Entsorgungstechnik

Operating Instructions

Masch.-Type: **RB 30 S**

Customer: _____

Briquetting Press Type RB

REINBOLD
Entsorgungstechnik GmbH
Gottlieb-Daimlerstr. 13
D – 75050 Gemmingen
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Stand 11.01.2007
englisch

Contents

Briquetting Press

Standard and special accessories

Scope of delivery:

- incl. Hydraulic, Motor
- incl. control cabinet with all operating elements
- incl. Hydraulicoil

Special accessories:

- **Connection for transport pipe**
- **Central greasing system**
- **Oi heating**
- **Saftey switch for oiltemperature**

TECHNICAL DATA

Machine type:	RB 30 S
Machine number:	910-
Year of construction:	12.2006

Type	RB 30 S
Briquett - ∅	50 mm
Output	30 - 50 kg/h
Operating voltage:	400 V, 3 Ph, 50Hz
Motor output	5,5 kW
current consumtion	approx.15 A
Fuse:	16 A
min. cable diameter until 10 m lenght:	6 mm²
Weight:	500 kg
Length:	2030 mm
Width:	1320 mm

Conformity declaration

We hereby declare that the design of the briquetting press

Type: **RB 30 S**

Machine-No.: **910-**

complies accordingly with the following regulations:

EG - Machine directive in the version of	93/68/EWG	i.d.F. 93/68/EWG
EG - Low voltage directive	73/23/EWG	i.d.F. 93/68/EWG
EG - EMC directive	89/336/EWG	i.d.F. 93/68/EWG

This declaration refers to the machine aforesaid in brand-new condition at the time of shipment ex works. It will be rendered invalid by any modification of the machine that was not authorized by us.

Applicable corresponding standards, in particular:

- EN 12100-1
- EN 12100-2
- EN 294
- EN 349
- EN 418
- EN 626
- EN 954-1
- EN 982
- EN 1088
- EN ISO 3746
- EN ISO 11202
- EN 60204-1

Applied European draft standards:

Applied national standards and technical specifications

VBG* 7j, ZH 1/3.12

*Regulations issued by German professional associations

This conformity has been certified by an EC design inspection in compliance with § 3 para. 4 GSG (Appliance Safety Code).

Gemmingen, 22.12.2006

H.Grimm
Geschäftsführer

Normal operation

The briquetting press has been designed exclusively for compressing wood and similar materials e.g. plastics, cardboard etc.

Normal operation also includes compliance with the operating instructions.

The machine may only be operated, serviced and repaired by trained and authorized persons.

The appropriate accident prevention regulations, as well as general safety regulations, must be observed (see section 6/1 Safety Instructions as well).

The briquetting press may only be used with original accessories and original tools.

Any other usage is deemed to be improper operation. The manufacturer accepts no liability for any damage occurring as a result. The operator alone is responsible for risks incurred.

Guarantee and liability

Our "General Terms of Sale and Delivery" apply under all circumstances. The operator has had access to these since the agreement was reached. Guarantee and liability claims for damage to people and property are excluded if they are the result of one or more of the following causes:

- incorrect (non-contractual) use of the machine
- incorrect installation, start-up, operation or maintenance of the machine
- failure to observe the operating instructions
- unauthorised constructional changes to the machine
- unauthorised changes to programmes which have an influence on the machine's control system
- inadequate monitoring of machine parts that are subject to wear
- repairs that have been carried out incorrectly
- catastrophes caused by force majeure
- effects caused by foreign bodies, e.g. stones, metal parts etc.
- function of the briquetting press when set-up outdoors (room at pleasant temperature necessary)
- changing materials or insufficient or excessive material moistness (this also prevents constant briquette quality and length from being achieved)

A good briquette quality is only possible if the moistness of the material being pressed is not less than 8 % and not more than 20 % (depending on the material being used).

Description of precautions to be taken to avert danger

Source of danger:	Safety precautions:
Feed mechanisms	Stirrer: Hand feeding - adhere to distances prescribed in EN 294. Low-mounted machine - close off area in suitable manner. Arrange the inspection flap in such a way that nobody can come close to the danger points in the worm drive. The carriers in the stirrer are flexibly mounted and do not give rise to danger. See operating instructions. Press area - provide with appropriate cladding and only ever open using tools. (No regular intervention is necessary.)
Work-pieces	Press channel extensions: enclosed construction with no danger points.
Drives	Stirrer drive Hydraulic drive: - closed systems
Press claw lift	The press claw lift is no greater than 10 mm. At the end-position, a minimum distance of > 25 mm has been provided as required by EN 349, and there are no sharp edges.

Source of danger:	Safety precautions:
Noise	The emission levels have been established. They lie within the range of the latest noise reduction technology standards. See "Noise emission" section.
Sawdust	The emission levels have been established. The present applicable limits for sawdust will not be exceeded if operating according to specifications. See details and operating instructions in section "Extractor connection" in this respect.
Electricity	The electrical equipment complies with the requirements of EN 60 204-1. The input terminals which are live after switching off the mains switch, are covered and marked with a lightning bolt.

Residual risks

The machine has been constructed according to latest technological standards and recognized safety regulations.

Nevertheless, individual residual risks can occur:

- live parts are touched when the control cabinet is open;

- dust of a kind which is a health hazard is released during repair work in the silo or when chips are being fed in by hand;

- the press claws rise while being adjusted;

- persons come too close to the stirrer in the intermediate silo or the briquette outlet (and risk being sliced or squashed)
  leaks arise in the hydraulic hoses or fittings.

Residual risks can be minimized by observing the safety instructions.

General safety instructions

1. Repair and maintenance work, e.g. on the hydraulic systems, anywhere near the chip feed, in the intermediate silo, or on the electrical system, must not be carried out until the master switch has first been switched off and secured against being switched on again, or alternatively the machine has been unplugged from the mains.

2. The machine must never be operated if the covers have been removed from the press or fill cylinders or from the stirrer unit.

3. If in any exceptional circumstances chips are being fed in by hand, or if repair work is being carried out on the silo, the personnel involved should wear particle-protection masks of protection grade P2, or alternatively dust and chips should first be removed by vacuum extraction.

4. The service life of the hydraulic hoses is not infinitely long. A visual inspection should therefore be carried out at least once a year **by a qualified technician**.

   Any signs of scuffing, cuts, cracks, brittle areas, or discoloration indicate possible dangers to workers' safety. The affected hoses should be replaced.

   The hose fittings should likewise be inspected visually at regular intervals. Any leaks that cannot be rectified by tightening the nuts, deformations, or layers of corrosion are signs that the fittings need to be replaced.

   Press must be let off the hydraulic system whenever work is being done on it. (Switch the machine off.)

Transport and installation

Transport

RB: A wooden frame is bolted on underneath the press frame and feet in case the machine is to be transported with lifting gear or a fork-lift truck. This should be removed prior to installation.
Caution: Take care not to damage the stirrer drive when running lifting forks in underneath the machine.

RB30S (C): The machine is to be transported with lifting gear or a fork-lift truck.
Caution: Take care not to damage the press cylinder when running lifting forks in underneath the machine.

Installation

Set the briquette press up on a level floor and ensure that it is standing horizontally. Sufficient room should be available around it for maintenance and any repair work.

If local conditions make it impossible to set the press up in a temperature-controlled room, a detailed discussion should be held with the manufacturer.

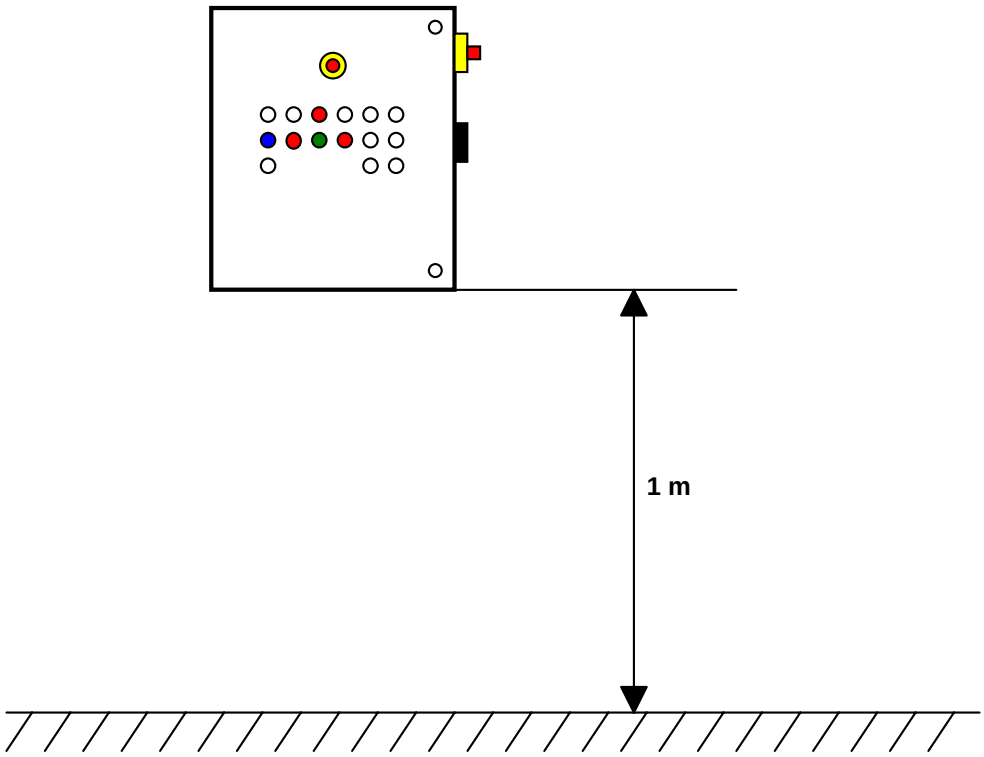
The inspection opening (special accessory) on the intermediate tank delivered with the machine should be arranged in such a way that nobody can come near the danger points in the worm drive. If any changes are made to the silo, or if different silos are used, any inspection traps should be closed by means of position-switches which open them automatically.

