English

Stack 200

Instruction Manual

POMI Industri ApS

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1. Pomi Stack 200

Thank you for choosing the Stack 200 bale stacker from POMI for your straw and silage needs.

Using the bale stacker for any other purposes is subject to prior written permission from the manufacturer.

2. Safety instructions

FOR YOUR OWN SAFETY

- **Only carry out work on the machine when the tractor has been stopped and the emergency stop on the electric box has been activated.**
- **Do not allow unauthorized personnel within a distance of 10 m from the machine when it is in operation as the machine can make sudden movements and oil may squirt from a damaged hose.**
- **The lights must be functioning in accordance with national traffic regulations. It is the operator's responsibility to ensure that the lights meet current national legislation.**
- **Drive sensibly when using the bale stacker, as reckless driving will damage the trailer. POMI assumes no liability for any damage caused.**
- **Special care should be taken when setting the oil flow speed, as too much oil may cause the tractor to overheat and consequently damage the tractor. POMI assumes no liability for any such damage.**
- **Remember to re-tighten the wheel and the wheel axle**

3. EU DECLARATION OF CONFORMITY

Manufacturer: POMI Industri ApS
Abildvadvej 5, Thorup
DK-9610 Nørager
Tlf. +45 98 55 20 00
Company

Hereby declares that

The following machine: Stack 200 _____
Make type, serial no., year

has been manufactured in conformity with the provisions of Council Directive 2006/42/EEC of 17th May 2006 on the approximation of the laws of the Member States relating to machinery, with particular reference to its Annex II, A and Annex I on essential health and safety requirements for the design and construction of machinery.

The machine has been manufactured in conformity with the following national/international standards and technical specifications

DS/EN ISO 12100-1:2005	Safety of Machinery - Basic concepts and general principles for design - Part 1: Basic terminology and methodology.
DS/EN ISO 12100-2:2005	Safety of Machinery - Basic concepts and general principles for design - Part 2: Technical principles.
DS/EN ISO 13857:2008	Safety of Machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs.
Nr. 693	Executive Order of 10 June 2013 issued by the Danish National Working Environment Authority, Arbejdstilsynet. Executive Order on the Design of Technical Equipment.

Signature Date

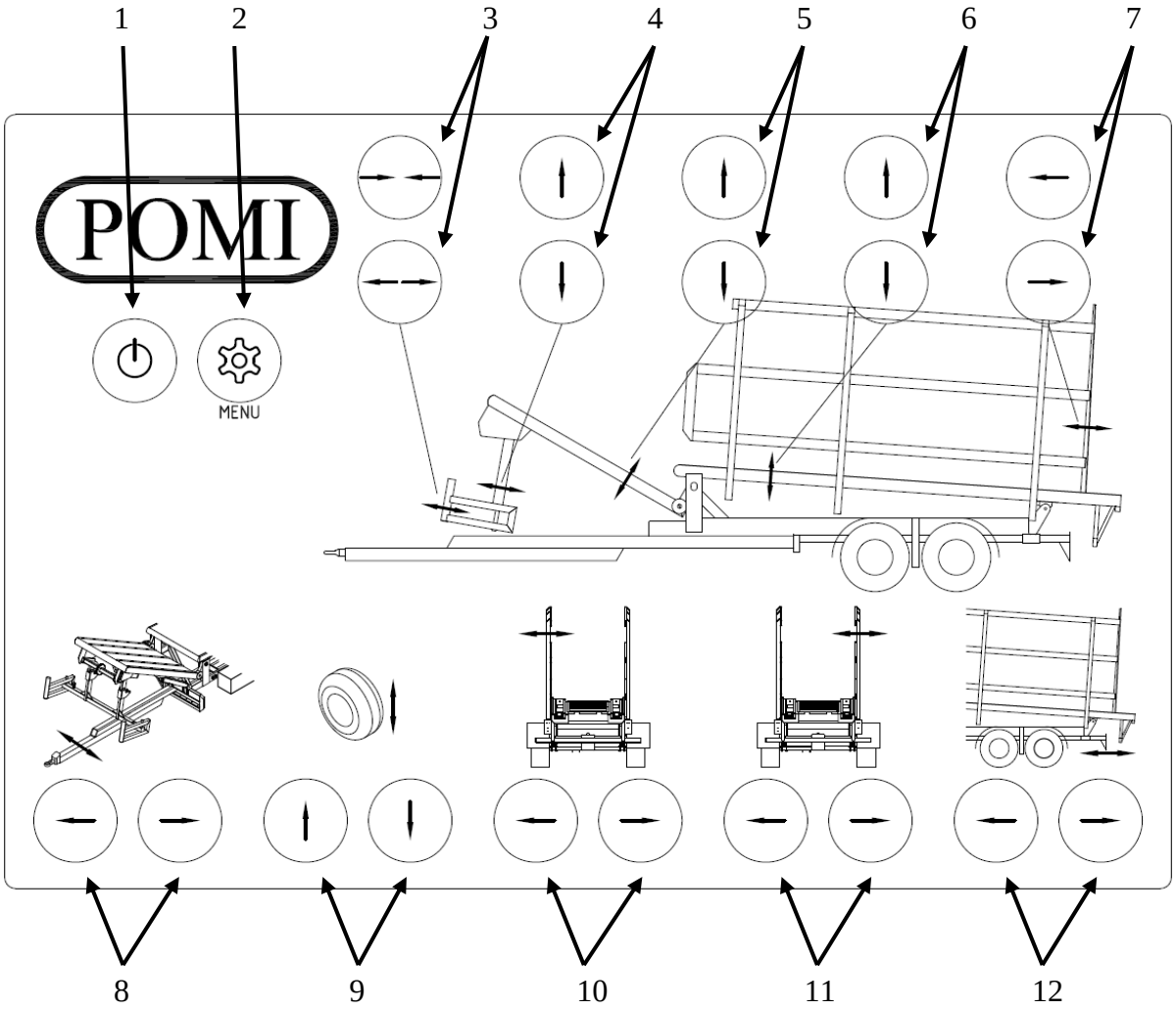
Poul Mikkelsen
Managing director
POMI Industri ApS

4. Machine identification

When ordering parts, please state the serial number of the machine. You will find the serial number on the left side of the machine, as shown in the picture below.

