

INSTRUCTIONS FOR USE 

MASTERSKIN

ITEM NO. 32100077



Our quality – Your choice Jaso **pels**

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DECLARATION OF CONFORMITY

ANNEX II OF THE MACHINERY DIRECTIVE

Type designation: Masterskin

Description: Jasopels skinning machine

Date: 15-09-2017

Manufacturer: MasterSkin

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

Signature



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 MasterSkin device.
- These Instructions for use and safety notes are necessary for safe and proper use of this device.
Read it carefully before use and refer to it when 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 copy 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

These instructions for use were published by Jasopels A/S, which owns all rights related to it. The document or its parts may not be reproduced, copied or distributed in electronic or paper form without a written consent of Jasopels A/S.

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.

All trademarks provided in these instructions are owned by their owners.

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 MasterSkin skinning device contains innovative design and operational solutions.
- With MasterSkin, 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).
- The machine can only be operated by trained persons.
- 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 and compressed air supply.
Minor changes in settings and corrections in operation of the software can be made using the control panel buttons.
- The instructions for use should always be kept in a place accessible to the operator.



COMMENCEMENT OF OPERATION

- Before commencement of operation of MasterSkin device, 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 can be used to skin minks only.

DANGER!

To avoid the risk of injuries during the machine operation, such as crushing fingers, etc., it is necessary to comply with safety regulations and avoid touching moving parts of the machine.

This especially applies to all skin clamps and holders that are activated when the machine is in operation.



- Do not try to manually stop moving parts of the machine. To avoid dangerous situations, **always use an emergency stop switch. Never use a stop button to do this.** The stop button on the front panel stops the current process and caused the device to move back a step in sequence.
In case of danger, **always use the emergency stop switch.**
- MasterSkin device is factory equipped with a 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 MasterSkin 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:

When the machine is not in use and needs cleaning, it can only be done after disconnecting the power supply and the compressed air supply first.

**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.

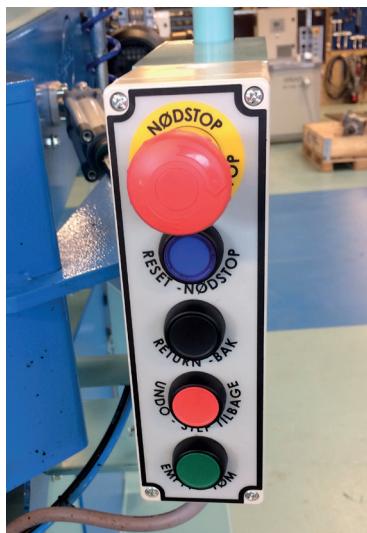


USER SAFETY

- To ensure 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 understand operation and performance of all parts and controls of the device. 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 device. 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.
- Protection goggles protect eyes from injury caused by falling parts of the machine or parts of minks.
- ALWAYS disconnect the unused machine from the power supply and the compressed air supply.
- 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 device with all safety measures and ensure that they work properly. DO NOT modify or disable protections. DO NOT start the device, if any cover or protection is missing or they do not work.
- Due to the monotony and repeatability of work (EGA), Jasopels recommends that operators should not work on the machine more than 3-4 hours in total during a working day. A person supervising work is responsible for ensuring that machine operators do not work on it too long. Jasopels recommends rotation at the workplace. Learn more about EGA 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.

DEVICE OPERATION

Fig. 10.1

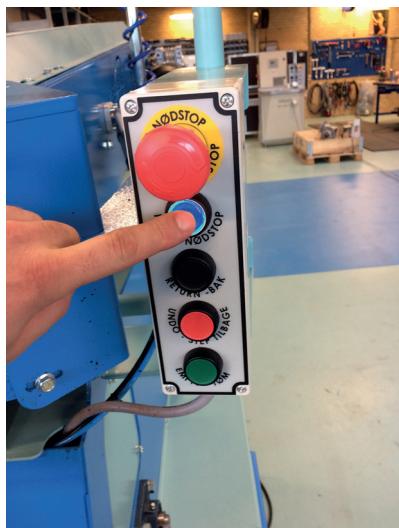


EMERGENCY STOP SWITCH (RED BUTTON ON YELLOW BACKGROUND) – FIG. 10.1

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, press the blue button [Reset].

Fig. 10.2



RESET - EMERGENCY STOP SWITCH (BLUE LIGHT) –

FIG. 10.2

The light flashes when the emergency stop switch is on. When the emergency stop switch is off, the device can be reset by pressing the button once (hold for min. 1 second), then the device calibrates itself.

Fig. 10.3



RETURN – BACK (BLACK BUTTON) FIG. 10.3

- Used in manual mode to move back a chain or arm.
- To make the arm move backwards, hold the button and then press the left pedal.
- To make the chain move backwards, hold the button and then press the right pedal.

DEVICE OPERATION

Fig. 10.1



BACK – STEP BACKWARDS (RED BUTTON)

FIG. 10.4

Stops the current process and undoes the program sequence by 1 step. If necessary, the sequence may be further undone by pressing the button more times.

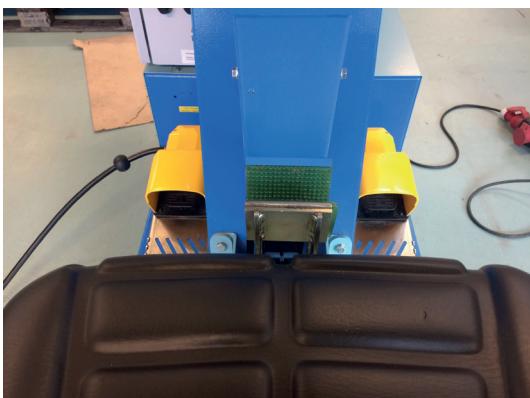
Fig. 10.5



EMPTY – GREEN BUTTON, FIG. 10.5

Pressing the button closes the leg clamp and the chain drive returns to empty the drip tray. Pressing the button after mink skinning starts the chain, releases carcass and empties the tray.

Fig. 10.6



RIGHT PEDAL (YELLOW PEDAL) FIG. 10.6

The right pedal is used to operate the machine movements - lower paws clamp, arm and chain.

LEFT PEDAL (YELLOW PEDAL) FIG. 10.6

The upper paw clamp closes under pressure. The left pedal operates the upper paws clamp and empties the tray after the end of the cycle.

DESCRIPTION OF FUNCTIONS:

PROGRAM CYCLE FOR MINK SKINNING



START

The arm (skin clamp) in the initial position is usually located at the height of the machine seat.

Note: After a power failure or emergency stop, the arm and chain return to the zero point - the arm returns completely to the center of the device first and then moves to the starting position. The device is now ready for operation.



PLACE A MINK IN THE MACHINE.

The hind legs must be held with clamps. When the right pedal is pressed, the clamp closes on rear legs under low pressure.

Low pressure is used in the first stage. Jasopels A/S recommends a maximum of 2.0 bar to minimize the risk of crushing fingers under high pressure in the first stage. The second stage completely closes the jaws on skin. The second stage can only be started, if the operator approves the first stage. Jasopels has developed the mechanism so that the smallest possible gap will remain after the first step.

If it is necessary to open the jaw, press the back button - step backwards.

The operator must ensure that a mink is correctly positioned before proceeding with the next step.



DESCRIPTION OF FUNCTIONS:



SKIN POSITION

Pressing right pedal: The lower paw clamp moves under high pressure and the device's arm moves towards the upper paw clamp (close to the lower paw clamp). The machine is ready to place skin on the arm of the device (in the appropriate holder). When it is in the skin holder, the operator can press the right pedal again and the skin clamp will close under low pressure.



Low pressure is used in the first step. Jasopels A/S recommends a maximum of 2.0 bar to minimize the risk of crushing fingers under high pressure in the first stage. The second stage completely closes the jaws on skin. The second stage can only be started, if the operator approves the first stage. Jasopels has developed the mechanism so that the smallest possible gap will remain after the first step.



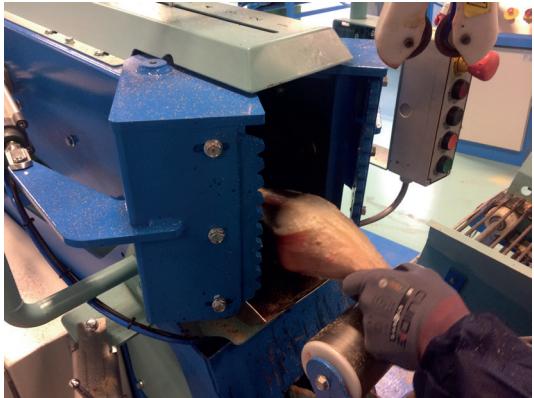
SKINNING

When the right pedal is pressed, the arm and chain move - the skin clamp closes under high pressure and the arm and chain shift.

The device is ready for skinning. When the right pedal is pressed, the skin clamp is closed under high pressure, and then the arm pulls the skin and separates it from the carcass. The chain removes a carcass towards the device. The speed of the arm and chain can be adjusted on the side of the machine (description provided on page17).



DESCRIPTION OF FUNCTIONS:



CLOSURE OF UPPER PAW HOLDERS

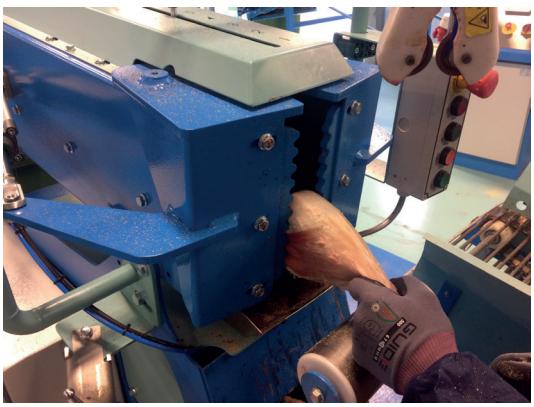
The speed of correct closure of the holders: When the chain touches an adjustable sensor, it will switch to low speed so that the operator can reach the place where the upper paw clamp should close more easily.

Adjustment of the release sensor

(description provided on page 17).

Now, by pressing the left pedal, the operator can close the upper paw clamp.

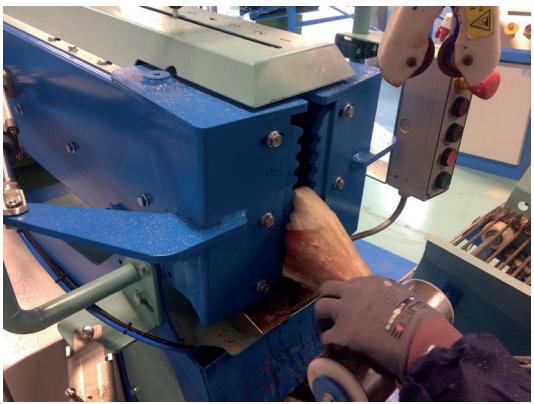
The second stage can only be started, if the operator approves the first stage. Jasopels has developed the mechanism so that the smallest possible gap will remain after the first step.



With a handwheel in the upper part of the device, the machine can be adjusted to large and small animals. It has a scale of 1-9 (see Fig. 10.3) where 1 means a very small mink, and 9 - a very small one. (Jasopels A/S recommends to start from the setting no. 3).

If the size is still not right, the potentiometer is equipped with a wheel that also has a scale of 1-11 (see Fig. 10.4). Both the arm and the chain can be adjusted with it.

(Jasopels A/S recommends to start from the setting no. 7 for the arm and no. 4 for the chain).



CUTTING

Cut off the head with a pneumatic knife.

The operator has good sight distance to make a perfect cut. When the operator uses a knife, the right pedal must be pressed to move the arm forward.



DESCRIPTION OF FUNCTIONS:



SEPARATION

After last cut.

Now, in his left hand, the operator has a separated skin that is ready for further processing.

EMPTYING

When head is completely separated from body, the operator has the skin in his left hand: Carcass is placed on the tray and the operator holds the skin in his left hand. When the operator places the skin aside, the machine can be emptied by pressing the "Empty" button on the operator's board, or by pressing the left pedal. (Jasopels A/S recommends to use the pedal to minimize the carcass load). Now the upper paw clamp loosens under low pressure, and the arm and chain (of skin and lower paw clamp) return to the output position and the machine is ready to repeat the process. Jaws open/loose under low pressure. Jasopels A/S recommends a maximum of 2.0 bar to avoid the risk of crushing fingers under high pressure. Jasopels has developed the mechanism in a manner to minimize the possibility of crushing fingers.

ADJUSTMENT



Adjustment to males and females (large and small animals).

The selection of small / large mink setting is made in the upper part of the device using a handle that can be adjusted from 1 to 9. 1 means a very small mink and 9 - a very large one.

If more precise adjustment is needed, this can be done on two potentiometers (more information in following point).

(Jasopels A/S recommends to start from the setting no. 3).



Basic speed adjustments

Arm and chain speed is adjusted on the side of the machine. This can be done on two potentiometers - one adjusts the arm, and the other one - the chain.

(Jasopels A/S recommends to start from the setting no. 7 for the arm and no. 4 for the chain) as shown in figure.



Adjustment of stopping points for the arm.

Arm stopping positions can be adjusted behind the cover on the left side of the machine.

!!! NOTE!!! The adjustment should be carried out with great care, as even very small adjustments can have a significant impact on operation of the device.

Adjustment is made by turning the rollers that fixed with a 3mm hex wrench.

!!! NOTE!!! Do not adjust the sensors as such.

Sensor 1 - lifting position. Sensor 2 - waiting position. Sensor 3 - end position of the arm inside the device.

Before adjustment of Jasopels MasterSkin, disconnect the device from the power supply and compressed air supply.

It is recommended to contact Jasopels Service Department, if adjustment of the MasterSkin device is needed.

NOTES

SERVICING OF JASOPELS MASTERSKIN

DESCRIPTION OF SERVICING AND TRANSPORT OF MASTERSKIN.

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 should monitor the unloading area of the machine and the other person - a transport route. These persons should be in continuous contact.

The device can be transported with a forklift that can be easily driven from the rear side of the device. To move the device, at least two persons are needed.

MasterSkin device should always be properly secured during transport, e.g. with ropes/belts.

Before installing the device, make sure that access to the place of the machine is not difficult. Lifting equipment or a crane is necessary, if installation requires it.

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 besides hand tools.

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 MasterSkin device, 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 or a qualified electrician. Before start-up or testing the device, read the instructions for use.

Adjustment of the stopping points (moments when the arm rises, waits and lower points)

MAINTENANCE

MAINTENANCE PERFORMED BY AN 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 all moving parts for functionality:
- Check clamping jaws,
- Chain tension
- Arm tension.
- Defects of mechanical parts should be evaluated by a technician.
- Before starting the device, it must be checked for visible damages. Cables should be located away from communication routes in order not to damage them. Any damage to the cables must be inspected by a Jasopels service technician or 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 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 chain, arm, jaws, roller and clamping device 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, arm, jaws and clamping device, should be inspected at least once every 6 months. Replacement of mechanical parts.
- 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. Any works related to the electrical installation of the machine must be carried out by a qualified electrician.

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.

Using other parts may damage the equipment and / or cause injuries 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 above provided information may appear on two plates.



COMPLAINTS

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 device is used for more than eight hours a day, hours are counted in one-to-one ratio.
The right to complaint is kept, if the following conditions are respected.

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.

After many years of operation of the device, when it has already fulfilled its function and must be disposed of, dismantle and dispose of it in an environmentally friendly manner. 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 red reset button. The device will vent and return to the starting point. The device is now ready for operation.

THE EMERGENCY STOP SWITCH IS OFF, RESET IS PRESSED, BUT THE DEVICE DOES NOT WORK.

The reset button is pressed too early after deactivation of emergency stop.

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 in the device.

Check the fuses in the electrical cabinet.

DEVICE DOES NOT WORK

Check if there are no foreign objects in the device. Also 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 again, wait 10-20 sec. and press the reset button.

If this does not help, the machine should be inspected by a qualified technician, or you should contact Jasopels A/S - Technical Department.

CLAMPING JAWS DO NOT CLOSE OR DO NOT OPEN

Check if there is compressed air in the machine.

Check if there are no foreign bodies in the device and if too much sawdust is not accumulated inside the machine. Disconnect the device from the power supply and the compressed air supply, wait 30-50 seconds, and then connect the device to the power supply again. Wait 10-20 seconds and press the reset button.

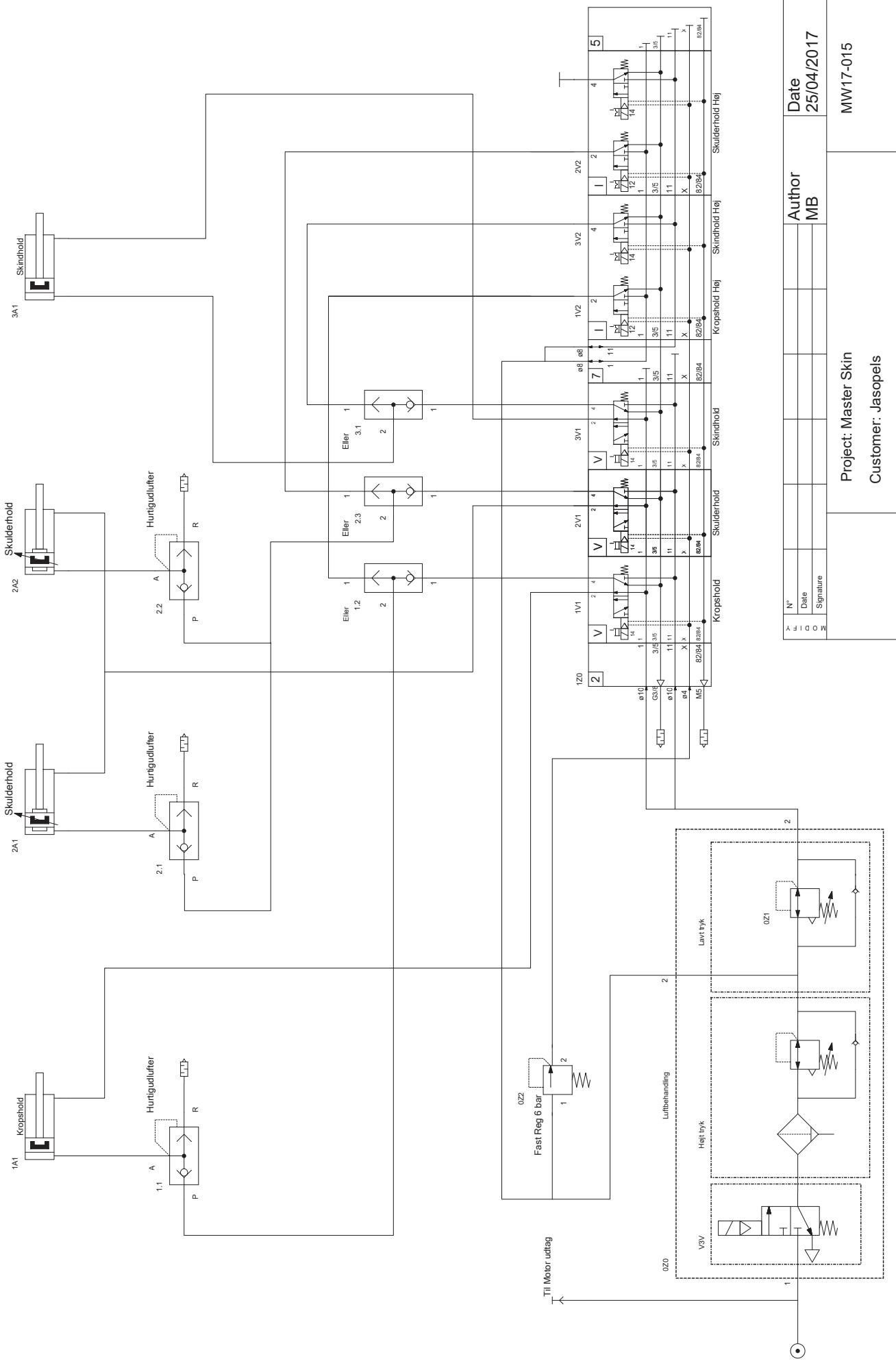
If this does not help, the machine should be inspected by a qualified technician, or you should contact Jasopels A/S - Technical Department.

CLAMPING DEVICE DOES NOT OPEN OR DOES NOT CLOSE

Check if there is compressed air in the machine.

Check if there is compressed air in the machine. Check if there are no foreign bodies in the device and if too much sawdust is accumulated inside the machine. Disconnect the device from the power supply and the compressed air supply, wait 30-50 seconds, and then connect the device to the power supply again. Wait 10-20 seconds and press the reset button.

If this does not help, the machine should be inspected by a qualified technician, or you should contact Jasopels A/S - Technical Department.