Terminals for external connections have been provided in the control unit.

Electrical connection

Caution: The electrical connection of the machine may only be carried out by a local electrician.

Important: If the switchbox is not attached to the machine, attention must be paid that installation is such that the distance between the switchbox and the machine does not exceed approx. 5 m and that the lower edge of the switchbox is at least 1 m above the floor. The connecting cables between switchbox and machine are to be protected against damage (cable duct, protective sleeve).



If the switchbox cannot be installed according to these criteria, an additional emergency OFF button must be located on the machine or within reach (see special accessories).

Dust emissions

The machine will keep well below the TRK value for sawdust (2 mg / cubic metre) in all operating conditions.

- This press is not categorised as a wood-cutting machine.

- It is not usually expected that briquette presses connected to a chip feed from an enclosed storage system will cause any significant emissions of sawdust. Measurements carried out by the expert committee for the wood-working industry have confirmed this statement.

Noise emission

The figures quoted here are emission values and therefore do not necessarily represent workplace values. As there is no correlation between emission values and workplace values, these cannot be used reliably to establish whether any further measures are necessary. Factors which could influence workplace values include duration of exposure, characteristics of the workshop, other noise sources, the number of machines and other neighbouring influences. Reliable workplace values, therefore, can vary from country to country. This information, however, should enable the operator to be able to make a better estimate of dangers and risks.

Measurements to EN 31 202 with CENTL 142 supplement in connection with ISO 7960 for workplace-related emission value L_{pA} = 70 dB work noise.

The measurement uncertainty constant K is 4 dB (A).

The sound power level measured to EN 23746 with CEN-TC 142 supplement is L_{WA} = 87 dB work noise.

The measurement uncertainty constant K is 4 dB (A).

The following supplements from CEN-TC 142 were taken into account in order to obtain an accuracy class of better than 3 dB:

- The ambient correction factors K_{2A} and K_{3A} are µ 4 dB
- The difference between background noise level and noise sound pressure level at every measuring point is · 6 dB
- K_{3A} is calculated according to appendix A, prEN 31204
- A pararellepipidal enveloping surface with 9 measuring points at distances of 1.0 m from the reference surface is used.

Machine-related settings:

Through-put capacity 30 to 50 kg / hour.

Microphone position for workplace-related emission measurement:

1.5 metres above the floor, and 0.5 metres away from the briquette outlet.

Care and maintenance

- Every 50 operating hours:
  Check oil level.

- After the first 50 operating hours:
  Tighten the screw fittings on the hydraulic hoses and
  the blank screws on the hydraulic block.

- After 200 operating hours:
  Clean the filling shaft of escaping material (if no vacuum extraction is available in this area).

- Every 500 operating hours:
  Clean all swarf from the tube connector and the transportation tube (vacuum extraction is best!)

- Every 2000 operating hours or 2 years:
  A complete overhaul is advisable.

It is also advisable to check the pressings at pre-set intervals.

Chips and dust should be cleaned away with vacuum extraction, and not by blowing compressed air.

Maintenance work should only be carried out by trained personnel. Alternatively, contact the Customer Service Department.

Withdrawal from service / Disposal

If withdrawing the machine from service for disposal, please ensure that this is done according to local regulations. This applies in particular to used oil and electric components.

Start-up / Description of function / Maifunctions

Proceed as follows upon completion of electrical installation and electrical work:

- Check the rotational direction of the pump motor
  The briquetting press is ready for operation if the hydraulic motor rotates in a clockwise direction

Startup:

- Turn the main switch on
- Unlock the emergency stop button by pulling out
- Press the control ON button

- Set the rotary control knob Hand/Auto to "Auto"

- The machine is now ready for operation and can be started by pressing the "Start" button.

Switching off:

The briquetting press is switched off by pressing the "Stop" button briefly. When this button is pressed once, the machine runs into position and switches off after a brief high pressure phase (1 sec.).

Automatic startup using the filling level detector (optional extra):

- Turn the main switch on
- Unlock the emergency stop button by pulling out
- Press the control ON button
- If a specific filling level is now reached in the storage container of the briquetting press, the filling level detector switches the briquetting press on automatically and the pressing process begins.

Switching off using the filling level detector (optional extra):

Switching the briquetting press off using an installed filling level detector is also automatic. If the filling level in the storage container drops below the level of the filling level detector, an automatic control period is activated. At the end of this period, the briquetting press switches off following a brief high pressure phase (1 sec.). The briquetting press switches back on again automatically when the required filling level in the storage container has been reached again.

Hydraulic system

All screw fittings in the hydraulic system should be checked about 100 operating hours after the first start-up to see if there has been any loss of oil, and tightened if necessary. The tank of the machine should also be inspected.

Malfunctions

When malfunctions are being rectified, care should be taken to ensure the master switch is first switched off and secured against being switched on again, or alternatively that the machine has been unplugged from the mains.

Generally speaking, malfunctions arise through operating errors or mistakes in setting up the machine. As the automatic switches will then no longer function, the relevant procedures have to be carried out by hand following discussion with the supplier.

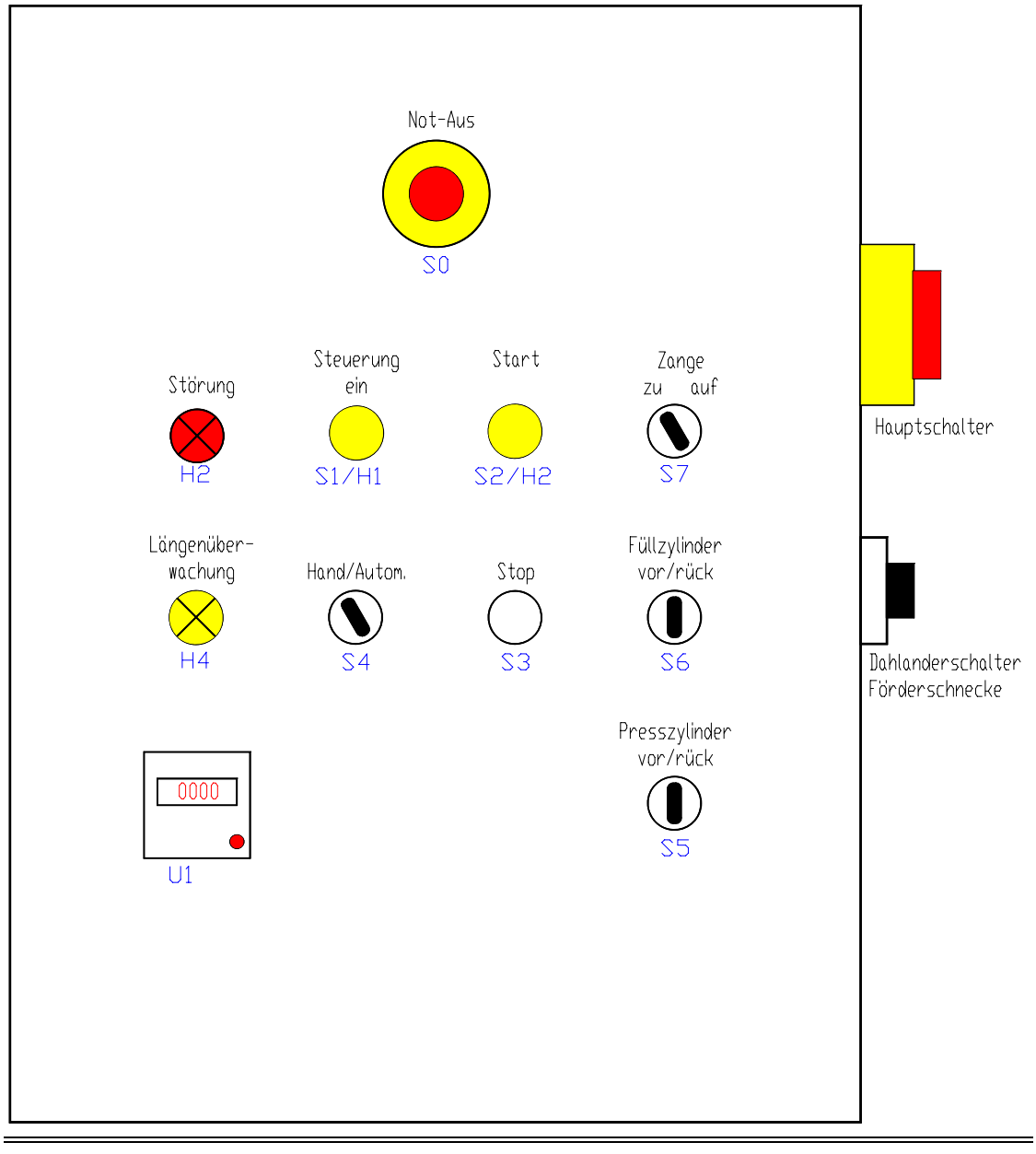
If malfunctions occur while the machine is working, the motor for the hydraulic system will overheat and will be switched off by its built-in protection switch.

When the machine is started again, the black knob of the motor protection switch must be pressed in again.

