

Operating Instructions

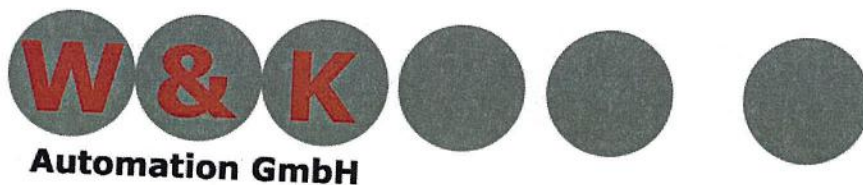
Hammer Mill Junior 5



Machine- No.: P16017-1
Issue date: 08.2016

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Preface

Congratulation to the purchase of your new hammer mill. You acquired a machine that is solid and will cause no problems, a machine that will work trouble-free for decades, if it is serviced properly.

This operating instructions is meant to give you the possibility of having this machine work for you optimally and reliably.

As you know our Service is written in capital letters. So don't be shy, don't hesitate to complain about the smallest irregularities. We keep developing our products continuously and therefore depend on a good partnership with your costumers. We appreciate all comments to make our products perfect, above all reproach.

You, too, will be grateful for every feed-back that might come from your clientele, be it negative or positive. Only in this way a reaction to the requirements of the market is possible and enables us to serve our costumers in the best possible way.

Service-telephone

We offer fast service thanks to their qualified technicians, you, too, should advantage of it.

Service-telephone: 0049 (221) 912829-0

Machine number	P16017-1
Date of putting into service	08.2016
Your Consultant	Mr. Wohler
Local office	Köln
Your dealer	W&K Automation GmbH

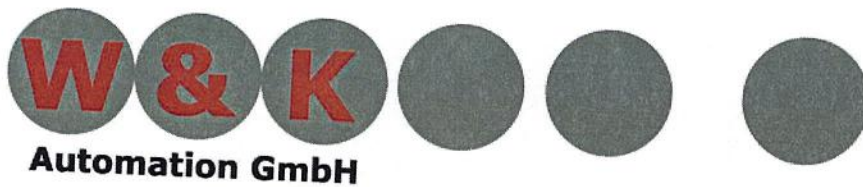
Quick survey

Servicing of hammer mill Junior models (short review)

1. Put the machine on its place provided for and connect electricity. This machine needs a 5-conductor connection. Secure inertly main conductor lead 16 Ampere.
2. Make sure machine is free of foreign bodies setting in motion.
3. Check direction of rotation.
4. Start machine. Now the material to be ground can be fed into machine. Feed in only so much that machine is not overloaded. Break whole loaves (fresh) several times. (this applies only to model Junior-Mini). Dry material to be ground can be fed in faster. Nuts are filled in slowly and steadily. By all means, use sieve 10mm. Do not remove tilting lid.

Opening of machine:

1. In closed condition the closing lever is on 3:00 o'clock. To open it put the clamp on 11:00 o'clock and raise that funnel with your other hand to the limit stop. Now return clamp to 6:00 o'clock so that the bolt of the shutter can be guided by the groove and can be opened by pulling forward completely.
2. The degree of fineness of the material to be ground is determined by the hole diameter of the sieve. In this regard, you point the "handing" (page 7) and "Overview of sieve size" (page 8) will be helpful.
3. Das Verschließen der Verschluss- bzw. Ausgabeklappe erfolgt in umgekehrter Reihenfolge, wie bereits oben im Punkt 1 beschrieben.



Intended application

The machine type hammer mill Junior 4 "is suitable for grinding of bread at a weight of 1kg and other foods such as cheese, nuts or seeds (already mentioned in the quick view).

Inappropriate use is the grinding of:

- meat scrap and bone
- glass, wood, metals
- remnants of building materials

Important to note what you must!

1. Do not reach with the machine running in the hopper!
2. Change sieve only when the engine is switched off!
3. Open the Hopper only when the engine is not running!
4. Hammer Mill have to standing at a flat settled ground!

Maintenance note!