El-dokumentation

MasterSkin V010

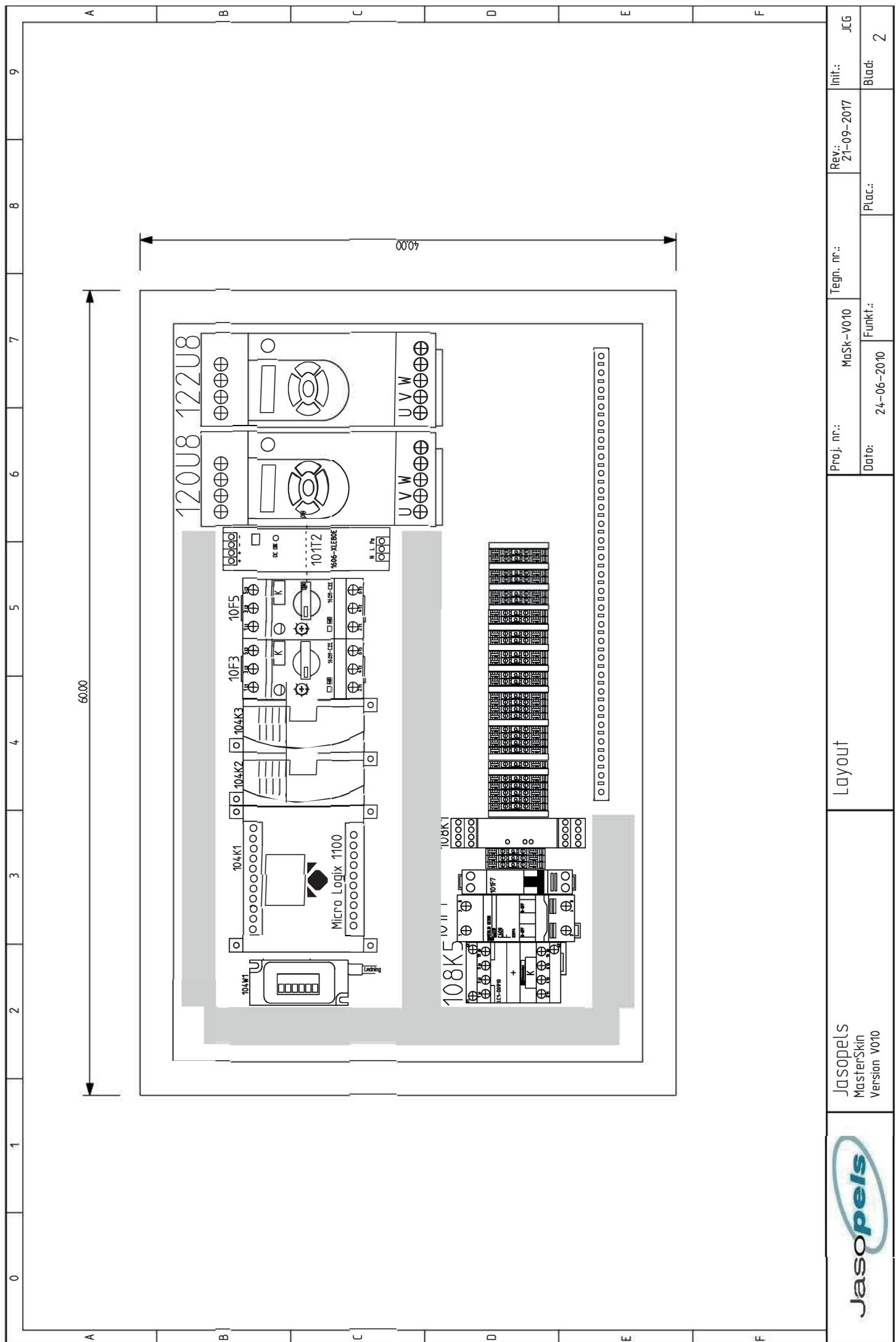
Flå maskine

Type - serie nr : MaSk-V010

oprettet dato 21-09-2017

Dokumentliste

Sidefunktion (=)	Blad	Dokumenttype	Beskrivelse	Beskrivelse	Rev dato
	2	Projektforside	Forside		
1	1	Dokumentliste		Mærster Skin V010	21-09-2017
	2	Dokumentliste			21-09-2017
	2	Kredsskema	Layout		21-09-2017
	4	Kredsskema	Ledningsfarver		21-09-2017
	4 a	Kredsskema	Standarter		21-09-2017
	10	Kredsskema	Supply / Main Power	Forsyning / Hovedstrom	21-09-2017
	101	Kredsskema	Power supply	Strømforsyning	21-09-2017
	104	Kredsskema	PLC and Modulus	PLC og Moduler	21-09-2017
	108	Kredsskema	Emergency stop	Nødstop	21-09-2017
	109	Kredsskema	Alarm Reset	Alarm Reset	21-09-2017
	120	Kredsskema	FRQ 1 Chain (Leg hold)	FRQ 1 Kæde (Benhold)	21-09-2017
	122	Kredsskema	FRQ 2 Arm (Skin hold)	FRQ 2 Arm (Skindhold)	21-09-2017
	202	Kredsskema	Air On/Off (Safety)	På/afventer (Sikkerhed)	21-09-2017
	210	Kredsskema	Leg hold : Low Pressure	Benhold Lav Tryk	21-09-2017
	211	Kredsskema	Skin hold : Low Pressure	Skindhold Lav Tryk	21-09-2017
	212	Kredsskema	Shoulder hold : Low Pressure	Skulderhold Lav Tryk	21-09-2017
	213	Kredsskema	Leg hold : High Pressure	Benhold Høj Tryk	21-09-2017
	214	Kredsskema	Skin hold : High Pressure	Skindhold Høj Tryk	21-09-2017
	215	Kredsskema	Shoulder hold : High Pressure	Skulderhold Høj Tryk	21-09-2017
	216	Kredsskema	Body roll up	Krops rulle op	21-09-2017
	302	Kredsskema	Controls/management	Betjening	21-09-2017
	306	Kredsskema	Skin hold : Home	Skindhold : Hjemme	21-09-2017
	308	Kredsskema	Skin hold : Start Pos.	Skindhold : Start Pos.	21-09-2017
	310	Kredsskema	Skin hold : Out	Skindhold : Ude	21-09-2017
	312	Kredsskema	Leg hold : Home	Benhold Hjemme	21-09-2017
	314	Kredsskema	Leg hold : High/Low speed	Benhold : Høj/Lav hast	21-09-2017
	316	Kredsskema	Leg hold : Open/dispose	Benhold : Åben/Aflever	21-09-2017
	318	Kredsskema	Leg hold : Out	Benhold : Ude	21-09-2017
		JASOPELS MasterSkin Version V010	Proj. nr.: MaSk-V010 Tegn. nr.: Init.: Funkt.: Plat.:	Rev.: Antal blade: Blad:	1 2 2
			Date: 21-09-2017		



A	B	C	D	E	F
9					JCG
8					Init.:
7					Blad:
6					4
5					
4					
3					
2					
1					
0					

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

Styrestrøm 24v DC

0,75# MørkBlå (DBU) = Gnd 24v DC
 0,75# Rød (RD) = 24v DC
 0,75# Brun (BR) = Mellemledninger

Fremmed spænding

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

A	B	C	D	E	F
9					
8					
7					
6					
5					
4					
3					
2					
1					
0					
A	B	C	D	E	F

Lednings numre

Forsynings ledninger f.eks 24V AC opmærkes ikke, da de kan identifiseres ud fra farve.
 Hvis der er flere styrestrøm sikringer bliver forsyningens ledninger efter sikringer,
 mærket med sikringsnummer.
 Forsyningens 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

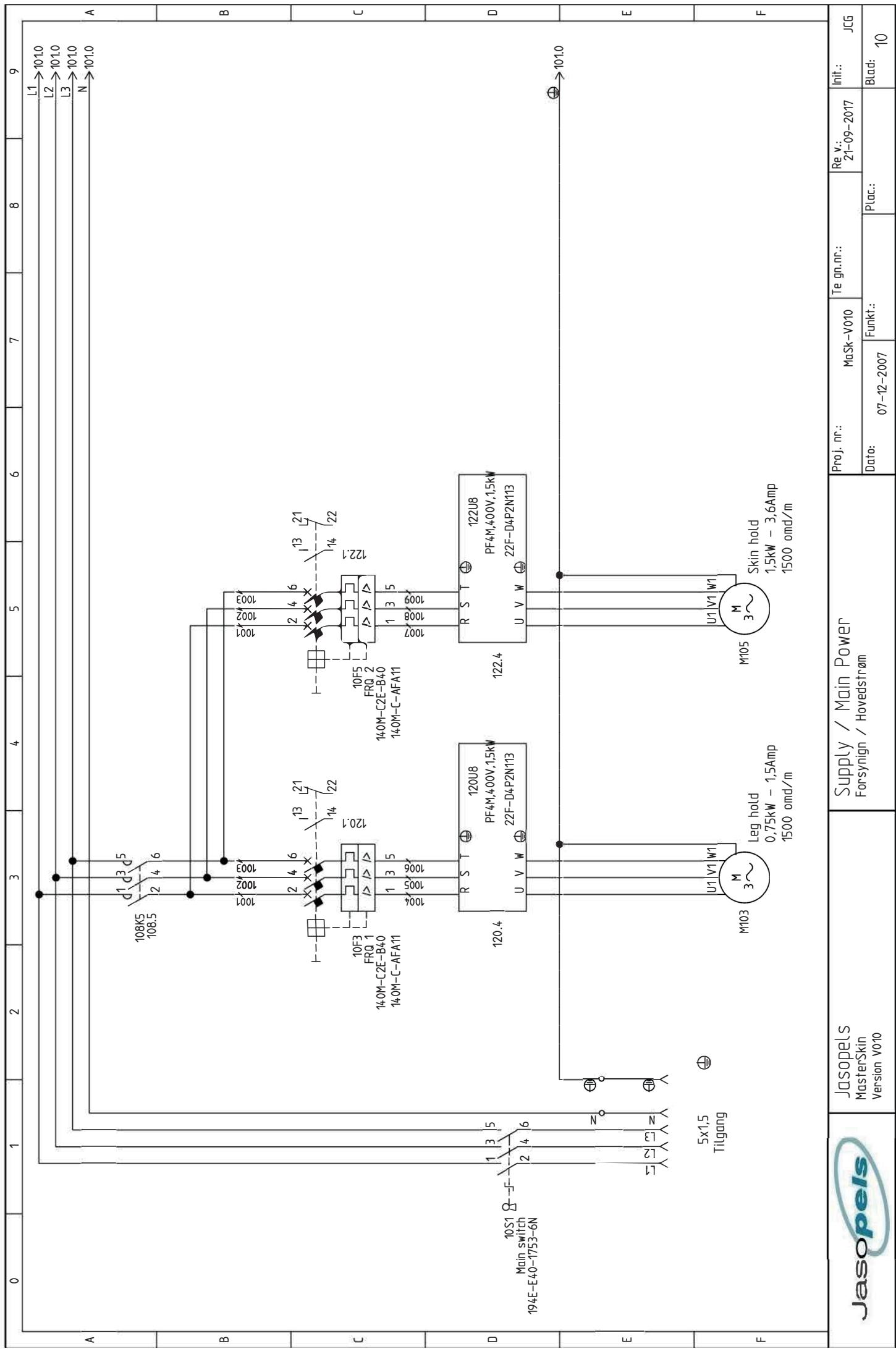
BK Black Sort
 BN Brown Brun
 RD Red Rød
 OG Orange Orange
 YE Yellow Gul
 GN Green Grøn
 BU Blue (incl. light blue) Blå (inkl. lys blå)
 VT Violet (purple) Violet
 GY Grey (slate) Grå
 WH White Hvid
 PK Pink Lyserød
 GD Gold Guld
 TQ Turquoise Turkis
 SR Silver.Sølv
 GNYE Green-and-yellow Grøn-gul (jord)

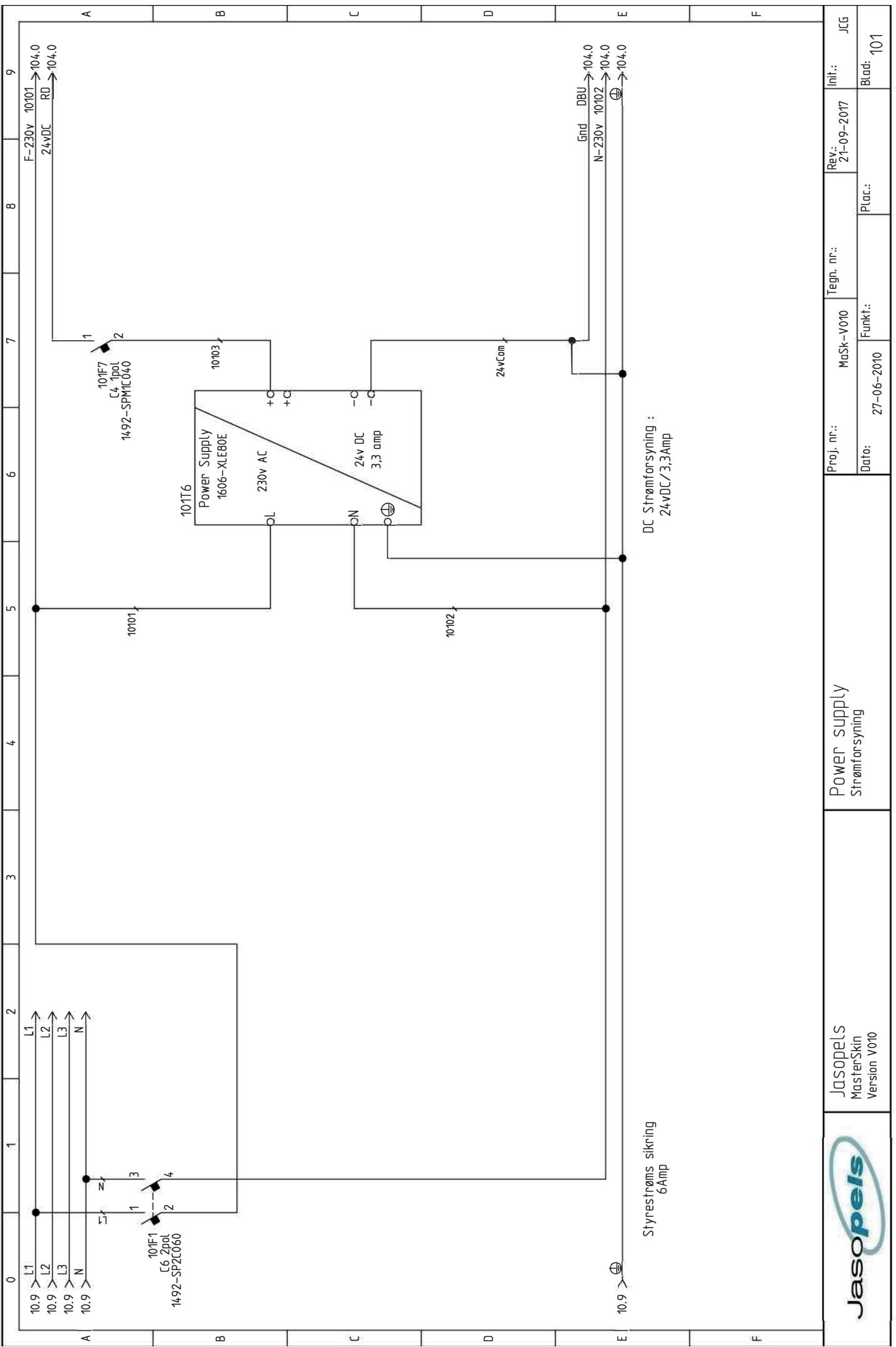
DS/EN61346-2

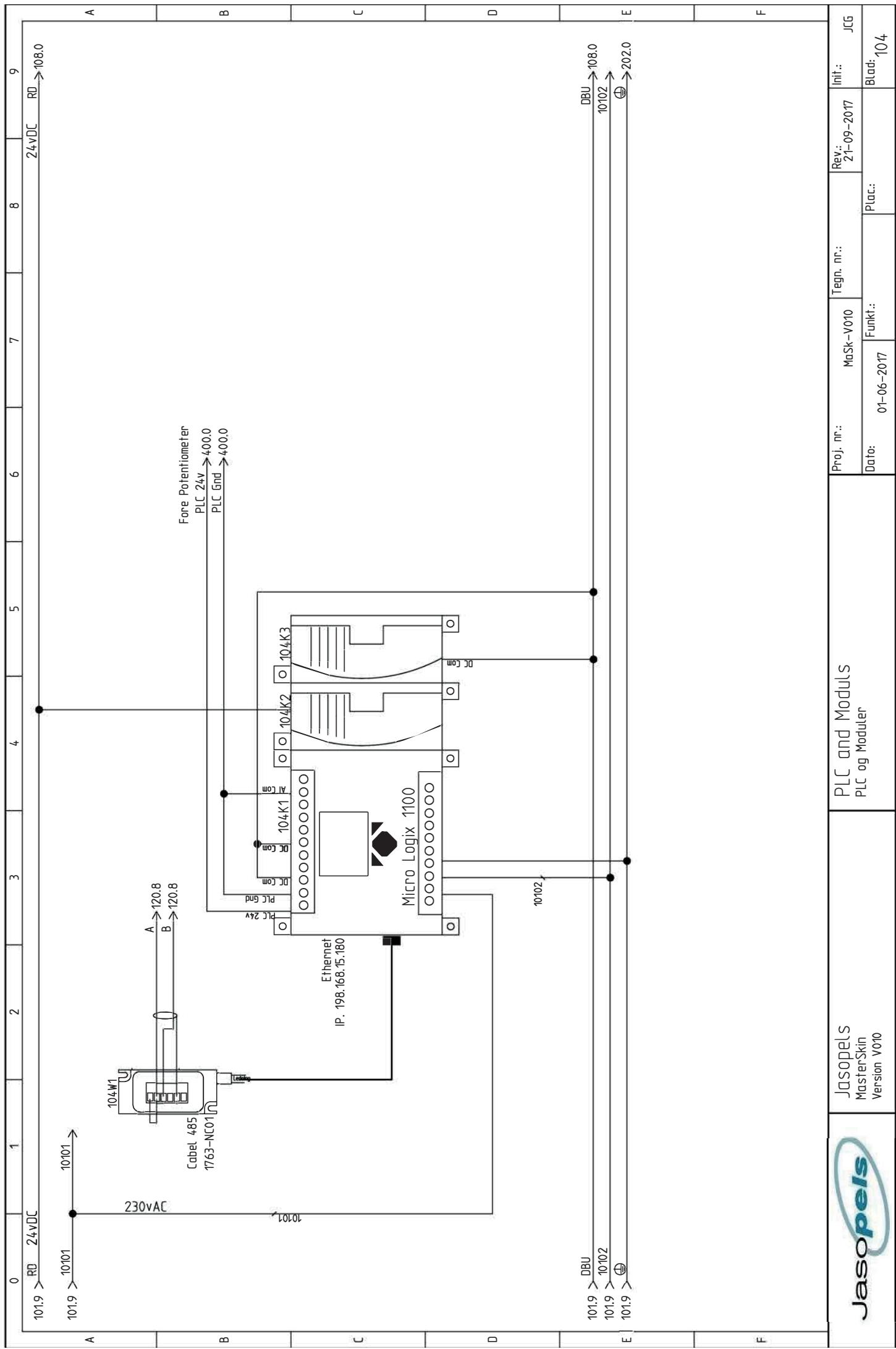
A : Berøringsskærm
 B : Føler, Detektor, Målelement, Fotoceller, Temperatur
 C : Buffer, Kondensator
 E : Kedel, Lys, og varme element
 F : Sikring, Termisk beskyttelse, Overspændingsafslader
 G : Generator, spændingsforsyning
 K : Relæer, Kontaktorer, Filter
 M : Motor, Aktiveringsspole
 N : Analog 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

