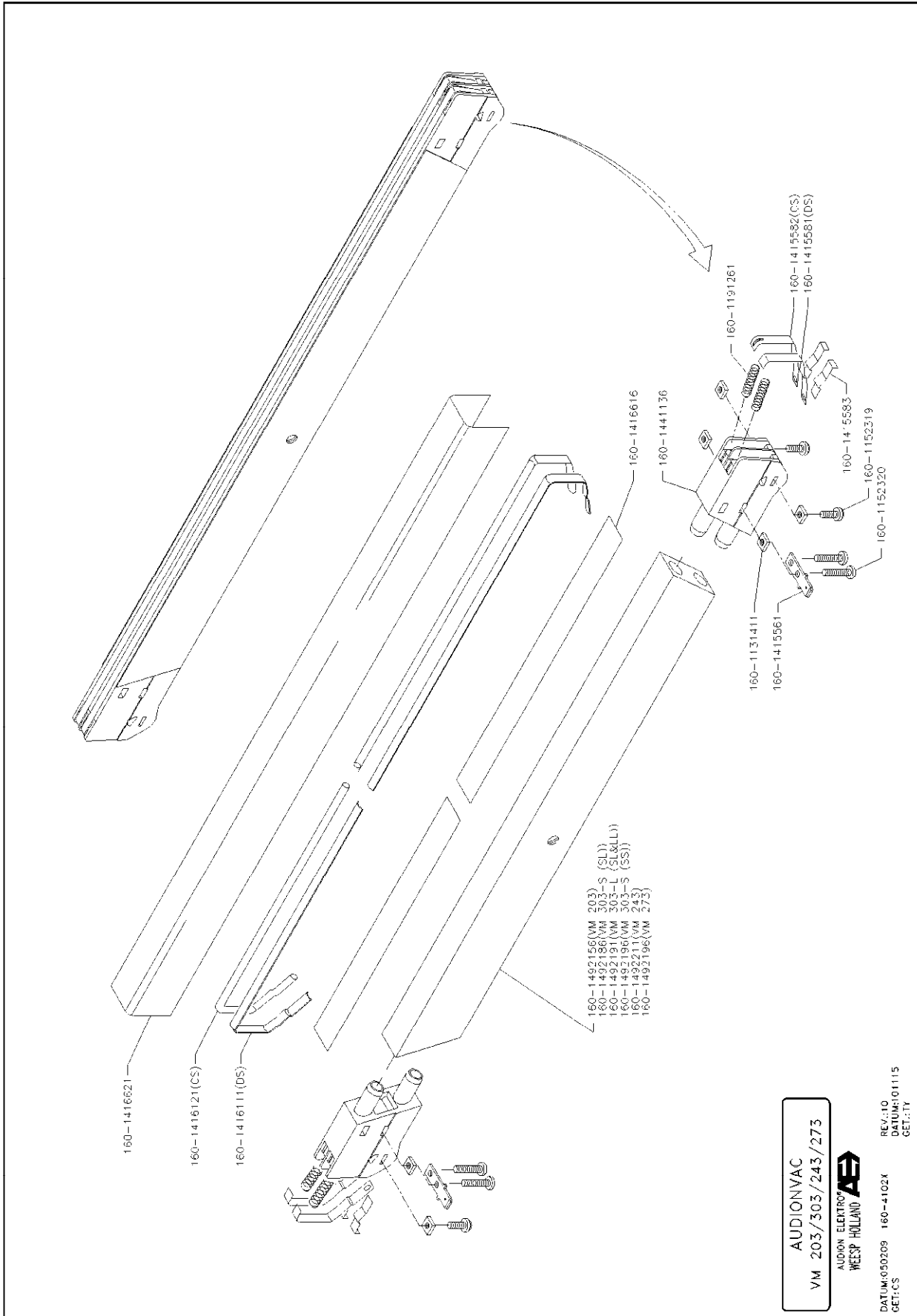


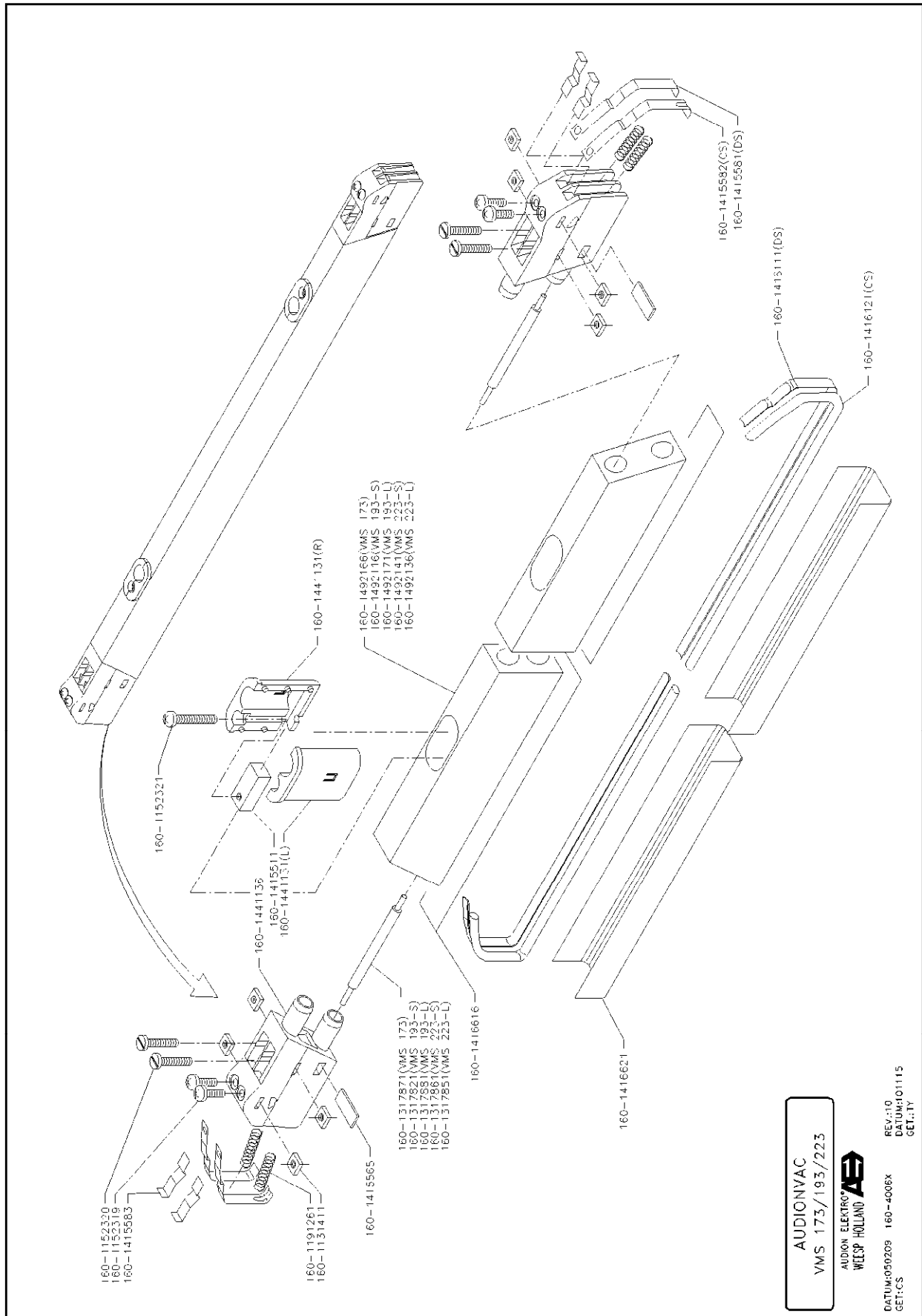


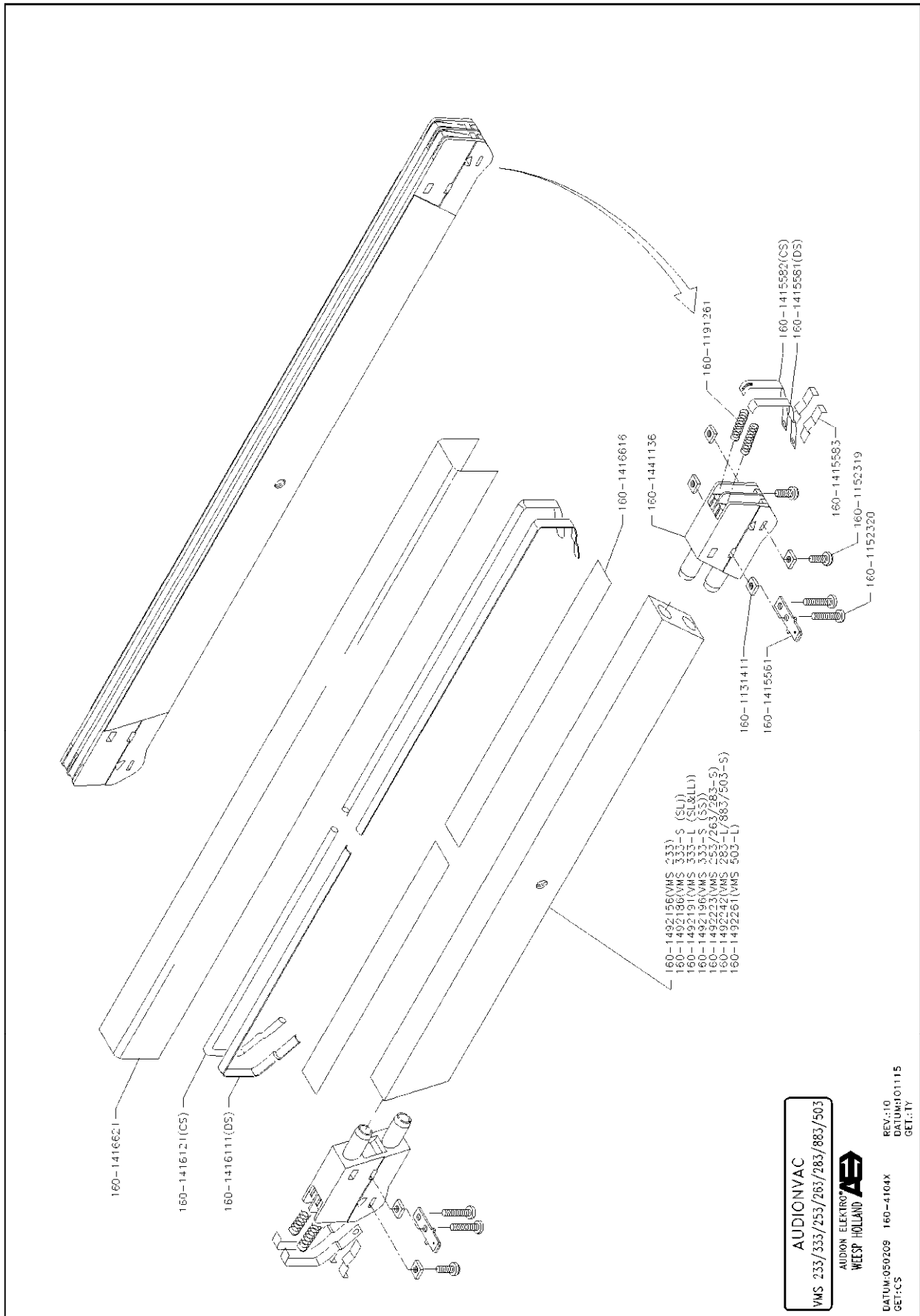




13 Exploded view seal bar







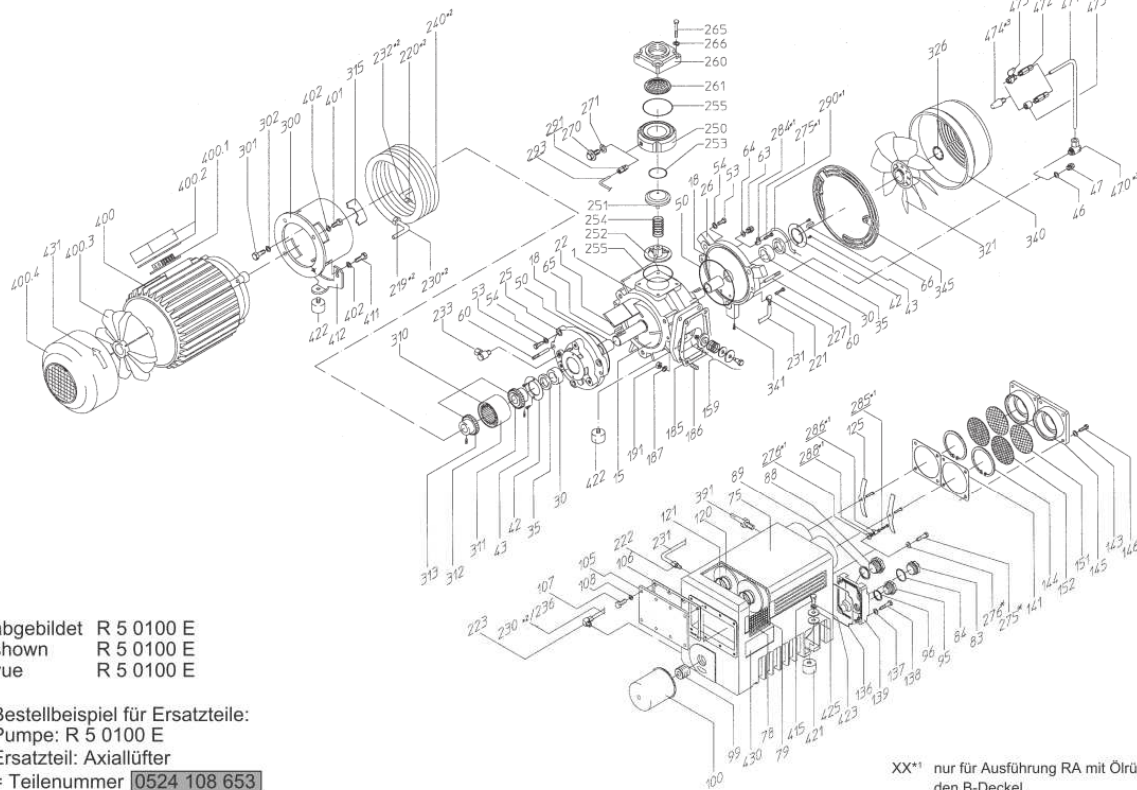
AUDIONVAC
VMS 233/333/253/263/283/883/503

AUDION ELEKTRO
WESPE HOLLAND

DATUM: 050209 160-4104X REV.: 10
GET.: CS DATUM: 011115
GET.: IT

14 Exploded view pump

63m3-100m3



abgebildet R 5 0100 E
shown R 5 0100 E
vue R 5 0100 E

Bestellbeispiel für Ersatzteile:

Pumpe: R 5 0100 E

Ersatzteil: Axiallüfter

= Teilenummer **0524 108 653**

Order sample for spare parts:

Pump: R 5 0100 E

Spare part: Axial fan

= Part number **0524 108 653**

Exemple de commande pour pièces de remplacement:

Pompes: R 5 0100 E

Pièce de rechange: Ventilateur axial

= Numéro de pièce **0524 108 653**

XX nur für Ausführung RC
version RC only
sur version RC uniquement

XX* nur für Ausführung RA mit Ölrücklauf
version RA with oil return to oil separator
seulement sur version RA avec retour d'huile

XX** nur für Ausführung RA mit Ölrücksaugung in
den B-Deckel
version RA with oil return to B-endplate
seulement sur version RA avec retour d'huile
vers le lasque B

XX*2 nur für Ausführung R 5 0100 E
version R 5 0100 E only
seulement sur version R 5 0100 E

