INSTRUCTIONS FOR USE

MASTERCUT

PRODUCT NO. 32100079

Our quality – Your choice Jasopels

TABLE OF CONTENTS

DECLARATION OF CONFORMITY

ANNEX II OF THE MACHINERY DIRECTIVE

Type designation: MASTERCUT
Device description: Jasopels Splitter with loosening function
Date: 15-09-2017

Manufacturer:
Name: Jasopels
Address: Fabriksvej 19
Postcode: 7441 Bording

THE DEVICE MEETS THE FOLLOWING STANDARDS:

Low Voltage Directive EU 73 / 23EEA
as amended by the CE Marking Directive 93/68 EEA.
Directive 2006/42/EC– Machinery Directive

PRODUCT MEETS THE STANDARDS WHEN
the following harmonised standards apply:

- EN 60204-1: Safety of machinery – Electrical equipment of machines — Part 1: General requirements 60439-1
- EN 60439-1: LOW-VOLTAGE SWITCHGEAR – PART 4: PARTICULAR REQUIREMENTS FOR ASSEMBLIES FOR CONSTRUCTION SITES (ACS)
- EN ISO 12100 : SAFETY OF MACHINERY – GENERAL PRINCIPLES FOR DESIGN – RISK ASSESSMENT AND REDUCTION
- EN ISO 13850: SAFETY OF MACHINERY – EMERGENCY STOP – PRINCIPLES FOR DESIGN

PERSON RESPONSIBLE FOR THIS DECLARATION:

Name: Poul A. Bach
Company name: Jasopels a/s
Address: Fabriksvej 19
Postcode: 7441 Bording

Signatur Date 21.09.2017

The Administrative Director, Poul A. Bach, Fabriksvej 19, 7441 is authorized to submit technical documentation.

INTRODUCTION

- Congratulations on the purchase of a new Mastercut device.
- These Instructions for use and safety notes are necessary for safe and proper use of this device. **Read the instructions carefully before you start to use the device, and follow the instructions, if needed.**
- Instructions for use contain important information on safety and use of the machine. All users of the machine should be trained to be able to use it properly. A person supervising work is responsible for proper instruction of machine operators.
- The instructions for use or its copies should be kept with the device. Instructions for use and declaration of conformity must be provided to a new user, if the device is resold or lent.
- This machine was designed regarding the operator's safety, however it may present a risk, if it is not properly used or maintained. The machine instructions for use must be strictly observed! If you have any questions regarding the operation or maintenance of the machine, please contact Jasopels.
- Information presented in these instructions is based on machines under production at the time of publication. Jasopels A/S reserves the right to change the information without a prior notice to users.
- The machine owner must ensure that the machine operator, technical maintenance personnel and any other persons having access to the machine were properly instructed on how to use and handle the machine. For more information, see the following part of the instructions.

2 . COPYRIGHTS

Jasopels A/S reserves the right to continuously update the instructions and documents to reflect the current version of the product, and the company is not obliged to update already distributed copies of documents.

Jasopels A/S will publish information on important changes to the instructions or other documentation for its devices on the website.

Instructions for use are drawn up in Danish and the Danish version is applicable despite available translations. Danish original is always their source.

The company reserves the right to make technical changes without prior notice in order to improve our machines or their safety standards.

EXPLANATION OF SYMBOLS

Please read the instructions for use and follow the recommendations contained.
To emphasize the importance of some information, the following phrases were used:

NOTE!

A triangle with an exclamation mark is a warning symbol that presents important instructions or provides information on this device.

WARNING!

A triangle containing a warning on the risk of crushing.

MACHINE PRESENTATION

- The MasterCut skinning device contains innovative design and operational solutions.
- With MasterCut, any mink can be skinned.
- Without the need to manually change settings for male and female skins.
- After removal from the machine, the skin is completely ready and the carcass is automatically removed.

IMPORTANT INFORMATION FOR A PERSON SUPERVISING WORK.

NOTE!

- The person supervising work must ensure that the machine operator, technical maintenance personnel and any other persons having access to the machine were properly instructed on how to use and handle the machine.
  For further information, read these instructions carefully.
- The machine can only be used for the purposes for which it was designed (for mink skinning).
- NEVER allow untrained persons to operate the device.
- If there are any problems related to the machine or its operation, do not try to solve them before disconnecting the device from the power supply. Software changes and error fixes in the software can be installed using the control panel.
- The instructions for use should always be kept in a place accessible to the operator.

COMMENCEMENT OF OPERATION

- Before commencement of operation of MasterCut, check whether the machine has been placed on a firm and stable surface.
  (Use the adjustable feet to position the machine in the correct position).
- The machine is intended for skinning minks only.
- !!! The device can only be operated by the operator!!!

DANGER!
To avoid the risk of crushing hands while the machine is in operation, it is necessary to follow the safety instructions to ensure the correct and safe use of the machine. Always avoid touching moving parts of the machine. This particularly applies to all blades and a paw cutter that are activated in the machine's working process.

- Do not try to manually stop moving parts of the machine. To avoid dangerous situations, always use an emergency stop switch. **Do not use the stop button to prevent dangerous situations.** Please remember that pressing the emergency stop button located on the front panel will stop the current process and the machine's sequence will move back by one step.
- In case of danger, always use the emergency stop switch.
- MasterCut is factory equipped with a CEE 400V 5-PIN plug. Use the device with the above plug only to ensure grounding.

NOTE!
The power cable of the machine must be grounded. In the event of non-compliance with this requirement, the warranty expires

(Absence of grounding may cause unintended program operation or errors)

- The compressed air must have a pressure of at least 8 bars. The compressed air consumption is up to 70 l/min.
- The hose connecting the MasterCut device and the compressor must have a diameter of min. 3.8", while the recommended diameter is 1/2" - the operation of the device is then the most optimal.

IMPORTANT:
Any works related to the machine, e.g. cleaning, adjustment, etc., when it is not in use, can only be performed after disconnecting the power supply and the compressed air supply.

NOTE!
To avoid possible damage to the microcontroller of the control system and other components of the electrical system of the machine due to storms, it is recommended to disconnect the machine from the power supply, when it is not in use and always during a storm.

USER SAFETY

- For the safe operation of the machine, the operator must be familiar with the machine and trained. Machines operated inappropriately or by untrained persons may be dangerous. Read the instructions for use to know the location of all lights and devices and their use. Before using the device, a user should carefully read the instructions for use. A person supervising work is responsible for proper instruction of machine operators.
- NEVER allow untrained persons to operate the machine. Persons operating the machine must be aware of the potential risk and hazards related to operation.
- NEVER use equipment or accessories not recommended by Jasopels A/S. It can lead to equipment damage and/or injury to people and expiry of the warranty.
- NEVER use the device without safety guards or safety measures - this could result in potentially dangerous situations that could lead to serious injuries.
- NEVER leave the device running unattended.
- Safety goggles protect the eyes from damage caused by dropping pieces of the carcass or other objects.
- ALWAYS turn off the electricity and air supply when the device is not in use.
- ALWAYS keep the device clean and in the appropriate manner when it is not in use. The device should be clean and dry and kept out of the reach of children.
- The device must be stored in a place inaccessible to rodents, otherwise damage to the equipment and/or injury may occur.
- ALWAYS use the machine with the recommended safety measures and as intended. DO NOT change or switch off the safety functions. DO NOT operate the machine if any guard or protection is missing or does not work.
- Due to the monotony and repeatability of work (EGA), Jasopels recommends that operators should not work on the machine more than 2 hours in total during a working day. The persons supervising work are responsible for ensuring that operators are not exposed to monotonous work. Jasopels A/S recommends rotation of employees working with the machine. Learn more about EGA at the link on the JASOPELS.DK website.
- It is forbidden to wear loosely hanging objects and loose clothing on the body and around the head when the device is in use, as this causes danger.
- Long hair and beards should be protected with a net or something similar. It is forbidden to operate the machine with unbound hair or a long beard, as this causes danger.
- Before starting work, read, understand and follow the procedures described in the Instructions for use.
- Jasopels provides continuous trainings on the safe use of the machine. The courses are conducted by the Jasopels technician at the company's headquarters at Fabriksvej 19, 7441 Bording.

Rys.10.1

EMERGENCY STOP SWITCH (RED BUTTON ON YELLOW BACKGROUND) – FIG. 10.1

- Machine stops immediately, any movement is stopped and the pneumatic system is vented.

The person supervising work is responsible for training operators on the proper use of the emergency stop switch.

After an emergency stop, deactivate the emergency stop switch and press the blue button [Reset].

Rys.10.2

RESET – EMERGENCY STOP SWITCH (BLUE BUTTON) – FIG. 10.2.

When the emergency stop switch is turned off, the device can be reset by pressing the button once (press for min. 5 seconds), then the machine is ready for calibration / returns to the initial position (homing).

After an emergency stop, homing can be performed on the HMI screen or by pressing the green Start button – Fig. 10.4

Rys.10.3

STOP – BACK (RED BUTTON) – FIG. 10.3

- Used to stop the program cycle, !!! It is not an emergency stop switch!!!
- The button is used to undo the program cycle.
- For example, if the operator has misplaced a mink, he can always press the stop button and then press it again to go back one step in the program cycle.

If needed, you can still go back in the cycle by repeatedly pressing the button.

DEVICE OPERATION

Rys.10.4

START / STEP (GREEN BUTTON) – FIG. 10.4
activates the current process.

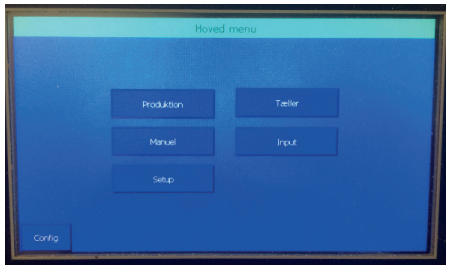
- If the device is in manual mode, this button can also move a step forward in the cycle.
- After an emergency stop, the start button is also used to bring the machine to the reference / homing points.

OPERATION – HM SCREEN

Rys.10.5

START SCREEN ON THE TOUCH SCREEN PANEL – FIG. 10.5
After the machine is turned on, the start screen will automatically appear on the screen. It takes approx. 30 seconds to start the screen.
During start up, the start up image is displayed as shown below.
Press the menu button to start.

Rys.10.6



MAIN MENU – FIG. 10.6
Here you can select from five main options.

- Production – Page 13
- Counter – Page 13
- Manual mode – Page 14
- Configuration – Page 14-16
- Input – Page 17

There is also a (config) button in the left corner of the screen (!!!!the button is intended only for maintenance purposes!!!!) This button changes the screen configuration (HMI). This button should not be used unnecessarily. Instructions on how to return to the main screen after using the button are provided on page 18.

OPERATION – PRODUCTION

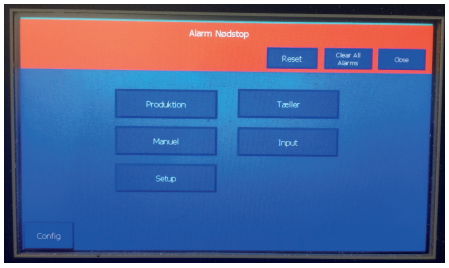
PRODUCTION SIDE – FIG. 10.7

Rys.10.7

This image will appear on the screen after pressing the PRODUCTION button in the main menu.

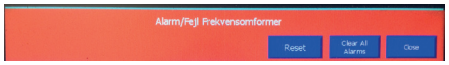
- Total counter - shows the number of cycles the machine has made until now.
- Male/number. - Number of males. Reset by means of the CLEAR command
- Female/number. - Number of females. Reset by means of the CLEAR command
- Male/day. Counter that is deleted at 0:00
- Female/day. Counter that is deleted at 0:00
- Alarm cancel. - Pressing this button deletes alarms.
- Homing. – Pressing the HOMING button after an emergency stop leads the device to the reference points (works in the same way as the green start button).
- Stretching power - male/female - Here you can select the male/female option. (Female selected in the picture)
- Menu. – In the menu in the upper right corner, selecting the icon allows for returning to the main menu.

Rys.10.8



TOUCH SCREEN OF THE EMERGENCY STOP SWITCH – FIG. 10.8

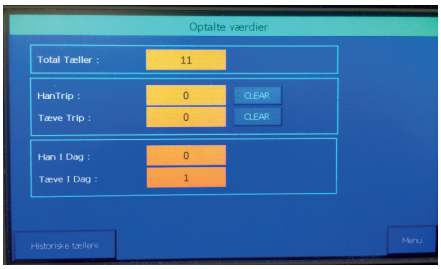
When the device's emergency stop switch is turned on, a red warning will appear at the top of the screen.
The text will automatically disappear after approx. 3 seconds, when the frequency converter's voltage drops.



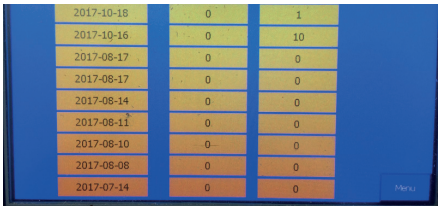
Now you can restart the machine. See Page 11, points 1-2.

OPERATION – COUNTER

Rys.10.9



Rys.10.10



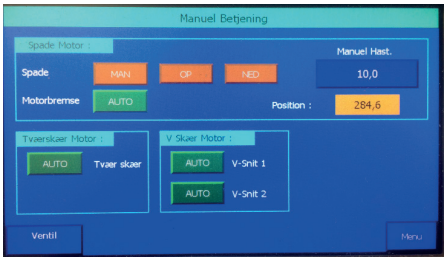
COUNTED VALUES – FIG. 10.9-10.10

This image will appear on the screen after pressing the COUNTER button in the main menu.

- Total counter - shows the number of cycles the machine has made until now.
- Male. – Number of males. Reset by means of the CLEAR command
- Females. - Number of females. Reset by means of the CLEAR command
- Male/day. Counter that is deleted at 0:00
- Female/day. Counter that is deleted at 0:00
- COUNTER HISTORY icon is also in the left corner - here you can check the data from a specific date.
- Menu – In the menu in the upper right corner, selecting the icon allows for returning to the main menu.

OPERATION - MANUAL MODE

Rys.10.11



MANUAL MODE 1 – FIG. 10.11

This image will appear on the screen after pressing the MANUAL MODE button in the main menu.

- Blade motor: Here you can control manually up / down with the upper arm (hooks, V cutting blades and the console with a blade). Press the AUTO button (until a MAN text signal appears) and the upper console can be manually moved up/down. You can adjust its speed on the right side of the screen, but it is not recommended to change this setting drastically. The current position of the console is visible on the screen.
- Cross-cutting motor: The cross-cutting blade rotation is activated here - by pressing the auto button.
- V cutting motor: The V cutting blade rotation is activated here - by pressing the auto button.

Rys.10.12

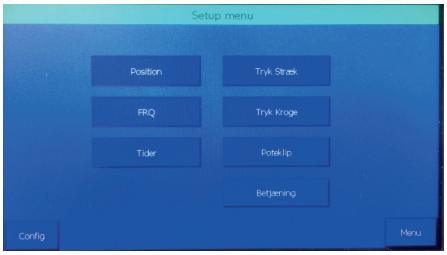
MANUAL CONTROL VALVE. – FIG. 10.12 -10.13

This image will appear on the screen after pressing the VALVE button in the main menu.
Here, all valves and laser are activated and operated by pressing an appropriate field. The field will change from AUTO to MAN.
After pressing this field, the valve will activate and the cylinder will initiate the desired movement.

Rys.10.13

OPERATION – SETTINGS

Rys.10.14

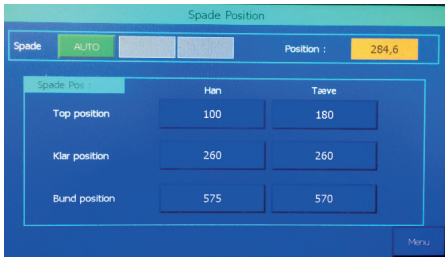


SETTINGS MENU – FIG. 10.14

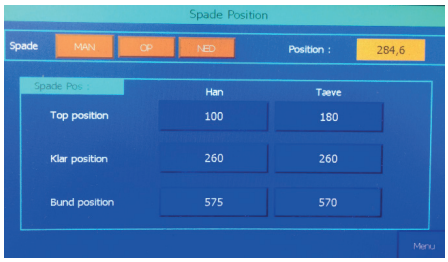
In the settings menu, many fields of the device operation can be adjusted.

- Position (Page 14)
- Stretching power (Page 15)
- FRQ (Page 15)
- Hook pressure (Page 15)
- Number (Page 15)
- Paw cutter (Page 16)
- Operation (Page 16)

Rys.10.15



Rys.10.16



POSITION – FIG. 10.15-10.16

This image will appear on the screen after pressing the POSITION button in the menu.

- Upper position - The upper limit for the placement of males and females is set here.
- Standby position - The waiting position for males and females is set here.
- Bottom position - Here you set the depth of the upper console (blade/ V blades) that lowers in auto mode.
- Auto / Man Blade - The blade can be manually controlled here - Fig. 10.15-16.

Rys.10.17

AIR PRESSURE AT STRETCHING - FIG. 10.17

This image will appear on the screen after pressing the STRETCHING POWER button in the menu.

- The pressure used will be shown in the yellow field.
- The pressure can be adjusted for males/females, respectively.

Jasopels recommends to use the settings as shown in Fig. 10.17.

Rys.10.18

FRQ / FREQUENCIES (SPEED OF BLADE/HOOKS) - FIG. 10.18

This image will appear on the screen after pressing the FRQ button in the settings menu.

- The current position will be shown in the yellow field.
- In the LESS field the speed of the upper console (blade/ hooks) can be adjusted.
- In the MORE field the speed of the upper console (blade/ hooks) can be adjusted.

Jasopels recommends to use the settings as shown in Fig. 10.18.

Rys.10.19

HOOKS PRESSURE – FIG. 10.19

This image will appear on the screen after pressing the HOOKS PRESSURE button in the settings menu.

- The pressure used will be shown in the yellow field.
- Idle pressure – pressure at which the cylinders return to the initial position.
- Pressure 1 – pressure at which the hook moves forward. It can be adjusted for males and females.
- Pressure 2 – pressure under which the displaced hook is located. It can be adjusted for males and females.

Jasopels recommends to use the settings as shown in Fig. 10.19.

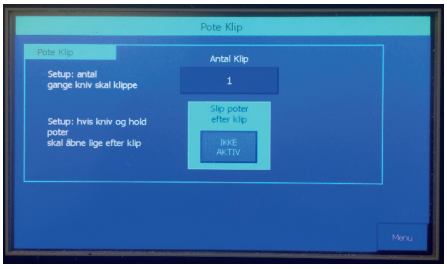
Rys.10.20

HOOKS PRESSURE – FIG. 10.19

This image will appear on the screen after pressing the TIME button in the menu.

- You can adjust the time of rising and dropping for the column itself (blade and hook).
- Sequence times. Cross-cutting time can be adjusted here.
- Blade – start. Waiting time for the blade can be adjusted here.
- Carcases 1 - waiting time. Waiting time for the carcases 1 can be adjusted here.

Rys.10.21

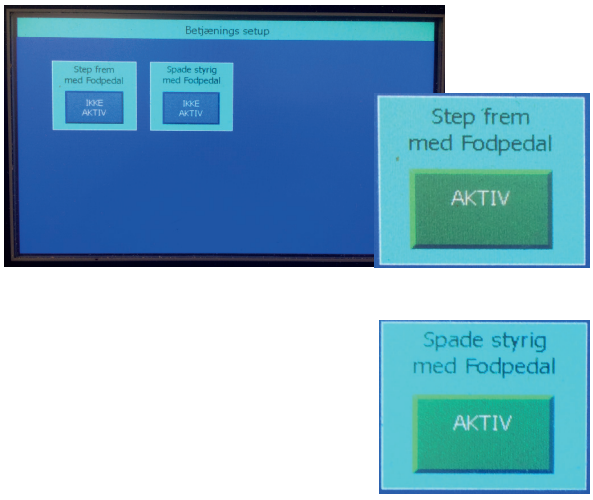


PAW CUTTING – FIG. 10.21

This image will appear on the screen after pressing the TIME button in the settings menu.

- Paw cutter. Number of settings – when several cuts in sequence are needed
- Release the paws after cutting. – this option can be enabled or disabled.

Rys.10.22



USER CONFIGURATION – FIG. 10.22

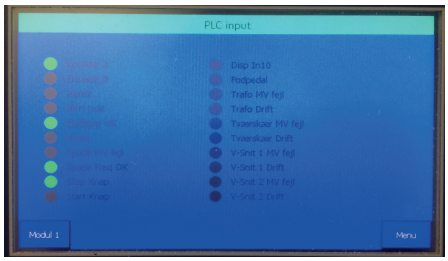
This image will appear on the screen after pressing the TIME button in the menu.

Step forward using the pedal. Activate this field when you want to go step by step in a cycle in manual mode.

Blade control with a foot pedal. Activate this field when you want to manually control the column (blade and hooks) up.

OPERATION – INPUT

Rys.10.23



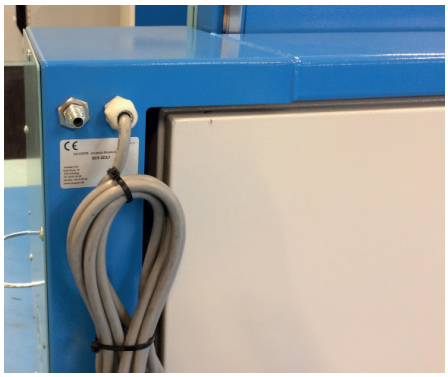
INPUT – FIG. 10.23
This image will appear on the screen after pressing the INPUT button in the main menu.
All active and inactive settings are visible here.
When the setting is active, it will be highlighted in green. It can be an active reed switch or a functioning valve.

Rys.10.24

INPUT. 2 . FIG. 10.24
This image will appear on the screen after pressing the MODULE 1 button in the left corner.
List of inputs is presented here - the other side.

OPERATION – CONNECTIONS

Rys.10.25



CONNECTIONS – FIG. 10.25
The connection of compressed air and supply current is located in the rear part of the machine where a quick release coupling (series 520) of compressed air is installed.
The power cable is located next to the quick release coupling. This cable is equipped with a CE plug.

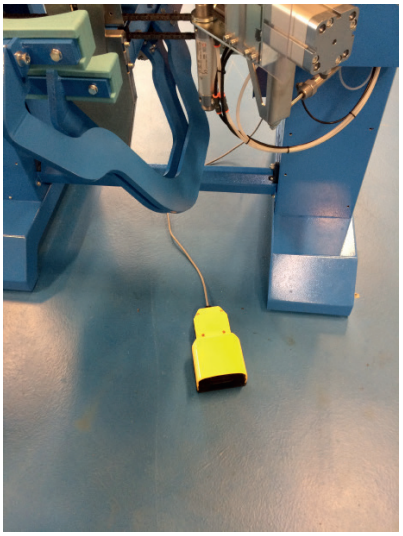
OPERATION – MAIN SWITCH

Rys.10.26

MAIN SWITCH – FIG. 10.26
At the rear of the machine, there is a main switch on the outer part of the control cabinet.

OPERATION – FOOT PEDAL

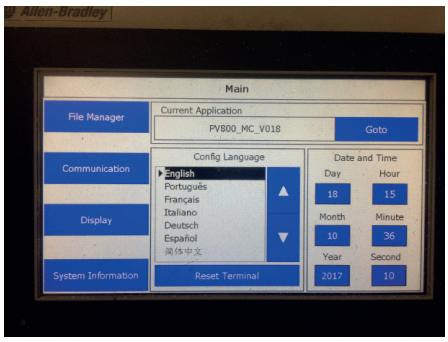
Rys.10.27



FOOT PEDAL (YELLOW) – FIG. 10.27
The machine is equipped with a pedal that is used to initiate machine operations.

OPERATION – CONFIGURATION

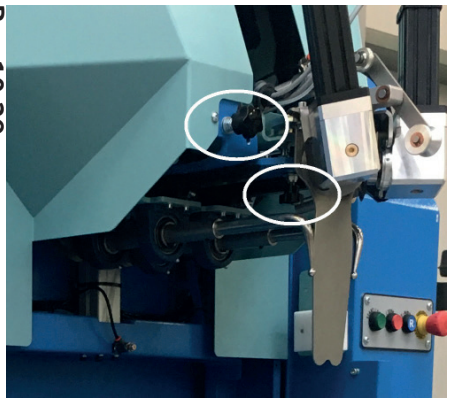
Rys.10.28



CONFIGURATION – FIG. 10.28
If the configuration icon is clicked in the main menu, you just need to press the Goto icon to return to the main menu.

OPERATION – MALE/FEMALE SETTING

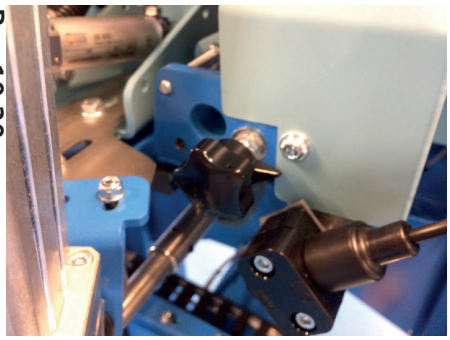
Rys.10.29



MALE/FEMALE SETTING – FIG. 10.29
When changing a male to a female, besides the selection on the screen, the three levers located around the blade must be turned.

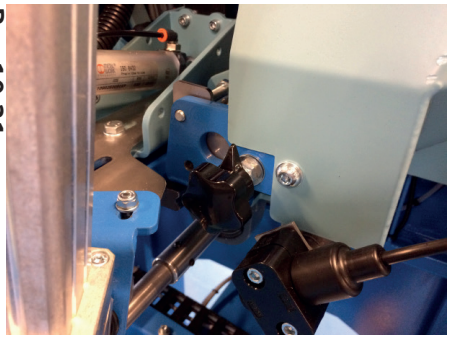
- One holder is behind the blade, while the other two are located on the right and left side of the blade.

Rys.10.30



MALE SETTING (OPEN/CLOSED) – FIG. 10.30
When the opening is open, the machine is ready to skin males.

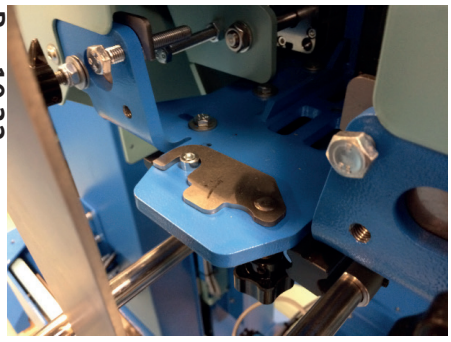
Rys.10.31



FEMALE SETTING (OPEN/CLOSED) – FIG. 10.31
When the opening is closed with a metal plate, the machine is ready to skin females.

This refers to both holders.

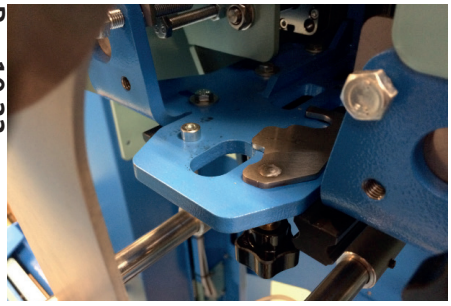
Rys.10.32



MALE/FEMALE UP/DOWN SETTING – FIG. 10.32
When the opening is closed with a metal plate, the machine is ready to skin males.

This refers to the up/down movement only.

Rys.10.33

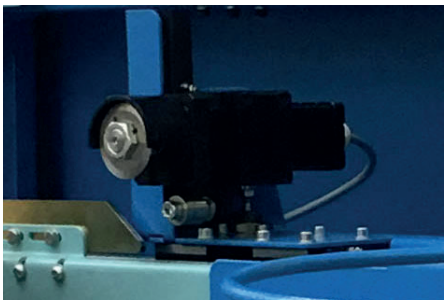


MALE/FEMALE UP/DOWN SETTING – FIG. 10.33
When the opening is open, the machine is ready to skin females.

This refers to the up/down movement only.

OPERATION – REPLACEMENT OF CROSS-CUTTING BLADE

Rys.10.34



REPLACEMENT OF CROSS-CUTTING BLADE – FIG. 10.34

!!!!! Before the replacement of the blade, completely disconnect the power supply and the compressed air supply from the machine!!!!!

When the power supply and compressed air supply to the device is disconnected, the cross-cutting blade can be replaced using two wrenches - 19mm and 24mm. Unscrew the nut by holding the mandrel with a 19 mm wrench. Next, use a 24mm wrench to turn the nut to the left. When the nut is loose, it can be removed and the blade can be replaced. Reassembly of the device is made in reverse order.

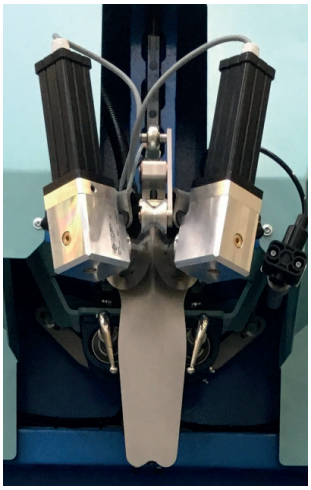
!!!!! The assembly and removal of the blade should be carried out with extreme caution, as there is a risk of injury to hands and fingers!!!!!

Safety gloves are REQUIRED when replacing and mounting the blade.

The blade may only be replaced by a person who has read the blade replacement instructions.

OPERATION – REPLACEMENT OF V BLADE

Rys.10.35



REPLACEMENT OF V BLADE – FIG. 10.35

!!!!! Before the replacement of the blade, completely disconnect the power supply and the compressed air supply from the machine!!!!!

When the power supply and the compressed air supply to the device is disconnected, the blade can be removed using a star-like wrench or similar. V blade can be replaced using two wrenches – 30mm and 32mm. Unscrew the nut by holding the mandrel with a 30 mm wrench. Next, use a 32mm wrench to turn the nut to the left. When the nut is loose, it can be removed and the blade can be replaced. Reassembly of these parts is made in reverse order.

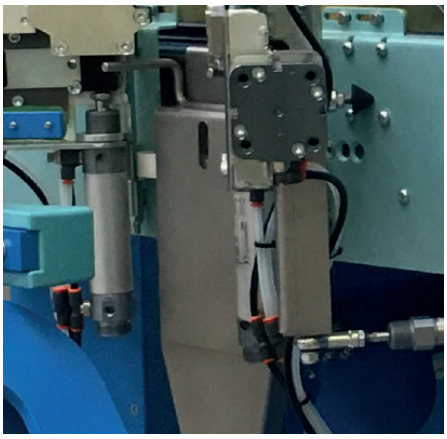
!!!!! The assembly and removal of the blade should be carried out with extreme caution, as there is a risk of injury to hands and fingers!!!!!

Safety gloves are REQUIRED when replacing and mounting the blade.

The blade may only be replaced by a person who has read the blade replacement instructions.

OPERATION – CARCASSES EXTRACTOR

Rys.10.36



CARCASSES EXTRACTOR – FIG. 10.36
If it is necessary to change the height of the carcasses extractor, this can easily be done with a 5mm hexagon socket screw wrench that is inserted into the bed on the carcasses extractor.
If it is loose, it can be adjusted as needed.
During the adjustment of the carcasses extractor, the paw cutters must be pushed together as they will determine the adjustment limit.

TECHNICAL DATA

MASTERCUT device technical data	
width:	1250mm
depth:	1100 mm
Min. height:	1600 mm
Max. height:	2300 mm
Weight:	250 kg
Electrical parameters	
Rated voltage:	3x400 V -L1, L2, L3 + N + PE
Rated frequency:	50 Hz
Rated current:	5.25 Amp
Automatic circuit breakers:	AC / DC transmitter
Fuses (max):	Amp 16 gL
Pressure parameters	
Pressure:	8 Bar
Compressed air consumption:	80L / min (V.250 / h)

Rys.20.1

PROGRAM CYCLE FOR MINK SKINNING

START – FIG. 20.1

Paw cutters are connected and ready. The head (blade/hook) is in standby. The device is ready to start.
Note: After a power failure or emergency stop, the device will not work until calibration is started. This is done by releasing the emergency stop switch. Then press and hold the blue reset button (R) for approx. 5 seconds. The machine will be vented and it then moves to the reference points. The device is now ready for operation.

Rys.20.2

PLACE THE MINK IN THE MACHINE – FIG. 20.2

The hind legs must be held with clamps. By pressing the pedal, the paw holders are closed and the mink is stretched under the set pressure (see page 15).
If the device is in automatic mode, the motor moves the device from left to right and it cross cuts itself.

Rys.20.3

PAW POSITION – FIG. 20.3

It is important to properly adjust the paws for optimal cutting.

- The paw pads must be faced up.
- Place the paw in the holder so that the lock is outside the paw pad.

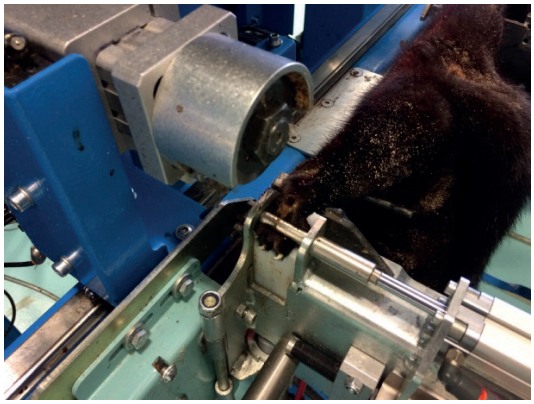
DESCRIPTION OF FUNCTIONS:

Rys.20.4

PAW POSITION – FIG. 20.4

The paws should be stretched towards the end plate of the paw holder.
When the paw pad is properly placed and fully tightened forward in the holder, (this applies to both right and left paws),
the lock can be activated by pressing the foot pedal.
The operator must ensure that nobody else is in the vicinity of the device, as he could get jammed. The operator must also watch his fingers.