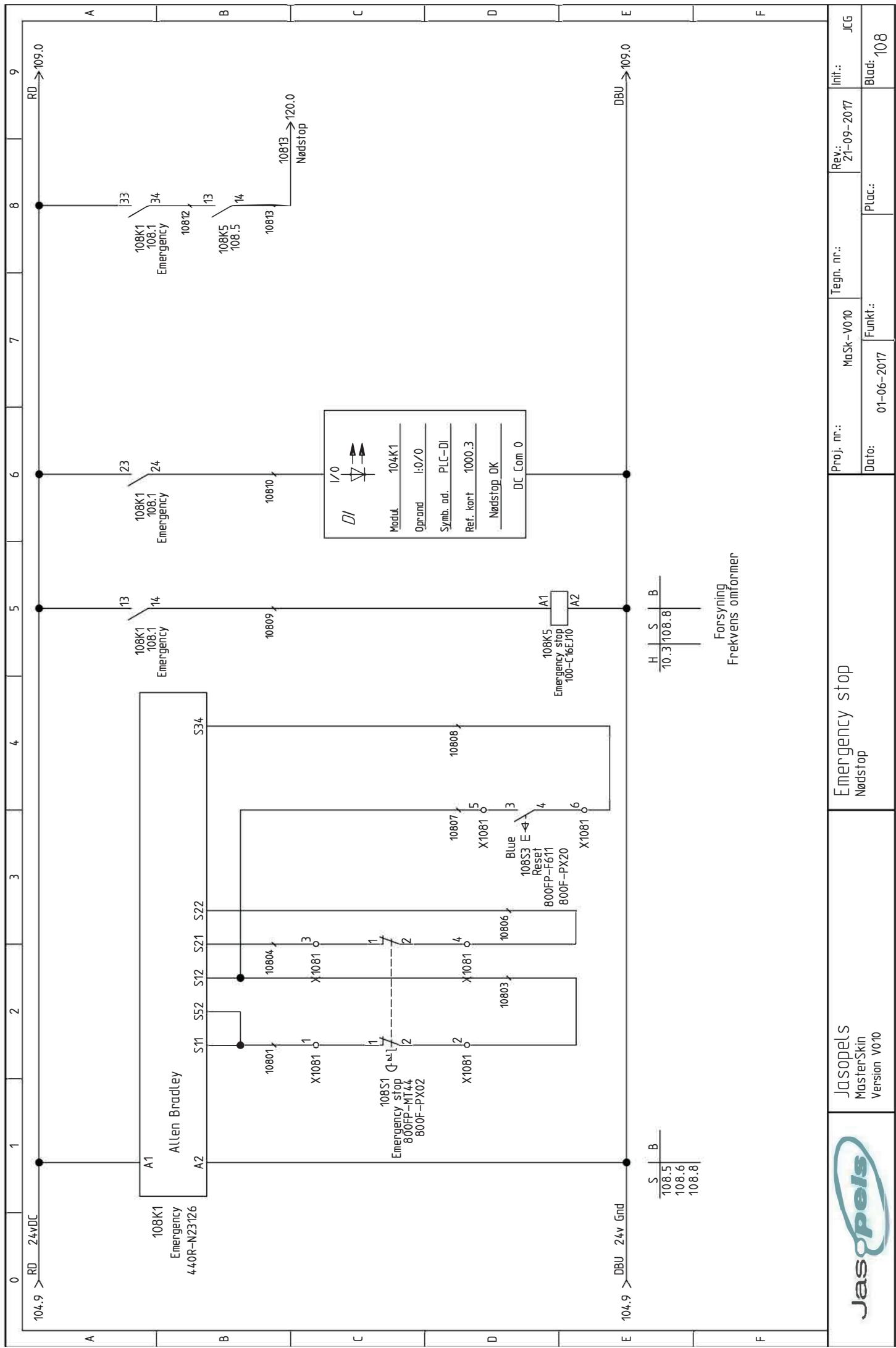
Jasopels Master Skin Version V010	Standarter	Proj. nr.: Data: 30-10-2008	MaSk-V010 Funkt.: Plac.:	Tegn. nr.: Rev.: 21-09-2017	Init.: Blad: 4 a
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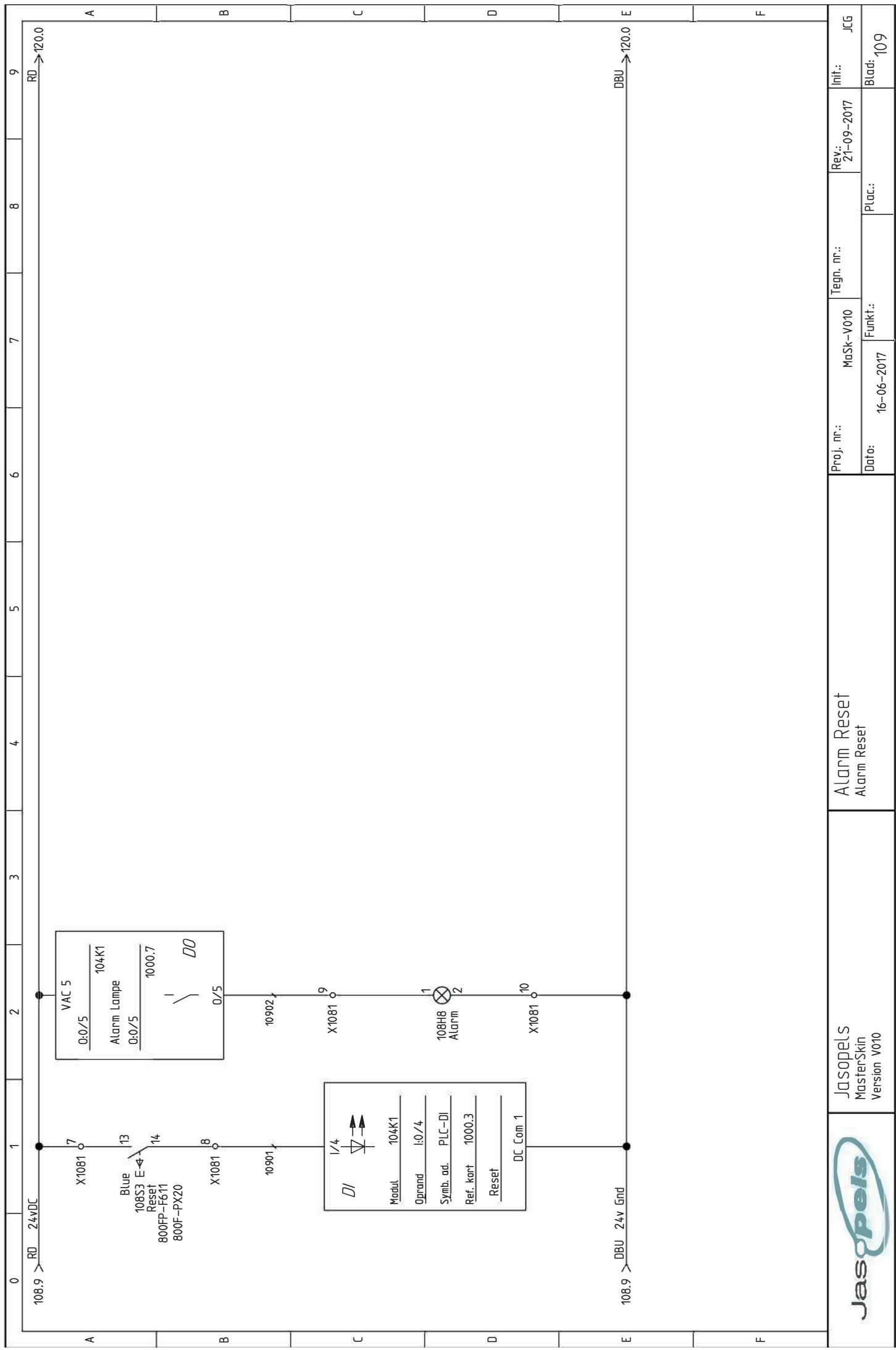
Jasopels