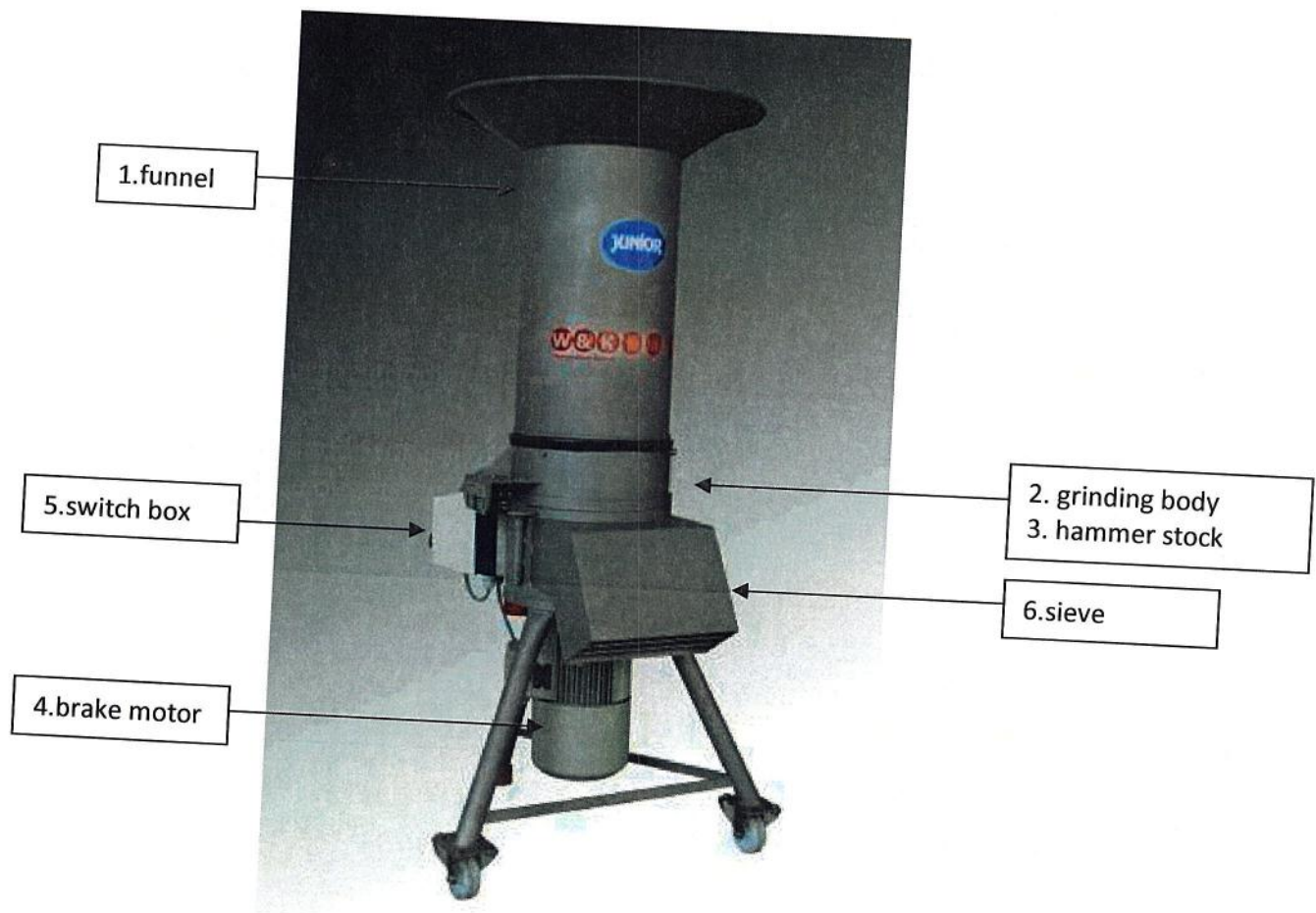
The hammer mill is technically so improved that it does not require regular maintenance. Due to the high centrifugal force of the hammer stock the machine cleans itself almost alone. Therefore prolong the time of idle running.