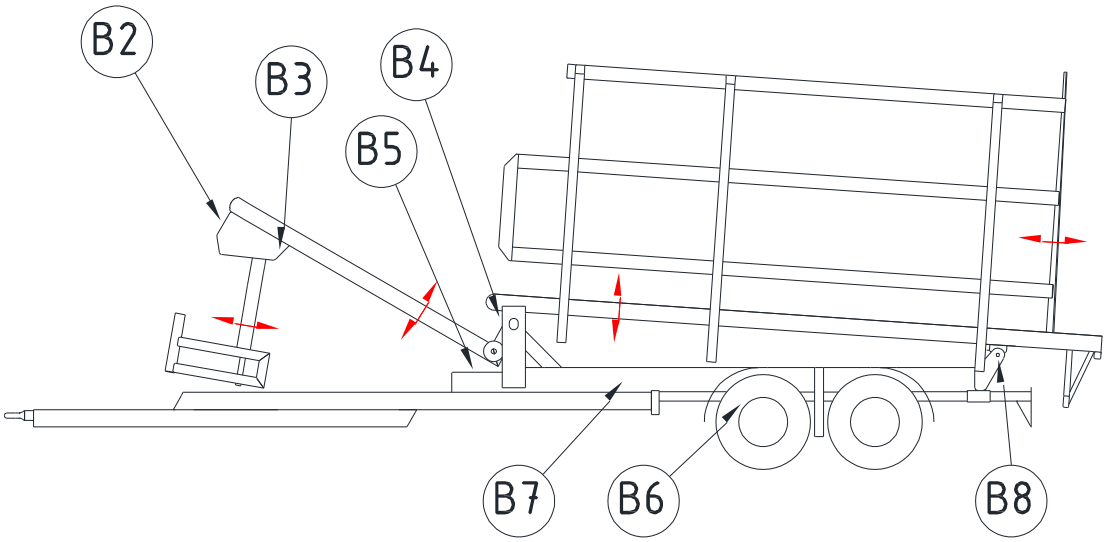
Serial no._____

5. Computer



1. Start/pause (the external button has the same function).
2. Menu
3. Bale clamp out/in
4. Tip the bale onto the loading platform.
5. Lift the loading platform up and down / tip the bales onto the trailer.
6. Tilt the trailer
7. Move the stacker forks forward/backwards depending on the amount of bales stacked on the trailer.
8. Move the drawbar to the right/the left.
9. Move the support wheel located in the front right corner up/down.
10. Move the left side in/out.
11. Move the right side in/out.
12. Bale push-off

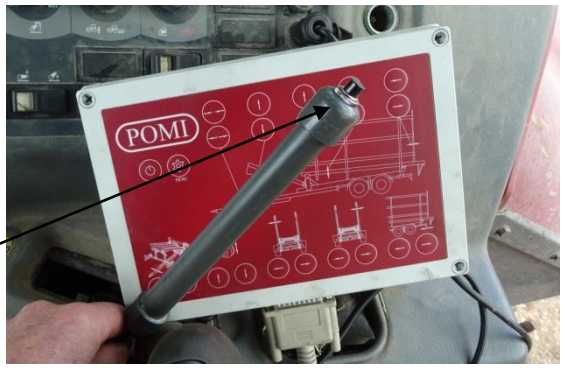
6. Sensor overview



This is an overview of the sensors on the Stack 200.

7. Bale stacker start-up

Use the start button to start and pause the loading program. Press this button to start automatic loading. The external button (1) has the same function.



Use the Menu to choose between the two loading programs. Choose the loading program where the bale clamp starts in the inner position or the other program where the bale clamp starts in the outer position. By pressing the start button when the bale clamp is in the inner position, the bale clamp comes out. You use this for turning the bale. When pressing the start button a second time, the loading program will start.

By pressing Menu, you can switch the program so the bale clamp starts in the outer position. Press the start button to start the loading program.

When the loading program starts, the bale clamp compresses the bale until reaching the compression pressure set in the PLC. The bale is then lifted upwards until sensor B2 is activated.

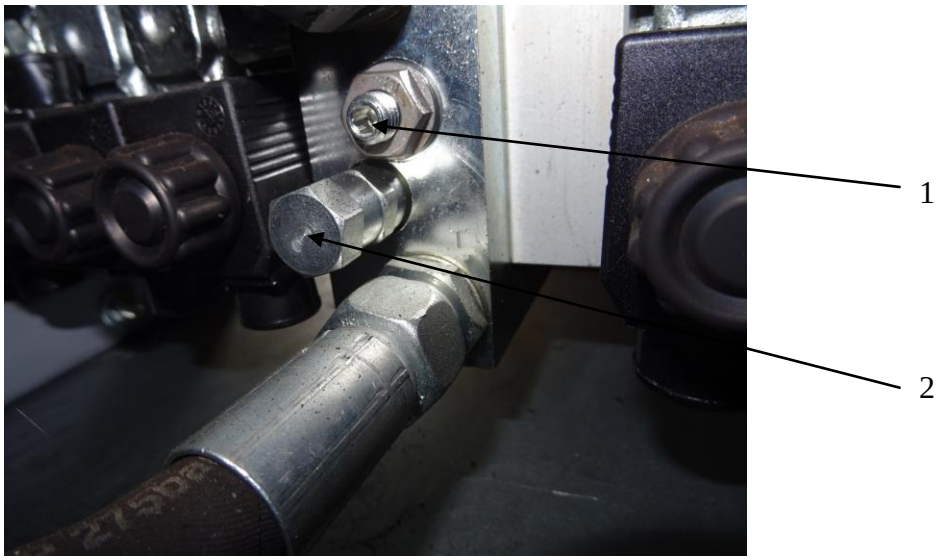
In this position the bale clamp releases the bale when the set pressure is reached. The fork yoke then moves downwards until sensor B3 is activated, and the trailer is ready to receive the next bale.

When the loading platform is full, it tilts upwards until sensor B4 is activated. It is then lowered until it reaches sensor B5. When the loading platform stops in the top position, the trailer is full. It is therefore important to enter in the PLC how many layers and stacks you want to load onto the trailer. See the section on the electric box.

The push-off mechanism cannot be used, if the trailer is not tipped upwards and sensor B8 is activated.
The push-off mechanism must be pulled in and sensor B6 must be activated before the trailer can be tilted up or down.