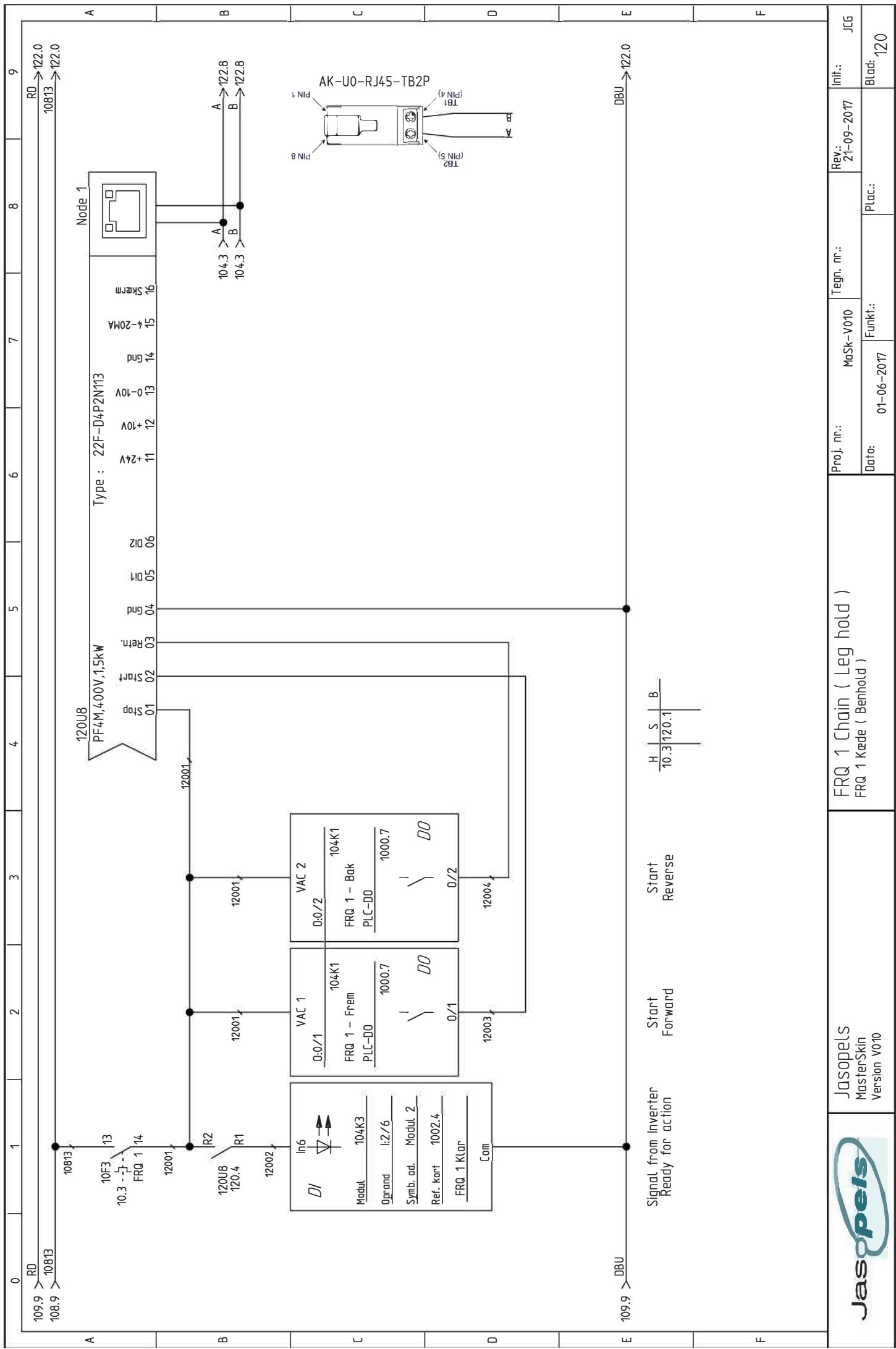


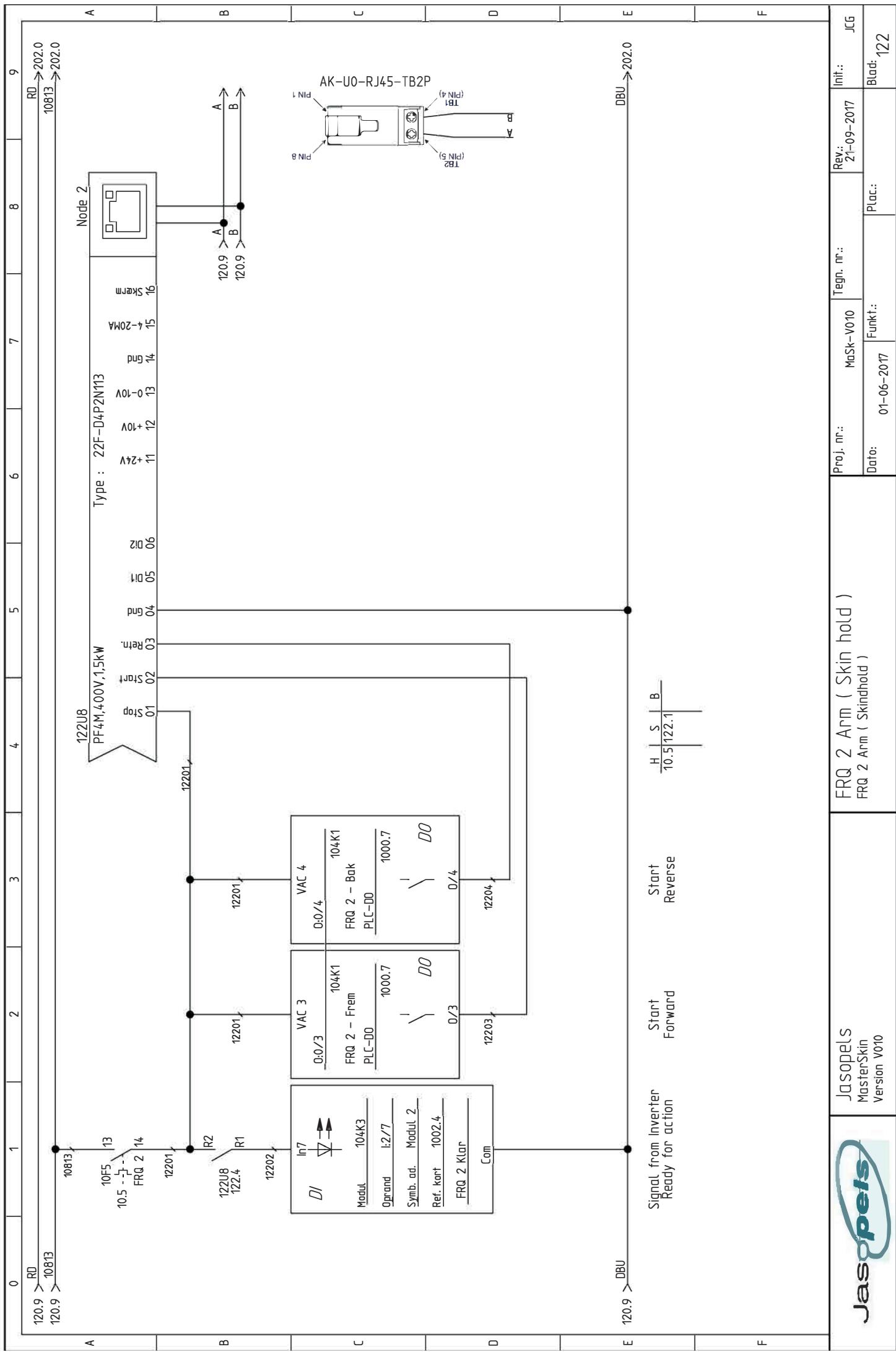


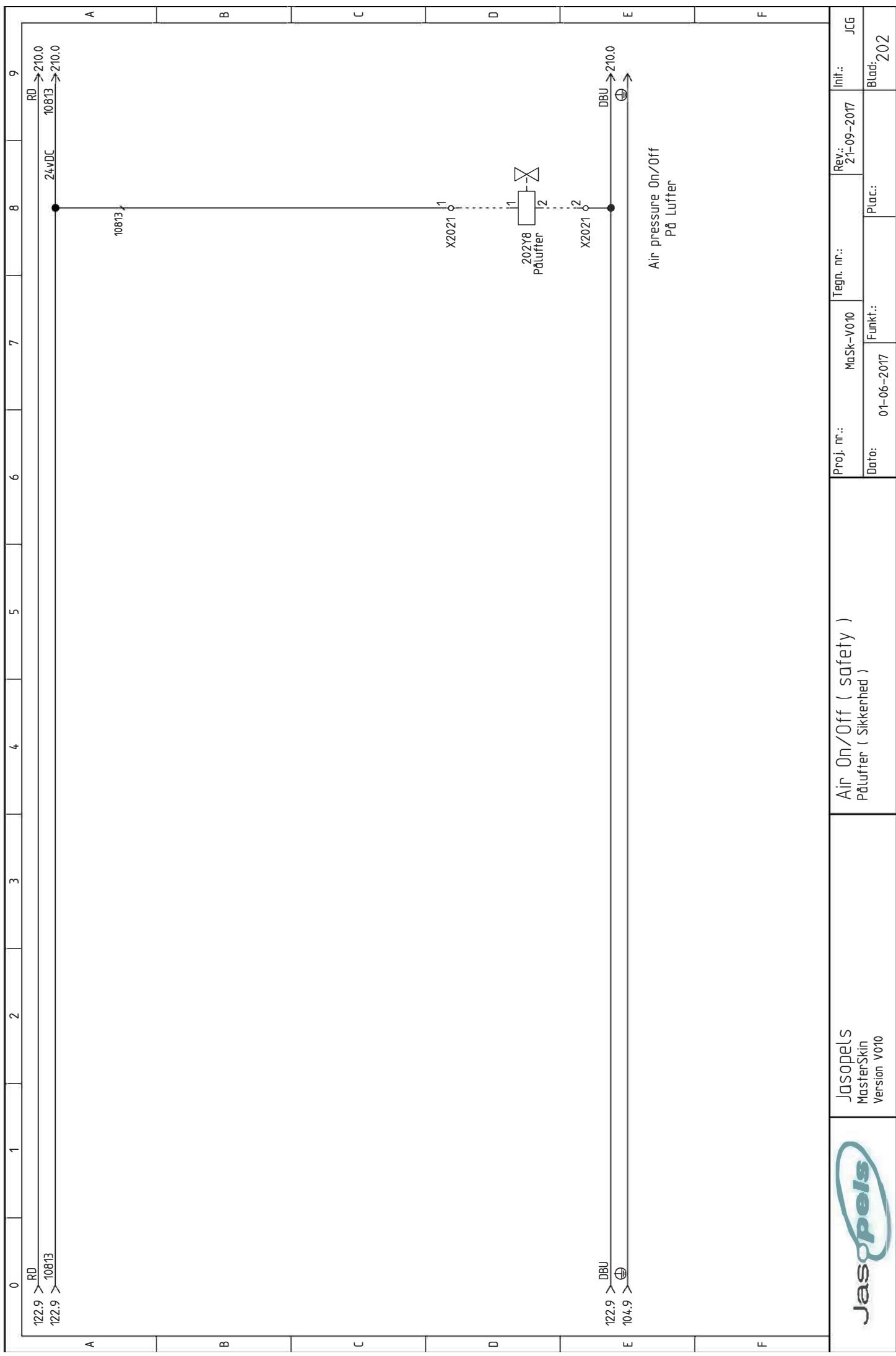


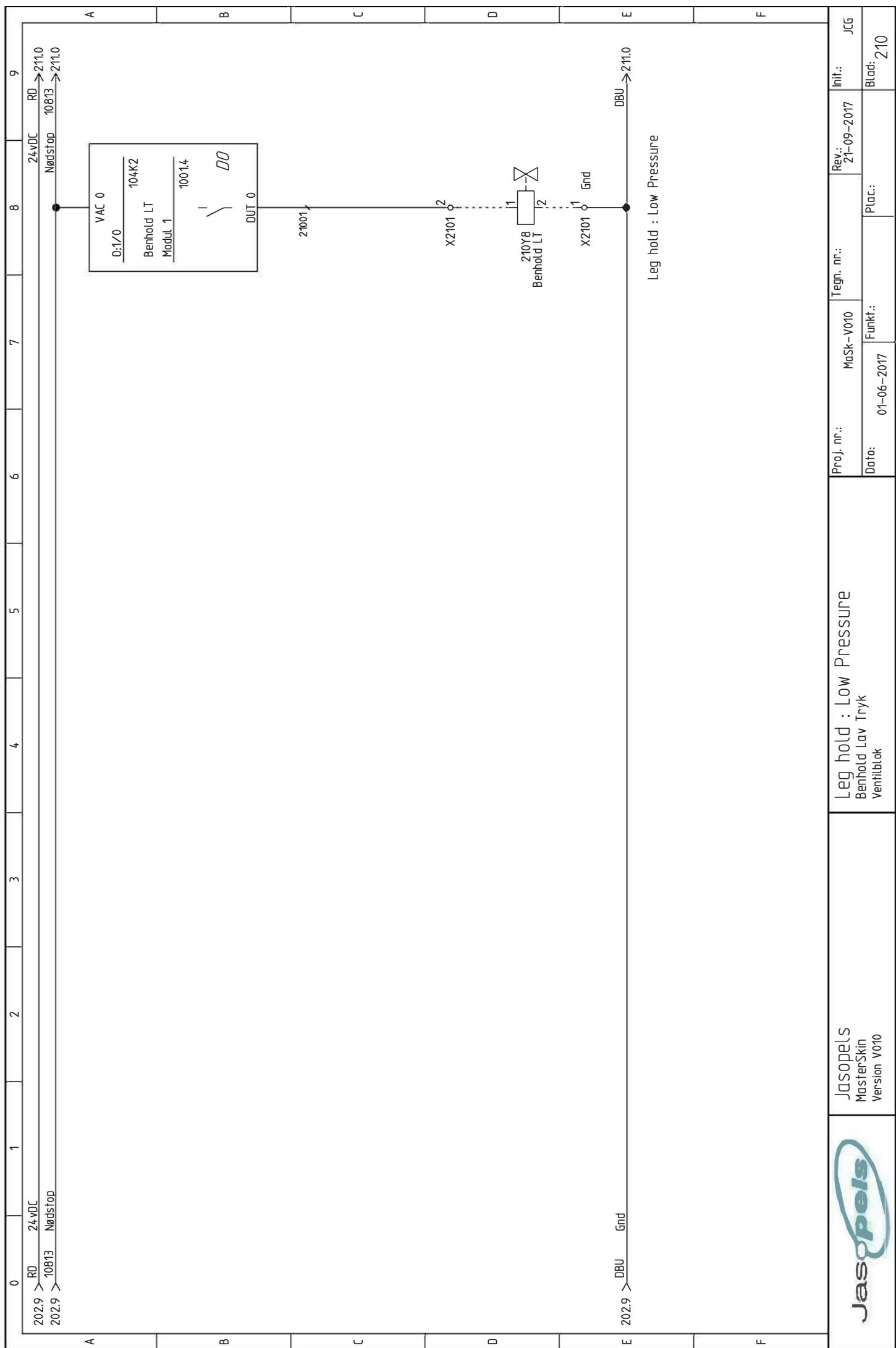










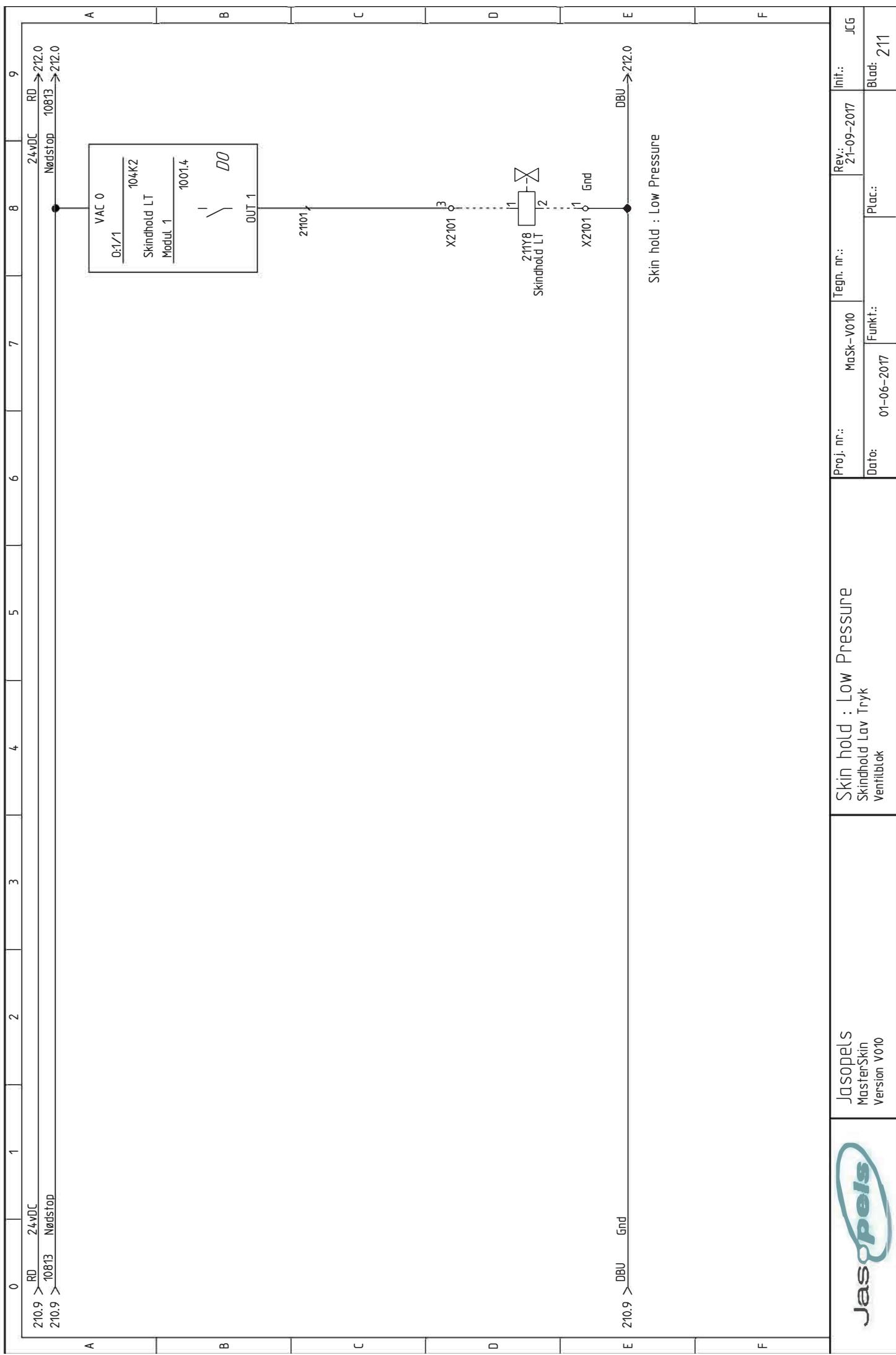


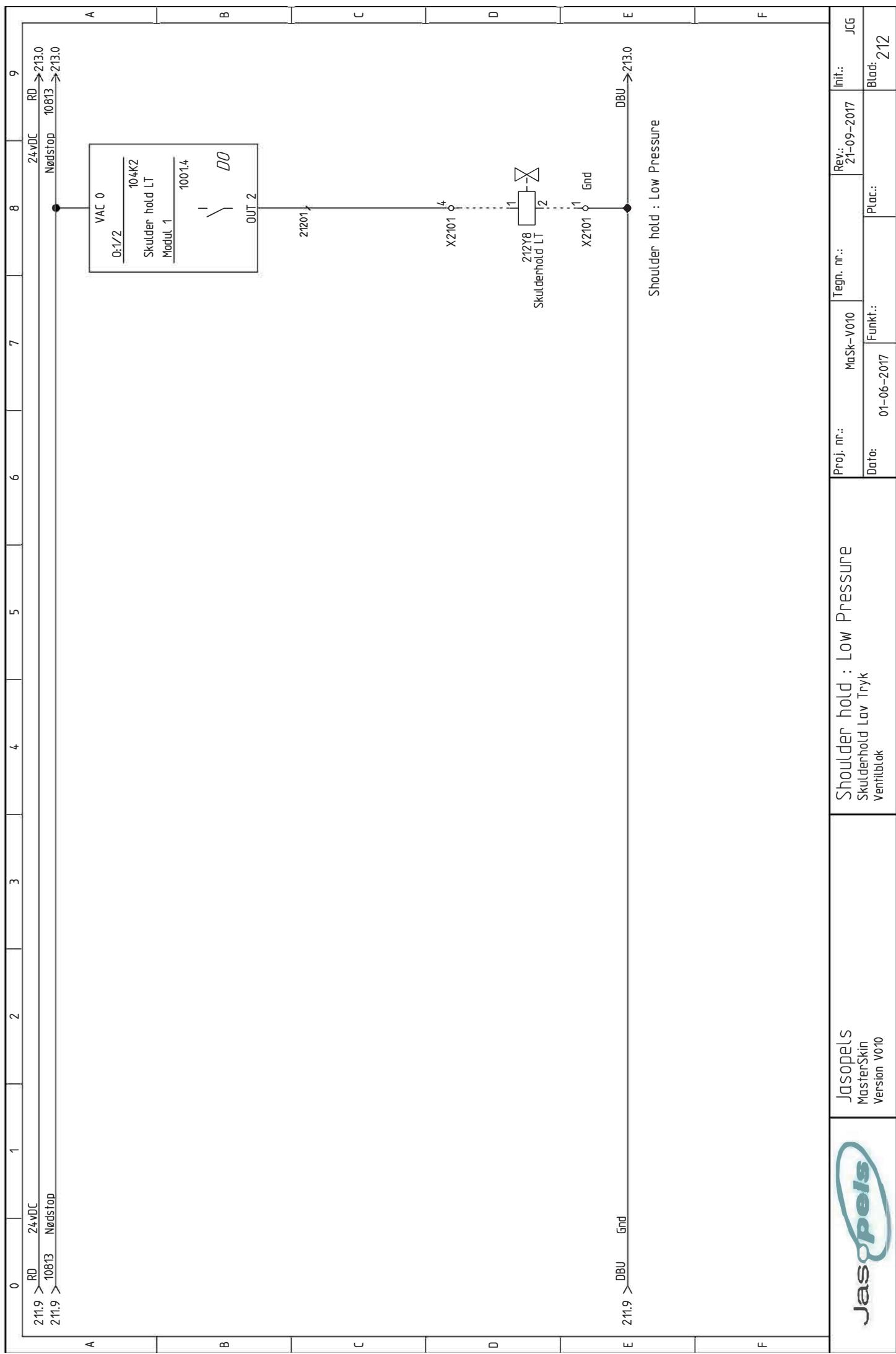
Jasopels
MasterSkin
Version V010

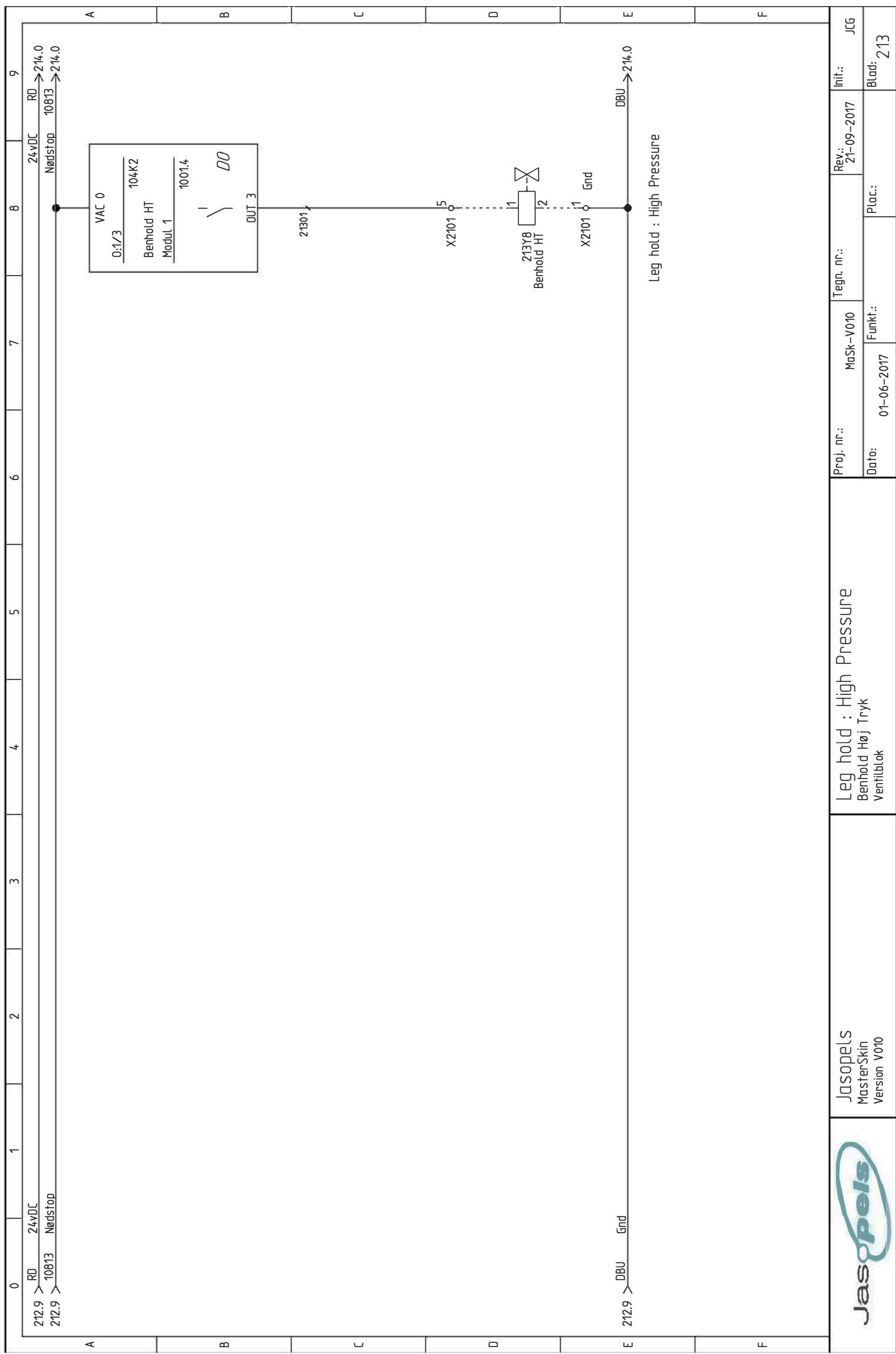
 Jasopels
Leg hold : Low Pressure
Benhold Lav Tryk
Ventiblok

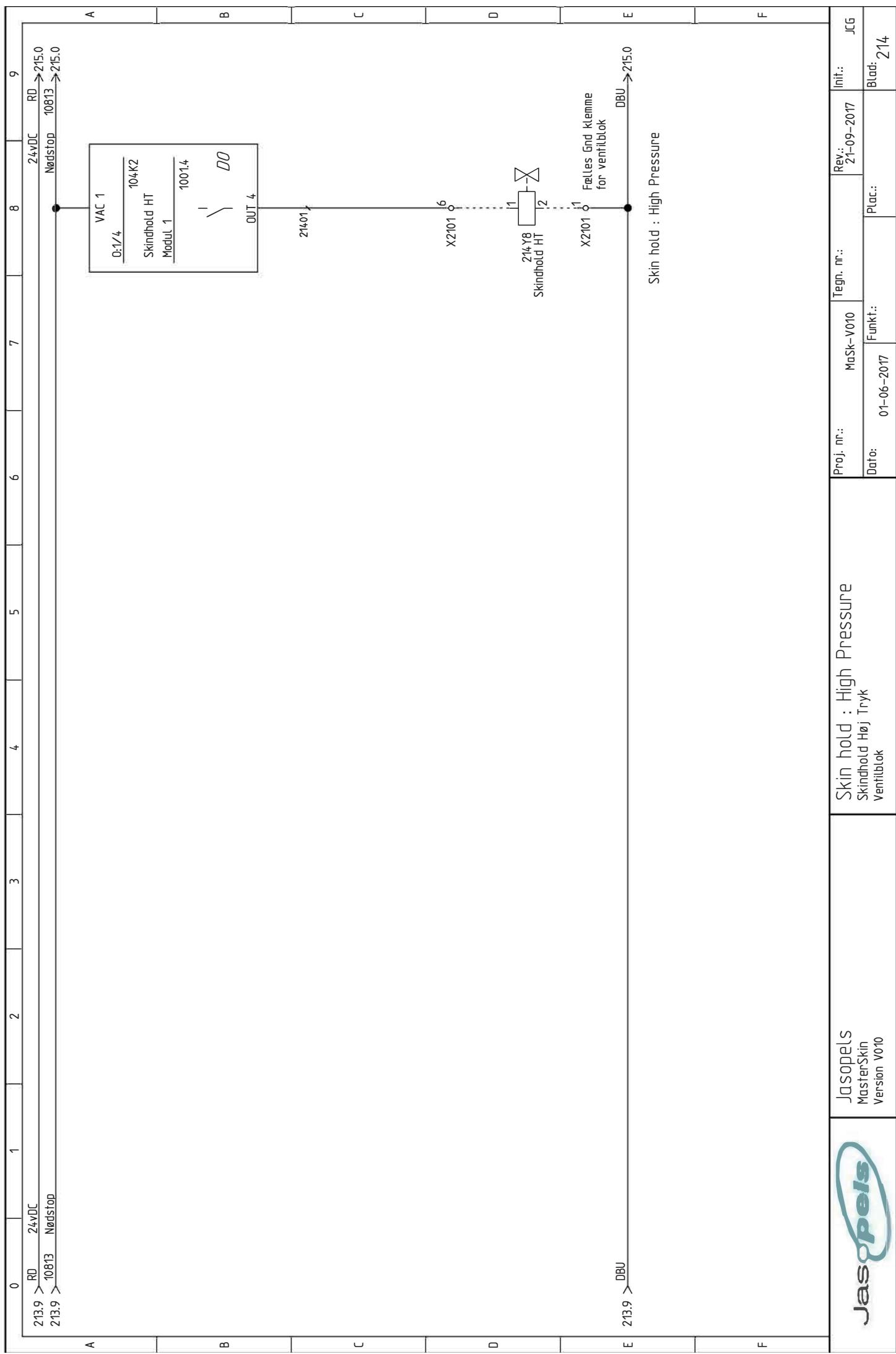
Proj. nr.:	MaSk-V010	Tegn. nr.:	Init.:
Dato:	01-06-2017	Funkt.:	JCG

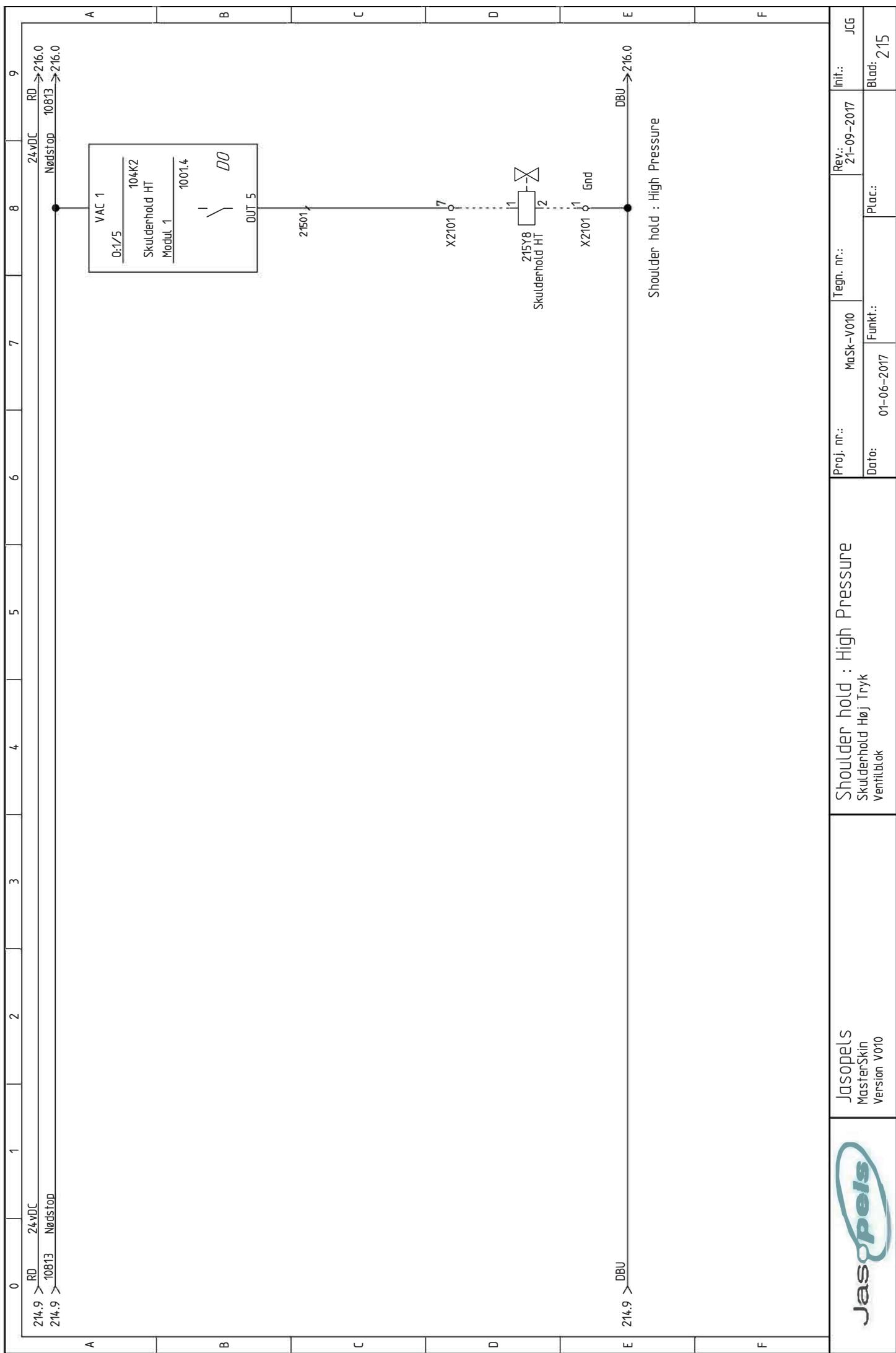
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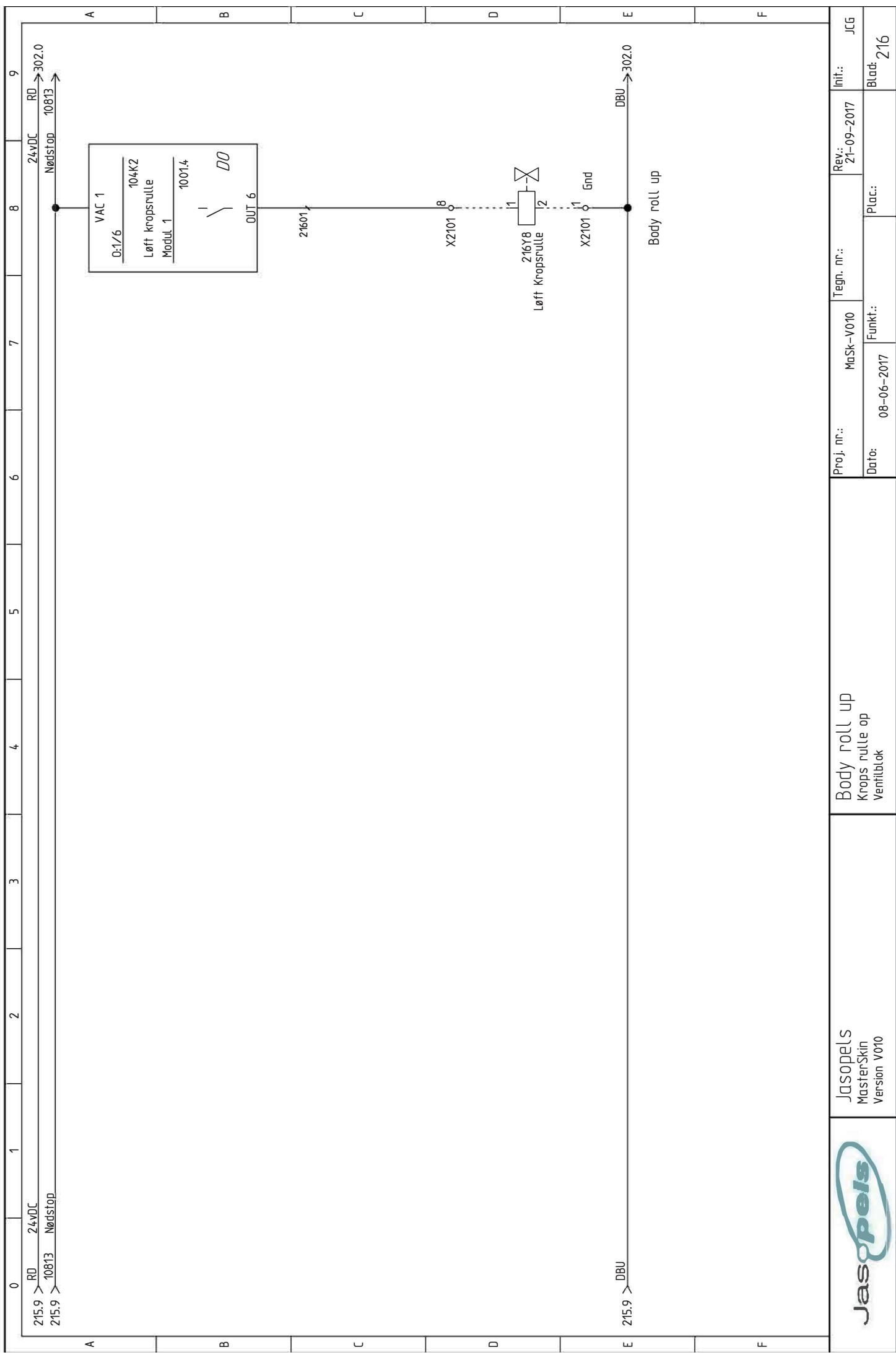