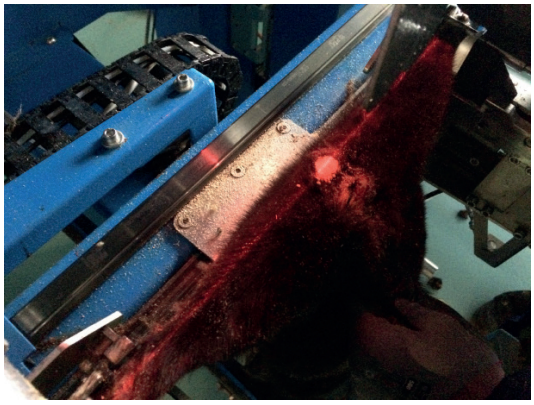
Rys.20.5



PAW POSITION – FIG. 20.5

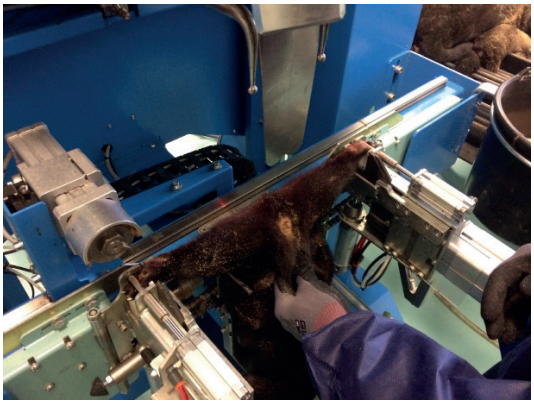
Paws are blocked and the machine strethens the mink under the set pressure. (See page 15).
If the paw is not correctly positioned, press stop immediately, which will release the lock.
Now the operator can put a mink in the device again.

Rys.20.6



Laser – Fig. 20.6
When the mink is stretched, the laser engages and the operator can easily see how the cut will be made.
If the mink is not correctly positioned, press stop immediately, which will release the lock.
Now the operator can put a mink in the device again.

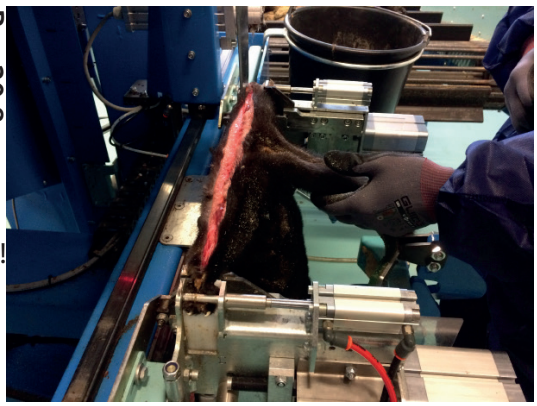
Rys.20.7



Abdomen cutting – Fig. 20.7
The operator holds the mink by a tail and pulling it down slightly he can make the proper abdominal cutting.

DESCRIPTION OF FUNCTIONS:

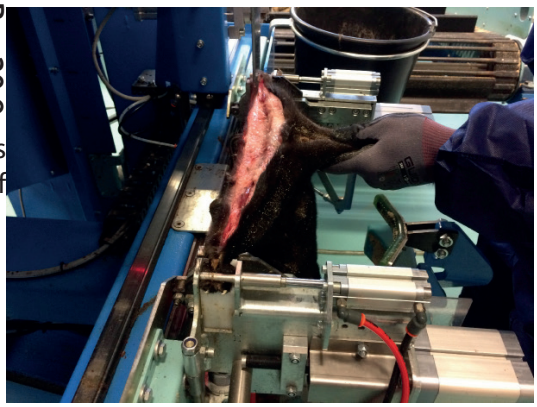
Rys.20.8



! ! !

CROSS-CUTTING – FIG. 20.8
Thanks to the strong and almost noiseless DC electric motor, an open cross-cutting cut is now being made.
!!! The operator must keep fingers and other parts of the body away from this motor when the machine is plugged!!!
The operator must ensure that there are no persons in the vicinity of the device when the machine is working!!!!

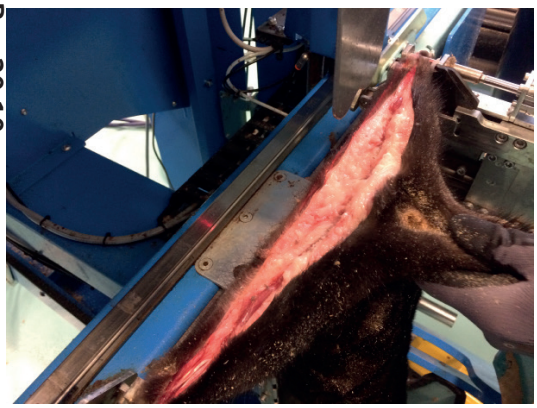
Rys.20.9



A s
I f

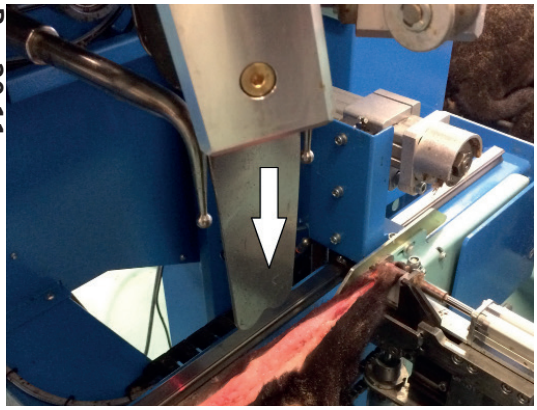
CROSS-CUTTING – FIG. 20.9
The cross-cutting is made from left to right, and the blade stays on the right side until the process is completed.
shown in the picture 20.9, the mink is cut nicely.
the cut is too deep or shalow, adjust the cross-cutting blade or carcasses extractor.

Rys.20.10



CROSS-CUTTING – FIG. 20.10
Pull slightly to open the incision. This will provide the access for the blade.
The device is now ready to leave the upper console (blade/hooks and V blade).

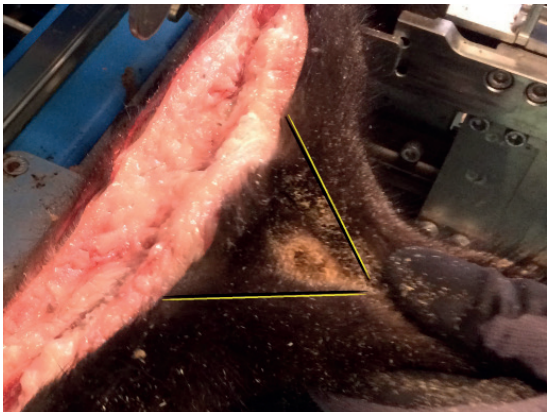
Rys.20.11



BLADE/HOOKS AND THE CONSOLE OF V BLADE – FIG. 20.11
!!!! V blade activates and lowers automatically!!!!
The console is lowered so that the blade and hooks move along the skin of the abdomen.
Pull the tail slightly towards you when the V blade leaves and cuts.
!!! The operator must keep fingers and other parts of the body away from this motor when the machine is plugged!!!
!!! The operator must ensure that there are no persons in the vicinity of the device when the machine is working!!!!

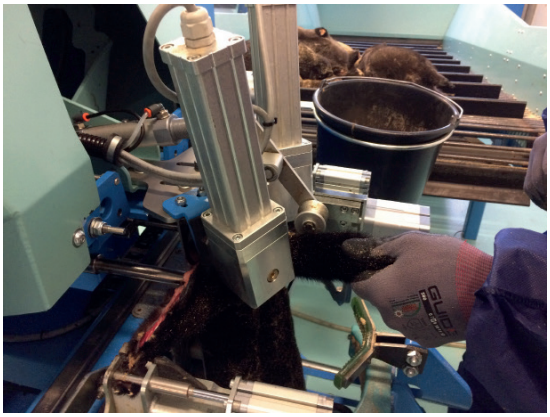
DESCRIPTION OF FUNCTIONS:

Rys.20.12



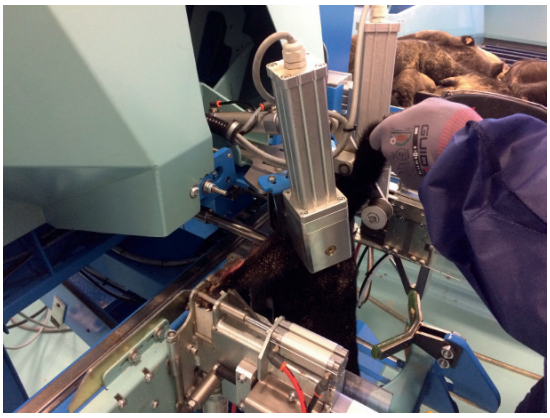
V CUTTING – FIG. 20.12
Thanks to the strong and almost noiseless DC electric motor installed on two strong angular gears, an open V cut is now being made.

Rys.20.13



UPPER CONSOLE LOWERS – FIG. 20.13
When the upper console approaches the abdominal line, the V cutting motor stops.

Rys.20.14

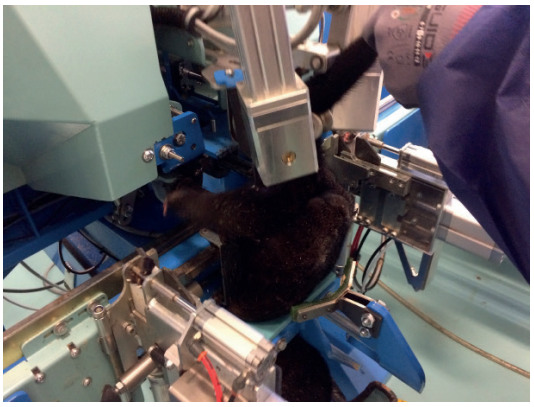


TAIL ROLL – FIG. 20.14

- The tail is raised by a light pull of the roller up.
- The operator must now confirm the operation by pressing the pedal.
- Gently hold the tail until the shaft closes.
- The hooks 1 and 2 slide out and operate under the programmed pressure (see Page 15).

DESCRIPTION OF FUNCTIONS:

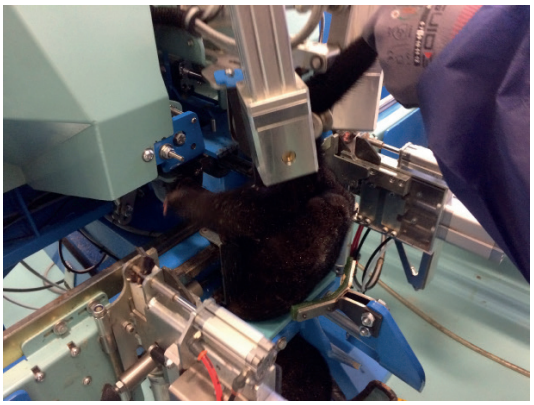
Rys.20.15



SPINE HOOK – FIG. 20.15

- The carcass holder moves and holds the mink.
- The spine hook 1 rotates by approx. 90°.
- The spine hook 2 rotates by approx. 90°.

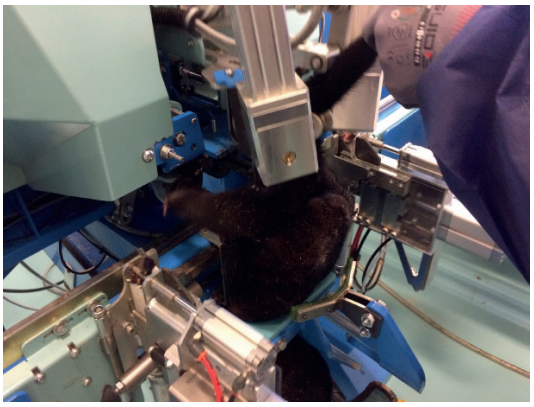
Rys.20.16



PAW CUTTER – FIG.20.16

- It cuts hind paws.
- V blade activates.

Rys.20.17



TAIL CUTTING – FIG. 20.17

- The blade console moves 250mm up. During the same operation, the tail is cut off.

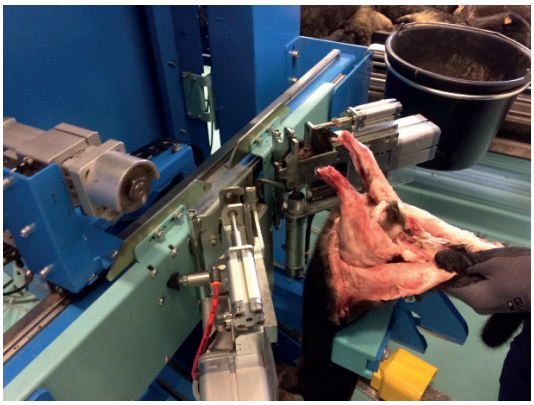
Rys.20.18

CARCASS HOLDERS – FIG. 20.18

- The carcass holder 2 moves and holds the mink.
- The upper console moves to a set position (see Page 15, Fig. 10.15-16).

DESCRIPTION OF FUNCTIONS:

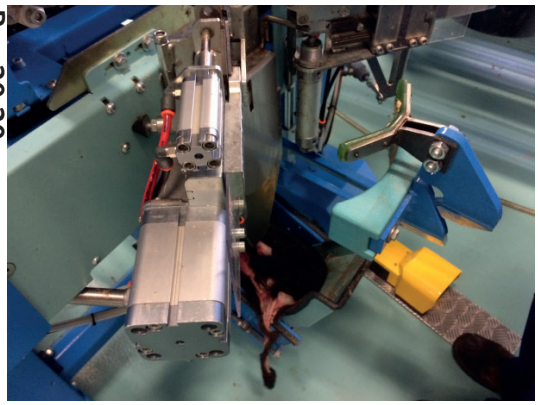
Rys.20.19



SAWDUST – FIG. 20.19

- The hind legs and a large piece of skin are now cut off from the carcass.
- Sawdust can be now poured.

Rys.20.20



READY – FIG. 20.20

- You can now release the mink - it will fall on the conveyor and it will be removed.
- The device returns to the starting point.

Rys.20.21

REPEATED READINESS TO WORK – FIG. 20.21

- The machine is again ready for next work cycle.

NOTATKI

SERVICING OF JASOPELS MASTERCUT

DESCRIPTION OF SERVICING AND TRANSPORT OF MASTERCUT

SERVICING
Jasopels A/S recommends that every servicing of the device is performed by a technician. (If needed, contact Jasopels A/S)
Note: Jasopels A/S recommends that the person supervising the assembly monitors unpacking of the device. After unpacking, pay attention to possible damage in transport. All damages made in transport must be reported directly to the transportation company that was responsible for delivery. It is recommended to take photos of any damage.

TRANSPORT
Jasopels A/S recommends that transport of the device is performed by a technician. (If needed, contact Jasopels A/S)
During transport, one person must monitor the working area of the machine and the other person – a transport route. These people must be able to communicate with no problems.

The machine can be moved by a forklift that can easily move at the back of the machine.
Two people are needed to carry or pull the machine.
During transport, MasterCut must be properly secured with straps or stoppers.

Before installing the device, make sure that access to the place where the machine will be standing is not difficult. If the installation of the machine requires the use of lifting equipment, it is necessary to use a crane or a lift in such a case.
Check whether the surface on which the device will stand will withstand such a load. You do not need any special tools to install the device.
Before installation, remember to use safety measures, such as a helmet, footwear, gloves, safety goggles and, possibly, a safety rope. (These parts are not included).

- Before commencement of operation of MasterCut, check whether the machine has been placed on a firm and stable surface.
  (Use the adjustable feet to position the machine in the correct position).

START-UP / TRIAL START-UP

Electrical works and connection of the device should be performed by Jasopels A/S qualified electrician.
Before start-up or testing the device, read the instructions for use.

MAINTENANCE

MACHINE MAINTENANCE BY THE OPERATOR

Maintenance performed by an operator.

- Before start-up, check all visible surfaces for damage. Any visible damage should be evaluated by a technician.
- Before start-up of the device, check the operation of all moving parts:
  - Cross-cutting blade drive
  - V blade drive
  - Upper console
- Defects of mechanical parts should be evaluated by a technician.
- Before start-up of the device, check whether the cables are not damaged. To avoid damage to the cables, arrange them in such a way that they are not in the communication routes. Any damage to the cables must be evaluated by Jasopels A/S or a qualified electrician.
- Daily cleaning of the machine - removal of impurities from the device. Keep the work area clean.
- The water separator of the compressed air filter should be emptied every day by pressing a button located under the glass container until it is empty. If there are residues of oil or other dirt on the filter, the glass should be removed and washed with warm water and soap.
- The device should be cleaned every day after using compressed air, or with hot water to remove residues of fat and blood. In particular, moving parts in the skin holder must be free from sawdust and dirt.
- To avoid downtime in the machine operation, it is important to keep the machine clean under the moving carcass holder. This area can be cleaned with warm water and a brush.
- It is recommended to clean the belts, hooks, carcass extractor and motor every day after finishing work.

MAINTENANCE BY A TECHNICIAN - IF NECESSARY, PLEASE CONTACT JASOPELS

Maintenance performed by a technician.

- Any visible damage of the surface should be evaluated by a technician.
- Moving parts, such as chain, jaw arm and clamping device, should be inspected at least once every 6 months.
- An emergency stop test must be carried out at least once every 6 months.
- It is also necessary to check the physical setting of the device, i.e. height adjustment (feet), and proper positioning in the work area.

AUTHORIZED SERVICE TECHNICIAN (JASOPELS SERVICE DEPARTMENT)

Maintenance performed by an authorized technician.

- Problems with the power supply as well as the electrical installation of the device and the PLC should be examined by Jasopels or a qualified electrician. Works related to the electrical installation of the machine must be carried out by a qualified electrician.

DO NOT CLEAN THE MACHINE OR INSPECT IT WHILE IT IS OPERATING.
Rotating and moving parts can cause serious injuries.

MAINTENANCE

MAINTENANCE (GENERALLY)

IMPROPERLY MAINTAINED DEVICE CAN BE A DANGEROUS!
To ensure correct, long and safe operation of the device, remember to regularly maintain and repair it, if needed.

DO NOT CLEAN THE MACHINE OR INSPECT IT WHILE IT IS OPERATING.
Rotating and moving parts can cause serious injuries.

ALWAYS KEEP THE AREA AROUND THE MACHINE CLEAN, FREE FROM DIRT, SAWDUST AND OTHER IMPURITIES.

ALWAYS REPLACE WORN OR DAMAGED PARTS TO SPARE PARTS THAT ARE DESIGNED AND / OR MANUFACTURED BY JASOPELS.
The use of other spare parts may result in damage to the equipment and / or damage and loss of warranty.

ALWAYS KEEP THE MACHINE CLEAN AND ITS MARKINGS MUST REMAIN LEGIBLE.
Replace all missing labels and stickers, including those that are illegible. Labels and stickers provide important information on the operation of the device and warn against dangers and hazards.

NOTE: NEVER OPERATE AND START THE MACHINE WHEN IT HAS THE ELECTRICAL CABINET DOORS OPEN AND ACCESS TO COMPRESSED AIR.
An open door may damage the equipment and / or cause injuries and loss of warranty.

THE MACHINE IS EQUIPPED WITH A NAMEPLATE.
The nameplate has the model number, device type, version and serial number, and is included to each device. Note information provided on the plate so that it is available if the plate is lost or damaged. When ordering spare parts or requesting information on the service, always provide the device type, model and product number. The machine cannot be used or sold without the nameplate. Jasopels does not take responsibility for using the device without the nameplate.
The device can have this information on two plates.

COMPLAINTS

THIS WARRANTY IS VALID FOR A PERIOD OF 12 MONTHS,
starting from the date of delivery. The working day is defined as eight hours.
If the operation of the device takes more than eight hours a day, hours are added in a ratio of 1:1.
The right to a complaint is related with compliance with these terms.

The right to make a complaint is lost in the event of:

- Improper use
- Incorrect maintenance or lack of maintenance
- Improper repair or lack of repair.
- Use of non-original spare parts.
- Repair carried out by entities other than Jasopels.
- If the equipment is not serviced / inspected every year by an authorized body.

CHOICE OF COURT AND APPLICABLE LAW

The court in Herning, Haraldsgade 28, DK-7400 is established as the place for solving any disputes between the parties. Jasopels has the right to refer the case to court at the customer's place of business. Danish law is the applicable law, with the exception of international conflict-of-law rules, for all disputes between the parties.

DISASSEMBLY / DISPOSAL

MANY PARTS OF THE DEVICE MUST BE PROPERLY DISPOSED OF.
When the device is suitable for disposal after many years of use, it must be disassembled and disposed in environmental-friendly mean. After disassembly of parts of the device, sort them separately into steel parts, rubber gaskets, gear oils and other liquids. Sort all parts according to the appropriate categories and then dispose of them according to the applicable rules.

FAILURES

EMERGENCY STOP SWITCH
Emergency stop switch is on
Restart the device by first turning off the emergency button and then press the blue reset button.
The device will vent and return to the starting point. It is now ready to operate.

THE EMERGENCY STOP SWITCH IS OFF, RESET IS PRESSED, BUT THE DEVICE DOES NOT WORK.
Reset was switched on too soon after the emergency stop switch was turned off.
Disconnect the device from the power supply and compressed air and wait at least 30-50 sec.
Then connect the device to the power supply, wait 10-20 sec. and press the reset button.

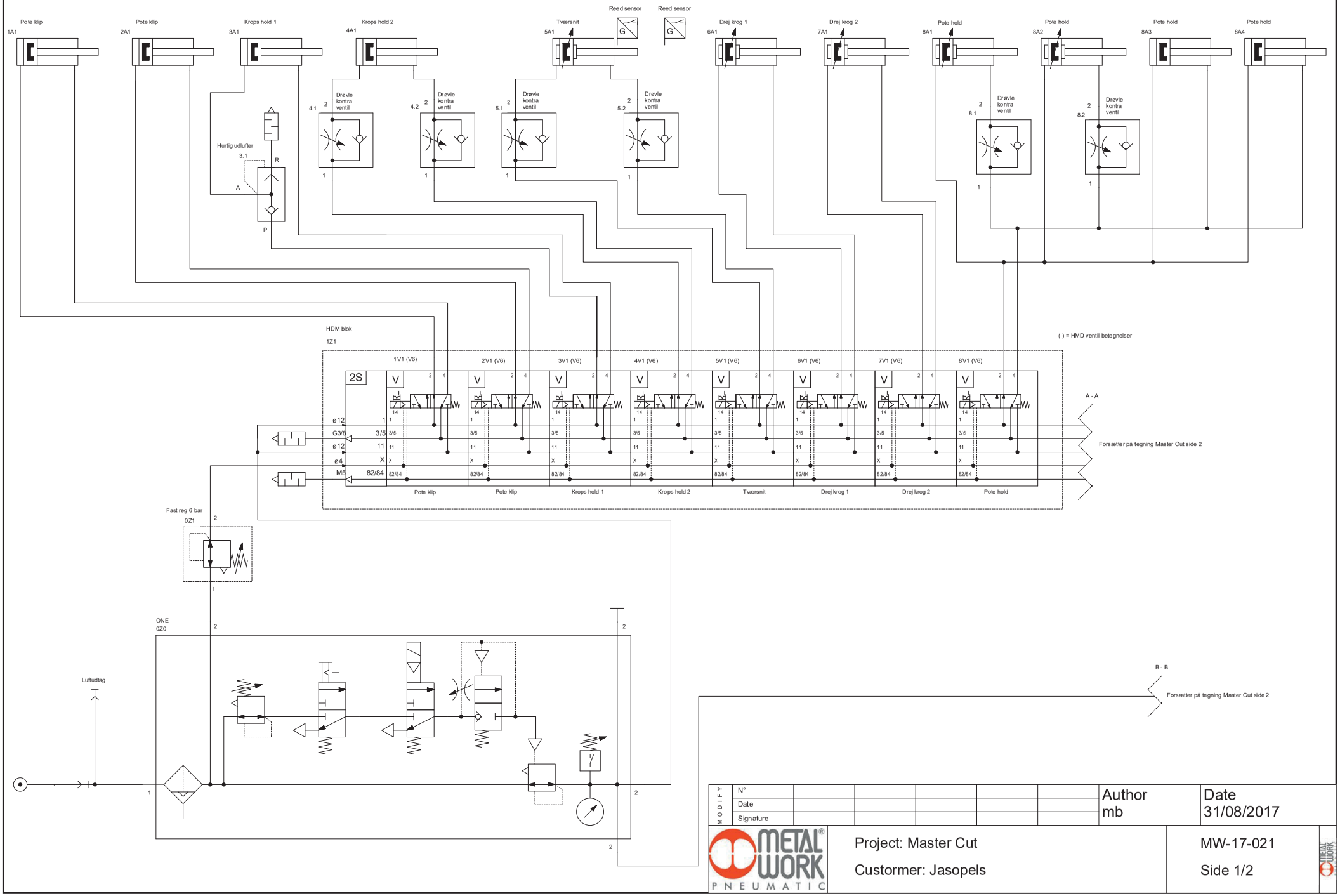
DEVICE DOES NOT WORK
Check the connection to the power supply and check if there is compressed air.
Check the fuses in the electrical cabinet.

DEVICE DOES NOT WORK
Check if there are no foreign objects in the device. Check the accumulation of sawdust inside the device.

MOTOR OPERATES, BUT THE DEVICE DOES NOT WORK
Disconnect the device from the power supply and compressed air and wait at least 30-50 sec.
Then connect the device to the power supply, wait 10-20 sec. and press the reset button.
If this does not help, the machine must be inspected by a qualified technician – contact Jasopels A/S – Technical Department.

CROSS-CUTTING BLADE DOES NOT WORK.
Check if the magnetic switch light is on, when the blade is moved to right. If the lamp is not on, check whether the magnetic switch is working. If not, set it in active position or contact Jasopels A/S – Technical Department.

PROTECTIVE SWITCH TURNS OFF.
Check which protective switch is connected to the power supply of the device (it should be an AC-DC switch) or contact Jasopels A/S – Technical Department.



MODIFY							Author	Date
	N°						mb	31/08/2017
	Date							
	Signature							

METAL WORK PNEUMATIC

Project: Master Cut

Custormer: Jasopels

MW-17-021

Side 1/2

El-dokumentation

MasterCut V017

Opskærer

Type - serie nr : MaCu_V017

oprettet dato 05-12-2016

Dokumentliste

Sidefunktion (=)	Blad	Dokumenttype	Beskrivelse	Beskrivelse	Rev.dato
	1	Dokumentliste			08-07-2017
	2	Dokumentliste			08-07-2017
	3	Dokumentliste			08-07-2017
	2	Projektforside	Forside	MarsterCut V016	08-07-2017
	2	Kredsskema	Layout		08-07-2017
	4	Kredsskema	Ledningsfarver		08-07-2017
	4 a	Kredsskema	Standarter		06-07-2017
	10	Kredsskema	Supply / Main Power	Forsynign / Hovedstrøm	08-07-2017
	11	Kredsskema	3 phase 24v/42v	3 faset 24v/42v	08-07-2017
	12	Kredsskema	DC motore, Cross section & V section	DC motore, Tværsnit & V-Snit	08-07-2017
	101	Kredsskema	Power supply 24V	Strømforsyning / PLC	08-07-2017
	104	Kredsskema	PLC , Moduls and Panel	PLC, Moduler & Panel	08-07-2017
	108	Kredsskema	Emergency stop	Nødstop	08-07-2017
	120	Kredsskema	Freq. Spade motor	Freq. Spade motor	08-07-2017
	121	Kredsskema	Motor Bremse	På spade motor	07-07-2017
	122	Kredsskema	Trafo 24vAC	Forsyning til motor Knive	06-07-2017
	124	Kredsskema	Tvær opskær	DC motor	06-07-2017
	126	Kredsskema	V snit 1	DC motor	06-07-2017
	128	Kredsskema	V snit 2	Dc motor	06-07-2017
	202	Kredsskema	På lufter	(sikkerheds ventil)	08-07-2017
	210	Kredsskema	Krops Hold (bagende)	Ventil Blok	08-07-2017
	211	Kredsskema	Hold Poter	Ventil Blok	08-07-2017
	212	Kredsskema	Krops Løft	Ventil Blok	08-07-2017
	213	Kredsskema	Tværs Ud	Ventil Blok	08-07-2017
	214	Kredsskema	Strøk Ud	Ventil Blok	08-07-2017
	215	Kredsskema	Luk Halerulle	Ventil Blok	08-07-2017
	216	Kredsskema	Pote Klip	Ventil Blok	08-07-2017
	217	Kredsskema	Rygkrog 1 Ud	Ventil Blok	08-07-2017
	218	Kredsskema	Rygkrog 2 Ud	Ventil Blok	08-07-2017

Jasopels

Jasopels
MasterCut V016

Proj. nr.: MaCu_V017	Tegn. nr.:	Init.:	Rev.:	Blad: 1
Dato: 08-07-2017	Funkt.:	Plac.:	Antal blade: 3	Næste blad: 2

Dokumentliste

Sidefunktion (=)	Blad	Dokumenttype	Beskrivelse	Beskrivelse	Rev.dato
	219	Kredsskema	Rygkrog 1 Drej	Ventil Blok	08-07-2017
	220	Kredsskema	Rygkrog 2 Drej	Ventil Blok	08-07-2017
	221	Kredsskema	Krops hold	Ventil Blok	08-07-2017
	222	Kredsskema	Tværkniv Ned	Ventil Blok	08-07-2017
	223	Kredsskema	V-kniv Op	Ventil Blok	08-07-2017
	224	Kredsskema	Disp	Ventil Blok	08-07-2017
	225	Kredsskema	Disp	Ventil Blok	08-07-2017
	226	Kredsskema	Laser Light	laser lys	08-07-2017
	302	Kredsskema	Betjening	Knapper på Maskinfront	08-07-2017
	304	Kredsskema	Encoder	Spade position	08-07-2017
	306	Kredsskema	Home føler	Induktiv føler	08-07-2017
	308	Kredsskema	Rotations Kontrol	Induktiv føler	08-07-2017
	310	Kredsskema	Tvær skær Hjemme	Reed kontakt	08-07-2017
	312	Kredsskema	Tvær skær Ude	Reed kontakt	08-07-2017
	400	Kredsskema	Strøk Ud - Analog signal	4-20mA til propotional ventil	08-07-2017
	402	Kredsskema	Kroge Ud - Analog signal	4-20mA til propotional ventil	08-07-2017
	602	Kredsskema	X101 , X124 , X126 , X128	DC motore	08-07-2017
	604	Kredsskema	X111 , X124 , X126 , X128	DC motore	08-07-2017
	618	Kredsskema	X1041 - X1081	Forsyning til Panel	08-07-2017
	620	Kredsskema	X2021 Pålufter		08-07-2017
	622	Kredsskema	X2111 Ventil Blok		08-07-2017
	623	Kredsskema	X2111 Ventil Blok		08-07-2017
	624	Kredsskema	X2261 Laser Light		08-07-2017
	626	Kredsskema	X3021 - X3041	Fodpedal og Encoder	08-07-2017
	628	Kredsskema	X3061 - X3081	Home føler og Rotationsvagt	08-07-2017
	630	Kredsskema	X3101, X3121		06-07-2017
	640	Kredsskema	X4001 - X4021		08-07-2017
	1000	Kredsskema	PLC reference - Modul 0 (PLC)	1766-L32BWA	06-07-2017
	1001	Kredsskema	PLC reference - Modul 1	1762-IQ16 24v Input	06-07-2017
	1002	Kredsskema	PLC reference - Modul 2	1762-OW16 Relæ Output	06-07-2017

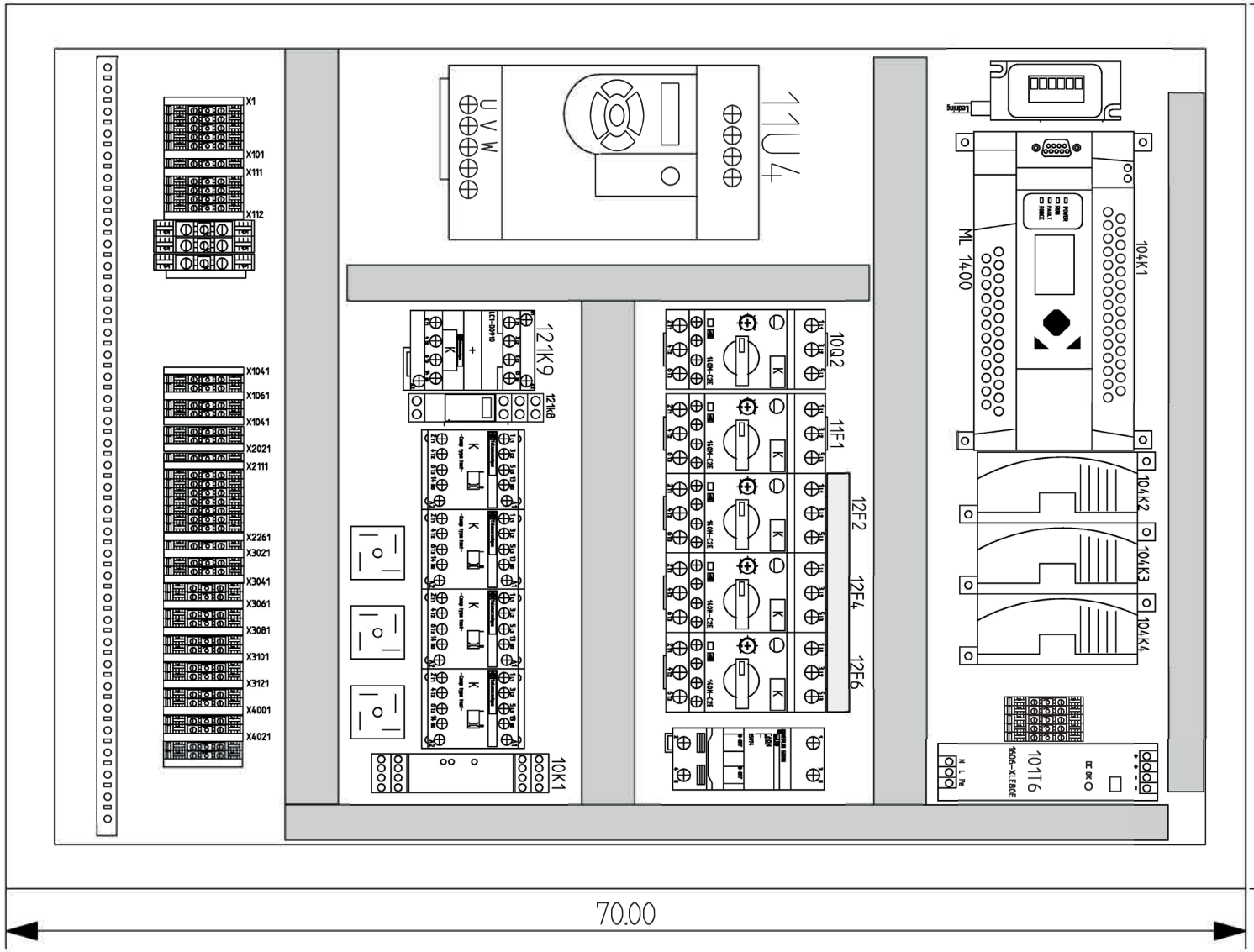
Dokumentliste

Sidefunktion (=)	Blad	Dokumenttype	Beskrivelse	Beskrivelse	Rev.dato
	1003	Kredsskema	PLC reference – Modul 3	1762-OF4 Analog Output	06-07-2017
	1	Produktliste			08-07-2017
	2	Produktliste			08-07-2017
	3	Produktliste			08-07-2017

Jasopels

Jasopels
MasterCut V016

Proj. nr.: MaCu_V017	Tegn. nr.:	Init.:	Rev.:	Blad: 3	
Dato: 08-07-2017	Funkt.:	Plac.:	Antal blade: 3	Næste blad:	



Jasopels	Jasopels MasterCut V016	Layout	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017 / Init.: JCG
			Dato: 24-06-2010	Funkt.:	Plac.: / Blad: 2

Lednings Farver / funktion

Hovedstrøm

>1,0 # Lys Blå = Nul i effekt kredse
>1,0 # Sort = Effekt kredse

Styrestrøm 230v AC

0,75# Lys Blå = 230v AC Nul

0,75# Sort (BK) = 230v AC

Styrestrøm 24v AC

0,75# Blå (BU) = 24v AC Nul

0,75# Hvid (WH) = 24v AC

Styrestrøm 24v DC

0,75# MørkBlå (DBU) = Gnd 24v DC

0,75# Rød (RD) = 24v DC

0,75# Brun (BR) = Mellemledninger

0,75# Vilolet (VT) = Analog signal , Modbus communikation

Fremmed spænding

alle # Orange (OG) = Fremmed spænding (udefra kommende)

Init.: JCG
Blad: 4
Rev.: 31-08-2017
Plac.:
Tegn. nr.:
Funkt.:
Proj. nr.: MaCu_V017
Dato: 01-08-2006
Ledningsfarver
Jasopels MasterCut V016
Jasopels

Lednings numre

Forsynings ledninger f.eks 24V AC opmærkes ikke, da de kan identifiseres ud fra farve.
Hvis der er flere styrestrøm sikringer bliver forsynings ledninger efter sikringer, mærket med sikringsnummer.
Forsynings ledere L1-L2-L3 & N mærkes ikke med side nr.