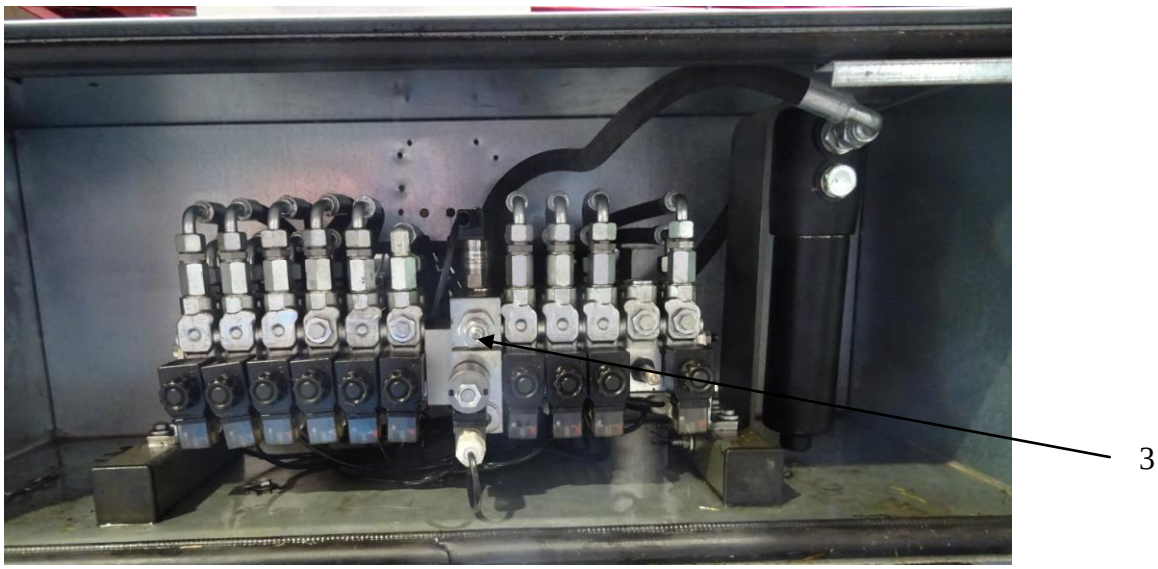
8. The hydraulic system

8.1. The trailer valve block



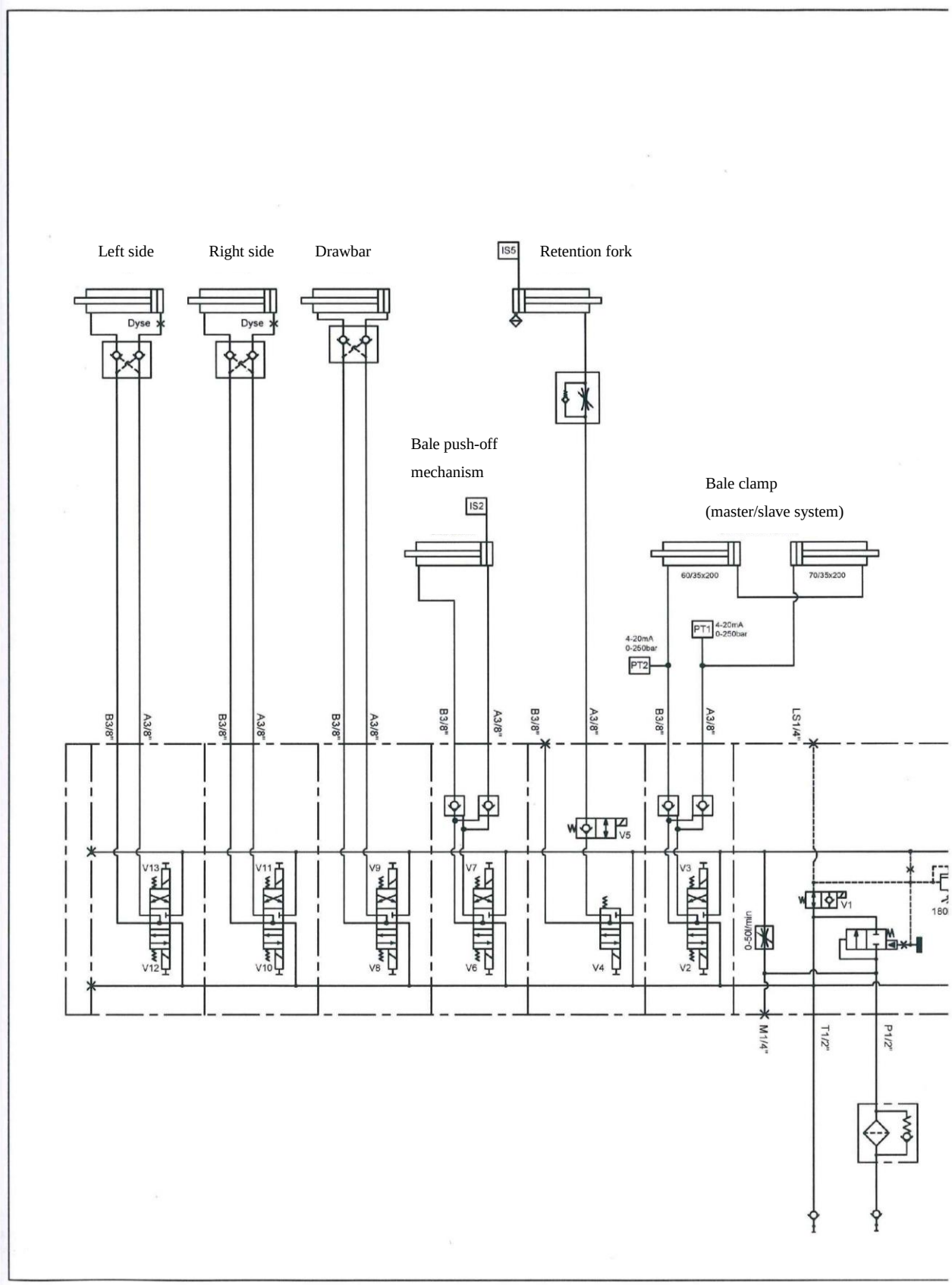
Use the hex screw (1) to adjust the oil flow when using a load sensing control system (LS). The pressure control valve (2) is set to 180 bars.

