



AUDION ELEKTRO®

Audionvac Digital

VMS 43-53-93-113-133-133L



MANUAL

VMS 43 - 133L ENG. Rev.11



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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

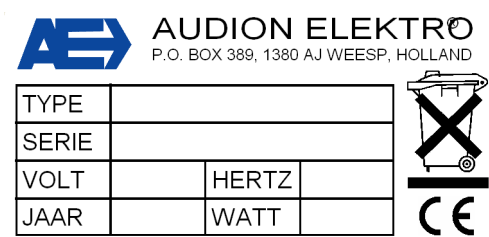












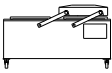







Fig. 1.1: identification plate

The Audionvac is packed in a box. 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

Whenever the model is a table model place it on a firm and stable table. Place the model on the ground in a well ventilated and luminated space when you're dealing with a floor model. Make sure the Audionvac isn't exposed to sunshine, extreme temperatures, humidity, dust or sand. The Audionvac mustn't be exposed to mechanical shocks and vibrations. Always leave room free around the machine.



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

2.2 Checking the oil level

Make sure the Audionvac is in the OFF position. If necessary switch the main switch to the OFF position (see fig. 3.1) before one can start with the process of connecting the power supply. In order to be able to check the oil level the machine must be at a flat underground, well leveled. The oil level glass (figure 2.2b) has been mounted in one of the sides of the machine, or in the backside of the machine. The oil level must lie between the signs: "MIN" and "MAX". For the machines the rule is that the oil reservoir must be filled until **80%**. An exception is the VMS43 from which the oil reservoir must be filled only until **60%**. A little less oil is better than a bit more. In practice this means that the oil in the oil reservoir mustn't 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

To replace the oil or to fill the oil reservoir you do the following:

Replacing the oil

- Turn off the machine.
- Loosen the oil drain plug (figure 2.2c) and drain the oil.
- In case the oil drain plug is behind de back plate, remove the back plate.
- When there is no oil drain plug present, the oil level glass functions as drain plug (figure 2.2b).
- Mount the oil drain plug again.
- For further instructions see: "filling oil reservoir"

Filling oil reservoir

- Turn off the machine.
- Unscrew oil filling plug (figure 2.2a) above the oil level glass.
- In case the oil-filling plug is behind de 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).
- Screw the oil-filling plug back on.
- Mount the back plate again.

Machine with corresponding oil:

VMS43

Shell Vitrea 22
Aral Motanol GM 22
BP Energol CS 22
Texaco Regal R+O 22

VMS53/ VMS93/ VMS113/
VMS123/ VMS133/ VMS133L/
VMS153/ VMS153V/ VMS163/
VMS163B/ VMS173

Shell Vitrea 32
Aral Motanol GM 32
BP Energol CS 32
Texaco Regal R+O 32

VMS193/ VMS223/ VMS233/
VMS333/ VMS253/ VMS263/
VMS283/ VMS503/ VMS883/
VM203/ VM303/ VM243/ VM273

Shell Vitrea 100
Aral Motanol GM 100
BP Energol CS 100

Hint: It is easier to drain the oil when it is warm. When possible keep the machine running for a few minutes before the draining of the oil. The oil will become warm then.

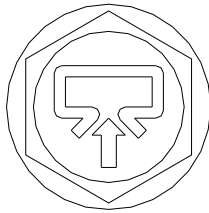


Figure 2.2a: oil filling plug

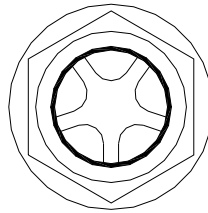


Figure 2.2b: oil level glass and draining plug (only VMS 43/53)

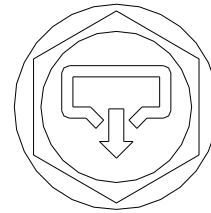
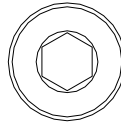
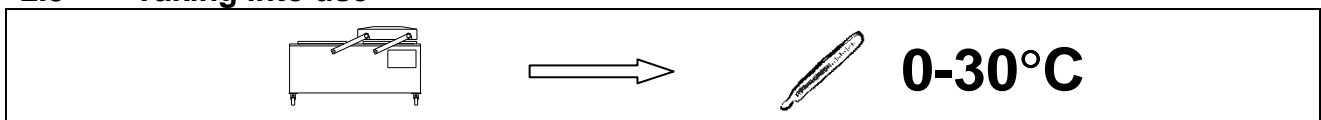


Figure 2.2c: oil draining plug (VMS 113/133)



2.3 Taking into use



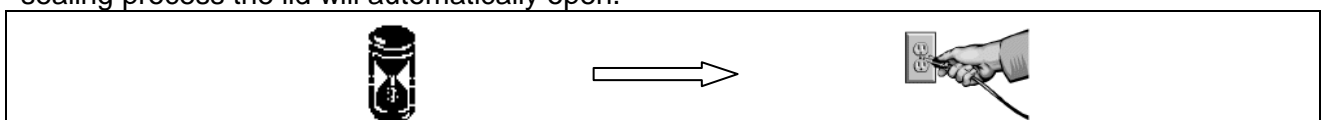
The surrounding temperature must lie between 0-30 degrees Celsius

Put the plug in a socket which has an earth connection and is fused max. 16 Amp - (230V). See electrical diagrams and index sheets, in case of other voltages.

After the Audionvac has been connected to the mains voltage the machine can be taken into use. Turn on the main switch. Check the direction which the pump is turning when the machine is connected to a three phase power source.

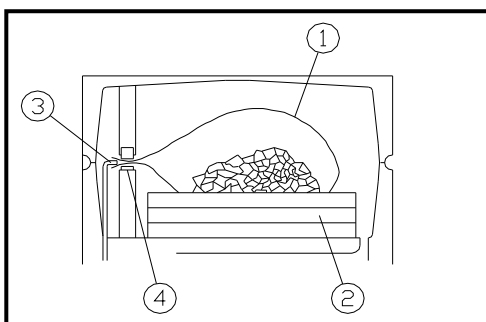
With the insert plates the product can be placed on right level (see figure 2.3).

The insert plates reduce the volume of the vacuum chamber; which means a shorter vacuuming time. Now the proper amount of insert plates is in the machine you can put the bag in the chamber. Put the opening of the bag over the seal bar (see figure 2.3 for an explanation of the proper way). Adjust the vacuuming and sealing time. (see chapter 3). Close the lid. After the vacuuming and sealing process the lid will automatically open.



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

Check the vacuum and the produced seal. Adjust the vacuuming time into a longer period when the vacuum is too low; and vice versa. When the seal is not strong enough adjust the sealing time into a longer period. When the seal looks melted or when the bag tears where the seal is the sealing time has been too long. The right sealing time has to be found by trial and error. The material and the thickness of the material determine the sealing time.



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

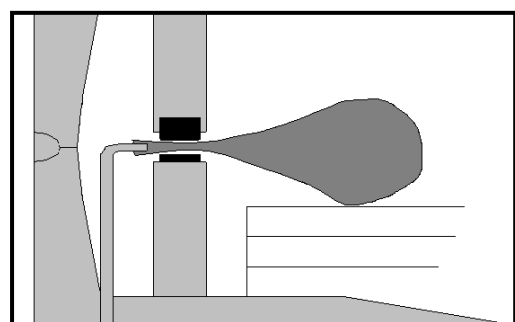


Figure 2.3: drawing and details of bag in chamber

3 Programming

The digital control is implemented with a function program that can be set with different function values per cycle (to be able to pack different products). A program cycle is the complete program of set functions (vacuum and seal) that the machine runs through to package a product.

The control panel is implemented standard with a conditioning program for the regular maintenance of the pump and two STOP keys for complete function interruption or for only active function interruption. There are also a number of built-in service programs. Contact the supplier or Audion Elektro B.V. for more information about these functions.

The value of the functions can be set for a certain time period.

The vacuum function can be set to whole seconds with a maximum of 99 seconds.

The seal function can be set with an interval of 0.1 seconds and a maximum of 6.0 seconds.

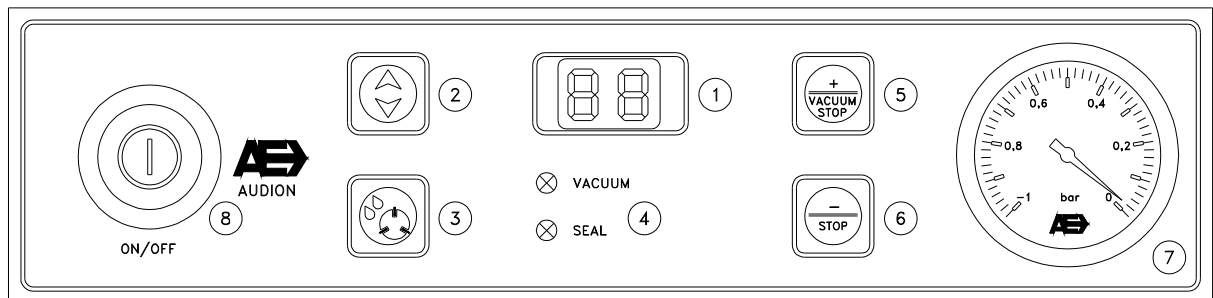
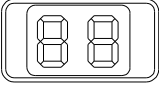




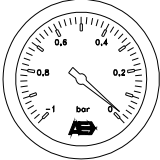



Figure 3.1: Control panel

	<p>DISPLAY (1): THIS DISPLAY SHOWS THE STATUS OF THE ACTIVE FUNCTION DURING THE RUN OF THE PROGRAM CYCLE OR THE SET VALUE OF THE SELECTED FUNCTION WHEN MACHINE IS NOT RUNNING.</p>
	<p>Function selection key (2): Select function (vacuum or seal) for viewing or changing function values. The function is selected if the function light is on in front of the function description under the display.</p>
	<p>Conditioning programmer key (3): Start the conditioning program for pump (duration 15 minutes) see § 4.4.</p>
<p>VACUUM SEAL</p>	<p>Process display (4): This display shows what process is active at the moment.</p>

	<p>FUNCTION DURING CYCLE (5): INTERRUPTION OF THE VACUUM FUNCTION DURING THE PROGRAM CYCLE. THE CYCLE IMMEDIATELY CONTINUES WITH THE NEXT FUNCTION.</p> <p>GENERAL FUNCTION: INCREMENT THE VALUE OF THE SELECTED FUNCTION.</p>
	<p>Function during cycle (6): Terminates the program cycle completely. The cycle immediately switches into the ventilation function.</p> <p>General function: Decrement the value of the selected function.</p>
	<p>Vacuum meter (7): The vacuum meter shows the percentage of vacuum inside the chamber. The maximum level of vacuum is about 99.95 percent. The vacuum meter will show '-1' The minimum level of vacuum will be when the pressure outside the chamber is the same as inside the chamber. The vacuum meter will show '0'</p>
	<p>ON/OFF switch (8):</p>

3.1 Description of the program cycle for digital time control

- 1) Functions (vacuum and sealing) are set with the correct values (see § 3.2 for settings).
- 2) Close the lid.
- 3) Vacuum function:

The machine starts to vacuum the chamber.
The light in front of **[VACUUM]** goes on.
Display: decrementing time per second starting at the time set (max. 99 sec.). Vacuum meter starts increasing to the left.
- 4) Sealing function:

seal

Once the vacuum function is finished, the sealing function starts to the vacuum bag(s). The light in front of **[SEAL]** goes on.
Display: decrementing time per 0.1 second starting at the time set (max. 6.0 sec.). The reading on the vacuum meter stays the same.
- 5) Ventilating function:

After ending the seal function the ventilating function starts ventilating the chamber to 1 atmosphere/ATO and the lid opens. There are no longer any lights on in front of the functions. Display: lines moving up and down until the lid is opened. The vacuum meter runs back to the right to zero and the lid opens automatically.
- 6) The product is packed and ready to remove.

3.2 Set / change function values

The following steps must be followed to change the function values for vacuum and/or seal:

- 1) Press the FUNCTION SELECT Key [**▲ ▼**] to select the required function. The function light will light up when the function is selected.
- 2) Press the [**+ / STOP VACUUM**] or [**- / STOP**] keys for incrementing or decrementing the function values respectively. It takes 0.5 seconds before the value begins to change.
- 3) After changing the value(s) the machine must run through the cycle once (see previous page) to record the values.
- 4) **Vacuum function**
The vacuum function value can be incremented or decremented per second with a maximum of 99 seconds and a minimum of 2 seconds.
- 5) If while changing the vacuum function setting the [**+ / STOP VACUUM**] or [**- / STOP**] key is held down then the first 5 seconds will be incremented or decremented per second. Then intervals of 10 seconds will appear. If the key is released then the settings can be changed again per second.
- 6) **Sealing function**
The seal function setting can be increased or decreased with a maximum of 6.0 sec. and a minimum of 0.5 sec.
- 7) If while changing the vacuum function setting the [**+ / STOP VACUUM**] or [**- / STOP**] key is held down then the first 0.5 seconds will be incremented or decremented per 0.1 second. Then intervals of 1.0 second will appear. If the key is released then the settings can be changed again per 0.1 second
- 8) **Service programs control panel**
The control panel is also equipped with a number of service programs that can be useful during regular maintenance or repairs. The conditioning program for the pump is the most used service program (see explanation on page 17).

Contact the supplier or Audion Elektro B.V. for more information about the use of other service programs.

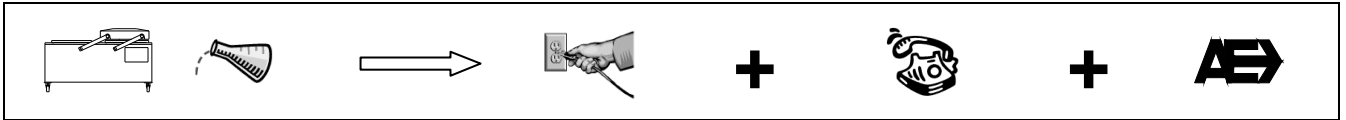
After switching to the user mode the display could read “oil”. This means that the operating hours counter is turned on and the set number of operating hours has elapsed. The hour counter is turned off by default but the client supplier can use it as a reminder for regular maintenance activities.

When “oil” is displayed the machine can be still be used as usual but it is advisable to either turn off the hour counter or to reset it.

Contact the supplier or Audion Elektro B.V. for more information about setting or turning off the operating hours counter.

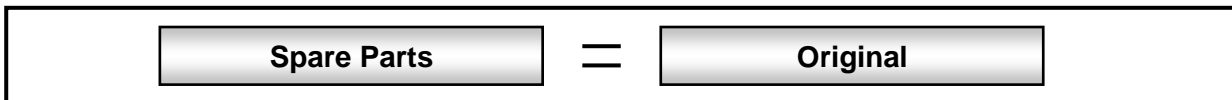
4 Maintenance

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 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.

To keep the machine in optimal condition there is a fully automatic conditioning program. This program makes sure the oil doesn't get contaminated with moisture or other watery liquids. Also corrosion as a result of too much water is being prevented by this way. It is recommended to condition the machine for at least one time a week.



Only use original parts recommended by Audion Elektro BV.



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 “§ 4.3” 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 § 2.2)
Half year maintenance	
Oil reservoir and oil filter	Change the oil and, when it is there, the oil filter (see § 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
Oil exhaust filter in the pump	Check the condition. Replace if necessary. Warning: If oil spray is at any time visible, replace the oil 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.
Oil filter in the vacuum pump	If these have not been replaced, they should be now.
Electrical wiring	Let you dealer check these and repair if necessary

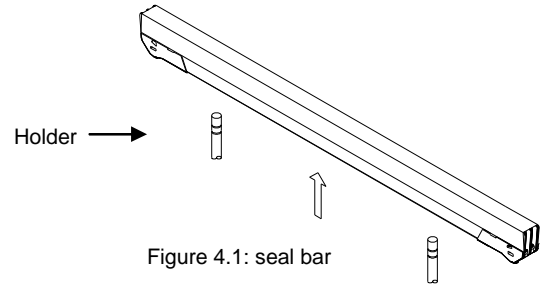
4.2 Maintenance of the seal bar

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

4.2.1 Removing the seal bar

- Switch off the machine.
- Pull the seal bar out of the machine. (see figure 4.1)



4.2.2 Replacing the PTFE

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

- Remove the seal bar (as in § 4.2.1) and carefully remove the PTFE.
- Check the seal wire. When it is damaged directly replace it (see § 4.2.3)
- 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.

4.2.3 Replacing the seal wire

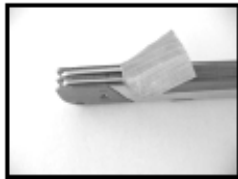


Figure 4.1.1

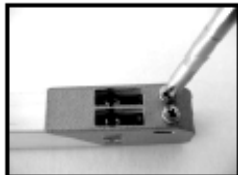


Figure 4.1.2



Figure 4.1.3

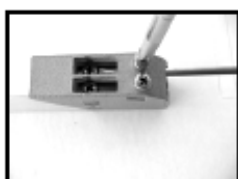


Figure 4.1.4



Figure 4.1.5



Figure 4.1.6

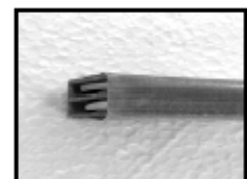


Figure 4.1.7

- Remove the seal bar and PTFE (fig. 4.1.1).
- Loosen the screws at both sides of the seal bar (fig. 4.1.2) and remove the seal wire(s).
- Remove the old PTFE and clean the seal bar (fig. 4.1.3).
- Cut the new seal wire with an extra 15 cm length.
- Place the seal wire in the clamp on the sealing bar and tighten the screws (fig. 4.1.4).
- Put the sealing bar in a bench vice, with the sealing wire facing down and tighten the sealing wire (fig. 4.1.5).
- 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. 4.1.6).
- Cut a piece of PTFE tape with a length of the seal bar + 5 cm.
- Place the new PTFE over the seal bar (fig. 4.1.7).
- Put the seal bar back into the machine.