Numre på S pladsen henviser til kredsskema side nr.

SSSNN

Numre på N pladsen er lednings nr. på aktuelle side (altid 2 cifre)

På Hovedstrøms ledninger kan der ud over Side og nr. være mærket med Fase nr. f.eks. XXYYL1
Der kan derfor være op til 4 forskellige ledninger med samme XXYY nr. men hvor slutbetegnelsen er forskellig.

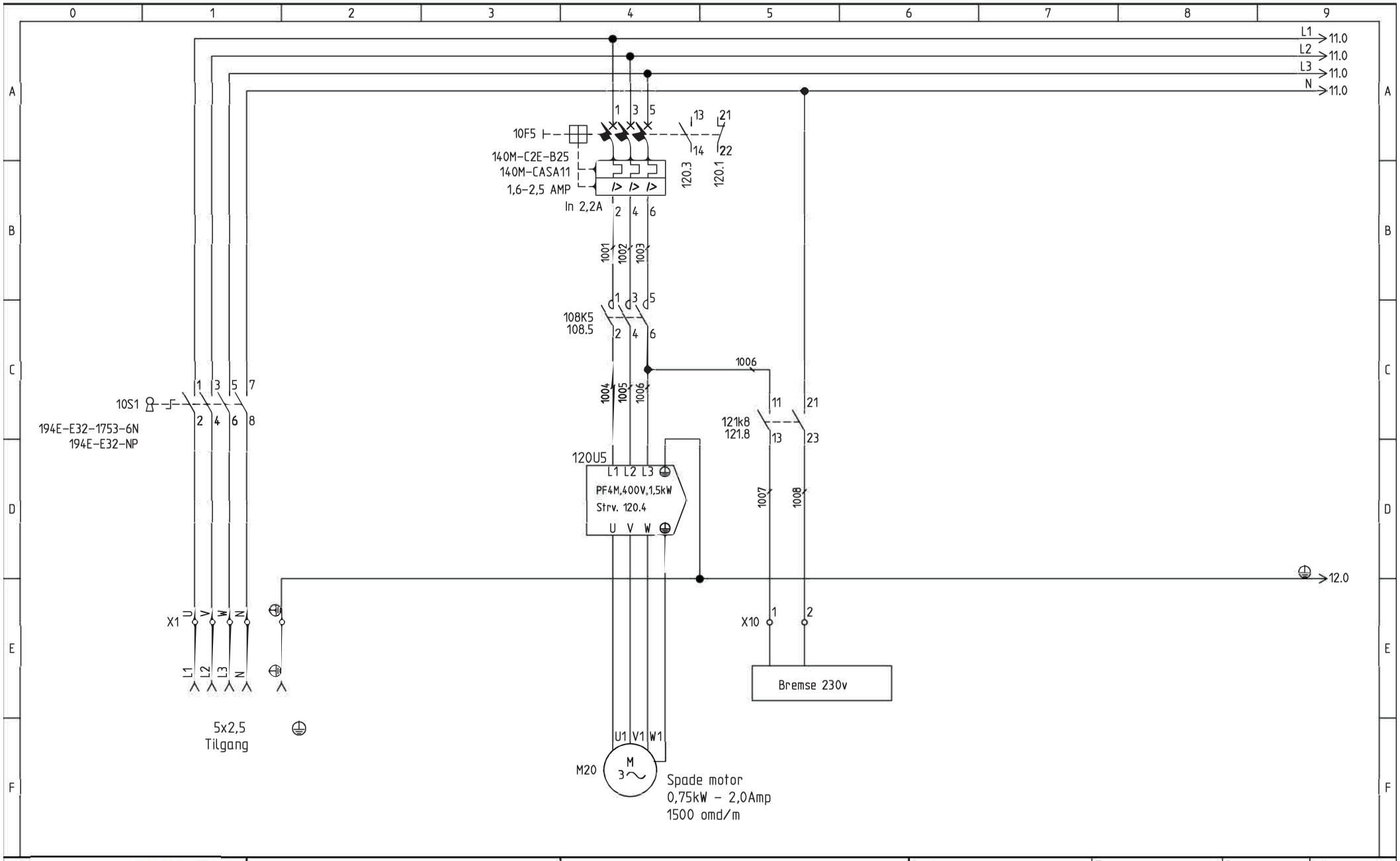
Stardart farve forkortelser

BK Black Sort
BN Brown Brun
RD Red Rød
OG Orange Orange
YE Yellow Gul
GN Green Grøn
BU Blue (incl. light blue) Blå (inkl. lys blå)
VT Violet (purple) Violet
GY Grey (slate) Grå
WH White Hvid
PK Pink Lyserød
GD Gold Guld
TQ Turquoise Turkis
SR Silver.Sølv
GNYE Green-and-yellow Grøn-gul (jord)

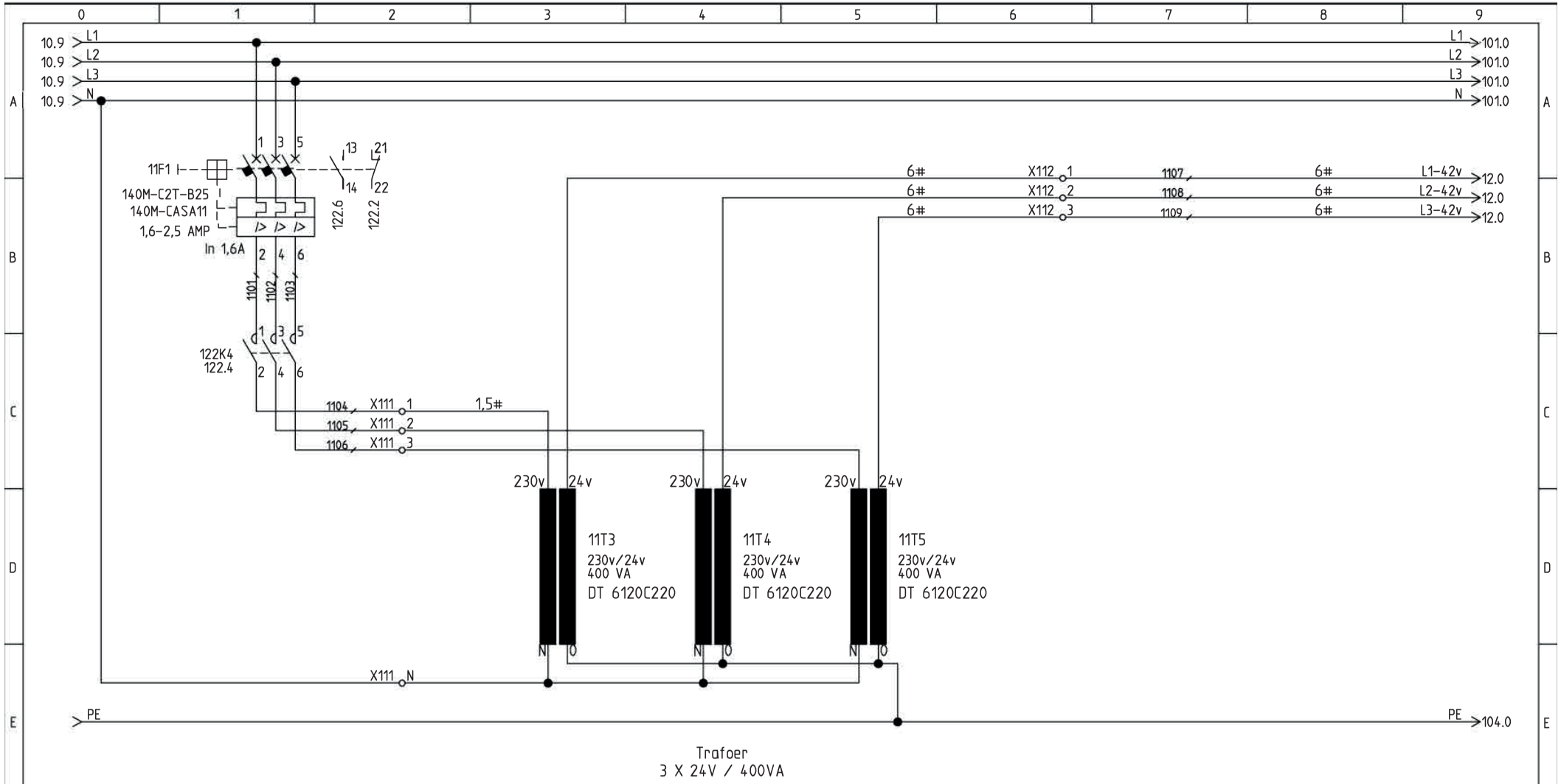
DS/EN61346-2

A : Berøringsskærm
B : Føler, Detektor, Måleelement, Fotoceller, Temperatur
C : Buffer, Kondensator
E : Kedel, Lys, og varme element
F : Sikring, Termisk beskyttelse, Overspændingsaflader
G : Generator, spændingsforsyning
K : Relæer, Kontaktorer, Filter
M : Motor, Aktiveringsspole
N : Analog elementer
P : Måleudstyr, Signallampe, Testudstyr
Q : Effekt afbrydere, adskiller
R : Modstande
S : Afbryder i styrekredse
T : AC/DC omformer, Frekvensomformer
U : Isolator
V : Filter, Halvleder
W : Samleskinne, Kabel
X : Terminaler, Stik, Fatninger

Init.: JCG
Blad: 4 a
Rev.: 31-08-2017
Plac.:
Tegn. nr.:
Funkt.:
Proj. nr.: MaCu_V017
Dato: 30-10-2008
Standarter
Jasopels MasterCut V016
Jasopels

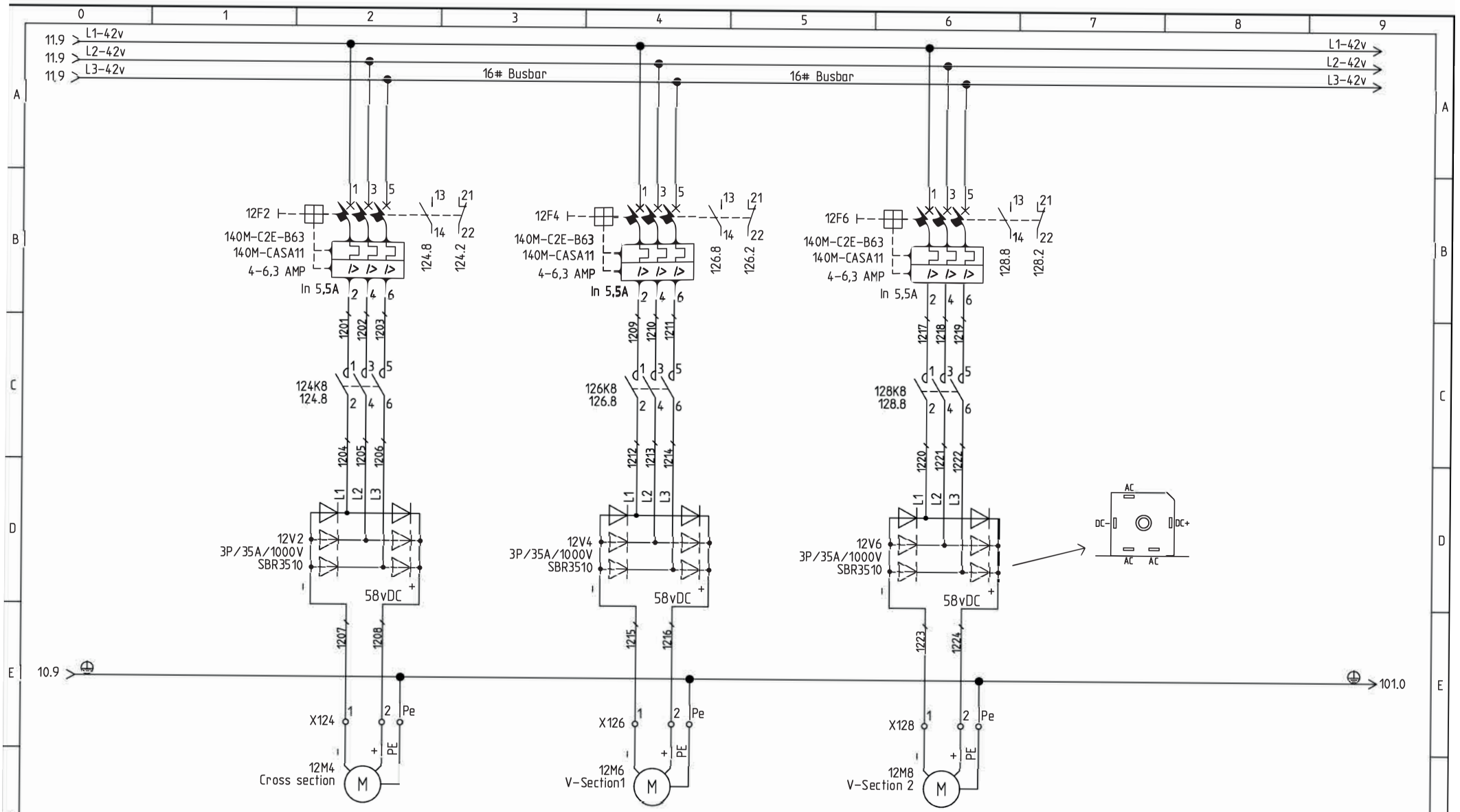


Jasopels	Jasopels MasterCut V016	Supply / Main Power Forsynign / Hovedstrøm	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 07-12-2007	Funkt.:	Plac.:	Blad: 10

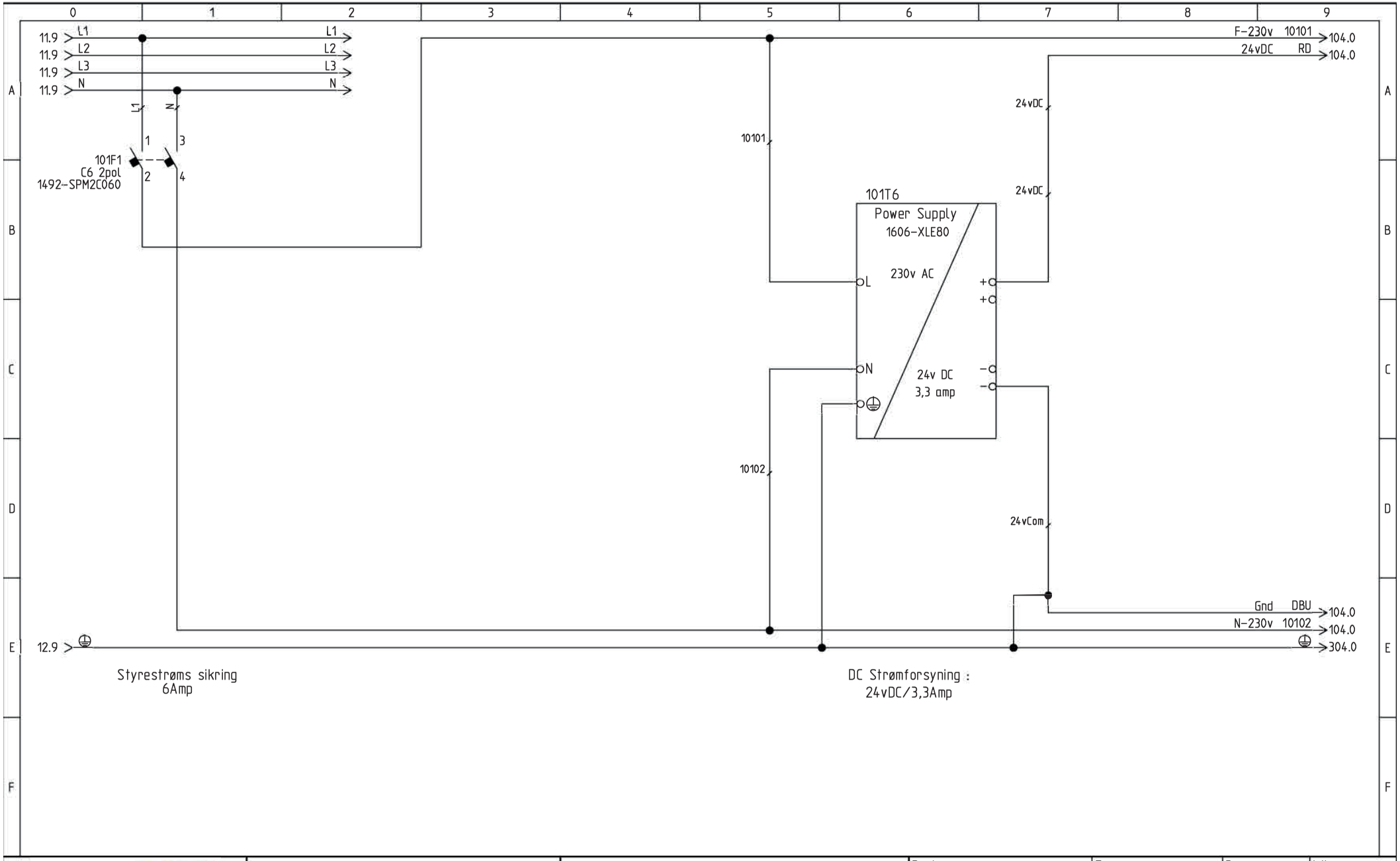


Trafoer
3 X 24V / 400VA

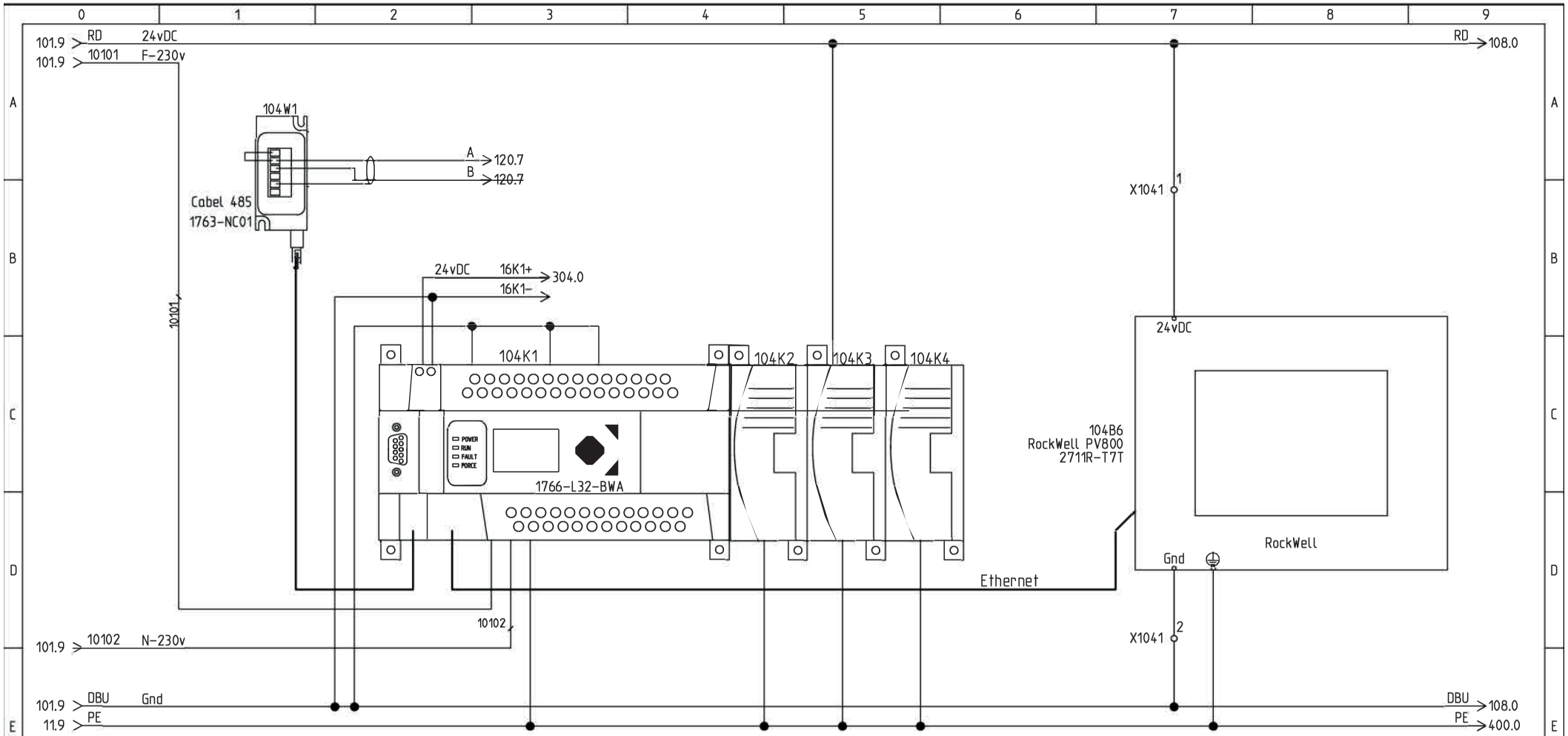
Jasopels	Jasopels MasterCut V016	3 phase 24v/42v 3 faset 24v/42v forsyning til DC motore	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 08-05-2017	Funkt.:	Plac.:	Blad: 11



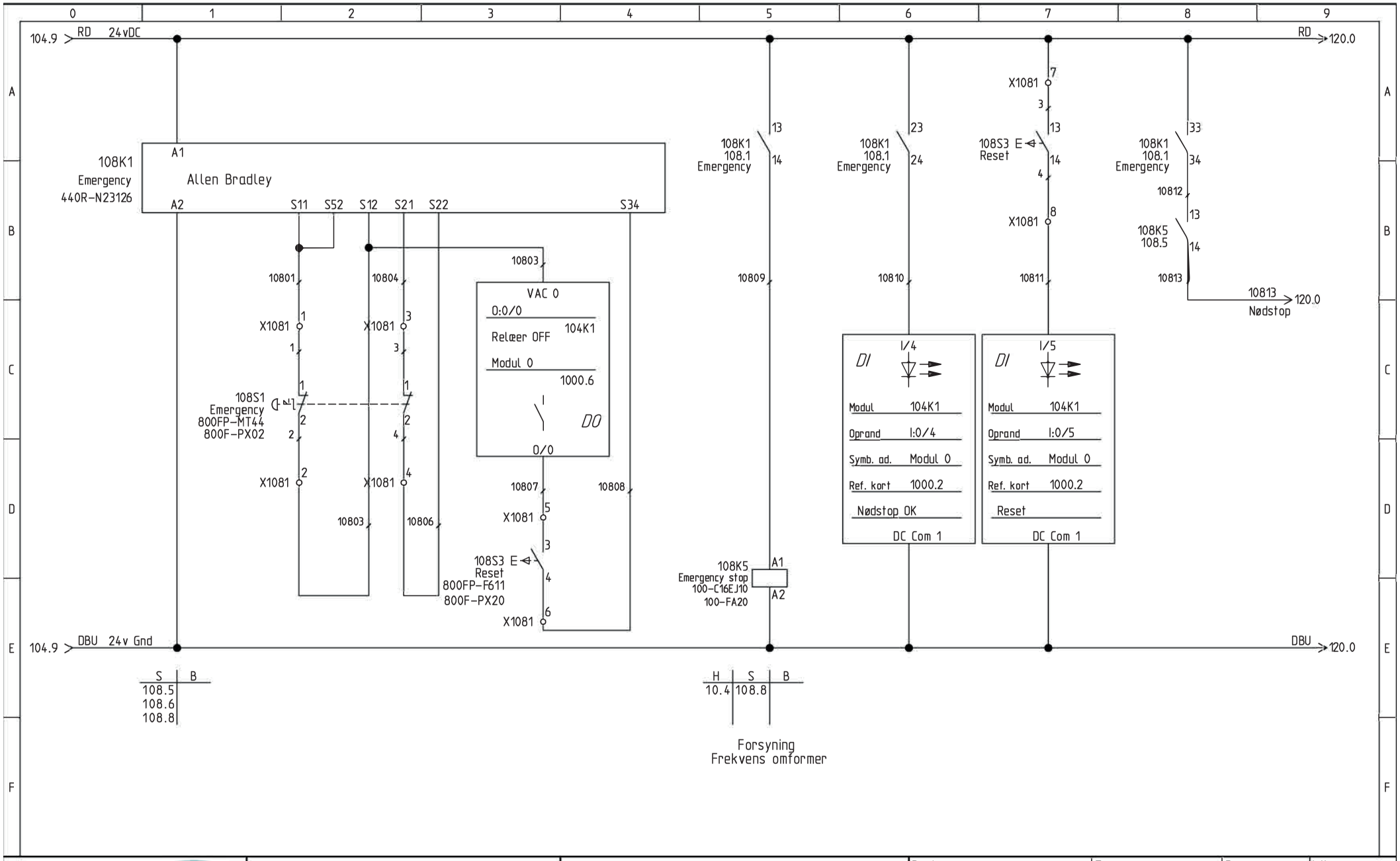
Jasopels	Jasopels MasterCut V016	DC motore, Cross section & V section DC motore, Tværsnit & V-Snit	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017 / Init.: JCG
			Dato: 05-12-2016	Funkt.:	Plac.: / Blad: 12



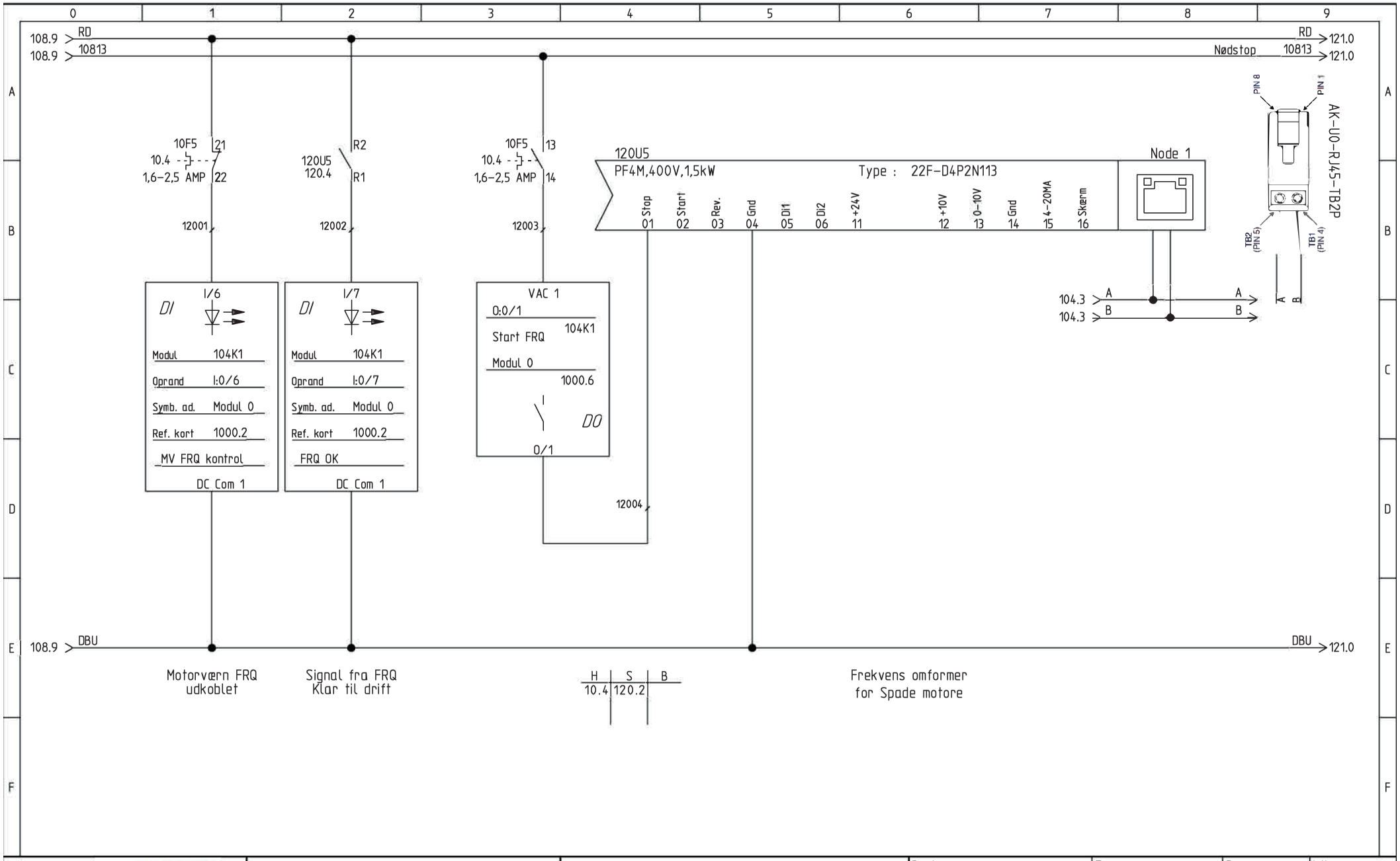
Jasopels	Jasopels MasterCut V016	Power supply 24V Strømforsyning / PLC	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 27-06-2010	Funkt.:	Plac.:	Blad: 101



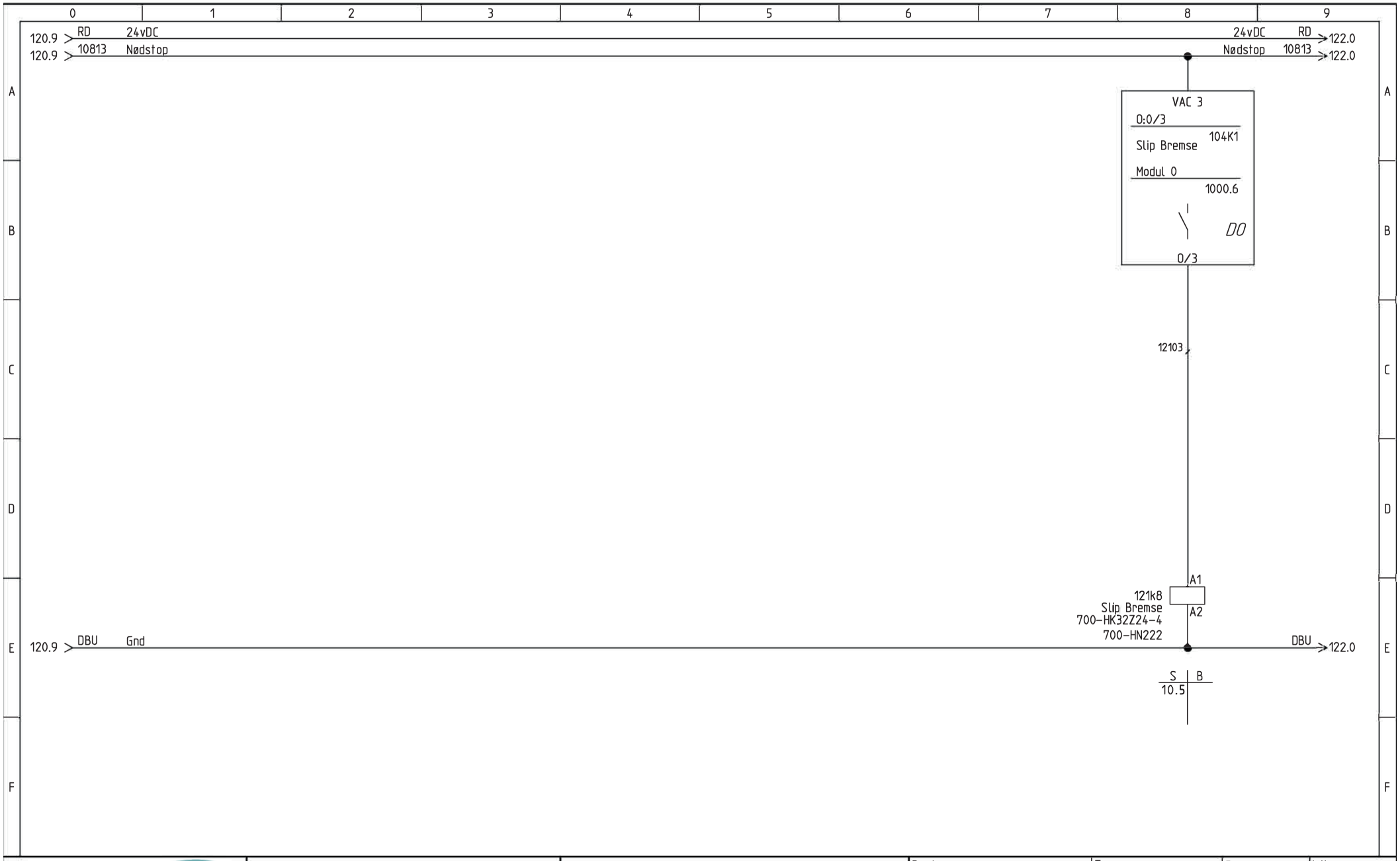
Jasopels	Jasopels MasterCut V016	PLC , Moduls and Panel PLC, Moduler & Panel	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 02-02-2017	Funkt.:	Plac.:	Blad: 104