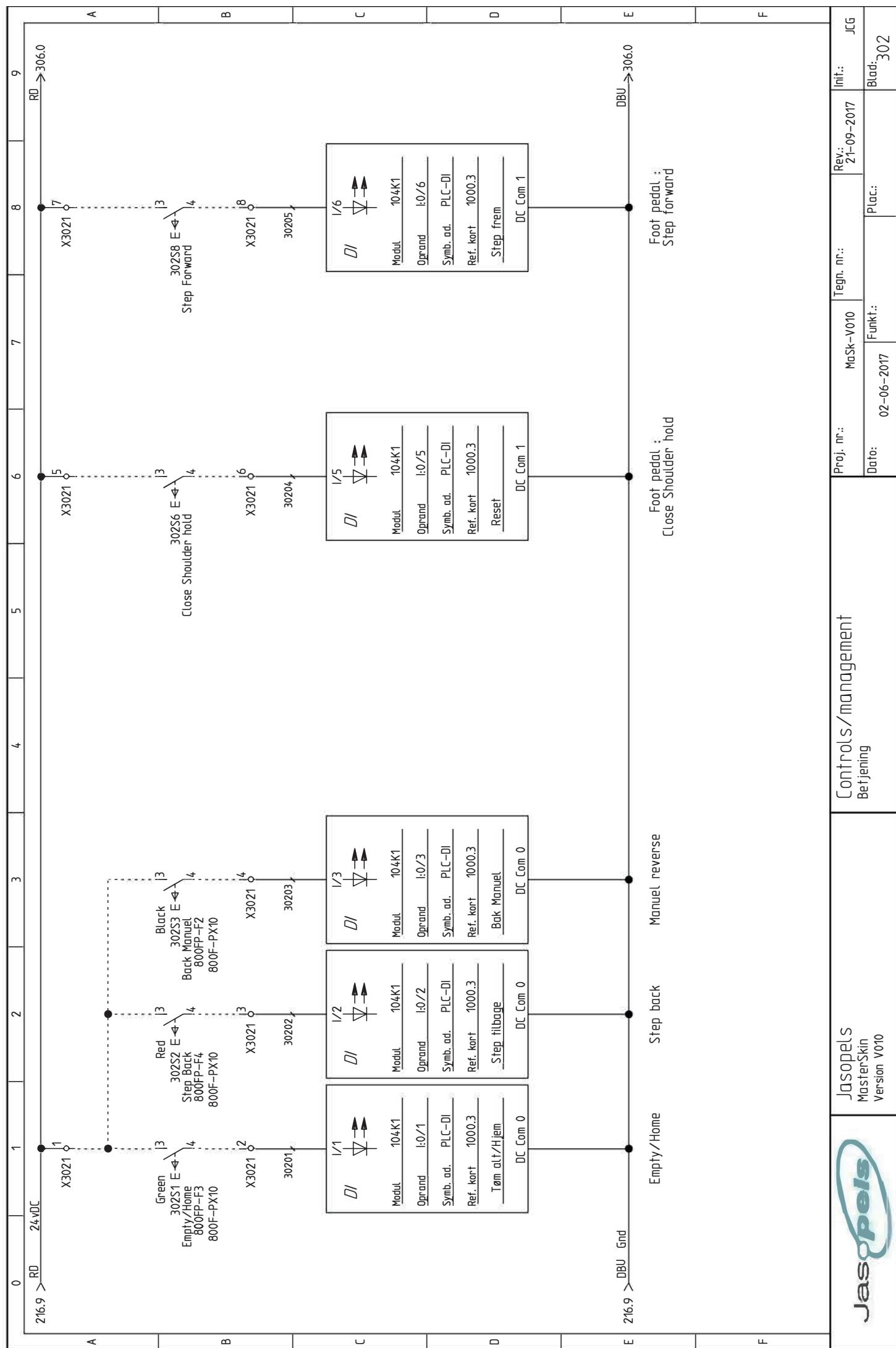


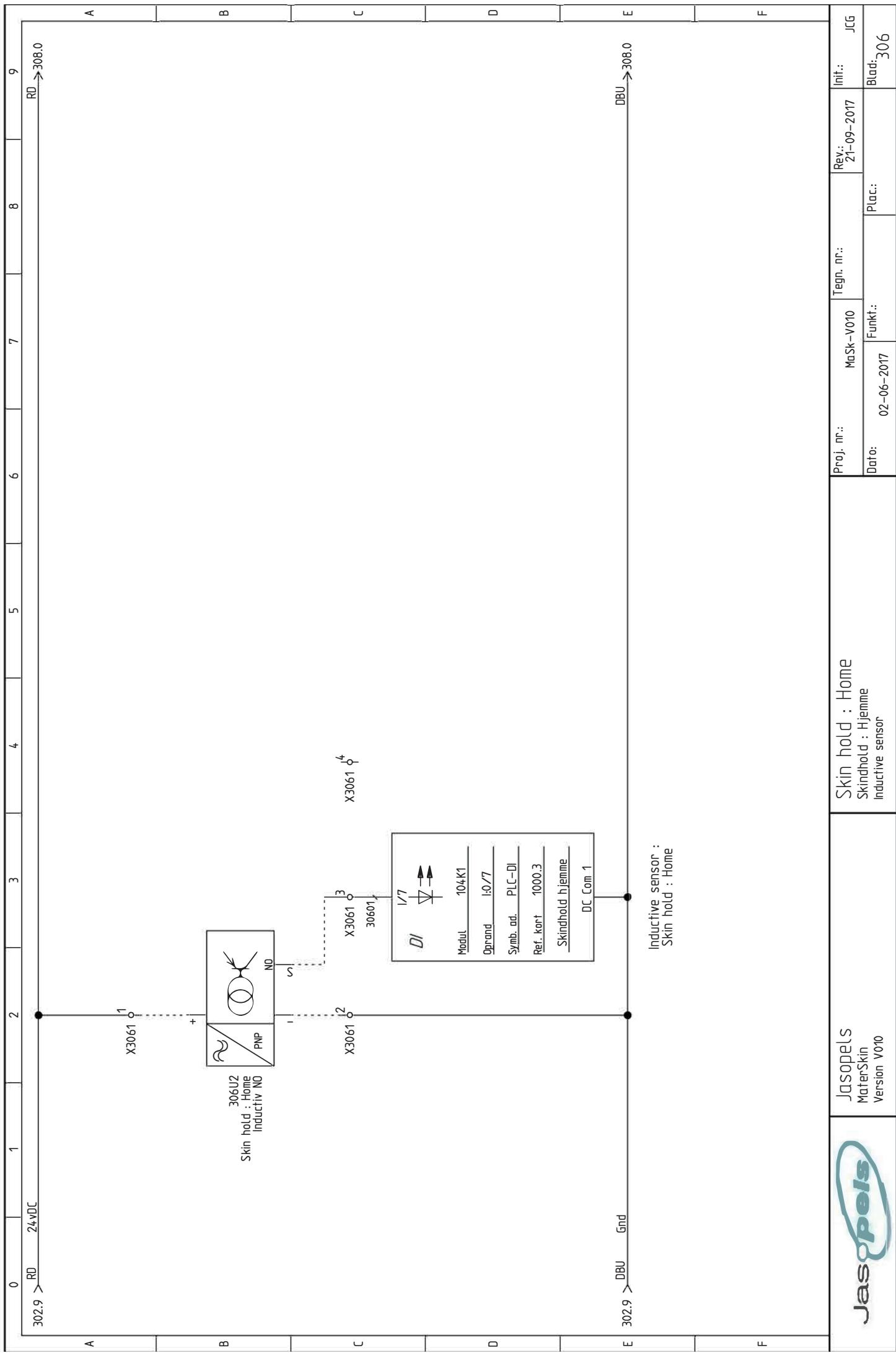


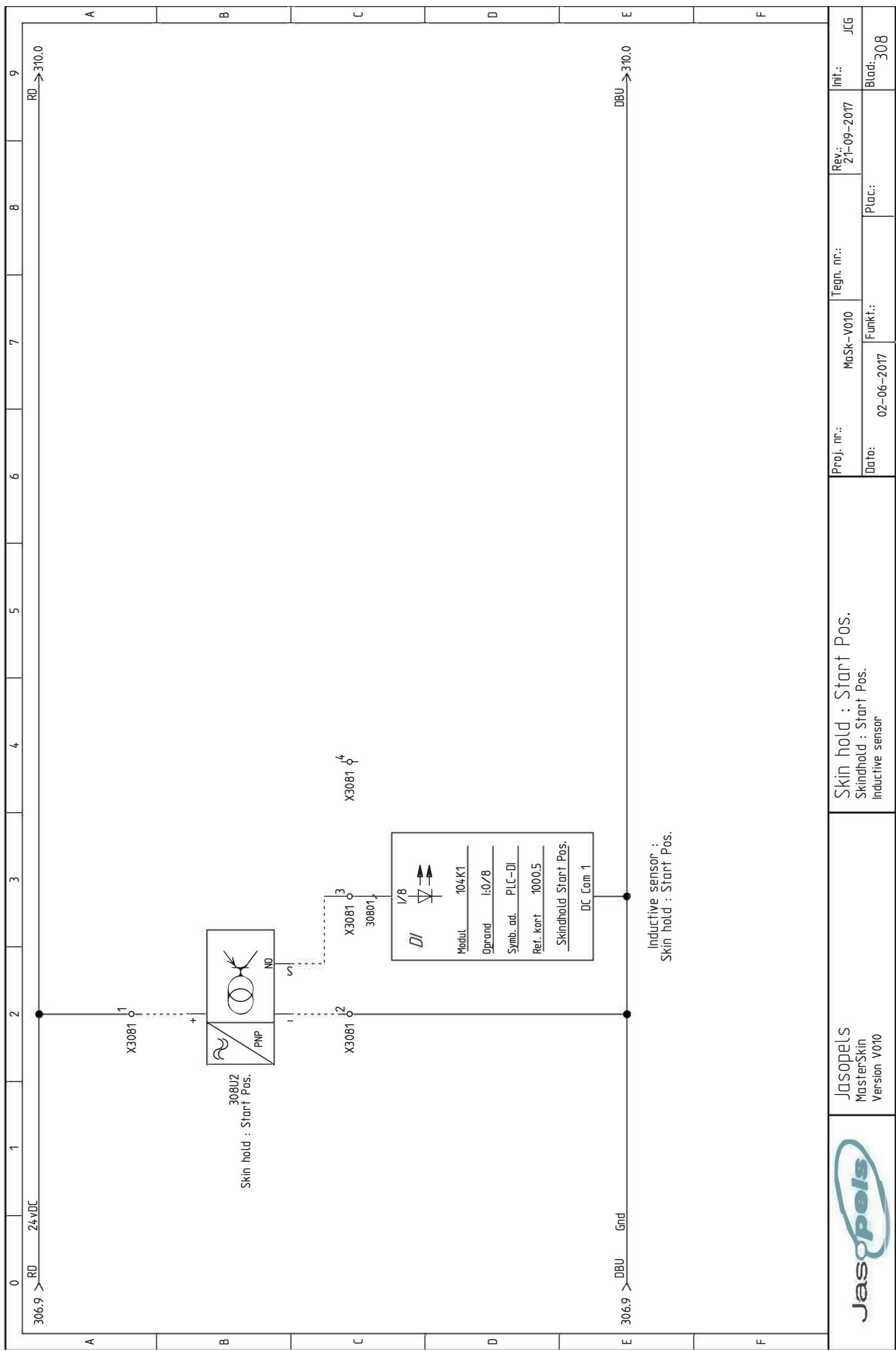


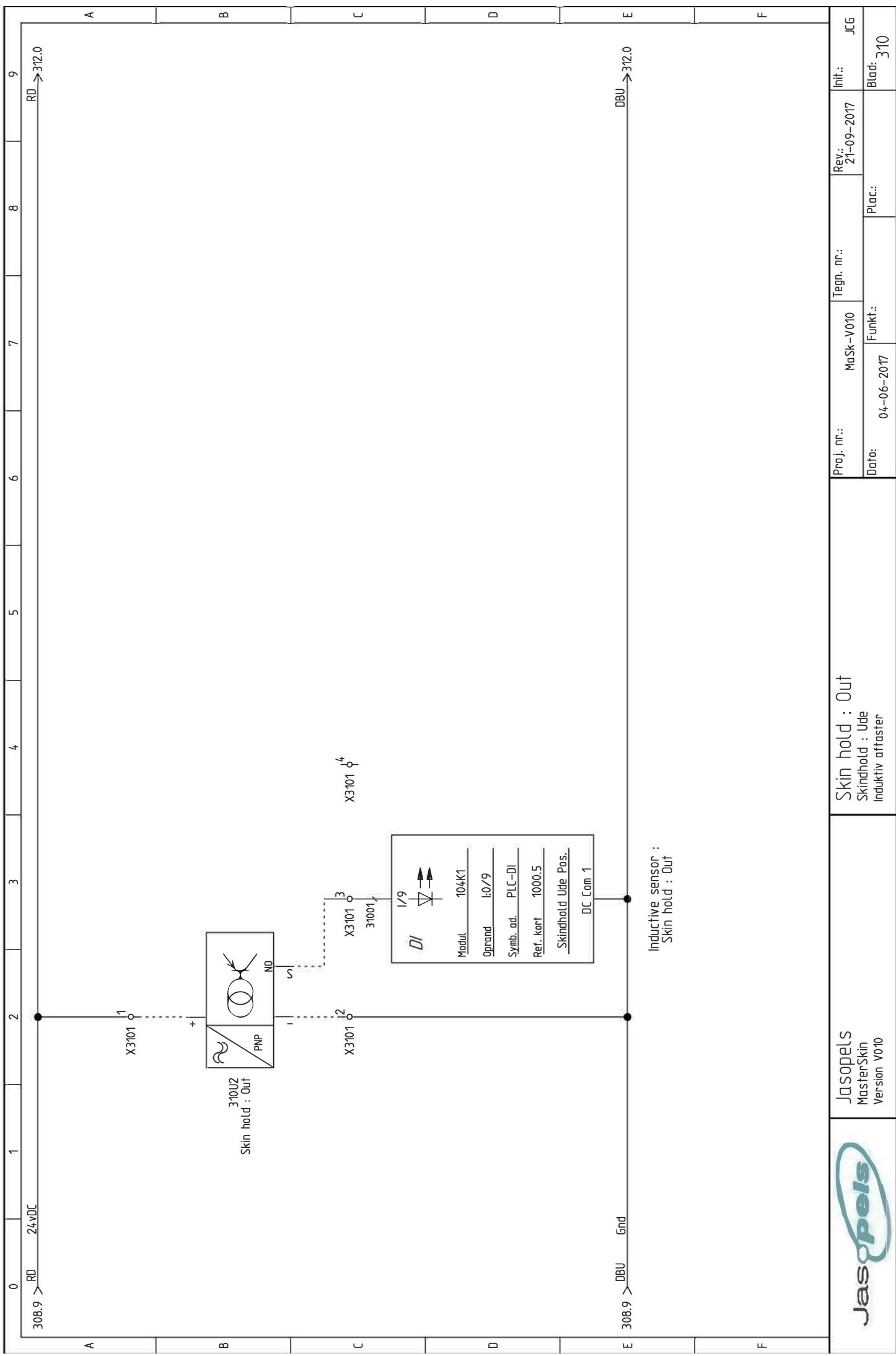


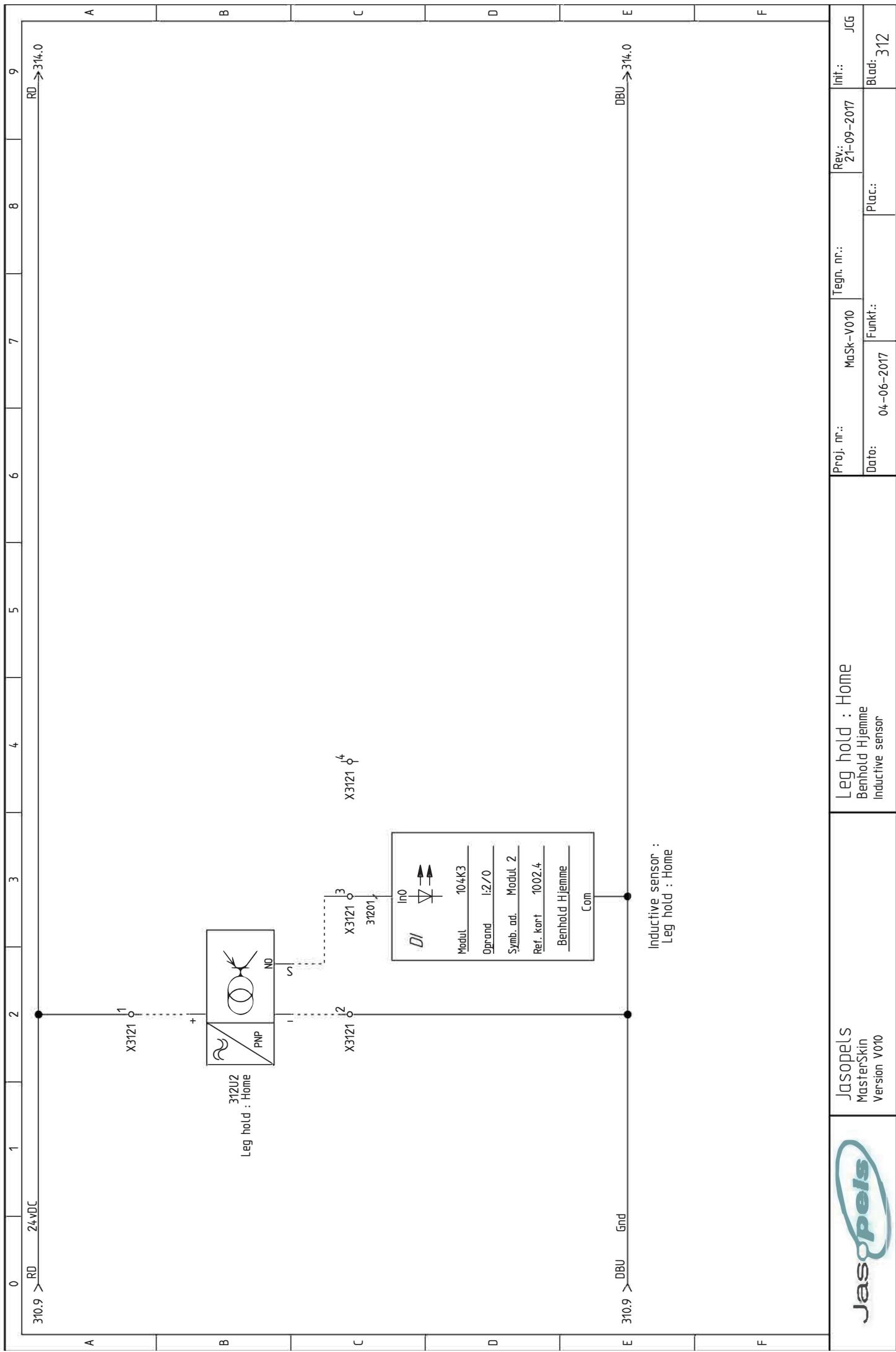


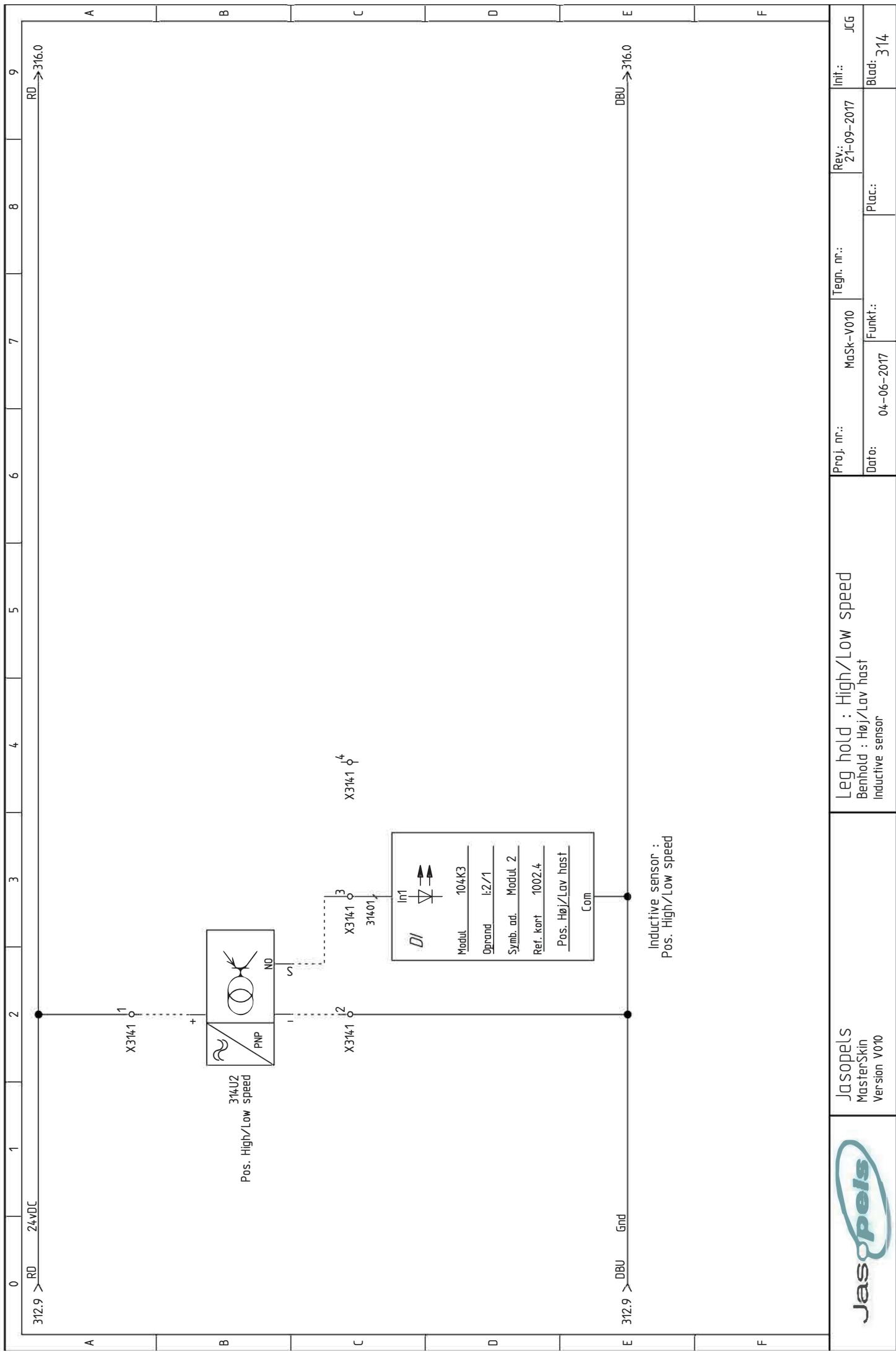


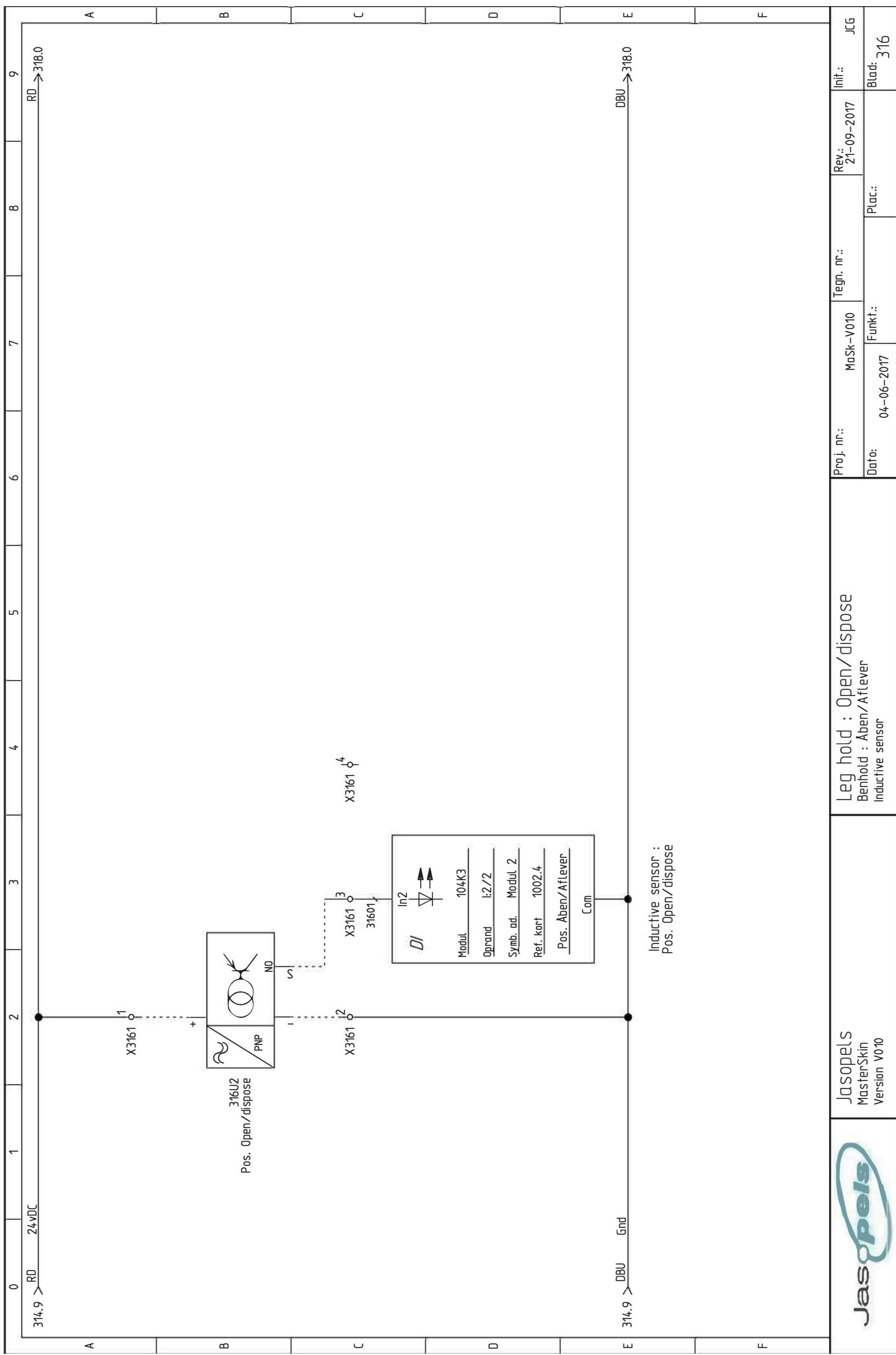


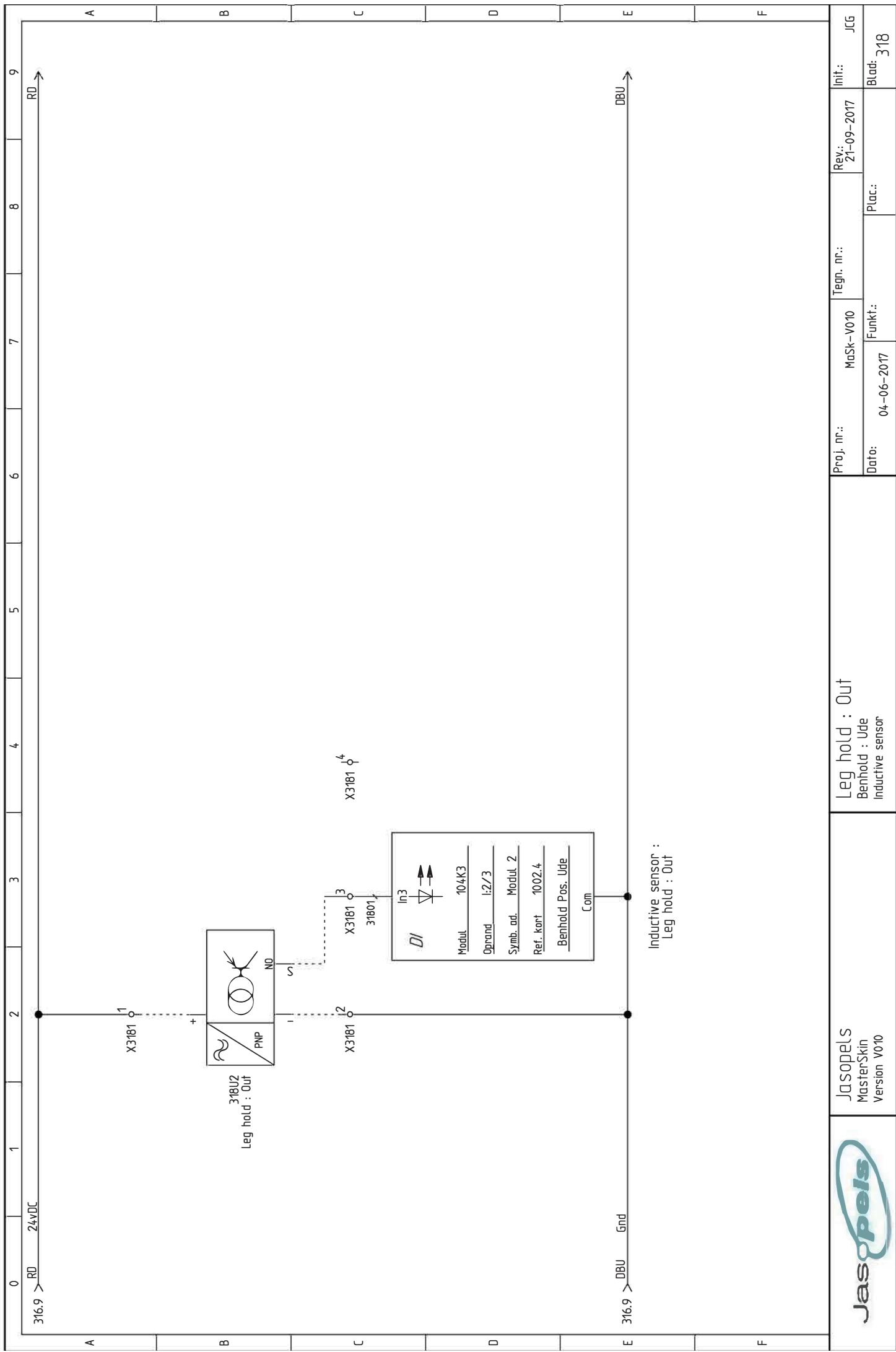


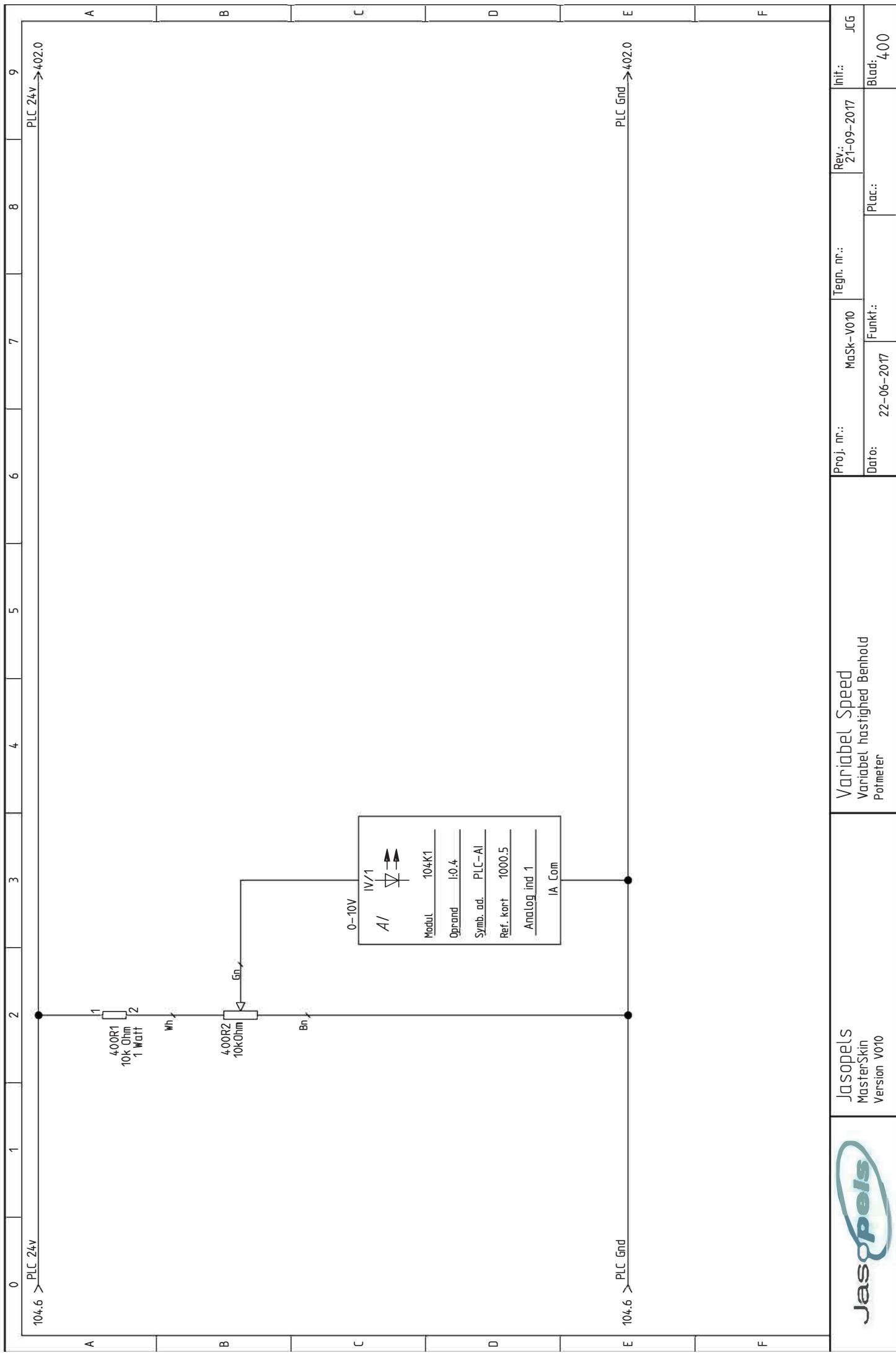


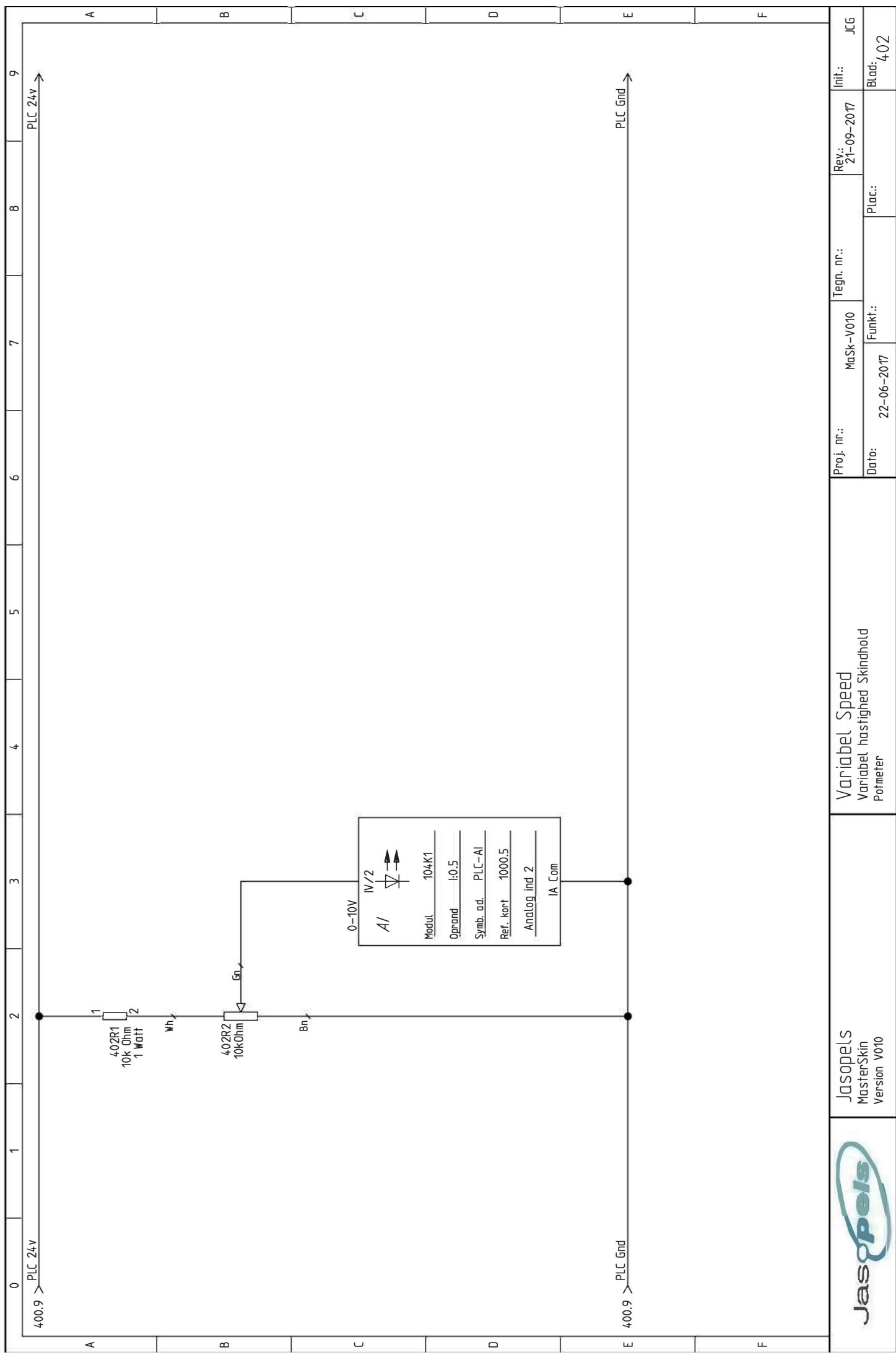


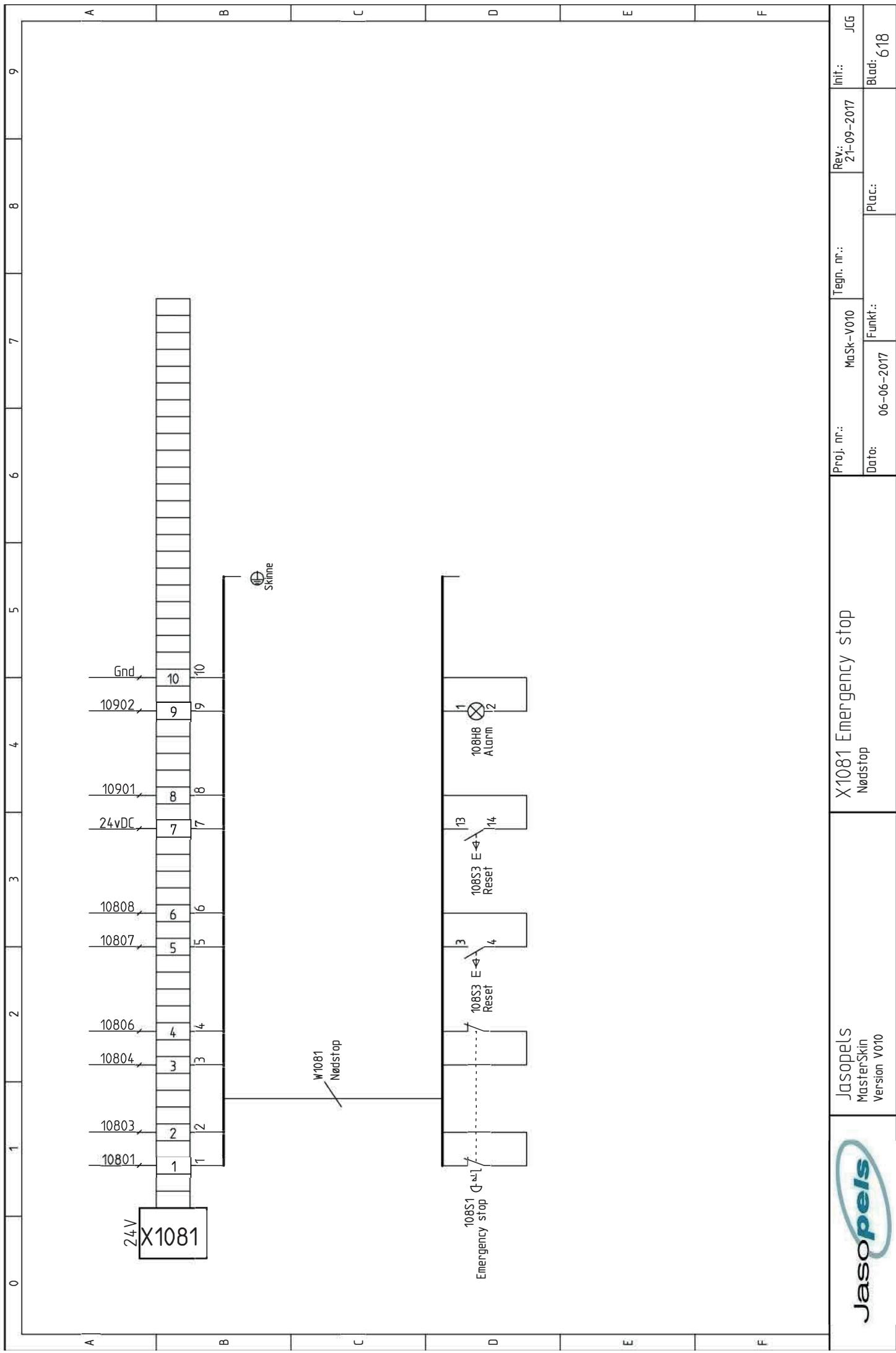


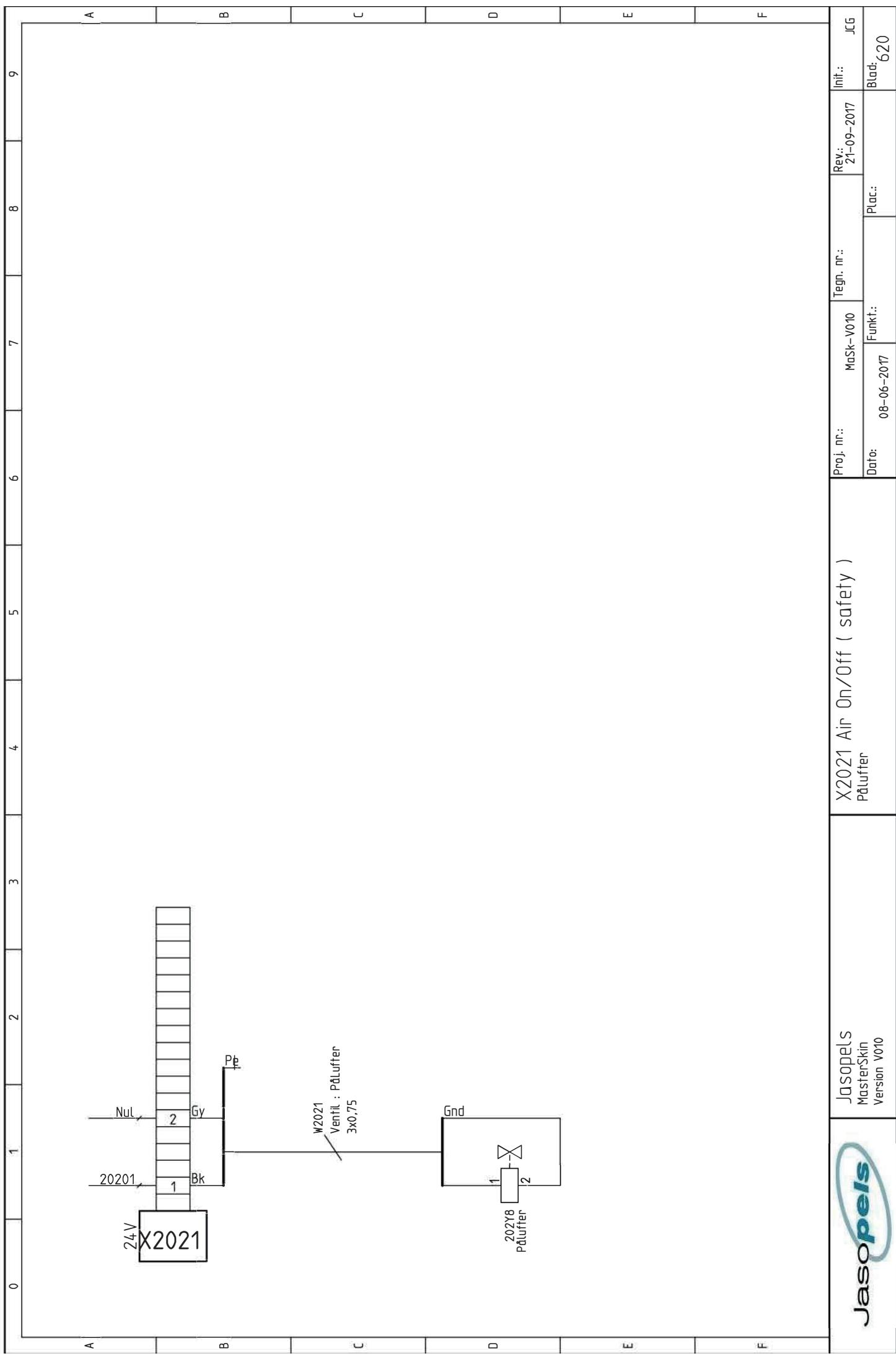


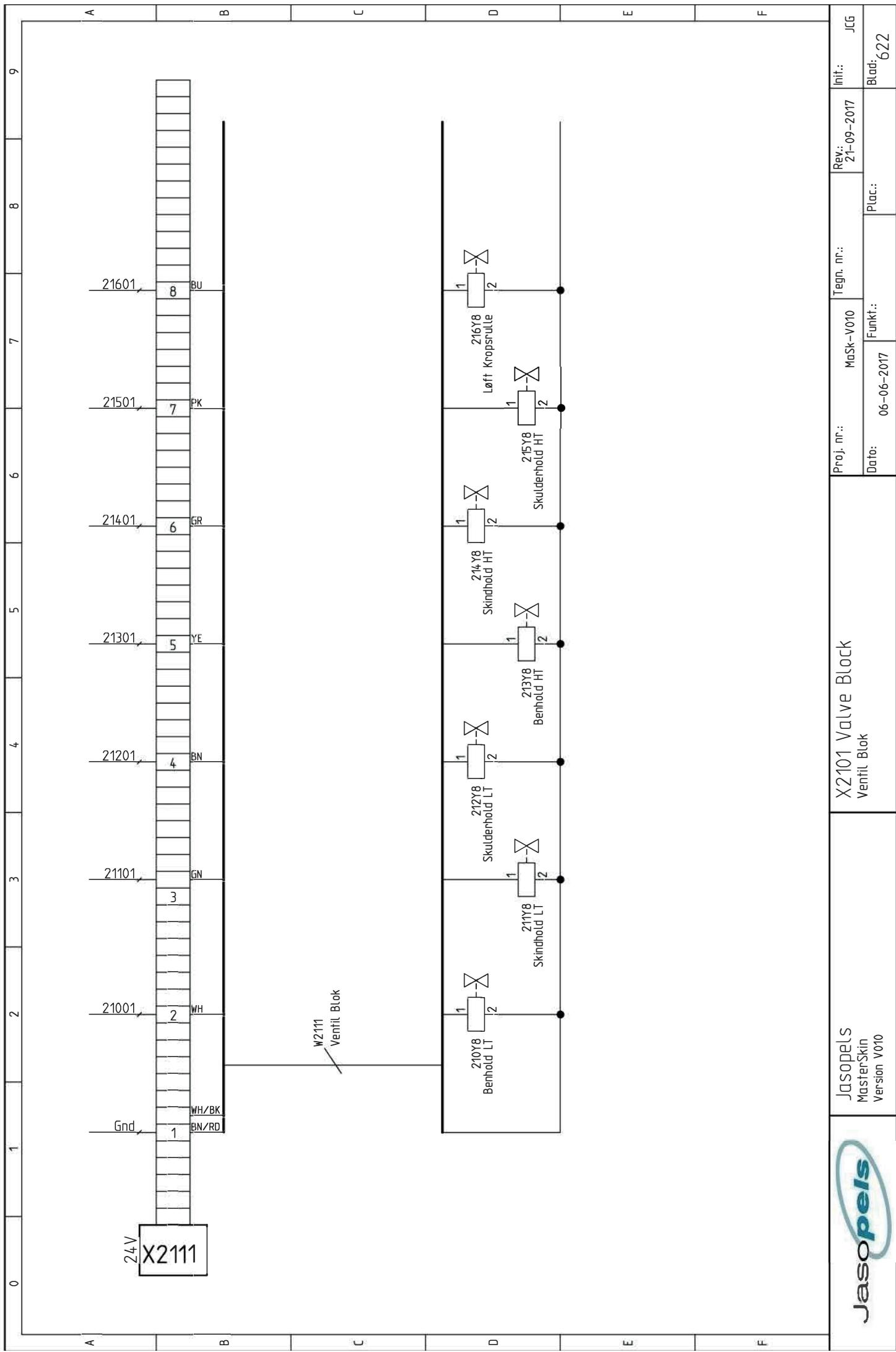


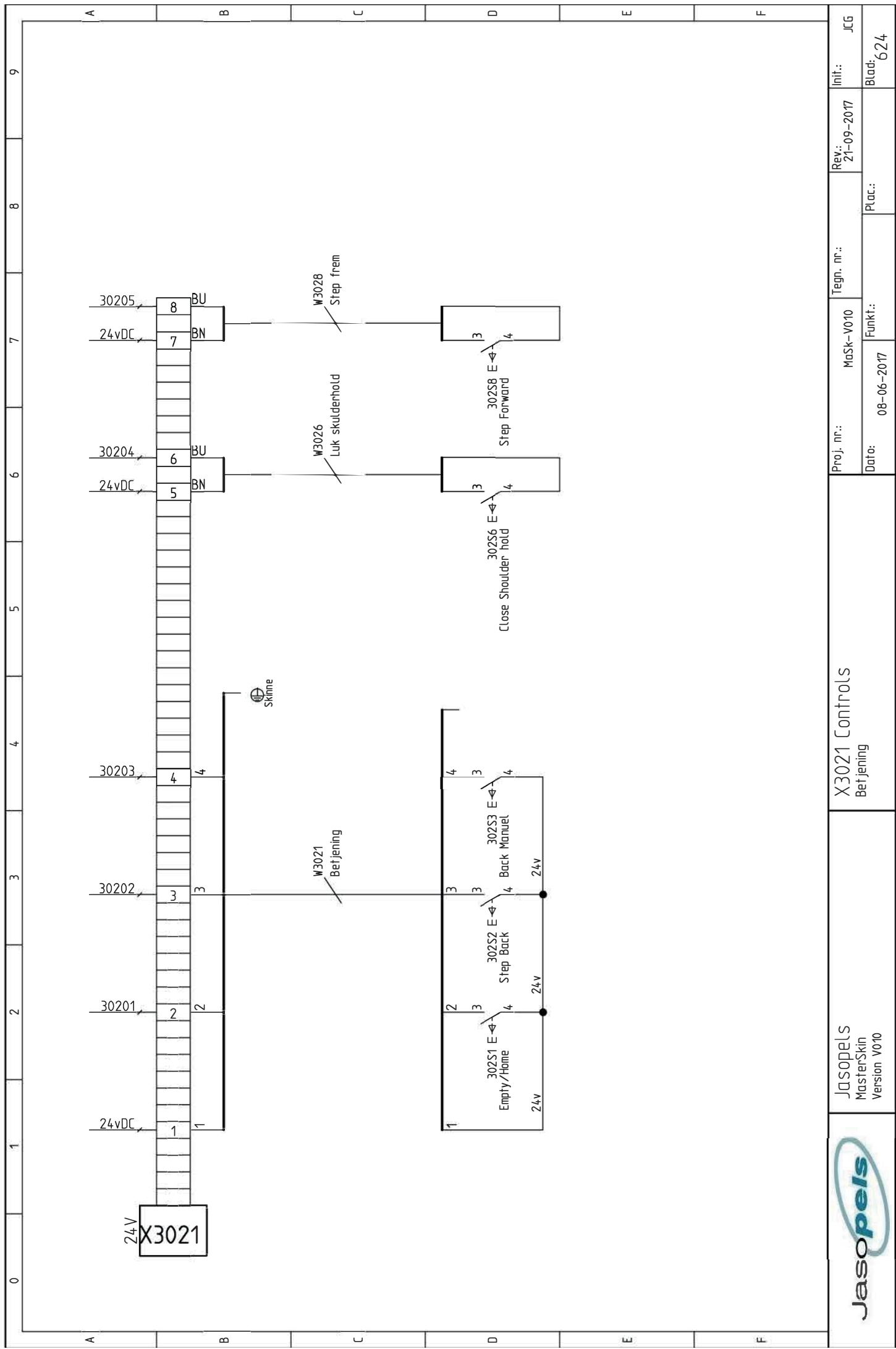


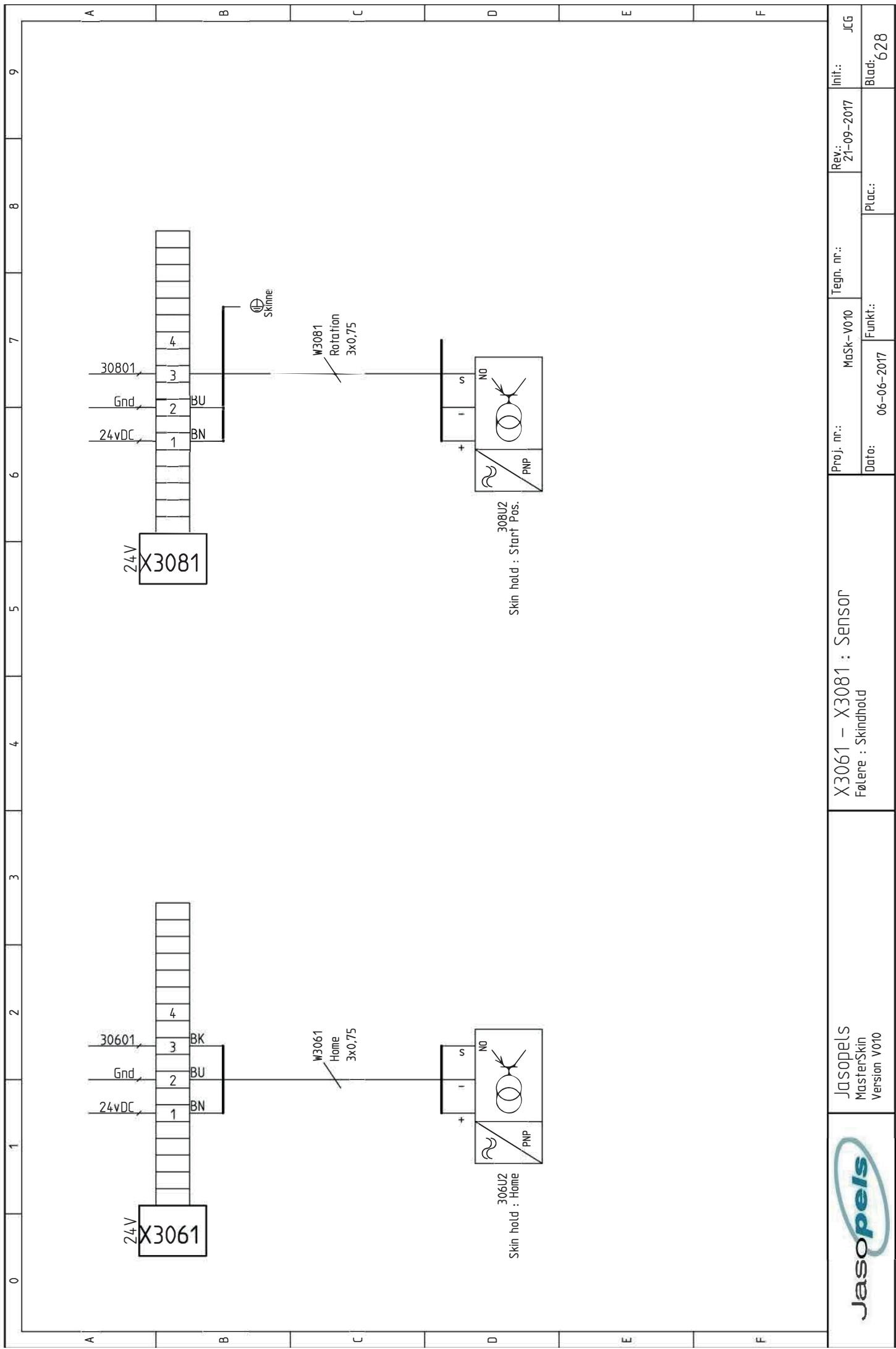


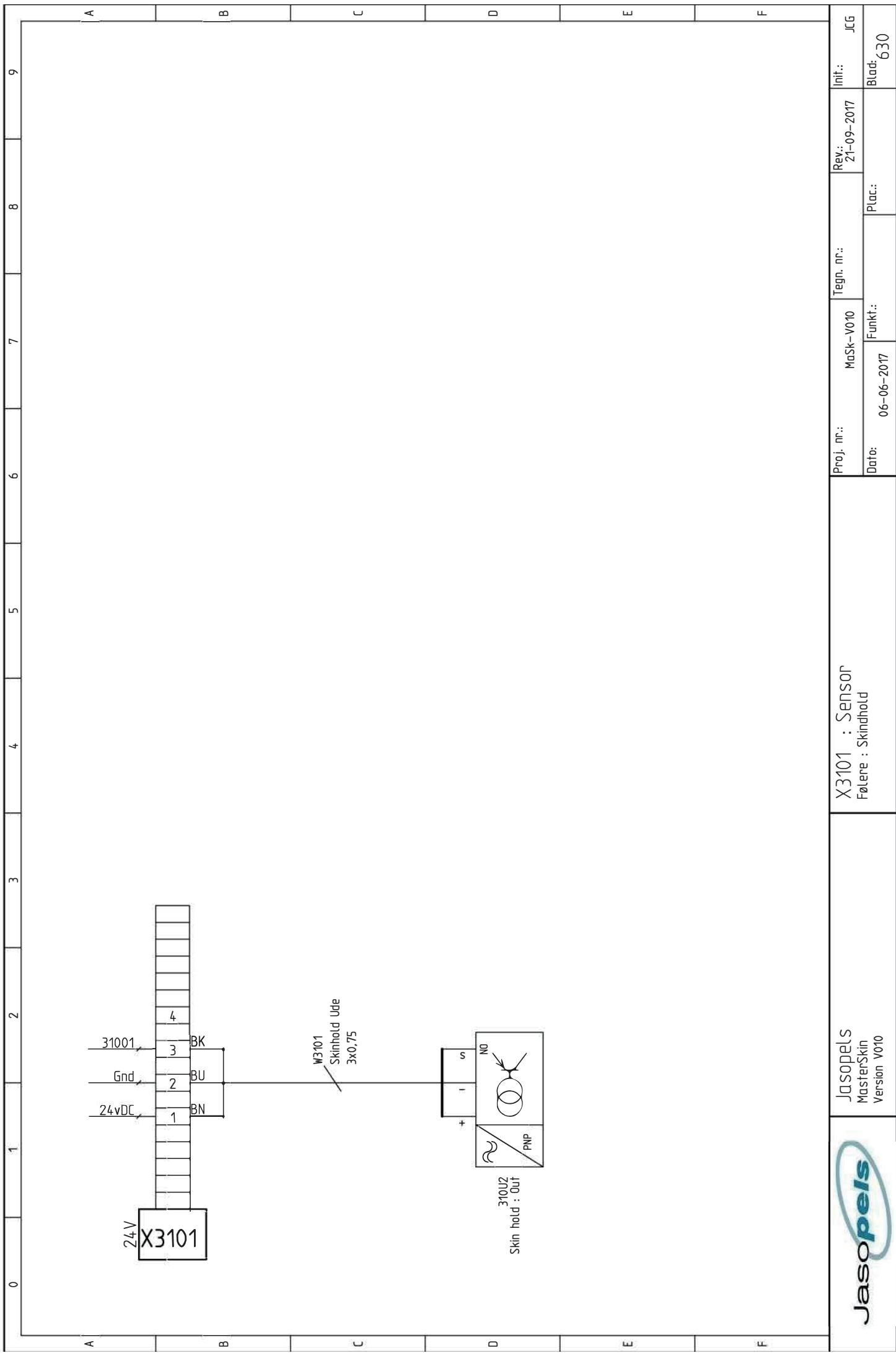


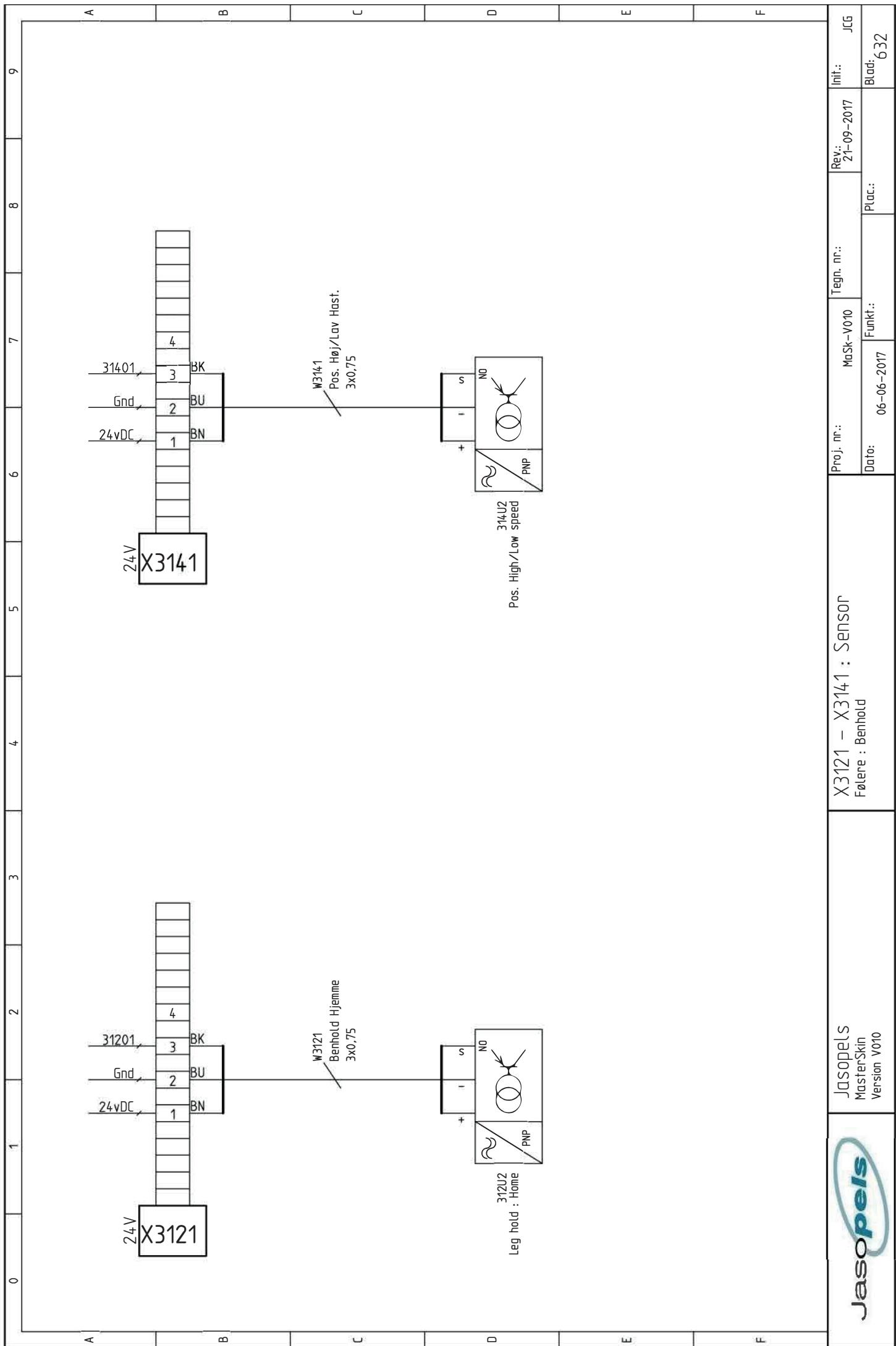


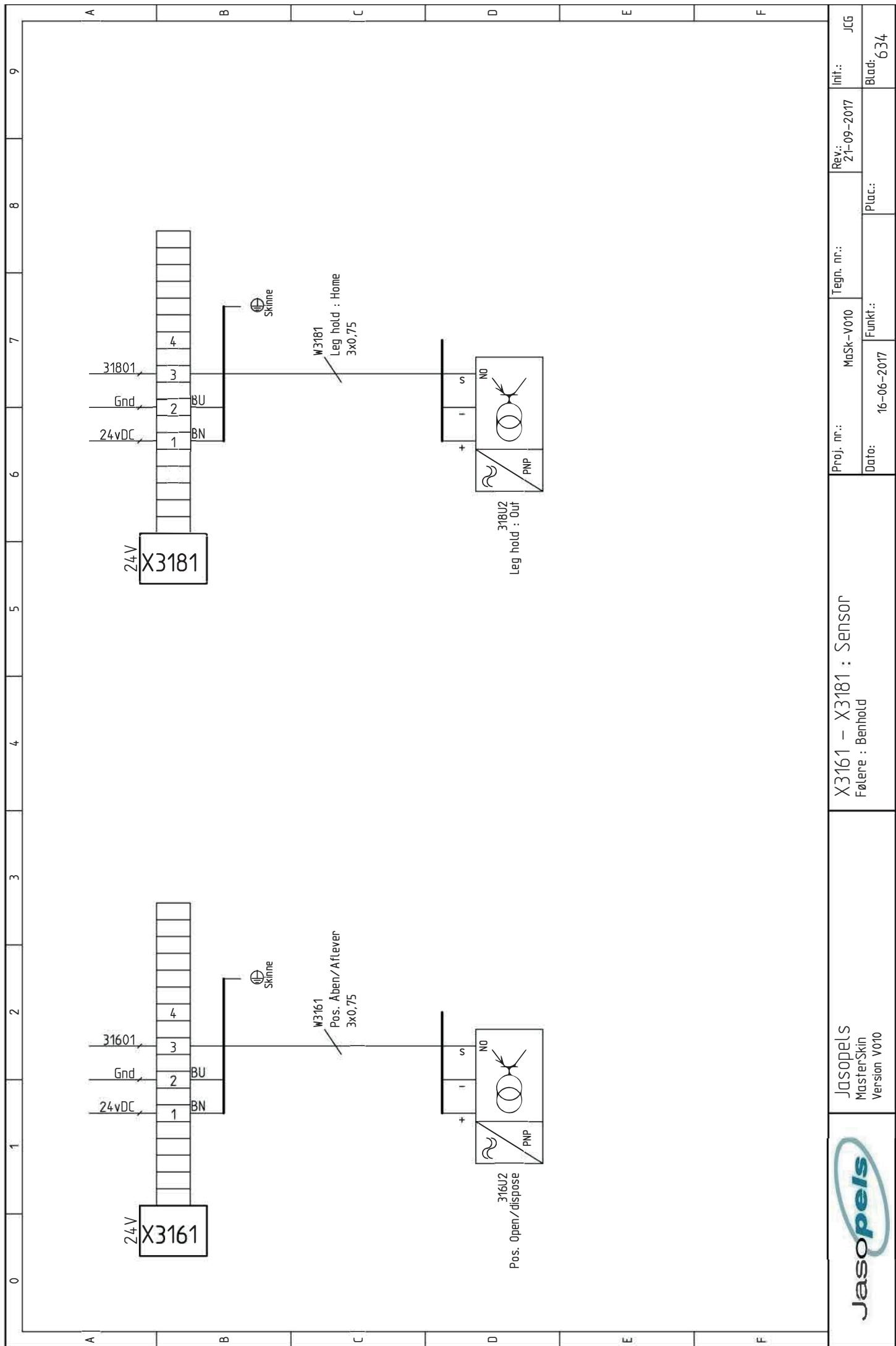












0	1	2	3	4	5	6	7	8	9
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A

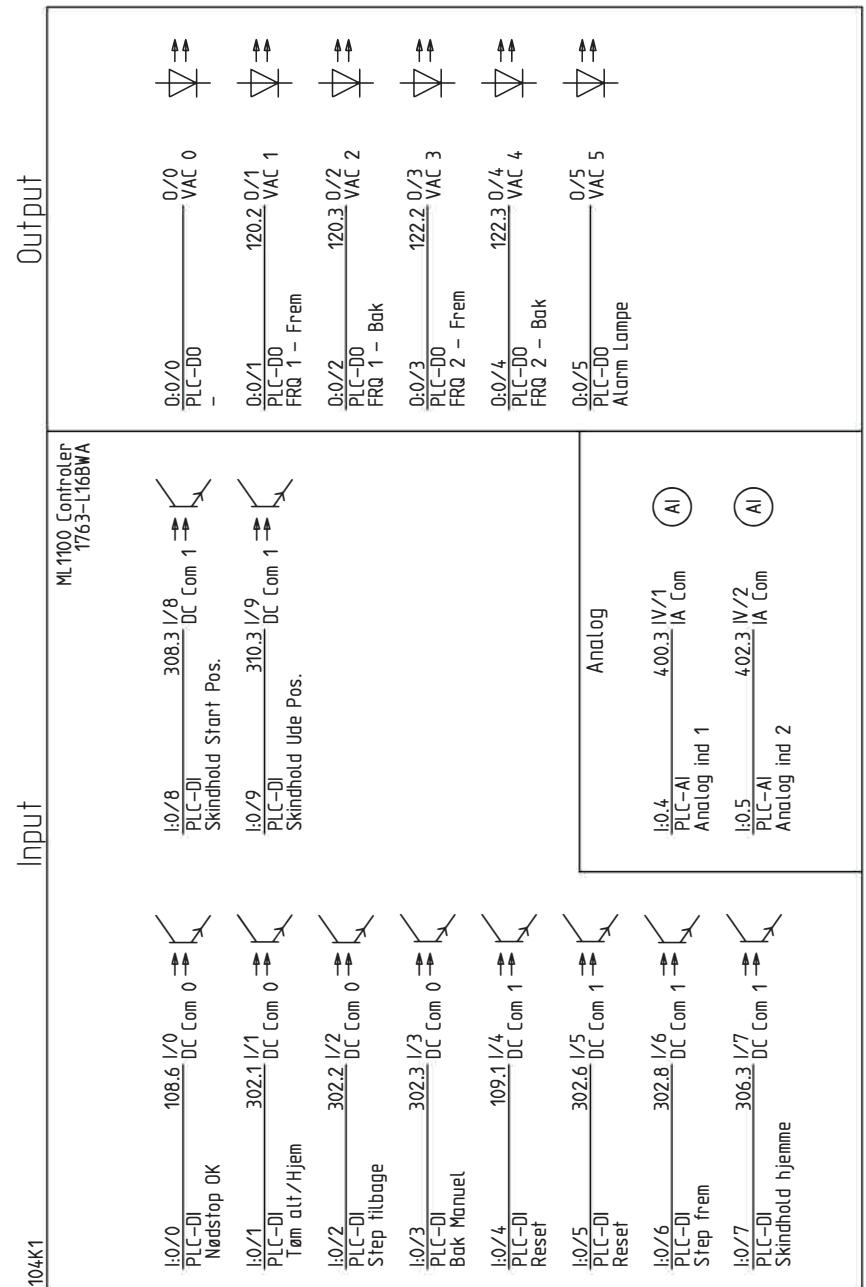
B

C

D

E

F



A

B

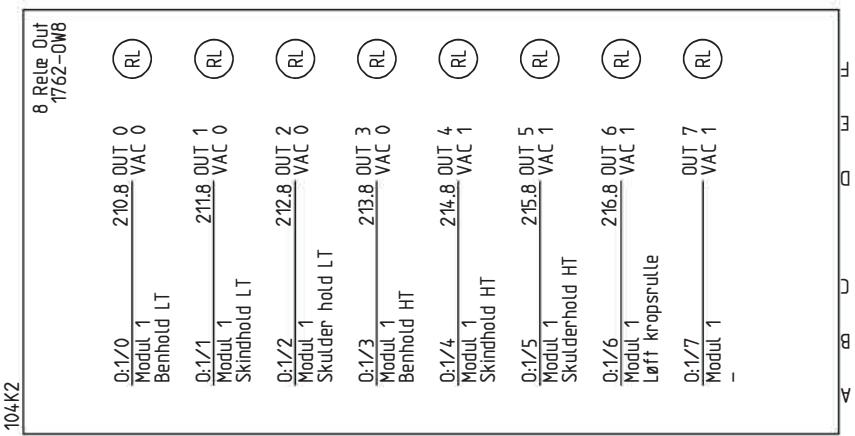
C

D

E

F

A	B	C	D	E	F											
0	1	2	3	4	5 6 7 8 9											
104K2	<table border="1"> <tr> <td colspan="3">Modul 1 – 8 relay Out</td> </tr> <tr> <td colspan="3">reference kart</td> </tr> <tr> <td>Proj. nr.:</td><td>MaSk-V010</td><td>Tegn. nr.:</td></tr> <tr> <td>Dato:</td><td>01-06-2017</td><td>Funkt.:</td></tr> <tr> <td></td><td></td><td>Plac.:</td></tr> </table> <p>Jasopels MasterSkin Version V010</p>	Modul 1 – 8 relay Out			reference kart			Proj. nr.:	MaSk-V010	Tegn. nr.:	Dato:	01-06-2017	Funkt.:			Plac.:
Modul 1 – 8 relay Out																
reference kart																
Proj. nr.:	MaSk-V010	Tegn. nr.:														
Dato:	01-06-2017	Funkt.:														
		Plac.:														



A	B	C	D	E	F																																																																												
0	1	2	3	4	5																																																																												
6	7	8	9																																																																														
104K3	<p>8 Digital Input 1762-Q8</p> <table border="0"> <tr> <td>I:2/0</td> <td>Modul 2</td> <td>312.3 In0</td> <td>Com</td> <td>(D)</td> </tr> <tr> <td>Benhold</td> <td>Hjemme</td> <td></td> <td></td> <td></td> </tr> <tr> <td>I:2/1</td> <td>Modul 2</td> <td>314.3 In1</td> <td>Com</td> <td>(D)</td> </tr> <tr> <td>Pos. Høj/Lav hast</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>I:2/2</td> <td>Modul 2</td> <td>316.3 In2</td> <td>Com</td> <td>(D)</td> </tr> <tr> <td>Pos. Åben/Aflever</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>I:2/3</td> <td>Modul 