8.2. Valves in the control box/toolbox

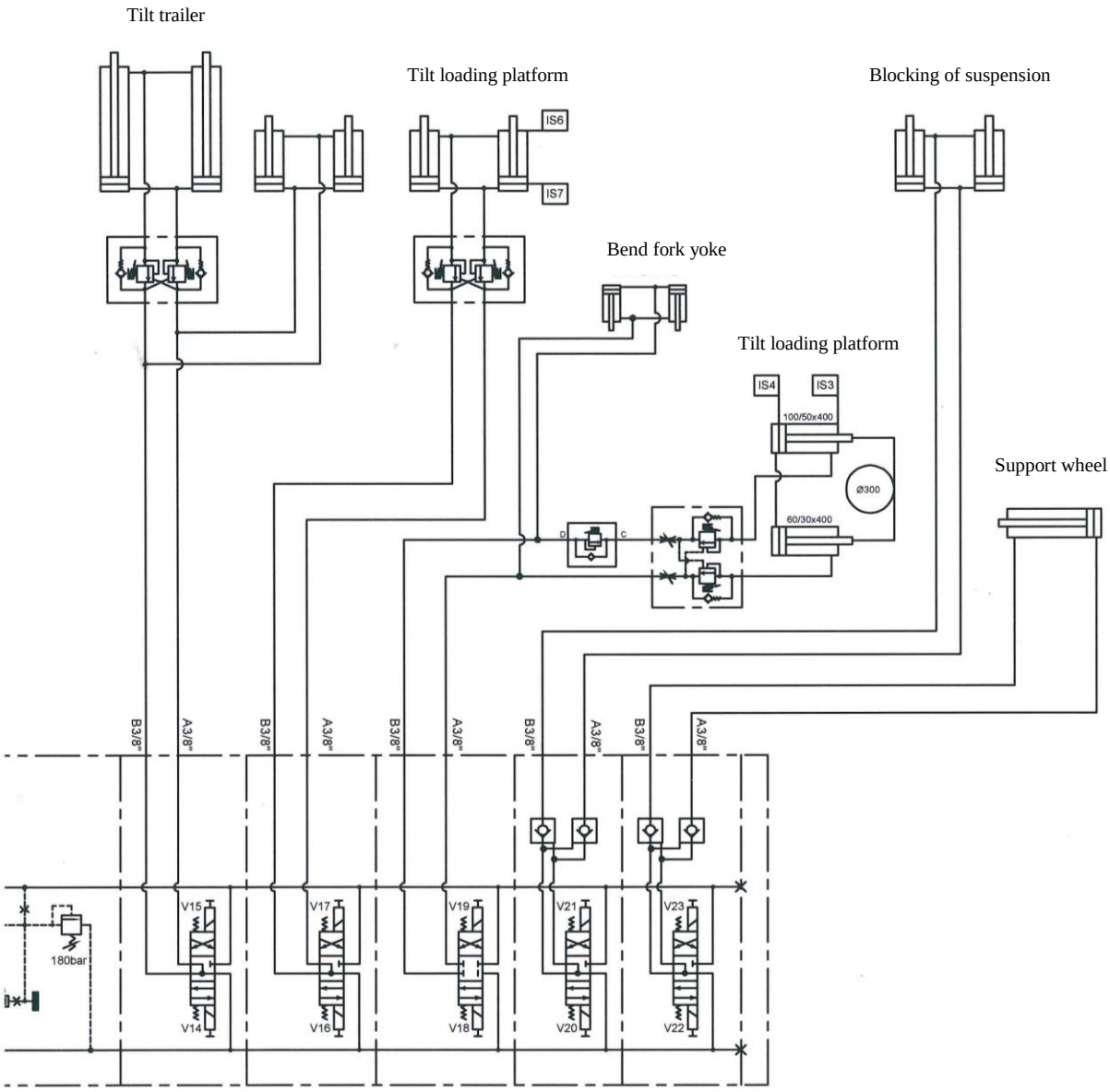


When using an LS control system, the hex screw (3) must tightened and when not using an LS control system (hydraulic circulation) it must be loosened.

8.3. Hydraulics diagram

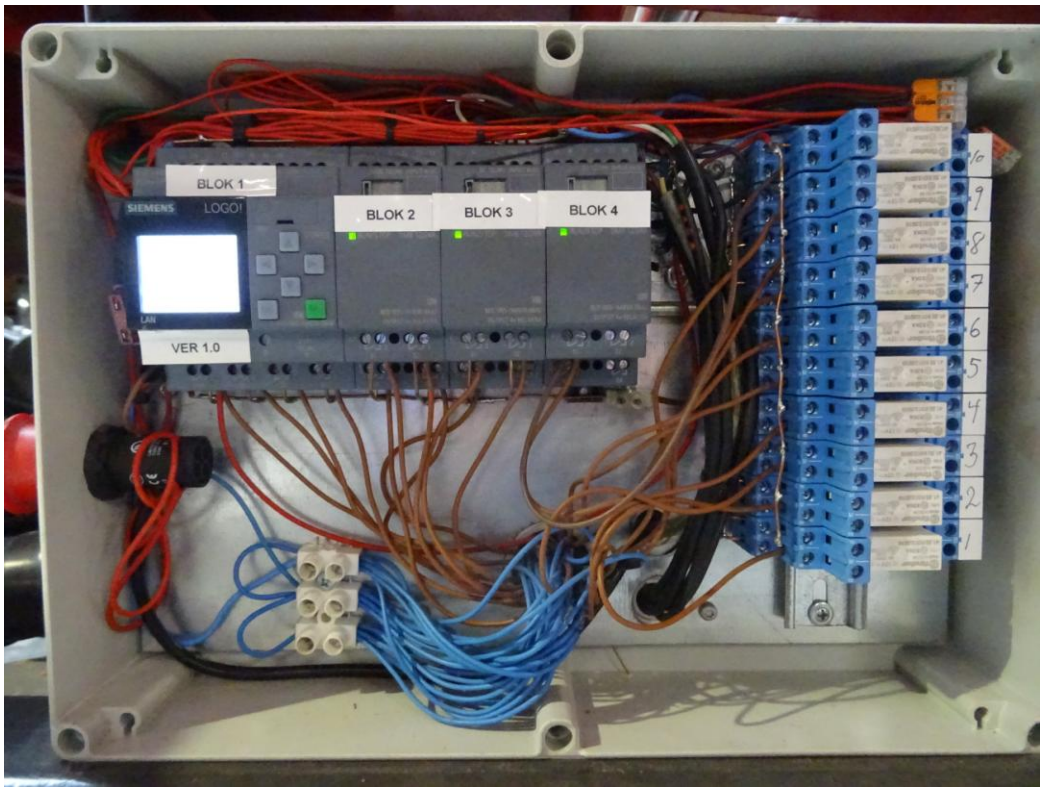


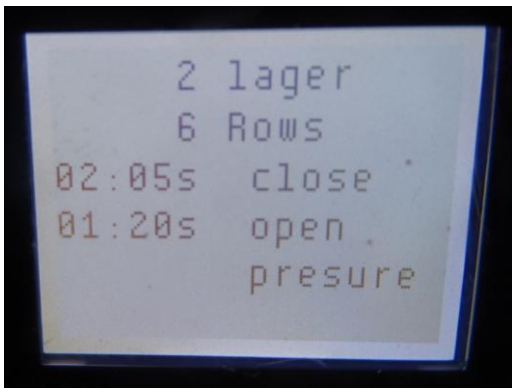
Rev.No.	Note:	Rev. Date	Signature	Checked



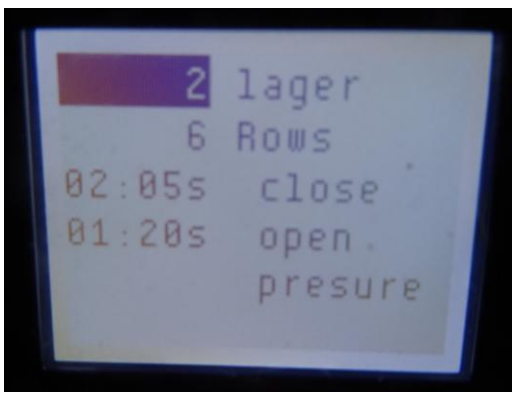
Application BM	Drawing BM	Approved	Drawing no. SQDK-28932	Date 3/12-2015	Scale
Dani-tech Denmark. ☎+45-76342300 +45-76342301 Sweden. ☎+46-46233060 +46-46233069 Nederland. ☎+31-715417704 +31-715419106		Description Komponenter for ballevogn			
		Item no.			Sheet 1/1

9. Electric box

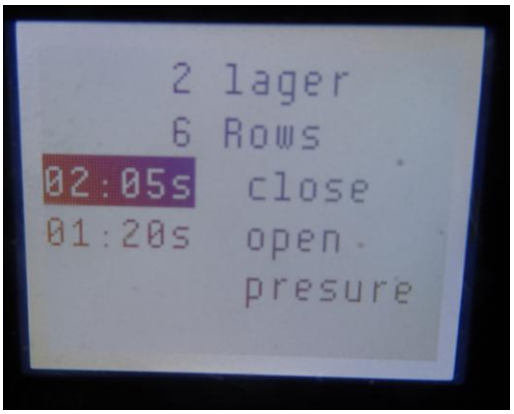




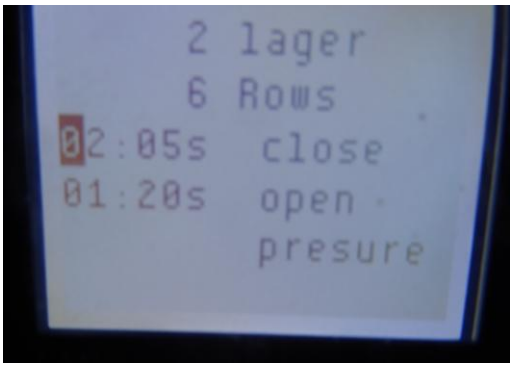
In the PLC on the electric box you set how many layers and stacks you want to load onto the trailer. Here you also set the closing and opening time for the bale clamp.