XX*3 Gasballast Einzelteile
components gas ballast
composants du lest d'air

Teilenummern Ersatzteile Part numbers spare parts Numéro de pièce					
Pos.	Teil	Part	Pièce	R 5 0063 E	R 5 0100 E
1	Zylinder	Cylinder	Cylindre	0223 000 088	0223 000 089
15	Rotor	Rotor	Rotor	0210 108 662	0210 108 663
18	Innenring	Sleeve	Portée axe rotor	0472 105 822	0472 105 822
22	Schieber	Vane	Palette	0722 000 330	0722 000 360
25	Zylinderdeckel A-Seite	A-endplate	A-couvercle de cylindre	0233 107 520	0233 107 520
26	Zylinderdeckel B-Seite	B-endplate	B-couvercle de cylindre	0233 000 155	0233 000 155
30	Nadellager	Needle bearing	Roulement à aiguilles, cage PA	0473 103 123	0473 103 123
35	Weilendichtring	Shaft seal	Joint d'arbre	0487 000 008	0487 000 008
42	Stützscheibe	Supporting ring	Rondelle pour bague de frein	0391 000 601	0391 000 601
43	Sechskantschraube	Hexagon head screw	Vis à tête hexagonale	0410 000 023	0410 000 023
46	Dichtring	Sealing ring	Joint	0484 000 029	0484 000 029
47	Verschlußschraube	Plug	Bouchon	0415 000 002	0415 000 002
50	O-Ring	O-ring	Joint torique	0486 000 539	0486 000 539
53	Sechskantschraube	Hexagon head screw	Vis à tête hexagonale	0410 000 130	0410 000 130
54	Federring	Lock washer	Rondelle ressort	0432 000 013	0432 000 013
60	Kegelstift	Taper pin	Goupille conique	0437 104 545	0437 000 074
63	Verschlußschraube	Plug	Bouchon	0415 000 002	0415 000 002
64	Dichtring	Sealing ring	Joint	0484 000 029	0484 000 029
65	Paßfeder	Shaft key	Clavette	0434 000 044	0434 000 044
66	Paßfeder	Shaft key	Clavette	0434 000 044	0434 000 044
75	Ölabscheider	Oil separator	Séparateur de brouillard d'huile	0266 000 156	0266 000 156
78	Streckmetall	Expanded metal	Métal déployé	0534 101 306	0534 101 306
79	Demister	Demister	Dévisculeur	0534 101 308	0534 101 308
83	Ölschauglas, gewölbt	Oil sight glass, convex	Voyant d'huile, convexe	0583 108 695	0583 108 695
84	Ölschauglasdichtung	Oil sight glass seal	Joint du voyant d'huile	0480 109 793	0480 109 793
88	Verschlußschraube	Plug	Bouchon	0710 000 010	0710 000 010
89	Dichtring	Sealing ring	Joint	0482 000 020	0482 000 020
95	Verschlußschraube	Plug	Bouchon	0710 000 010	0710 000 010
96	O-Ring	O-ring	Joint torique	0486 000 505	0486 000 505
99	Nippel	Threaded fitting	Mamelon	0461 000 061	0461 000 061
100	Ölfilter	Oil filter	Filter à huile	0531 000 002	0531 000 002
105	Deckel	Cover	Couvercle	0360 108 294	0360 108 294
106	Dichtung	Seal	Joint	0480 108 718	0480 108 718
107	Sechskantschraube	Hexagon head screw	Vis à tête hexagonale	0410 000 020	0410 000 020
108	Federring	Lock washer	Rondelle ressort	0432 000 010	0432 000 010
120	Luftentölement	Exhaust filter	Filter d'échappement	0532 000 509	0532 000 509