Technical Description

Components

Your devices consist essentially of following parts:

1. funnel
2. grinding body
3. hammer stock (In the grinding element)
4. brake motor
5. switch box (start and Stop switch)
6. sieve (Before the outlet)



Putting into service

Delivery-note

The machine was delivered to you by a forwarding agent. Check delivery; make sure that it is complete.

Unpacking

Remove foil and check machine for damages and completeness (see supplement).

Electrical connection

Put the machine on its proper place and check sense of rotation. For our part, the direction of rotation of the motor was correctly wired to the plug. If the machine runs in reverse call electrician. Hammer device runs in the correct sense of direction! Now machine can be put into service

Important!

Zero conductor must have contact – otherwise machine cannot start (motor brake brakes)

Servicing

Now machine can be put into service. The degree of fineness of the material to be ground is determined by the hole diameter of the sieve. But please note the following:

- **Grind bread crumbs** and **corn** only in the cotton bags supplied (open receptacles cause too much dust)
- **Grind sponge cake, cake edges, sweet biscuits** or **similar items** only without cream particles with sieve 16mm.
- Fill in **nuts** only slowly and steadily with sieves 8, 10 and 12mm to avoid any warming up and dripping of oil
- **Grind cheese** only with sieve 16mm. Use only goods from cool houses, no frozen goods!
- **Light mixed bread** can also be ground with small sieves (5 or 6mm)
- **Dark rye bread types** are better being ground with bigger sieves 8-10mm.

Overview sieve size

Hole diameter	application	result
1,5	for grain kibble	(very fine)
2	"	(fine)
3	"	(medium fine)
4	"	(medium), breadcrumbs (fine), white bread
5	"	(rough), breadcrumbs (medium), brown bread
6	Breadcrumbs (rough)	Brown bread, white bread
8	Wholewheat bread (fine)	
10	" (medium), pumpernickel, nut	
16	pumpernickel, cake borders, biscuit etc	

The exact handling of the sieves you can find the page before. The table shows the most common sieves and their uses, usually but all the sieves from a hole size of 1 mm in 1 mm increments available, please take this matter to contact us if you need a mid-size or oversize.

Quick failure diagnosis

Machine does not start although starter has been pressed:

- Open and shut machine once again.
- Final switch has tilted and does not release contact.
- Zero conductors may be missing; ask electrician.

Motor starts but immediately Stops again:

- Check fuses!
- Roll machine to another wall socket with a higher degree of security

Product remains in grinding chamver:

- Size of sieve does not correspond to the requirements of the material to be ground.
- Motor runs in reverse.

Machine runs unquietly:

- A dent or unevenness must have occurred in the hammer device (maybe by foreign bodies like metal etc.)

Machine is too noisy:

- Stop motor at once!
 - hard body has entered machine
 - a bolt is broken
 - machine runs in two phases

Quick Course/Repairs

Change of sieve

The degree of fineness of the material to be ground is determined by the hole diameter of the sieve. After opening the lid of the mill (only when machine is absolutely idle) take sieve out of sieve guide.

Every sieve can be turned. Turning is necessary as soon as the performance is noticeably abating due to wear and tear of the edge of the holes. When turning has been carried out there is again a sharp hole edge against the sense of rotation of the hammers and the former performance is restored.

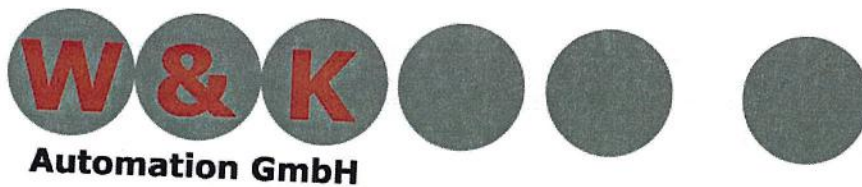
Change of hammers/change of bolts

As soon as the edge of the hammers is worn out, the hammers must be changed (turned). The turning as well as the later changing of the hammers must be carried out with care, so that no unevenness or imbalance may occur. The facing hammers must always be absolutely alike. E.g. if a damaged hammer on the left side must be replaced by a new one, a hammer of the same size and weight must also be installed on the right side of the rotor disk. Always pay attention that the facing hammers on the rotor disk are exactly balanced. Imbalance causes unquiet running of the mill and leads to damages.