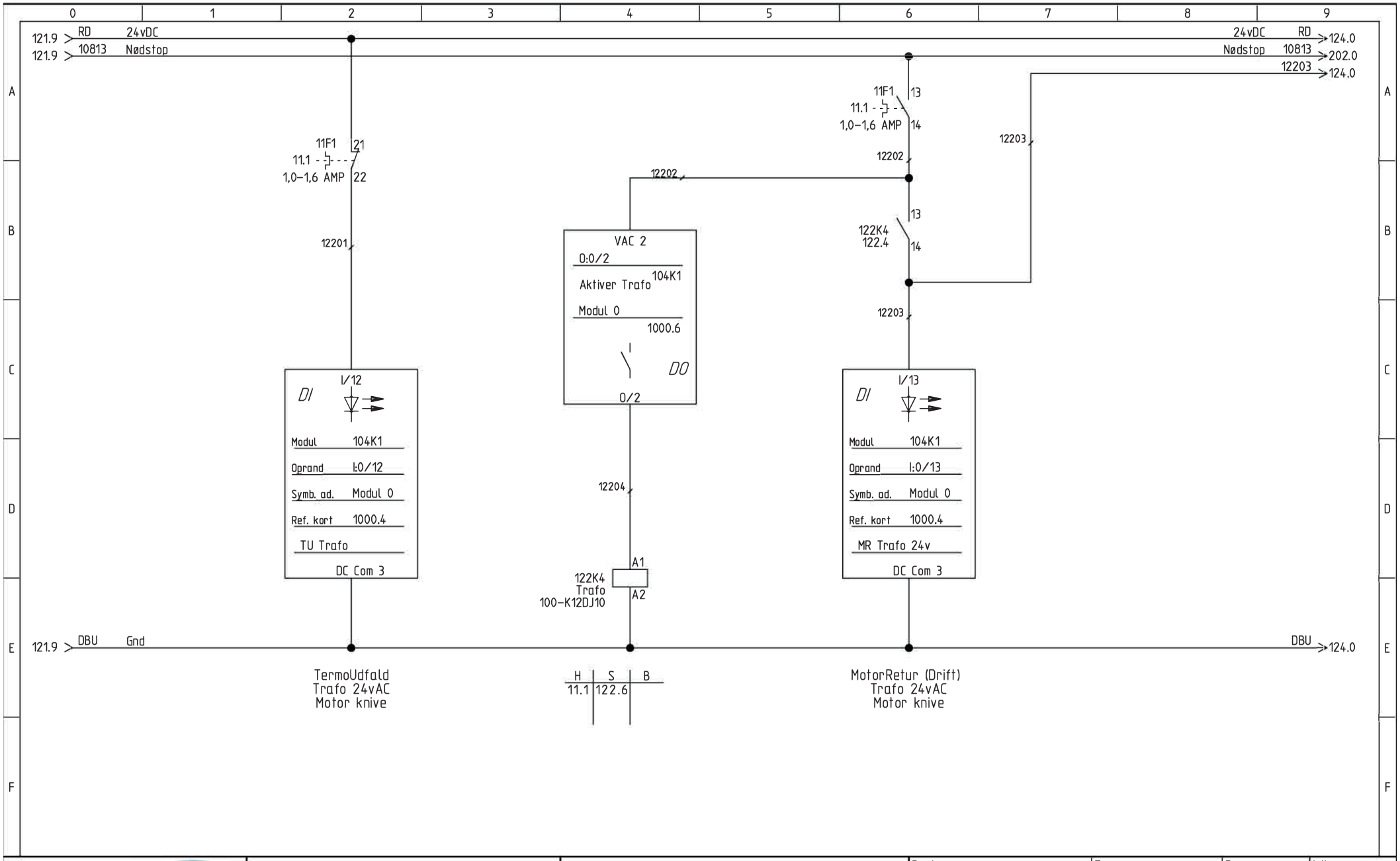
Jasopels	Jasopels MasterCut V016	Emergency stop Nødstop Bem. Knapper på Maskinfront	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 04-02-2017	Funkt.:	Plac.:	Blad: 108



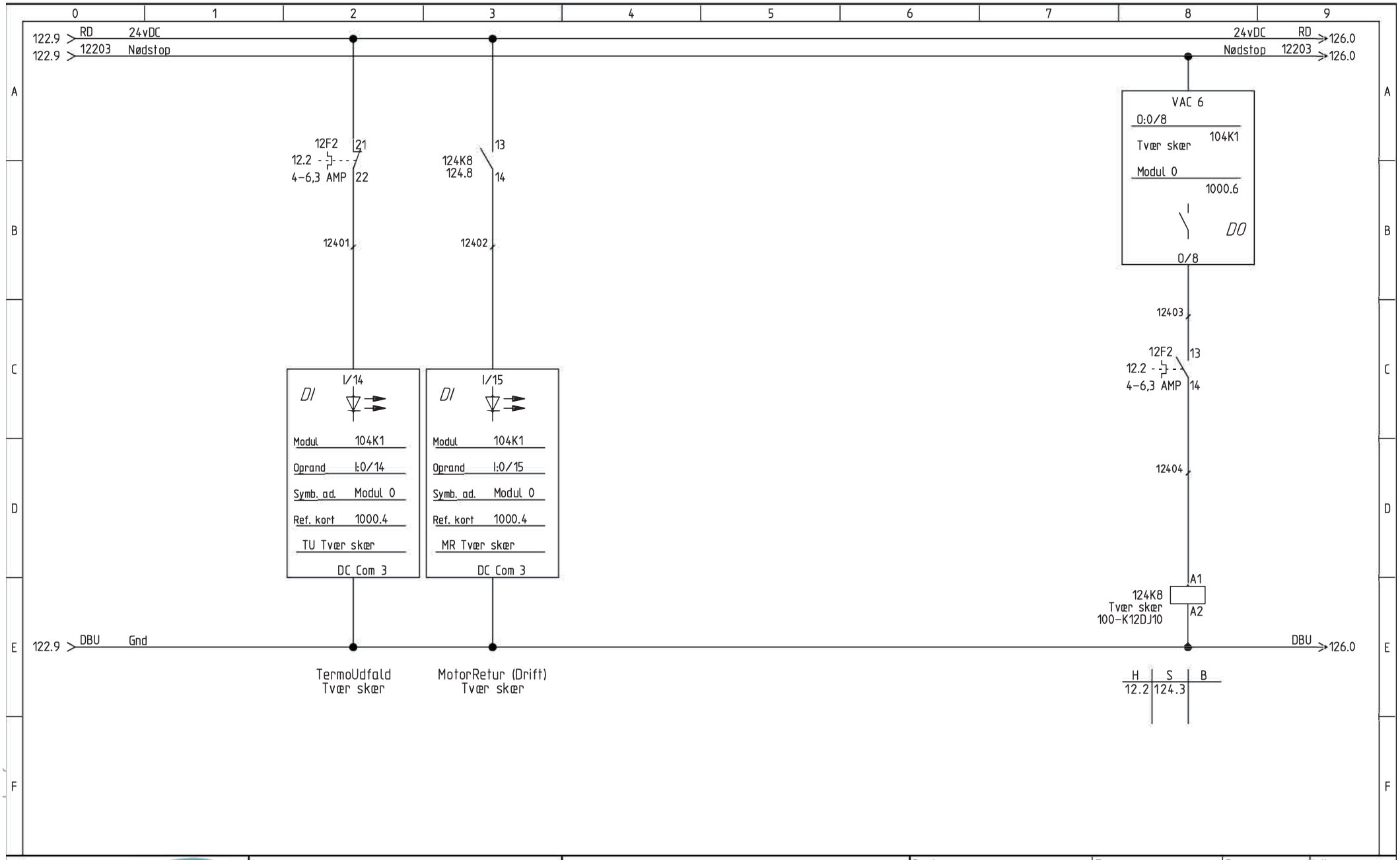
Jasopels	Jasopels MasterCut V016	Freq. Spade motor Freq. Spade motor Frekvnes omformer PF4M	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 04-02-2017	Funkt.:	Plac.:	Blad: 120



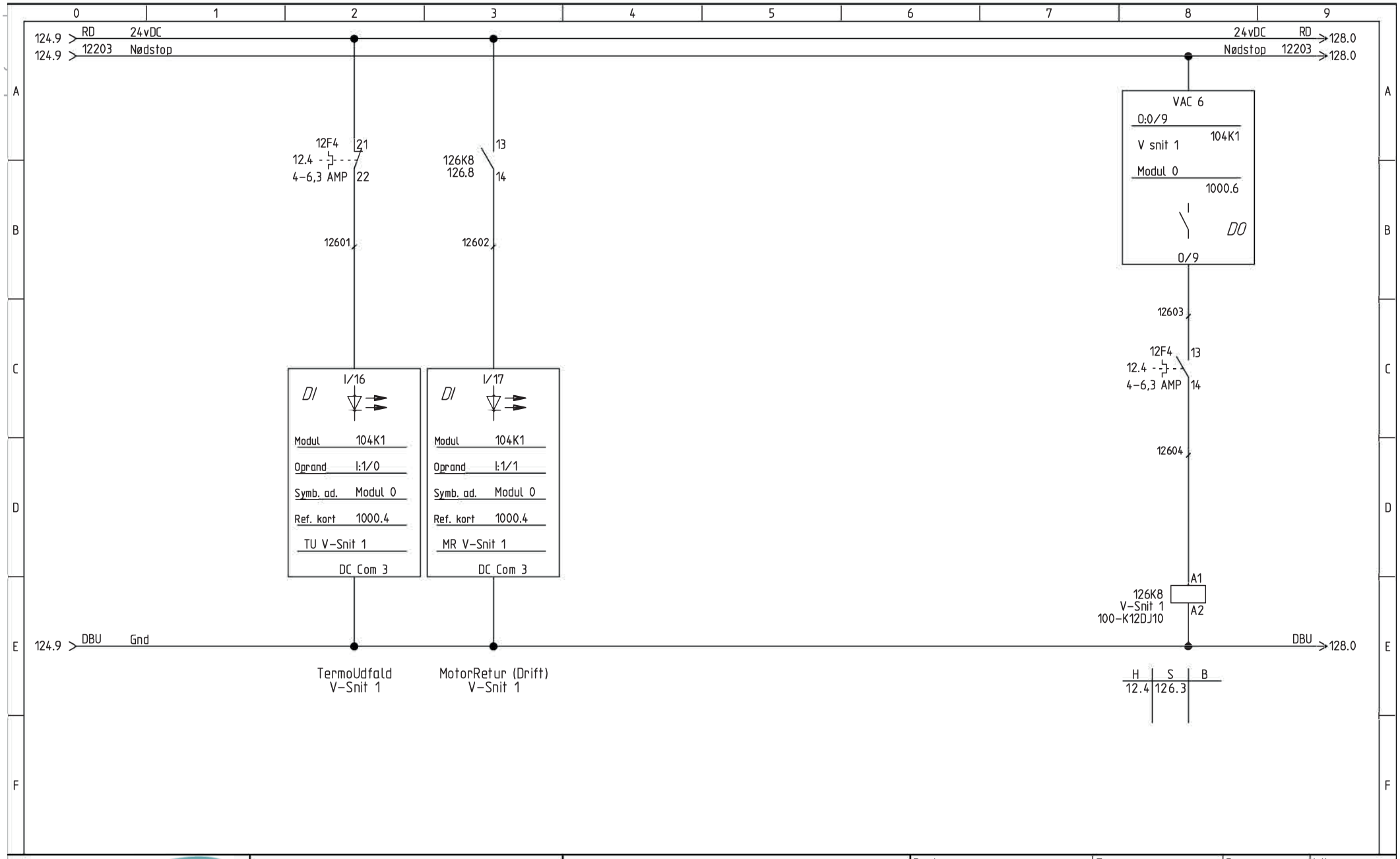
Jasopels	Jasopels MasterCut V016	Motor Bremse På spade motor	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 11-02-2017	Funkt.:	Plac.:	Blad: 121



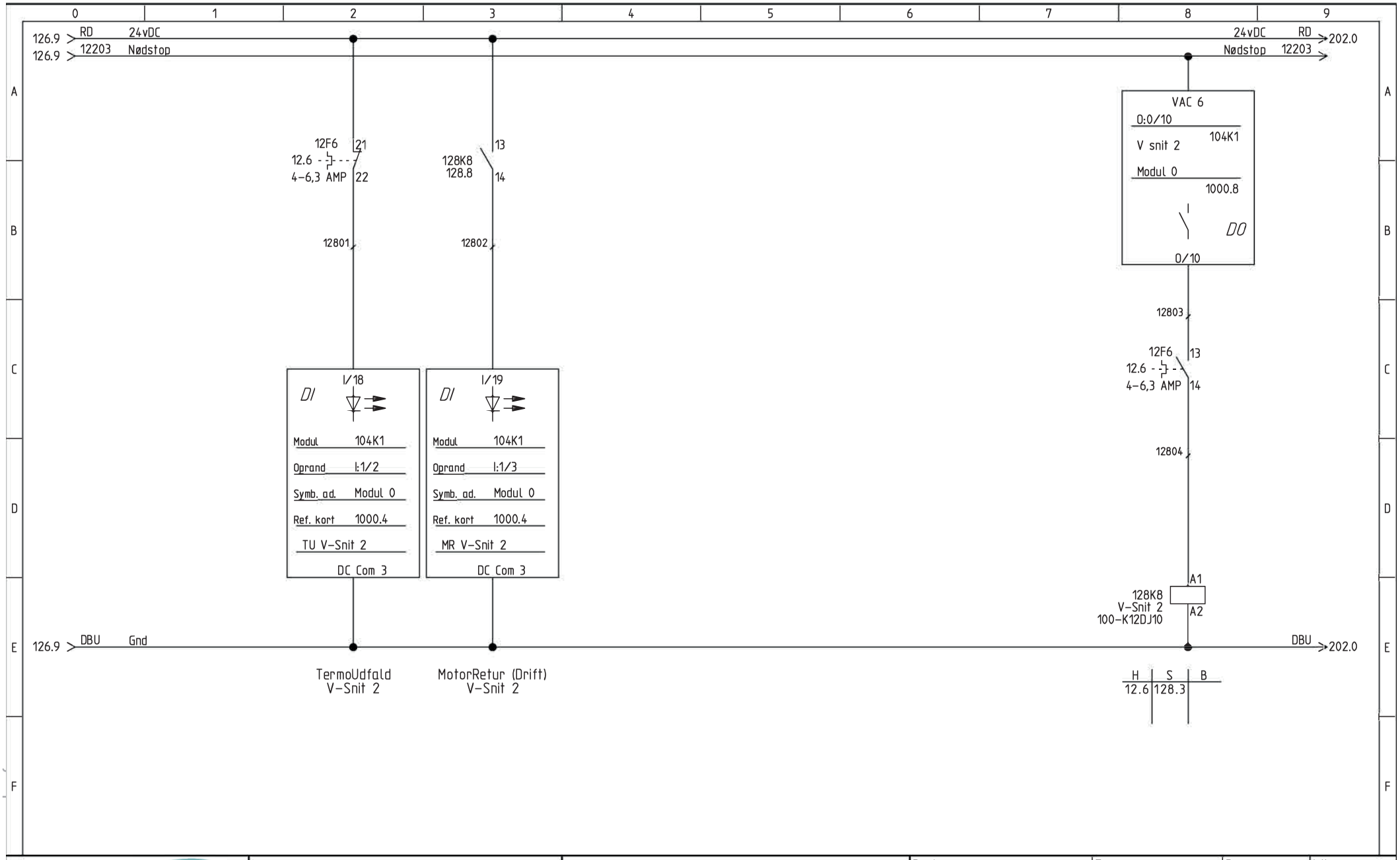
Jasopels	Jasopels MasterCut V016	Trafo 24vAC Forsyning til motor Knive	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 23-02-2017	Funkt.:	Plac.:	Blad: 122



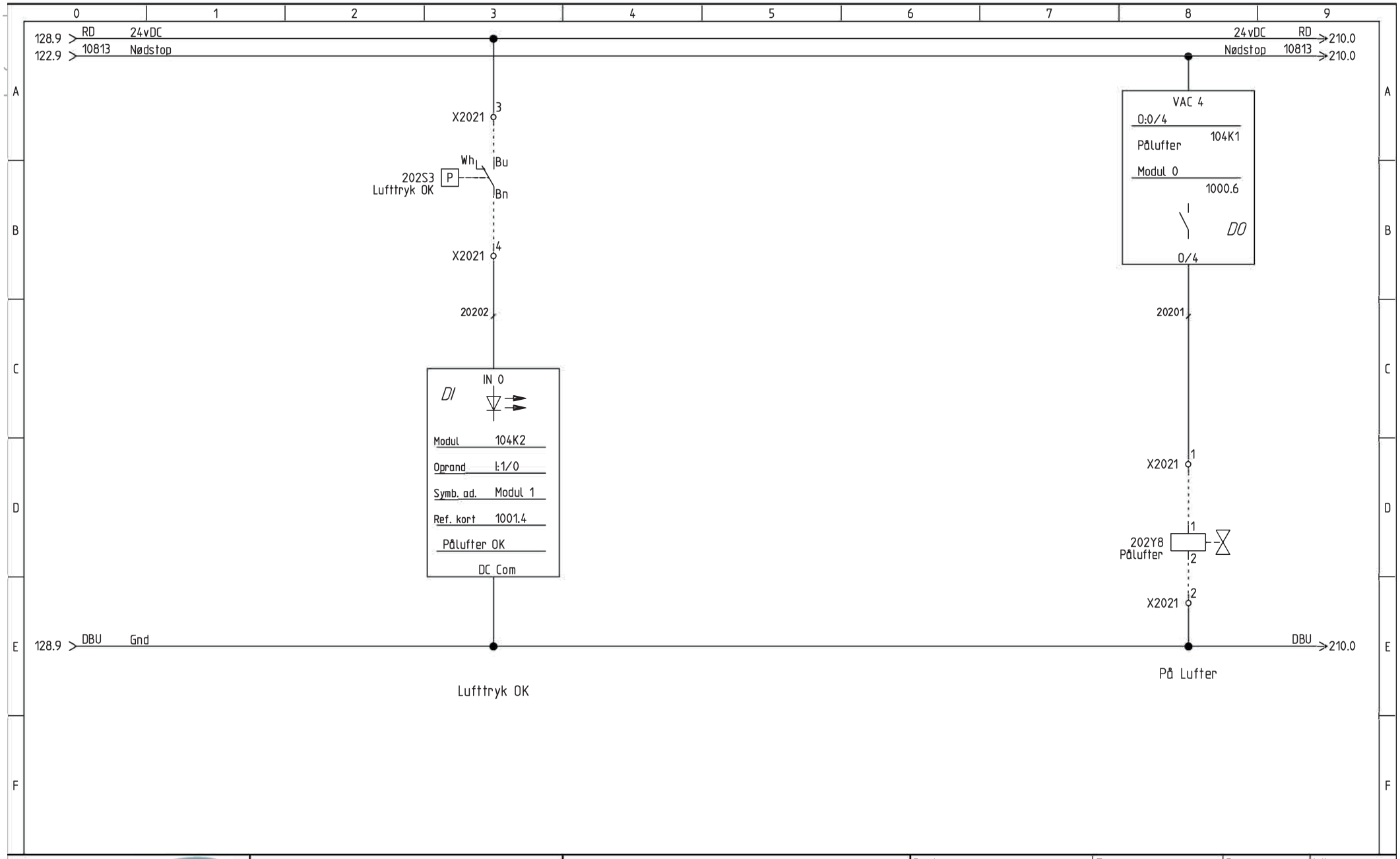
Jasopels	Jasopels MasterCut V016	Tvær opskær DC motor	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 04-02-2017	Funkt.:	Plac.:	Blad: 124



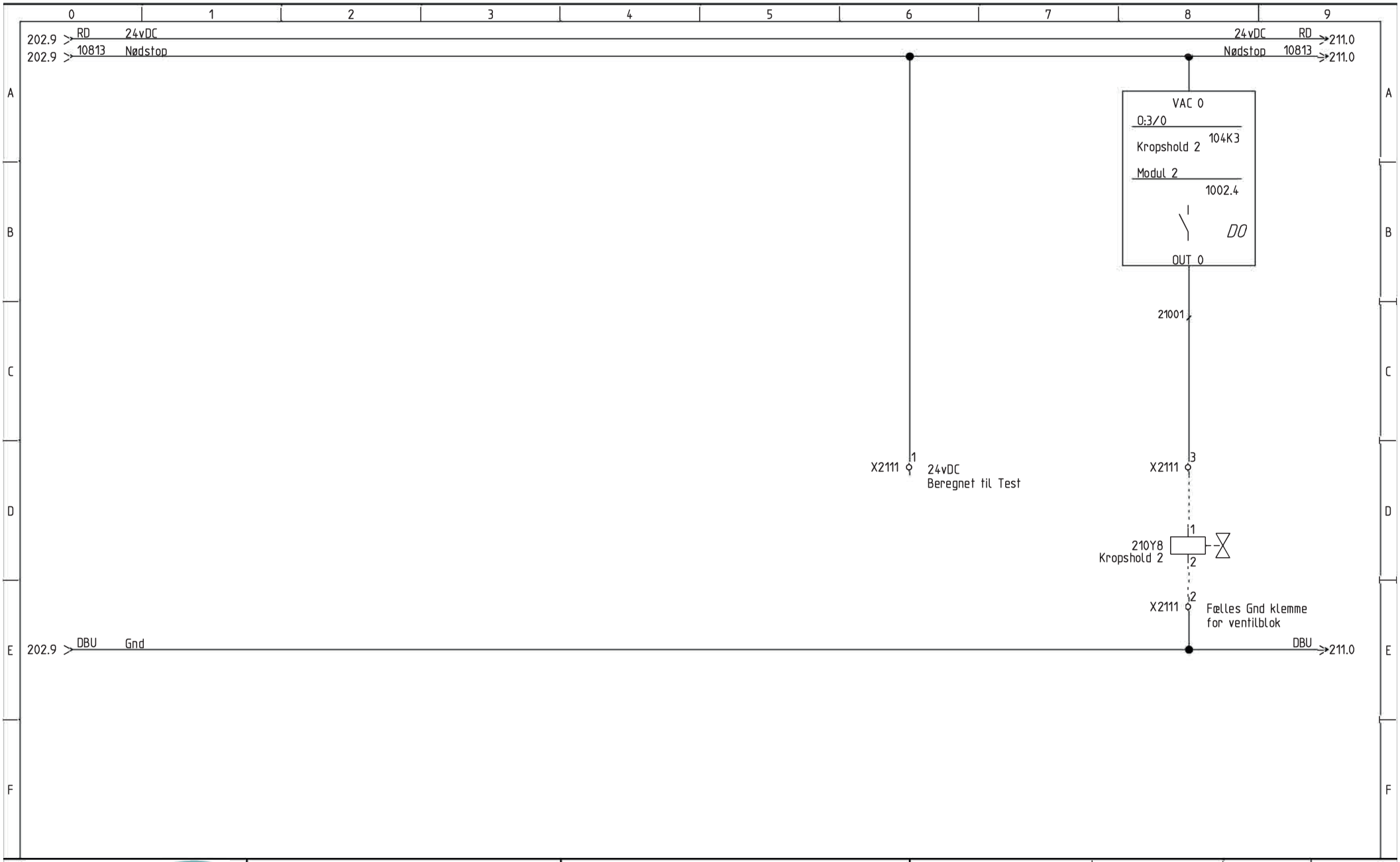
Jasopels	Jasopels MasterCut V016	V snit 1 DC motor	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 04-02-2017	Funkt.:	Plac.:	Blad: 126



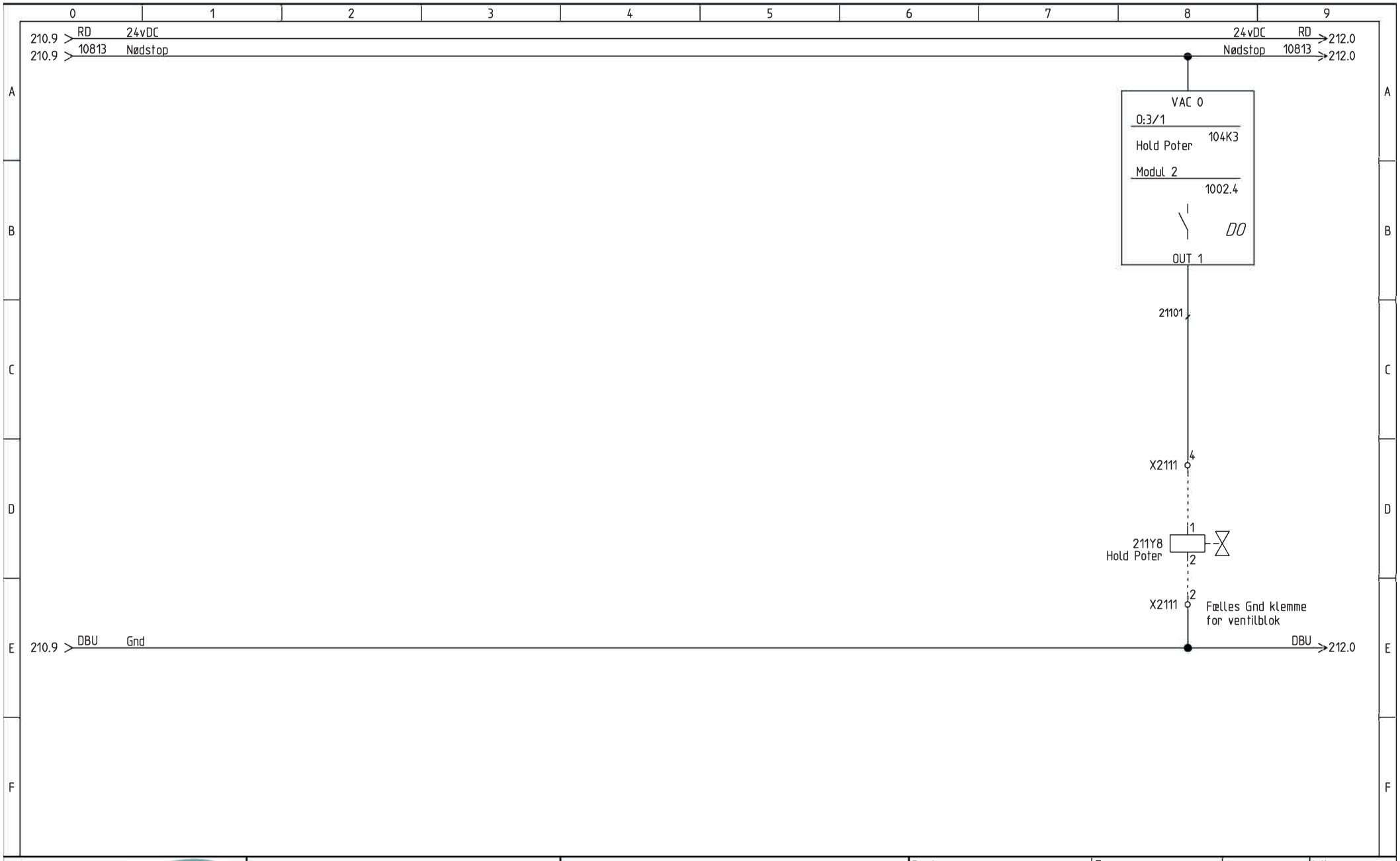
Jasopels	Jasopels MasterCut V016	V snit 2 Dc motor	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 04-02-2017	Funkt.:	Plac.:	Blad: 128



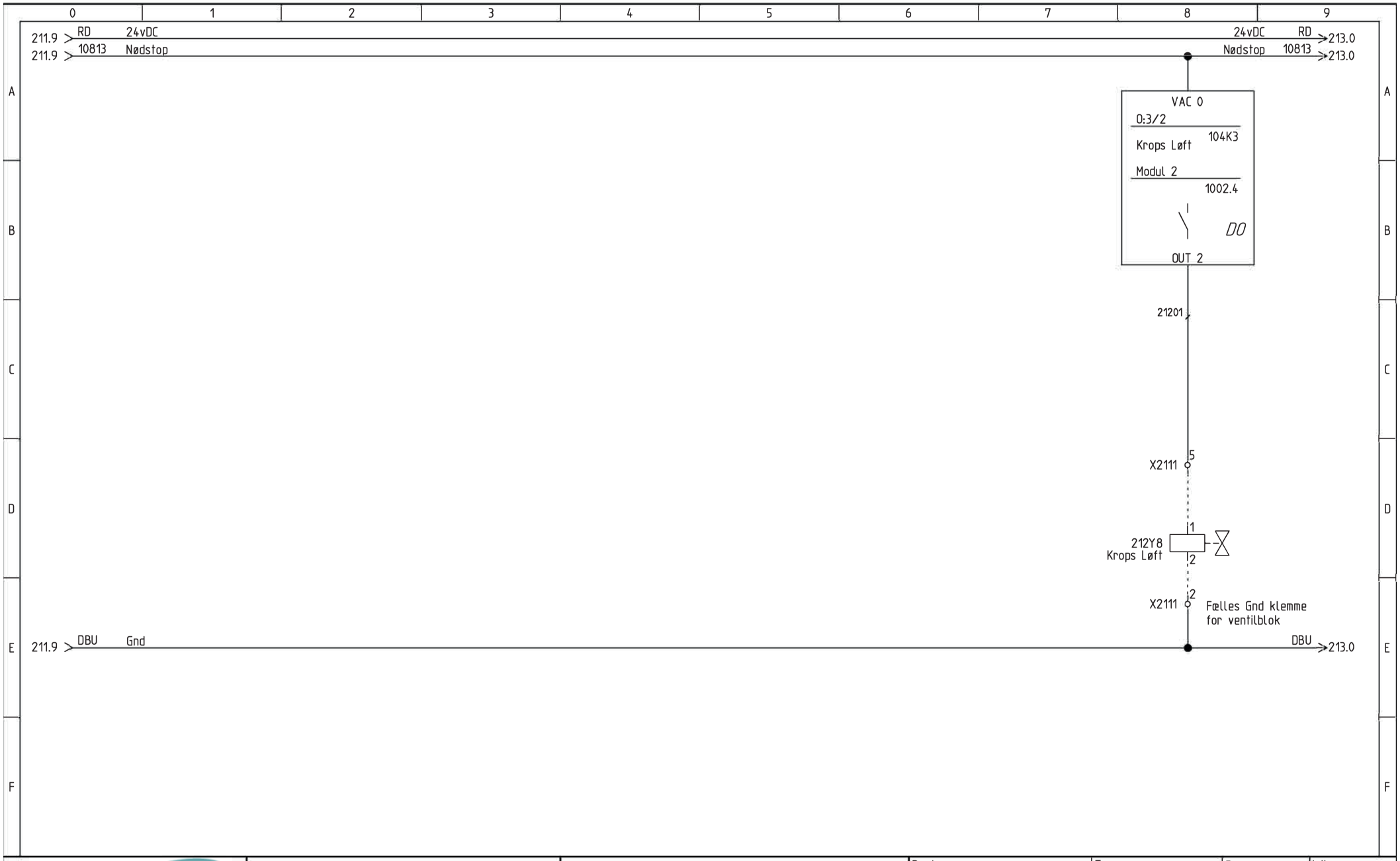
Jasopels	Jasopels MasterCut V016	På lufter (sikkerheds ventil)	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 11-02-2017	Funkt.:	Plac.:	Blad: 202



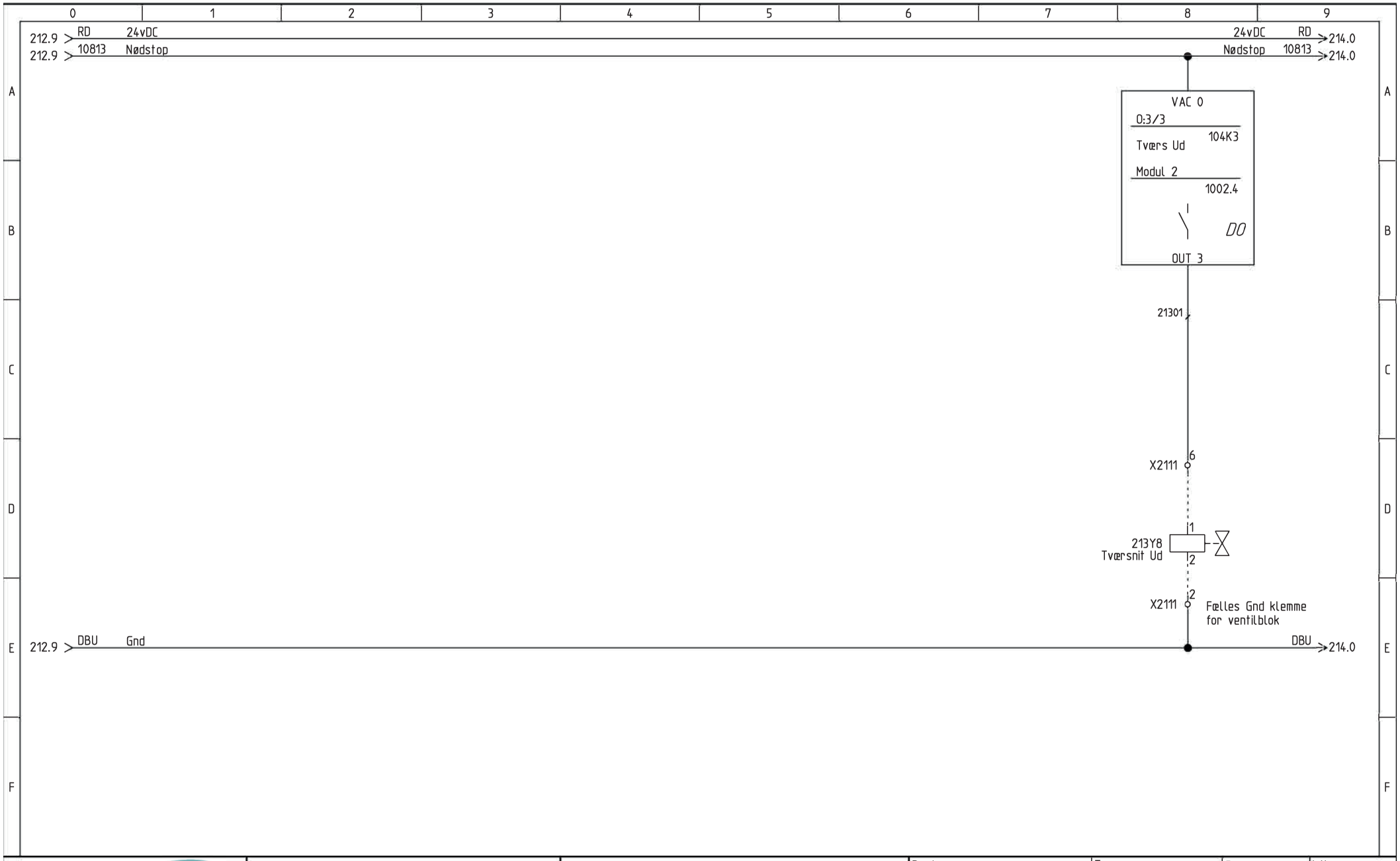
Jasopels	Jasopels MasterCut V016	Krops Hold (bagende) Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 04-03-2017	Funkt.:	Plac.:	Blad: 210