4.3 Maintenance of the vacuum pump

In case of irregular or intensive operating you will have to “condition” the machine. When a vacuum pump doesn't reach the ideal temperature there is a chance the vacuumed air contains water which leads to condensation inside the pump. Water in the pump can lead to corrosion, which can be very harmful for then pump. In case of intensive use there is a chance of too much humidity in the pump too.

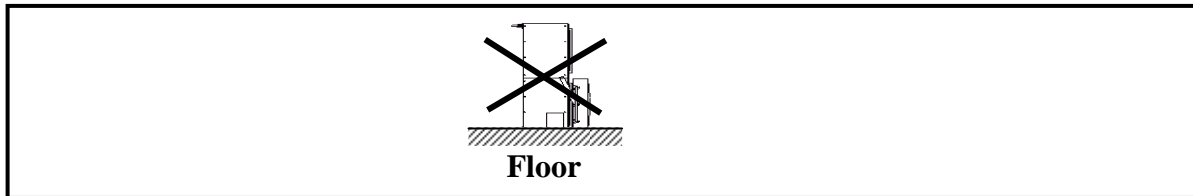


Conditioning program:

The program lasts 15 minutes and it is advisable to run it at least once a week. Turn on the machine, press the key **[conditioning program]**, and close the lid. The program runs automatically. During the program the display will display moving lines.

The program can be interrupted at any time using the **[STOP]** key. It is however important for the sake of good maintenance that the program completes a full 15 minute cycle and therefore advisable only to interrupt the cycle for something urgent.

It is also advisable to run the program before using the machine for the first time, after the machine has been stationary for a lengthy period of time, and especially prior to changing oil.



Never turn over the machine. This can damage the pump.

4.4 Silicone rubber of the pressing bar

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 pressing bar.
- Cut the new rubber as long as the old rubber.
- Push the new rubber into the pressure.

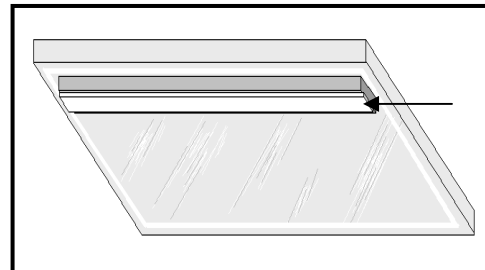
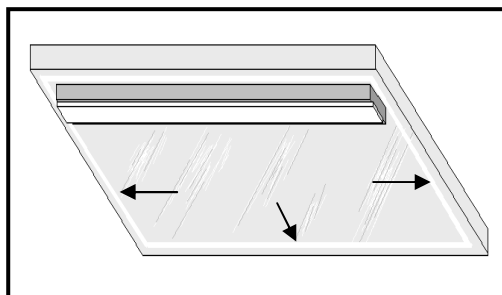


Figure 4.2: Silicone rubber of the pressing bar

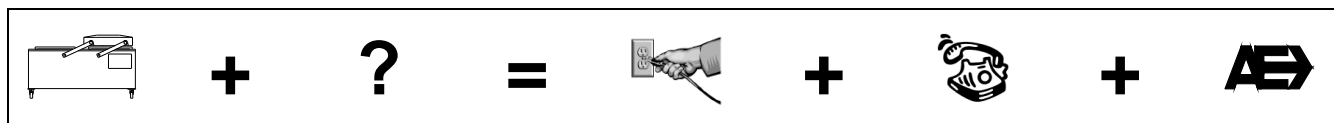
4.5 Lid rubber

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.



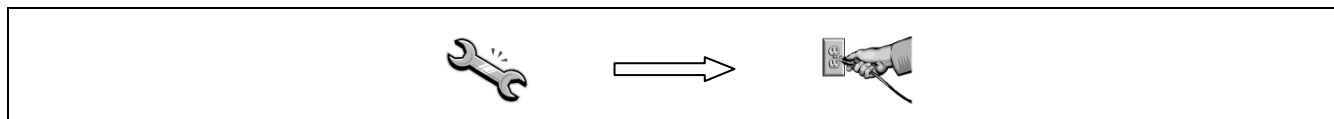
- Pull the rubber out of the lid.
- Cut the new rubber as long as the old rubber. Cutting straight prevents leaking.
- Push the new rubber into the lid (start in the middle of the backside).

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 VMS 43

Description	Size / Specification	Part numbers	Quantity per machine
PTFE tape	0.33 m	160-1416621	-
Seal wire (DS 3.5mm width)	0.43 m	160-1416111	-
Seal wire (CS 1.1mm width)	0.43 m	160-1416121	-
Seal wire (8mm width)	0.43 m	160-1416136	-
Silicone rubber	0.28 m	160-1431311	-
Lid rubber (lip 5.5mm)	1.40 m	160-1431326	-
Seal bar (double seal)	net seal length 270mm	160-1411152	1
Seal bar (cut-off seal)	net seal length 270mm	160-1411153	1
Seal bar (8mm seal)	net seal length 270mm	160-1411154	1
Seal cylinder		160-1397116	2
Membrane for seal cylinder	80mm dia.	160-2042516	2
Gas spring	370N	160-1921311	1
Micro switch		160-2011576	1
Valve block (seal & de-vac)		160-1391150	1
PCB	digital 1 program	160-1341147	1
Panel complete (consists of parts with *)		160-2011317	1
Panel holder + panel sheet *		160-2011327	1
Main switch *		160-1331117	1
Vacuum meter *	40mm dia.	160-1921216	1
Panel opening tool		160-1441226	2
Main fuse	10A	160-1343125	2
Exhaust filter		160-2050271	1

		110V-1P-60Hz	230V-1P-50Hz	
Control transformer		160-1334116	160-1334115	1
Seal transformer	10V 500VA	160-1334127	160-1334128	1
Vacuum pump	4m3/h 0.1KW	160-1541246	160-1541241	1

Seal bar configuration



Spare parts list for VMS 53

Description	Size / Specification	Part numbers	Quantity per machine
PTFE tape	0.33 m	160-1416621	-
Seal wire (DS 3.5mm width)	0.43 m	160-1416111	-
Seal wire (CS 1.1mm width)	0.43 m	160-1416121	-
Seal wire (8mm width)	0.43 m	160-1416136	-
Silicone rubber	0.28 m	160-1431311	-
Lid rubber (lip 5.5mm)	1.40 m	160-1431326	-
Seal bar (double seal)	net seal length 270mm	160-1411152	1
Seal bar (cut-off seal)	net seal length 270mm	160-1411153	1
Seal bar (8mm seal)	net seal length 270mm	160-1411154	1
Seal cylinder		160-1397116	2
Membrane for seal cylinder	80mm dia.	160-2042516	2
Gas spring	370N	160-1921311	1
Micro switch		160-2011576	1
Valve block (seal & de-vac)		160-1391138	1
PCB	digital 1 program	160-1341147	1
Panel complete (consists of parts with *)		160-2011317	1
Panel holder + panel sheet *		160-2011327	1
Main switch *		160-1331117	1
Vacuum meter *	40mm dia.	160-1921216	1
Panel opening tool		160-1441226	2
Exhaust filter		160-2050273	1

		110V-1P-60Hz	230V-1P-50Hz	
Main fuse	15A	160-1343145	-	2
	10A	-	160-1343125	2
Control transformer		160-1334116	160-1334115	1
Seal transformer	10V 500VA	160-1334127	160-1334128	1
Vacuum pump	8m3/h 0.45KW	160-1542421	-	1
	8m3/h 0.35KW	-	160-1542411	1

Seal bar configuration



Spare parts list for VMS 93

Description	Size / Specification	Part numbers	Quantity per machine
PTFE tape	0.40 m	160-1416621	-
Seal wire (DS 3.5mm width)	0.50 m	160-1416111	-
Seal wire (CS 1.1mm width)	0.50 m	160-1416121	-
Seal wire (8mm width)	0.50 m	160-1416136	-
Silicone rubber	0.35 m	160-1431311	-
Lid rubber (lip 5.5mm)	1.75 m	160-1431326	-
Seal bar (double seal)	net seal length 340mm	160-1411227	1
Seal bar (cut-off seal)	net seal length 340mm	160-1411237	1
Seal bar (8mm seal)	net seal length 340mm	160-1411726	1
Seal cylinder		160-1397119	2
Membrane for seal cylinder	80mm dia.	160-2042516	2
Gas spring	370N	160-1921311	2
Micro switch		160-2011576	1
Valve block (seal & de-vac)		160-1391146	1
PCB	digital 1 program	160-1341147	1
Panel complete (consists of parts with *)		160-2011317	1
Panel holder + panel sheet *		160-2011327	1
Main switch *		160-1331117	1
Vacuum meter *	40mm dia.	160-1921216	1
Panel opening tool		160-1441226	2
Exhaust filter		160-2050273	1

		110V-1P-60Hz	230V-1P-50Hz	
Main fuse	15A	160-1343145	-	2
	10A	-	160-1343125	2
Control transformer		160-1334116	160-1334115	1
Seal transformer	10V 500VA	160-1334127	160-1334128	1
Vacuum pump	8m3/h 0.35kw	160-1542421	-	1
	8m3/h 0.45kw	-	160-1542411	1

Seal bar configuration



Spare parts list for VMS 113

Description	Size / Specification	Part numbers	Quantity per machine
PTFE tape	0.40 m	160-1416621	-
Seal wire (DS 3.5mm width)	0.50 m	160-1416111	-
Seal wire (CS 1.1mm width)	0.50 m	160-1416121	-
Seal wire (8mm width)	0.50 m	160-1416136	-
Silicone rubber	0.35 m	160-1431311	-
Lid rubber (lip 5.5mm)	1.75 m	160-1431326	-
Seal bar (double seal)	net seal length 340mm	160-1411227	1
Seal bar (cut-off seal)	net seal length 340mm	160-1411237	1
Seal bar (8mm seal)	net seal length 340mm	160-1411726	1
Seal cylinder		160-1397119	2
Membrane for seal cylinder	80mm dia.	160-2042516	2
Gas spring	370N	160-1921311	2
Micro switch		160-2011576	1
Valve block (seal & de-vac)		160-1391137	1
PCB	digital 1 program	160-1341147	1
Panel complete (consists of parts with *)		160-2011317	1
Panel holder + panel sheet *		160-2011327	1
Main switch *		160-1331117	1
Vacuum meter *	40mm dia.	160-1921216	1
Panel opening tool		160-1441226	2
Exhaust filter		160-2050274	1

		110V-1P-60Hz	230V-1P-50Hz	
Main fuse	15A	160-1343145	-	2
	10A	-	160-1343125	2
Control transformer		160-1334116	160-1334115	1
Seal transformer	10V 500VA	160-1334127	160-1334128	1
Vacuum pump	16m3/h 0.55kw	160-1542716	160-1542711	1

Seal bar configuration



Spare parts list for VMS 133

Description	Size / Specification	Part numbers	Quantity per machine
PTFE tape	0.47 m	160-1416621	-
Seal wire (DS 3.5mm width)	0.57 m	160-1416111	-
Seal wire (CS 1.1mm width)	0.57 m	160-1416121	-
Seal wire (8mm width)	0.57 m	160-1416136	-
Silicone rubber	0.41 m	160-1431311	-
Lid rubber (lip 5.5mm)	1.90 m	160-1431326	-
Seal bar (double seal)	net seal length 410mm	160-1411321	1
Seal bar (cut-off seal)	net seal length 410mm	160-1411326	1
Seal bar (double seal)	net seal length 410mm	160-1411731	1
Seal cylinder		160-1397121	2
Membrane for seal cylinder	80mm dia.	160-2042516	2
Gas spring	385N	160-1921312	2
Micro switch		160-2011576	1
Valve block (seal & de-vac)		160-1391148	1
PCB	digital 1 program	160-1341147	1
Panel complete (consists of parts with *)		160-2011317	1
Panel holder + panel sheet *		160-2011327	1
Main switch *		160-1331117	1
Vacuum meter *	40mm dia.	160-1921216	1
Panel opening tool		160-1441226	2
Exhaust filter		160-2050274	1

		110V-1P-60Hz	230V-1P-50Hz	
Main fuse	15A	160-1343145	-	2
	10A	-	160-1343125	2
Control transformer		160-1334116	160-1334115	1
Seal transformer	15V 700VA	160-1334126	160-1334130	1
Vacuum pump	16m3/h 0.55kw	160-1542716	160-1542711	1

Seal bar configuration



Spare parts list for VMS 133 L

Description	Size / Specification	Part numbers	Quantity per machine
Teflon tape	0.47 m	160-1416621	-
Seal wire (DS 3.5mm width)	0.57 m	160-1416111	-
Seal wire (CS 1.1mm width)	0.57 m	160-1416121	-
Seal wire (8mm width)	0.57 m	160-1416136	-
Silicone rubber	0.41 m	160-1431311	-
Lid rubber (lip 5.5mm)	2.10 m	160-1431326	-
Seal bar (double seal)	net seal length 410mm	160-1411321	1 / (2)
Seal bar (cut-off seal)	net seal length 410mm	160-1411326	1 / (2)
Seal bar (double seal)	net seal length 410mm	160-1411731	1 / (2)
Seal cylinder		160-1397121	2 / (4)
Membrane for seal cylinder	80mm dia.	160-2042516	2 / (4)
Gas spring	500N	160-1921326	2
Micro switch		160-2011576	1
Valve block (seal & de-vac)		160-1391148	1
PCB	digital 1 program	160-1341147	1
Panel complete (consists of parts with *)		160-2011317	1
Panel holder + panel sheet *		160-2011327	1
Main switch *		160-1331117	1
Vacuum meter *	40mm dia.	160-1921216	1
Panel opening tool		160-1441226	2
Exhaust filter		160-2050274	1

		110V-1P-60Hz	230V-1P-50Hz	
Main fuse	15A	160-1343145	-	2
	10A	-	160-1343125	2
Control transformer		160-1334116	160-1334115	1
Seal transformer	15V 700VA	160-1334126	160-1334130	1 / (2)
Vacuum pump	16m3/h 0.55kw	160-1542716	160-1542711	1

Seal bar configuration



1 seal bar (standard)

2 seal bars (option)

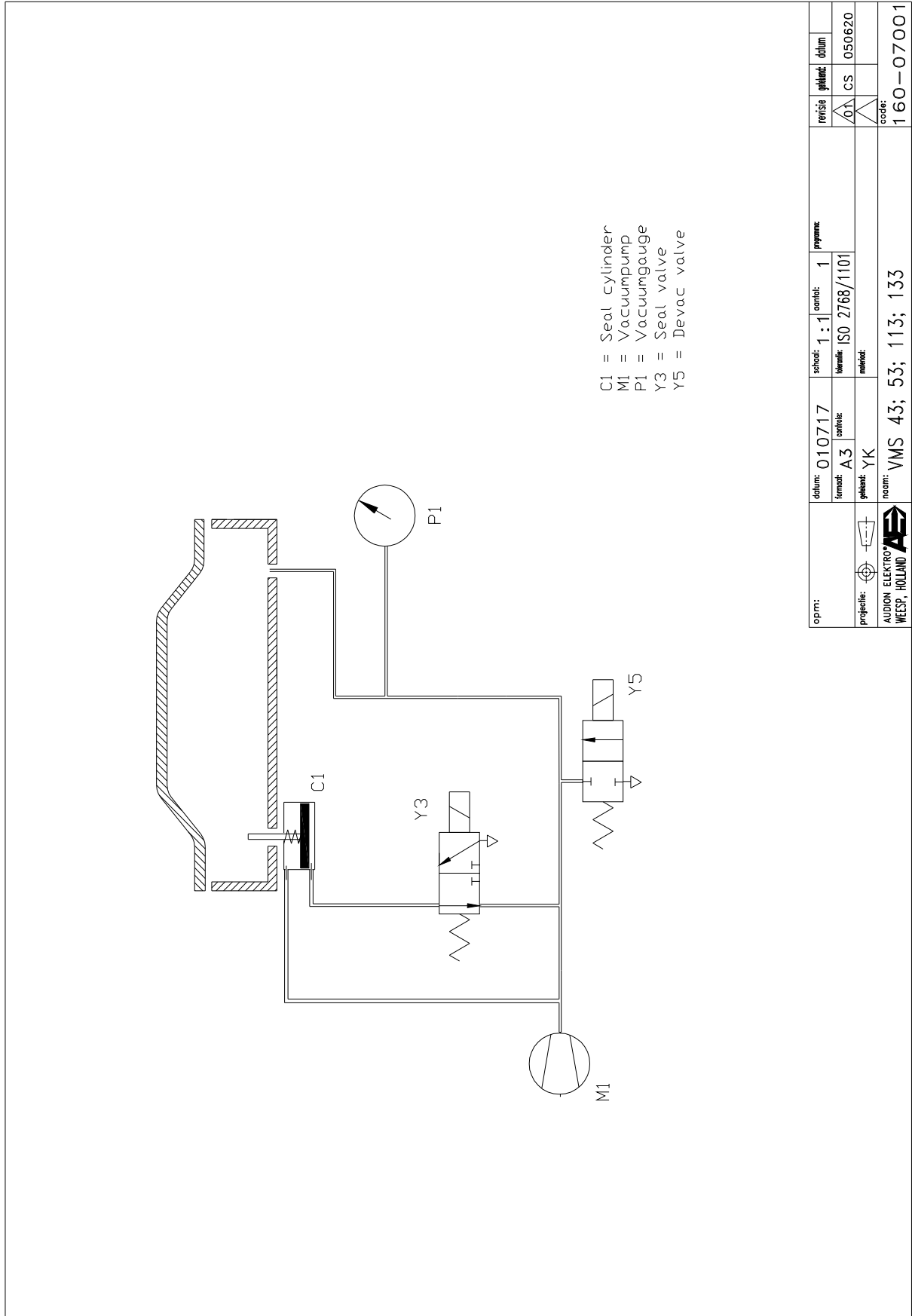
9 Technical specifications

TYPE	VMS 43	VMS 53	VMS 93	VMS 113	VMS 133	VMS 133 L
Machine size (L x W x H) in mm.	330x450x295	330x450x295	450x525x370	450x525x385	490x525x430	490x610x445
Effective chamber size in mm.	270x310	270x310	340x370	340x370	410x370	410x460 410x410
Net. Sealing bar length in mm.	1x 270	1x 270	1x 340	1x 340	1x 410	1x 410 2x 410
Chamber height in mm.						
Absolute chamber size in mm.	280x340x85 (h.l.* 130mm H)	280x340x85 (h.l.* 130mm H)	350x420x150	350x420x150	420x420x180	420x500x180
Tabletop model	X	X	X	X	X	X
Floor model						
Double chamber						
Stainless steel housing	X	X	X	X	X	X
Stainless steel chamber	X	X	X	X	X	X
Flat transparent lid	X	X				
High transparent lid	Optional	Optional	X	X	X	X
Pump capacity in m³/h	4 m³/h	8 m³/h	8 m³/h	16 m³/h	16 m³/h	16 m³/h
Capacity / min.	Ca. 2	Ca. 2	Ca. 2	Ca. 2	Ca. 2	Ca. 2
Voltage, phase and frequency	230V-1- 50Hz.	230V-1- 50Hz.	230V-1- 50Hz.	230V-1- 50Hz.	230V-1- 50Hz.	230V-1- 50Hz.
Power	0.3 - 0.4 kW	0.35-0.45 kW	0.35-0.45 kW	0.55 kW	0.55 kW	0.55 kW
Control	Digital	Digital	Digital	Digital	Digital	Digital
Packed size (L x W x H)						
Number of gas pipes	-	-	-	-	-	-