Teilenummern Ersatzteile Part numbers spare parts Numéro de pièce					
Pos.	Teil	Part	Pièce	R 5 0063 E	R 5 0100 E
121	O-Ring	O-ring	Joint torique	0486 000 512	0486 000 512
125	Filterfeder	Filter spring	Ressort de filtre	0947 000 720	0947 000 720
136	Dichtung	Seal	Joint	0486 114 368	0486 114 368
137	Federring	Lock washer	Rondelle ressort	0432 000 010	0432 000 010
138	Sechskantschraube	Hexagon head screw	Vis à tête hexagonale	0410 000 030	0410 000 030
139	Servicedeckel	Service cover	Couvercle de service	0247 113 773	0247 113 773
143	Federring	Lock washer	Rondelle ressort	0432 000 010	0432 000 010
145	Abluftdeckel	Exhaust cover plate	Couvercle d'échappement	0246 000 008	0246 000 008
146	Sechskantschraube	Hexagon head screw	Vis à tête hexagonale	0410 000 055	0410 000 055
154	Schalldämpfermembran	Silencer membrane	Membrane silencieuse	0734 000 003	0734 000 003
155	Sechskantschraube	Hexagon head screw	Vis à tête hexagonale	0410 000 020	0410 000 020
156	Streckmetall	Expanded metal	Métal déployé	0534 000 926	0534 000 926
159	Abluftventil	Exhaust valve	Soupape d'échappement	0916 000 696	0916 000 696
185	Abscheiderdichtung	Separator gasket	Joint plat	0480 000 150	0480 000 150
186	Stiftschraube	Stud	Goujon	0412 104 730	0412 104 730
187	Federring	Lock washer	Rondelle ressort	0432 000 013	0432 000 013
191	Sechskantmutter	Hexagon nut	Ecrou hexagonal	0420 000 007	0420 000 007
219	Gerade Einschraubverschraubung	Straight stud fitting	Union mâle	-	0441 000 005
220	Gerade Einschraubverschraubung	Straight stud fitting	Union mâle	-	0441 000 005
221	Schwenkverschraubung	Hydraulic fitting	Raccord	0441 000 123	0441 000 123
222	Gerade Einschraubverschraubung	Straight stud fitting	Union mâle	0441 000 004	0441 000 004
223	Schwenkverschraubung	Hydraulic fitting	Raccord	0441 000 199	0441 000 199
227	Hohlschraube	Hollow-core screw	Vis creuse	0415 000 105	0415 000 105
230	Leitungsrohr	Tube	Tube	-	0327 108 887
231	B-Leitungsrohr	B-tube	B-tube	0327 109 090	0327 109 091
232	A-Leitungsrohr	A-tube	B-tube	-	0327 108 888
233	Schwenkverschraubung	Hydraulic fitting	Raccord	0441 000 199	0441 000 199
236	A-Leitungsrohr	A-tube	A-tube	0327 108 724	-
240	Kühlschlange	Cooling spiral	Serpentin	-	0522 000 014
250	Saugflanschunterteil	Inlet flange, lower housing	Flasque d'aspiration, partie inf.	0246 101 999	0246 101 999
251	Ventilteller	Valve plate	Clapet d'aspiration	0711 101 429	0711 101 429
252	Ventilführung	Guide for valve plate	Guide de clapet d'aspiration	0711 101 428	0711 101 428
253	O-Ring	O-ring	Joint torique	0486 000 559	0486 000 559
254	Druckfeder	Compression spring	Ressort de pression	0435 103 976	0435 103 976
255	O-Ring	O-ring	Joint torique	0486 000 526	0486 000 526
260	Saugflansch	Inlet flange	Flasque d'aspiration	0246 000 541	0246 000 541
261	Sieb	Screen	Tamis	0534 000 018	0534 000 018
265	Sechskantschraube	Hexagon head screw	Vis à tête hexagonale	0410 000 060	0410 000 060
266	Federring	Lock washer	Rondelle ressort	0432 000 010	0432 000 010
270	Verschlußschraube	Plug	Bouchon	0415 000 002	0415 000 002
271	Dichtring	Sealing ring	Joint	0484 000 029	0484 000 029
275	Ölrücklaufventil	Oil return valve	Clapet de retour d'huile	0916 000 048	0916 000 048
276	Dichtring	Sealing ring	Joint	0484 000 034	0484 000 034
284	Schwenkverschraubung	Hydraulic fitting	Raccord	0441 000 152	0441 000 152
285	Hohlschraube	Hollow-core screw	Vis creuse	0416 000 117	0416 000 117
286	Ringanschlußstück	Connecting piece	Pièce de connexion	0947 000 707	0947 000 707
288	Dichtring	Sealing ring	Joint	0484 000 017	0484 000 017
290	Leitungsrohr	Tube	Tube	0327 000 199	0327 000 198
291	Gerade Einschraubverschraubung	Straight stud fitting	Union mâle	0441 114 738	0441 000 003
293	Leitungsrohr	Tube	Tube	0327 101 828	0327 101 828
300	Motorflansch	Motor flange	Flasque de moteur	0247 107 490	0247 107 490
301	Zylinderschaube	Cylinder cover screw	Vis de flasque	0413 000 425	0413 000 425
302	Federring	Lock washer	Rondelle ressort	0432 000 013	0432 000 013