Procedure:

1. Pull plug out of wall socket
2. Open funnel
3. Remove lid of grinding device
4. Unscrew fastening screw of grinding device and take out grinding device with extractor
5. Pull out bolt upwards and change hammers and bolts as described above.

Reassemble in the opposite way!



Guarantee Conditions

Guarantee

We, the W&K Automation GmbH) guarantee faultless material and expert performance for one year. We commit it to repair or to replace, free of charge, any parts that fail these distinctive features as we see fit. Each guarantee performance is carried out provided that efficient servicing and a close study of the operating instructions have been fulfilled. No repair is to be undertaken without previous agreement with W&K Automation GmbH. Further acceptance of responsibility is excluded within the legally admissible frame; in particular, the customer has no claims to damages whatsoever. The obligation of payment is not suspended herewith. Besides, the efficiency and excellent performance, as put down in the leaflet, are guaranteed. Our guarantee conditions do not apply to products and performance of the electronic industry but to the delivery conditions of the supplier's .e. of the trade association of the electro-industry.

Safety Device

We give the assurance that their machines for delivery to the provisions of Annex I to the European Machinery Directive 2006/42/EC

List of parts

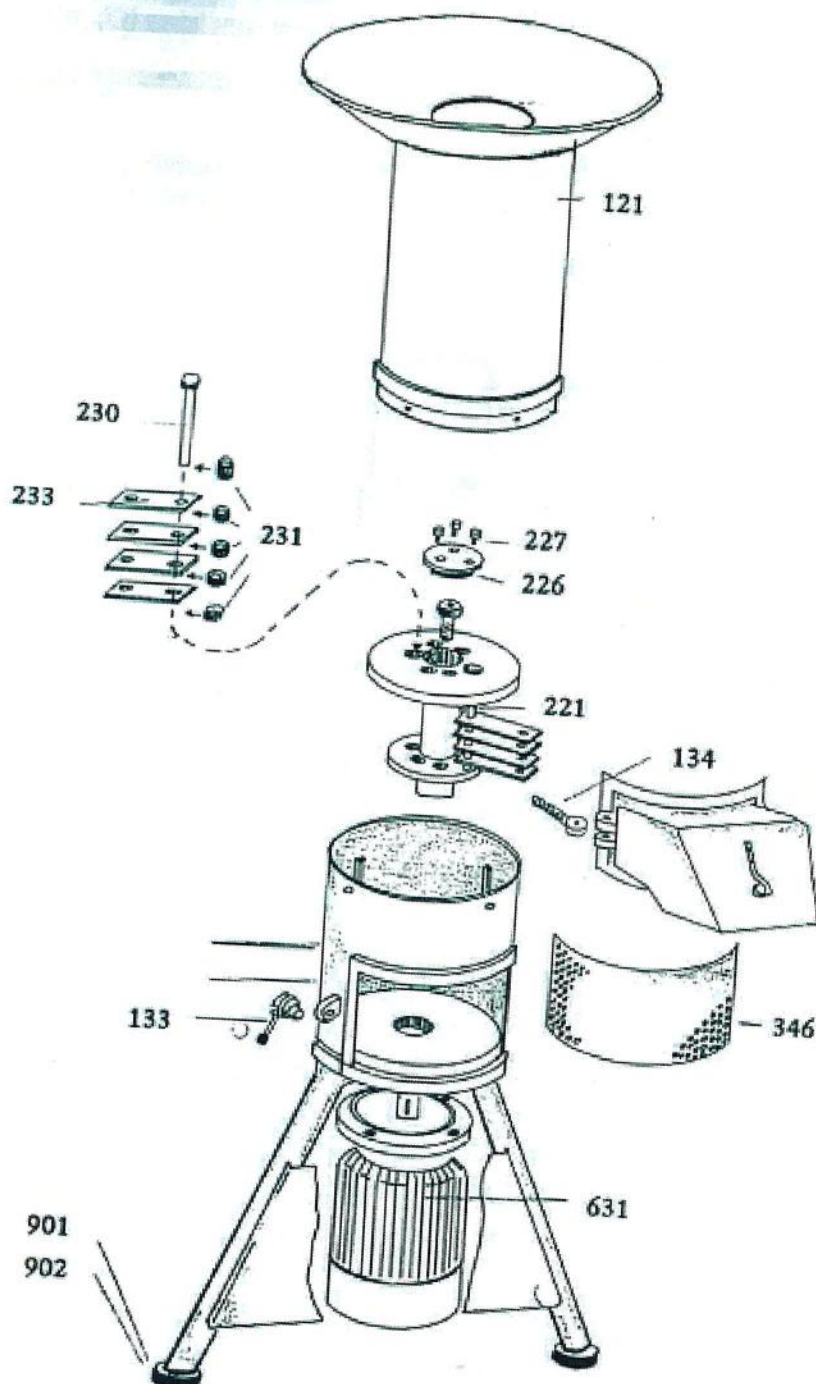
When ordering spare parts please state type, year of construction and number of machine.