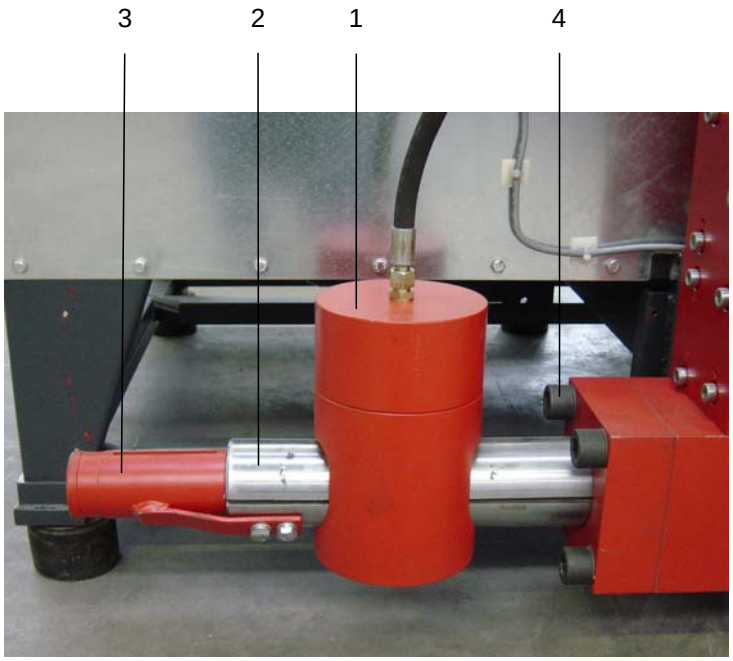
Attention:

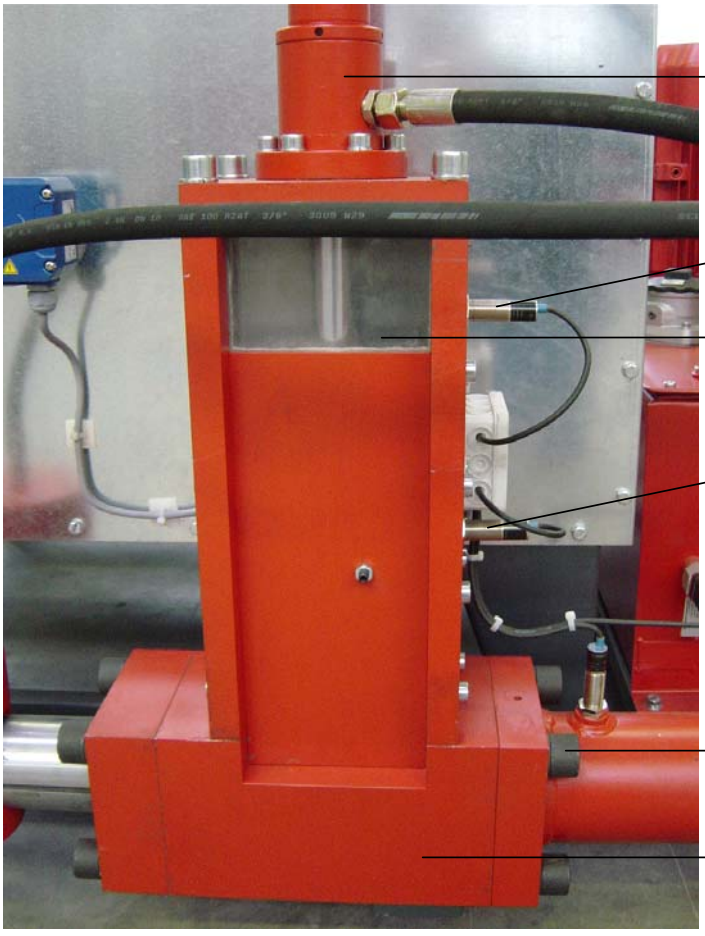
Do not adjust the sealed pressure limiting valve (Position 11) under any circumstances! This would entail the cancellation of any and all claims under guaranty.

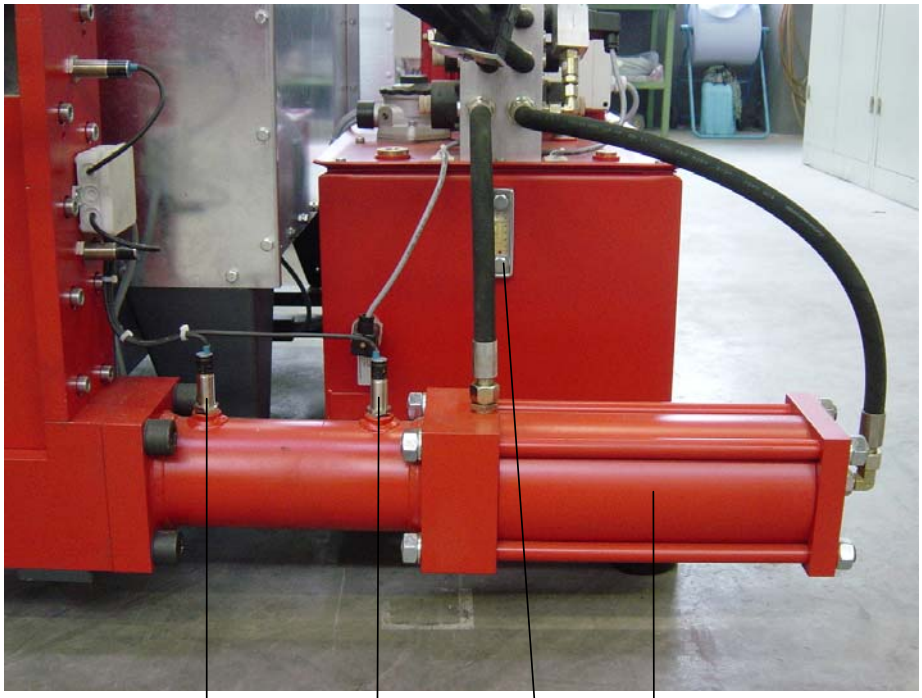
Control-cabinet RB 30 S



Spare part picture



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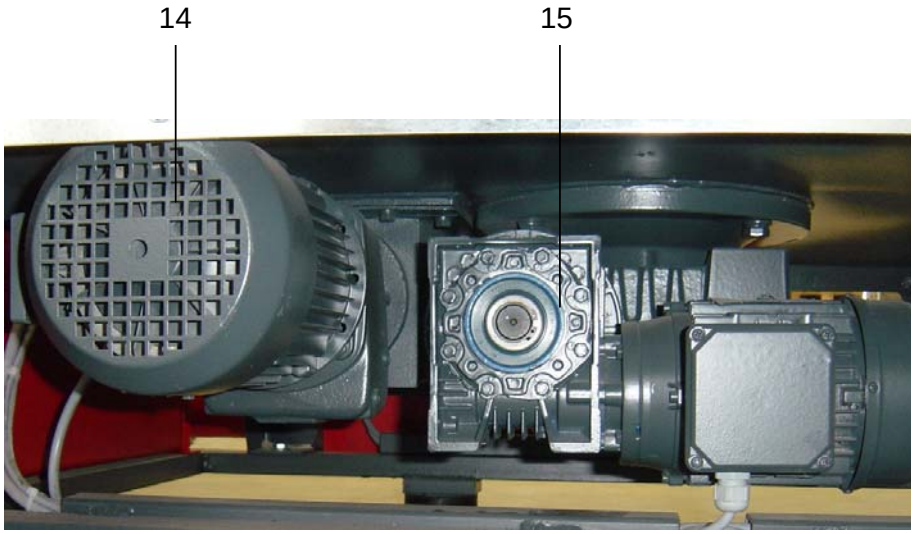
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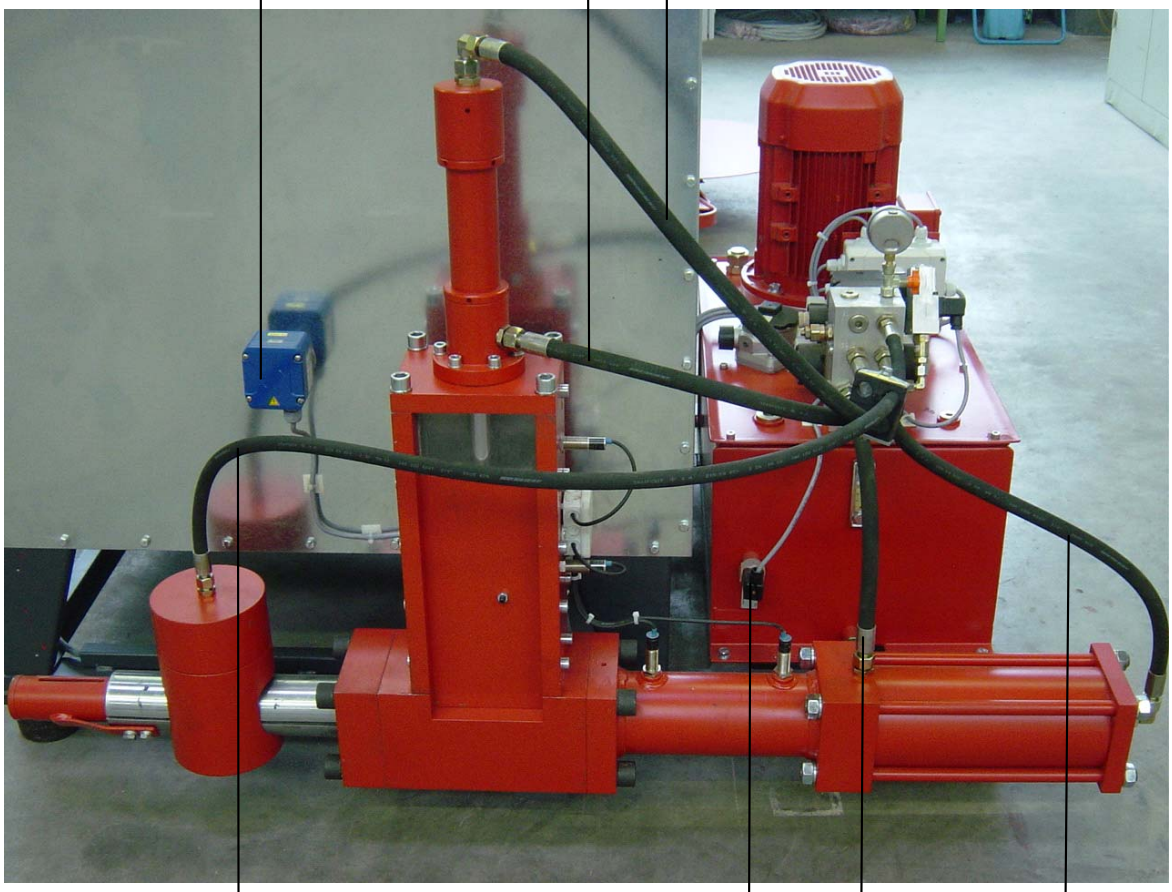
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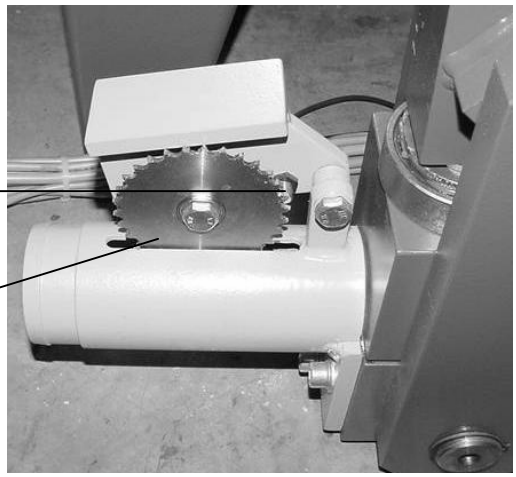
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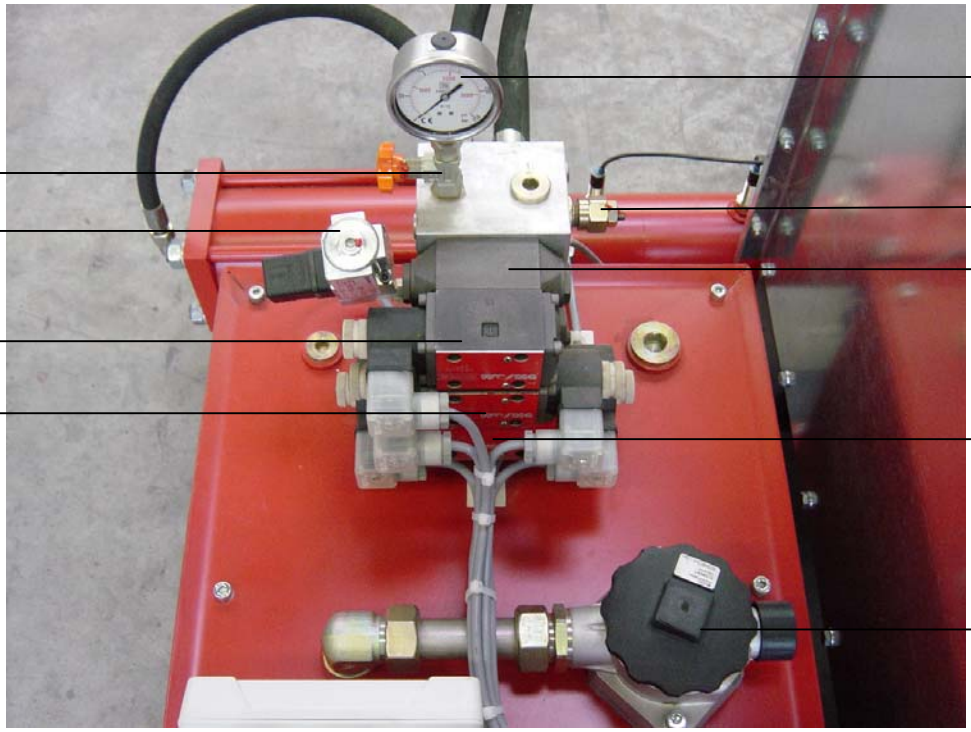
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Spare parts list RB 30 S