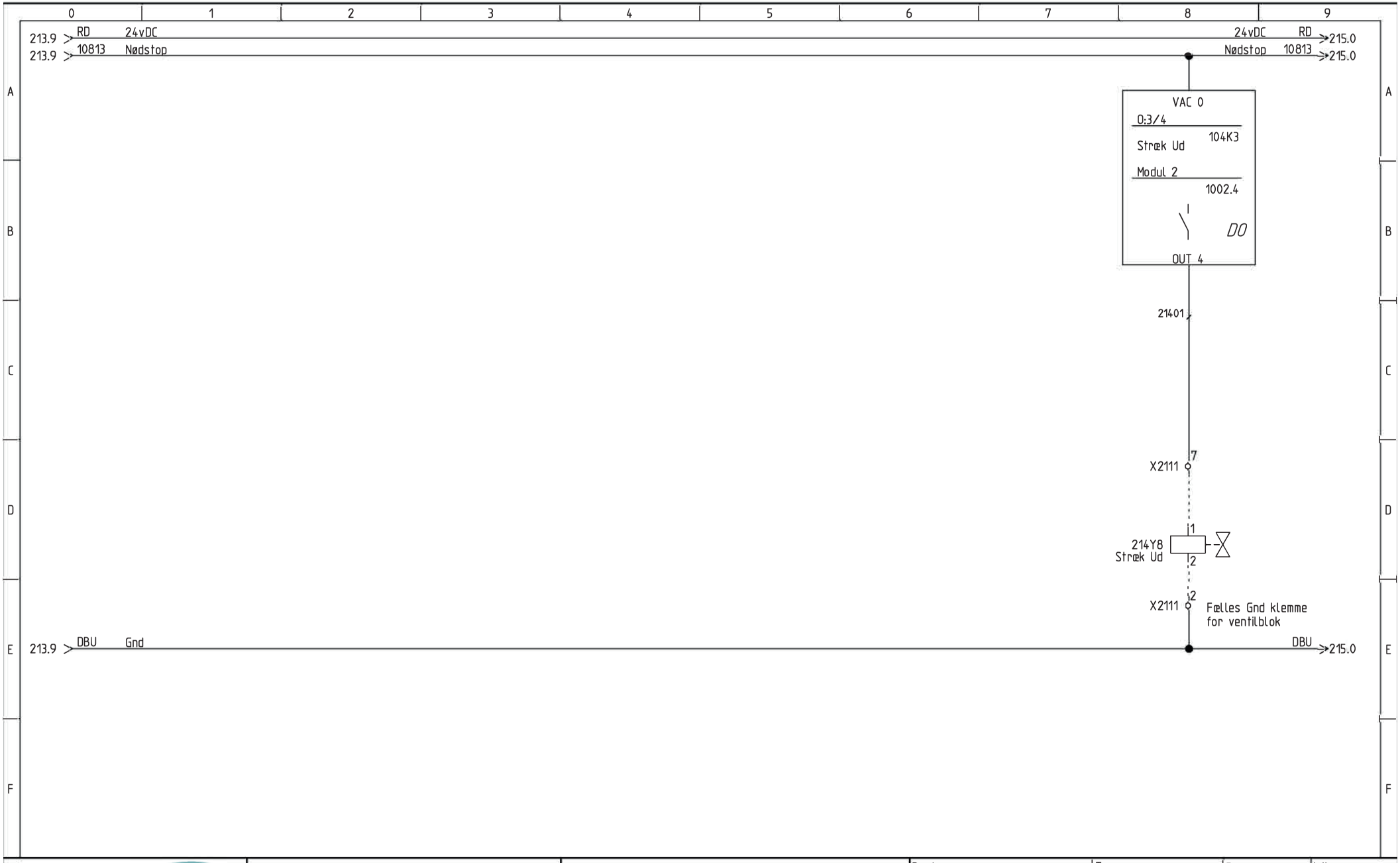
Jasopels	Jasopels MasterCut V016	Hold Poter Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 211



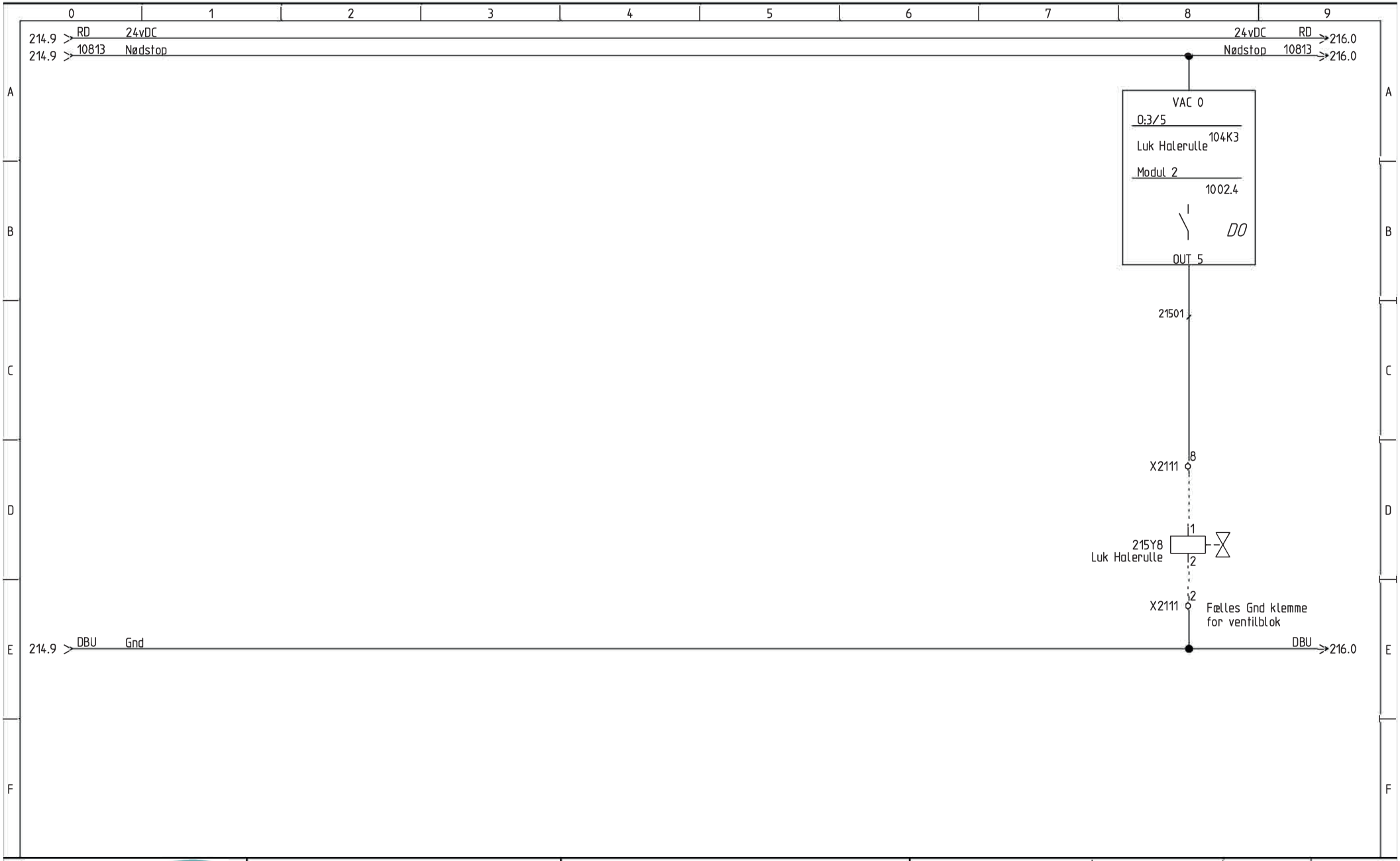
Jasopels	Jasopels MasterCut V016	Krops Løft Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 212



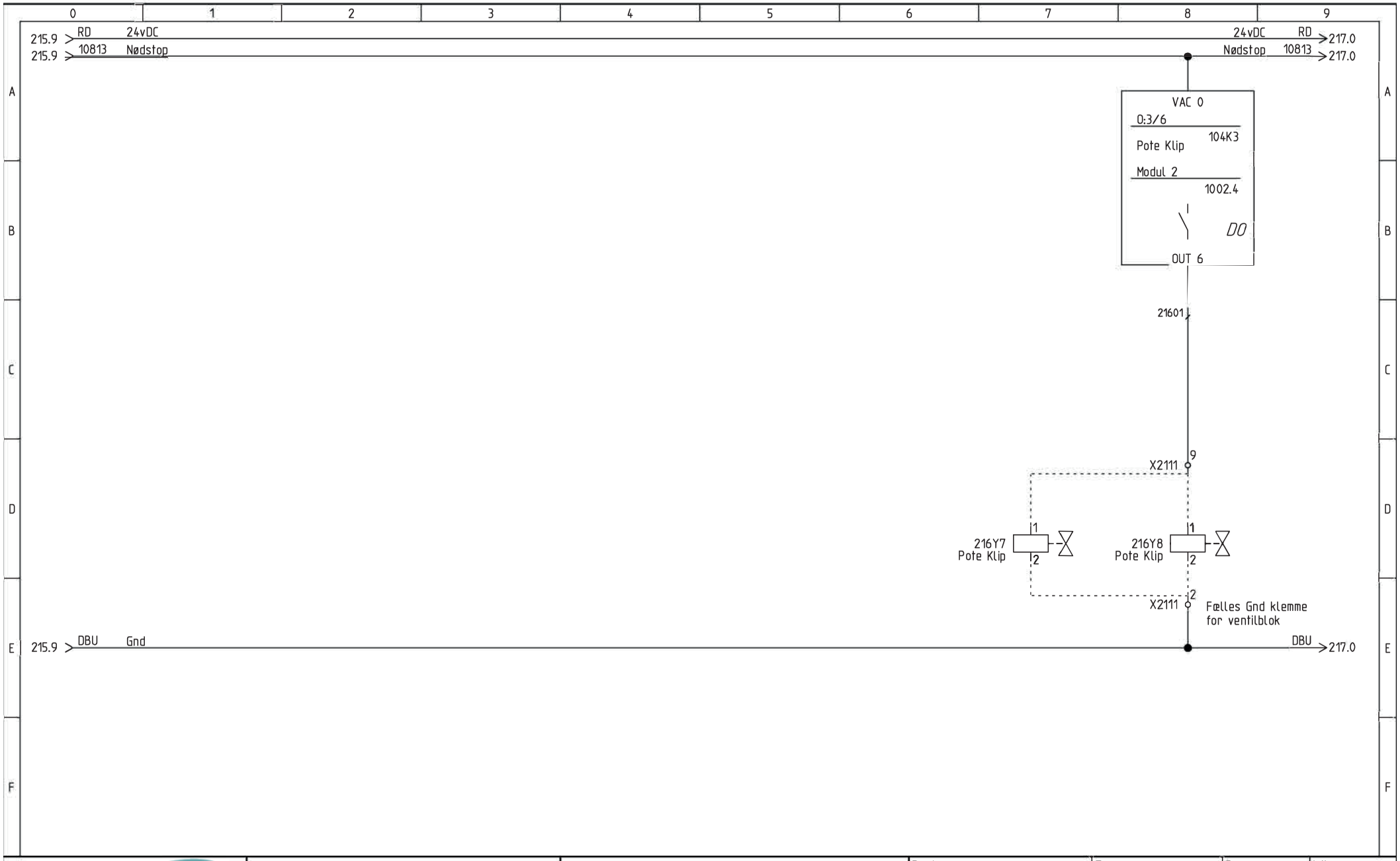
Jasopels	Jasopels MasterCut V016	Tværs Ud Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 213



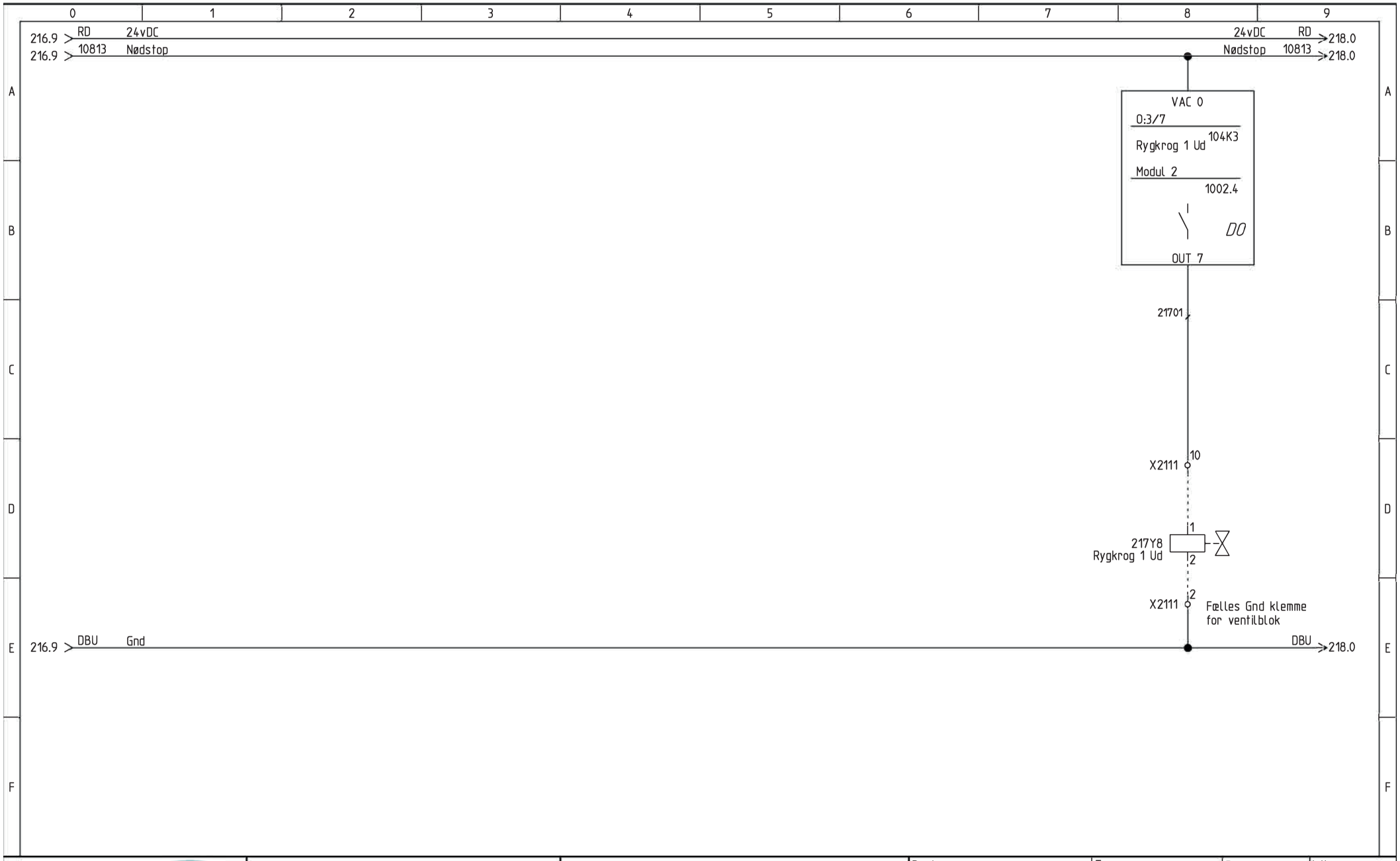
Jasopels	Jasopels MasterCut V016	Strøk Ud Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 214



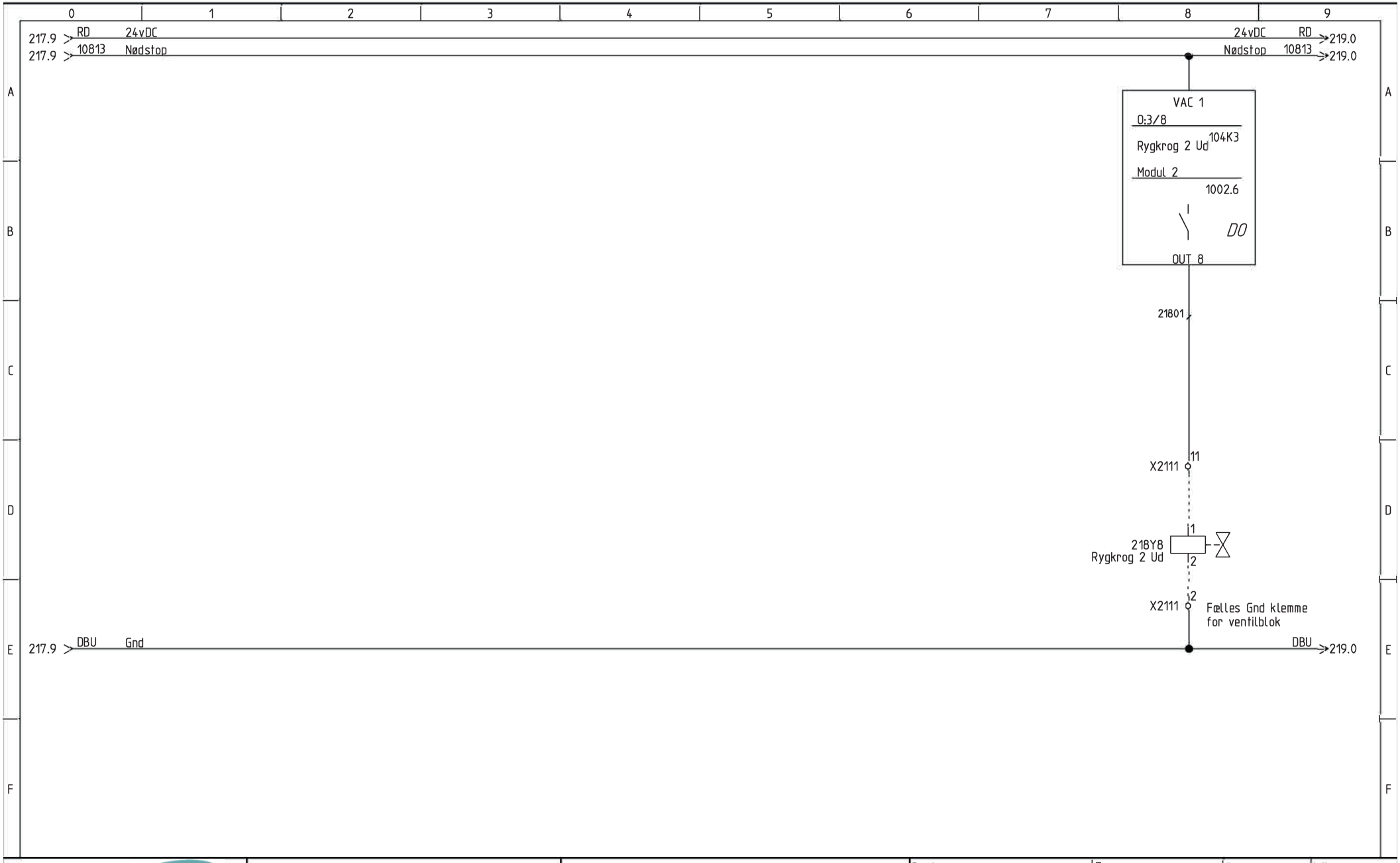
Jasopels	Jasopels MasterCut V016	Luk Halerulle Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 215



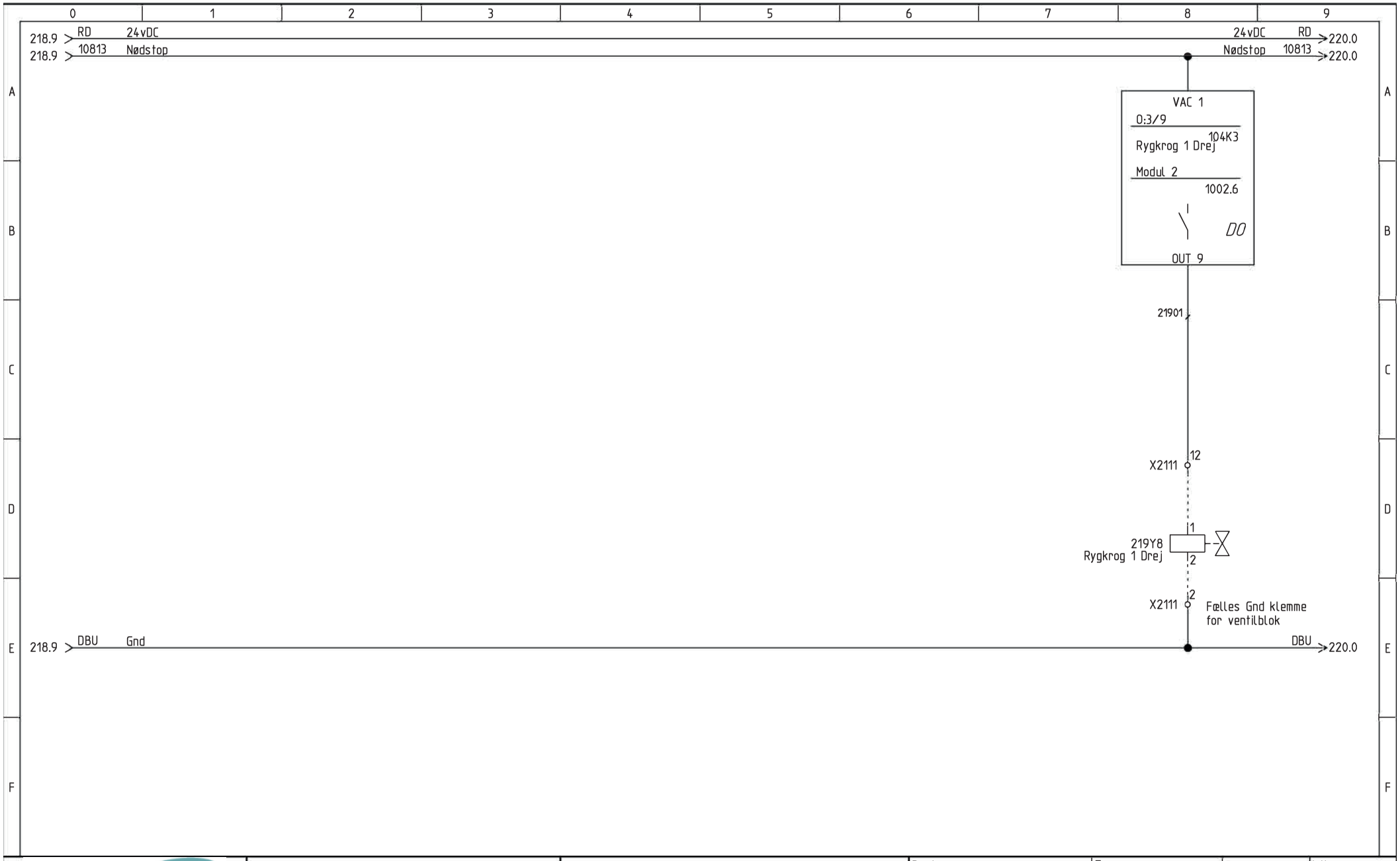
Jasopels	Jasopels MasterCut V016	Pote Klip Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 216



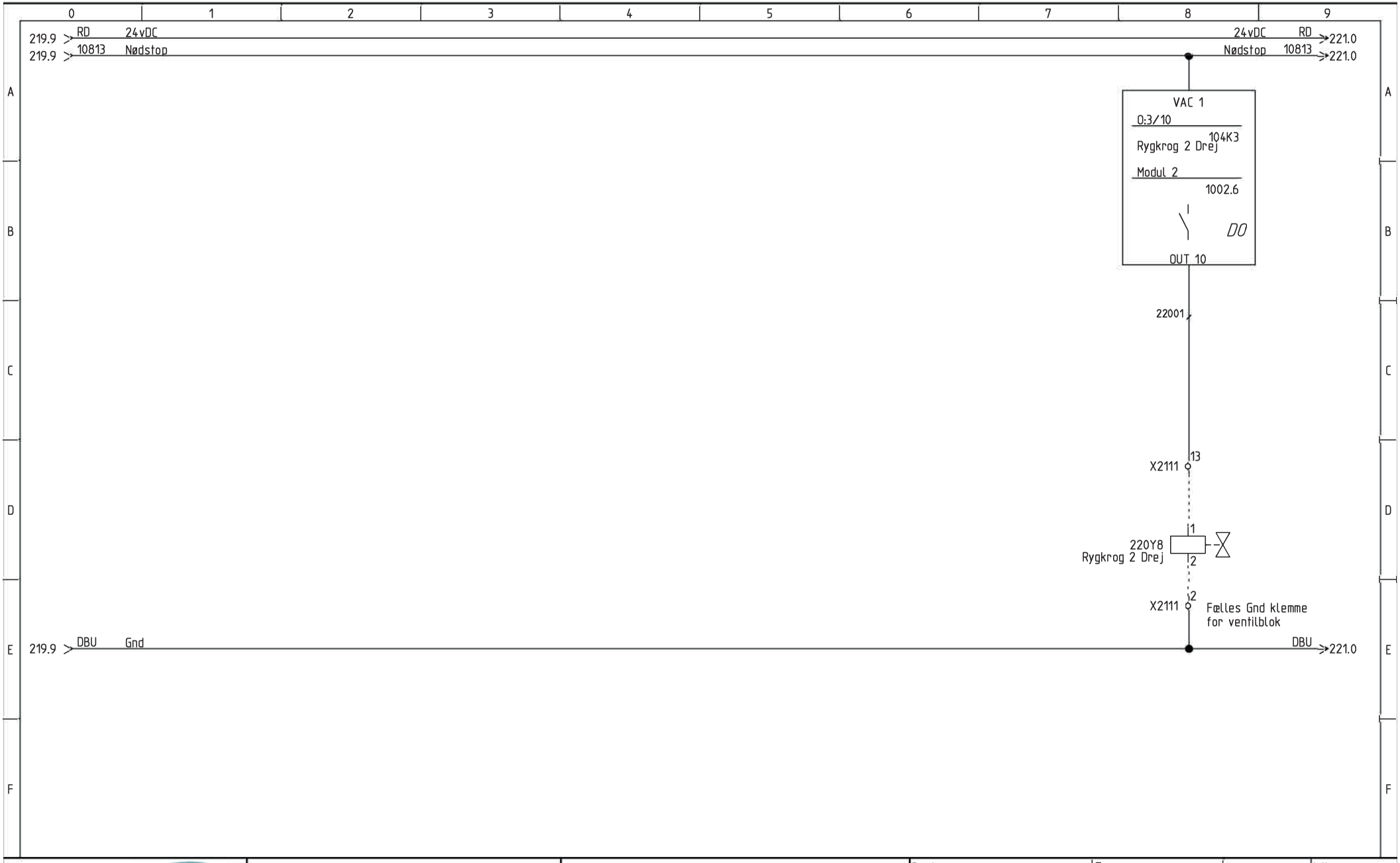
Jasopels	Jasopels MasterCut V016	Rygkrog 1 Ud Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 217



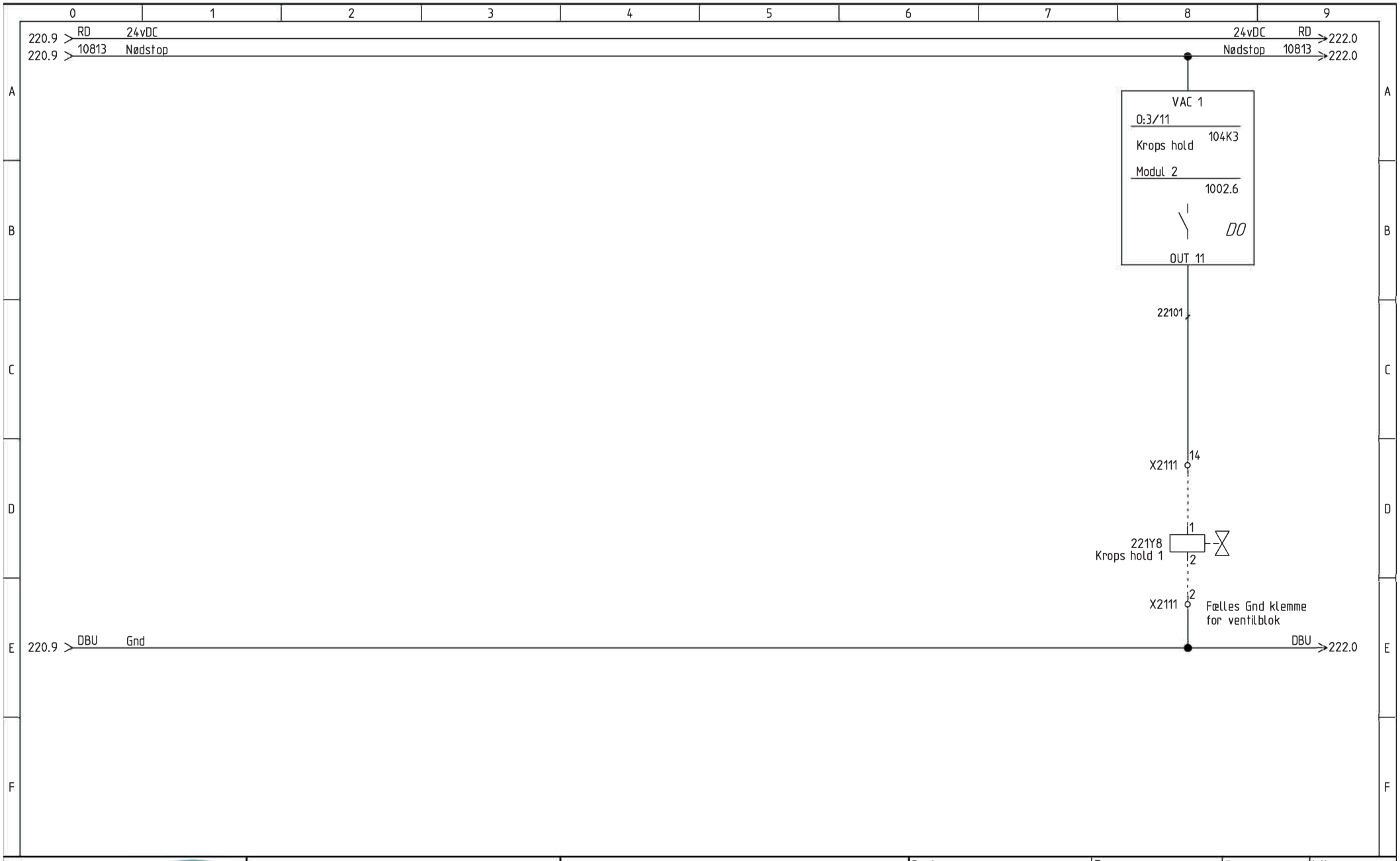
Jasopels	Jasopels MasterCut V016	Rygkrog 2 Ud Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 218



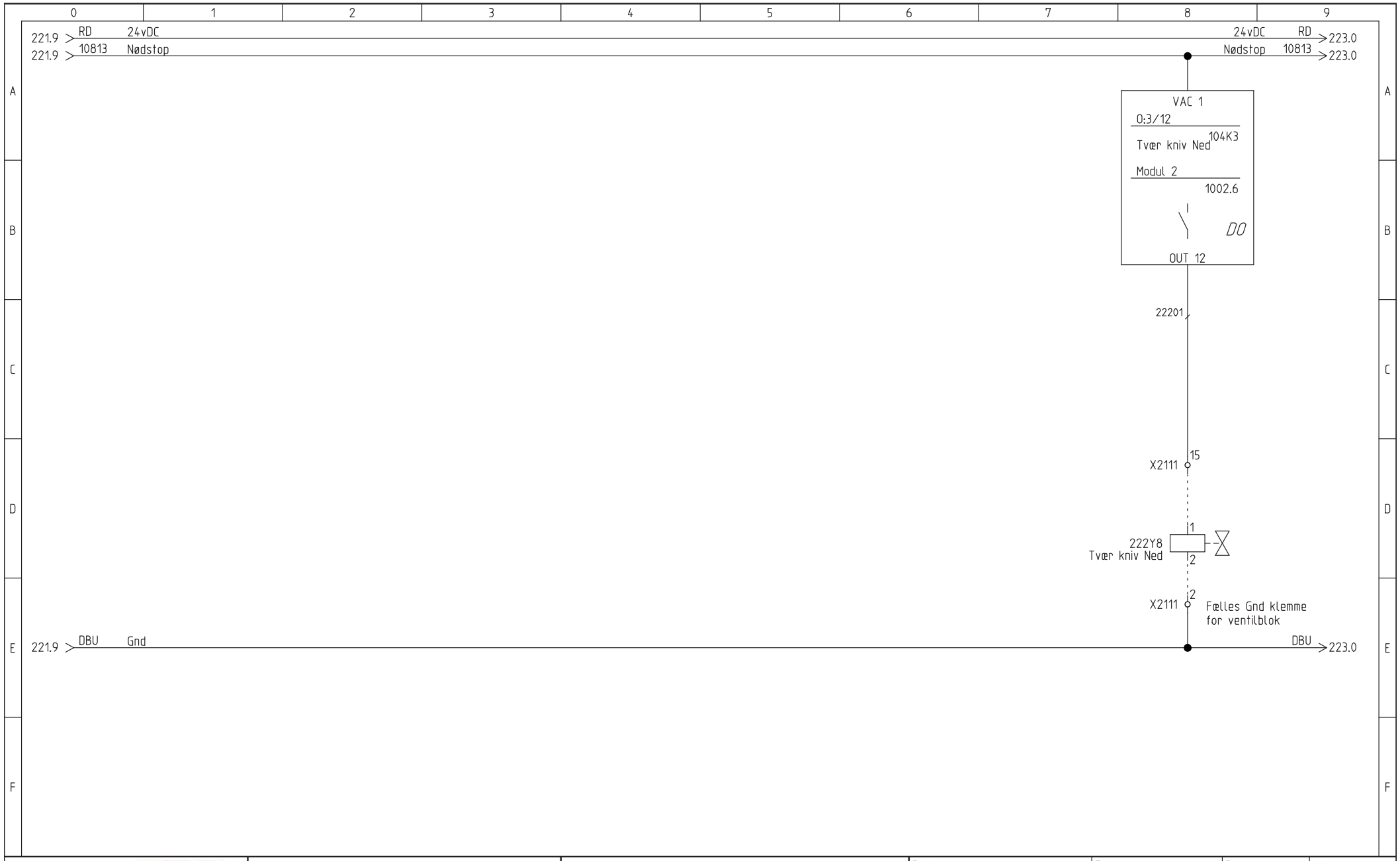
Jasopels	Jasopels MasterCut V016	Rygkrog 1 Drej Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 219