*h.l. high lid



10 Pneumatic diagram



11 Electrical 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 43, 53, ...)
- voltage (110V, 230V, ...)

Model & voltage

VMS 53 – 93 230V - 1P - 50Hz

Control diagram	001-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	003-J	Seal configuration	Front
Machine serie	VMS 53 / VMS 93	Seal type	Double / Cut-off / 8mm
Power (V~/Hz)	220/230-1-50/60		
Pump capacity	008 m³/h		

Main electrical supply:			
L1	Phase 1		
N	Neutral		
PE	Ground connection		

Overload devices:			
Fuse main entrance	F1, F2	Part number:	160-1343125
		Specification:	10 Amp, Slow
		Size:	5 x 20 mm
Fuse seal transformer	F4	Part number:	160-1343131
		Specification:	4 Amp Slow
		Size:	5 x 20 mm
Fuse control transformer	F6	FT:	130 °C
		Part number:	160-1343122
		Specification:	0.25 Amp Slow (24 Volt)
Fuse PCB	F9	Size:	5 x 20 mm
		Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:			
Pump type	008 m³/h		
Capacity	0.35 kW		

Transformers:			
Seal transformer	Tr1	Part number:	160-1334132
		Input:	220-230 Volt
		Capacity:	500 VA
		Output:	18 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334115
		Input:	220-230 Volt
		Capacity:	30 VA
		Output 1:	24 Volt
		Output 2:	-
		ED:	100 %

Sealbars:			
Used sealbars	R1	Connection:	Stand alone

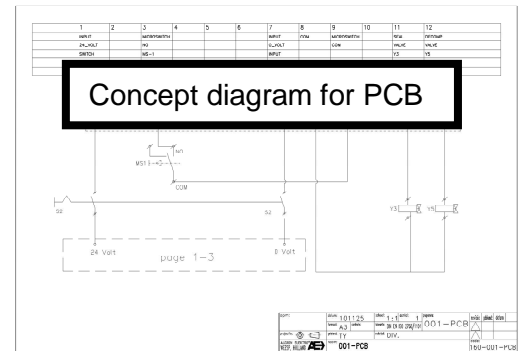
Switches:			
Control switch ON/OFF	S2	Part number:	160-1331117

Microswitches:			
Switch start cycle	MS1	Electrical connections:	2

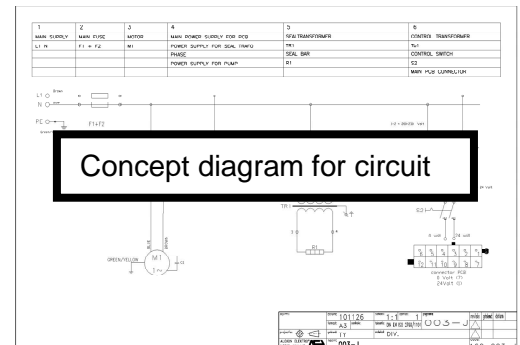
Valves:			
Seal valve	Y3		
Decompression valve	Y9		

Index sheet

Concept diagram for PCB



Concept diagram for circuit





VMS 43 100/120V – 1P – 50/60Hz

Control diagram	001-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	002-J	Sealconfiguration	Front
Machine serie	VMS 43	Seal type	Double / Cut-off / 8mm
Power (V/~/Hz)	100/120-1-50/60		
Pump capacity	004 m³/h		

Main electrical supply:

L1	Phase 1
N	Neutral
PE	Ground connection

Overload devices:

Fuse main entrance	F1, F2	Part number:	160-1343125
		Specification:	10 Amp, Slow
		Size:	5 x 20 mm
Fuse seal transformer	F4	Part number:	160-1343137
		Specification:	6,3 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343127
		Specification:	0,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
Fuse PCB	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	004 m³/h
Capacity	0,10 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334127
		Input:	100-120 Volt
		Capacity:	500 VA
		Output:	10 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334116
		Input:	100-120 Volt
		Capacity:	30 VA
		Output 1:	24 Volt
		Output 2:	-
		ED:	100 %

Sealbars:

Used sealbars	R1	Connection:	Stand alone
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Switches:

Control switch ON/OFF	S2	Part number:	160-1331117
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Microswitches:

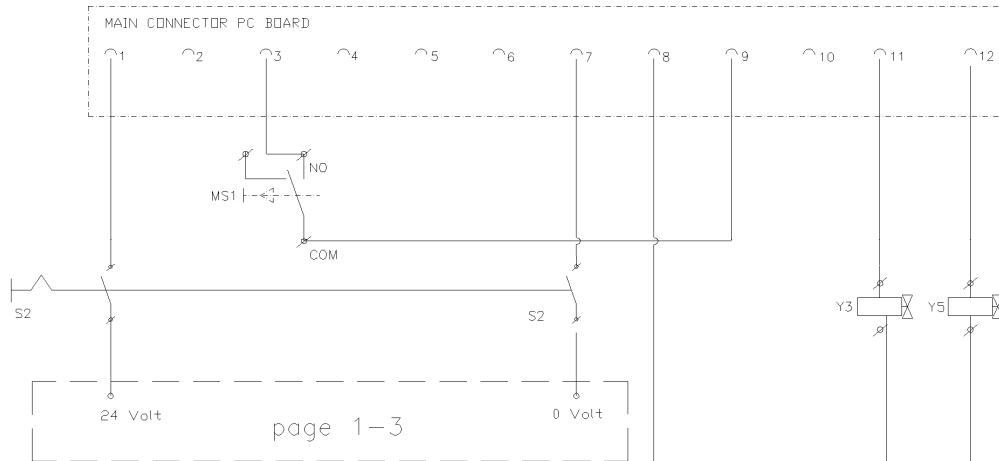
Switch start cycle	MS1	Electrical connections:	2
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Valves:

Seal valve	Y3
Decompression valve	Y5

VMS 43 100/120V – 1P – 50/60Hz

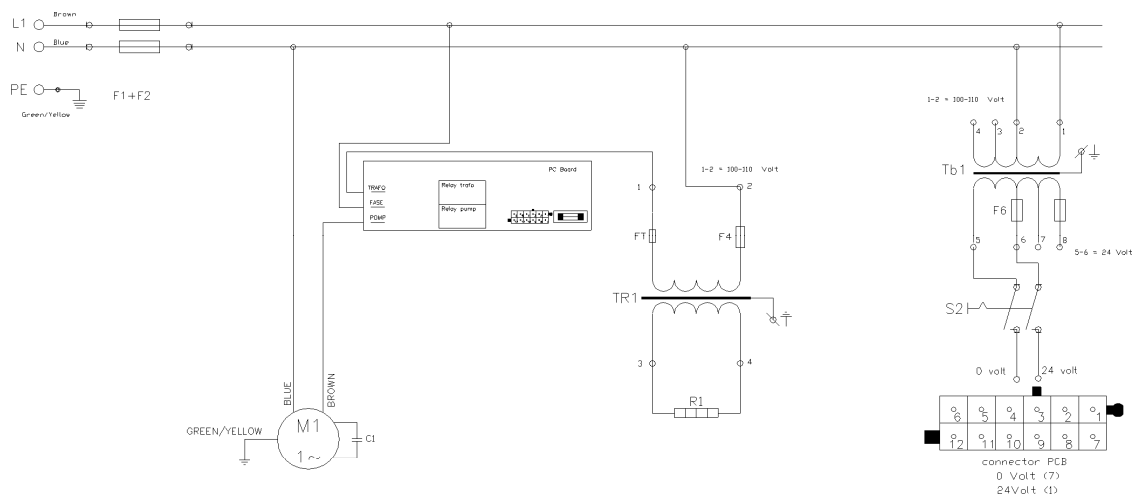
1	2	3	4	5	6	7	8	9	10	11	12
INPUT		MICROSWITCH				INPUT	COM	MICROSWITCH		SEAL	DECOMP
24_VOLT		NO				0_VOLT		COM		VALVE	VALVE
SWITCH		MS-1				INPUT				Y3	Y5
S2						SWITCH					
						S2					



dpm:	delum:	101125	school:	1:1	serial:	1	page:	001-PCB	revise:	gndent:	datum:
project:	form:	A3	code:	TY	ident:	DN EN ISO 2768/1101	code:	160-001-PCB			
project:	gndent:	TY	ident:	DIV.	code:	001-PCB					

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1	2	3	4	5	6
MAIN SUPPLY	MAIN FUSE	MOTOR	MAIN POWER SUPPLY FOR PCB	SEALTRANSFORMER	CONTROL TRANSFORMER
L1 N	F1 + F2	M1	POWER SUPPLY FOR SEAL TRAF0	TR1	Tb1
			PHASE	SEAL BAR	CONTROL SWITCH
			POWER SUPPLY FOR PUMP	R1	S2
					MAIN PCB CONNECTOR



dpm:	delum:	101125	school:	1:1	serial:	1	page:	002-J	revise:	gndent:	datum:
project:	form:	A3	code:	TY	ident:	DN EN ISO 2768/1101	code:	160-002-J			
project:	gndent:	TY	ident:	DIV.	code:	002-J					

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VMS 43 220/230V – 1P – 50/60Hz

Control diagram	001-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	003-J	Sealconfiguration	Front
Machine serie	VMS 43	Seal type	Double / Cut-off / 8mm
Power (V/~ /Hz)	220/230-1-50/60		
Pump capacity	004 m³/h		

Main electrical supply:

L1	Phase 1
N	Neutral
PE	Ground connection

Overload devices:

Fuse main entrance	F1, F2	Part number:	160-1343125
		Specification:	10 Amp, Slow
		Size:	5 x 20 mm
Fuse seal transformer	F4	Part number:	160-1343138
		Specification:	3,15 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343122
		Specification:	0,25 Amp Slow (24 Volt)
		Size:	5 x 20 mm
Fuse PCB	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	004 m³/h
Capacity	0,10 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334128
		Input:	220-230 Volt
		Capacity:	500 VA
		Output:	10 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334115
		Input:	220-230 Volt
		Capacity:	30 VA
		Output 1:	24 Volt
		Output 2:	-
		ED:	100 %

Sealbars:

Used sealbars	R1	Connection:	Stand alone
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Switches:

Control switch ON/OFF	S2	Part number:	160-1331117
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Microswitches:

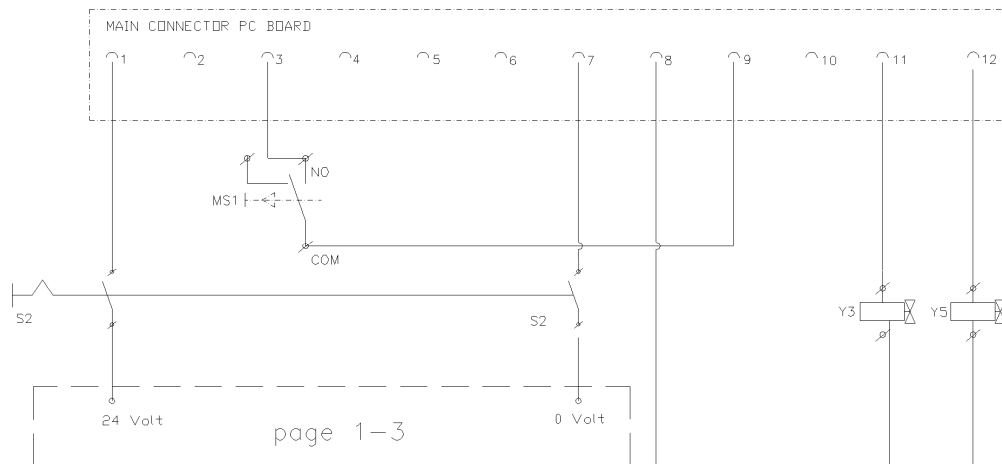
Switch start cycle	MS1	Electrical connections:	2
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Valves:

Seal valve	Y3
Decompression valve	Y5

VMS 43 220/230V – 1P – 50/60Hz

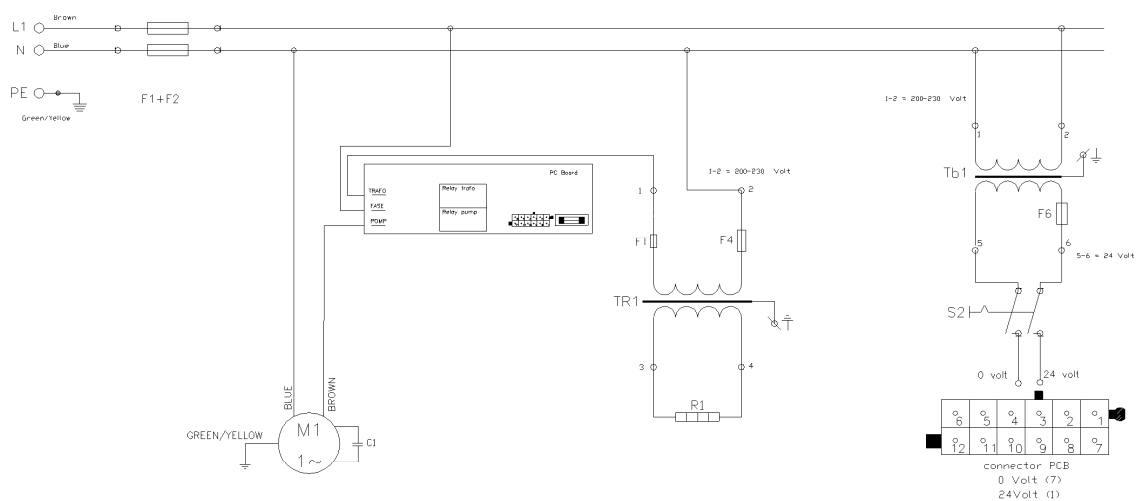
1	2	3	4	5	6	7	8	9	10	11	12
INPUT		MICROSWITCH				INPUT	COM	MICROSWITCH		SEAL	DECOMP
24_VOLT		NO				0_VOLT		COM		VALVE	VALVE
SWITCH		MS-1				INPUT				Y3	Y5
S2						SWITCH					
						S2					



dplm:	101125	school:	1:1	contol:	1	page:	001-PCB	revisie:	gemaakt:	datum:
projectie:	A3	controle:	TY	norme:	DIN EN ISO 2768/1101	code:	160-001-PCB			
projectie:	TY	norme:	DIV.							
AUDION ELEKTRO	WEESEP, HOLLAND	code:	001-PCB							

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1	2	3	4	5	6
MAIN SUPPLY	MAIN FUSE	MOTOR	MAIN POWER SUPPLY FOR PCB	SEALTRANSFORMER	CONTROL TRANSFORMER
L1 N	F1 + F2	M1	POWER SUPPLY FOR SEAL TRAFO	TR1	Tb1
			PHASE	SEAL BAR	CONTROL SWITCH
			POWER SUPPLY FOR PUMP	R1	S2
					MAIN PCB CONNECTOR



dplm:	101126	school:	1:1	contol:	1	page:	003-J	revisie:	gemaakt:	datum:
projectie:	A3	controle:	TY	norme:	DIN EN ISO 2768/1101	code:	160-003-J			
projectie:	TY	norme:	DIV.							
AUDION ELEKTRO	WEESEP, HOLLAND	code:	003-J							

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VMS 53 - 93 100V – 1P – 50/60Hz

Control diagram	001-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	002-J	Sealconfiguration	Front
Machine serie	VMS 53 / VMS 93	Seal type	Double / Cut-off / 8mm
Power (V/~/Hz)	100-1-50/60		
Pump capacity	008 m³/h		

Main electrical supply:

L1	Phase 1
N	Neutral
PE	Ground connection

Overload devices:

Fuse main entrance	F1, F2	Part number:	160-1343145
		Specification:	15 Amp, Slow
		Size:	5 x 20 mm
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:	160-1343127
		Specification:	0,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
Fuse PCB	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	008 m³/h
Capacity	0,35 / 0,45 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334134
		Input:	100 Volt
		Capacity:	500 VA
		Output:	18 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334116
		Input:	100 Volt
		Capacity:	30 VA
		Output 1:	24 Volt
		Output 2:	-
		ED:	100 %

Sealbars:

Used sealbars	R1	Connection:	Stand alone
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Switches:

Control switch ON/OFF	S2	Part number:	160-1331117
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Microswitches:

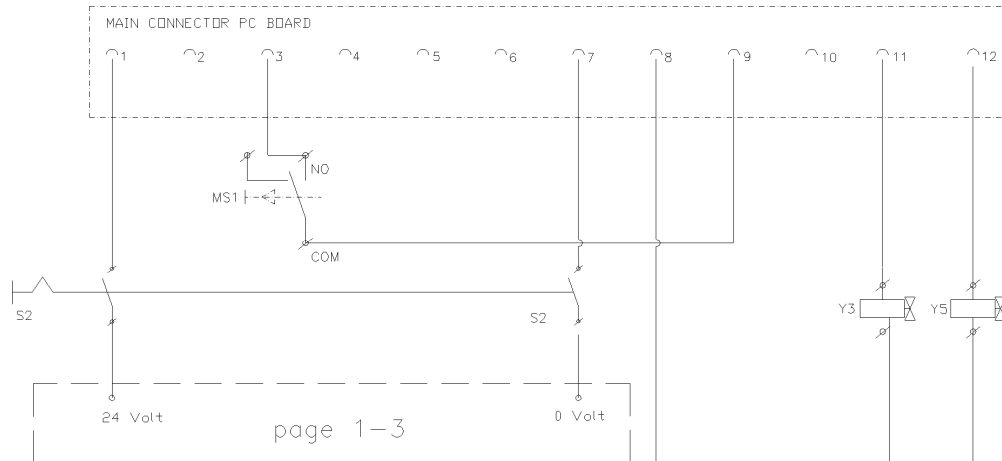
Switch start cycle	MS1	Electrical connections:	2
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Valves:

Seal valve	Y3
Decompression valve	Y5

VMS 53 - 93 100V – 1P – 50/60Hz

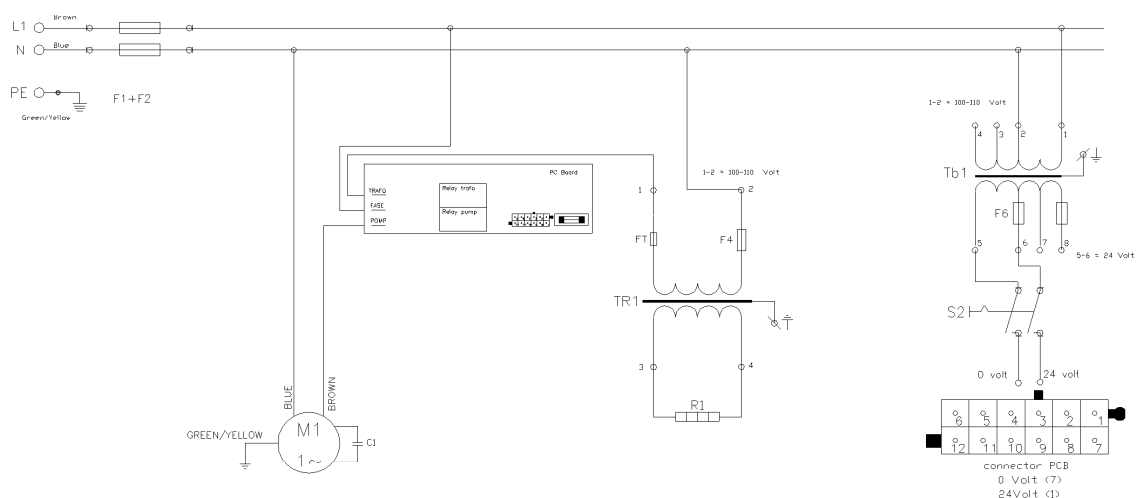
1	2	3	4	5	6	7	8	9	10	11	12
INPUT		MICROSWITCH				INPUT	COM	MICROSWITCH		SEAL	DECOMP
24_VOLT		NO				0_VOLT		COM		VALVE	VALVE
SWITCH		MS-1				INPUT				Y3	Y5
S2						SWITCH					
						S2					



dpm:	delum:	101125	school:	1:1	oantal:	1	pagena:	001-PCB	revisie:	gemaakt:	datum:
projectie:	formaat:	A3	conform:	norme:	DIN EN ISO 2768/1101						
gemaakt:	TY		model:	DIV.							
AUDION ELEKTRO	WEESEP, HOLLAND		001-PCB								

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1	2	3	4	5	6
MAIN SUPPLY	MAIN FUSE	MOTOR	MAIN POWER SUPPLY FOR PCB	SEALTRANSFORMER	CONTROL TRANSFORMER
L1 N	F1 + F2	M1	POWER SUPPLY FOR SEAL TRAFO	TR1	Tb1
			PHASE	SEAL BAR	CONTROL SWITCH
			POWER SUPPLY FOR PUMP	R1	S2
					MAIN PCB CONNECTOR



dpm:	delum:	101125	school:	1:1	oantal:	1	pagena:	002-J	revisie:	gemaakt:	datum:
projectie:	formaat:	A3	conform:	norme:	DIN EN ISO 2768/1101						
gemaakt:	TY		model:	DIV.							
AUDION ELEKTRO	WEESEP, HOLLAND		002-J								

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VMS 53 - 93 110V – 1P – 50/60Hz

Control diagram	001-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	002-J	Sealconfiguration	Front
Machine serie	VMS 53 / VMS 93	Seal type	Double / Cut-off / 8mm
Power (V/~/Hz)	110-1-50/60		
Pump capacity	008 m³/h		

Main electrical supply:

L1	Phase 1
N	Neutral
PE	Ground connection

Overload devices:

Fuse main entrance	F1, F2	Part number:	160-1343145
		Specification:	15 Amp, Slow
		Size:	5 x 20 mm
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:	160-1343127
		Specification:	0,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
Fuse PCB	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	008 m³/h
Capacity	0,45 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334134
		Input:	110 Volt
		Capacity:	500 VA
		Output:	18 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334116
		Input:	110 Volt
		Capacity:	30 VA
		Output 1:	24 Volt
		Output 2:	-
		ED:	100 %

Sealbars:

Used sealbars	R1	Connection:	Stand alone
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Switches:

Control switch ON/OFF	S2	Part number:	160-1331117
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Microswitches:

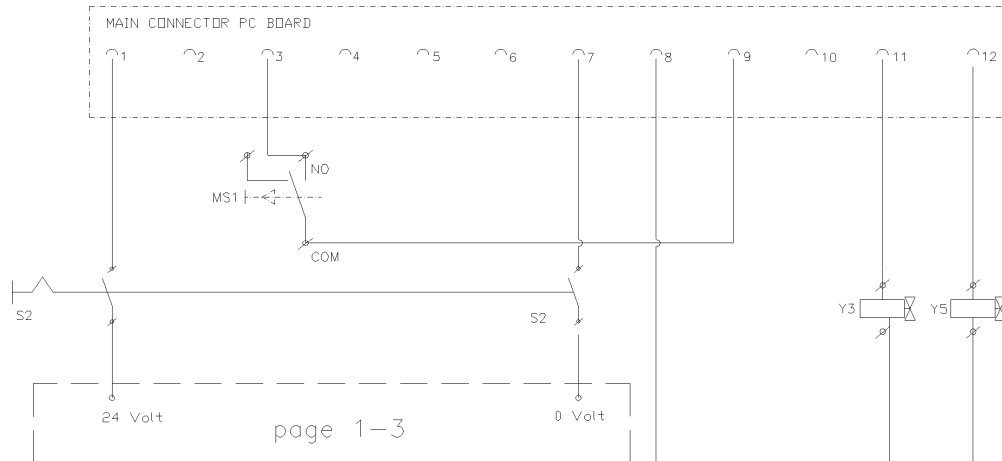
Switch start cycle	MS1	Electrical connections:	2
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Valves:

Seal valve	Y3
Decompression valve	Y5

VMS 53 - 93 110V – 1P – 50/60Hz

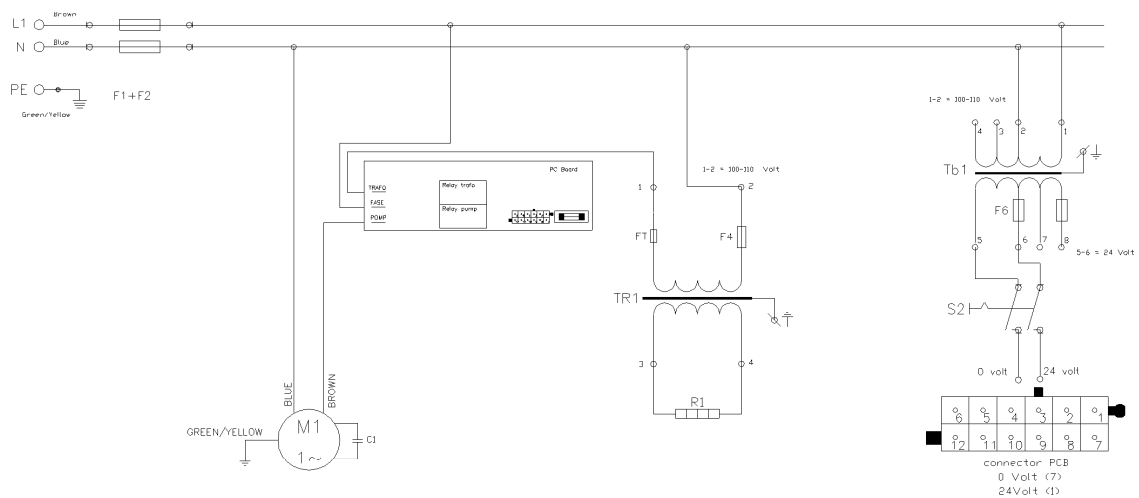
1	2	3	4	5	6	7	8	9	10	11	12
INPUT		MICROSWITCH				INPUT	COM	MICROSWITCH		SEAL	DECOMP
24_VOLT		NO				0_VOLT		COM		VALVE	VALVE
SWITCH		MS-1				INPUT				Y3	Y5
S2						SWITCH					
						S2					



dpm:	delum:	101125	school:	1:1	oantal:	1	pagena:	001-PCB	revisie:	gemaakt:	datum:
projectie:	formaat:	A3	conform:	norme:	DIN EN ISO 2768/1101						
gemaakt:	TY		model:	DIV.							
AUDION ELEKTRO	WEESEP, HOLLAND		001-PCB								

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1	2	3	4	5	6
MAIN SUPPLY	MAIN FUSE	MOTOR	MAIN POWER SUPPLY FOR PCB	SEALTRANSFORMER	CONTROL TRANSFORMER
L1 N	F1 + F2	M1	POWER SUPPLY FOR SEAL TRAFO	TR1	Tb1
			PHASE	SEAL BAR	CONTROL SWITCH
			POWER SUPPLY FOR PUMP	R1	S2
					MAIN PCB CONNECTOR



dpm:	delum:	101125	school:	1:1	oantal:	1	pagena:	002-J	revisie:	gemaakt:	datum:
projectie:	formaat:	A3	conform:	norme:	DIN EN ISO 2768/1101						
gemaakt:	TY		model:	DIV.							
AUDION ELEKTRO	WEESEP, HOLLAND		002-J								

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VMS 53 - 93 220/230V – 1P – 50/60Hz

Control diagram	001-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	003-J	Sealconfiguration	Front
Machine serie	VMS 53 / VMS 93	Seal type	Double / Cut-off / 8mm
Power (V/~ /Hz)	220/230-1-50/60		
Pump capacity	008 m³/h		

Main electrical supply:

L1	Phase 1
N	Neutral
PE	Ground connection

Overload devices:

Fuse main entrance	F1, F2	Part number:	160-1343125
		Specification:	10 Amp, Slow
		Size:	5 x 20 mm
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:	160-1343122
		Specification:	0,25 Amp Slow (24 Volt)
		Size:	5 x 20 mm
Fuse PCB	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	008 m³/h
Capacity	0,35 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334132
		Input:	220-230 Volt
		Capacity:	500 VA
		Output:	18 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334115
		Input:	220-230 Volt
		Capacity:	30 VA
		Output 1:	24 Volt
		Output 2:	-
		ED:	100 %

Sealbars:

Used sealbars	R1	Connection:	Stand alone
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Switches:

Control switch ON/OFF	S2	Part number:	160-1331117
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Microswitches:

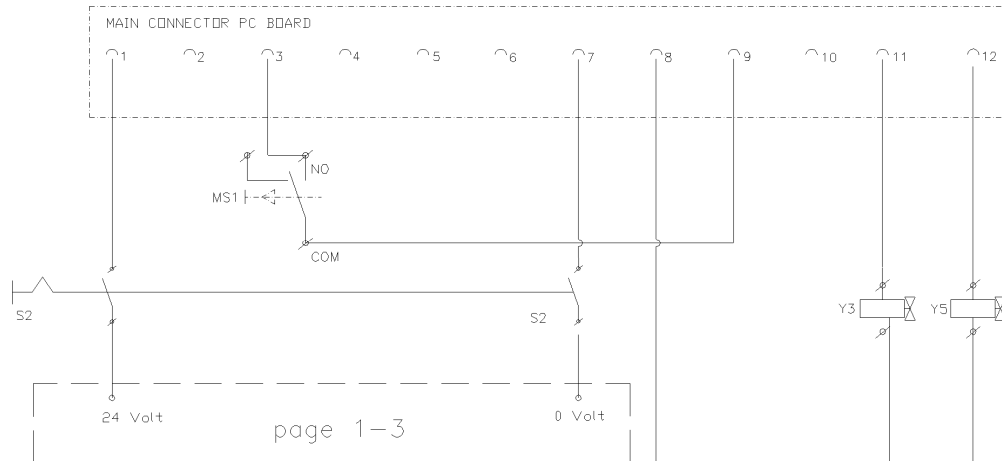
Switch start cycle	MS1	Electrical connections:	2
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Valves:

Seal valve	Y3
Decompression valve	Y5

VMS 53 - 93 220/230V – 1P – 50/60Hz

1	2	3	4	5	6	7	8	9	10	11	12
INPUT		MICROSWITCH				INPUT	COM	MICROSWITCH		SEAL	DECOMP
24_VOLT		NO				0_VOLT		COM		VALVE	VALVE
SWITCH		MS-1				INPUT				Y3	Y5
S2						SWITCH					
						S2					

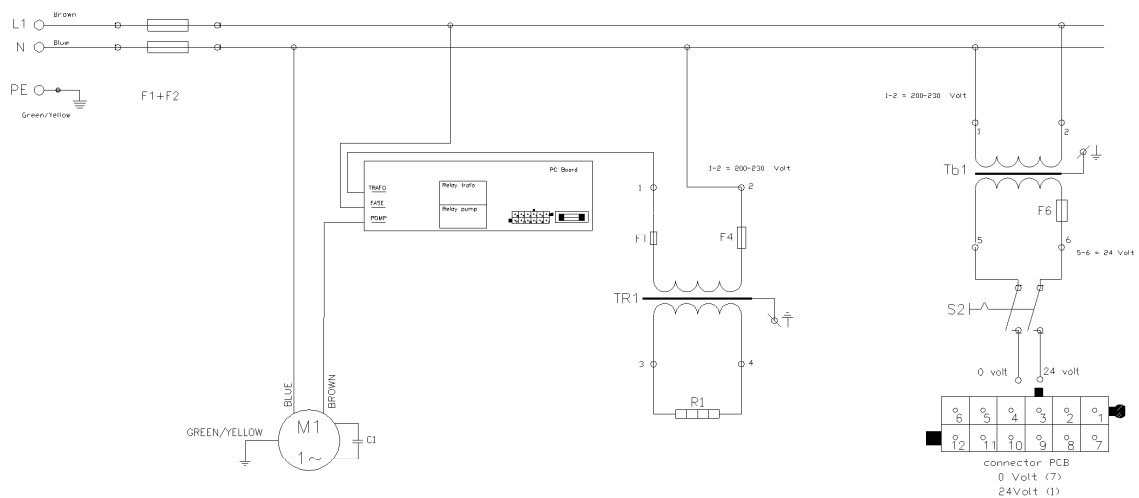


page 1-3

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projectie:	format:	A3	conform:	norme:	DIN EN ISO 2768/1101	div.	code:	160-001-PCB			
projectie:	gemaakt:	TY	model:	DIV.							
AUDION ELEKTRO	WEESEP, HOLLAND		code:	001-PCB							

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1	2	3	4	5	6
MAIN SUPPLY	MAIN FUSE	MOTOR	MAIN POWER SUPPLY FOR PCB	SEALTRANSFORMER	CONTROL TRANSFORMER
L1 N	F1 + F2	M1	POWER SUPPLY FOR SEAL TRAFO	TR1	Tb1
			PHASE	SEAL BAR	CONTROL SWITCH
			POWER SUPPLY FOR PUMP	R1	S2
					MAIN PCB CONNECTOR



opm:	datum:	101126	school:	1:1	aanpak:	1	profiel:	003-J	revisie:	gemaakt:	datum:
projectie:	format:	A3	conform:	norme:	DIN EN ISO 2768/1101	div.	code:	160-003-J			
projectie:	gemaakt:	TY	model:	DIV.							
AUDION ELEKTRO	WEESEP, HOLLAND		code:	003-J							

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VMS 113 100V – 1P – 50/60Hz

Control diagram	001-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	001-J	Sealconfiguration	Front
Machine serie	VMS 113	Seal type	Double / Cut-off / 8mm
Power (V/~ /Hz)	100-1-50/60		
Pump capacity	016 m³/h		

Main electrical supply:

L1	Phase 1
N	Neutral
PE	Ground connection

Overload devices:

Fuse main entrance	F1	Part number:	160-1343145
		Specification:	15 Amp, Slow
		Size:	5 x 20mm
Fuse seal transformer	F4	Part number:	160-1343137
		Specification:	6,3 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343127
		Specification:	0,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
Fuse PCB	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	016 m³/h
Capacity	0,55 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334127
		Input:	100 Volt
		Capacity:	500 VA
		Output:	10 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334116
		Input:	100 Volt
		Capacity:	30 VA
		Output 1:	24 Volt
		Output 2:	-
		ED:	100 %

Sealbars:

Used sealbars	R1	Connection:	Stand alone
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Switches:

Control switch ON/OFF	S2	Part number:	160-1331117
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Microswitches:

Switch start cycle	MS1	Electrical connections:	2
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Valves:

Seal valve	Y3
Decompression valve	Y5

1	2	3	4	5	6	7	8	9	10	11	12
INPUT		MICROSWITCH				INPUT	COM	MICROSWITCH		SEAL	DECOMP
24_VOLT		NO				O_VOLT		COM		VALVE	VALVE
SWITCH		MS-1				INPUT				Y3	Y5
S2						SWITCH					
						S2					