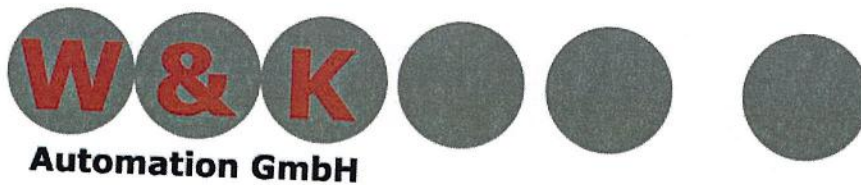
Junior 4 / 5

121 funnel	132 washer
133 stopper	134 screw for 133
136 distance plate for 1311	138 nut for 133
139 screw for 133	140 ball knob for 133
221 rotor	222 simmering
224 simmering PTFE	225 washer for 229
226 bolt safety disk	227 screw for 226
229 screw for 221	230 bolts (6 pieces)
231 distance rings (33 pieces)	233 hammers (24 pieces)
346 sieves	358 rubber clip for 357
631 brake motor	632 brake pulley for 631
635 rectifier for 631	841 switch box
842 casing	843 relay
844 excess current release	846 final switch
850 SRE-automatic	901 braking roll (2 pieces)
902 wheels (2 pieces)	903 vibration absorber

Single part-drawing

Example: Junior 4 (also valid by Junior 5 and VHS)





Transport damages

We are not liable for any damages suffered during transport, but the railway, postal service or forwarding agents are responsible for them, even if damages are not to be recognized on delivery.

Please note in case of transport damages:

In case of damaged deliveries notify immediately are

1. goods railway office (latest within one week)
or
2. forwarding agent (latest within 6 days)

to report the damage, even if the damage was not to be seen on delivery.

Leave goods and wrappings in the condition you received them until checking. Notify us, we may assist you as well.

Projekt: Hammermill Junior 5

Project:

Kunde:

Customer:

Auftrag:

Order:

Datum:

Date:

November 2015

Zeichnungs-Nr.:

Drawing No.:



Automation GmbH
SYSTEM DESIGNED FOR

VERTRAULICH

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Einspeisung Power supply

Spannung Voltage: 208 V
Stromaufnahme Current: 18 A
Frequenz Frequency: 60 Hz
Leistung Power: 5,5 kW

Layout layout

Konstruktion Construction
Schaltplan el. Drawing
Software Software
T.Bertram

Verdrahtungsfarben Wiring colors

Lastspannung Power Voltage	Phase L1 Phase A	Phase L2 Phase B	Phase L3 Phase C	Neutral Neutral	Erde Earth ground	220V AC L 220V AC N
Steuerspannung Control Voltage	black	black	black	blue	grün/gelb	220V AC L 220V AC N
24V DC L+						
24V DC M						
120V AC L						
120V AC N						
230V AC L						
230V AC N						
Analogsignal PLC Inputs						
Messleitung PLC Outputs						
Fremdspannung Foreign voltage						
red						
red						

Zustand
Revision

Änderungen
Changes

BL/Pf.
Pg./Path

Datum
Date

Name
Name

Revision
Revision
Auftrag

Erstellung

04.11.15

TB

Tel: 0221-92829-0

Fax: 0221-92829-30



Automation GmbH
Vogelsanger Str. 356-358, 50827 Köln

Urspr.