310	Kupplung	Coupling	Accouplement	0510 000 014	0510 000 015
313.1	Kupplungsnabe, motorseitig	Coupler hub, motor sided	Moyeu d'accouplement, côté moteur	0512 000 182	0512 000 184
312.2	Kupplungshülse	Coupling sleeve	Douille d'accouplement	0512 000 004	0512 000 004
311.3	Kupplungsnabe, rotorseitig	Coupler hub, rotor sided	Moyeu d'accouplement, côté rotor	0512 000 180	0512 000 180
321	Axiallüfter	Axial fan	Ventilateur axial	0524 108 653	0524 108 653
326	Zacken-Ring	Sprocket ring	Rondelle dent	0432 000 380	0432 000 380
340	Lüfterhaube	Fan hood	Capot de ventilateur	0713 000 108	0713 000 108
341	Blechschraube	Tin screw	Vis	0418 101 688	0418 101 688
342	Dübel	Dowel	Douille	0710 000 200	0710 000 200
345	Schutzgitter	Protection grid	Garde-corps	0713 108 129	0713 108 129
391	Ringschraube	Lifting eye bolt	Anneau de levage	0416 000 007	0416 000 007
400	Elektromotor (50 Hz)	Motor (50 Hz)	Moteur électrique (50 Hz)	0616 109 939	0620 101 754
400*)	Elektromotor (60 Hz)	Motor (60 Hz)	Moteur électrique (60 Hz)	0620 000 321	0621 000 121
400.1	Klemmbrett (50 Hz)	Terminal Board (50 Hz)	Bornier (50 Hz)	0648 103 778	0684 103 778
400.1*)	Klemmbrett (60 Hz)	Terminal Board (60 Hz)	Bornier (60 Hz)	0648 103 778	0648 103 778
400.2	Klemmkasten (50 Hz)	Terminalbox (50 Hz)	Boîte à bornes (50 Hz)	0648 000 461	0648 000 461
400.2*)	Klemmkasten (60 Hz)	Terminalbox (60 Hz)	Boîte à bornes (60 Hz)	0648 000 461	0648 000 461
400.3	Lüfterflügel (50 Hz)	Fan blade (50 Hz)	Palette de ventilateur (50 Hz)	0648 000 302	0648 000 333
400.3*)	Lüfterflügel (60 Hz)	Fan blade (60 Hz)	Palette de ventilateur (60 Hz)	0648 000 333	0648 000 333
400.4	Elektromotorhaube (50 Hz)	Motor fan cover (50 Hz)	Capot ventilateur moteur (50 Hz)	0648 000 017	0648 103 875
400.4*)	Elektromotorhaube (60 Hz)	Motor fan cover (60 Hz)	Capot ventilateur moteur (60 Hz)	0648 000 018	0648 000 018
401	Sechskantschraube	Hexagon head screw	Vis à tête hexagonale	0410 000 120	0410 000 120
402	Federring	Lock washer	Rondelle ressort	0432 000 013	0432 000 013
411	Sechskantschraube	Hexagon head screw	Vis à tête hexagonale	0410 000 125	0410 000 125
412	Fuß	Foot	Pied	0391 107 504	0391 107 504
415	Sechskantschraube	Hexagon head screw	Vis à tête hexagonale	0410 000 120	0410 000 120
421	Schwingmetallpuffer	Rubber foot	Support élastique	0561 000 030	0561 000 030
422	Schwingmetallpuffer	Rubber foot	Support élastique	0561 000 001	0561 000 001
423	Federring	Lock washer	Rondelle ressort	0432 000 013	0432 000 013
425	Scheibe	Washer	Rondelle	0431 000 131	0431 000 131
430	Typenschild	Nameplate	Plaque signalétique	0565 102 562	0565 102 562
431	Drehrichtungspfeil	Arrow label	Flèche sens de rotation	0565 000 003	0565 000 003
470	Schwenkverschraubung	Hydraulic fitting	Raccord d'angle	0441 000 123	0441 000 123
471	Leitungsrohr	Tube	Tube	0327 000 200	0327 000 200
472	Rückschlagsventil	Nonreturn valve	Clapet de non-retour	0541 000 050	0541 000 050
473	Muffe	Bushing	Raccord à vis	0456 000 250	0456 000 250
474	Schalldämpfer	Silencer	Silencieux	0562 000 004	0562 000 004
475	Hohlschraube	Hollow-core screw	Vis creuse	0415 000 105	0415 000 105

*) = bei 220/ 380 V

*) = at 220/ 380 V

*) = à 220/ 380 V





AUDION ELEKTRO®



EC-DECLARATION OF CONFORMITY

AUDION ELEKTRO B.V., located at the Hogeweyselaan 235 in
Weesp, The Netherlands

herewith declares that the

AUDIONVAC FLOOR MODEL

Type:

VM 203 ; VM 303 ; VMS 173 ; VMS 193 ; VMS 223 ; VMS 333

- is in conformity with the provisions of the following EEC directives:
2014/35/EU Low Voltage Directive ; 2006/42/EC Machine Directive ;
2014/30/EU EMC-Directive ; RoHS 2 2011/65/EU Directive ;

- and that the following (parts/clauses of) harmonized standards have been
applied:

EN-ISO 12100; EN-ISO 13732-1; EN-ISO 13857; EN-IEC 60204-1; EN-IEC
61558-1; EN-IEC 61558-2-6; NEN 5509;

Weesp. 16-3-2017

E.Tangelder
Director

PGR160B

AUDION ELEKTRO

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