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VMS 113 110V – 1P – 50/60Hz

Control diagram	001-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	001-J	Seal configuration	Front
Machine serie	VMS 113	Seal type	Double / Cut-off / 8mm
Power (V/~ /Hz)	110-1-50/60		
Pump capacity	016 m ³ /h		

Main electrical supply:

L1	Phase 1
N	Neutral
PE	Ground connection

Overload devices:

Fuse main entrance	F1	Part number:	160-1343145
		Specification:	15 Amp, Slow
		Size:	5 x 20mm
Fuse seal transformer	F4	Part number:	160-1343137
		Specification:	6,3 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343127
		Specification:	0,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
Fuse PCB	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	016 m ³ /h
Capacity	0,55 kW

Transformers:

Seal transformer	Tr1	Part number:	160-1334127
		Input:	110 Volt
		Capacity:	500 VA
		Output:	10 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334116
		Input:	110 Volt
		Capacity:	30 VA
		Output 1:	24 Volt
		Output 2:	-
		ED:	100 %

Sealbars:

Used sealbars	R1	Connection:	Stand alone
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Switches:

Control switch ON/OFF	S2	Part number:	160-1331117
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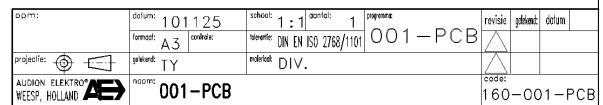
Microswitches:

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

Valves:

Seal valve	Y3
Decompression valve	Y5

1	2	3	4	5	6	7	8	9	10	11	12
INPUT		MICROSWITCH				INPUT	COM	MICROSWITCH		SEAL	DECOMP
24_VOLT		NO				O_VOLT		COM		VALVE	VALVE
SWITCH		MS-1				INPUT				Y3	Y5
S2						SWITCH					
						S2					



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1	2	3	4	5	6
MAIN SUPPLY	MAIN FUSE	MOTOR	MAIN POWER SUPPLY FOR PCB	SEALTRANSFORMER	CONTROL TRANSFORMER
L1 N	F1	M1	POWER SUPPLY FOR SEAL TRAF0	TR1	Tb1
			PHASE	SEAL BAR	CONTROL SWITCH
			POWER SUPPLY FOR PUMP	R1	S2
					MAIN PCB CONNECTOR



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VMS 113 220/230V – 1P – 50/60Hz

Control diagram	001-PCB	Revision (From - Until)	0 (01-01-2011 =>)
Main circuit diagram	003-J	Sealconfiguration	Front
Machine serie	VMS 113	Seal type	Double / Cut-off / 8mm
Power (V~/Hz)	220/230-1-50/60		
Pump capacity	016 m³/h		

Main electrical supply:

L1	Phase 1
N	Neutral
PE	Ground connection

Overload devices:

Fuse main entrance	F1, F2	Part number:	160-1343125
		Specification:	10 Amp, Slow
		Size:	5 x 20 mm
Fuse seal transformer	F4	Part number:	160-1343138
		Specification:	3,15 Amp Slow
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343122
		Specification:	0,25 Amp Slow (24 Volt)
		Size:	5 x 20 mm
Fuse PCB	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	016 m³/h
Capacity	0,55 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334128
		Input:	220-230 Volt
		Capacity:	500 VA
		Output:	10 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334115
		Input:	220-230 Volt
		Capacity:	30 VA
		Output 1:	24 Volt
		Output 2:	-
		ED:	100 %

Sealbars:

Used sealbars	R1	Connection:	Stand alone
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Switches:

Control switch ON/OFF	S2	Part number:	160-1331117
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Microswitches:

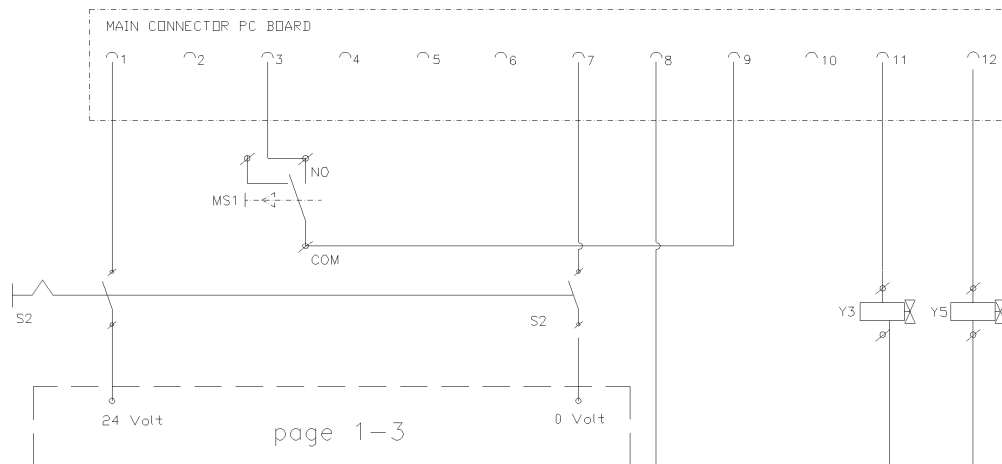
Switch start cycle	MS1	Electrical connections:	2
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Valves:

Seal valve	Y3
Decompression valve	Y5

VMS 113 220/230V – 1P – 50/60Hz

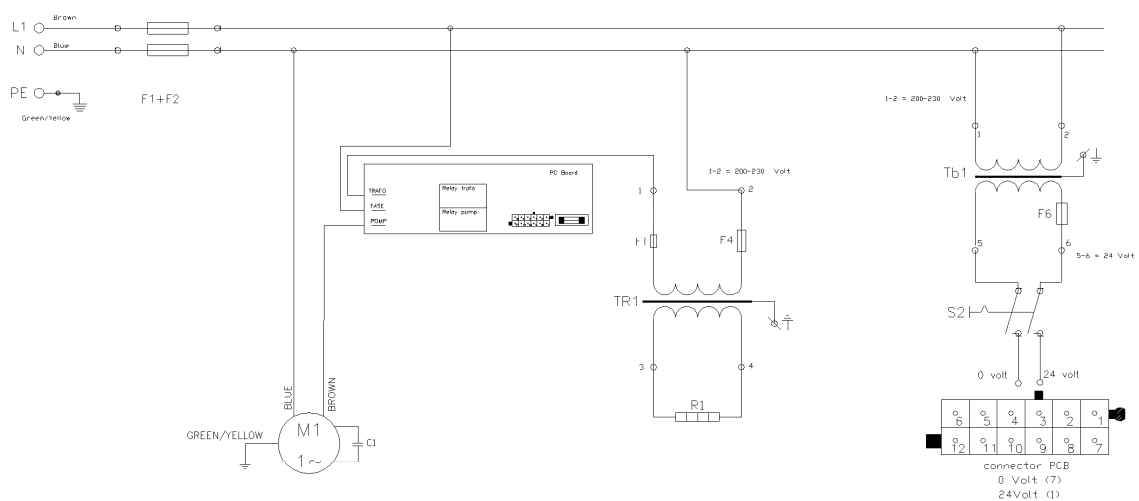
1	2	3	4	5	6	7	8	9	10	11	12
INPUT		MICROSWITCH				INPUT	COM	MICROSWITCH		SEAL	DECOMP
24_VOLT		NO				O_VOLT		COM		VALVE	VALVE
SWITCH		MS-1				INPUT				Y3	Y5
S2						SWITCH					
						S2					








opm:		datum: 101125	schoot: 1:1	aantal: 1	programma	revisie	gemaakt	datum
		format: A3	ontwerp:	tweede: OM EN ISO 2768/1101	001-PCB			
project:		gemaakt: TY	indirect:	DIV.				
AUDION ELEKTRO WEESEP, HOLLAND		naam: 001-PCB				code: 160-001-PCB		

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1	2	3	4	5	6
MAIN SUPPLY	MAIN FUSE	MOTOR	MAIN POWER SUPPLY FOR PCB	SEALTRANSFORMER	CONTROL TRANSFORMER
L1 N	F1 + F2	M1	POWER SUPPLY FOR SEAL TRAFO	TR1	Tb1
			PHASE	SEAL BAR	CONTROL SWITCH
			POWER SUPPLY FOR PUMP	R1	S2
					MAIN PCB CONNECTOR



ppm:	date:	school:	anle:	propane	refle:	globe:	dur:
	101126	1:1	1				
	format:	anle:	titre:	003-J			
	A3		DIN EN ISO 2768/1101				
project:	globe:	mat:					
 	TY		DIV.				
AUDION ELECTRO WESP. HOLLAND 	name:				code:		
	003-J				160-003-J		

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VMS 133 – 133 L 100V – 1P – 50/60Hz

Index sheet supplemental to:

Control diagram	001-PCB	Date printed:	
Main circuit diagram	001-J		
Machine serie	VMS 133 / VMS 133 L	Revision (From - Until)	0 (01-01-2011 =>)
Power (V/~ /Hz)	100-1-50/60	Sealconfiguration	Front
Pump capacity	016 m³/h	Seal type	Double / Cut-off / 8mm

Main electrical supply:

L1	Phase 1
N	Neutral
PE	Ground connection

Overload devices:

Fuse main entrance	F1	Part number:	160-1343145
		Specification:	15 Amp, Slow
		Size:	5 x 20mm
Fuse seal transformer	F4	Part number:	160-1343126
		Specification:	10 Amp Fast
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343127
		Specification:	0,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
Fuse PCB	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	016 m³/h
Capacity	0,55 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334126
		Input:	100 Volt
		Capacity:	700 VA
		Output:	15 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334116
		Input:	100 Volt
		Capacity:	30 VA
		Output 1:	24 Volt
		Output 2:	-
		ED:	100 %

Sealbars:

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

Switches:

Control switch ON/OFF	S2	Part number:	160-1331117
-----------------------	----	--------------	-------------

Microswitches:

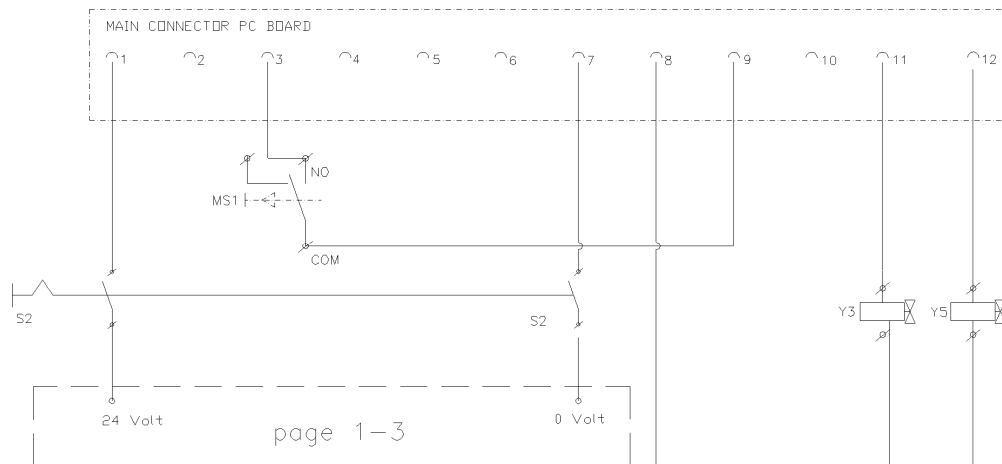
Switch start cycle	MS1	Electrical connections:	2
--------------------	-----	-------------------------	---

Valves:

Seal valve	Y3
Decompression valve	Y5

VMS 133 – 133 L 100V – 1P – 50/60Hz

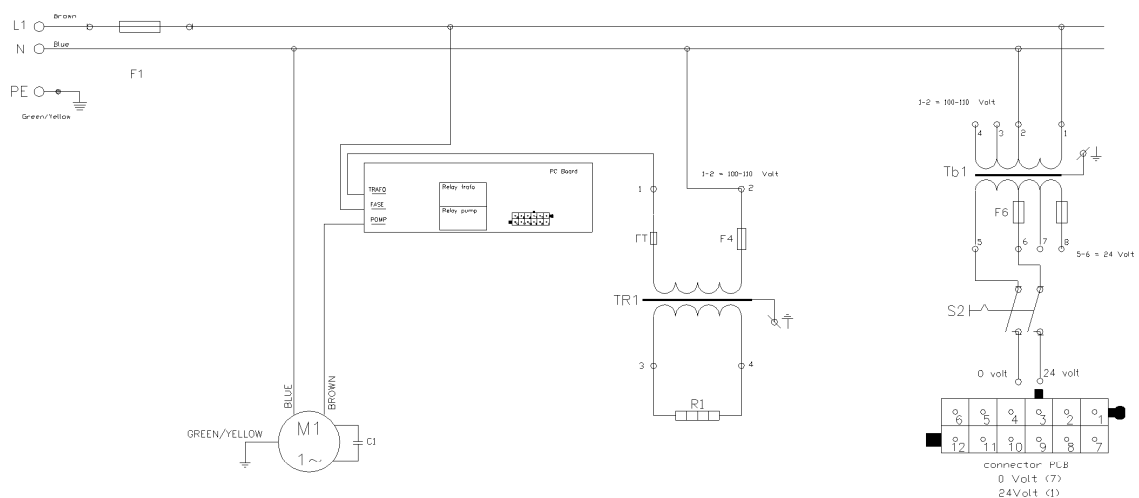
1	2	3	4	5	6	7	8	9	10	11	12
INPUT		MICROSWITCH				INPUT	COM	MICROSWITCH		SEAL	DECOMP
24_VOLT		NO				0_VOLT		COM		VALVE	VALVE
SWITCH		MS-1				INPUT				Y3	Y5
S2						SWITCH					
						S2					



dpm:	delum:	101125	school:	1:1	contol:	1	page:	001-PCB	revise:	geline:	datum:
project:	format:	A3	contol:	1	revise:	001-PCB	geline:	160-001-PCB	datum:		
project:	format:	A3	contol:	1	revise:	001-PCB	geline:	160-001-PCB	datum:		
project:	format:	A3	contol:	1	revise:	001-PCB	geline:	160-001-PCB	datum:		

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1	2	3	4	5	6
MAIN SUPPLY	MAIN FUSE	MOTOR	MAIN POWER SUPPLY FOR PCB	SEALTRANSFORMER	CONTROL TRANSFORMER
L1 N	F1	M1	POWER SUPPLY FOR SEAL TRAF0	TR1	Tb1
			PHASE	SEAL BAR	CONTROL SWITCH
			POWER SUPPLY FOR PUMP	R1	S2
					MAIN PCB CONNECTOR



dpm:	delum:	101125	school:	1:1	contol:	1	page:	001-J	revise:	geline:	datum:
project:	format:	A3	contol:	1	revise:	001-J	geline:	160-001-J	datum:		
project:	format:	A3	contol:	1	revise:	001-J	geline:	160-001-J	datum:		
project:	format:	A3	contol:	1	revise:	001-J	geline:	160-001-J	datum:		

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VMS 133 – 133 L 110V – 1P – 50/60Hz

Index sheet supplemental to:

Control diagram	001-PCB	Date printed:	
Main circuit diagram	001-J		
Machine serie	VMS 133 / VMS 133 L	Revision (From - Until)	0 (01-01-2011 =>)
Power (V/~ /Hz)	110-1-50/60	Seal configuration	Front
Pump capacity	016 m³/h	Seal type	Double / Cut-off / 8mm

Main electrical supply:

L1	Phase 1
N	Neutral
PE	Ground connection

Overload devices:

Fuse main entrance	F1	Part number:	160-1343145
		Specification:	15 Amp, Slow
		Size:	5 x 20mm
Fuse seal transformer	F4	Part number:	160-1343126
		Specification:	10 Amp Fast
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343127
		Specification:	0,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
Fuse PCB	F9	Part number:	160-1343123
		Specification:	4 Amp Slow
		Size:	5 x 20 mm

Pump:

Pump type	016 m³/h
Capacity	0,55 kW

Transformers:

Seal transformer	Tr1	Part number:	160-1334126
		Input:	110 Volt
		Capacity:	700 VA
		Output:	15 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334116
		Input:	110 Volt
		Capacity:	30 VA
		Output 1:	24 Volt
		Output 2:	-
		ED:	100 %

Sealbars:

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

Switches:

Control switch ON/OFF	S2	Part number:	160-1331117
-----------------------	----	--------------	-------------

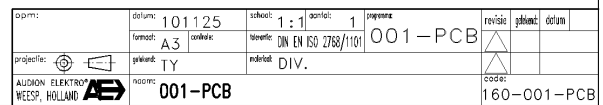
Microswitches:

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

Valves:

Seal valve	Y3
Decompression valve	Y5

1	2	3	4	5	6	7	8	9	10	11	12
INPUT		MICROSWITCH				INPUT	COM	MICROSWITCH		SEAL	DECOMP
24_VOLT		NO				O_VOLT		COM		VALVE	VALVE
SWITCH		MS-1				INPUT				Y3	Y5
S2						SWITCH					
						S2					



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1	2	3	4	5	6
MAIN SUPPLY	MAIN FUSE	MOTOR	MAIN POWER SUPPLY FOR PCB	SEALTRANSFORMER	CONTROL TRANSFORMER
L1 N	F1	M1	POWER SUPPLY FOR SEAL TRAF0	TR1	Tb1
			PHASE	SEAL BAR	CONTROL SWITCH
			POWER SUPPLY FOR PUMP	R1	S2
					MAIN PCB CONNECTOR



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VMS 133 – 133 L 220/230V – 1P – 50/60Hz

Index sheet supplemental to:

Control diagram	001-PCB	Date printed:	
Main circuit diagram	003-J		
Machine serie	VMS 133 / VMS 133 L	Revision (From - Until)	0 (01-01-2011 =>)
Power (V/~ /Hz)	220/230-1-50/60	Seal configuration	Front
Pump capacity	016 m³/h	Seal type	Double / Cut-off / 8mm

Main electrical supply:

L1	Phase 1
N	Neutral
PE	Ground connection

Overload devices:

Fuse main entrance	F1, F2	Part number:	160-1343125
		Specification:	10 Amp, Slow
		Size:	5 x 20 mm
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:	160-1343122
		Specification:	0,25 Amp Slow (24 Volt)
		Size:	5 x 20 mm
Fuse PCB	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	016 m³/h
Capacity	0,55 kW

Transformers:

Seal transformer	Tr1	Part number:	160-1334130
		Input:	220-230 Volt
		Capacity:	700 VA
		Output:	15 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334115
		Input:	220-230 Volt
		Capacity:	30 VA
		Output 1:	24 Volt
		Output 2:	-
		ED:	100 %

Sealbars:

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

Switches:

Control switch ON/OFF	S2	Part number:	160-1331117
-----------------------	----	--------------	-------------

Microswitches:

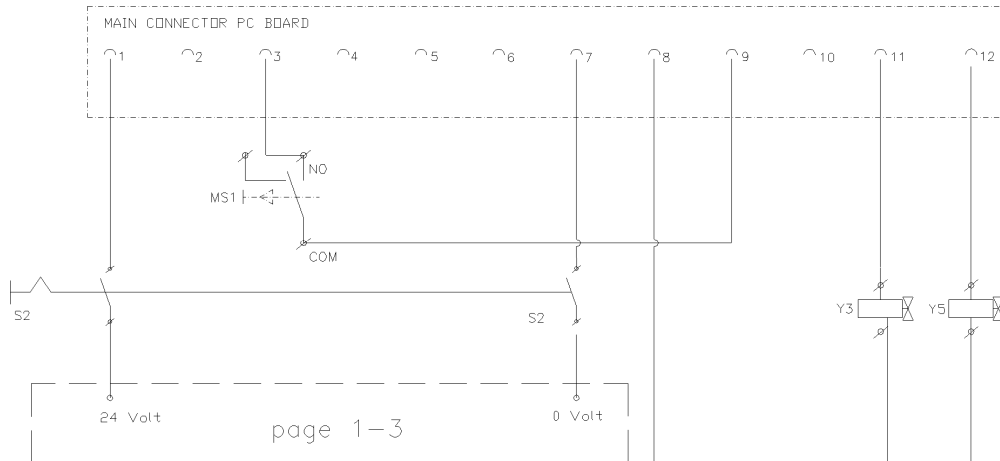
Switch start cycle	MS1	Electrical connections:	2
--------------------	-----	-------------------------	---

Valves:

Seal valve	Y3
Decompression valve	Y5

VMS 133 – 133 L 220/230V – 1P – 50/60Hz

1	2	3	4	5	6	7	8	9	10	11	12
INPUT		MICROSWITCH				INPUT	COM	MICROSWITCH		SEAL	DECOMP
24_VOLT		NO				0_VOLT		COM		VALVE	VALVE
SWITCH		MS-1				INPUT				Y3	Y5
S2						SWITCH					
						S2					

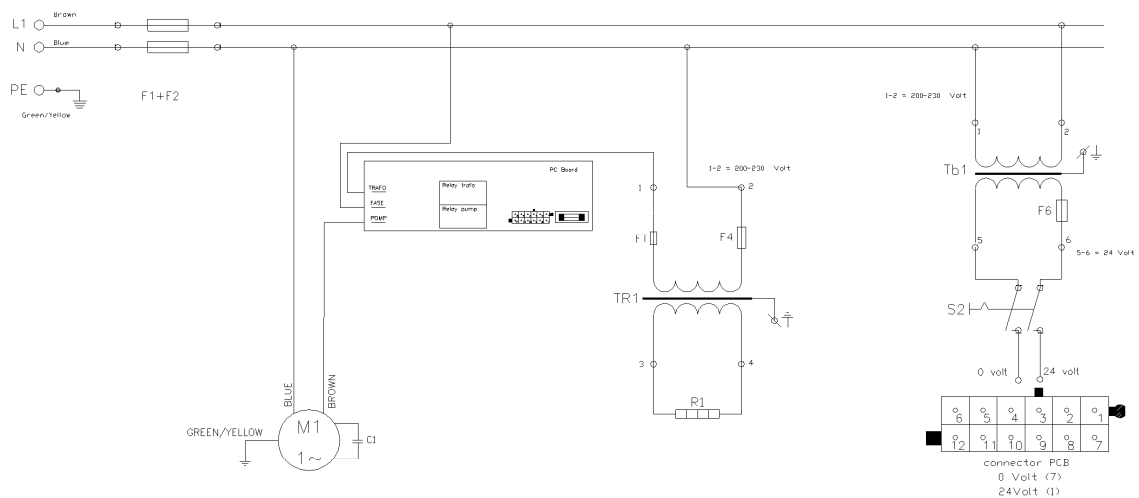


page 1-3

dpm:	101125	school:	1:1	contol:	1	propane:	001-PCB	revisie:	gemaakt:	datum:
projectie:	A3	controle:	TY	norme:	DIN EN ISO 2768/1101	code:	160-001-PCB			
projectie:	TY	norme:	DIV.							
AUDION ELEKTRO	WEESEP, HOLLAND	code:	001-PCB							

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1	2	3	4	5	6
MAIN SUPPLY	MAIN FUSE	MOTOR	MAIN POWER SUPPLY FOR PCB	SEALTRANSFORMER	CONTROL TRANSFORMER
L1 N	F1 + F2	M1	POWER SUPPLY FOR SEAL TRAFO	TR1	Tb1
			PHASE	SEAL BAR	CONTROL SWITCH
			POWER SUPPLY FOR PUMP	R1	S2
					MAIN PCB CONNECTOR



dpm:	101126	school:	1:1	contol:	1	propane:	003-J	revisie:	gemaakt:	datum:
projectie:	A3	controle:	TY	norme:	DIN EN ISO 2768/1101	code:	160-003-J			
projectie:	TY	norme:	DIV.							
AUDION ELEKTRO	WEESEP, HOLLAND	code:	003-J							

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VMS 133 L (2 seal bars) 100V – 1P – 50/60Hz

Index sheet supplemental to:

Control diagram	001-PCB	Date printed:	
Main circuit diagram	004-J		
Machine serie	VMS 133 L	Revision (From - Until)	0 (01-01-2011 =>)
Power (V/~Hz)	100-1-50/60	Sealconfiguration	Front and Rear
Pump capacity	016 m³/h	Seal type	Double / Cut-off / 8mm

Main electrical supply:

L1	Phase 1
N	Neutral
PE	Ground connection

Overload devices:

Fuse main entrance	F1	Part number:	160-1343145
		Specification:	15 Amp, Slow
		Size:	5 x 20mm
Fuse seal transformer	F4	Part number:	160-1343126
		Specification:	10 Amp Fast
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343127
		Specification:	0,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
Fuse PCB	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	016 m³/h
Capacity	0.55 kW

Transformers:

Sealtransformer	Tr1	Part number:	160-1334126
		Input:	100 Volt
		Capacity:	700 VA
		Output:	15 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334116
		Input:	100 Volt
		Capacity:	30 VA
		Output 1:	24 Volt
		Output 2:	-
		ED:	100 %

Sealbars:

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

Switches:

Control switch ON/OFF	S2	Part number:	160-1331117
-----------------------	----	--------------	-------------

Microswitches:

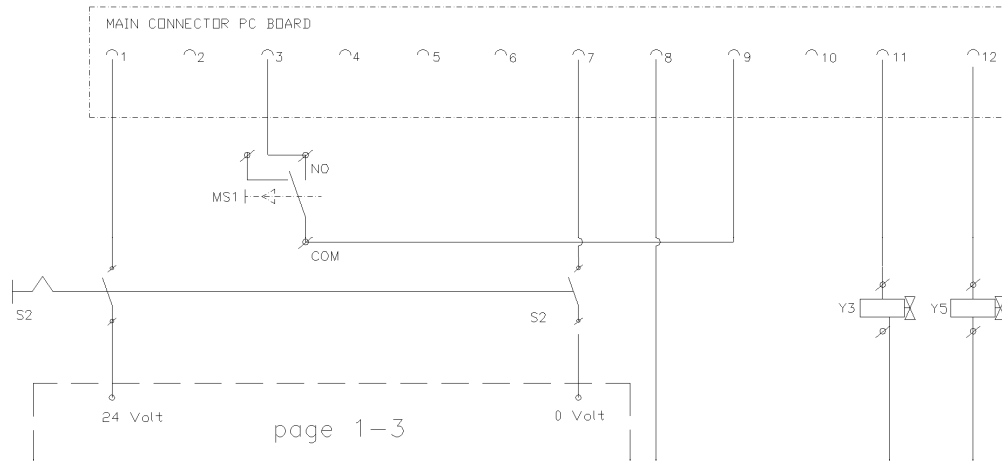
Switch start cycle	MS1	Electrical connections:	2
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Valves:

Seal valve	Y3
Decompression valve	Y5

VMS 133 L (2 seal bars) 100V – 1P – 50/60Hz

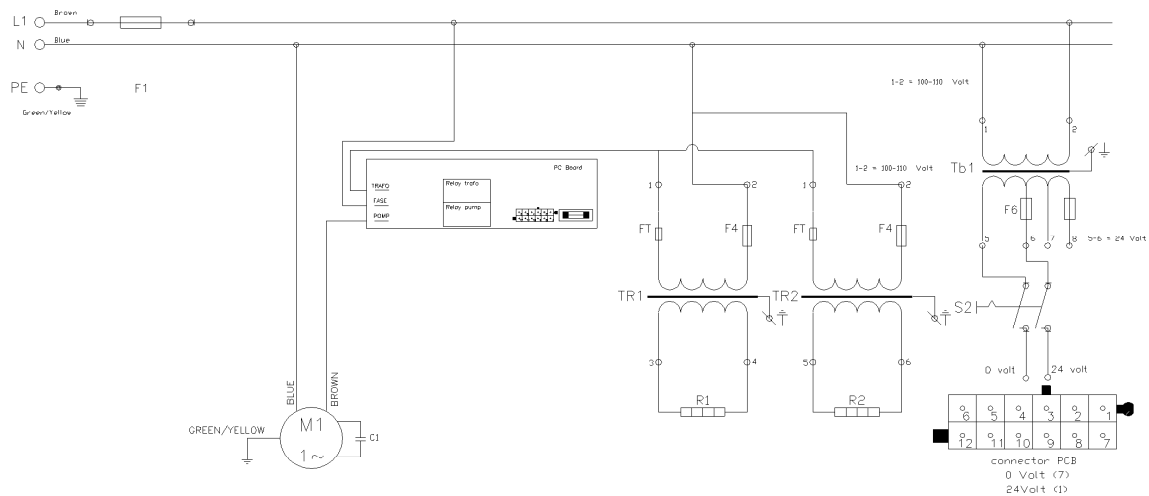
1	2	3	4	5	6	7	8	9	10	11	12
INPUT		MICROSWITCH				INPUT	COM	MICROSWITCH		SEAL	DECOMP
24_VOLT		NO				0_VOLT		COM		VALVE	VALVE
SWITCH		MS-1				INPUT				Y3	Y5
S2						SWITCH					
						S2					



dpm:	delum:	101125	school:	1:1	script:	1	programe:	001-PCB	revise:	glsheet:	datum:
projectie:	format:	A3	code:	TY	norm:	DIN EN ISO 2768/1101	code:	001-PCB			
projectie:	format:	A3	code:	TY	norm:	DIN EN ISO 2768/1101	code:	001-PCB			
projectie:	format:	A3	code:	TY	norm:	DIN EN ISO 2768/1101	code:	001-PCB			

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1	2	3	4	5	6	7
MAIN SUPPLY	MAIN FUSE	MOTOR	MAIN POWER SUPPLY FOR PCB	SEALTRANSFORMER	SEALTRANSFORMER	CONTROL TRANSFORMER
L1 N	F1	M1	POWER SUPPLY FOR SEAL TRAF0	TR1	TR2	Tb1
			PHASE	SEAL BAR	SEAL BAR	CONTROL SWITCH
			POWER SUPPLY FOR PUMP	R1	R2	S2
						MAIN PCB CONNECTOR



dpm:	delum:	101126	school:	1:1	script:	1	programe:	004-J	revise:	glsheet:	datum:
projectie:	format:	A3	code:	TY	norm:	DIN EN ISO 2768/1101	code:	004-J			
projectie:	format:	A3	code:	TY	norm:	DIN EN ISO 2768/1101	code:	004-J			
projectie:	format:	A3	code:	TY	norm:	DIN EN ISO 2768/1101	code:	004-J			

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VMS 133 L (2 seal bars) 110V – 1P – 50/60Hz

Index sheet supplemental to:

Control diagram	001-PCB	Date printed:	
Main circuit diagram	004-J		
Machine serie	VMS 133 L	Revision (From - Until)	0 (01-01-2011 =>)
Power (V/~ /Hz)	110-1-50/60	Seal configuration	Front and Rear
Pump capacity	016 m³/h	Seal type	Double / Cut-off / 8mm

Main electrical supply:

L1	Phase 1
N	Neutral
PE	Ground connection

Overload devices:

Fuse main entrance	F1	Part number:	160-1343145
		Specification:	15 Amp, Slow
		Size:	5 x 20mm
Fuse seal transformer	F4	Part number:	160-1343126
		Specification:	10 Amp Fast
		Size:	5 x 20 mm
		FT:	130 °C
Fuse control transformer	F6	Part number:	160-1343127
		Specification:	0,5 Amp Slow (24 Volt)
		Size:	5 x 20 mm
Fuse PCB	F9	Part number:	160-1343123
		Specification:	4 Amp Slow
		Size:	5 x 20 mm

Pump:

Pump type	016 m³/h
Capacity	0,55 kW

Transformers:

Seal transformer	Tr1	Part number:	160-1334126
		Input:	110 Volt
		Capacity:	700 VA
		Output:	15 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334116
		Input:	110 Volt
		Capacity:	30 VA
		Output 1:	24 Volt
		Output 2:	-
		ED:	100 %

Sealbars:

Used sealbars	R1, R2	Connection:	Stand alone
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Switches:

Control switch ON/OFF	S2	Part number:	160-1331117
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Microswitches:

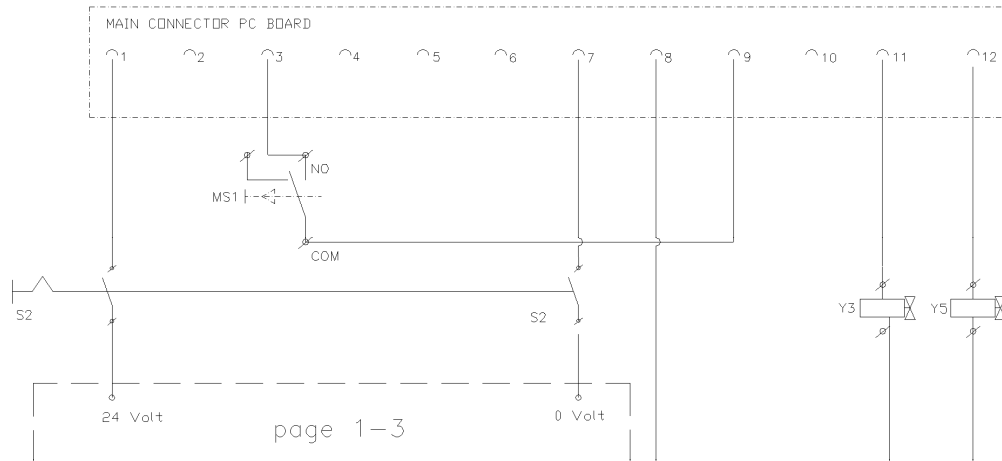
Switch start cycle	MS1	Electrical connections:	2
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Valves:

Seal valve	Y3
Decompression valve	Y5

VMS 133 L (2 seal bars) 110V – 1P – 50/60Hz

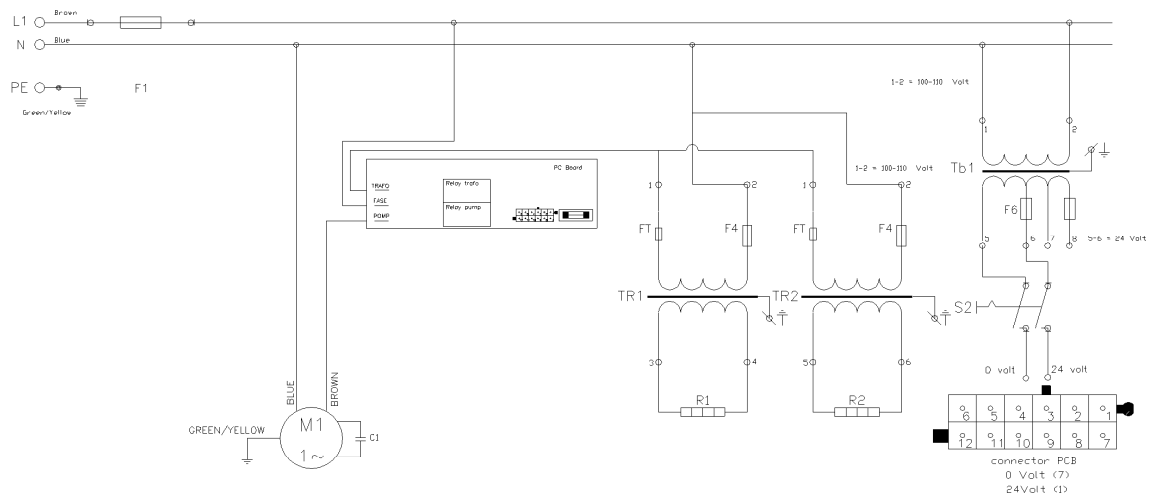
1	2	3	4	5	6	7	8	9	10	11	12
INPUT		MICROSWITCH				INPUT	COM	MICROSWITCH		SEAL	DECOMP
24_VOLT		NO				0_VOLT		COM		VALVE	VALVE
SWITCH		MS-1				INPUT				Y3	Y5
S2						SWITCH					
						S2					



dpm:	delum:	101125	school:	1:1	script:	1	programe:	001-PCB	revise:	glsent:	datum:
projectie:	format:	A3	code:	TY	norm:	DIN EN ISO 2768/1101	code:	001-PCB	code:	160-001-PCB	
projectie:	format:	A3	code:	TY	norm:	DIN EN ISO 2768/1101	code:	001-PCB	code:	160-001-PCB	

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1	2	3	4	5	6	7
MAIN SUPPLY	MAIN FUSE	MOTOR	MAIN POWER SUPPLY FOR PCB	SEALTRANSFORMER	SEALTRANSFORMER	CONTROL TRANSFORMER
L1 N	F1	M1	POWER SUPPLY FOR SEAL TRAF0	TR1	TR2	Tb1
			PHASE	SEAL BAR	SEAL BAR	CONTROL SWITCH
			POWER SUPPLY FOR PUMP	R1	R2	S2
						MAIN PCB CONNECTOR



dpm:	delum:	101126	school:	1:1	script:	1	programe:	004-J	revise:	glsent:	datum:
projectie:	format:	A3	code:	TY	norm:	DIN EN ISO 2768/1101	code:	004-J	code:	160-004-J	
projectie:	format:	A3	code:	TY	norm:	DIN EN ISO 2768/1101	code:	004-J	code:	160-004-J	

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VMS 133 L (2 seal bars) 220/230V – 1P – 50/60Hz

Index sheet supplemental to:

Control diagram	001-PCB	Date printed:	
Main circuit diagram	005-J		
Machine serie	VMS 133 L	Revision (From - Until)	0 (01-01-2011 =>)
Power (V/~ /Hz)	220/230-1-50/60	Seal configuration	Front and Rear
Pump capacity	016 m³/h	Seal type	Double / Cut-off / 8mm

Main electrical supply:

L1	Phase 1
N	Neutral
PE	Ground connection

Overload devices:

Fuse main entrance	F1, F2	Part number:	160-1343125
		Specification:	10 Amp, Slow
		Size:	5 x 20 mm
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:	160-1343122
		Specification:	0,25 Amp Slow (24 Volt)
		Size:	5 x 20 mm
Fuse PCB	F9	Part number:	160-1343123
		Specification:	4 Amp, Slow
		Size:	5 x 20 mm

Pump:

Pump type	016 m³/h
Capacity	0,55 kW

Transformers:

Seal transformer	Tr1	Part number:	160-1334130
		Input:	220-230 Volt
		Capacity:	700 VA
		Output:	15 Volt
		ED:	10 %
Used transformers	Tr1	Connection:	Stand alone
	Tr2	Connection:	Stand alone
Control transformer	Tb1	Part number:	160-1334115
		Input:	220-230 Volt
		Capacity:	30 VA
		Output 1:	24 Volt
		Output 2:	-
		ED:	100 %

Sealbars:

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

Switches:

Control switch ON/OFF	S2	Part number:	160-1331117
-----------------------	----	--------------	-------------

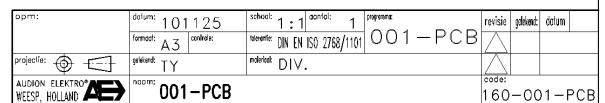
Microswitches:

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

Valves:

Seal valve	Y3
Decompression valve	Y5

1	2	3	4	5	6	7	8	9	10	11	12
INPUT		MICROSWITCH				INPUT	COM	MICROSWITCH		SEAL	DECOMP
24_VOLT		NO				O_VOLT		COM		VALVE	VALVE
SWITCH		MS-1				INPUT				Y3	Y5
S2						SWITCH					
						S2					

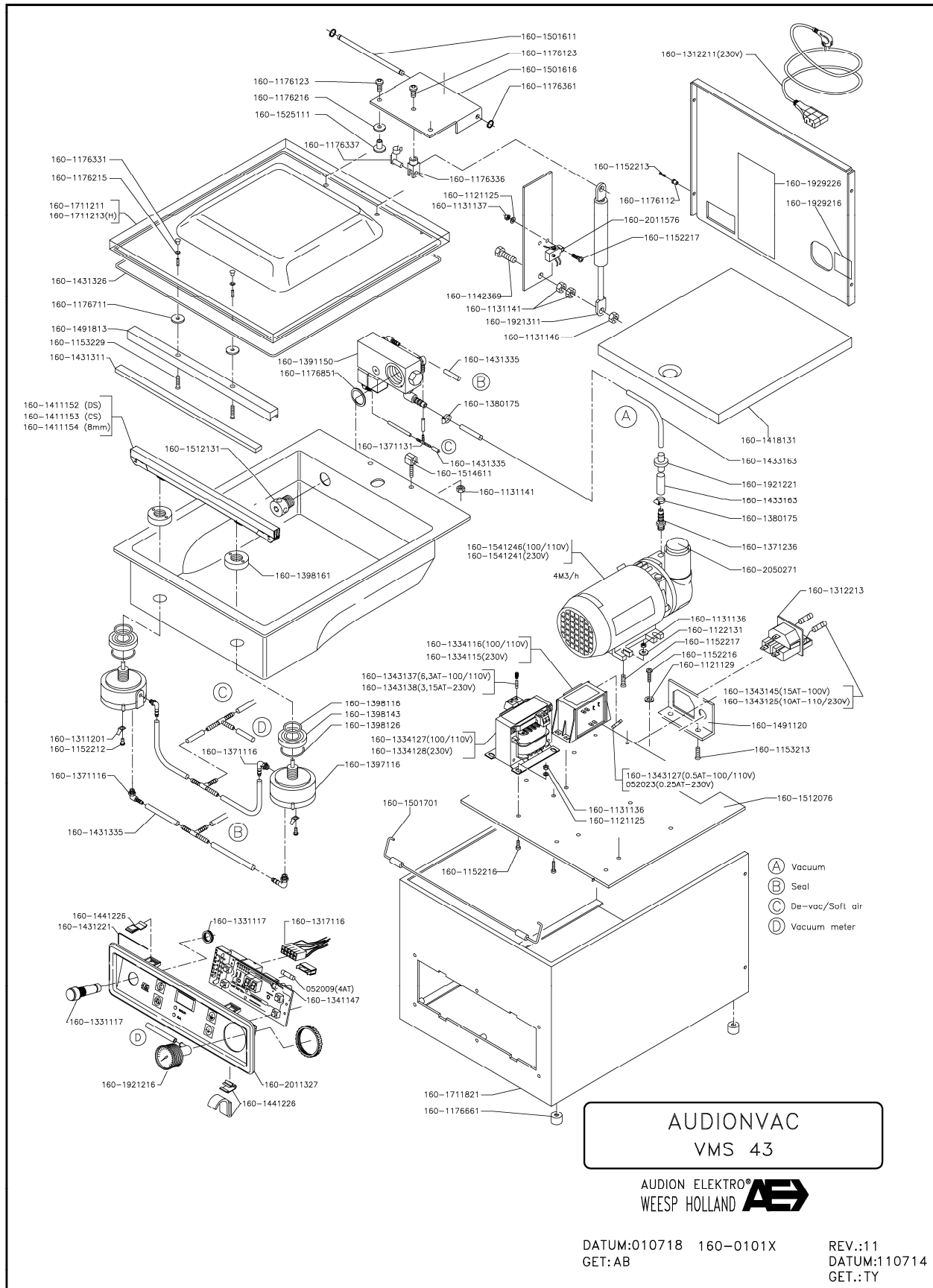


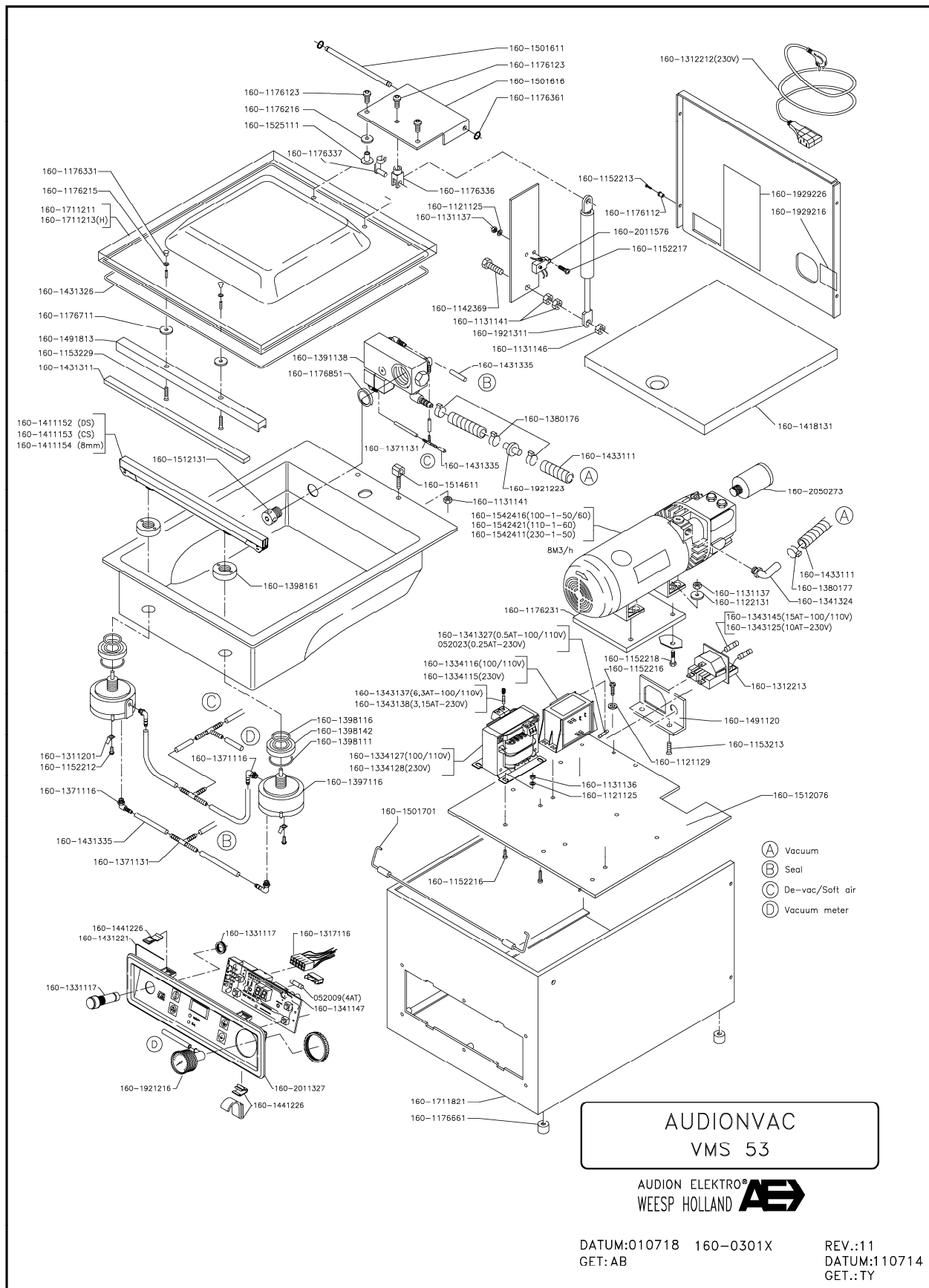
1	2	3	4	5	6	7
MAIN SUPPLY	MAIN FUSE	MOTOR	MAIN POWER SUPPLY FOR PCB	SEALTRANSFORMER	SEALTRANSFORMER	CONTROL TRANSFORMER
L1 N	F1	M1	POWER SUPPLY FOR SEAL TRAF0	TR1	TR2	Tb1
			PHASE	SEAL BAR	SEAL BAR	CONTROL SWITCH
			POWER SUPPLY FOR PUMP	R1	R2	S2
						MAIN PCB CONNECTOR