Ers. f.

Ers. d.

Schaltplan

Deckblatt
Coversheet

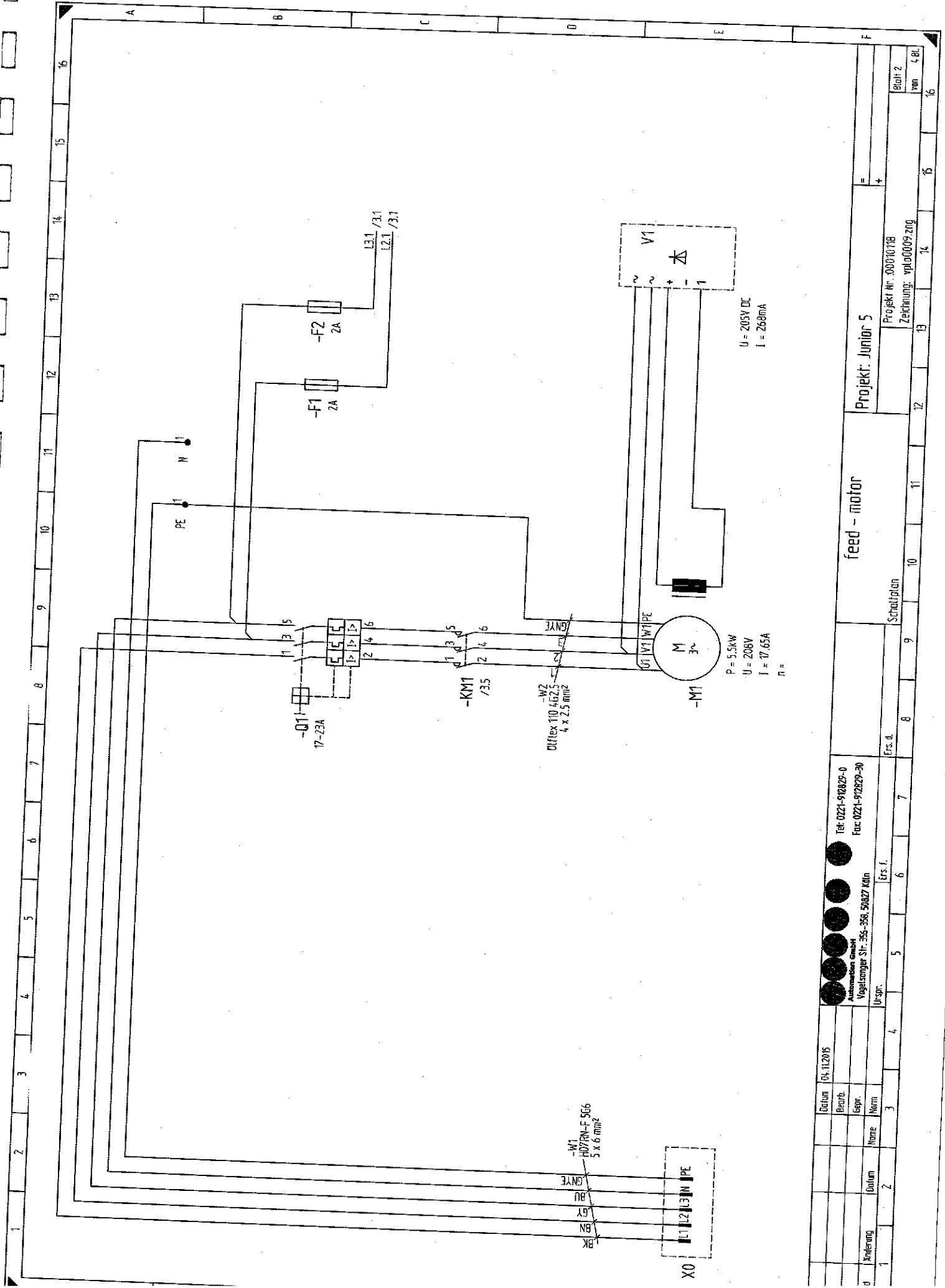
Projekt: Junior 5

Projekt Nr. 00010118

Zeichnung: vpln0009 zng

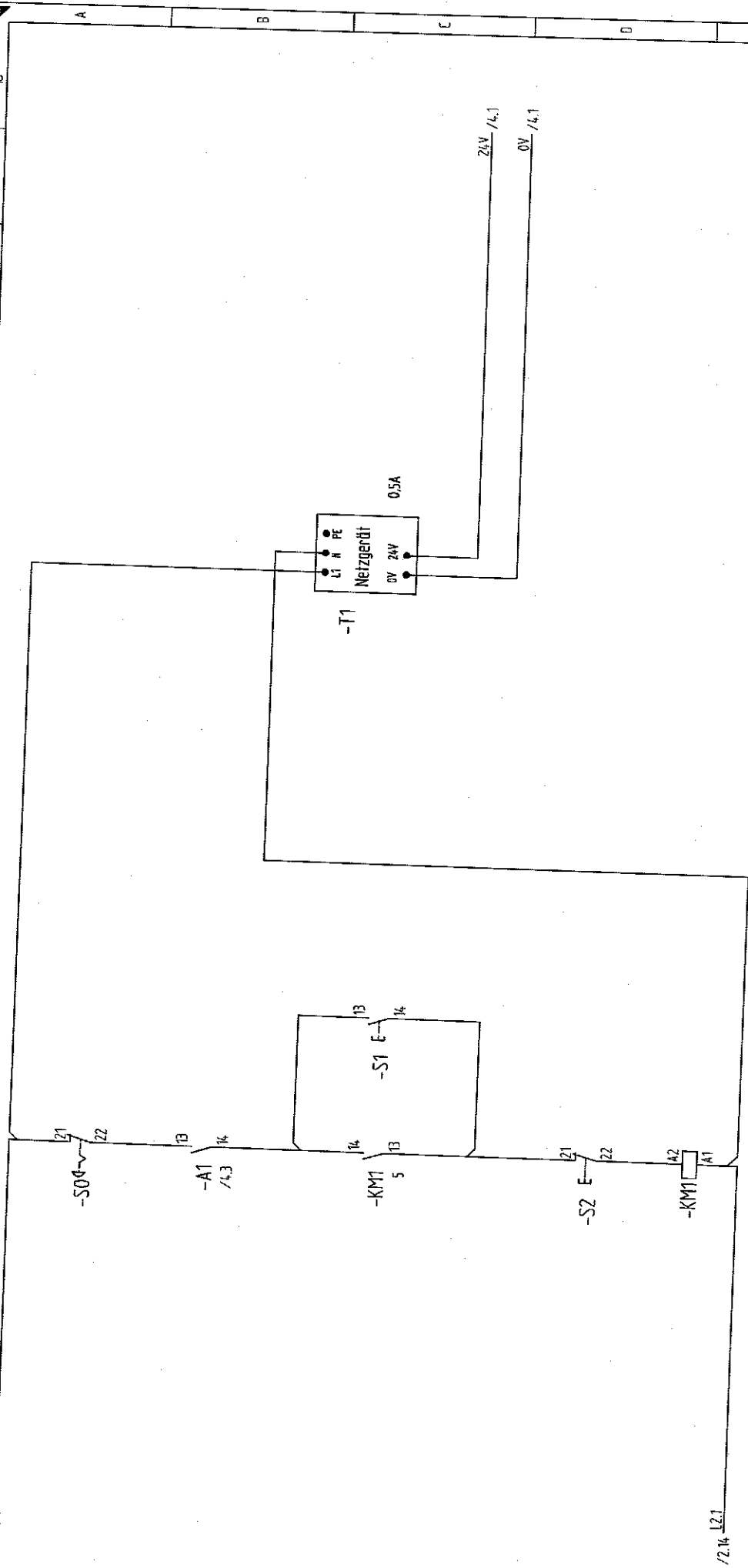