Pos.	Parts	pcs.
1	clamp cylinder	1
2	clamp	1
3	connection for transport pipe	1
4	screw for clamp fixing M24x90	4
5	filling cylinder	1
6	filling pusher	1
7	press block	1
8	limit switch S for filling cylinder top	1
9	limit switch Ö for filling cylinder top	1
10	screw for cylinder fixing M24x70	4
11	press cylinder	1
12	limit switch for press cylinder back	1
13	limit switch for press cylinder front	1
14	geared motor worm screw 28/56	1
15	geared motor stirrer Yilmaz	1
16	worm screw	1
17	oil level and heat indicator	1
18	thermo switch	1
19	filling level detector MBA 8	1
20	gauge	1
21	stop valve for gauge	1
22	pressure switch	1
23	relief valve	1
24	nonreturn valve clamp	1
25	clamp solenoid valve	1
26	filling cylinder solenoid valve	1
27	press cylinder solenoid valve	1
28	return filter	1
29	electric motor 5,5 kW	1
30	hydraulic pump 250 bar 40l	1

Spare parts list RB 30 S

Pos.	Teile - Bezeichnung	Stück
31	hydraulic hose 800 mm 15L	1
32	hydraulic hose 1100 mm 15L	1
33	hydraulic hose 1600 mm 12L	1
34	hydraulic hose 550 mm 15L	1
35	hydraulic hose 800 mm 15L	1
82	limit switch S for length monitoring	1
83	gearwheel for length monitoring	1

Hydraulic liquid recommendation

Designation to DIN 51 502	HLP 32	**HLP 46**	HLP 68
Ambient temperature:	-7 to +70°C	±0 to +80°C	+5 to +90°C
Supply co.	Name of the oil	Name of the oil	Name of the oil
ARAL	Aral Vitam GF 32 Aral Vitam HF 32	Aral Vitam GF 46 Aral Vitam HF 46	Aral Vitam GF 68
BP	BP Energol HLP-D 32 BP Energol HLP 32 BP Energol SHF 32	BP Energol HLP-D 46 BP Energol HLP 46 BP Energol SHF 46	BP Energol HLP-D 68 BP Energol HLP 68
ELF	Elfolna 32 Hydrelf 32	Elfolna 46 Hydrelf 46	Elfolna 68 Hydrelf 68
ESSO	Nuto H 32 HLPD-Oel 32	**Nuto H 46** HLPD-Oel 46	Nuto H 68
FINA	Fina Hydran 32	Fina Hydran 46	Fina Hydran 68
FUCHS	Renolin MR 10 Renolin B 10	Renolin MR 15 Renolin B 15	Renolin MR 20
MOBIL	Mobil DTE 24 Mobil DTE 17 Drucköl HLP 32 - C Hydrauliköl HLPD 32	Mobil DTE 25 Drucköl HLP 46-C Hydrauliköl HLPD 46	Mobil DTE 27 Drucköl HLP 68-C Hydrauliköl HLPD 68
TEXACO	Rando Oil HD A - 32 Rando Oil HD AZ - 32 Alcor Oil DD 32	Rando Oil HD B - 46 Alcor Oil DD 46	Rando Oil HD C - 68 Rando Oil HD CZ - 68 Alcor Oil DD 68

These oils can be used without hesitation for 2,000 operating hours, after which time oil must be changed. When topping up hydraulic oil, attention must be paid that the same type of oil is used. If oil of the same type is not available, or the type of oil already in use is unknown, the oil in the tank and in the complete hydraulic system must be removed completely and the complete system flushed carefully. The system may only be filled with new oil after this has been done. Only in this way is it possible to prevent any gumming of the valves.

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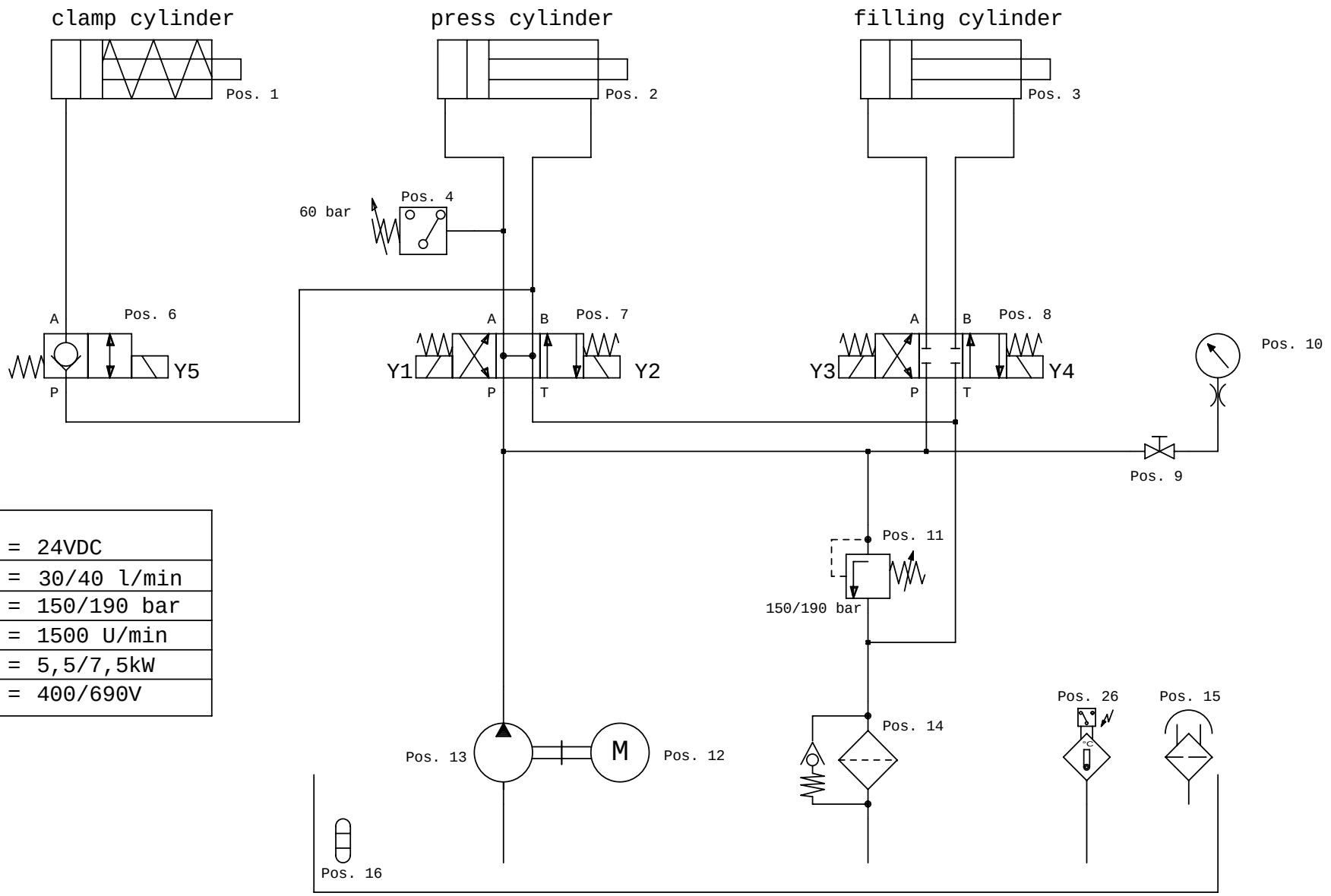

control voltage	= 24VDC
Q	= 30/40 l/min
p max	= 150/190 bar
n	= 1500 U/min
P	= 5,5/7,5kW
U	= 400/690V