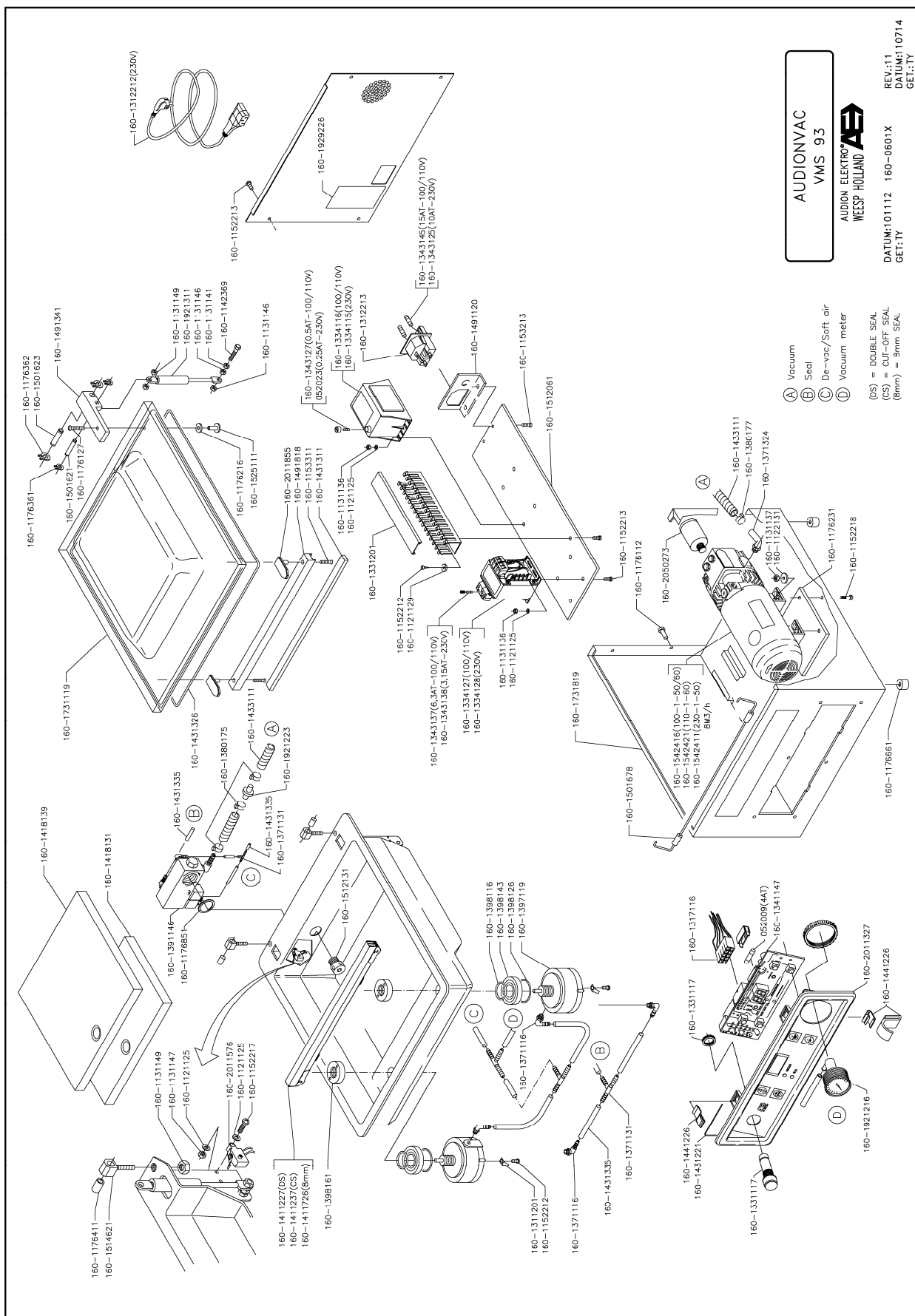


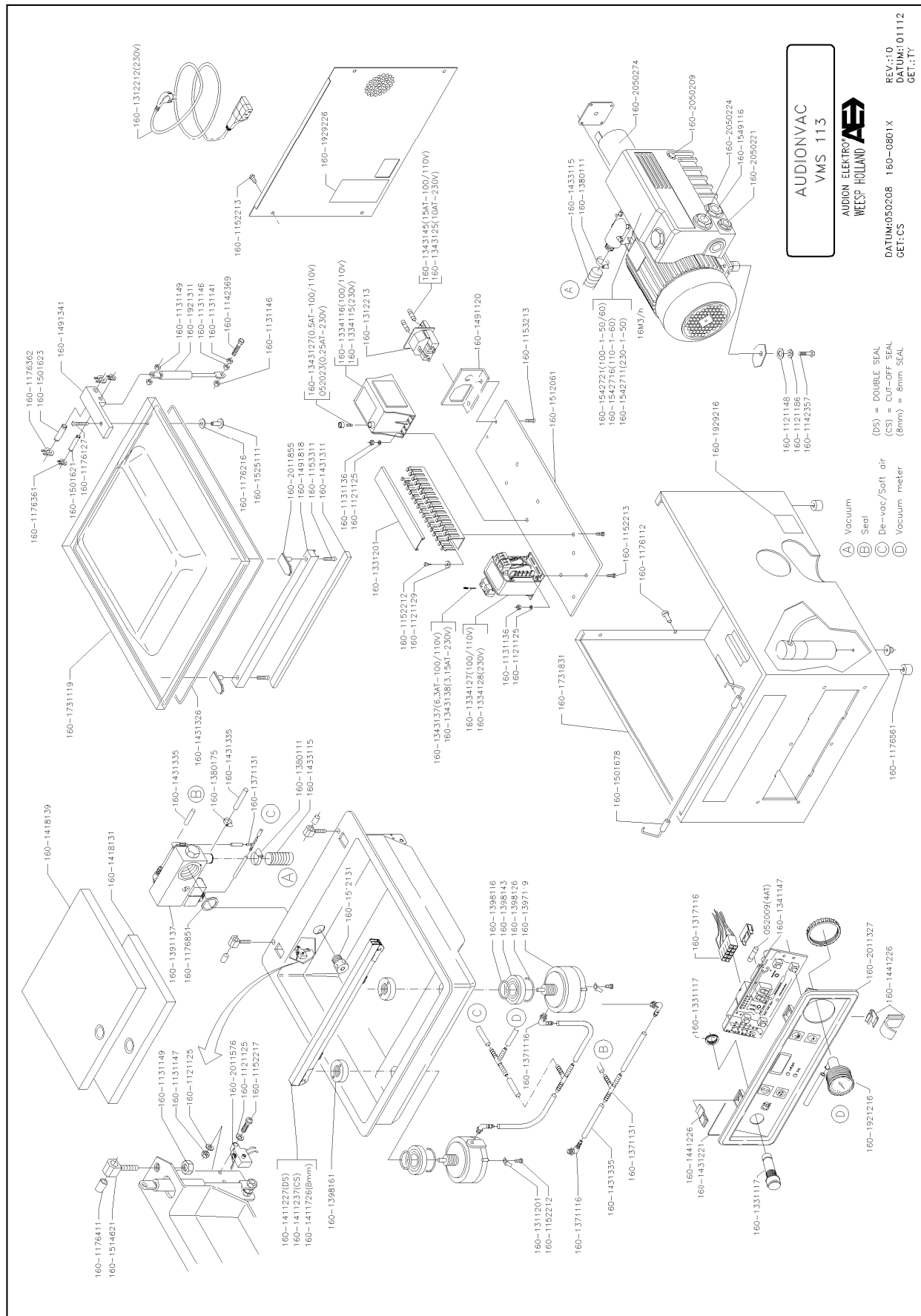
Appendix B29

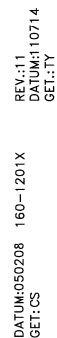
12 Exploded view machine

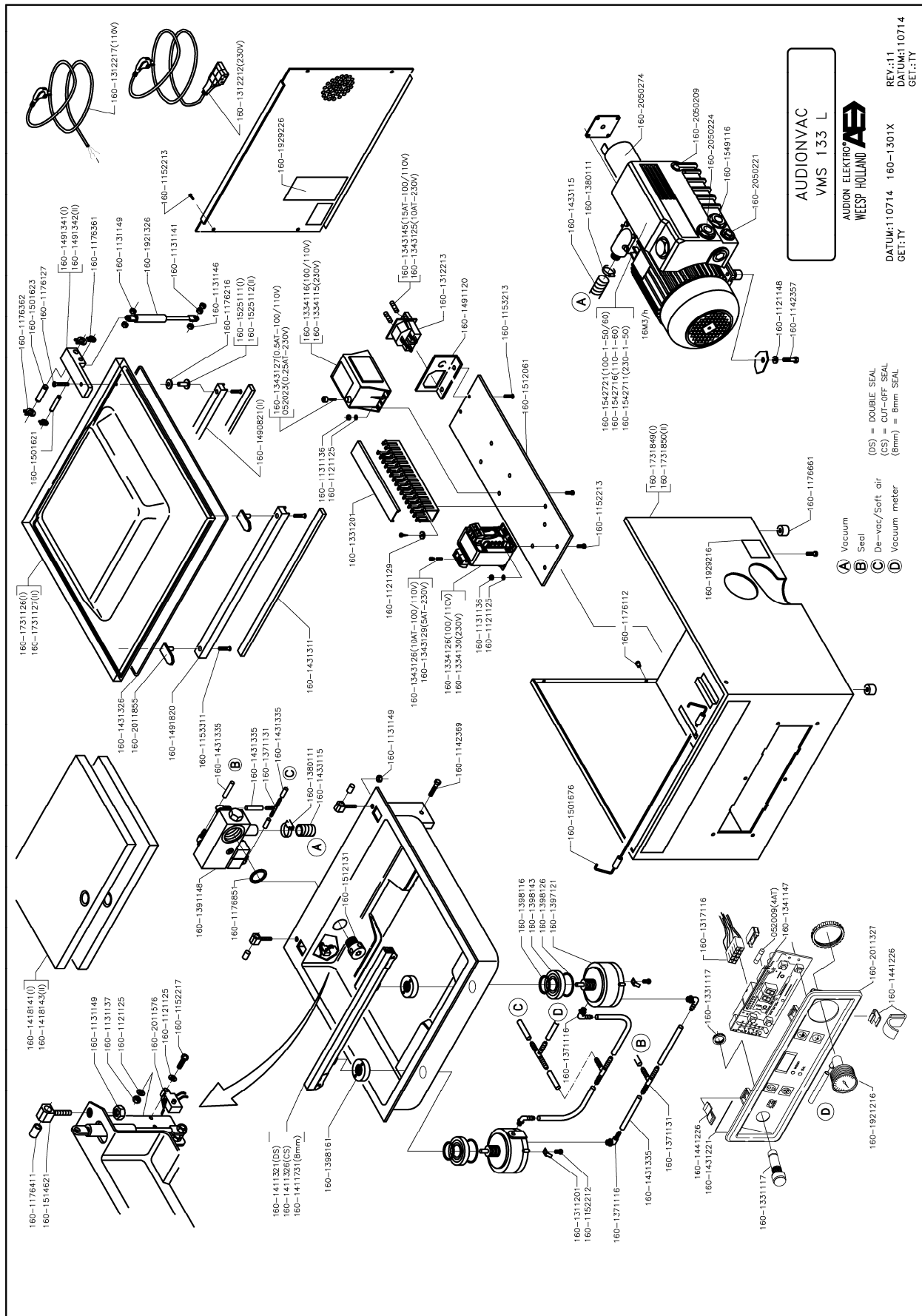




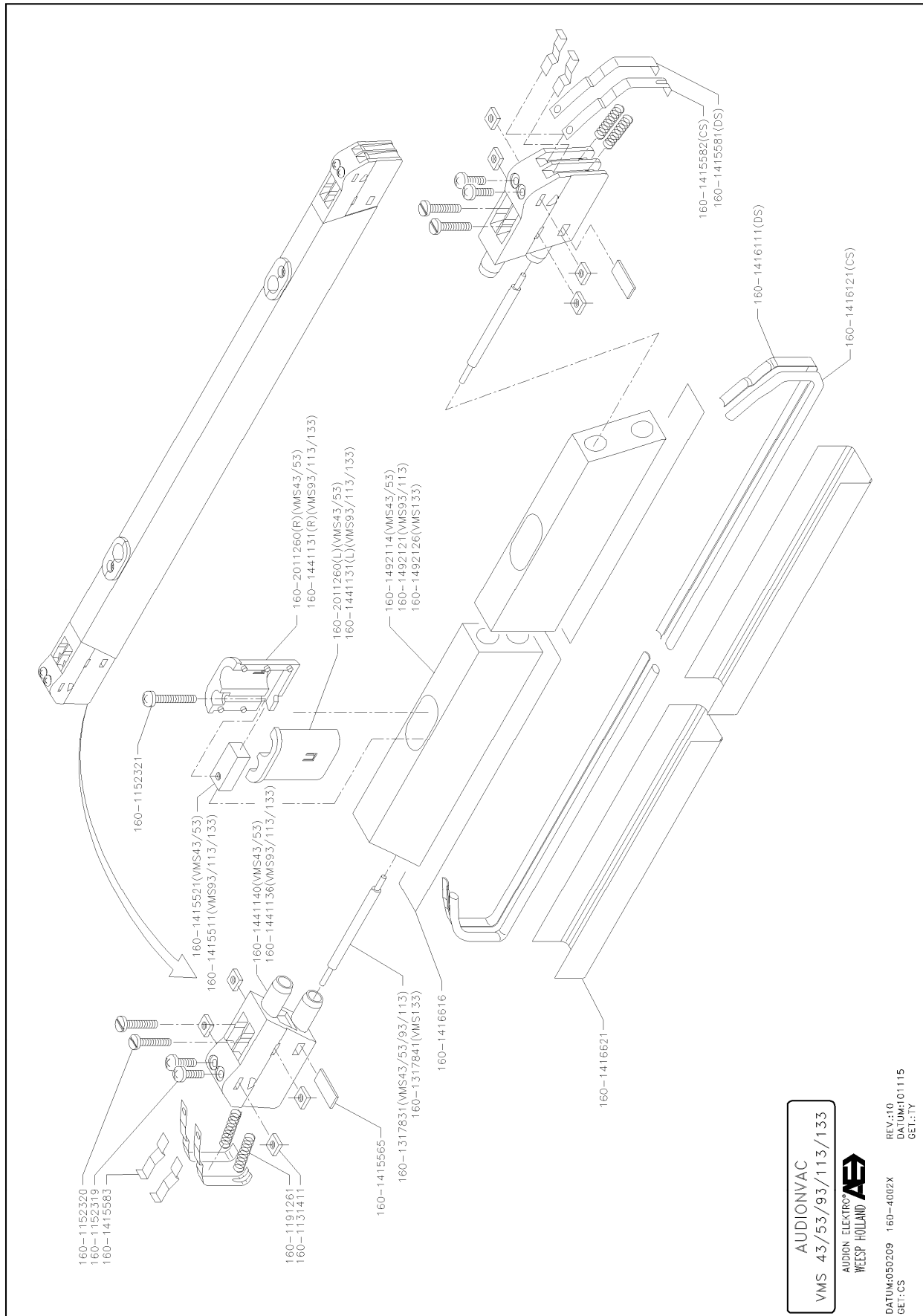








13 Exploded view seal bar



AUDIONVAC
VMS 43/53/93/113/133

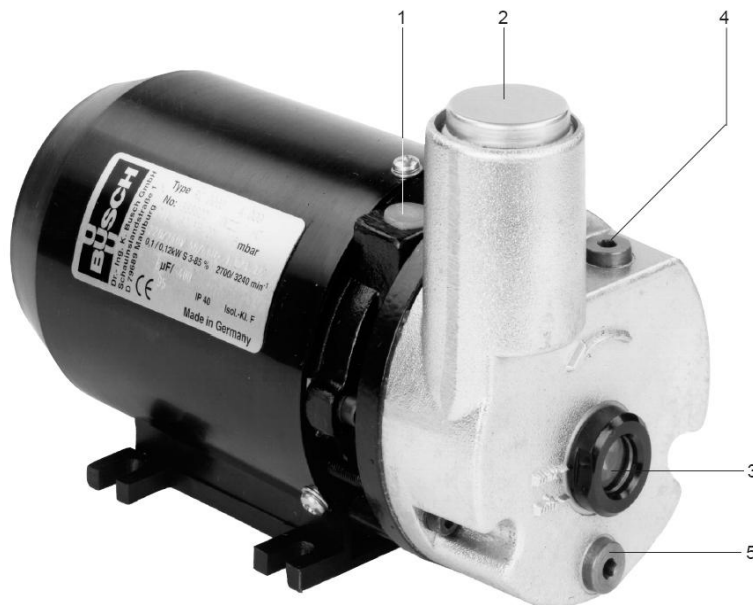
AUDION ELEKTRO
WEESP HOLLAND



DATUM: 050209 160-4002X
REV: 10
GET: CS
DATUM: 101115
GET: TY

14 Vacuum pump

VMS 43 (004 m³/h)



- 1 Sauganschluß
- 2 Luftentölement
- 3 Ölschauglas
- 4 Öleinfüllschraube
- 5 Ölablaßschraube

- 1 Gas inlet
- 2 Exhaust filter
- 3 Oil sight glass
- 4 Oil fill plug
- 5 Oil drain plug

- 1 Aspiration
- 2 Filtre d'échappement
- 3 Voyant d'huile
- 4 Bouchon de remplissage
- 5 Bouchon de vidange

VMS 53 / 93 (008 m³/h)

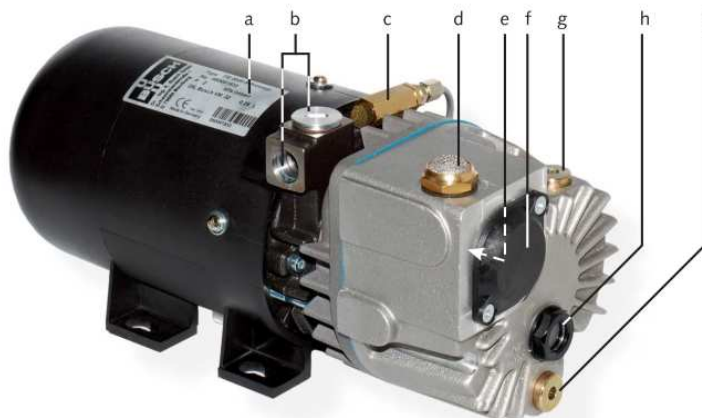


Illustration shows PB 0008 B,
PB/ PC 0008 B are similar

- A Nameplate
- B Suction connections with non-return valve
- C Gas ballast (optional)
- D Gas discharge
- E Exhaust filter
- F Lid over exhaust filter
- G Oil fill plug
- H Oil sight glass
- I Oil drain plug

VMS 113 / 133 / 133 L (016 m³/h)



1 Ölabscheider
2 Saugflansch
3 Ölschauglas
4 Öleinfüllschraube
5 Ölablaßschraube
6 Abluftdeckel

1 Oil separator
2 Inlet flange
3 Oil sight glass
4 Oil fill plug
5 Oil drain plug
6 Exhaust cover

1 Séparateur de brouillard d'huile
2 Bride d'aspiration
3 Voyant d'huile
4 Bouchon de remplissage
5 Bouchon de vidange
6 Couvercle d'échappement

BUSCH	STANDARD OIL			EXHAUST FILTER		
	Type	Audion Elektro Reference	Liters	Type	Audion Elektro Reference	#
004 m³/h	VG 22	160-1550612	0.05	50-60 Hz	160-2050271	1
008 m³/h	VG 32	160-1550621	0.20	50-60 Hz	160-2050273	1
016 m³/h	VG 32	160-1550621	0.40	50-60 Hz	160-2050274	1



AUDIONVAC



AUDION ELEKTRO®



EG-VERKLARING VAN OVEREENSTEMMING

AUDION ELEKTRO B.V., gevestigd op de Hogeweyselaan 235
te Weesp, Holland

verklaren hiermede dat de

AUDIONVAC TABLETOP MODEL

Type:

VMS 43 ; VMS 53 ; VMS 93 ; VMS 113 ; VMS 123 ; VMS 133 (L) ; VMS 153
(V) (VCB) ; VMS 163 (B)

- voldoet aan de bepalingen van de volgende EEG richtlijnen:
2006/95/EEG Laagspanningsrichtlijn ; 2006/42/EC Machinerichtlijn ;
2004/108/EG EMC-Richtlijn ;

- en verklaart voorts dat de volgende (onderdelen van)

geharmoniseerde normen zijn toegepast:

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

Weesp, 6-7-2011

E. Tangelder
Directeur

PGR160A

EC-DECLARATION OF CONFORMITY

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

herewith declares that the

AUDIONVAC TABLETOP MODEL

Type:

VMS 43 ; VMS 53 ; VMS 93 ; VMS 113 ; VMS 123 ; VMS 133 (L) ; VMS 153
(V) (VCB) ; VMS 163 (B)

- is in conformity with the provisions of the following EEC directives:
2006/95/EEG Low Voltage Directive ; 2006/42/EC Machine Directive ;
2004/108/EC EMC-Directive ;

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

applied:

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

Weesp, 6-7-2011

E. Tangelder
Director

PGR160A

EG-KONFORMITÄTSERKLÄRUNG FÜR MASCHINEN

AUDION ELEKTRO B.V., mit Sitz Hogeweyselaan 235
Weesp, Holland

Erklärt hiermit, dass

AUDIONVAC TABLETOP MODEL

Modell:

VMS 43 ; VMS 53 ; VMS 93 ; VMS 113 ; VMS 123 ; VMS 133 (L) ; VMS 153
(V) (VCB) ; VMS 163 (B)

- konform ist mit den relevanten Bestimmungen der EG-Maschinenrichtlinie:
2006/95/EEG Niederspannung Richtlinie ; 2006/42/EC Maschinenrichtlinien ;
2004/108/EG Elektromagnetische Verträglichkeit Richtlinie ;

- und dass folgende harmonisierte Normen (oder Teile/Klauseln hieraus)

angewendet werden:

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

Weesp, 6-7-2011

E. Tangelder
Geschäftsführer

PGR160A

DÉCLARATION CE DE CONFORMITÉ

AUDION ELEKTRO B.V., Hogeweyselaan 235 Weesp Hollande

Déclare que la machine désigne ci-après

AUDIONVAC TABLETOP MODEL

Type:

VMS 43 ; VMS 53 ; VMS 93 ; VMS 113 ; VMS 123 ; VMS 133 (L) ; VMS 153
(V) (VCB) ; VMS 163 (B)

- est conforme aux dispositions des directives CEE suivantes:
2006/95/CEE Directive Basse Tension ; 2006/42/EC Directive Machine ;
2004/108/EC Directive EMC ;

- et que les (parties/paragraphes) suivants des normes harmonisées ont été

appliquées:

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

Weesp, 6-7-2011

E. Tangelder
Directeur

PGR160A



AUDION ELEKTRO®



DICHIARAZIONE DI CONFORMITA' CE

AUDION ELEKTRO B.V., Hogeweyselaan 235
Weesp, Olanda

dichiara, che la macchina

AUDIONVAC TABLETOP MODEL

Type:

**VMS 43 ; VMS 53 ; VMS 93 ; VMS 113 ; VMS 123 ; VMS 133 (L) ; VMS 153
(V) (VCB) ; VMS 163 (B)**

- è conforme alle seguenti direttive:
2006/95/EEG Direttiva Bassa Tensione ; 2006/42/EC Direttiva Macchine ;
2004/108/EG Direttiva EMC ;

- le norme armonizzate di riferimento per la dichiarazione sono:

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

Weesp, 6-7-2011

E.Tangelder
Direttore

PGR160A

DECLARACIÓN DE CONFORMIDAD DE LA CE

AUDION ELEKTRO B.V., con sede en la calle Hogeweyselaan 235, en
Weesp, Holanda

declara, por la presente, que

AUDIONVAC TABLETOP MODEL

el Tipo:

**VMS 43 ; VMS 53 ; VMS 93 ; VMS 113 ; VMS 123 ; VMS 133 (L) ; VMS 153
(V) (VCB) ; VMS 163 (B)**

- cumple las estipulaciones de las siguientes normativas de la CE:
2006/95/EEG Sobre aparatos de baja tension ; 2006/42/EC Sobre maquinaria
y ; 2004/108/EG Sobre compatibilidad de campos magneticos ;

- y declara, además, que se han aplicado (parcialmente) las siguientes

normativas armonizadas:

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

Weesp, 6-7-2011

E.Tangelder
Director

PGR160A

AUDION ELEKTRO

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