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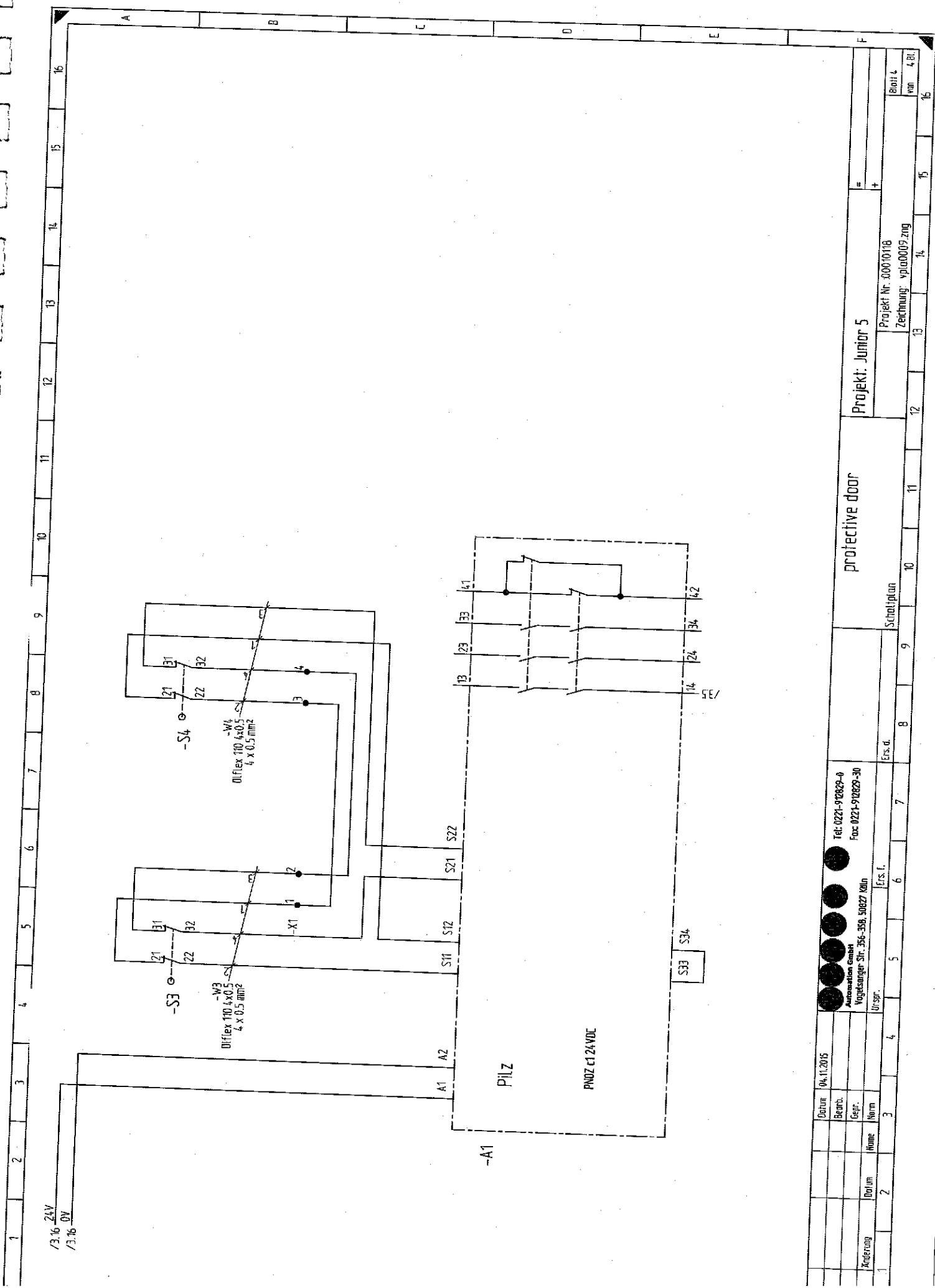
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Datum: 04.11.2015
 Bearb.:
 Gepr.:
 Änderung:

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 Ers. d.:

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 Fax: 0221-970229-30

Projekt: Junior 5

Projekt Nr. 30001018
 Zeichnung: ypla0009.zng

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