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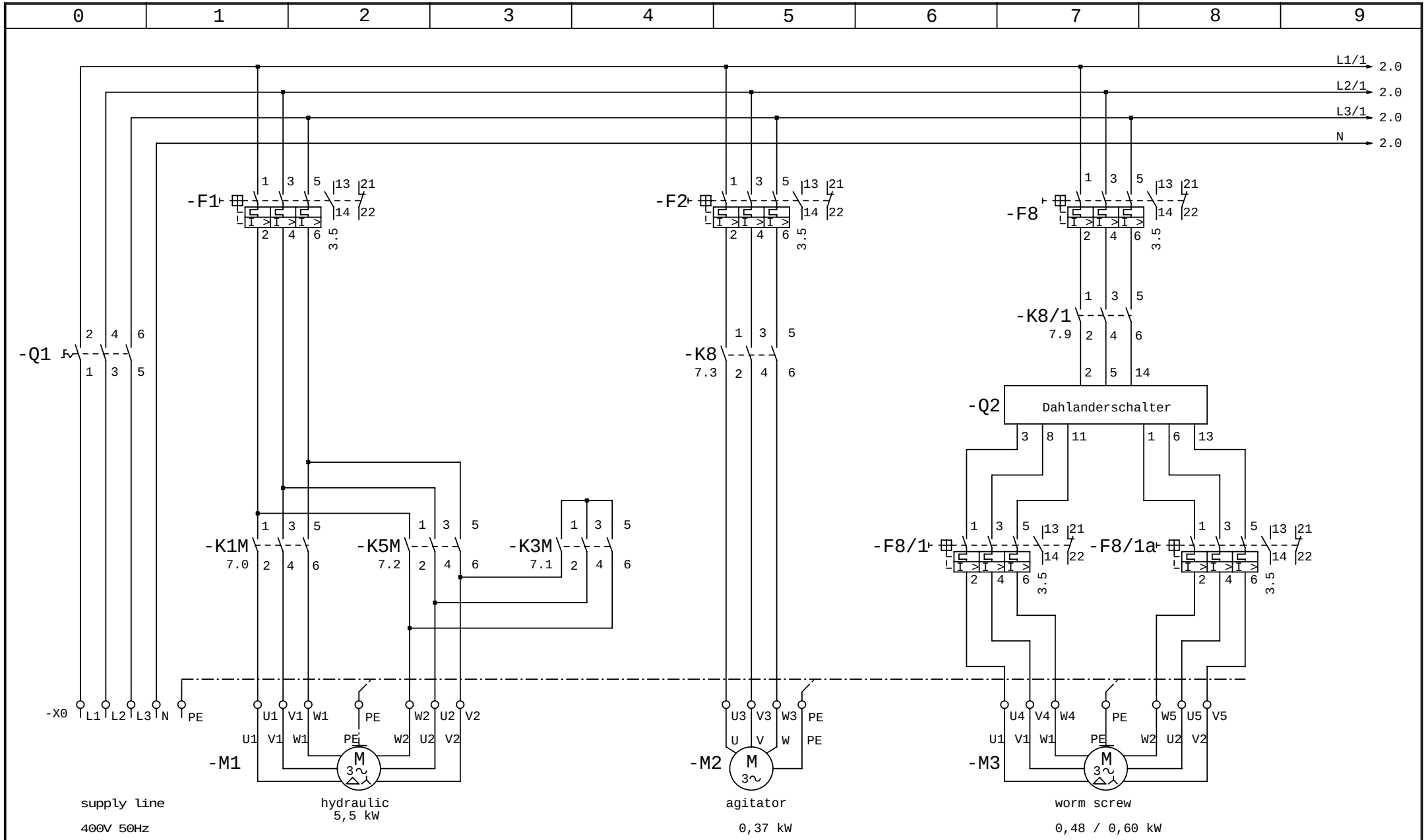

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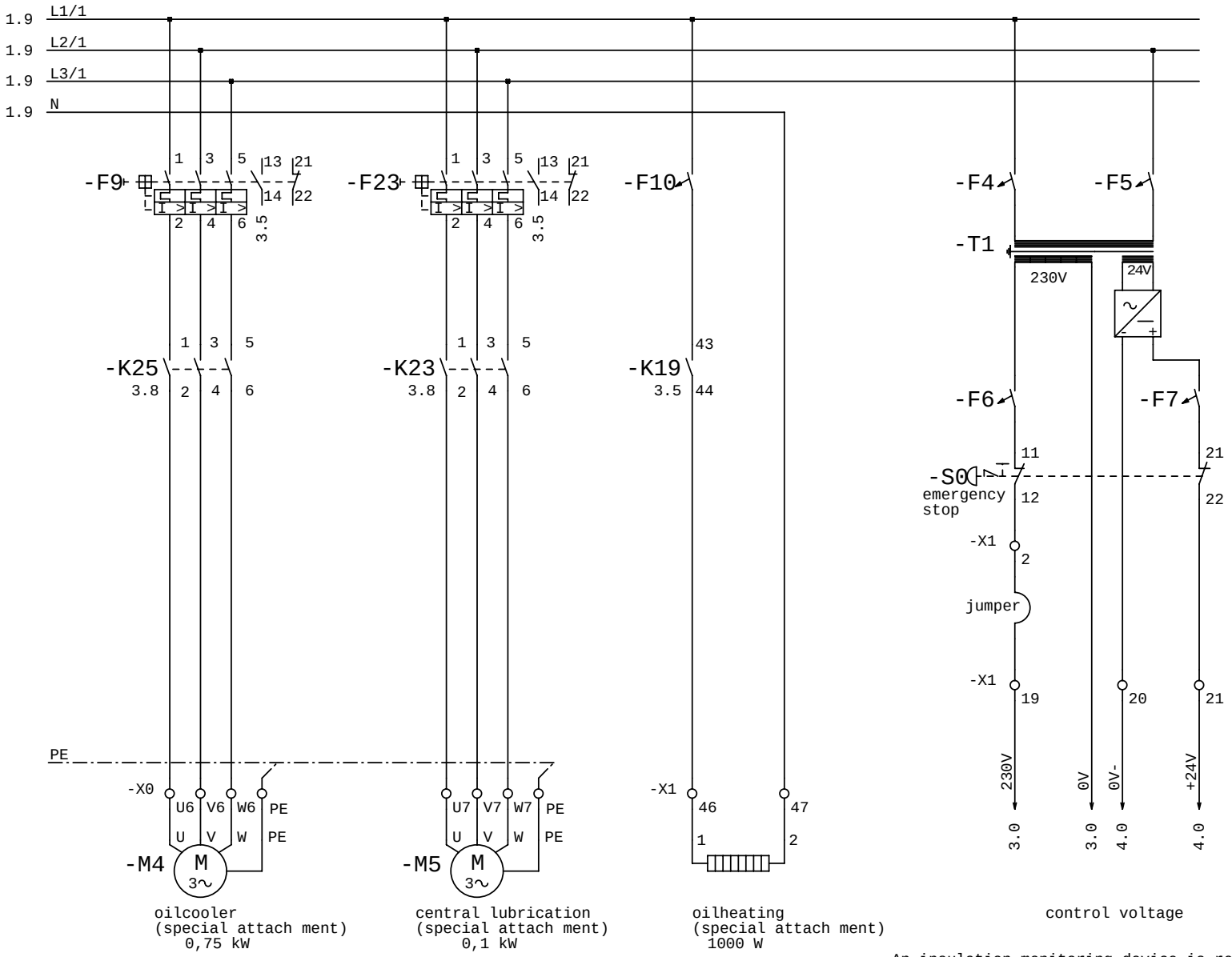