2</td> <td>318.3 In3</td> <td>Com</td> <td>(D)</td> </tr> <tr> <td>Benhold</td> <td>Pos. Ude</td> <td></td> <td></td> <td></td> </tr> <tr> <td>I:2/4</td> <td>Modul 2</td> <td>In4</td> <td>Com</td> <td>(D)</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>I:2/5</td> <td>Modul 2</td> <td>In5</td> <td>Com</td> <td>(D)</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>I:2/6</td> <td>Modul 2</td> <td>120.1 In6</td> <td>Com</td> <td>(D)</td> </tr> <tr> <td>FRQ 1</td> <td>Klar</td> <td></td> <td></td> <td></td> </tr> <tr> <td>I:2/7</td> <td>Modul 2</td> <td>122.1 In7</td> <td>Com</td> <td>(D)</td> </tr> <tr> <td>FRQ 2</td> <td>Klar</td> <td></td> <td></td> <td></td> </tr> </table>	I:2/0	Modul 2	312.3 In0	Com	(D)	Benhold	Hjemme				I:2/1	Modul 2	314.3 In1	Com	(D)	Pos. Høj/Lav hast					I:2/2	Modul 2	316.3 In2	Com	(D)	Pos. Åben/Aflever					I:2/3	Modul 2	318.3 In3	Com	(D)	Benhold	Pos. Ude				I:2/4	Modul 2	In4	Com	(D)						I:2/5	Modul 2	In5	Com	(D)						I:2/6	Modul 2	120.1 In6	Com	(D)	FRQ 1	Klar				I:2/7	Modul 2	122.1 In7	Com	(D)	FRQ 2	Klar			
I:2/0	Modul 2	312.3 In0	Com	(D)																																																																													
Benhold	Hjemme																																																																																
I:2/1	Modul 2	314.3 In1	Com	(D)																																																																													
Pos. Høj/Lav hast																																																																																	
I:2/2	Modul 2	316.3 In2	Com	(D)																																																																													
Pos. Åben/Aflever																																																																																	
I:2/3	Modul 2	318.3 In3	Com	(D)																																																																													
Benhold	Pos. Ude																																																																																
I:2/4	Modul 2	In4	Com	(D)																																																																													
I:2/5	Modul 2	In5	Com	(D)																																																																													
I:2/6	Modul 2	120.1 In6	Com	(D)																																																																													
FRQ 1	Klar																																																																																
I:2/7	Modul 2	122.1 In7	Com	(D)																																																																													
FRQ 2	Klar																																																																																