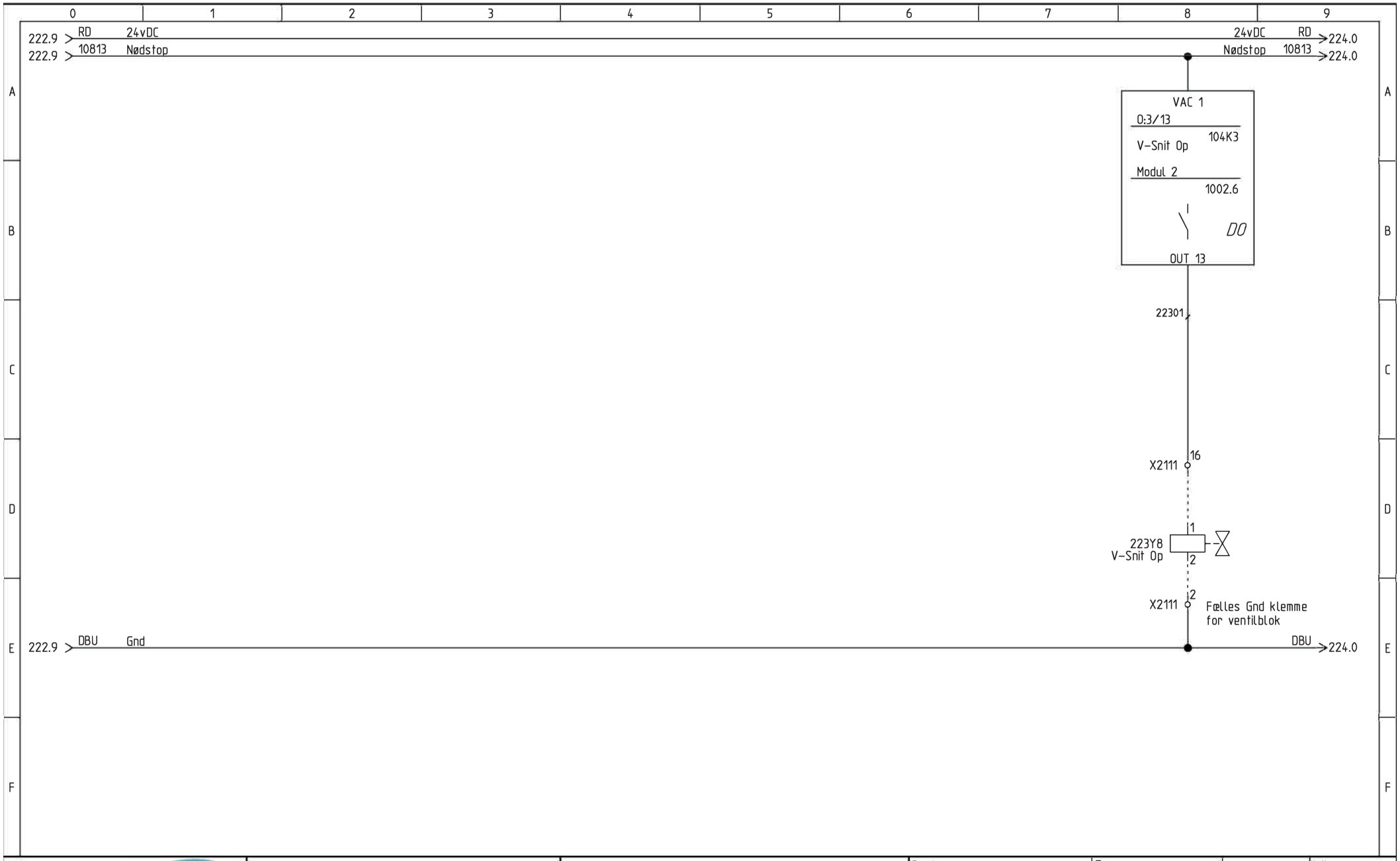
Jasopels	Jasopels MasterCut V016	Rygkrog 2 Drej Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 220



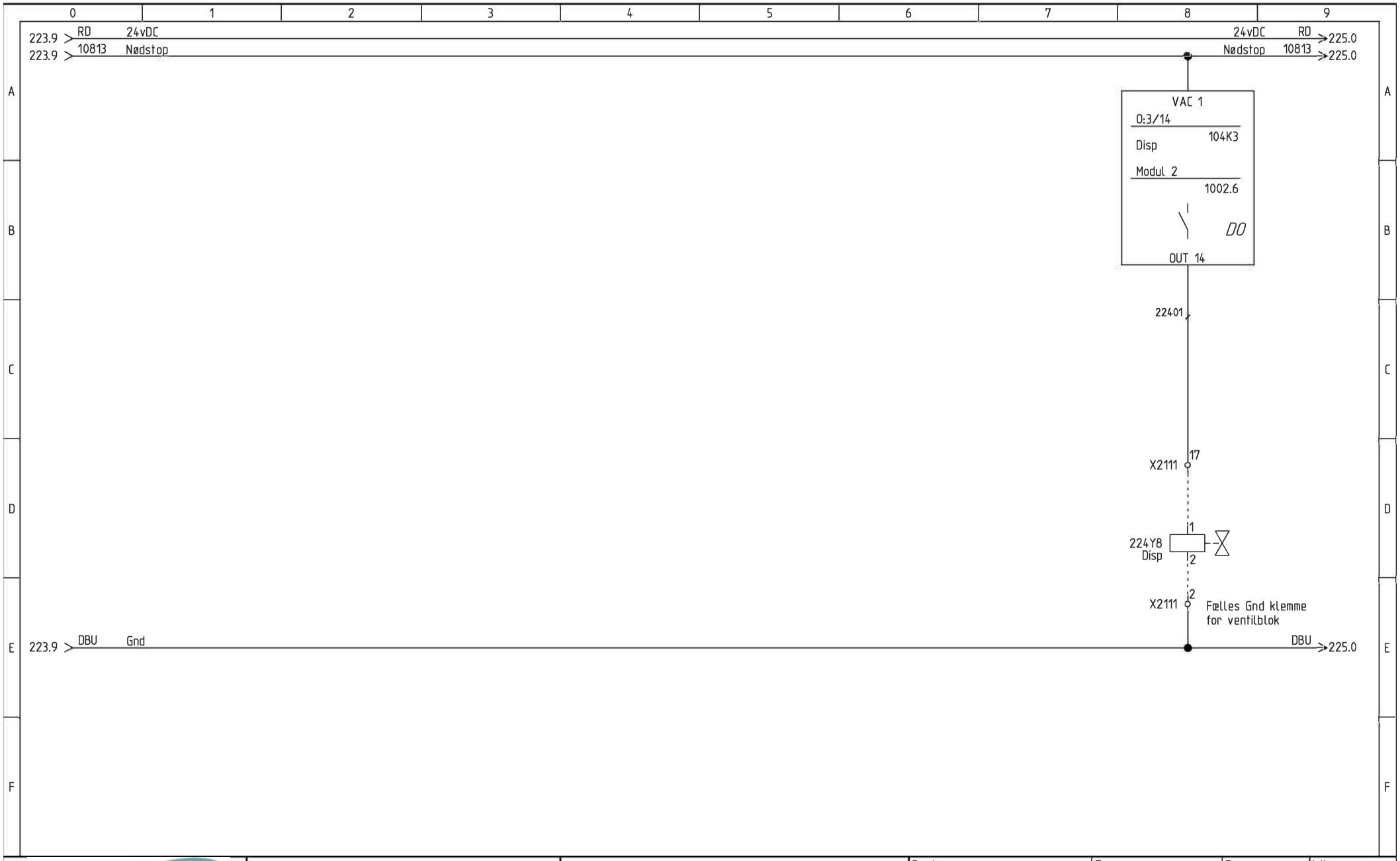
Jasopels	Jasopels MasterCut V016	Krops hold Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 221



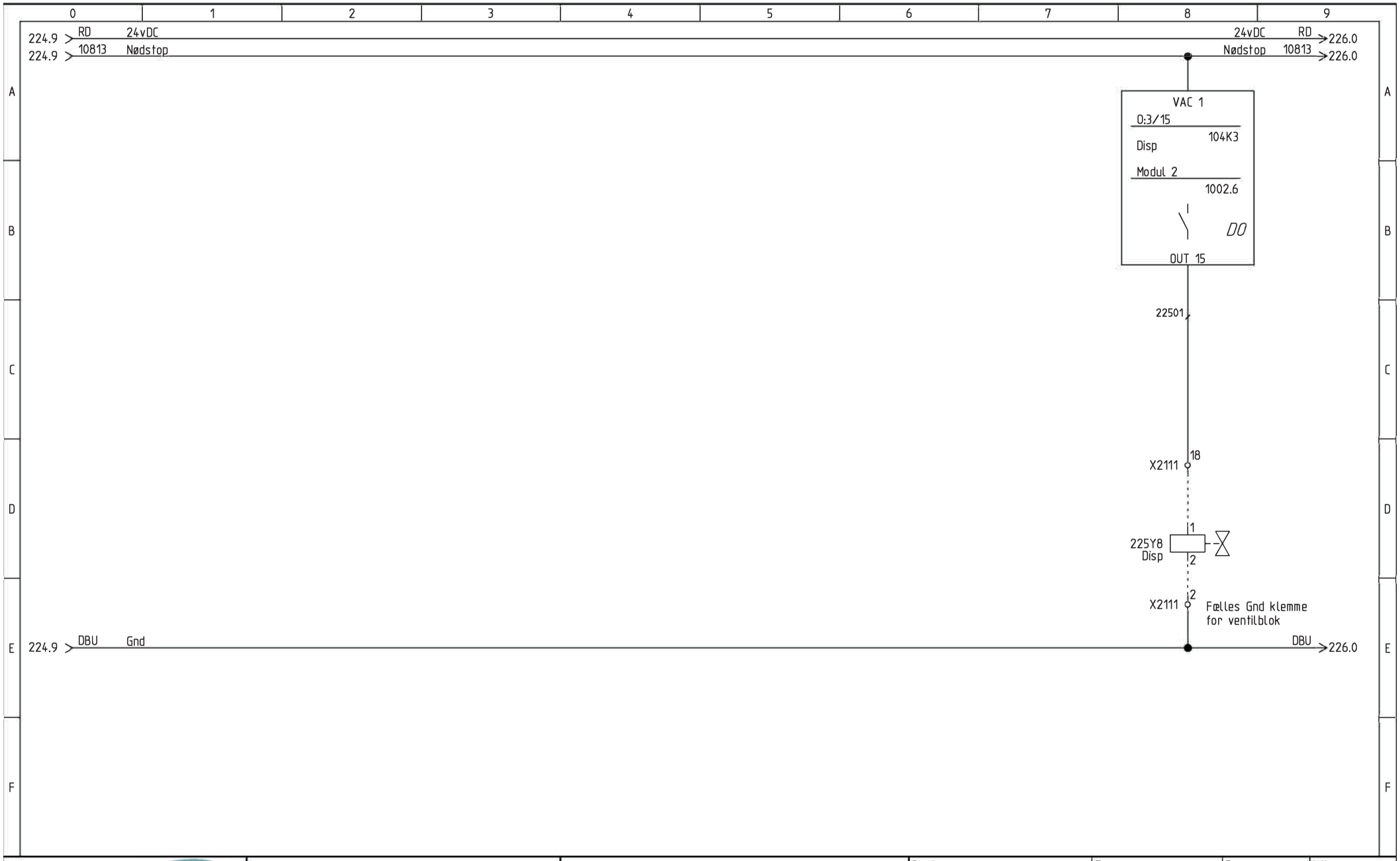
Jasopels	Jasopels MarsterCut V016	Tværkniv Ned Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 222



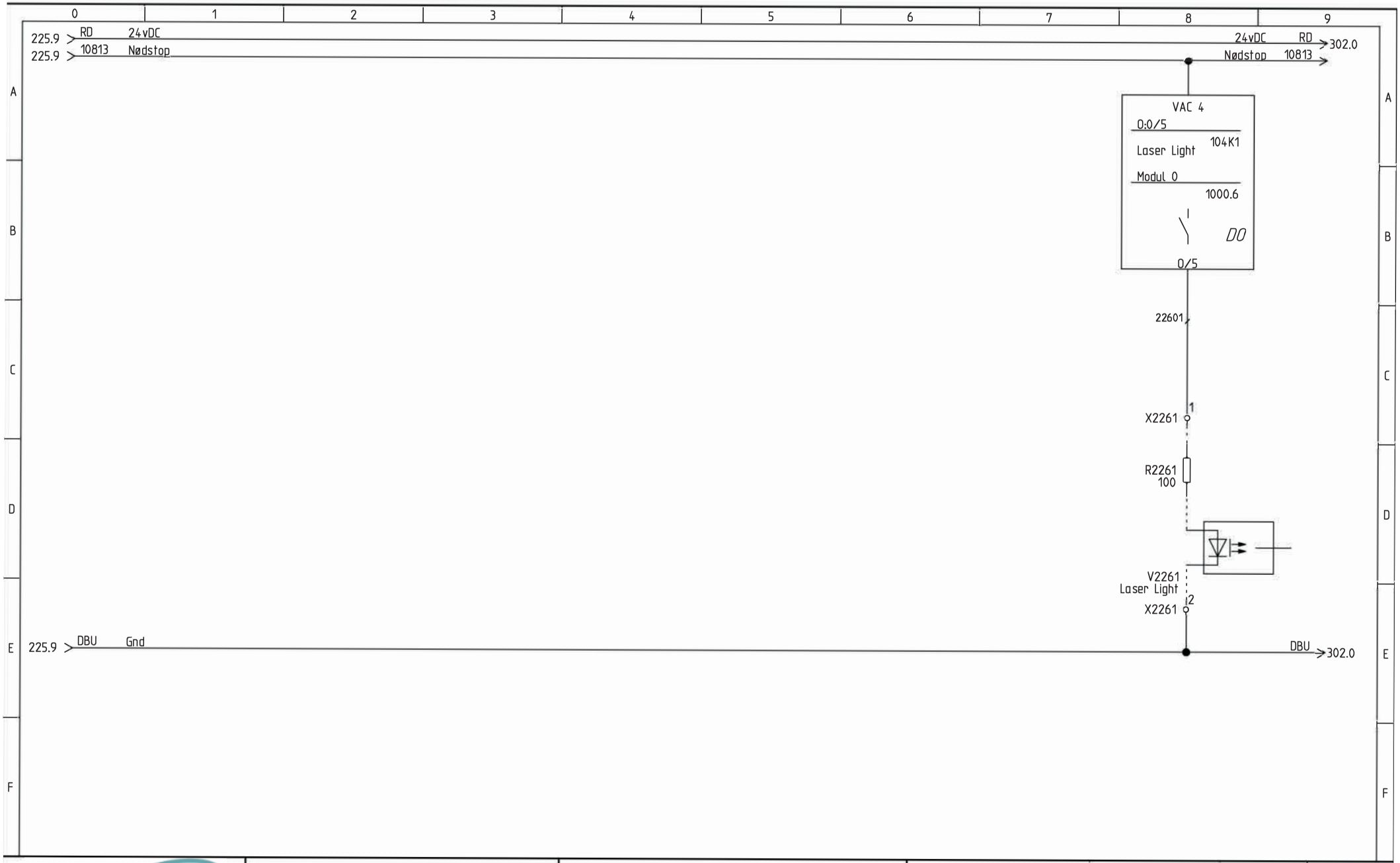
Jasopels	Jasopels MasterCut V016	V-kniv Op Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 223



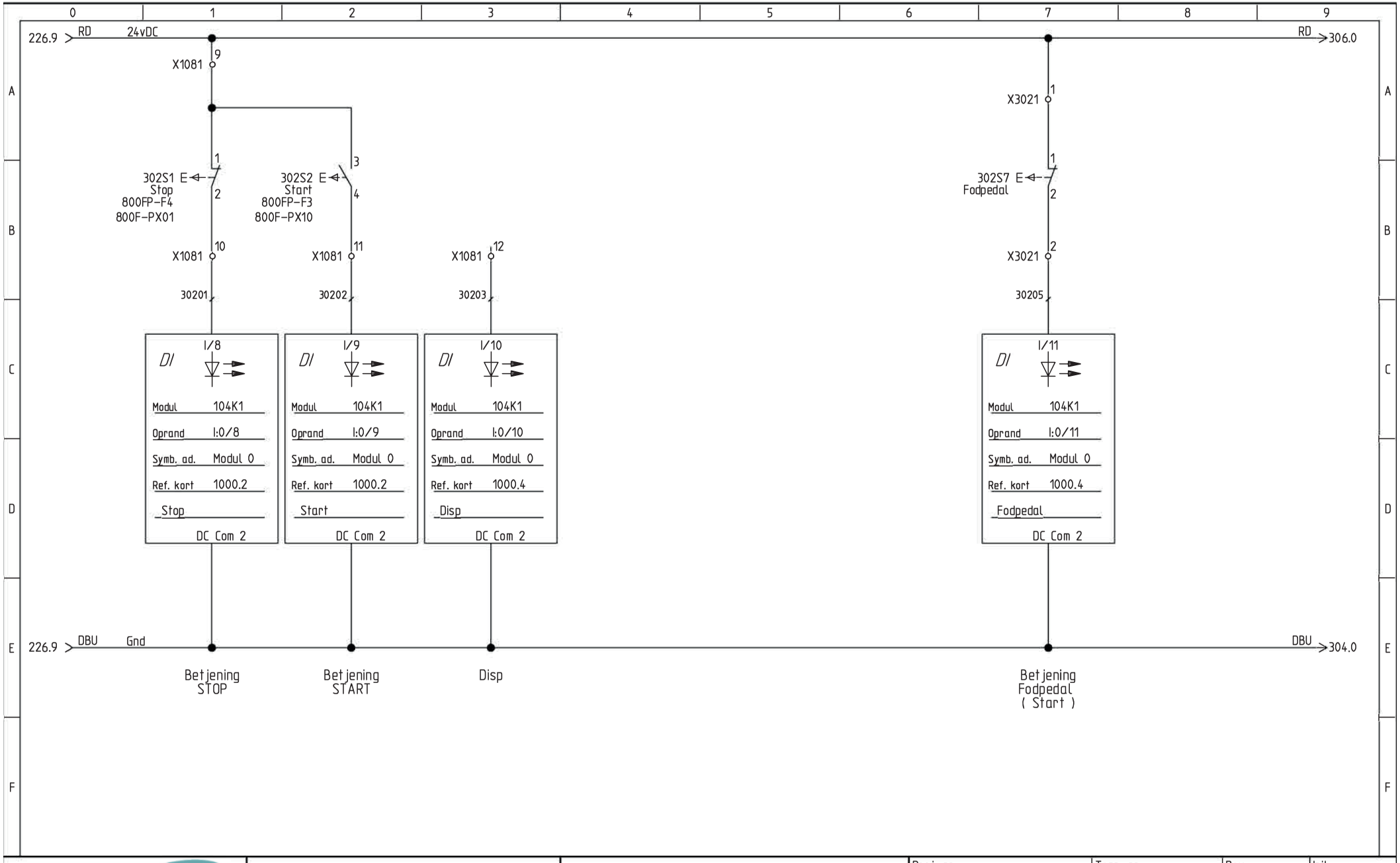
Jasopels	Jasopels MasterCut V016	Disp Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 04-03-2017	Funkt.:	Plac.:	Blad: 224



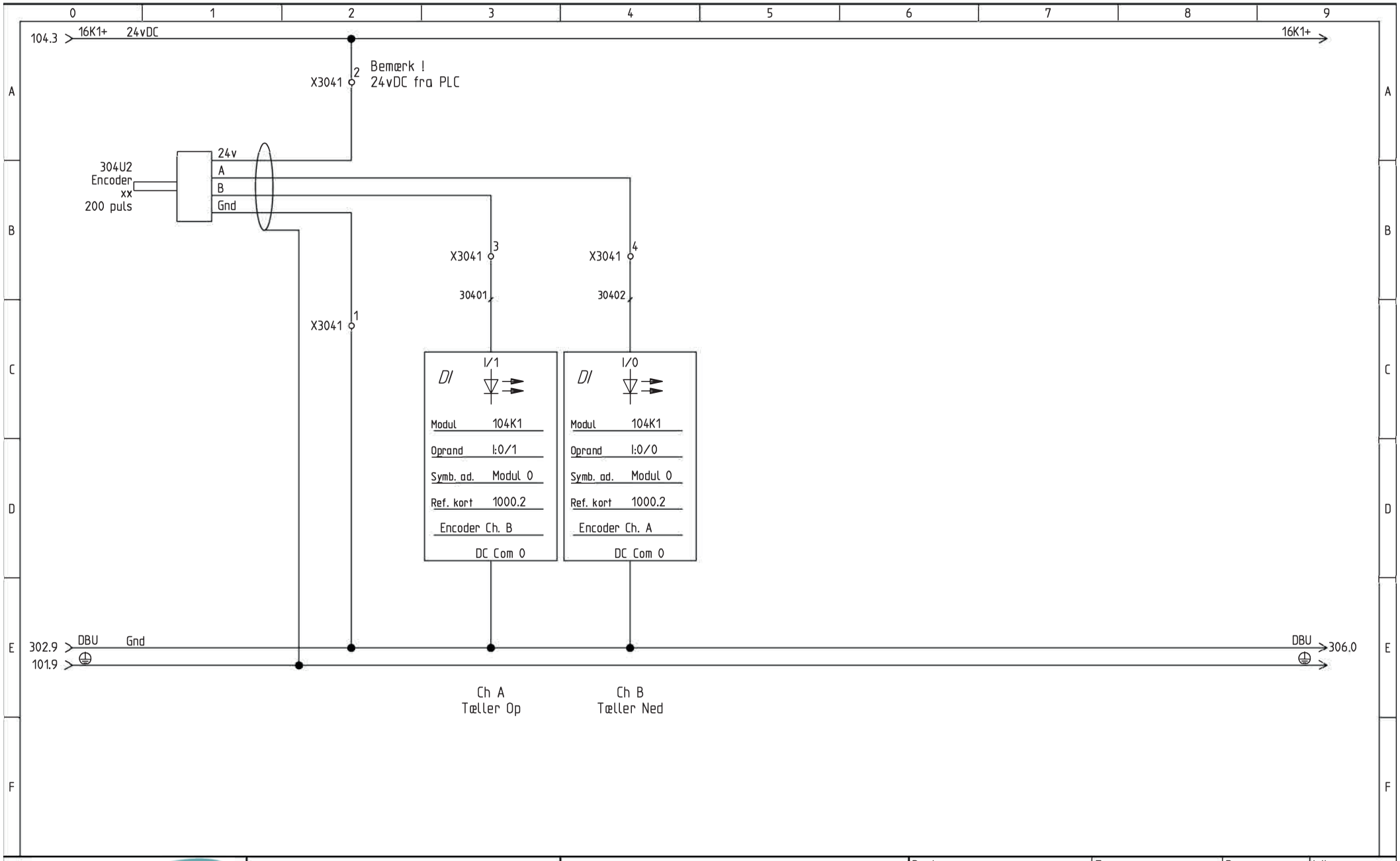
Jasopels	Jasopels MasterCut V016	Disp Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 04-03-2017	Funkt.:	Plac.:	Blad: 225



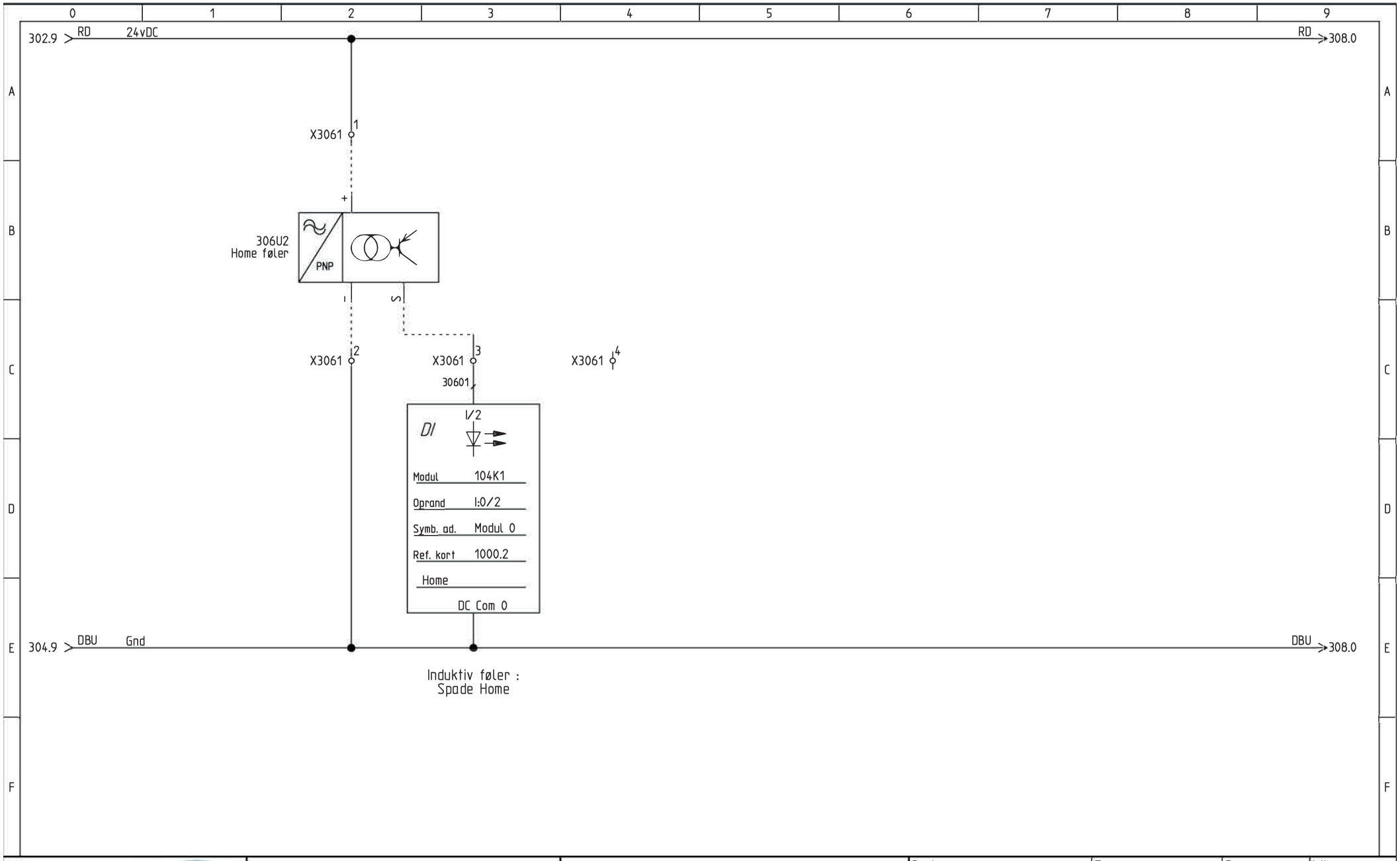
Jasopels	Jasopels MasterCut V016	Laser Light laser lys	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 11-03-2017	Funkt.:	Plac.:	Blad: 226



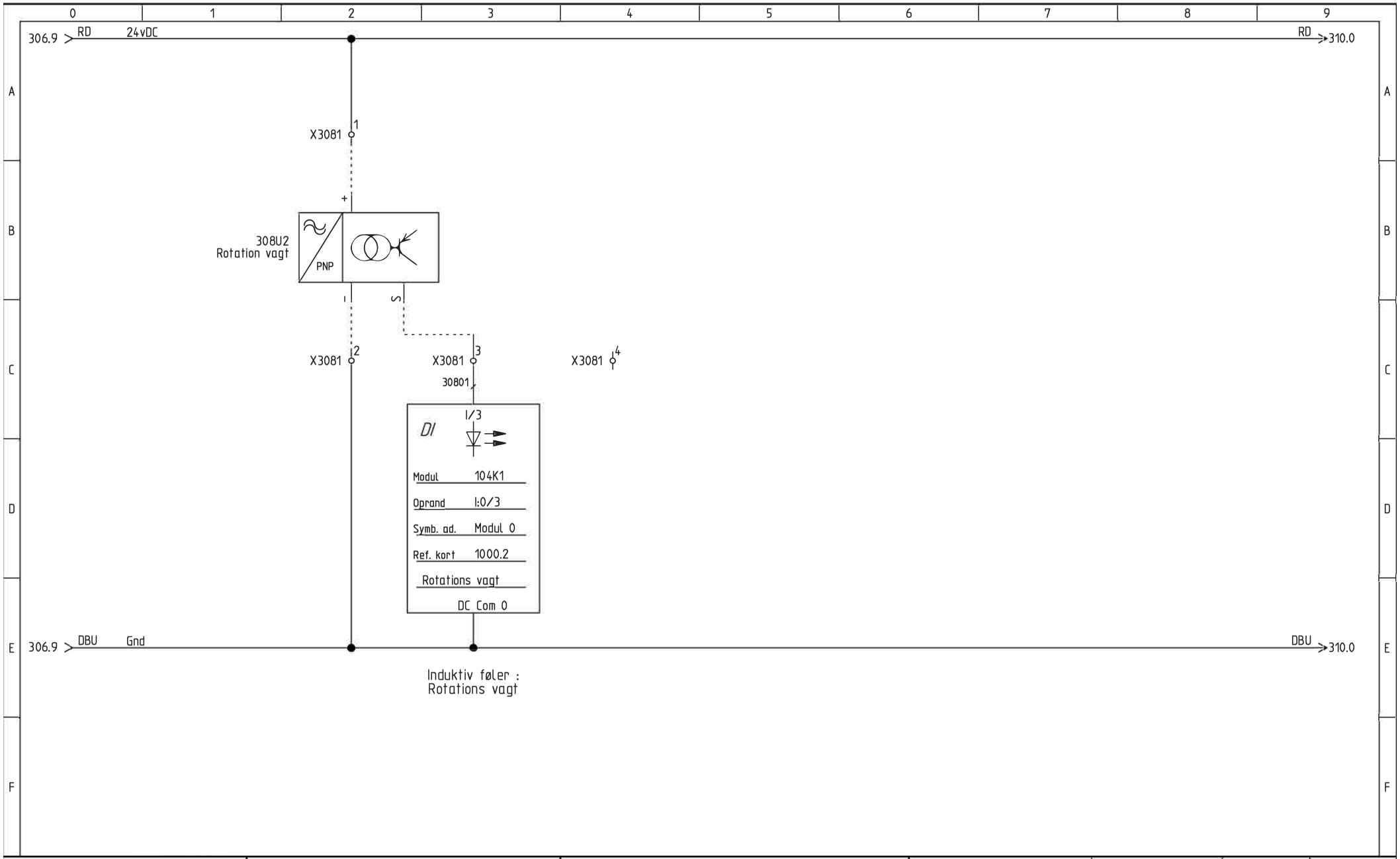
Jasopels	Jasopels MasterCut V016	Betjening Knapper på Maskinfront	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 04-02-2017	Funkt.:	Plac.:	Blad: 302



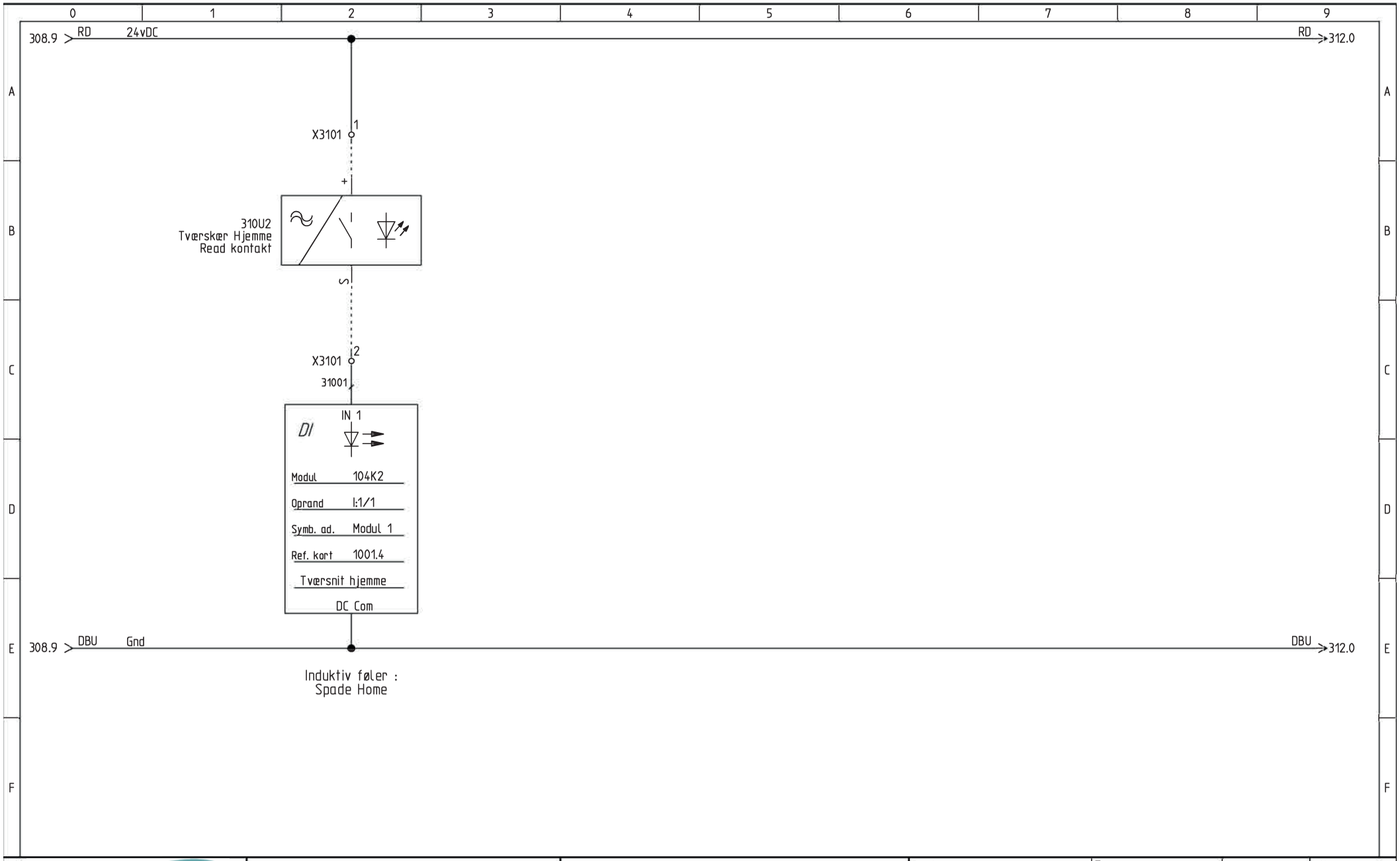
Jasopels	Jasopels MasterCut V016	Encoder Spade position	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 04-02-2017	Funkt.:	Plac.:	Blad: 304



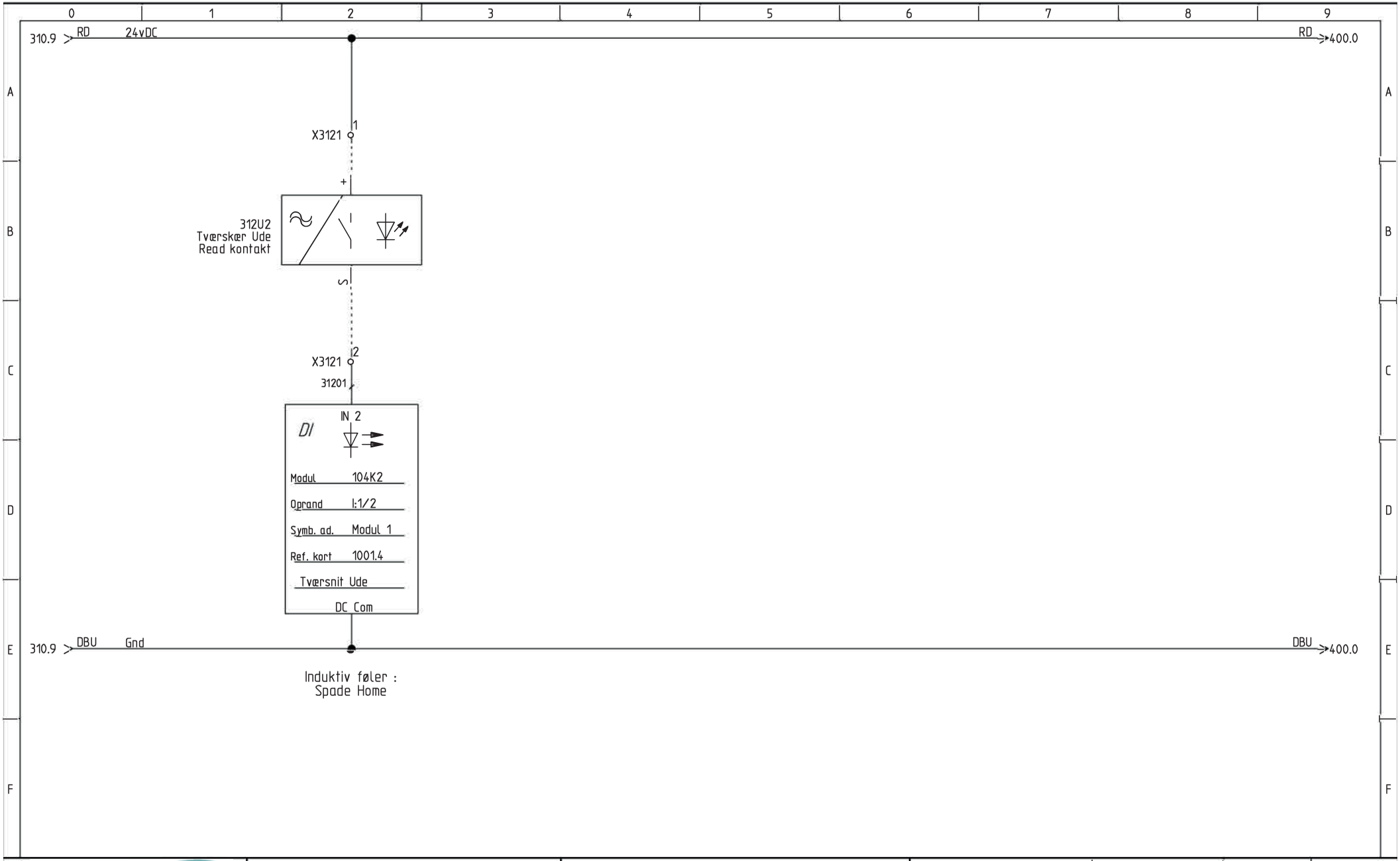
Jasopels	Jasopels MasterCut V016	Home føler Induktiv føler	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 04-02-2017	Funkt.:	Plac.:	Blad: 306



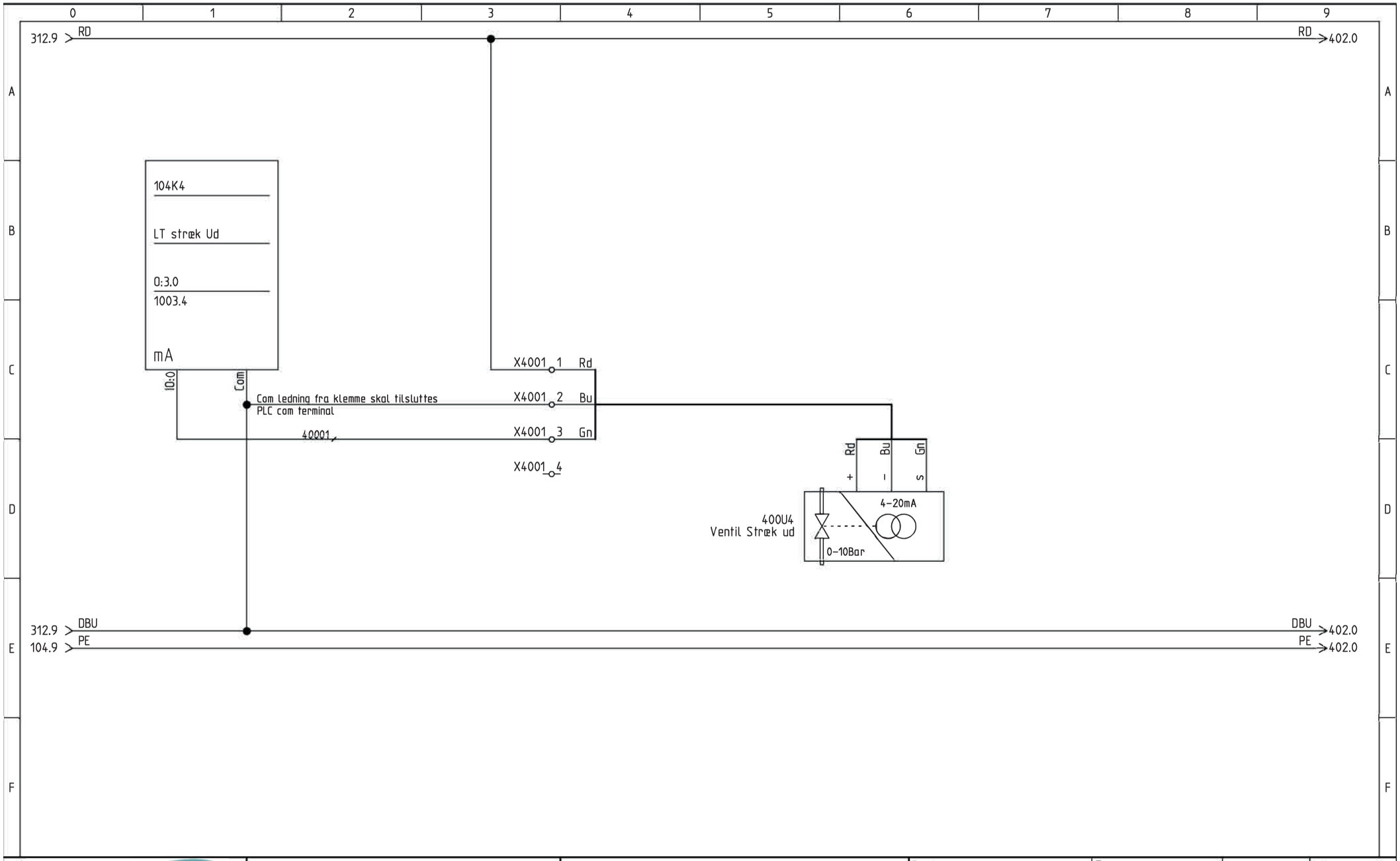
Jasopels	Jasopels MasterCut V016	Rotations Kontrol Induktiv føler	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 04-02-2017	Funkt.:	Plac.:	Blad: 308



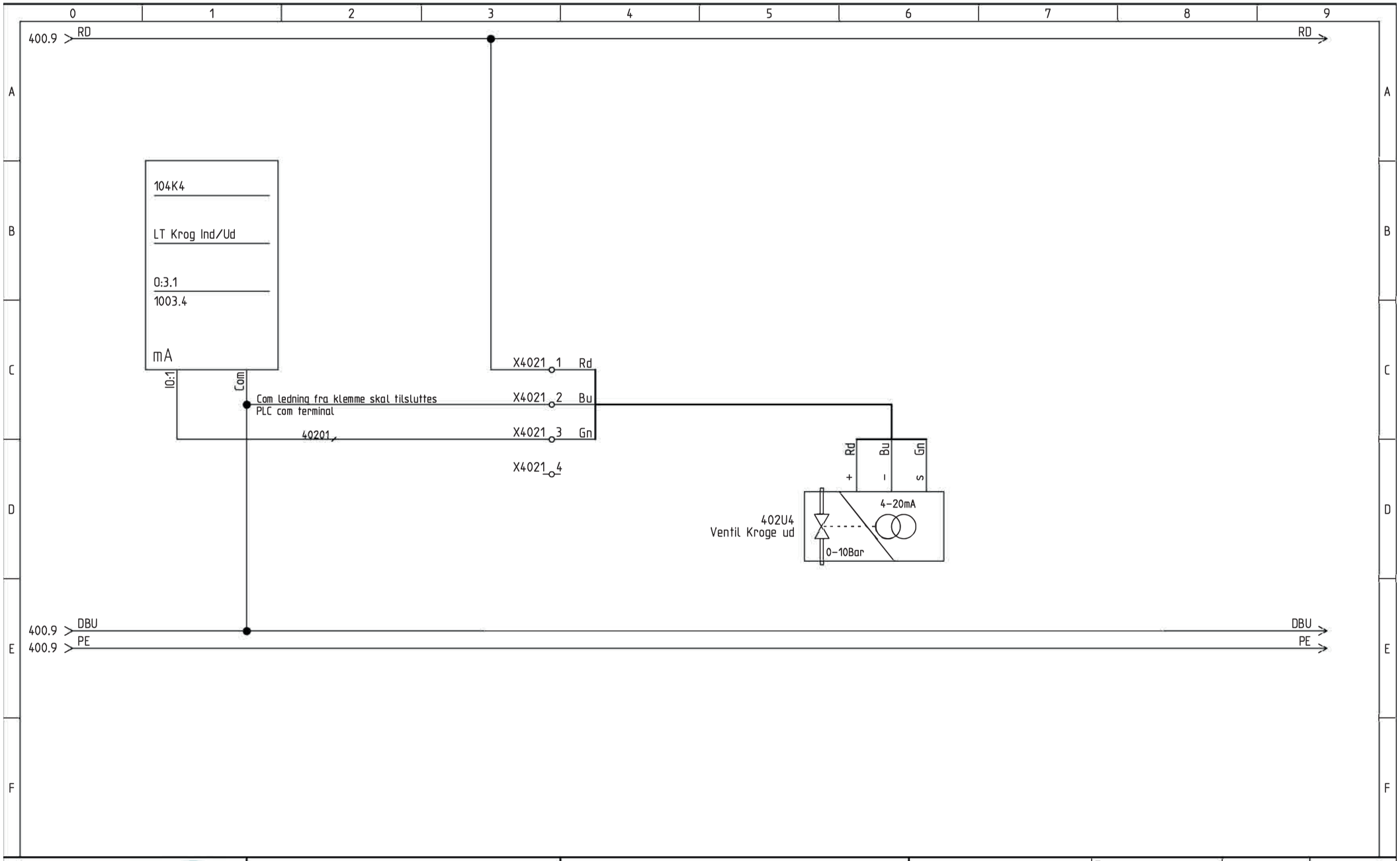
Jasopels	Jasopels MasterCut V016	Tvær skær Hjemme Reed kontakt	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 05-02-2017	Funkt.:	Plac.:	Blad: 310



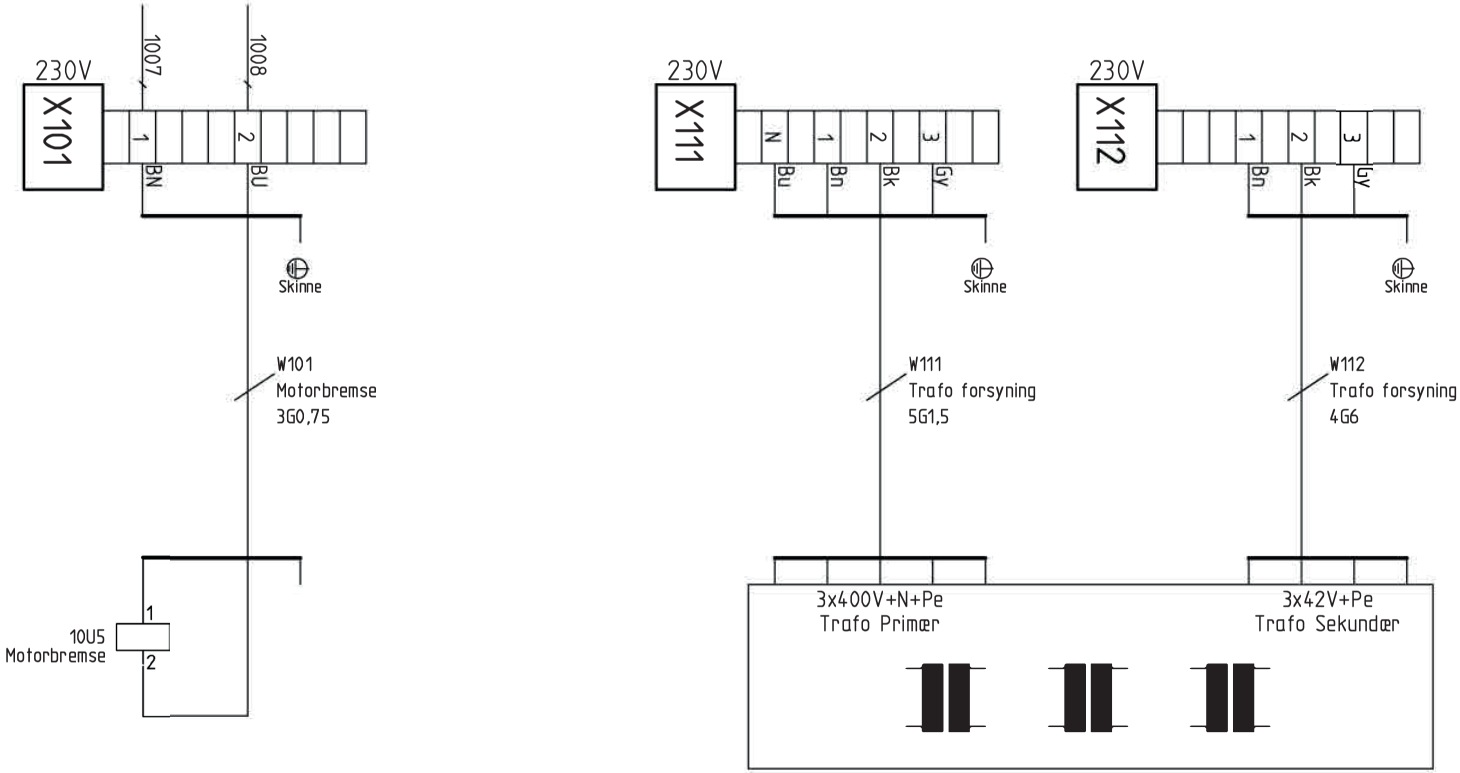
Jasopels	Jasopels MasterCut V016	Tvær skær Ude Reed kontakt	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 05-02-2017	Funkt.:	Plac.:	Blad: 312



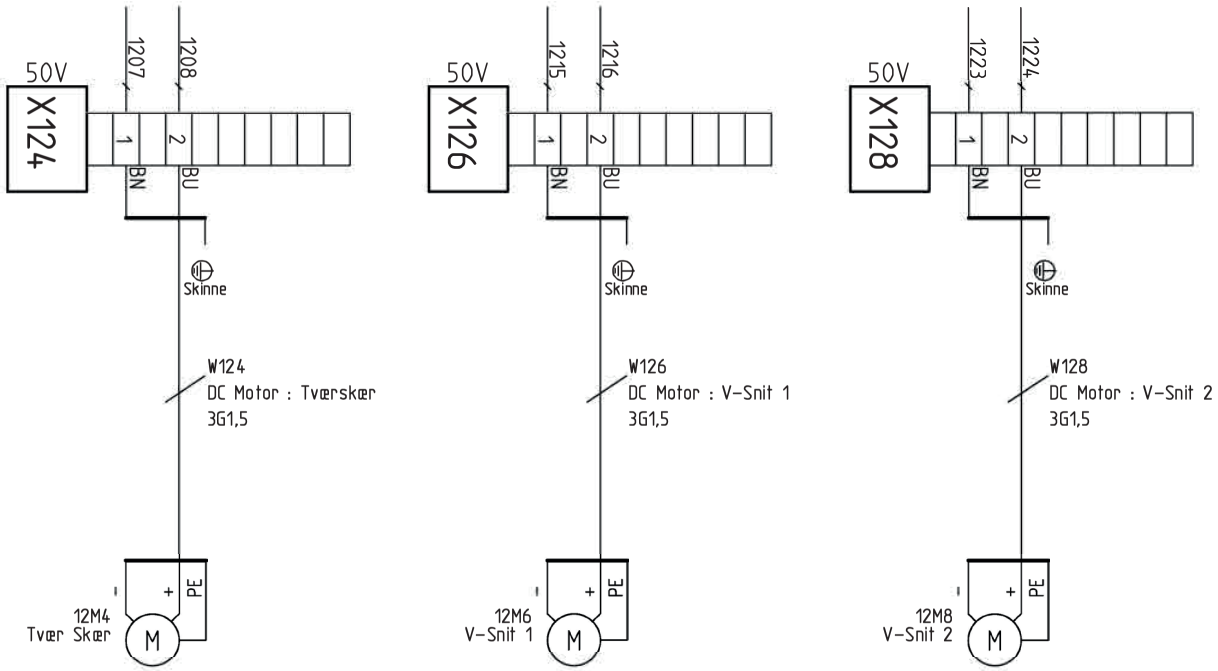
Jasopels	Jasopels MasterCut V016	Strøk Ud – Analog signal 4-20mA til propotional ventil	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 09-05-2017	Funkt.:	Plac.:	Blad: 400



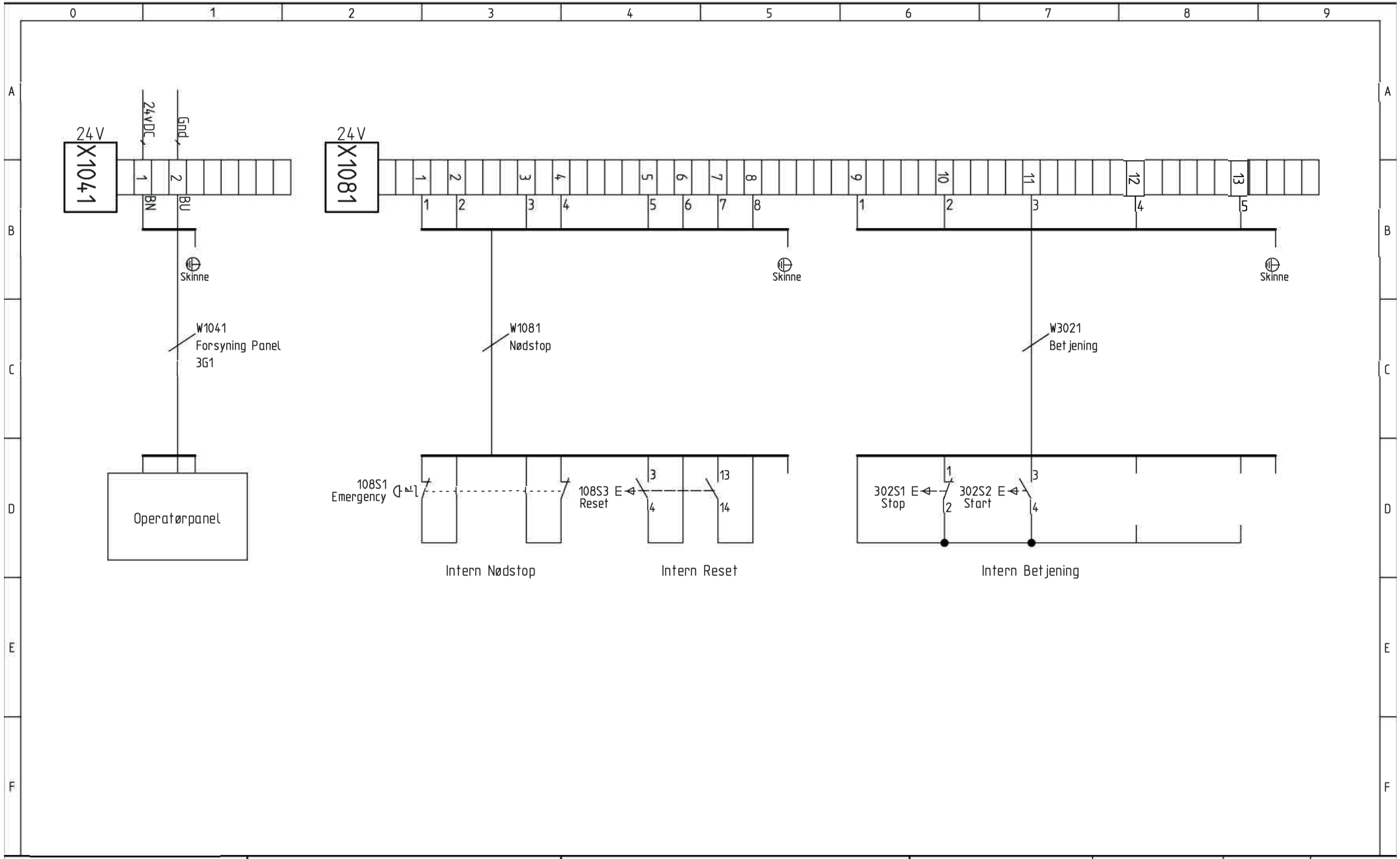
Jasopels	Jasopels MasterCut V016	Kroge Ud – Analog signal 4-20mA til propotional ventil	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 09-05-2017	Funkt.:	Plac.:	Blad: 402



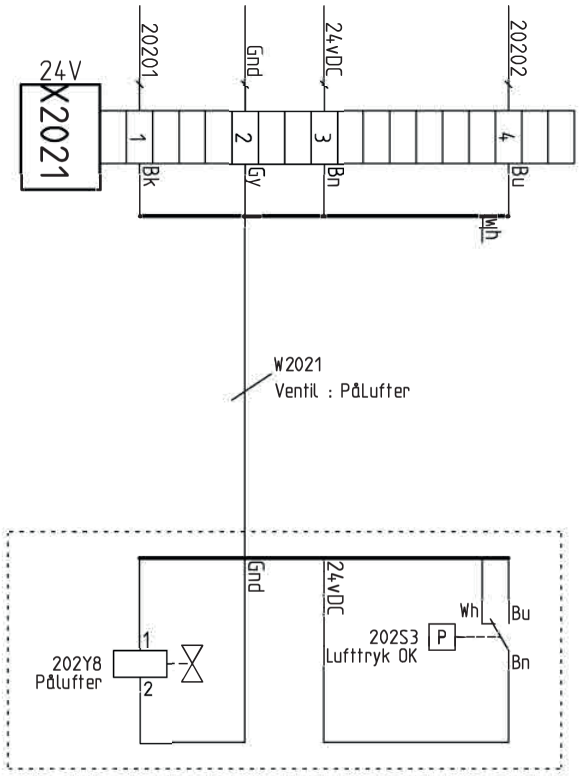
Jasopels	Jasopels MasterCut V016	X101 , X124 , X126 , X128 DC motore	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG	
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 602	



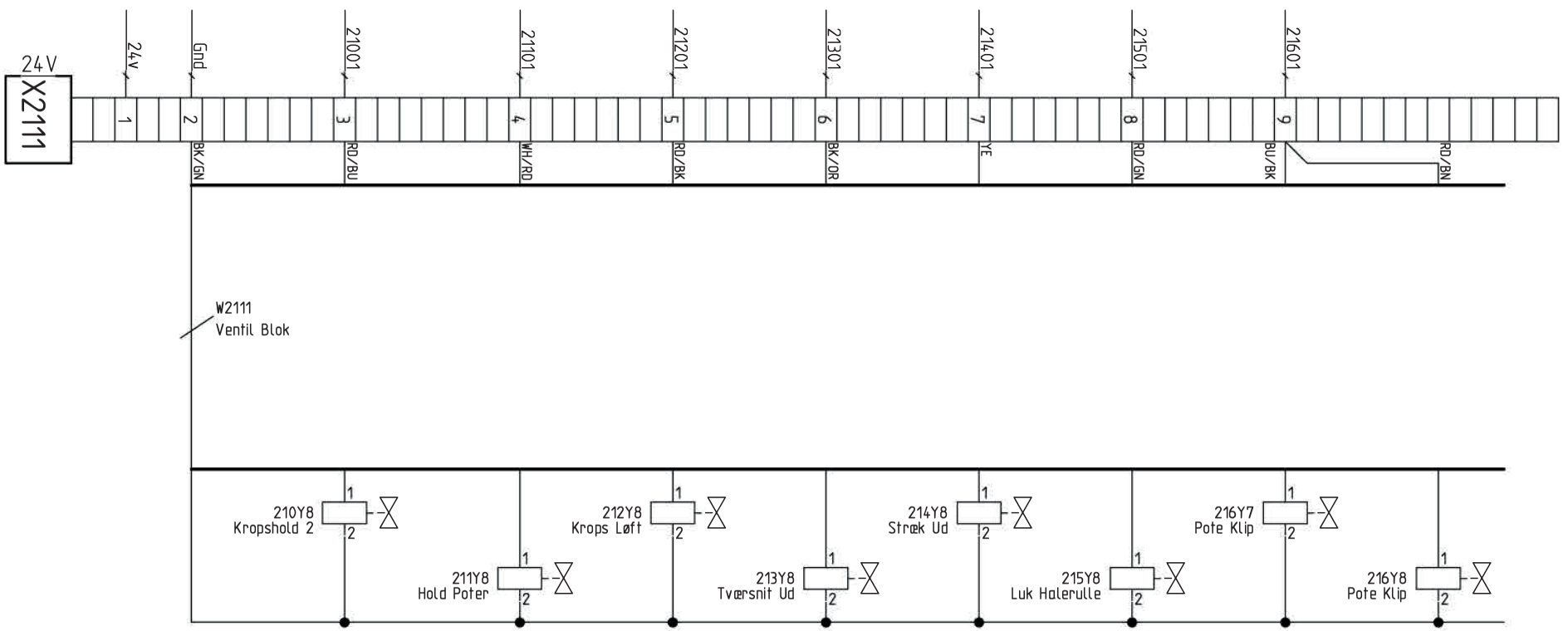
Jasopels	Jasopels MasterCut V016	X111 , X124 , X126 , X128 DC motore	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 09-05-2017	Funkt.:	Plac.:	Blad: 604



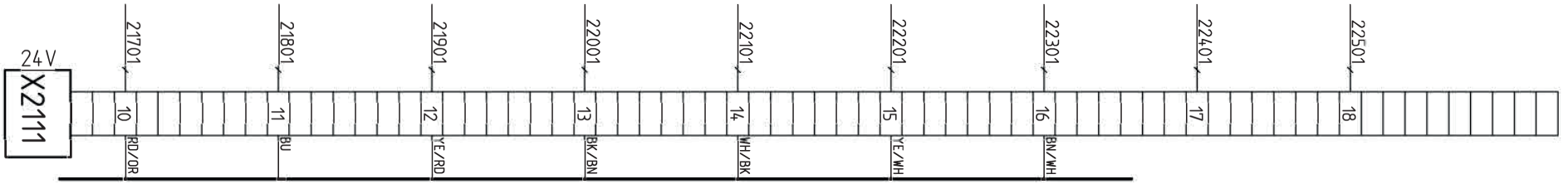
Jasopels	Jasopels MasterCut V016	X1041 – X1081 Forsyning til Panel Betjeningsknapper på Front	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 618



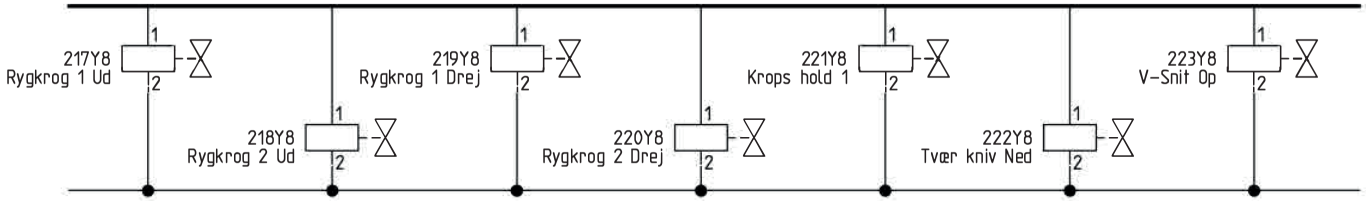
Jasopels	Jasopels MasterCut V016	X2021 Pålufter	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 620



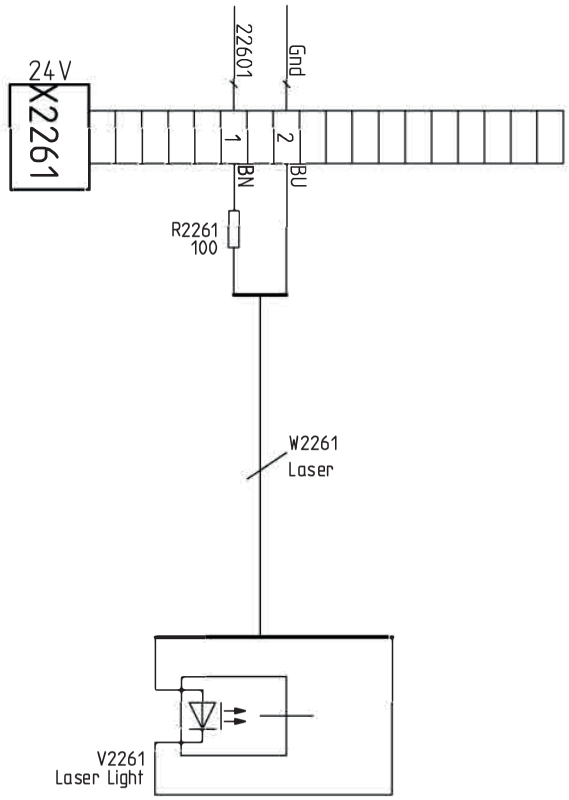
Jasopels	Jasopels MasterCut V016	X2111 Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 622



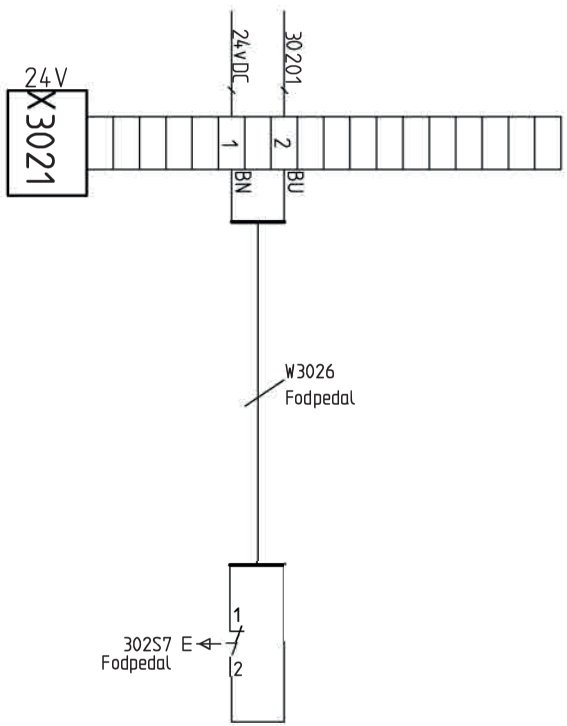
Klem række
X2111
Fortsat

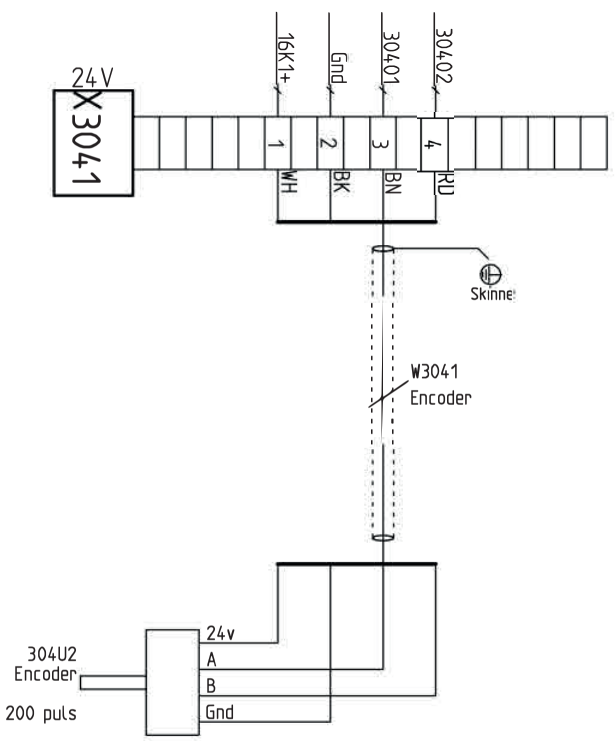


Jasopels	Jasopels MasterCut V016	X2111 Ventil Blok	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 623

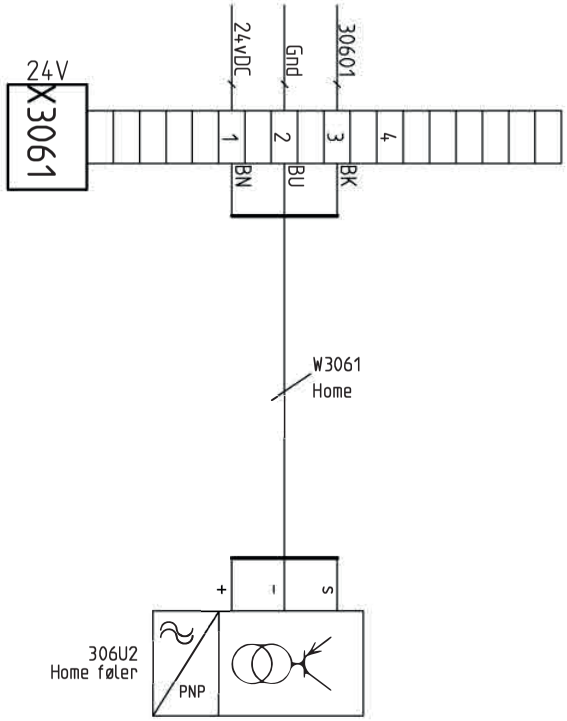


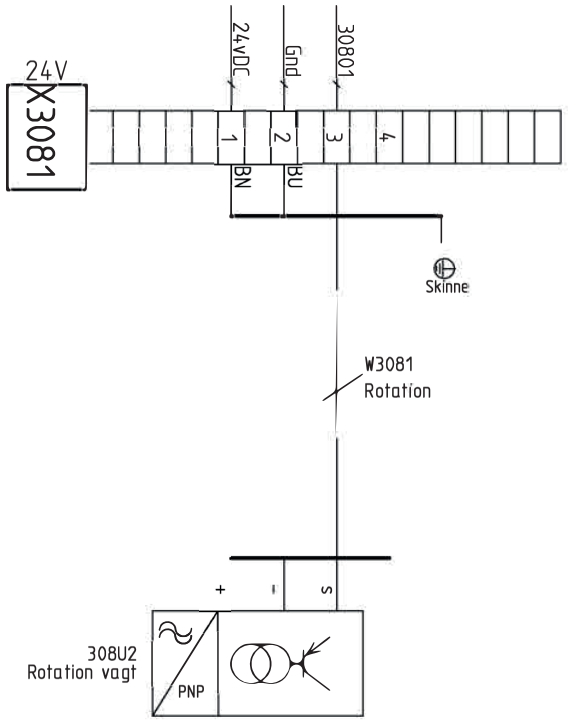
Jasopels	Jasopels MasterCut V016	X2261 Laser Light	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 06-07-2017	Funkt.:	Plac.:	Blad: 624



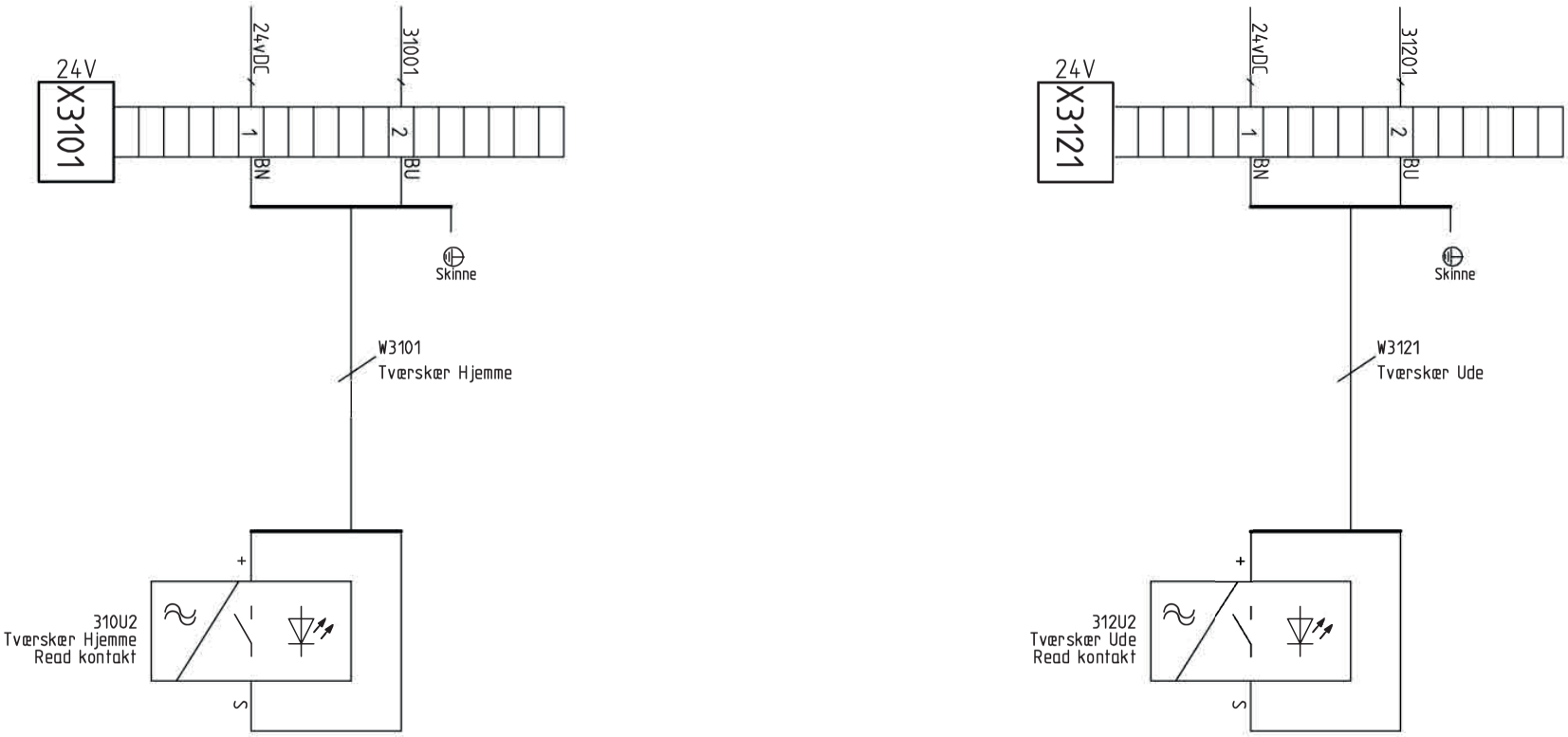


Jasopels	Jasopels MasterCut V016	X3021 – X3041 Fodpedal og Encoder	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 626

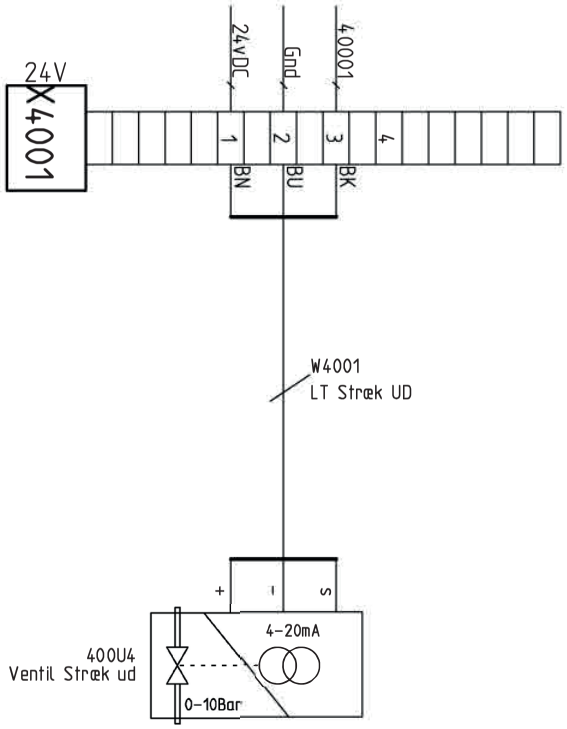


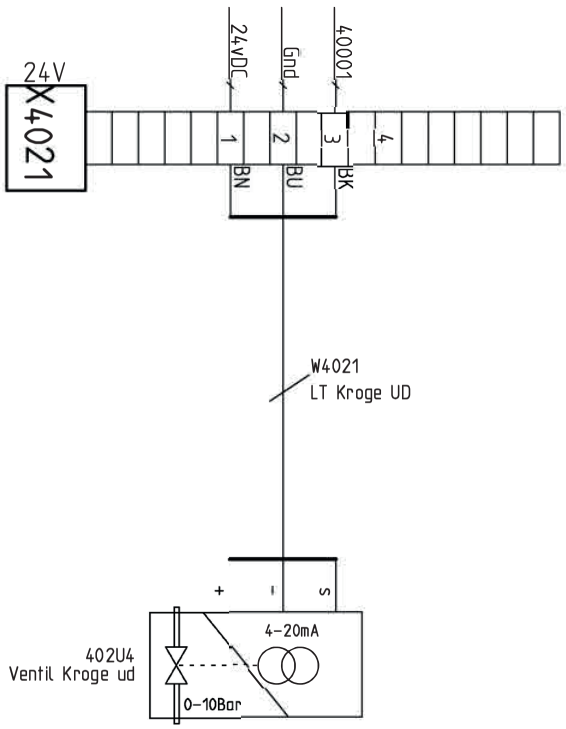


Jasopels	Jasopels MasterCut V016	X3061 – X3081 Home føler og Rotationsvagt	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 628



Jasopels	Jasopels MasterCut V016	X3101, X3121	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 12-02-2017	Funkt.:	Plac.:	Blad: 630





Jasopels	Jasopels MasterCut V016	X4001 - X4021	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG	
			Dato: 09-05-2017	Funkt.:	Plac.:	Blad: 640	

104K1

ML 1400
1766-L32-BWA

Input

I:0/0	304.4	I/0	Modul 0	Encoder Ch. A	DC Com 0
I:0/1	304.3	I/1	Modul 0	Encoder Ch. B	DC Com 0
I:0/2	306.3	I/2	Modul 0	Home	DC Com 0
I:0/3	308.3	I/3	Modul 0	Rotations vagt	DC Com 0
I:0/4	108.6	I/4	Modul 0	Nødstop OK	DC Com 1
I:0/5	108.7	I/5	Modul 0	Reset	DC Com 1
I:0/6	120.1	I/6	Modul 0	MV FRQ kontrol	DC Com 1
I:0/7	120.2	I/7	Modul 0	FRQ OK	DC Com 1
I:0/8	302.1	I/8	Modul 0	Stop	DC Com 2
I:0/9	302.2	I/9	Modul 0	Start	DC Com 2
I:0/10	302.3	I/10	Modul 0	Disp	DC Com 2
I:0/11	302.7	I/11	Modul 0	Fodpedal	DC Com 2
I:0/12	122.2	I/12	Modul 0	TU Trafo	DC Com 3
I:0/13	122.6	I/13	Modul 0	MR Trafo 24v	DC Com 3
I:0/14	124.2	I/14	Modul 0	TU Tvær skær	DC Com 3
I:0/15	124.3	I/15	Modul 0	MR Tvær skær	DC Com 3
I:1/0	126.2	I/16	Modul 0	TU V-Snit 1	DC Com 3
I:1/1	126.3	I/17	Modul 0	MR V-Snit 1	DC Com 3
I:1/2	128.2	I/18	Modul 0	TU V-Snit 2	DC Com 3
I:1/3	128.3	I/19	Modul 0	MR V-Snit 2	DC Com 3

Output

O:0/0	108.3	O/0	Modul 0	Relæer OFF	VAC 0
O:0/1	120.3	O/1	Modul 0	Start FRQ	VAC 1
O:0/2	122.4	O/2	Modul 0	Aktiver Trafo	VAC 2
O:0/3	121.8	O/3	Modul 0	Slip Bremse	VAC 3
O:0/4	202.8	O/4	Modul 0	Pålufter	VAC 4
O:0/5	226.8	O/5	Modul 0	Laser Light	VAC 4
O:0/6		O/6	Modul 0	Disp	VAC 5
O:0/7		O/7	Modul 0	Disp	VAC 5
O:0/8	124.8	O/8	Modul 0	Tvær skær	VAC 6
O:0/9	126.8	O/9	Modul 0	V snit 1	VAC 6
O:0/10	128.8	O/10	Modul 0	V snit 2	VAC 6
O:0/11		O/11	Modul 0	Disp	VAC 6

Analog Input

Analog Output

Jasopels	Jasopels MasterCut V016	PLC reference – Modul 0 (PLC) 1766-L32BWA	Proj. nr.: MaCu_V017	Tegn. nr.:
			Rev.: 31-08-2017	Init.: JCG
			Dato: 04-02-2017	Funkt.:
			Plac.:	Blad: 1000

104K2

16 DI input
1762-IQ16

I:1/0	202.3	IN 0	DI	I:1/8		IN 8	DI
Modul 1 Pålufter OK		DC Com		Modul 1 Disp		DC Com	
I:1/1	310.2	IN 1	DI	I:1/9		IN 9	DI
Modul 1 Tværsnit hjemme		DC Com		Modul 1 Disp		DC Com	
I:1/2	312.2	IN 2	DI	I:1/10		IN 10	DI
Modul 1 Tværsnit Ude		DC Com		Modul 1 Disp		DC Com	
I:1/3		IN 3	DI	I:1/11		IN 11	DI
Modul 1 Rygkrog 1 Ude		DC Com		Modul 1 Disp		DC Com	
I:1/4		IN 4	DI	I:1/12		IN 12	DI
Modul 1 Rygkrog 2 Ude		DC Com		Modul 1 Disp		DC Com	
I:1/5		IN 5	DI	I:1/13		IN 13	DI
Modul 1 Disp		DC Com		Modul 1 Disp		DC Com	
I:1/6		IN 6	DI	I:1/14		IN 14	DI
Modul 1 Disp		DC Com		Modul 1 Disp		DC Com	
I:1/7		IN 7	DI	I:1/15		IN 15	DI
Modul 1 Disp		DC Com		Modul 1 Disp		DC Com	

A B C D E F G H I J K L

Jasopels
MasterCut V016

PLC reference – Modul 1
1762-IQ16 24v Input

Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG	
Dato: 04-02-2017	Funkt.:	Plac.:	Blad: 1001	

104K3

16 Relay output
1762-OW16

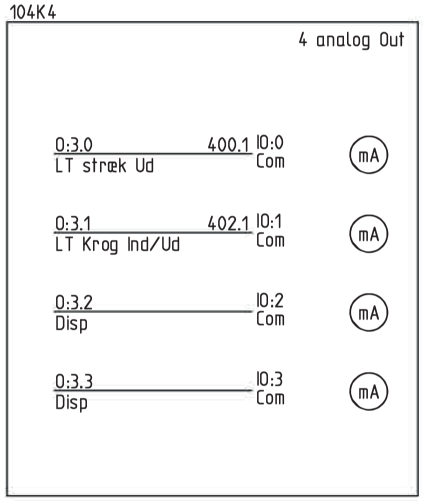
0:3/0	210.8	OUT 0 VAC 0	RL	0:3/8	218.8	OUT 8 VAC 1	RL
Modul 2 Kropshold 2				Modul 2 Rygkrog 2 Ud			
0:3/1	211.8	OUT 1 VAC 0	RL	0:3/9	219.8	OUT 9 VAC 1	RL
Modul 2 Hold Poter				Modul 2 Rygkrog 1 Drej			
0:3/2	212.8	OUT 2 VAC 0	RL	0:3/10	220.8	OUT 10 VAC 1	RL
Modul 2 Krops Løft				Modul 2 Rygkrog 2 Drej			
0:3/3	213.8	OUT 3 VAC 0	RL	0:3/11	221.8	OUT 11 VAC 1	RL
Modul 2 Tværs Ud				Modul 2 Krops hold			
0:3/4	214.8	OUT 4 VAC 0	RL	0:3/12	222.8	OUT 12 VAC 1	RL
Modul 2 Stræk Ud				Modul 2 Tvær kniv Ned			
0:3/5	215.8	OUT 5 VAC 0	RL	0:3/13	223.8	OUT 13 VAC 1	RL
Modul 2 Luk Halerulle				Modul 2 V-Snit Op			
0:3/6	216.8	OUT 6 VAC 0	RL	0:3/14	224.8	OUT 14 VAC 1	RL
Modul 2 Pote Klip				Modul 2 Disp			
0:3/7	217.8	OUT 7 VAC 0	RL	0:3/15	225.8	OUT 15 VAC 1	RL
Modul 2 Rygkrog 1 Ud				Modul 2 Disp			

Jasopels

Jasopels
MasterCut V016

PLC reference – Modul 2
1762-OW16 Relæ Output

Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG	
Dato: 04-02-2017	Funkt.:	Plac.:	Blad: 1002	



Jasopels	Jasopels MasterCut V016	PLC reference – Modul 3 1762-OF4 Analog Output	Proj. nr.: MaCu_V017	Tegn. nr.:	Rev.: 31-08-2017	Init.: JCG
			Dato: 09-05-2017	Funkt.:	Plac.:	Blad: 1003

Produktliste

Placering (+)	Funktion (=)	Produkt (-)	Type	Type 2	Beskrivelse	Fabrikat	Blad	Stv.
		10S1	194E-E32-1753-6N	194E-E32-NP			10	1
		10F5	140M-C2E-B25	140M-CASA11	1,6-2,5 AMP	Allen Bradley	10	4
		11F1	140M-C2E-B16	140M-CASA11	1,0-1,6 AMP	Allen Bradley	11	1
		12T3	DT 6120C220		230v/24v		11	3
		12T4	DT 6120C220		230v/24v		11	4
		12T5	DT 6120C220		230v/24v		11	5
		12V2	SBR3510		3P/35A/1000V		12	2
		12M4			Cross section		12	2
		12F2	140M-C2E-B63	140M-CASA11	4-6,3 AMP	Allen Bradley	12	2
		12F4	140M-C2E-B63	140M-CASA11	4-6,3 AMP	Allen Bradley	12	4
		12M6			V-Section1		12	4
		12V4	SBR3510		3P/35A/1000V		12	4
		12F6	140M-C2E-B63	140M-CASA11	4-6,3 AMP	Allen Bradley	12	6
		12M8			V-Section 2		12	6
		12V6	SBR3510		3P/35A/1000V		12	6
		101F1	1492-SPM2C060		C6 2pol		101	1
		101T6	1606-XLE80		Power Supply		101	6
		104W1	1763-NC01		Cabel 485	Allen Bradley	104	1
		104K1	1766-L32-BWA		ML 1400		104	2
		104K2	1762-IQ16		16 DI input		104	4
		104K3	1762-OW16		16 Relay output		104	5
		104K4	1762-OF4		4 analog Out		104	5
		104B6	2711R-T7T		RockWell PV800		104	7
		108K1	440R-N23126		Emergency	Allen Bradley	108	1
		108S1	800FP-MT44	800F-PX02	Emergency stop	Allen Bradley	108	2
		108S3	800FP-F611	800F-PX20	Reset	Allen Bradley	108	3
		108K5	100-C16EJ10	100-FA20	Emergency stop	Allen Bradley	108	5

Jasopels

Jasopels
MasterCut V016

Proj. nr.: MaCu_V017	Tegn. nr.:	Init.:	Rev.:	Blad: 1
Dato: 08-07-2017	Funkt.:	Plac.:	Antal blade: 3	Næste blad: 2

Produktliste

Placering (+)	Funktion (=)	Produkt (-)	Type	Type 2	Beskrivelse	Fabrikat	Blad	Stv.
		108S3	800FP-F611	800F-PX20	Reset	Allen Bradley	108	7
		120U5	22F-D4P2N113		PF4M,400V,1,5kW		120	4
		120U5	22F-D4P2N113		PF4M,400V,1,5kW		120	8
		121k8	700-HK32Z24-4	700-HN222	Slip Bremse	RockWell	121	8
		122K4	100-K12DJ10		Trafo	Allen Bradley	122	4
		124K8	100-K12DJ10		Tvær skær	Allen Bradley	124	8
		126K8	100-K12DJ10		V-Snit 1	Allen Bradley	126	8
		128K8	100-K12DJ10		V-Snit 2	Allen Bradley	128	8
		202S3			Lufttryk OK		202	3
		202Y8			Pålufter		202	8
		210Y8			Kropshold 2		210	8
		211Y8			Hold Poter		211	8
		212Y8			Krops Løft		212	8
		213Y8			Tværsnit Ud		213	8
		214Y8			Strøk Ud		214	8
		215Y8			Luk Halerulle		215	8
		216Y7			Pote Klip		216	7
		216Y8			Pote Klip		216	8
		217Y8			Rygkrog 1 Ud		217	8
		218Y8			Rygkrog 2 Ud		218	8
		219Y8			Rygkrog 1 Drej		219	8
		220Y8			Rygkrog 2 Drej		220	8
		221Y8			Krops hold 1		221	8
		222Y8			Tvær kniv Ned		222	8
		223Y8			V-Snit Op		223	8
		224Y8			Disp		224	8
		225Y8			Disp		225	8
		V2261			Laser Light		226	8
		R2261			100		226	8
		302S1	800FP-F4	800F-PX01	Stop		302	1

Jasopels

Jasopels
MasterCut V016

Proj. nr.:	Tegn. nr.:	Init.:	Rev.:	Blad:
MaCu_V017				2
Dato: 08-07-2017	Funkt.:	Plac.:	Antal blade: 3	Næste blad: 3

Produktliste

Placering (+)	Funktion (=)	Produkt (-)	Type	Type 2	Beskrivelse	Fabrikat	Blad	Stv.
		302S2	800FP-F3	800F-PX10	Start		302	2
		302S7			Fodpedal		302	7
		304U2	xx		Encoder		304	1
		306U2			Home føler		306	2
		308U2			Rotation vagt		308	2
		310U2	Read kontakt		Tværskær Hjemme		310	2
		312U2	Read kontakt		Tværskær Ude		312	2
		400U4			Ventil Stræk ud		400	6
		402U4			Ventil Kroge ud		402	6

Jasopels

Jasopels
MasterCut V016

Proj. nr.: MaCu_V017	Tegn. nr.:	Init.:	Rev.:	Blad: 3	
Dato: 08-07-2017	Funkt.:	Plac.:	Antal blade: 3	Næste blad:	

SISTEMA - Safety Integrity Software Tool for the Evaluation of Machine

Project name: **Jasopels_MasterCut_V017**

File date: 30-08-2017 21:16:10 Report date: 06-09-2017 Checksum: 80572d1c910932eedb192ead5c7b9404

PR Project name: Jasopels_MasterCut_V017

Project file name:	C:\Data\Arbejde\Projekter\Jasopels\MarsterCut\SW-Diagram\V017\SISTEMA\MaCu_V017_Safty_dok__V207.ssm
Creation date:	-
Project status:	
Project number:	
Project version:	
Authors:	Kesse
Project managers:	
Inspectors:	
Dangerous point/machine:	
Documentation:	
Document:	
Version of software:	2.0.7 build 2
Version of standard:	ISO 13849-1:2015, ISO 13849-2:2012
Checksum:	80572d1c910932eedb192ead5c7b9404
Options:	☑ Use DC intermediate levels for calculation of PFHD (more precise) ☐ MTTFD capping for category 4 lower from 2500 to 100 years.
Status:	green
Note:	There are no warnings listed for this project (or it's subordinate basic elements).

Print options

- ☐ Show device details
- ☐ Show documentations on SF, SB, BL and EL
- ☐ Show CCF and DC measures in detail
- ☐ Show requirements on PL and Category
- ☐ Show parameter documentations on PLr, PL, Category, CCF, MTTFD and DC
- ☐ Show messages

Contained safety functions

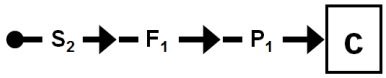
SF Name: Nødstop MasterCut_V017

Required: PLr c	Reached: PL e	PFHD [1/h]: 4,3E-8	Status: green

SF Safety function: Nødstop MasterCut_V017

Safety function type:	
Triggering event:	
Reaction and Behaviour on power failure:	
Safe state:	
Operation mode:	
Demand rate:	
Running-on time:	
Priority:	

Required Performance Level Safety function

PLr (by risk graph):	c
Severity of injury (S): False	Serious (normally irreversible) injury or death
Frequency / exposure times to hazard (F):	Seldom to less often / exposure time is short
Possibility of avoiding (P):	Possible under specific conditions
Risk graph:	

Performance Level Safety function

Reached PL: e	PFHD [1/h]: 4,3E-8

Status / Messages Safety function

Status:	green

Subsystems (1 / 1)

SB Name: Monitoring Safety Relay: MSR127

Reference designator:	Inventory number:

Performance Level Subsystem

PL determination:	Determine PL/PFHD from Category, MTTFD and DCavg
Software suitable up to PL:	n.a.
PL requirements:	fulfilled
Reached PL: e	PFHD [1/h]: 4,3E-8

Category Subsystem

Cat.:	3
Category requirements:	fulfilled

MTTFD and Mission time Subsystem

MTTFD [a]:	100 (High)
Mission time [a]: 20	Shortest mission time [a]: 20

SF Safety function: Nødstop MasterCut_V017

Diagnostic coverage Subsystem

DCavg [%]:	90 (Medium)

Common cause failure Subsystem

CCF Points:	65 (fulfilled)
CCF Measures:	- Separation / Segregation (15 Points) - Design / application / experience (15 Points) - Environmental (25 Points) - Design / application / experience (5 Points) - Competence / training (5 Points)

Status / Messages Subsystem

Status:	green

Channels / Test channels (1 / 2)

CH Name: Channel 1

MTTFD [a]: 2198,9

Blocks (1 / 2)

BL Name: E-Stop Switch: 800FP-MT44, 800FM-MT44 - Twist to release

Reference designator: Inventory number:

MTTFD and Mission time Block

MTTFD [a]: 2300 (High)

Mission time [a]: 20 Shortest mission time [a]: 20

Diagnostic coverage Block

DC [%]: 90 (Medium)

Status / Messages Block

Status: green

Elements (1 / 1)

EL Name: E-Stop Switch: 800FP-MT, 800FM-MT - Twist to release

Reference designator: Inventory number:

MTTFD and Mission time Element

MTTFD [a]: 2300 (High)

Mission time [a]: 20

B10D [cycles]: 736000 nop [cycles/a]: 3200

Nop parameter: Days: 200 Hours: 16 Seconds: 3600

Diagnostic coverage Element

DC [%]: 90 (Medium)

SF Safety function: Nødstop MasterCut_V017

Measure:

Status / Messages Element

Status: green

Blocks (2 / 2)

BL Name: Contactor: 100-C09 to C55 - Mechanical only

Reference designator: Inventory number:

MTTFD and Mission time Block

MTTFD [a]: 50000 (High)

Mission time [a]: 20 Shortest mission time [a]: 20

B10D [cycles]: 20000000 nop [cycles/a]: 4000

Nop parameter: Days: 200 Hours: 20 Seconds: 3600

Diagnostic coverage Block

DC [%]: 90 (Medium)

Measure: Cross monitoring of output signals with dynamic test without detection of short circuits (for multiple I/O)

Status / Messages Block

Status: green

Channels / Test channels (2 / 2)

CH Name: Channel 2

MTTFD [a]: 2198,9

Blocks (1 / 2)

BL Name: Contactor: 100-C09 to C55 - Mechanical only

Reference designator: Inventory number:

MTTFD and Mission time Block

MTTFD [a]: 50000 (High)

Mission time [a]: 20 Shortest mission time [a]: 20

B10D [cycles]: 20000000 nop [cycles/a]: 4000

Nop parameter: Days: 200 Hours: 20 Seconds: 3600

Diagnostic coverage Block

DC [%]: 90 (Medium)

Measure: Cross monitoring of output signals with dynamic test without detection of short circuits (for multiple I/O)

Status / Messages Block

Status: green

SF Safety function: Nødstop MasterCut_V017

Blocks (2 / 2)

BL Name: E-Stop Switch: 800FP-MT44, 800FM-MT44 - Twist to release

Reference designator: Inventory number:

MTTFD and Mission time Block

MTTFD [a]: 2300 (High)

Mission time [a]: 20 Shortest mission time [a]: 20

Diagnostic coverage Block

DC [%]: 90 (Medium)

Measure: Indirect monitoring (e.g. monitoring by pressure switch, electrical position monitoring of actuators)

Status / Messages Block

Status: green

Elements (1 / 1)

EL Name: E-Stop Switch: 800FP-MT, 800FM-MT - Twist to release

Reference designator: Inventory number:

MTTFD and Mission time Element

MTTFD [a]: 2300 (High)

Mission time [a]: 20

B10D [cycles]: 736000 nop [cycles/a]: 3200

Nop parameter: Days: 200 Hours: 16 Seconds: 3600

Diagnostic coverage Element

DC [%]: not relevant

Measure:

Status / Messages Element

Status: green

EXCLUSION OF LIABILITY

Care has been taken in production of the software SISTEMA, which corresponds to the state of the art. It is made available to users free of charge.

Die Software wurde gemäß dem Stand von Wissenschaft und Technik sorgfältig erstellt. Sie wird dem Nutzer unentgeltlich zur Verfügung gestellt.

Die Haftung des IFAs/ DGUV ist damit auf Vorsatz und grobe Fahrlässigkeit (§ 521 BGB) bzw. bei Sach- und Rechtsmängel auf arglistig verschwiegene Fehler beschränkt (523, 524 BGB).

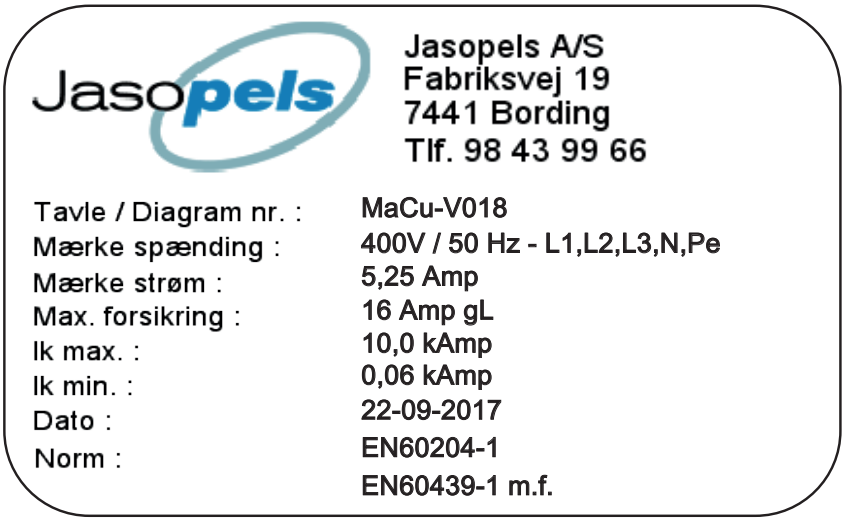
The IFA undertakes to keep its website free of viruses; nevertheless, no guarantee can be given that the software and information provided are virus-free. The user is therefore advised to take appropriate security precautions and to use a virus scanner prior to downloading software, documentation or information.

CONTACT

Institute for Occupational Health and Safety of German Social Accident Insurance (IFA)
Division 5: Accident Prevention / Product Safety
Alte Heerstr. 111, 53757 Sankt Augustin
E-mail: sistema@dguv.de
www.dguv.de/ifa (Webcode e561582)

Date, signature of the author

Date, signature of the revisor



Mærkeplade på tavlen

Opmærkning ifølge EN60204-1 og EN60439-1

Leveradørens navn eller varemærke	Jasopels A/S
Produktions dato	22-09-2017
Certifikations mærke	
Serienummer	MaCu-V018
Hoveddokument nummer	MaCu-V018
Udført efter EN norm (1)	EN60204-1
Udført efter EN norm (2)	EN60439-1 m.f.
Fasetal	L1,L2,L3,N,Pe
Frekvens	50 Hz
Mærkedriftspænding (U_e)	
for Hovedkreds	400V
for hjælpekredse	24vDC
Isolations mærkespændig (U_i)	
for Hovedkreds	400V
for Hjælpekredse	24V DC
Mærke impulsholdespænding (U_{imp})	6kV
Mærke strøm (I_n)	5,25 Amp
Max. Forsikring (I_{max})	16 Amp gL
Midnste forudsatte I_k (Ik_{min})	0,06 kAmp målt Ik_{min} > 0,09 kAmp
Mærkekortslutnings strøm (Ik_{max}) (Max I_{cc})	10,0 kAmp (automatsikring)
Mærke korttidsstrøm (I_{cw})	
Mærke stødstrøm (I_{pk})	
Mærke kortslutningsstrøm m. sikring (I_{cf})	
Max Specifik energi (Max I^2t)	29,756 kA^2t
Metoder til beskyttelse imod elektriske stød	Afbrydelse af forsyning
Typer af systemjording som tavlen er udført for	TT (HPFI foran tavlen)
Kapslingsklasse	IP 65
Driftforhold indendørs / udendørs (Temp)	Min. -25°C Max 40°C
Driftforhold indendørs / udendørs (Rel. luftfugt)	90% Rf ikke kondenserende
forureningsgrad	-3
Mål (H x B x D) mm	2 stk (700 x 500 x 200)
Vægt	
Form for indre opdeling	Form 1
Typer af elektriske forbindelser af funktionsenheder	
EMC miliø (1 eller 2)	

EGNE NOTER

Jasopels

Our quality – Your choice

Fabriksvej 19 • DK-7441 Bording • Tel. 98 42 05 66 76 95 • 13 43 faks • info@jasopels.dk • www.jasopels.dk

Produkt Nr. 32100079

32100110