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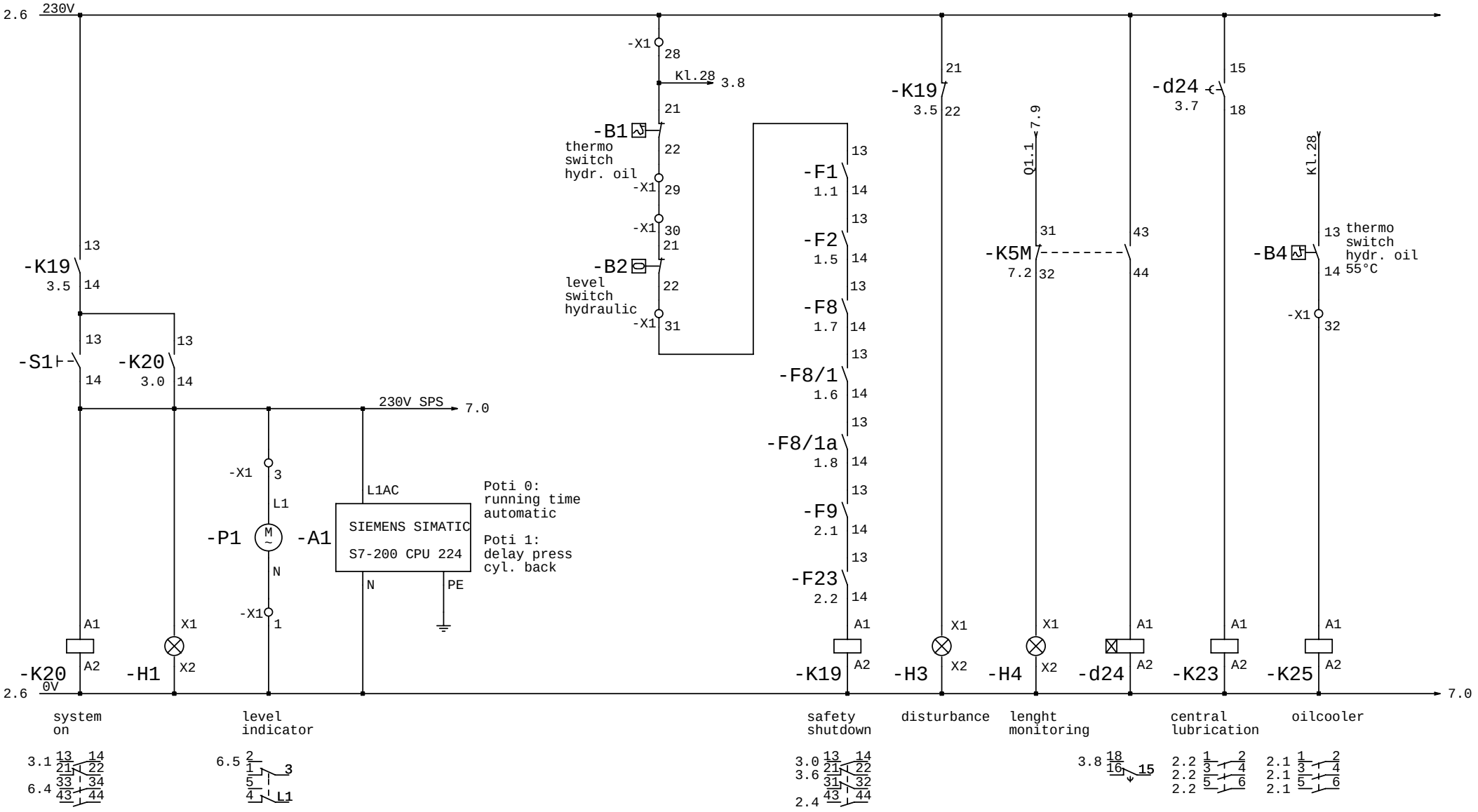

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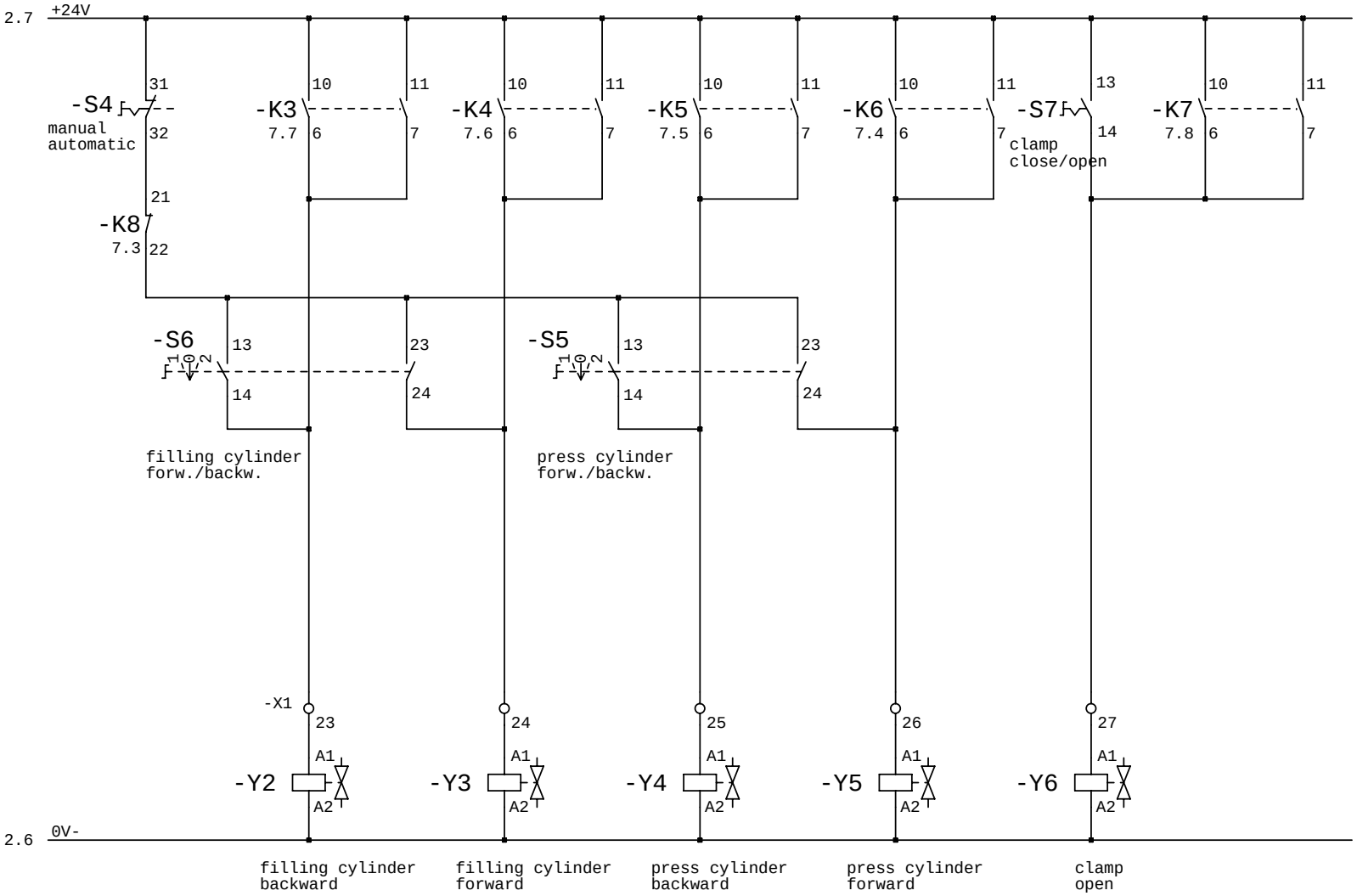

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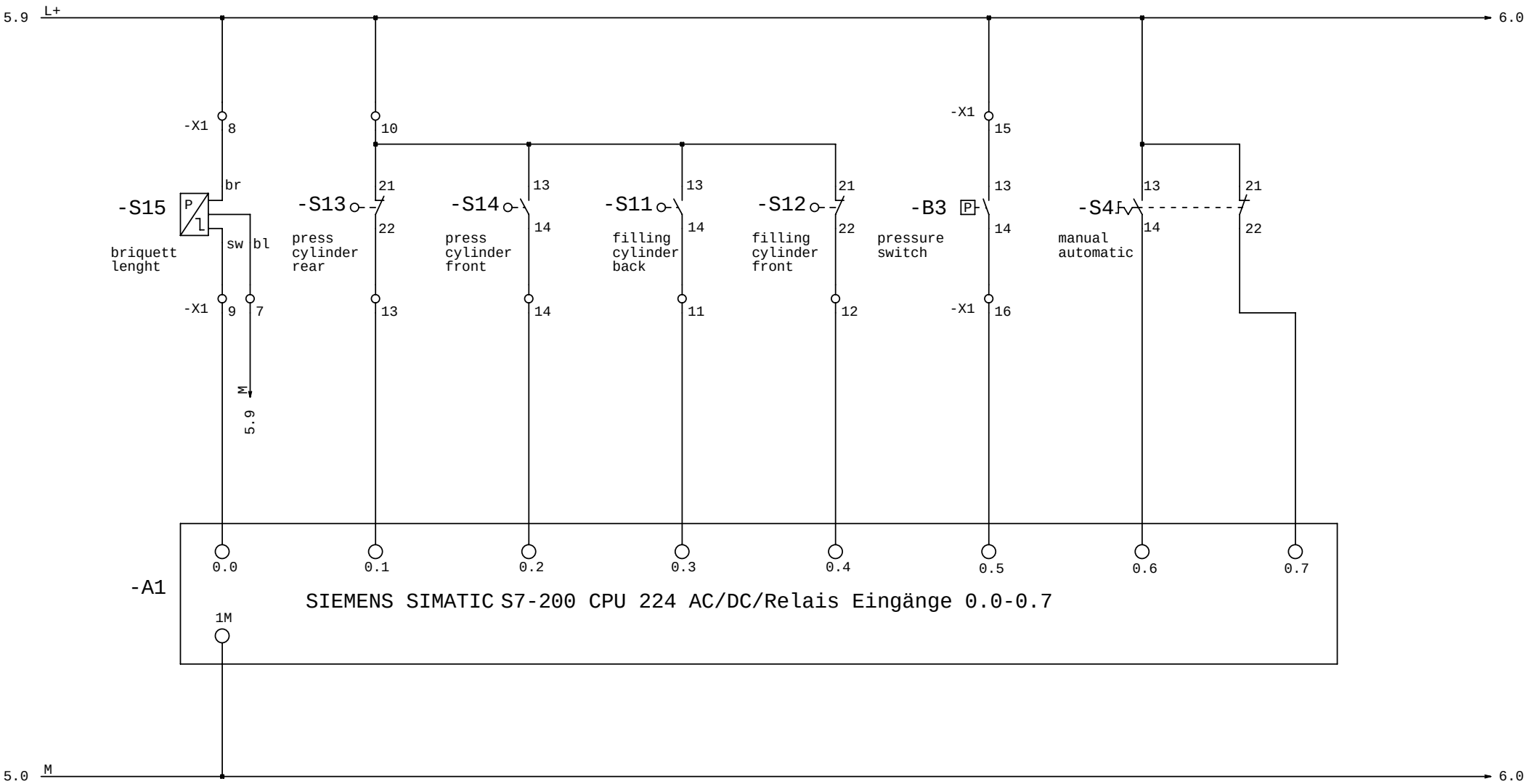