Jasopels	Jasopels MasterSkin version V010	Modul 2 – reference kort	8 digital In	Proj. nr.: MaSk-V010 Tegn. nr.: Funkt.: Plac.: Rev.: 21-09-2017 Init.: JG Blad: 1002	Date: 01-06-2017																																																																												

A	B	C	D	E	F
0	1	2	3	4	5
6	7	8	9		
104K3	<p>8 Digital Input 1762-Q8</p> <p>I:2/0 Modul 2 In0 Com Benhold Hjemme</p> <p>I:2/1 Modul 2 In1 Com Pos. Høj/Lav hast</p> <p>I:2/2 Modul 2 In2 Com Pos. Åben/Aflever</p> <p>I:2/3 Modul 2 In3 Com Benhold Pos. Ude</p> <p>I:2/4 Modul 2 In4 Com</p> <p>I:2/5 Modul 2 In5 Com</p> <p>I:2/6 Modul 2 In6 Com FRQ 1 Klar</p> <p>I:2/7 Modul 2 In7 Com FRQ 2 Klar</p>				
Jasopels	Jasopels MasterSkin version V010	Modul 2 – 8 digital In reference kart	Proj. nr.: MaSk-V010 Dato: 01-06-2017	Tegn. nr.: Funkt.: Plac.: Rev.: 21-09-2017	Init.: JG Blad: 1002

Produktliste

Placering (+)	Funktion (-)	Produkt (-)	Type	Type 2	Beskrivelse	Fabrikat	Blad	Stv.
104K1		104K1	1763-L16BWA		ML1100 Controller	Rockwell	2	2
104F1		1492-SP2L060		C6 2pol	Rockwell	2	3	
104K3		1762-IQ8		8 Digi Input		2	4	
104K2		1762-DN8		8 Relæ Out		2	4	
10S1		194E-E40-1753-6N		Main switch		10	1	
10F3		140M-C2E-B40	140M-C-AFA11	FRQ 1	Allen Bradley	10	3	
10F5		140M-C2E-B40	140M-C-AFA11	FRQ 2	Allen Bradley	10	5	
10F1		1492-SP2L060		C6 2pol	Rockwell	101	1	
10T6		1606-XLE80E		Power Supply	Allen Bradley	101	6	
10F7		1492-SPM1C040		C4 1pol		101	7	
104M1		1763-NC01		Cabel 485	Allen Bradley	104	1	
104K1		1763-L16BWA		ML1100 Controller	Rockwell	104	3	
104K3		1762-IQ8		8 Digi Input		104	4	
104K2		1762-DN8		8 Relæ Out		104	4	
108K1		440P-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	4	
108K5		100-C16EJ10		Emergency stop	Allen Bradley	108	5	
108S3		800FP-F611	800F-PX20	Reset	Allen Bradley	109	1	
108H8				Alarm		109	2	
120I8		22F-D4P2N13		PF4M,400V,1.5kW		120	3	
120R6		?		10kOhm		120	6	
122R6		22F-D4P2N13		PF4M,400V,1.5kW		122	6	
202Y8				Pduftter		202	8	
210Y8		Metal Works		Benhoid LT		210	8	
211Y8		Metal Works		Skindhold LT		211	8	
212Y8		Metal Works		Skulderhold LT		212	8	
213Y8		Metal Works		Benhoid HT		213	8	
214Y8		Metal Works		Skindhold HT		214	8	
 Jasopels MasterSkin Version v010				Proj. nr.: MaSk-v010	Tegn. nr.:	Init.:	Rev.:	Blad: 1
				Date: 24-06-2017	Funkt. Plac.:	Antal blade: 3	Neste blade: 3	

Produktliste

Placering (+)	Funktion (-)	Produkt (-)	Type	Type 2	Beskrivelse	Fabrikat	Blad	Stv.
	215Y8	Metal Works			Skulderhold HT		215	8
	216Y8	Metal Works			Left Kroppsrolle		216	8
	302S1	800FP-F6	800F-PX10		Empty/Home	Allen Bradley	302	1
	302S2	800FP-F4	800F-PX10		Step Back		302	2
	302S3	800FP-F2	800F-PX10		Back Manual		302	3
	302S6				Close Shoulder hold		302	6
	302S8				Step Forward		302	8
	306U2	Induktiv NO			Skin hold : Home		306	2
	308U2	Induktiv NO			Skin hold : Start Pos.		308	2
	310U2	Induktiv NO			Skin hold : Out		310	2
	312U2	Induktiv NO			Leg hold : Home		312	2
	314U2	Induktiv NO			Pos. High/Low speed		314	2
	316U2	Induktiv NO			Pos. Open/dispose		316	2
	318U2	Induktiv NO			Leg hold : Out		318	2
	400V1	1 Watt			Zener 10v		400	1
	400R2	?			10kOhm		400	2
	400R1	1 Watt			10k Ohm		400	2
	402V1	1 Watt			Zener 10v		402	1
	402R1	1 Watt			10k Ohm		402	2
	402R2	?			10kOhm		402	2
	108S1	800FP-MT44	800F-PX02		Emergency stop	Allen Bradley	618	1
	108S3	800FP-F611	800F-PX20		Reset	Allen Bradley	618	3
	108H8				Alarm		618	4
	202Y8	Metal Works			Pdaffer		620	1
	210Y8				Benhold LT		622	2
	211Y8	Metal Works			Skindhold LT		622	3
	212Y8	Metal Works			Skulderhold LT		622	4
	213Y8	Metal Works			Benhold HT		622	5
	214Y8	Metal Works			Skindhold HT		622	6
	215Y8	Metal Works			Skulderhold HT	Proj. nr.: MaSk-V010 Data: 24-06-2017	622	7
Jasopels MasterSkin Version V010				Tegn. nr.: Plac.:	Init.:	Rev.:	Blad: Antal blade: 3	Blad: Neste blade: 3



Jasopels A/S
Fabriksvej 19
7441 Bording
Tlf. 98 43 99 66

Tavle / Diagram nr. :	MRSK-V010 - GET0106
Mærke spænding :	400V / 50 Hz - L1,L2,L3,N,Pe
Mærke strøm :	6,5 Amp
Max. forsikring :	16 Amp gL
Ik max. :	10,0 kAmp
Ik min. :	0,06 kAmp
Dato :	21-09-2017
Norm :	EN60204-1 EN60439-1 m.f.

Mærkeplade på tavlen

Opmærkning ifølge EN60204-1 og EN60439-1

Leveradørens navn eller varemærke	Jasopels A/S
Produktions dato	21-09-2017
Certifikations mærke	
Serienummer	nr. :
Hoveddokument nummer	MRSK-V010 - GET0106
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	230V
Mærke impulsdelspænding (U_{imp})	6kV
Mærke strøm (I_n)	6,5 Amp
Max. Forsikring (I_{max})	16 Amp gL
Midnste forudsatte I_k ($I_{k_{min}}$)	0,06 kAmp
Mærkekortslutnings strøm ($I_{k_{max}}$) (Max I_{cc})	10,0 kAmp
Mærke korttidsstrøm (I_{cw})	målt $I_{k_{min}} > 0,09$ kAmp
Mærke stødstrøm (I_{pk})	
Mærke kortslutningsstrøm m. sikring (I_{cf})	
Max Specifik energi (Max I^2t)	29,756 kA ² t
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	400 x 600 x 200
Vægt	
Form for indre opdeling	Form 1
Typer af elektriske forbindelser af funktionsenheder	
EMC miliø (1 eller 2)	

NOTES



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Item no. 32100077



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