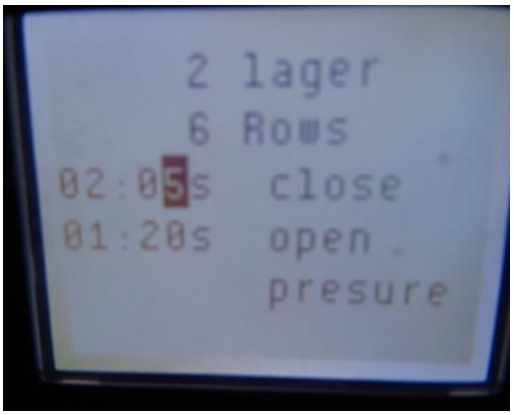


If you need to change any of the values, press and hold the ESC button until a row lights up.



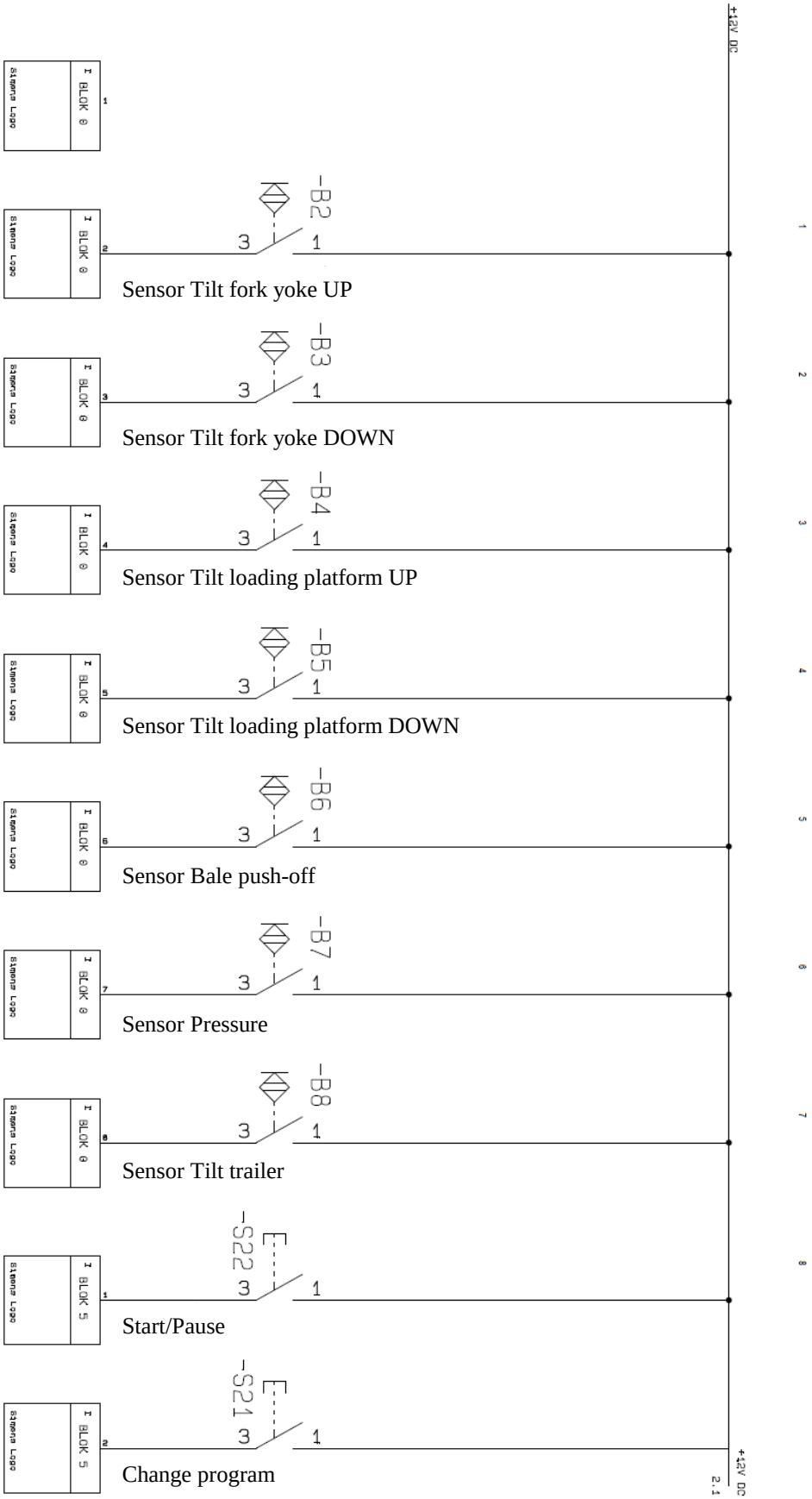
Then, using the up and down arrows, move to the row you want to change and press OK.

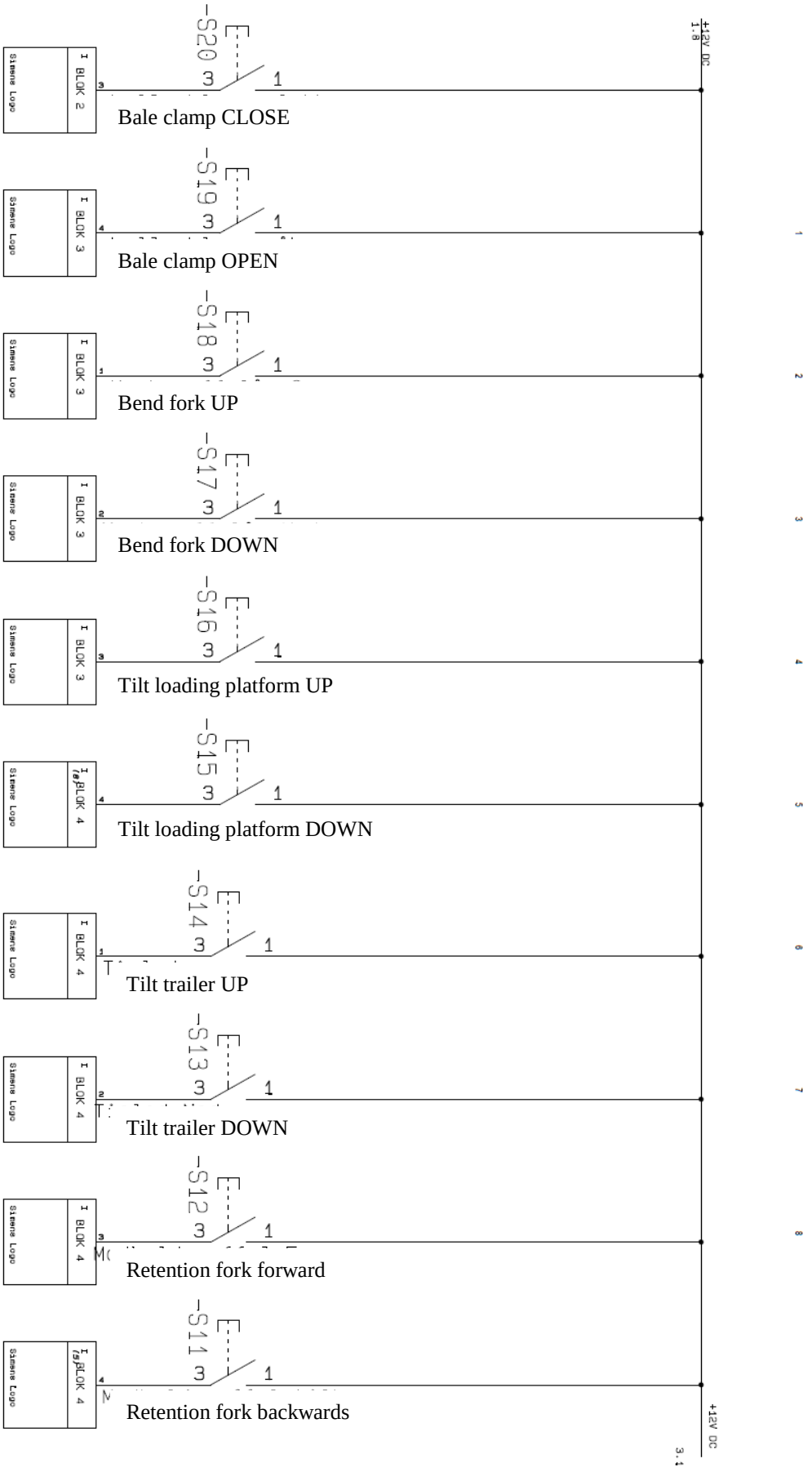


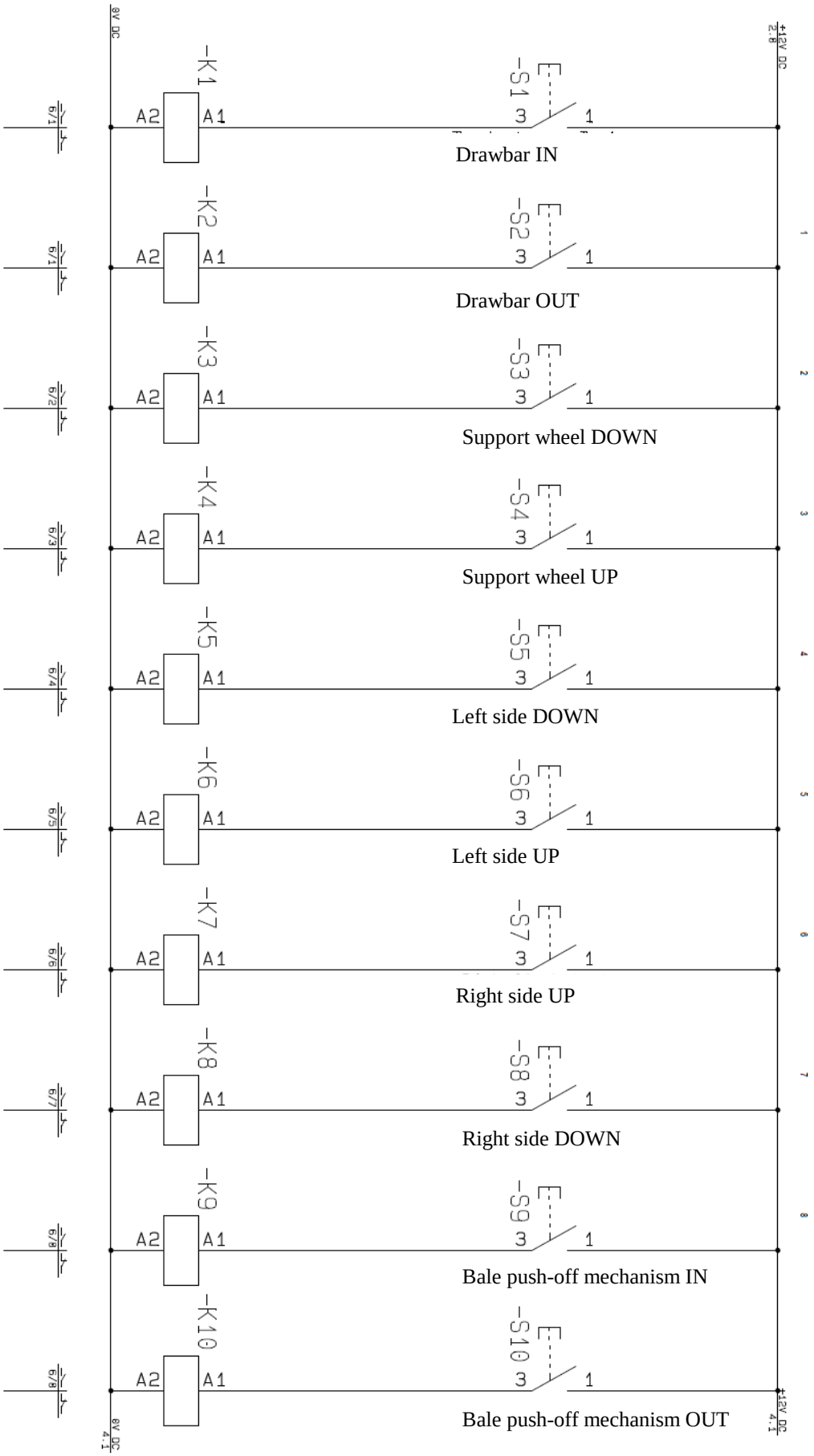


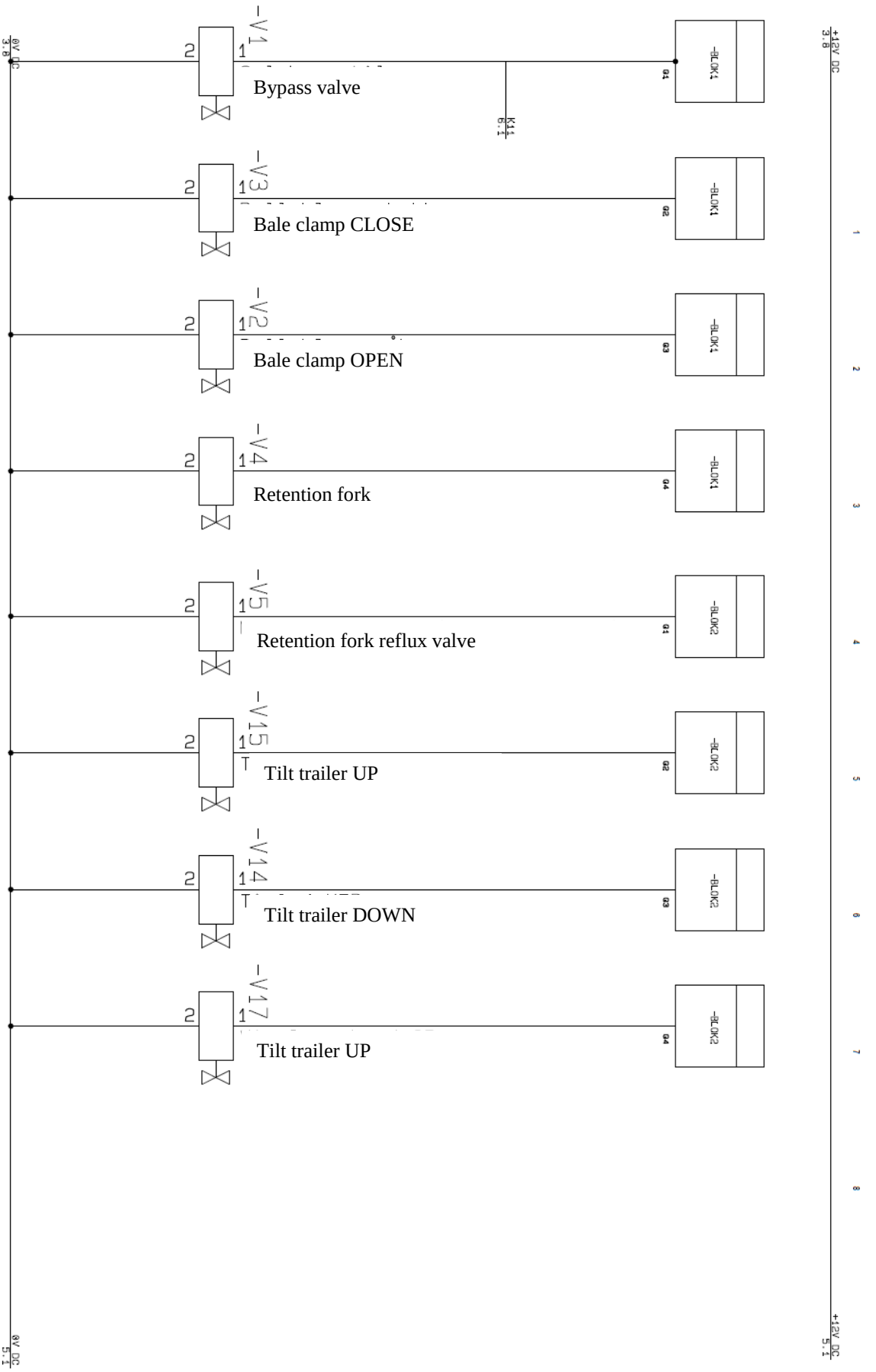
Then there is only one number marked where you can move the selection with the left/right arrows, and change the value with the up/down arrows. Press OK, and exit by pressing the ESC-button.

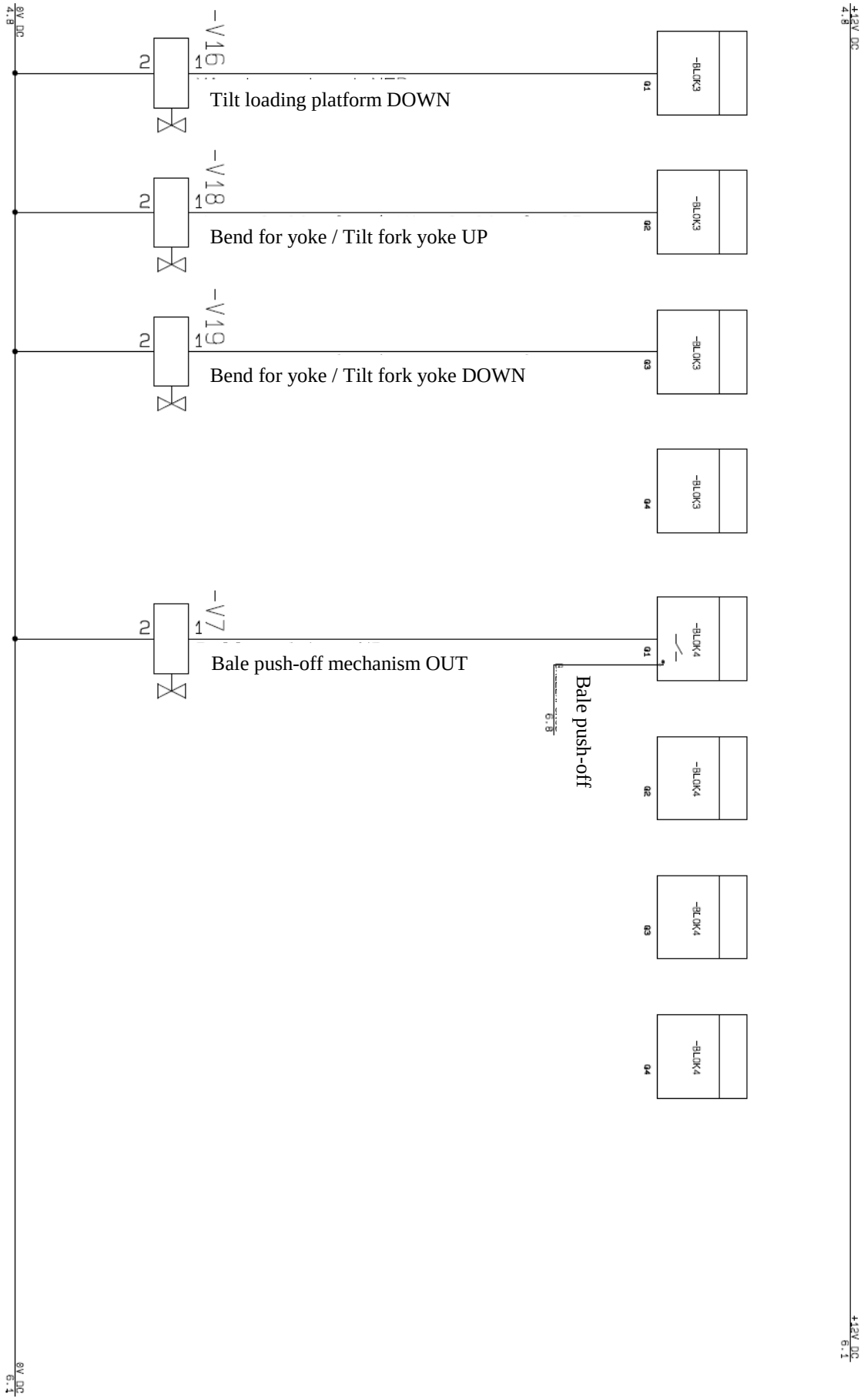
9.1. Wiring diagram

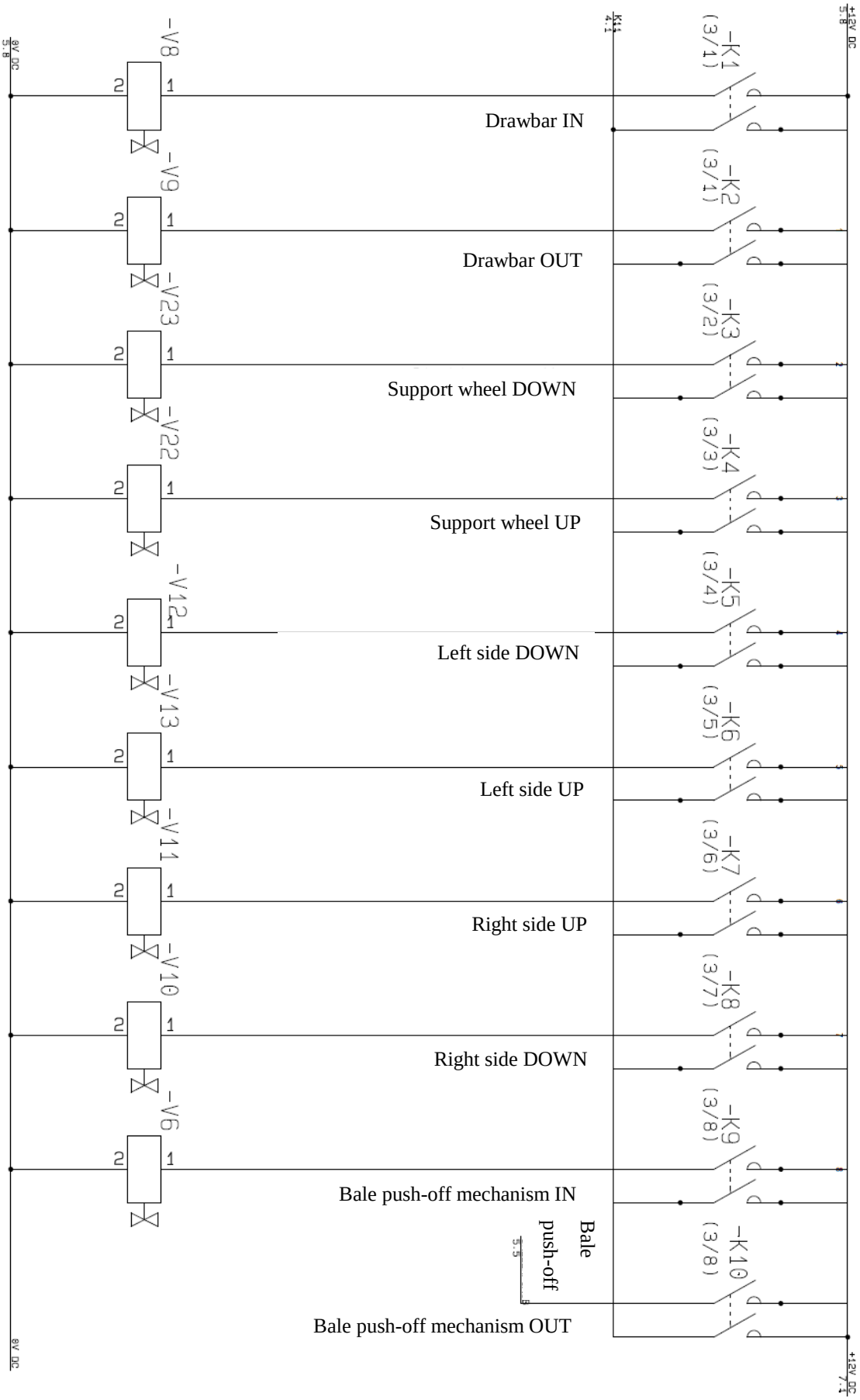


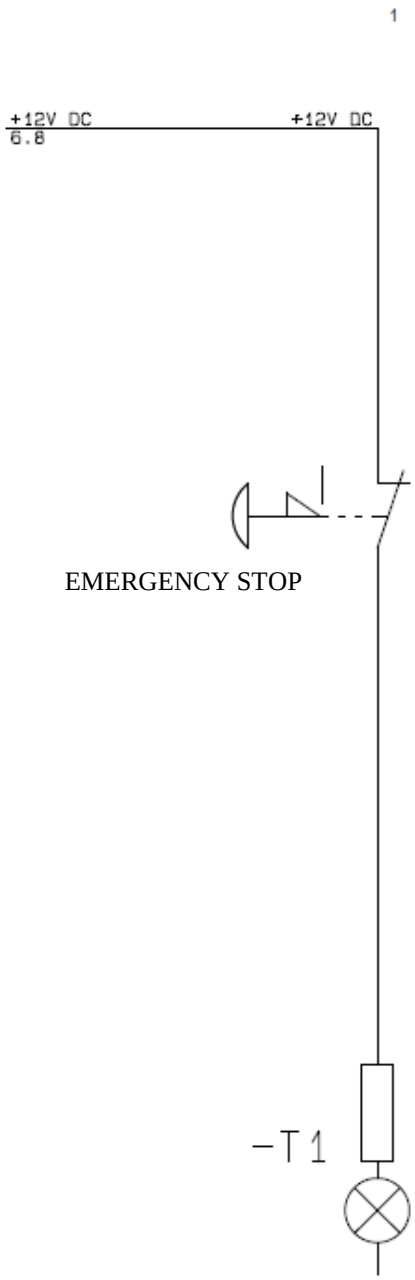

-S20
-S19
-S18
-S17
-S16
-S15
-S14
-S13
-S12
-S11
Bale clamp CLOSE
Bale clamp OPEN
Bend fork UP
Bend fork DOWN
Tilt loading platform UP
Tilt loading platform DOWN
Tilt trailer UP
Tilt trailer DOWN
Retention fork forward
Retention fork backwards
+12V DC
Siemens Logo


8V DC
+12V DC
-K1
-S1
A2
A1
3
1
Drawbar IN
-K2
-S2
Drawbar OUT
-K3
-S3
Support wheel DOWN
-K4
-S4
Support wheel UP
-K5
-S5
Left side DOWN
-K6
-S6
Left side UP
-K7
-S7
Right side UP
-K8
-S8
Right side DOWN
-K9
-S9
Bale push-off mechanism IN
-K10
-S10
Bale push-off mechanism OUT


-V1
Bypass valve
-V3
Bale clamp CLOSE
-V2
Bale clamp OPEN
-V4
Retention fork
-V5
Retention fork reflux valve
-V15
Tilt trailer UP
-V14
Tilt trailer DOWN
-V17
Tilt trailer UP
-BLOK1
-BLOK2
+12V DC
0V DC


8V DC
4.8
+12V DC
4.8
-V16
Tilt loading platform DOWN
-V18
Bend for yoke / Tilt fork yoke UP
-V19
Bend for yoke / Tilt fork yoke DOWN
-V7
Bale push-off mechanism OUT
Bale push-off
6.8
-BLOK3
-BLOK4
8V DC
6.1
+12V DC
6.1


-V8
-V9
-V23
-V22
-V12
-V13
-V11
-V10
-V6
-K1 (3/1)
-K2 (3/1)
-K3 (3/2)
-K4 (3/3)
-K5 (3/4)
-K6 (3/5)
-K7 (3/6)
-K8 (3/7)
-K9 (3/8)
-K10 (3/8)
Drawbar IN
Drawbar OUT
Support wheel DOWN
Support wheel UP
Left side DOWN
Left side UP
Right side UP
Right side DOWN
Bale push-off mechanism IN
Bale push-off
Bale push-off mechanism OUT
+12V DC
8V DC


1
2
+12V DC
6.8
+12V DC
EMERGENCY STOP
-T1

1. Technical specifications

Max. hydraulic operating pressure	180 bars
Power	12 V
Transport width	2.5 meters
Operating width	2.7 meters
Height	3.9 meters (4.15 meters)
Length	9.10 meters
Weight	6000 kg
Max. Load	8000 kg
Wheels	4, 400/60-15.5
Noise level	Below 70 dB