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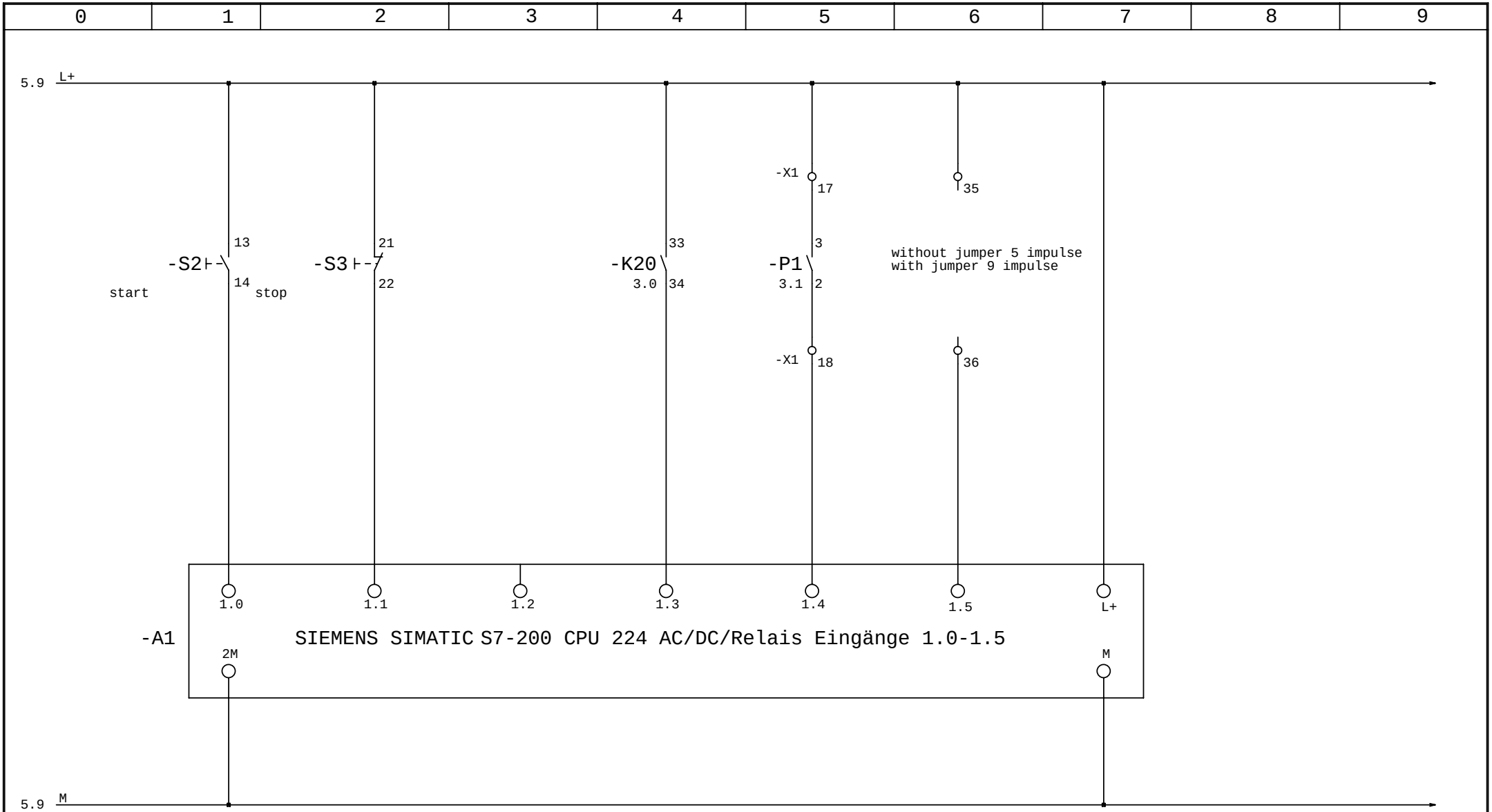

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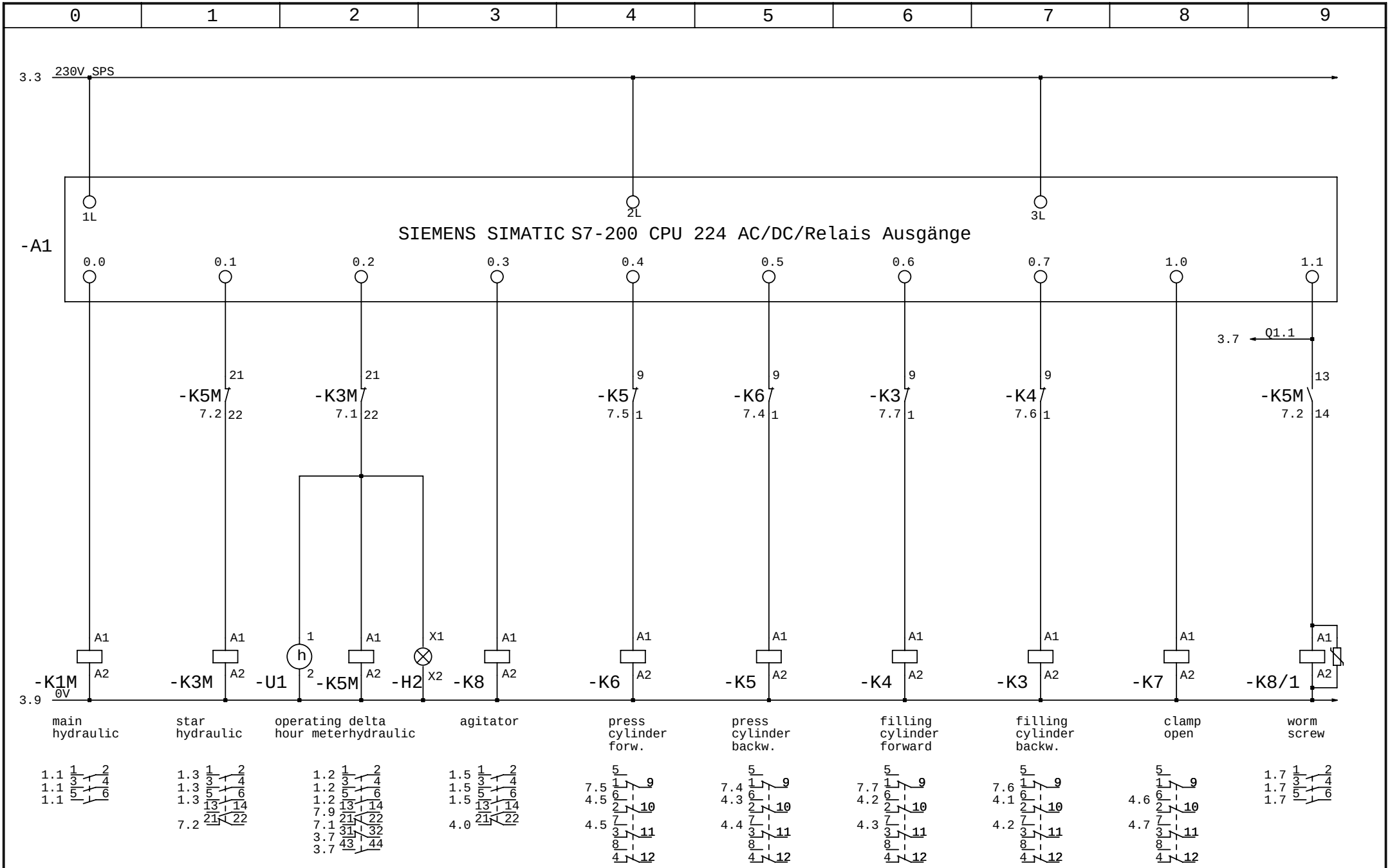

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terminal plan -X0

page 1

page/path	mark internal connection	mark internal name	jumper	terminal number	mark external connection	mark external name	supply line	hydraulic	agitator	worm screw	oilcooler (special attach ment)	central lubrication (special attach ment)
1.0	1	-Q1		L1								
1.0	3	-Q1		L2								
1.0	5	-Q1		L3								
1.1	47	-X1		N								
1.1			•	PE								
1.1	2	-K1M		U1	U1	-M1		1				
1.2	4	-K1M		V1	V1	-M1		2				
1.2	6	-K1M		W1	W1	-M1		3				
1.2			•	PE	PE	-M1		SL				
1.2	2	-K5M		W2	W2	-M1		6				
1.3	4	-K5M		U2	U2	-M1		4				
1.3	6	-K5M		V2	V2	-M1		5				
1.5	2	-K8		U3	U	-M2			1			
1.5	4	-K8		V3	V	-M2			2			
1.5	6	-K8		W3	W	-M2			3			
1.5			•	PE	PE	-M2			SL			
1.7	2	-F8/1		U4	U1	-M3				1		
1.7	4	-F8/1		V4	V1	-M3				2		
1.7	6	-F8/1		W4	W1	-M3				3		
1.7			•	PE	PE	-M3				SL		
1.8	2	-F8/1a		W5	W2	-M3				6		
1.8	4	-F8/1a		U5	U2	-M3				4		
1.8	6	-F8/1a		V5	V2	-M3				5		
2.1	2	-K25		U6	U	-M4					1	
2.1	4	-K25		V6	V	-M4					2	
2.1	6	-K25		W6	W	-M4					3	
2.1			•	PE	PE	-M4					SL	
2.2	2	-K23		U7	U	-M5						1
2.2	4	-K23		V7	V	-M5						2
2.3	6	-K23		W7	W	-M5						3
2.3			•	PE	PE	-M5						SL

cable name external

state	change	date	name	date	13.08.02	origin	replace	exchange	Reinbold Entsorgungstechnik	RB 30S	ES-4-01-120 Rev.3
				drawn	Steiner					Brikettlängeneinstellung	terminal plan
				check							page 1
				norm							of 2 sh.

page 2

terminal plan -X1

terminal number	page/path	mark internal: connection	mark internal: name	jumper	mark external: connection	mark external: name	cable name external
1	3.1	0V	-T1		N	-P1	level indicator 1
2	2.6	12	-S0				jumper (2–19)
3	3.1	14	-K20		L1	-P1	level indicator 2
7	5.1	M	-A1		bl	-S15	briquett lenght 3
8	5.1			■ (8–10–15–17)	br	-S15	briquett lenght 1
9	5.1	0.0	-A1		sw	-S15	briquett lenght 2
10	5.2			■	21	-S13	safety switch 5
11	5.4	0.3	-A1		14	-S11	safety switch 1
12	5.5	0.4	-A1		22	-S12	safety switch 2
13	5.2	0.1	-A1		22	-S13	safety switch 3
14	5.3	0.2	-A1		14	-S14	safety switch 4
15	5.6	13	-S4	■	13	-B3	pressure switch 1
16	5.6	0.5	-A1		14	-B3	pressure switch 2
17	6.5	13	-S4	■	3	-P1	level indicator 3
18	6.5	1.4	-A1		2	-P1	level indicator 4
19	2.6	13	-K19	■ (19–28)			jumper (2–19)
20	2.6	0V-	-T1		A2	-Y6	valve 6
21	2.7	22	-S0				
23	4.1	14	-K3		A1	-Y2	valve 1
24	4.2	14	-K4		A1	-Y3	valve 2
25	4.3	14	-K5		A1	-Y4	valve 3
26	4.4	14	-K6		A1	-Y5	valve 4
27	4.5	14	-S7		A1	-Y6	valve 5
28	3.4	21	-K19	■	21	-B1	temp. hydraulic 1
29	3.4			■ (29–30)	22	-B1	temp. hydraulic 2
30	3.4			■	21	-B2	level switch hydraulic (special attach ment) 1
31	3.4	33	-F1		22	-B2	level switch hydraulic (special attach ment) 2
32	3.8	A1	-K25		14	-B4	temp. hydraulic 3
35	6.6	13	-S4			0 = 5Z	
36	6.6	1.5	-A1			1 = 9Z	
46	2.4	44	-K19		1		oilheating (special attach ment) 1
47	2.4	N	-X0		2		oilheating (special attach ment) 2

Cable rows: jumper; pressure switch; level indicator; safety switch; temp. hydraulic; level switch hydraulic (special attach ment); valve; oilheating (special attach ment); briquett lenght

state	change	date	name				
date	13.08.02	origin	replace	exchange			
drawn	Steiner						
check							
norm							

Reinbold Entsorgungstechnik

RB 30S

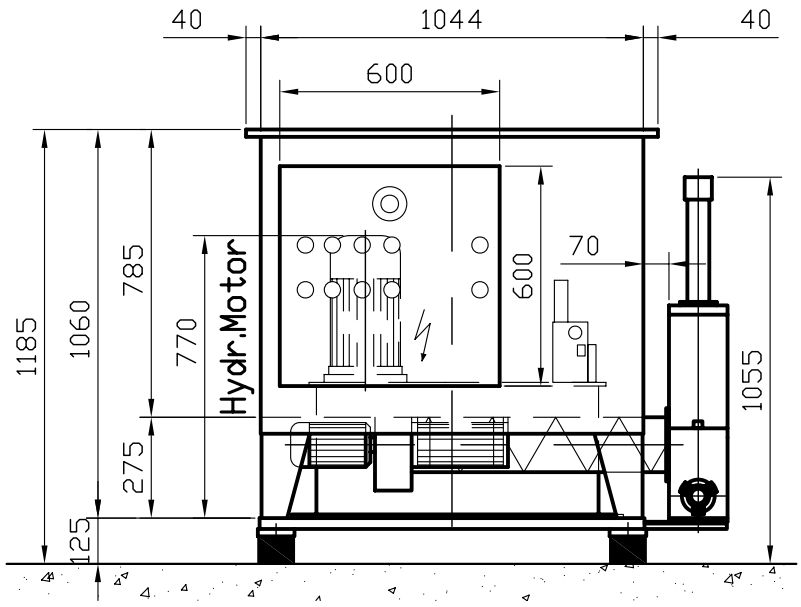
Brikettlängeneinstellung

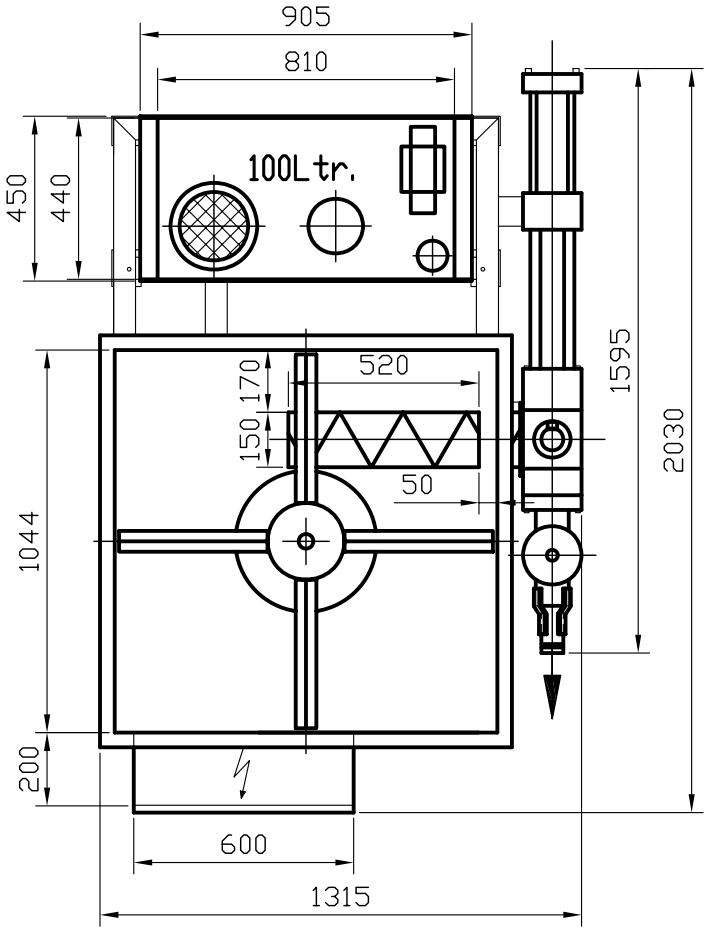
ES-4-01-120 Rev.3

terminal plan

Spare parts briquetting press control cabinet ES-4-01-120 Rev.3

	name	pcs.	item	item-number
F1	hydraulic motor	1	motor protective switch	PKZM0-20 / NHI 11
F2	stirrer	1	motor protective switch	PKZM0-1,6 / NHI 11
F4	transformator power	1	fuse	FAZ C6
F5	transformator power	1	fuse	FAZ C6
F6	transformator 220V	1	fuse	FAZ C6
F7	transformator 24V	1	fuse	FAZ C10
F8	worm screw	1	motor protective switch	PKZM0-2,5 / NHI 11
F8/1	worm screw slow	1	motor protective switch	PKZM0-1,6 / NHI 11
F8/1a	worm screw fast	1	motor protective switch	PKZM0-2,5 / NHI 11
F9	oilcooler	1	motor protective switch	PKZM0-2,5 / NHI 11
K1M	main hydraulic motor	1	main contactor	DILM12-10(230V50/60HZ)
K3M	star hydraulic motor	1	main contactor	DILM9-01(230V50/60HZ)
K5M	delta hydraulic motor	1	main contactor	DILM12-10(230V50/60HZ) / DILM32-XHI22
K3	filling cylinder backw.	1	control contactor	RM730L 230VAC
K4	filling cylinder forw.	1	control contactor	RM730L 230VAC
K5	press cylinder backw.	1	control contactor	RM730L 230VAC
K6	press cylinder forw.	1	control contactor	RM730L 230VAC
K7	clamp open	1	control contactor	RM730L 230VAC
K8	stirrer	1	control contactor	DILEM-01(230V50/60HZ)
K8/1	worm screw	1	main contactor	DILEM-10(230V50/60HZ)
K19	distrubance	1	control contactor	DILER-22(230V50/60Hz)
K20	system on	1	control contactor	DILER-31(230V50/60Hz)
K25	oilcooler	1	main contactor	DILEM-10(230V50/60HZ)
Q1	main switch	1	switch	P1-32/EA/SVB
Q2	worm screw slow / fast	1	switch	T0-4-8440/EZ
S0	emergency-off	1	switch	M22-PV/AK01/K01/1AK
S1/H1	system on	1	switch	M22-DL-W/AK10/LED-230W
S2	on	1	switch	M22-DL-W/AK10/LED-230W
S3	off	1	switch	M22-D-S-X0/AK01
S4	manual / automatic	1	switch	M22-WR-X91/AK11/K01
S5	press cylinder forw./backw.	1	switch	M22-WR3-X7/AK10/K10/XC-Y
S6	filling cylinder forw./backw.	1	switch	RW3R-X/BK10/EK10
S7	clamp open/close	1	switch	M22-WR-X79/AK10
H3	distrubance	1	lamp	M22-L-R/A/LED-230W
H4	length monitoring	1	lamp	M22-L-Y/A/LED-230W
U1	hour meter	1	hour meter	UWZ48KE 230V 50Hz
A1	PLC	1	S7-200	CPU224
T1	trafo 400V / 220V / 24V	1	transformator	EI 150 NB





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(Zul. Abw.)	Format DIN A3	Maßstab: 1:20	Techn. Änderungen jederzeit vorbehalten!
		Kommission: Standard	

2006	Datum	Name
Bearb.	15.09.	Kis Kollar
Gepr.		
Norm		

RB 30 S

Rechtsausführung

Zust.	Änderung	Datum	Name

Revision 1

AP-4-01-365

Blatt 1
1 Bl.

EDV: AP-4-01-365R1_RB

Ersatz für: