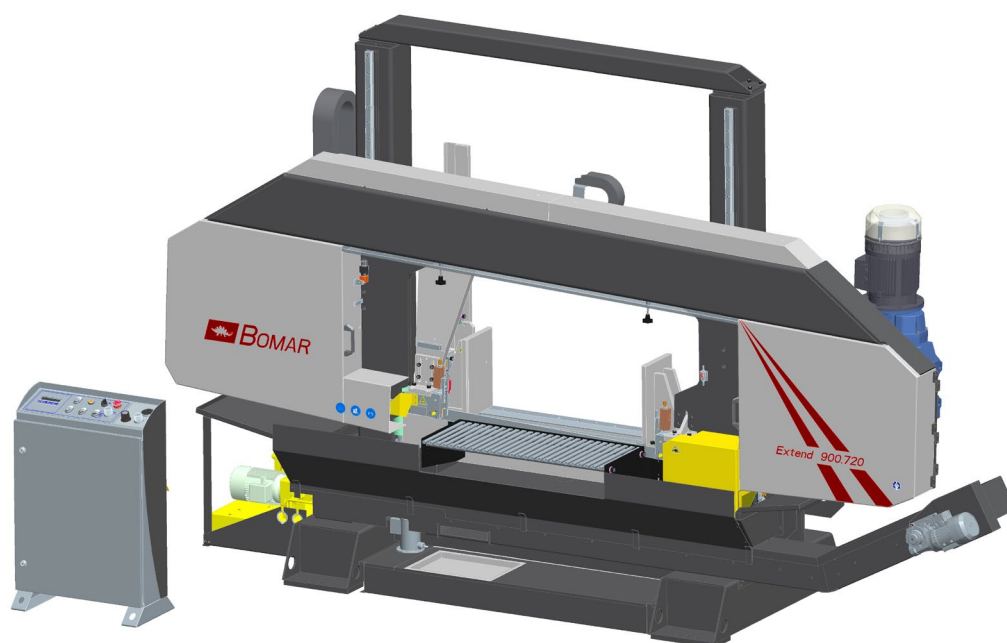




Extend 900.720 Extend 900.720sx

Operating instructions

Before transporting and using the machine,
please read the instructions thoroughly!

Service and information

Your BOMAR dealer:

Direct BOMAR contact:

BOMAR spol. s r.o.
Těžební 1236/1
62700 Brno
Czech Republic, EU

telefon: +420 – 533 426 100
fax: +420 – 533 426 109
e-mail: info@bomar.cz
www: <http://www.bomar.cz>

We are available:

Mondays to Fridays

7⁰⁰ – 16⁰⁰

Version:

1.02 / Oct. 2017
rev. 1

BOMAR, spol. s r.o. © – Subject to modifications and amendments.

EC Declaration of Conformity

^{1) 2)} We:

BOMAR, spol. s r.o.

Těžební 1236/1

627 00 Brno, Czech Republic

Id. No: 48908827

declare herewith

that the following designated device based on its conception and construction as well as the design launched by us meets the relevant basic safety requirements of the decrees of the government.

This statement applies exclusively to the machine device in conditions in which it was brought to the market. It does not apply to parts subsequently added by the end user or to modifications performed subsequently by the end user.

In the event of any device modification not approved by us this declaration shall lose its validity

Name: Band Saw

Type : Extend 900.720
Extend 900.720sx

Serial number:

Manufacturer BOMAR, spol. s r.o., Těžební 1236/1, 627 00 Brno

Product data

Determination: for cross dividing and cutting of rolled and towed bars and profiles made of steel, stainless steel, non-ferrous metals and plastics

Description: Stand, table, cutting unit with the saw band and drive, clamping device, cooling system, el. switch board with control panel.

Pneumatic NO ☐ YES ☒ Hydraulic NO ☐ YES ☐ Control system NO ☐ YES ☒

Technical data: Cutting rate 15-90 m.min-1
Cutting angle 0°
Total dimensions in mm (l×w×h) 4050 ×1250 ×2600
Total power requirement Extend 900.720 10,5 kW
Total power requirement Extend 900.720 sx 14 kW
Weight 6000 kg

Documentation:

Technical documentation for this machine device was elaborated in compliance with Government regulation no. 176/2008, Annex 7, part A.

The device meets relevant requirements of the given directives: 2006/42/EC
2004/108/EC

The applied harmonized standards, National standards and technical specifications:

ČSN EN ISO 12100:2011	ČSN EN 13898+A1:2009	ČSN EN ISO 13857:2008
ČSN EN ISO 4413:2011		ČSN EN 60204 -1 ed.2+A1:2009
ČSN EN 55011 ed.3+A1:2011	ČSN EN 61000-6-2 ed.3:2006	ČSN EN 61000-6-4 ed.2+A1:2011

The product is safe on condition of the common and determined usage.

The conformity judging was performed according to §12, par. 3, let. b), of the Law no. 22/1997 Coll. as amended.

The declaration of conformity was carried out in the cooperation with the ³⁾ TÜV SÜD Czech s.r.o, Novodvorská 994, 142 21 Prague 4 – Czech Republic, Identification number: 63987121 - Inspection body no. 4002.

The inspection certificate no 07.489.662 rev.1 was issued

Brno, 20.9.2016

Point of issue, datum

BOMAR, spol. s r.o.
Těžební 1236/1, 627 00 Brno
Czech Republic
IČO: 48908827
DIČ: CZ48908827

Alfred Pichlmann, Managing Director

Name and function of the responsible
subject, signature

1) Name, address and identification number of the subject issuing the conformity declaration (producer or importer)	
2) Person authorized to complete the technical documentation	
3) The authorized or accredited body co-operating on the conformity judging	
	If the equipment is installed without safety equipment offered by BOMAR, spol. s ro or its agents and used by the customer (or buyer) then EC declaration loses validity. EC Declaration of conformity is valid only if customer (buyer) installed the BOMAR safety equipment with the machine or with some other with equivalent safety device in accordance with current applicable regulations and standards. All machine elements and components that were built into the device by BOMAR, spol. s ro have been declared "identical" to a safety device, as offered by BOMAR, spol. s ro or its agents.

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1. **Safety notes**

The operating instructions must be read by the person, who keeps in touch with the machine before transportation, installation, using, servicing, repair, stocking or removal!

Attention!

The operating instructions must be available at the machine! Keep the operating instructions in good

The operating instructions include relevant information. The operator must familiarise himself with the install and operation, safety notes and machine servicing, because reliability and service life must be reached. The operating instructions must avoid risks, which are linked to work on the machine. Before transporting and using of the machine, please read the instructions thoroughly!

1.1. Machine determination

The band saw **Extend 900.720** **Extend 900.720sx** are determined for cutting and shortening of rolled bars and drawn bars and profiles from steels, stainless steels, non-ferrous metals and plastics **without cutting angle**.

Combustible materials are excepted for cutting! Any other usage and operation outside this range are unauthorized and the manufacturer/supplier does not accept any responsibility for any damages resulting from such misuse. **The operator has full responsibility!**

Attention!

Consider the safety signs on the machine. Do not remove or damage them!

The machine is equipped with safety and protective guarding for operator and machine protection. Nevertheless, this safety and protective guarding cannot prevent injury. Service personnel must read this chapter and comprehend it, before he starts to work on the machine. **Always keep instructions about work safety!** Service personnel must take into account other aspects of the risk, which refer to the ambient conditions and the material.

1.2. Protective suit and personal safety

Wear tight fitting overalls! Loose fitting clothes may be caught with machine parts and cause serious injury.

Wear protective gloves! Material cuts and saw band have sharp edges and may

Attention!

Gloves you can use only at working material replacement (saw band)! The machine and accessories must be inactive!

If the machine is running, you must not wear gloves! It is dangerous, because some parts of the machine can catch gloves!

cause serious injuries.

Wear protective shoes with non-skid soles! The unsuitable shoes may cause balance loss and following injury. Falling work pieces may cause serious injuries too.

Wear protective goggles! Chips and cooling liquid may damage your eyes.

Always wear ear protections! Most of the machines emit up to 80 dB and may damage your hearing.

Do not wear jewellery and always tie back long hair! Moving machine parts can catch jewellery or loose hair and may cause serious injuries.

Operate the machine only when you are fit enough to work. Illnesses or injuries diminish concentration. Avoid machine work, which may compromise the safety of you and your colleagues!

Attention!

**Machine can be operated by person older than 18 years!
Machine can be operated only person physically and mentally fit for this activity**

Keep instructions and orders about work safety!

Read the operating instructions, before you start to work on the machine! Keep the operating instructions in good condition!

1.3. Safety notes for machine operator

Machine can be operated only by one person. Machine operator is responsible for presence of other persons by the machine.

Close covers before the machine starting and check, if the covers are not damaged. Damaged covers must be repaired or changed. Do not start the machine, if the cover is removed! Check, if the electric cables are not damaged.

- Do not hold the material for clamping to the vice and for cutting!

Attention!

Do not connect the machine to electricity if the covers are removed. Do not touch the electrical equipment.

- Do not operate with the buttons and the switches on the control panel, when you have gloves!
- For machine starting take care, that there is nobody in the working area of the machine (it means in the working area of the vice, the saw band, the saw arm etc.).
- In no circumstances touch the rotating elements.
- Work on the machine only when the machine is in good condition!
- Check at least once in a shift, if the machine is not damaged. If the machine is damaged, you must bring the machine in order and you must inform your superior!
- Keep your working area clean! Ensure sufficient lighting in the working area.
- Take off the spilt water or the oil from the floor and dry it. Do not touch the cooling liquid with bare hands! Do not set the nozzle of the cooling liquid, when the machine is started on
- Do not remove the chips from the working area of the machine, when the machine is started on!
- Do not use the compressed air for the machine cleaning or for the chips removing!
- Use the protective instruments for chips removal!

1.4. Safety notes for the servicing and repairs

Switch off the main switch and lock it, before you start service work! Otherwise, there is possibility of hazardous machine starting.

Only qualified person can do the servicing and repairs. For parts changing, use only parts, which are identical with the originals. Otherwise, there is possibility of health hazard. Use only recommended type of the hydraulic oils and oils and lubricants!

Attention!

Only a qualified professional can carry out the servicing and repairs of the electric equipment! Take special care during the work with electrical equipment. High voltage shock can have fatal consequences! Always keep notes about work safety! Otherwise, there is possibility of heavy injury!

Do not remove or do not lock the limit switches or safety equipments! Any use of the saw, accessories or machine parts other than that intended by the BOMAR, spol. s r.o. company is not permitted. The guarantee on this product will be afterward lost and BOMAR, spol. s r.o. takes no responsibility for caused damages.

1.4.1. Safety notes for the servicing and repairs on hydraulic unit

Compliance with the the principles of cleanliness is basic requirement for trouble-free operation of hydraulic equipment. Hydraulic components are products made with high accuracy, and any contamination leads to a reduction lifetime or even malfunction. The consequences are very difficult to remove and expensive.

Always use clean tools. Parts and fasteners, which are part of a hydraulic circuit, never put away the dirty surface. The best cleaning agent is crepe paper, because the fibers of the cleaning cloths can also cause malfunction.

Protective cap from the threaded chamber remove just before the assembly of the unit.

Hoses and pipes before mounting flush with gasoline or other cleaning agent and blow compressed air.

All fittings must be properly tightened. However, do not raw power.

Attention!

- **When handling cooling agents always wear hazardous fluid-proof gloves!**
- **Wear protective goggles!**
- **Cooling liquid can get in contact with your eyes and may cause permanent severe injuries**

1.5. Safety notes for the cooling

1.5.1. Instructions for first help

1. Pull off and safely remove polluted, soaked clothing.
2. For breathing, go out in the fresh air or look for first aid treatment.
3. Wash with water or use crèmes for contact with the skin.
4. Flush with water for eyes and look for first aid treatment.

5. For swallowing, drink a lot of water and induce vomiting. Look for medical help.

1.6. Safety notes for Swarf conveyor (optional accessories)

Swarf conveyor is an accessories the machine pays for standing with this device



When the machine is switched swarf conveyor only operate using the control panel (see Chapter 3. Machine control)

Attention!

It is forbidden to enter the swarf conveyor area if the saw is in operation. All maintenance and other works on the swarf conveyor could be done only on equipment which has been switched off.

1.7. Safety machine accessories

Enhanced risk!

Do not come into or intervene in the cutting area. Otherwise, there is possibility of heavy injury.

The machine is equipped with safety accessories. It protects the operator from injuries and the machine before damage. The safety accessories are blocking accessories, emergency switches and covers. Check once in a week the function of the safety accessories. If the safety accessories are functionless, you must stop work and repair or change the safety accessories.

1.7.1. Total Stop

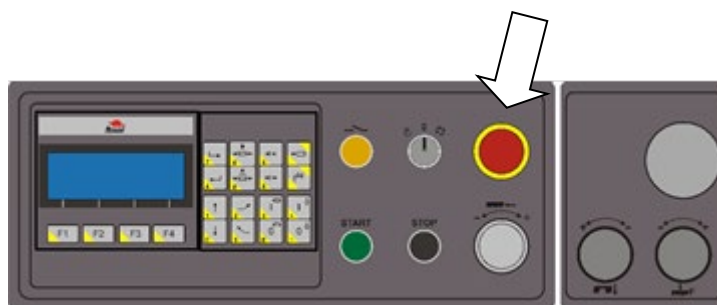
TOTAL STOP button is used for emergency switching – off the machine in case defect or health hazard. By pressing **TOTAL STOP** will immediately stop all dangerous machine movements.

If any damages or fault appears, immediately press TOTAL STOP button!

Release the pressing button is possible by twisting of the upper part of the button.

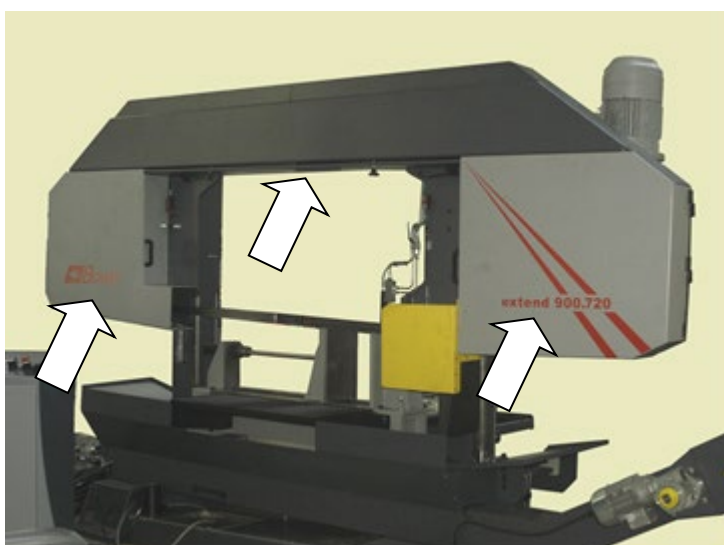


The TOTAL STOP button is placed at the control panel of the machine.

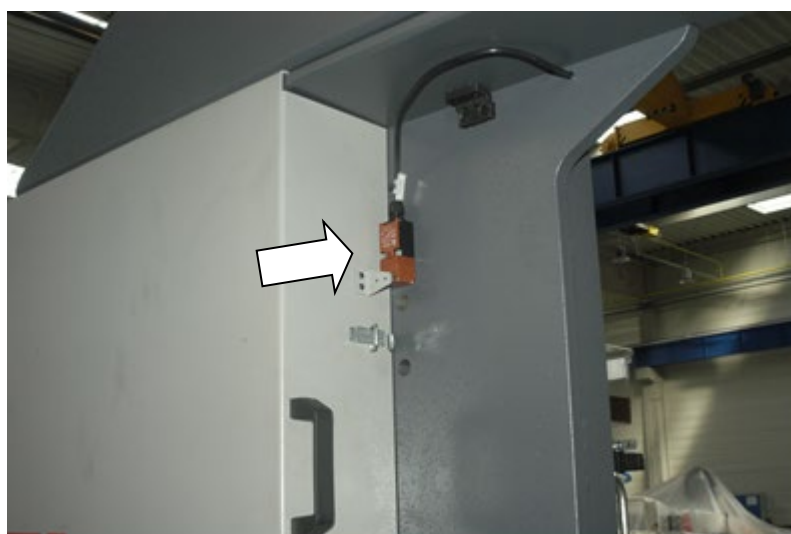


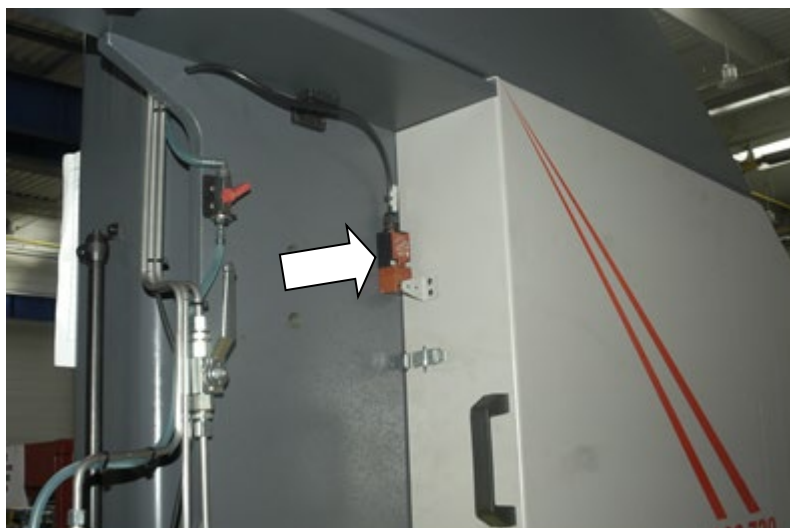
1.7.2. Arm covers

Arm covers cover the saw band and guiding wheels..



If the left or the right cover is opened during operation, the limit switch is opened and the band saw is stopped. The band saw is not possible start in set mode.





1.7.3. Brush cover

This cover covers the brush which is intended for cleaning of the saw band from impurities.



Never switch on the saw band driver if this cover is not mounted!

1.7.4. Saw band cover

It covers the visible area of the saw band from left guiding cube to the frame.

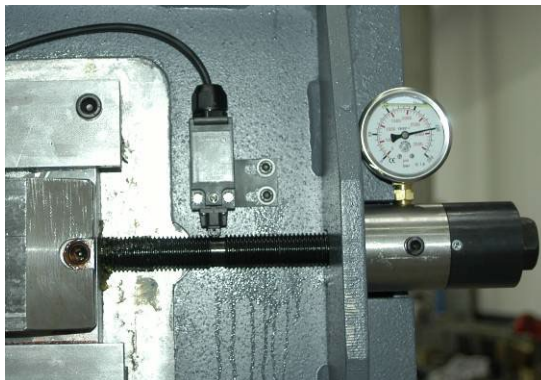


Never switch on the saw band driver if this cover is not mounted!

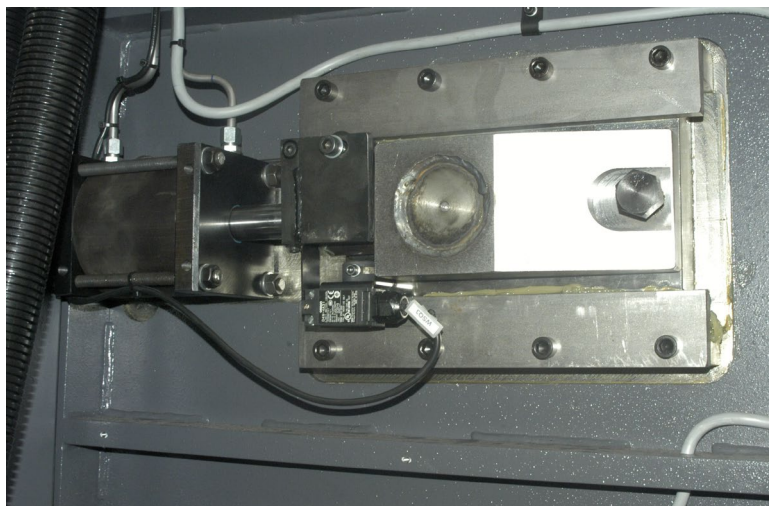
1.7.5. Device for the saw band stretching and rupture inspection

This device checks the saw band stretching and causes immediate machine shut – down in the event the band ruptures.

The device for a machine where a mechanical saw band stretching is installed



The device for a machine where a hydraulic saw band stretching is installed



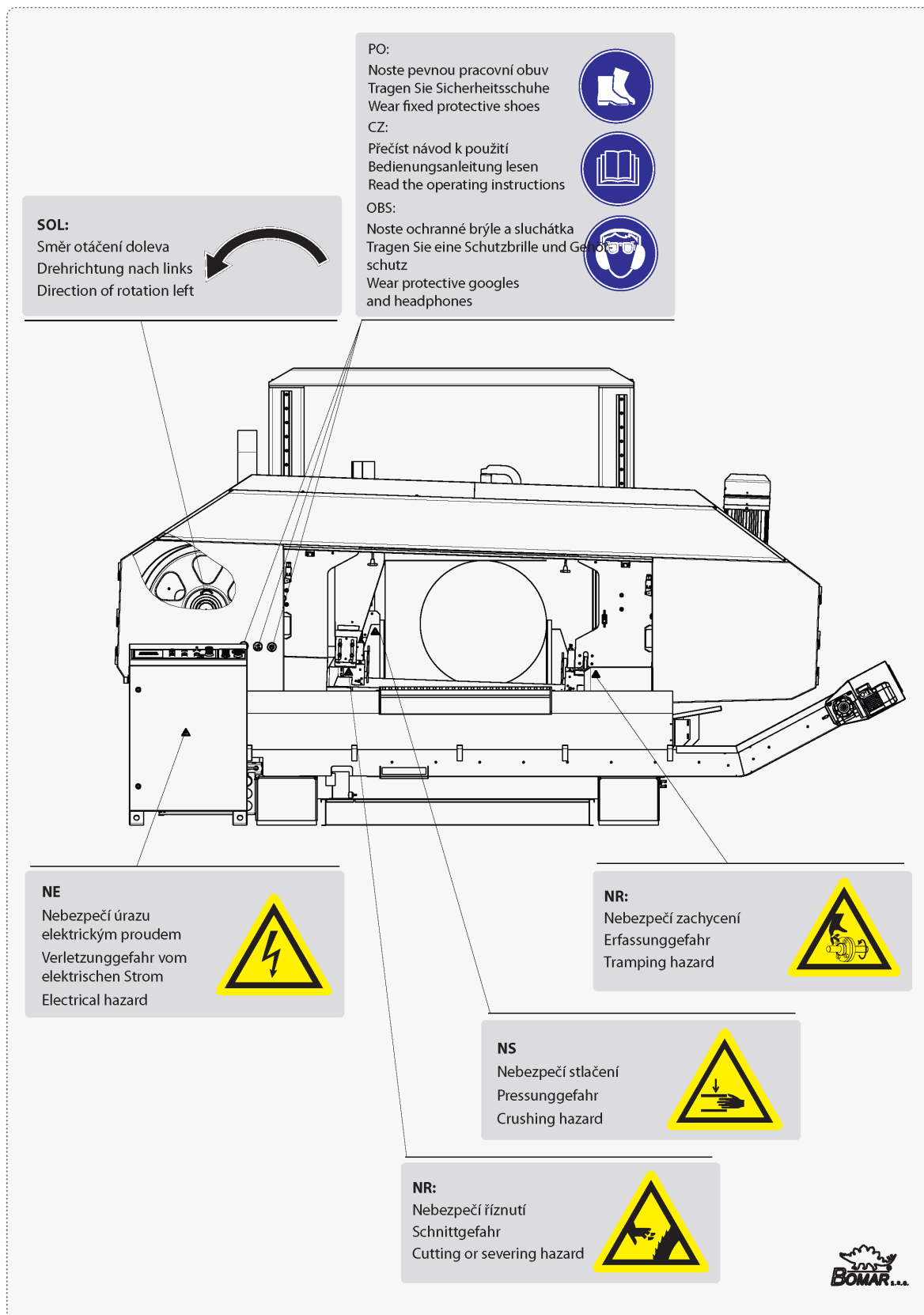
The device contains limit switch. Check the stretching carefully and periodically – eventually adjust.

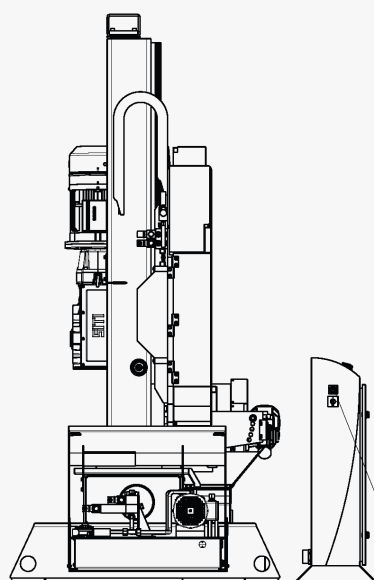
- 1.8. Umístění štítku stroje /
Maschinenschild position /
Position of machine label



Machine label is placed on the saw arm, near the engine.

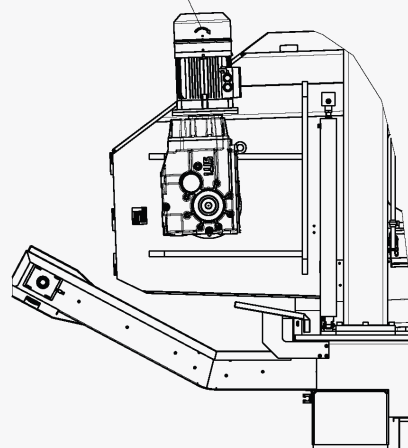
1.9. Umístění bezpečnostních značek / Verteilung der Sicherheitszeichen / Position of safety symbols





SOP:

Směr otáčení doprava
Drehrichtung nach rechts
Direction of rotation right



HV
Hlavní vypínač
Hauptschalter
Main switch

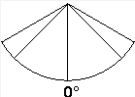


2. **Machine documentation**

2.1. Technická data / Technische Daten / Technical data

Hmotnost stroje / Maschinengewicht / Machine weight:	
• Hmotnost / Gewicht / Weight	6000 kg
Rozměry stroje / Maschinengröße / Machine size :	
• Délka / Länge / Length	4050 mm
• Šířka / Breite / Width	1250 mm
• Výška / Höhe / Height	2600 mm
Elektrické vybavení / Elektrische Ausrüstung / Electrical equipment Extended 900.720::	
• Napájení / Versorgungsspannung / Supply voltage	~3 x 400/230 V, 50Hz, TN-C-S
• Příkon / Gesamtschlosswert / Total Input	10,5 kW
• Max.jištění / Max. Vorschaltssicherung / Max. Fuse	40 A
• Krytí / Schutzart / Protection	IP 54
Elektrické vybavení / Elektrische Ausrüstung / Electrical equipment Extended 900.720sx:	
• Napájení / Versorgungsspannung / Supply voltage	~3 x 400/230 V, 50Hz, TN-C-S
• Příkon / Gesamtschlosswert / Total Input	14 kW
• Max.jištění / Max. Vorschaltssicherung / Max. Fuse	40 A (400V) 63 A (230V)
• Krytí / Schutzart / Protection	IP 54
Akustický tlak / Schalldruckpegel / Acoustic pressure:	
• Extend 900.720 Extend 900.720sx	L _{Aeqv} = 86 dB
Pohon / Atrieb / Drive Extended 900.720	
• Typ / Typ / Type	4P, 23/400V, B5, size 132
• Napájení / Versorgungsspannung / Supply voltage	~3 x 400V, 50Hz
• Výkon / Leistung / Output	5,5 kW
• Jmenovité otáčky / Motorenndrehzahl / Nominal speed	1455 min ⁻¹
Pohon / Atrieb / Drive Extended 900.720sx:	
• Typ / Typ / Type	4P, 23/400V, B5, size 132
• Napájení / Versorgungsspannung / Supply voltage	~3 x 400V, 50Hz
• Výkon / Leistung / Output	7,5 kW
• Jmenovité otáčky / Motorenndrehzahl / Nominal speed	1455 min ⁻¹
Hydraulické zařízení / Kühlmiteleinrichtung / Hydraulic equipment:	
• Typ / Typ / Type	(731-0507)/870-2038
• Výkon / Leistung / Output	6,5 MPa/2,2 kW
Chladicí zařízení / Kühlmiteleinrichtung / Cooling equipment:	
• Typ / Typ / Type	4-COA4-14 HP1
• Výkon / Leistung / Output	0,12 kW
• Obsah nádrže / Volumen vom Kühlmittel / Capacity	50 l
Rozměr pásu / Sägebanddimension / Band size:	
8560x54x1,6 mm	
Řezná rychlost / Schnittgeschwindigkeit / Cutting speed:	
15–90 m/min	

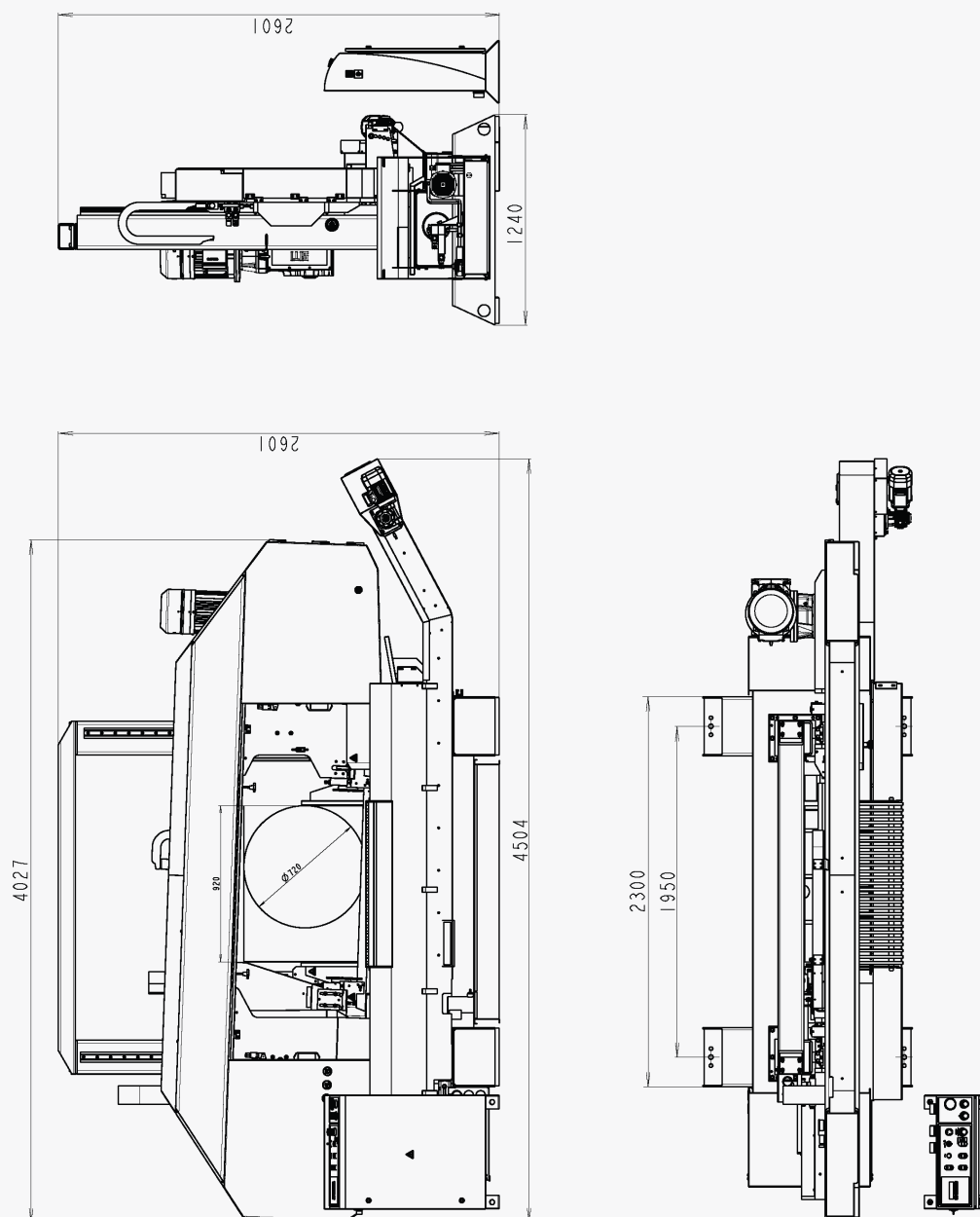
Řezné rozsahy / Schnittbereiche / Cutting size:

				
0°	Ø720 mm	900×720 mm	900×720 mm	720×720 mm

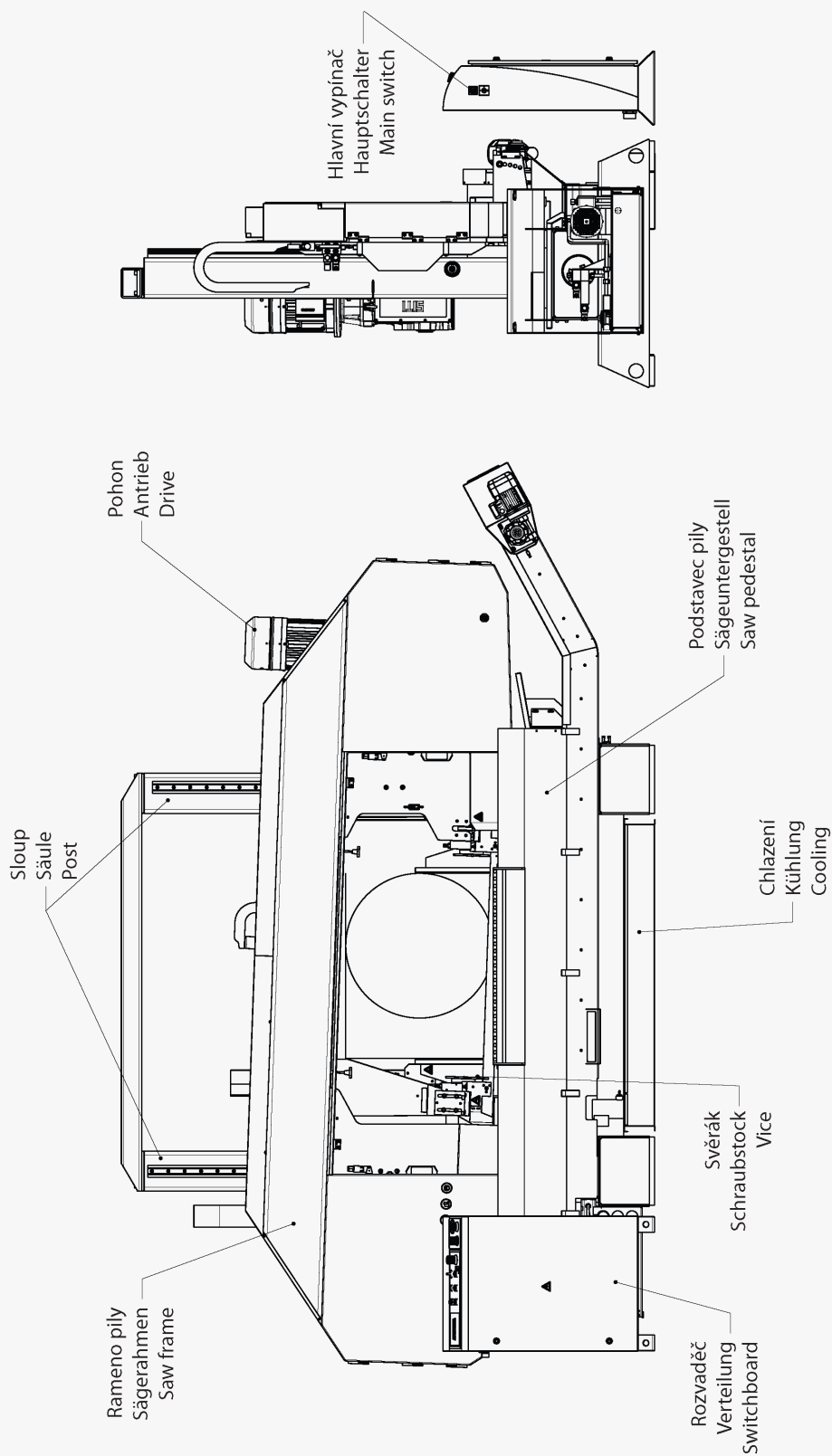
Level of acoustic pressure:

Equivalent level of acoustic pressure A (noise) at operator position are $L_{Aeqv}=86$ dB. Mentioned values are levels of emission which doesn't have to represent safe levels. Factors which influence real level of acoustic pressure on machine operator are: working place characteristics, cut material, saw band. These factors have significantly influence on acoustic pressure.

2.2. Rozměrové schéma / Aufstellzeichnung / Installation diagram



2.3. Popis / Beschreibung / Description



2.4. Transportation and stocking

2.4.1. Conditions for transportation and stocking

Keep recommendations for the manufacturers for transportation and stocking! If the recommendations are not kept, damage can occur to the machine.

- Don't use a forklift truck for handling the machine, if you do not have license for it!
- Don't move under suspended loads! Fault in lifting device may cause serious injury.
- Keep a safe distance from the machine during the transport.
- Temperature of the air from **-25°C to 55°C**, for a *short term* (max. 24 hours) temperature of the air until 70°C
- Do not expose the machine to radiation (for example microwave radiation, ultraviolet radiation, laser radiation, x-ray radiation). Radiation can cause problems with the machine function and deteriorating condition of the isolation.
- Take measures, to prevent damage by dampness, by vibrations and by shakes.

2.4.2. Transport and stocking preparations

Close the vice and thoroughly oil all blank surfaces.

Lower the saw frame to the lowest position.

Make sure to empty the machine of all traces of the cooling agent.

Fasten all loose parts securely to the machine.

Pack and wrap the control desk securely to avoid damage during transport.

Fix the stickers stating the minimum approximate machine weight to at least five well visible places.

2.4.3. Transport and stocking

Handle the machine with the hand pallet truck or the forklift truck! Use the lifters of the truck according to the Transport scheme.

If the hand pallet truck or the forklift truck is not available it is possible to use suspension cables and the crane.

The base of the machine is equipped with holes with a diameter of 70 mm. Insert steel logs corresponding dimensions into the holes. It is possible to use four shorter or two longer rods so as to pass through all eight holes. Attach to steel bars the suspension cables with adequate strength for the weight of the machine

Make sure that the hand pallet truck; the forklift truck or the the crane and the suspension cables had sufficient capacity. Use only shackles with appropriate capacity..

Make sure that the van or the trailer had sufficient capacity.

The machine must be properly secured during transport, to not tip over or fall from the transport vehicle.

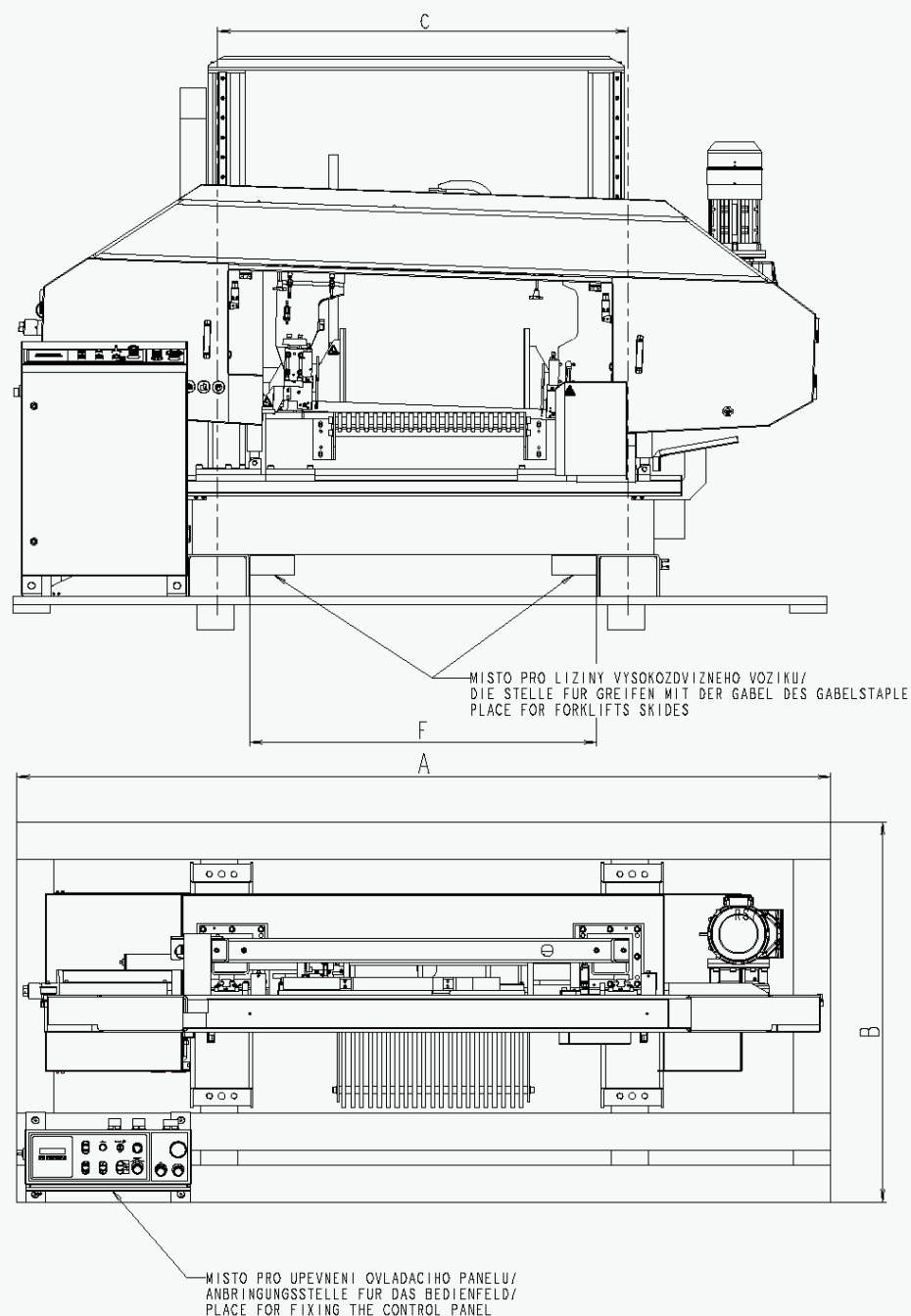
When it is possible, screw on the palette to the floor of the van or the trailer.

Be careful that the machine is not damaged during transportation.

It is forbidden to handle the machine any other way (for example by, lifting by the saw frame of the band saw), than it is written in this operating instructions, the machine can be damaged!

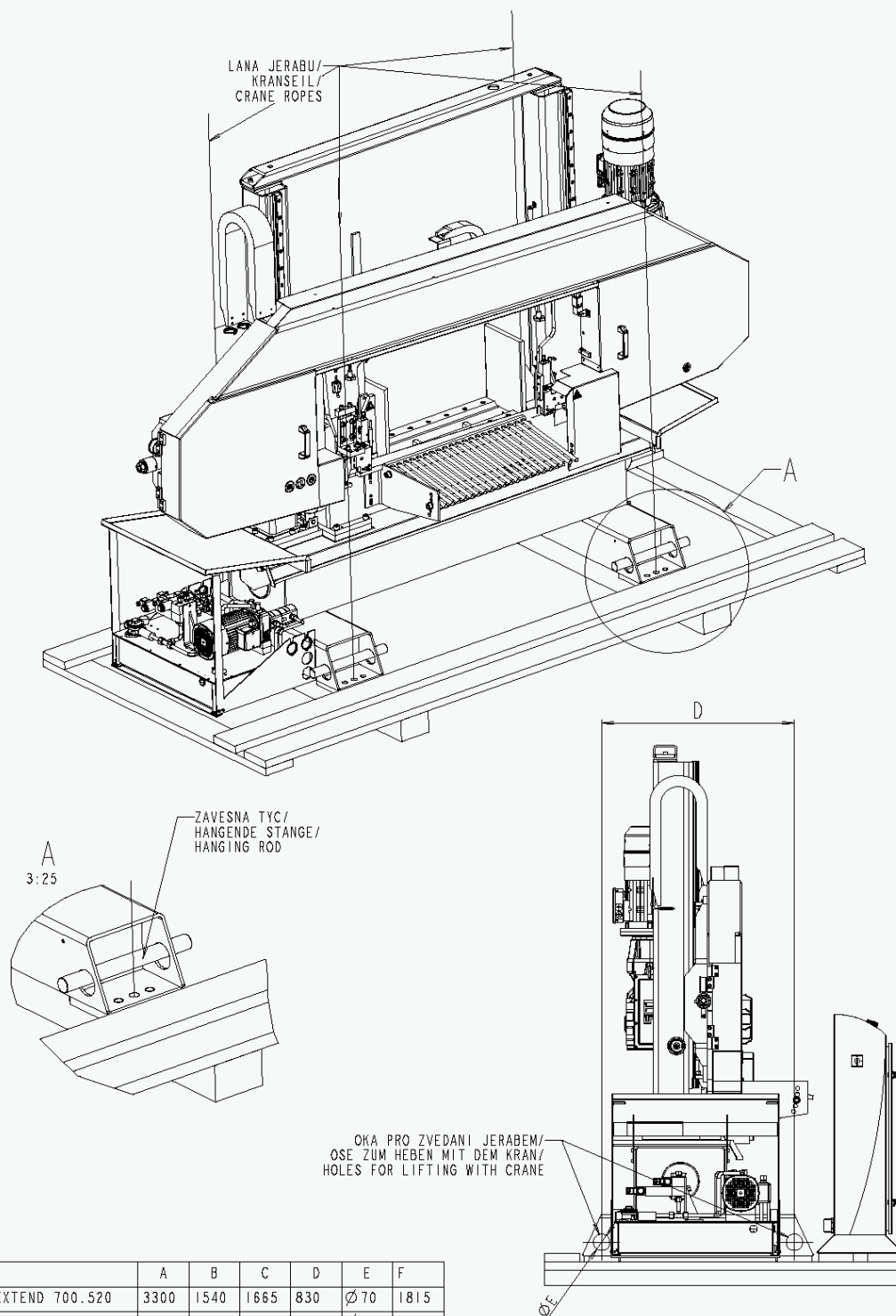
Store the machine only under the conditions specified in this manual to prevent damage to the machine

2.4.4. Transportní schéma - vozík /
Transport schema gabelstapler/
Transport scheme – forklift



	A	B	C	D	E	F
EXTEND 700.520	3300	1540	1665	830	Ø 70	1815
EXTEND 800.620	3450	1700	1790	900	Ø 70	1990
EXTEND 900.720	4000	1800	1950	1150	Ø 70	2150
EXTEND 1000.820	4300	2200	2275	1300	Ø 70	2475
EXTEND 1120.1120	3000	2400	2565	1600	Ø 70	

2.4.5. Transportní schéma - jeřáb /
Transport schema gabelstalper/
Transport scheme – crane



	A	B	C	D	E	F
EXTEND 700.520	3300	1540	1665	830	Ø 70	1815
EXTEND 800.620	3450	1700	1790	900	Ø 70	1990
EXTEND 900.720	4000	1800	1950	1150	Ø 70	2150
EXTEND 1000.820	4300	2200	2275	1300	Ø 70	2475
EXTEND 1120.1120	3000	2400	2565	1600	Ø 70	

2.5. Activation

2.5.1. Machine working conditions

Keep the conditions of the manufacturer for machine operating! If recommendations are not kept, damage can occur to the machine.

The manufacturer warrants the correct function of the machine for these conditions:

- At temperature air from *10°C do 40°C*, the temperature average during 24 hours must *not exceed over 35°C*.
- At relative dampness of the air in the interval from 30% to 95% (not concentrate). Altitude must be lower than 1000 metres.

Attention!

If the ambient temperature drops below 15 ° C is required before operating the machine to have switch on hydraulic unit around 10 minutes and then made several motion few times (for example, in manual mode) by all hydraulic cylinders. The reason is to heat hydraulic oil to the operating temperature for proper function of the pressure switches (and choke).

- Do not expose the machine to the radiation (for example microwave radiation, ultra-violet radiation, laser radiation, x-ray radiation). Radiation can cause problems with the machine function and deteriorating condition of the isolation.

2.6. Band saw unpacking and assembling

Attention!

Switch off the main switch and lock it, before you start assembly! Otherwise, there is possibility of hazardous machine starting.

Remove the packing from the machine and unpack all parts.

If the hydraulic unit is outside the machine (the machine only connected hoses and cables), it needs to be placed and mounted on a solid basis (floors, etc.). The mounting holes are used on the bottom (bases) of the tank.

2.6.1. Machine installing and levelling

Check the floor supporting capacity before machine installing. If the floor capacity does not agree with requirements, you must prepare the necessary base for the machine.

Minimal requirement:

machine weight – Extend 900.720 – 4000 kg

+ weight of accessories

+ maximum weight of material

- The machine must be levelled at the horizontal position. All feet of the machine must touch with the floor after levelling
- The machine must be levelled by means of the calibrated spirit level. Spirit level is put on the vice area. Set the roller conveyors according to the spirit level.
- For machine levelling, take care that there is sufficient available space for operation, repair work, servicing of the machine and handling the material..
- The machine including appended parts and accessories must be visible from the place of operation.

2.6.2. First run of the power pack

Before the first run check:

- The direction of the Pump, while run the power pack for max. 2seconds.
- The cooling fan of the motor has to rotate in the same direction as the arrow on the top of the motor cowling indicates.
- In case of wrong rotational direction, the electrical phase in the connection box is to be changed. This check is required after every disconnection from the power source
- Wiring matches with electrical and hydraulic diagrams
- the electric motors (pump and cooler) are properly connected and have the prescribed rotation
- the hydraulic accumulator with nitrogen gas to the specified value
- aux. elements work right (thermometer, level gauge, heater)

First run (Attention – working pressure on securing valve is set by producer in accoring the hydraulic diagram):

- In the short intervals activate an electric pump
- check for leaks and noise
- Bleed the hydraulic circuit
- if possible, test the circuit function with minimum load
- test the electrical equipment
- during operation monitor measuring equipment, noise, height and temperature of oil in the tank
- During this time a careful bleeding off for the whole hydraulic system is necessary. In case there is no bleeder port, the power pack will bleed itself after a while via the air breather on the tank or the return line filter.
- After multiple start-up.

2.6.3. Filling the reservoir with hydraulic oil

Oil regulations and recommendations of the manufacturer in the technical documentation (appendix) are to be carefully observed. For standard power packs we recommend the oiltype OH-HM32 (DIN 51524) of all known oil manufacturers.

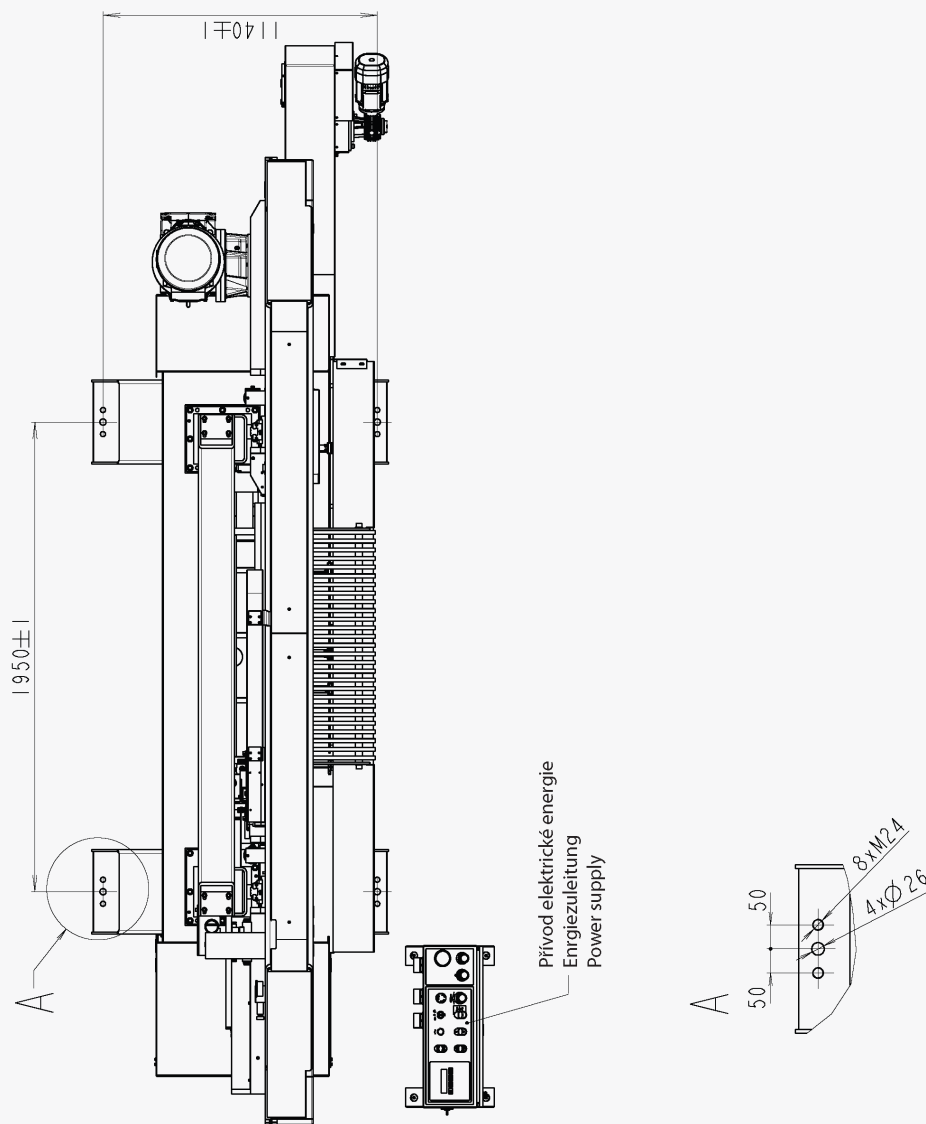
Power packs have to be filled up with clean, pre-filtered oil! The purity of the hydraulic fluid must correspond to the class 10 NAS 1638 (reachable with filter $\beta_{=75}$)!

Filling from container, such as barrels, buckets, etc. is not recommended or permitted!

The maximum oil level will be shown on the upper marking at the dipstick or the sight level glass. Overfilling has to be prevent. The maximum filling rate of 15 l/min shouldn't be exceed.

Druh oleje	Kinematická viskozita v mm ² /s v závislosti na teplotě					Bod tuhnutí
	0°C	20°C	40°C	60°C	80°C	°C
OH-HM 32	220	100	32	15	7	-40
OH-HV 32	180	67	32	17	11	-40

2.6.4. Kotevní plan / Verankerungsplan / Grounding plan



Kotvicí materiál / Verankerungsmaterial / Grouding material

- 4x Kotvicí hmoždina / Verankerungsdübel / Anchoring plug M24 mm - délka/ Länge/ Lenght 230 mm
- Vrtáno do hloubky / In die Tiefe gebohrt / Drilled to - 180 mm

Požadavky na rovinnost podlahy / Anforderungen an die Bodenebenheit / Requirements for floor flatness

± 10 mm / 1 m

2.6.5. Electrical connection

Attention!

Only a qualified professional must carry out the servicing and repairs of the electric equipment! Take special care during work with electrical equipment. High voltage shock can have fatal consequences! Always keep notes about work safety.

Electrical parameters of the machine – see technical data.

Before connecting switch off the main switch of the power supply circuit for the machine and ensure dry place when doing connecting works!

Note:

The values of the crosscut of the conductor and the rated current are in the norms.

Service voltage must agree with the line voltage! Crosscut of the supply line must respond with rated current for max. machine load.

In case the machine is connected with a direct connection, an extra main switch must be added which can be locked in zero position.

2.6.6. Check the direction of the saw band

Note:

The machine with the fast saw band must be connected to the

Attention!

In this case the extra main switch becomes primary and the main switch on the machine has only secondary function.



After the machine has been successfully connected, briefly switch on the machine and put the driving engine of the band in the running position. The direction must be in accordance with the arrow direction on the saw band cover. In case the direction of the saw band does not match, two phases at the terminal strip must be switched.

2.6.7. Check machine connection into electrical network



Attention!

When you connect the machine to the electrical network observe correct connection of all phases!

ENGINE IN IN HYDRAULIC AGGREGATE CANNOT BE OPERATED WITH REVERSE TURNING MORE THEN 10 SECONDS!!!



2.7. Filling of the cooling system

Prepare the mixture of the water and the cooling liquid. Keep the concentration specified by manufacturer. Shift away the cover from the drainage hole. Fill the mixture of the water and the cooling liquid to the tank of the cooling system. Area of the tank for the cooling liquid is discovered from the chapter *Technical data*.

Note

If the machine is equipped with Micronising unit, fill the Microniser container with prescribed cooling agent. Microniser is ready for operation.

Let the drainage hole opened and with the sieve during operation, because it secures the right work of the cooling system. Filling the tank with the cooling liquid, take care that the liquid does not drip out of the tank and the tank does not overflowed.

2.8. Connecting to the compressed air supply

If Micronizer (optional accessory) is installed at the machine, connect the machine to the compressed air supply by means of the screw G1/4 on the manifold period

Compressed air for Microniser must satisfy conditions:

- Roughly cleaned and partly dry
- $p_{\min} = 0,4 \text{ MPa}$
- $p_{\max} = 0,6 \text{ MPa}$
- Flow - 50 l/min.

2.9. Check machine function

Check, if the machine or some parts of the machine were not damaged during transport.

Check, if covers are installed and functional. Check by means of the Tenzomat if the saw band is correctly stretched. If it is necessary, you can stretch the saw band according to chapter *Selection and replacement of the saw band*. Values of the saw band stretching are on the Tenzomat. Switch on the main switch and check the motors and systems (saw band drive, hydraulic pump, cooling pump, chips conveyor).

Open and close the main vice. Turn the saw frame of the band saw from one outer position to other outer position. Raise the saw frame to the top position and drop the saw frame to the lowest position.

Start the machine with the cooling pump and let it run without load until the cooling system will be filled with cooling liquid. As soon as the cooling liquid starts to escape from the nozzles of the cooling system, the cooling system is ready for the operation. Carry one cycle of cutting without material. Check, if the machine runs with no irregularities. If all machine functions are right, the machine is ready for operation..

2.10. Machine disposal after lifetime

Blown out all service fluids (cooling liquid, hydraulic oil) into designated reservoir. Dismantle machine into separate parts and dispose them in accordance with valid directives.

2.11. Optional accessories

2.11.1. Laserliner

The device is used to ascertain exact position of the material cut before cutting.

The cut is indicated by the laser beam projected on the surface of the prepared material..



Switch of the laserliner is near of the main switch - on the side of switchboard.



2.11.2. Tool cleaning machines from chips after cutting.



With custom pump (min. capacity 16 l / min.) The coolant gets into the rinsing pistol with the trigger lever.

Sufficient pressure to the chips and debris were eliminated from the bearing surfaces of the base material and the saw.

Gun cleaning machine from the chip is supplied with a sufficient supply hose for easy handling (diameter of 12/8 mm).

Package includes:

1. Ergonomic handle allows easy handling of the gun during cleaning machine.



2. Brass adjustable nozzle allows for smooth width rinse stream.



3. Valve for setting maximum coolant flow



4. Also included is a convenient holder for postponement gun after use



5. Connecting part equipped with a transparent tube with a connecting part for coupling the cleaning pistol to the pump.



6. Transparent inlet hose to couple the pistol to the connecting part.



Suitable for machine brand Bomar

2.12. Saw band

Refit the saw band cover only after you have installed and tightened the saw band.



2.12.1. Saw band size

8560x1,6x54 mm

2.12.2. Selection of the saw band tooth system

The manufacturers provide the saw bands with constant and variable tooth system. The important factor for selection of the tooth system is length of the cutting canal with respect to the size of the product

BOMAR for recommended Variable tooth system for band saw.

1. *Constant tooth system* – the saw band has parallel tooth pitch all over length. This way is suitable for cutting of solid material.
2. *Variable tooth system* – tooth pitch is variable. Variable tooth system is used for profiled materials and bundle cutting. Variable tooth pitch lowers vibration of the saw band, increases service life of the saw band and quality of the cutting area.

In tables, there are advised type of the tooth system depending on sizes and form of the cutting material.

Footnotes:

Z_pZ – teeth number on one inch S – tooth with zero angle of the teeth K – tooth with positive angle of the teeth

Examples of the tooth system marking:

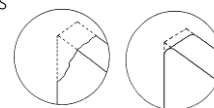
32 S – number „32“ means 32 teeth on one inch (that means constant tooth system), letter „S“ marks teeth with zero angle of the tooth.

4–6 K – number „4–6“ means 4 till 6 teeth on one inch (that means variable tooth system); letter „K“ marks teeth with positive angle of the teeth.

2.12.3. Saw band running-in

Running-in: Cut the material with the frame lowering reduced to 50% only. When vibrations occur increase or decrease the band speed.

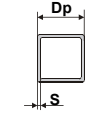
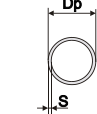
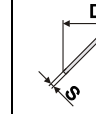
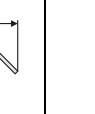
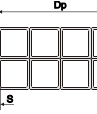
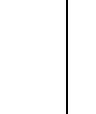
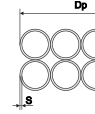
When cutting small pieces run the band until approximately 300 cm² of material has been cut. When cutting large pieces run the band for 15 minutes approximately. When the band has been run, increase the lowering-speed to normal speed. The running in of the saw band avoids micro-breaks on the cutting edges of new saw band ensuing from first excessive stress. This would decrease service life substantially. The optimal running in of the saw band produces ideal rounded



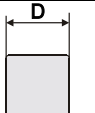
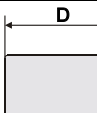
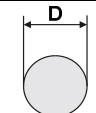
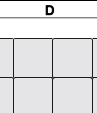
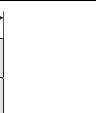
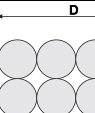
Note: Run regrounding saw bands too.

cutting edges and therefore the conditions for an optimal service life.

2.12.4. Tables for teeth selection

SHAPED MATERIAL (Dp, S = mm)						
						
Note: Table shows tooth system selection for cutting one piece of the profile. For cutting of more pieces of the profiles (bundle), you must think of the size of the wall as double size of the wall of one profile (that means, size „S“ equates to 2×S). In table, there are tooth systems constant and variable.						
Size of the wall S [mm]	Tooth system (ZpZ)					
	Outer diameter of the profile Dp [mm]					
	20	40	60	80	100	120
2	32 S	24 S	18 S	18 S	14 S	14 S
3	24 S	18 S	14 S	14 S	10–14 S	10–14 S
4	24 S	14 S	10–14 S	10–14 S	8–12 S	8–12 S
5	18 S	10–14 S	10–14 S	8–12 S	6–10 S	6–10 S
6	18 S	10–14 S	8–12 S	8–12 S	6–10 S	6–10 S
8	14 S	8–12 S	6–10 S	6–10 S	5–8 S	5–8 S
10	-	6–10 S	6–10 S	5–8 S	5–8 S	5–8 S
12	-	6–10 S	5–8 S	5–8 S	4–6 K	4–6 K
15	-	5–8 S	5–8 S	4–6 K	4–6 K	4–6 K
20	-	-	4–6 K	4–6 K	4–6 K	3–4 K
30	-	-	-	3–4 K	3–4 K	3–4 K
50	-	-	-	-	-	3–4 K

Size of the wall S [mm]	Tooth system (ZpZ)					
	Outer diameter of the profile Dp [mm]					
	150	200	300	500	750	1000
2	10–14 S	10–14 S	8–12 S	6–10 S	5–8 S	5–8 S
3	8–12 S	8–12 S	6–10 S	5–8 S	4–6 K	4–6 K
4	6–10 S	6–10 S	5–8 S	4–6 K	4–6 K	4–6 K
5	6–10 S	5–8 S	4–6 K	4–6 K	4–6 K	3–4 K
6	5–8 S	5–8 S	4–6 K	4–6 K	3–4 K	3–4 K
8	5–8 S	4–6 K	4–6 K	3–4 K	3–4 K	3–4 K
10	4–6 K	4–6 K	4–6 K	3–4 K	3–4 K	2–3 K
12	4–6 K	4–6 K	3–4 K	3–4 K	2–3 K	2–3 K
15	4–6 K	3–4 K	3–4 K	2–3 K	2–3 K	2–3 K
20	3–4 K	3–4 K	2–3 K	2–3 K	2–3 K	2–3 K
30	3–4 K	2–3 K	2–3 K	2–3 K	1,4–2 K	1,4–2 K
50	2–3 K	2–3 K	2–3 K	1,4–2 K	1,4–2 K	1,4–2 K
75	-	2–3 K	1,4–2 K	1,4–2 K	1,4–2 K	0,75–1,25 K
100	-	-	1,4–2 K	0,75–1,25 K	0,75–1,25 K	0,75–1,25 K
150	-	-	-	0,75–1,25 K	0,75–1,25 K	0,75–1,25 K
200	-	-	-	0,75–1,25 K	0,75–1,25 K	0,75–1,25 K

SOLID MATERIAL (D = mm)						
						
Constant tooth system		Variable tooth system				
length of the cut D	tooth system (ZpZ)	length of the cut D	tooth system (ZpZ)			
to 3 mm	32	to 30 mm	10 –14			
to 6 mm	24	20–50 mm	8–12			
to 10 mm	18	25–60 mm	6–10			
to 15 mm	14	35–80 mm	5–8			
15–30 mm	10	50–100 mm	4–6			
30–50 mm	8	70–120 mm	4–5			
50–80 mm	6	80–150 mm	3–4			
80–120 mm	4	120–350 mm	2–3			
120–200 mm	3	250–600 mm	1,4–2			
200–400 mm	2	500–3000 mm	0,75–1,25			
300–800 mm	1,25					
700–3000 mm	0,75					

3. **Machine control**

3.1. Starting the band saw

- » 1. Switch on the main switch of the band saw. The main switch is situated on the side of the switchboard.

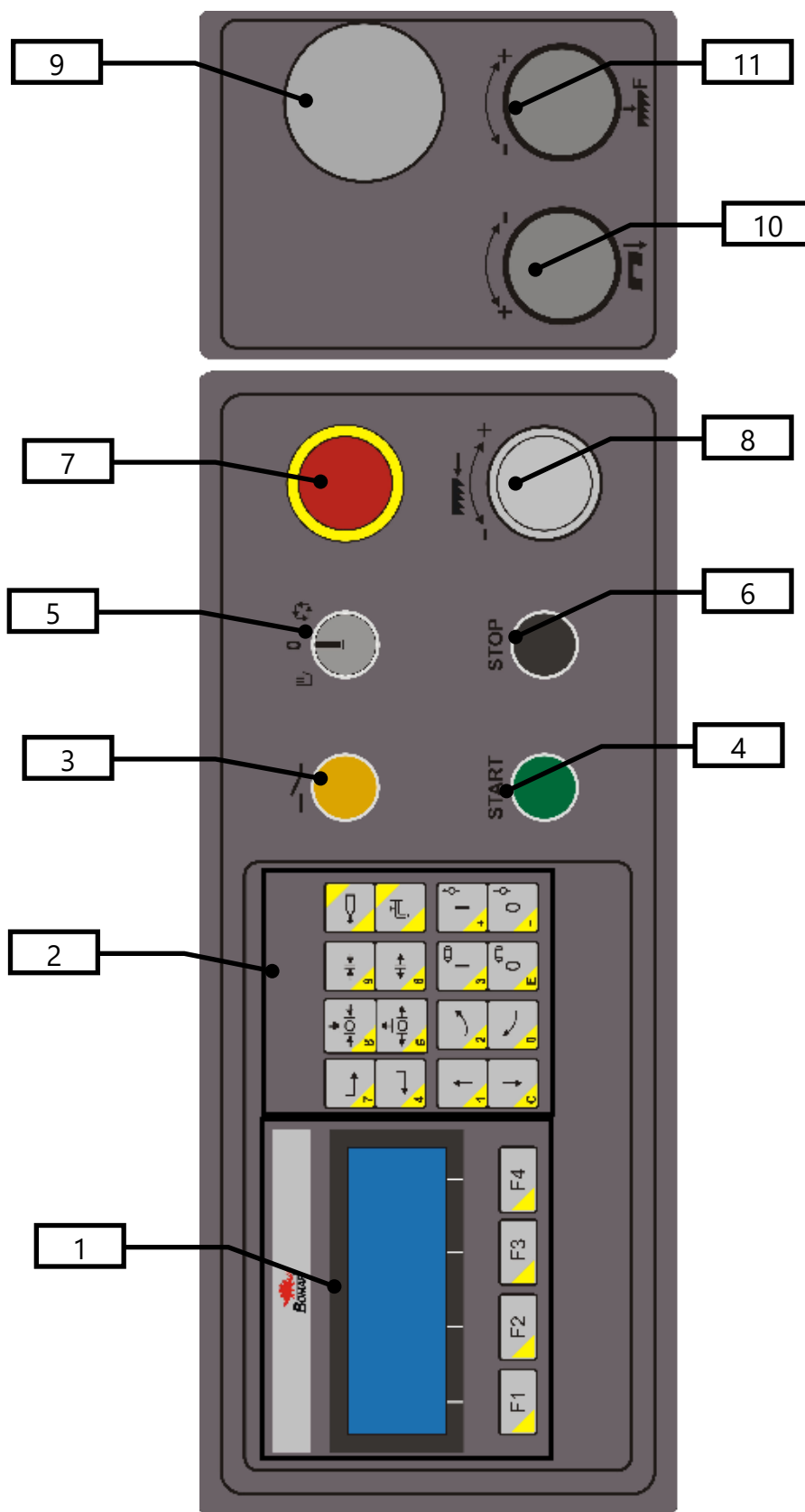


2. Switch on the safety circuit of the band saw **Safety circuit** (button 2) on control panel of the band saw.

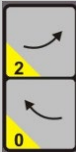


3.2. Control panel

Ovládání stroje
Bedienung der Maschine
Machine control



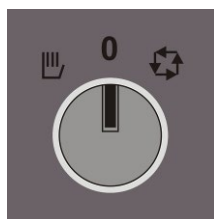
3.2.1. Control panel description

1	LCD Display On to display are described all running processes, control with functional buttons F1-F4
2	Control buttons / numeric keypad
	No function
	No function
	Clamp / release vice In manual cycle pressing and holding the button allows you to release pressure or clamping vise. The upper clamping operates automatically with the main vice
	Cooling system selection Cooling with Microniser (optional accessories) Cooling with water cooling pump runs even when the saw band drive is switched off.
	Movement of the arm Pressing and holding a button or trigger arm lifts the lifting hydraulic cylinder. When lifting the arm using the arm can be lifted in its entirety lifting cylinder. On the down can be activated by simultaneously pressing the rapid move functional button F1.
	No function
	Turn on / off the band drive In manual mode the button is displayed "I" switched band drive, the button with the symbol "0" switch off
	Turn on / off the hydraulic circuit Button with the symbol "I" turns the hydraulic circuit, the button with the symbol "0" disables the hydraulic circuit. The hydraulic circuit is automatically switched on when needed.
3	Safety circuit Switch on the safety circuit by pressing button.

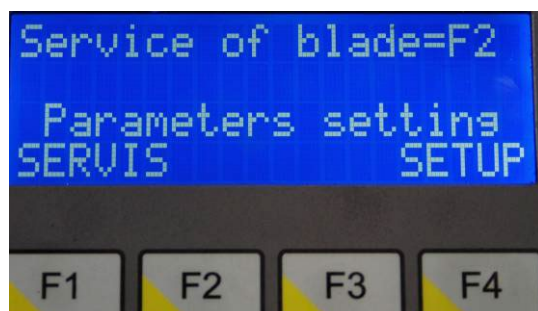
4	Button START - Switch on the semi-automatic cycle After pressing the button will start the cutting cycle
5	Selecting a mode machines  for servicing and settings  manual mode  semi-automatic mode Note: The functions performed in both manual and semi-automatic mode are the same, but only in semi-automatic cycle it is possible to use the START / STOP (ie start / off cycle)
6	Button STOP - Switch off on the semi-automatic cycle After pressing the button will turn off the interruption or of cutting cycle
7	TOTAL – STOP button In emergency causes the machine must be immediately switched off.
8	Frequency convertor Turn to change the speed of the saw band in the range of 20-120 m / min
9	Cutting pressure manometer Pointer to cut pressure adjustment
10	Cutting pressure regulation Adjust the arm pressure to the cut. Notice: If you keep closing the throttle valve too tightly, the valve seat may wear off which causes its leakage. Therefore, close the valve always gently.
11	Governing valve Adjust the speed of the arm sinking to the cut by governing valve. Notice: If you keep closing the throttle valve too tightly, the valve seat may wear off which causes its leakage. Therefore, close the valve always gently.

3.3. Machine setup

Machine setup mode is activated by switch on control panel. Switch must be in "0" position.



After switching into position "0" is displayed on LCD this screen.

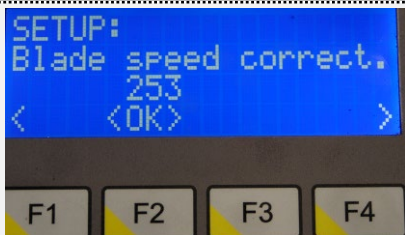


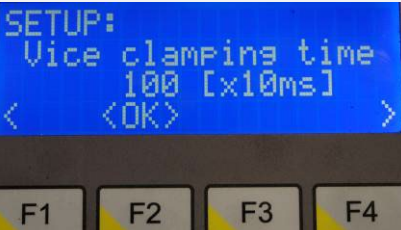
3.3.1. SERVICE

After pressing the **F1** functional key can be set servis parameters that are password protected (947).



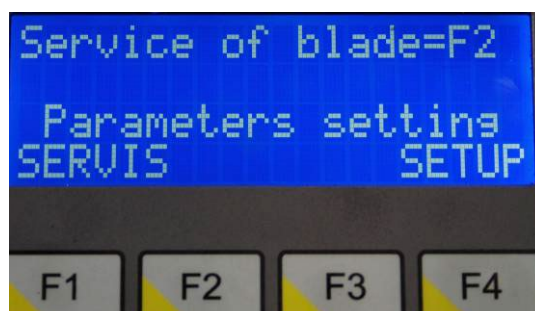
Control and movement in **SERVIS** can be set using the function keys **F1 - F4**.

On display	Description
	Blade speed correction - Constant for calculation of blade speed display values from analog input. F1 go back, F4 next menu screen, F2 enter value

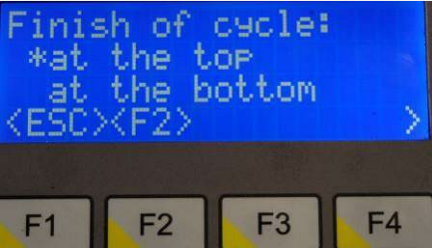
	Sensor • Display variable sensor arm (optional accessories) • Use to check the functionality of the sensor on the arm • Read only • F1 go back, F4 next menu screen
	Vice clamping time • Watch vice clamping time in ms. • F1 go back, F4 next menu screen, F2 enter value
	The type of machine. • Display the machine type (the value set by the manufacturer) • Read only

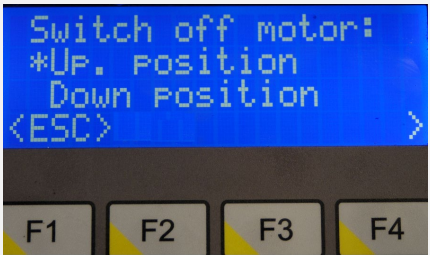
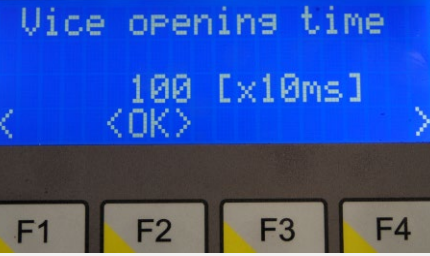
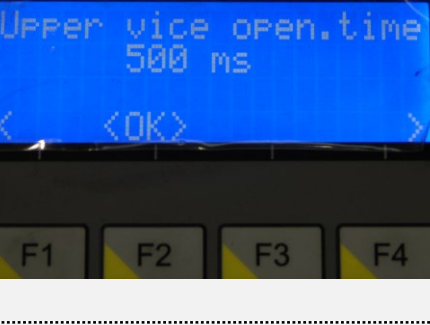
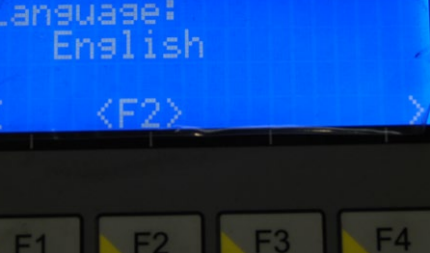
3.3.2. SETUP

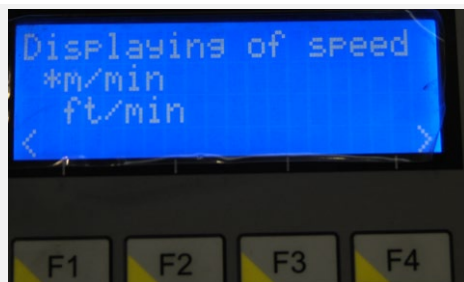
After pressing the **F4** functional key can be set setup parameters that are not password protected.



Control and movement in **SETUP** can be set using the function keys **F1 - F4**.

On display	Description
	Finish of cycle • At the top – arm after cut starts above the material and cutting cycle ends • At the bottom – arm after cut remains in the lower position, the above material does not exit • F1 go back, F4 next menu screen, F2 enter value

	Turn off motor after cut - Up position – saw arm move up after cut and then turn off drive of saw blade. - Down position – drive of saw band turn off immediately after cut. - F1 go back, F4 next menu screen
	Upper vice - Allows to able / disable the upper vice in the cutting process - F1 go back, F4 next menu screen, F2 enter value
	Vice opening time - Watch vice opening time in ms. - F1 go back, F4 next menu screen, F2 enter value
	Upper vice opening time - Watch upper vice opening time in ms. - F1 go back, F4 next menu screen, F2 enter value
	Switch off hydraulic - Setting the hydraulic unit off when idle machines - F1 go back, F4 next menu screen, F2 enter value
	Language - Choose menu language - F1 go back, F4 next menu screen, F2 enter value



Displaying of speed

- Displaying of band speed according to the selected units (m / min or ft / min)
- **F1** go back, **F4** next menu screen, **F2** enter value

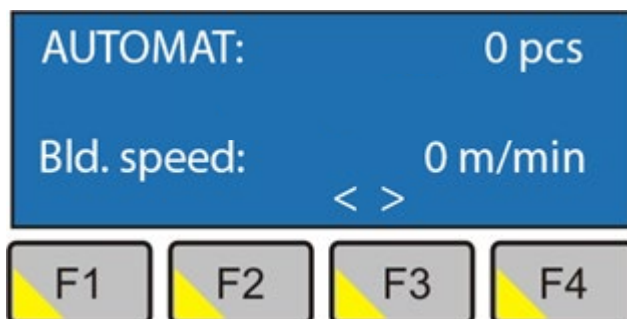
3.4. Machine error messages

Error	Information
SAFETY BUTTON is OFF F1 F2 F3 F4	Safety button (pos. 2 on control panel) is not ON. Press F4 to confirm error.
TOTALSTOP pressed F1 F2 F3 F4	Total Stop button is active. Turn button TOTAL STOP according to the arrows. Press F4 to confirm error.
Blade tension faulty F1 F2 F3 F4	Saw blade is not properly tensioned. Press F4 to confirm error.
Faulty motor protec. F1 F2 F3 F4	Engine temperature protection is active. Do not overload saw! Press F4 to confirm error.

3.5. Machine control

3.5.1. Semi-automatic cycle – STANDARD TYPE

1. Turn the switch to position for semi-automatic mode



You can clear the register of the performed cycles by button  and stop on 5 seconds.

2. Lift the saw arm to the top position by pressing button



3. Open the vice by pressing button



4. Clamp material to the vice by pressing button



5. Lower the frame about 10 mm above the material by button



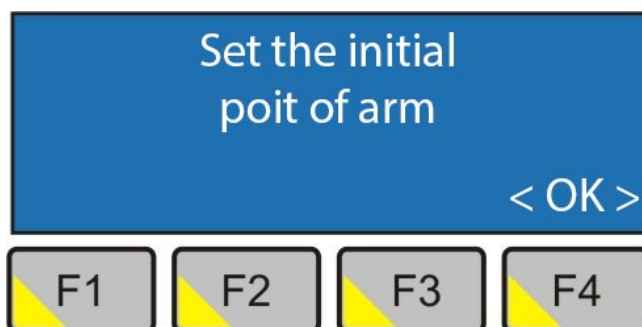
Attention!

Do not move the saw frame to the material, when the saw band driving is not running! Do not move the saw frame to the material with accelerated motion! The saw band can be damaged!

6. Set the max. height of the arm with limit switch.

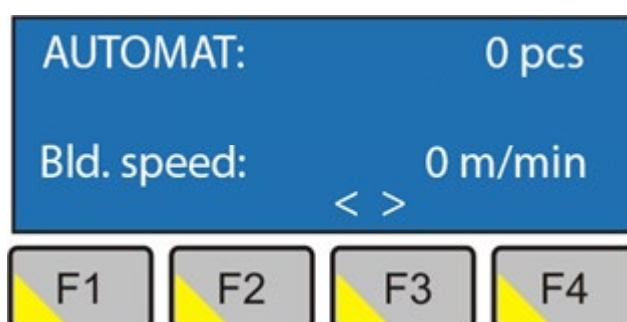
7. Press button **START**.

The screen appears with instruction to set the initial point of the saw arm.



Confirm by pressing the button F4 <OK> and move the limit switch of the saw arm to contact with the movable stop.

8. The screen appears for start of semi-automatic cycle.



You can clear the register of the performed cycles by button  and stop on 5 seconds.

9. Press button **START** for starting of the semiautomatic cut.

Attention!

Press button STOP of semi-automatic cycle (on the control panel). In risk of injury or damage of the band saw, press the emergency button TOTAL STOP "10"!

The screen appears with information about running of the semiautomatic cut and the band saw makes the cut.

Set the saw band speed according to the kind of the cutting material.

Set the speed of the arm sinking by adjust governing valve on the control panel.

Notice:

If the main vice is not clamped when semiautomatic cut is started:

- It is not possible to start the cut
- It is possible to move the movable jaw of the vice to the material using the button START, but the jaw moves in particular steps

- if you clamp the material using the button for main vice control (on the control panel), it will be necessary to start the semiautomatic cut pushing the **START** button

10. When the cut is finished the vice. Is automatically opened. If the vice is not



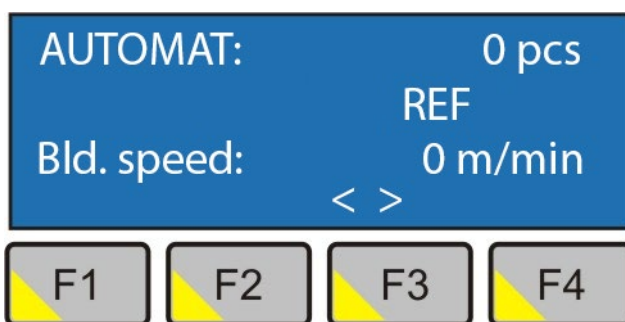
opened, you can open it by button

11. Remove the blank ((cut off a piece of material).

You can repeat whole process.

3.5.2. Semi-automatic cycle - with possibility of saw frame lift stop setting using an encoder (optional accessory)

1. Turn the switch to position for semi-automatic mode



2. Lift the saw arm to the maximal top position by pressing button



3. Open the vice by pressing button

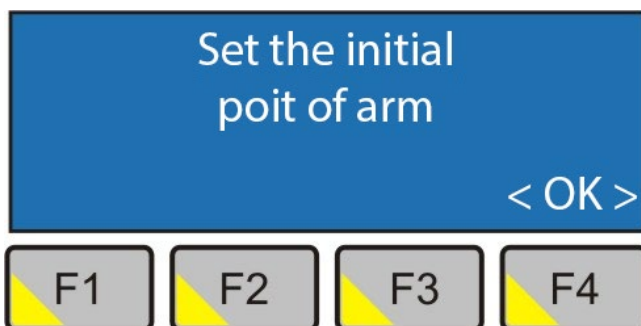


4. Clamp material to the vice by pressing button



5. Press button **START** (position 4).

6. The screen appears with instruction for setting of the saw arm into start position above material.



Confirm by pressing the button F4 <OK>.

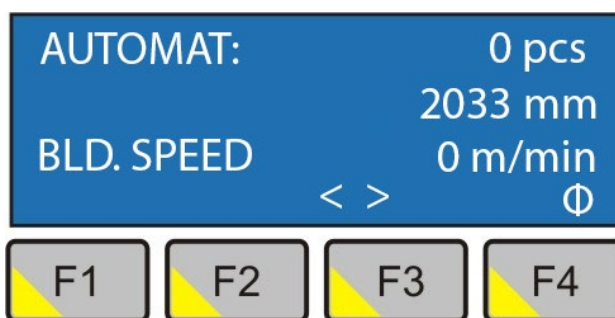
7. Now lower the frame about 10 mm above the material by button .

Attention!

Do not move the saw frame to the material, when the saw band driving is not running! Do not move the saw frame to the material with accelerated motion! The saw band can be damaged!

When the saw arm is set in start position above material confirm the state with button F1.

8. The screen appears for start of semiautomatic cycle.



It is possible to reset the register of finished pieces by pushing the button  for cca 5 sec.

9. Press button **START** (position **4**).

Set the saw band speed according to the kind of the cutting material.

Set the speed of the arm sinking by adjust governing valve (position **10**).

Attention!

Press button „5“ (STOP of semi-automatic cycle). In risk of injury or damage of the band saw, press the emergency button TOTAL STOP „10“!

10. The band saw clamps the material to the vice and it makes the cut.
11. If the possibility for finishing of the cut with the position of the saw arm above material was set in menu SETUP, arm automatically returns to a position that was set as the starting position above the material.

12. Open the vice. If the vice is not opened, you can open it by button . Remove the blank ((cut off a piece of material).

13. You can repeat whole process.

3.5.3. Cycle breaking

»

- **STOP button**

Semi-automatic cycle is interrupted by pressing button **STOP** (position **6**) of the semi-automatic cycle.

The arm is lifted to the top position and the saw band drive is stopped..

By pressing button **START** (position **4**) of the semi-automatic cycle, you can start the cycle.

- **TOTAL STOP button**

In case of the risk, press button **TOTAL STOP** (position **7**).

After pressing **TOTAL STOP** button, saw band drive is immediately broken and the arm sinking is stopped.

- **Reactivation**

1. Turn button **TOTAL STOP** according to the arrows (on the button).
2. Switch on the **Safety circuit** by button (position **3**).
3. By pressing button **START** (position **4**) of the semi-automatic cycle, you can start the cycle. The arm is lifted to the top position and the saw band starts the cycle.

3.6. Band saw adjusting

3.6.1. Adjusting band guides

If you want to achieve a smooth and precise cut, it is helpful to position the guide cube as close as possible to the material.



Mechanical adjusting

1. Press button **STOP** to switch off the hydraulics – *2 second stop on.*
2. Release the stopping lever of the listel (see picture).
3. Move the left part of the guide apparatus so that the left guide cube edge is as close to the cut material as possible.

Note:

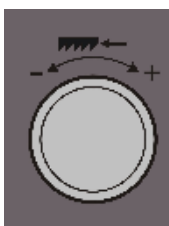
Position of the guiding cubes is secure by the limit switch. The limit switch is activated after switch lever hits the listel.

4. Tighten the lever of the gib and check the guide cube setting for possible collision with binding table or vice jaw.

Automatic adjusting (optional accessory)

The guide cube is joined with the movable jaw of the main vice and is moved to the material automatically with this jaw.

3.6.2. Cutting speed adjusting



Speed of the saw band is possible change from **15 to 90 m/min**. You can effect to adjusting speed of the saw band following.

Use the frequency convertor *on the control panel* to adjust requested speed of the saw band. You can see the speed on display.

Attention!

At least once a week set the saw band speed from the lowest up to the highest speed.

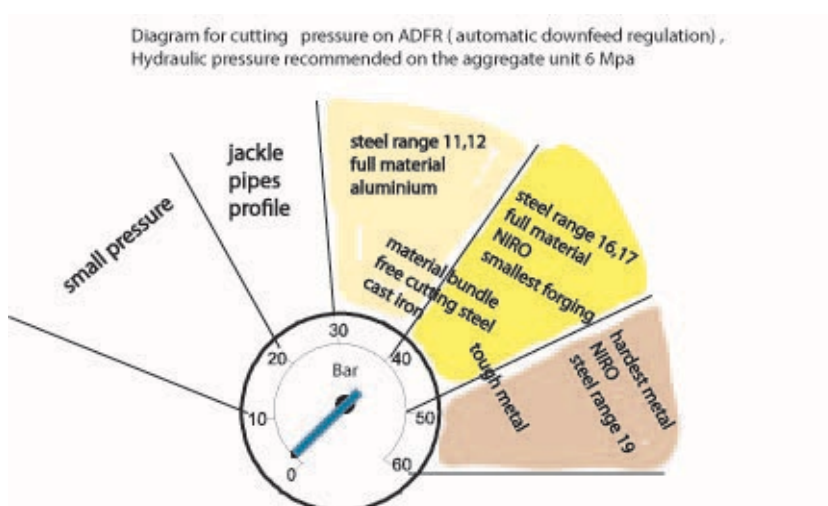
3.6.3. Adjustment of pressure to the cut

The band saw is equipped with cutting pressure regulation on the both guiding cubes.

Pressure adjusting is performed with regulating wheel at the control panel. The pressure to the cut is displayed on the cutting pressure manometer (see control panel)



Lower pressure to the cut – turn the wheel against the clock's direction.



Higher pressure to the cut – turn the wheel to the clock's direction.

Notice: If you keep closing the throttle valve too tightly, the valve seat may wear off which causes its leakage. Therefore, close the valve always gently.

3.6.4. Speed adjustment of the arm lowering

Set the speed of the arm lowering to the cut by control valve at the control panel.



Set the lower speed of the arm lowering to the cut by turning the switch clockwise.

Set the higher speed of the arm lowering to the cut by turning the switch anti-clockwise.

Notice: If you keep closing the throttle valve too tightly, the valve seat may wear off which causes its leakage. Therefore, close the valve always gently.

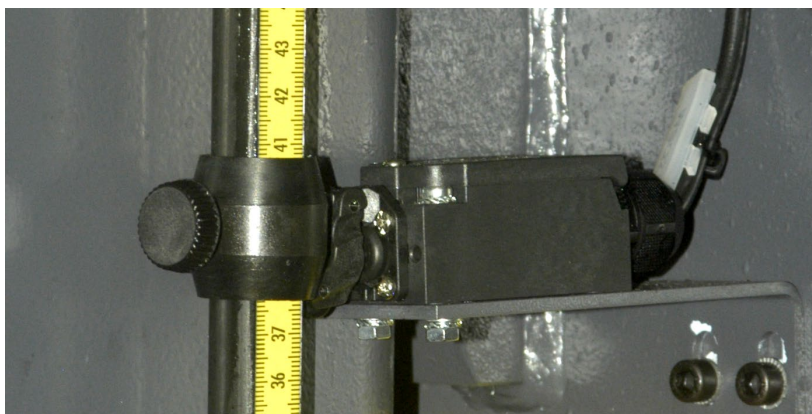
3.6.5. Saw frame lift stop setting

If you want to shorten the time of operations in automatic cycle, you have to adjust the height of the saw arm according to the height of the cutting material.

It is possible to set the start position of the saw frame before a cut using adjustable stop with end switch.



1. Press button  and lift the saw arm to the upper position.
2. Insert a material into the vice. Carefully lower the saw arm button  to the material. You can use combination of the buttons lower the saw arm  and lift the saw arm  for rapid movement.
3. Stop the saw arm 10mm above the material.
4. Set the stop just above arm height sensor - slide stop turning the locking knob close to the limit switch



3.6.6. Saw frame lift stop setting - using encoder (optional accessory)

To shorten cycle times in automatic mode, you can adjust the height of the lift arm according to the height of the material.

If the band saw is equipped with an encoder for positioning of the arm above the material, it is possible to adjust the position of the arm using the way which is described in the machine control (see Semi-automatic cycle - with possibility of saw frame lift stop setting using an encoder (optional accessory)).



3.6.7. Brush adjustment

The brush for chip removal from the saw band influences cutting durability, saw band lifetime and wheels lifetime, hard metal guides and finally the cut accuracy.

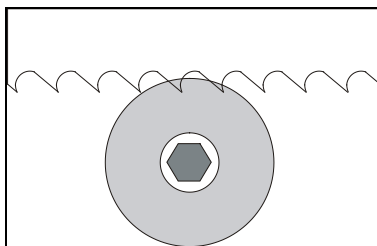
Brush adjustment must be checked every shift.

1. Open the cover of the band arm



2. Adjust the position of brush to the saw band by turning the adjusting screw(see arrow) of the brush.

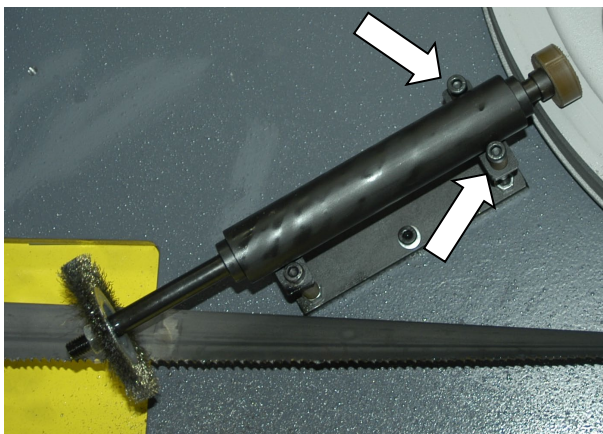
The brush must touch with teeth of the saw band.



Attention!

The brush must not touch the bottom of the saw teeth!

3. In case, that the brush is not turned right (driving wheel of the brush slips on the driving wheel of the saw band), push by means of the screws (see arrows) driving wheel of the brush to the driving wheel of the saw band.



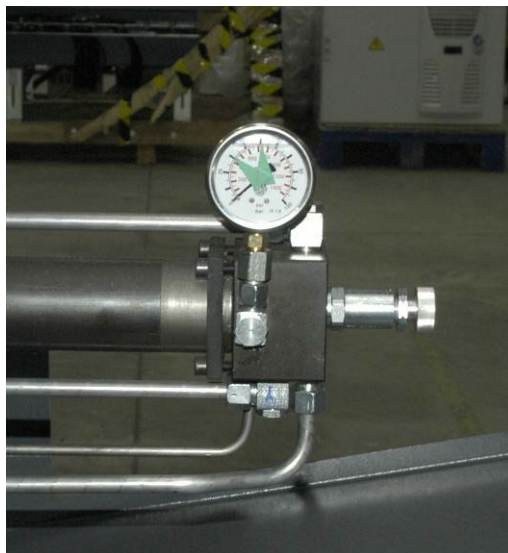
Attention!

The screw must not be tightened with heavy force, because driving wheel of the brush can be damaged or the lifetime of the bearings of the driving wheel of the band can be lowered!

4. Close saw arm cover

3.6.8. Device for regulation of clamping pressure (optional accessory)

The hydraulic pressure device is determined for pressure setting on the main vice and feed vise.

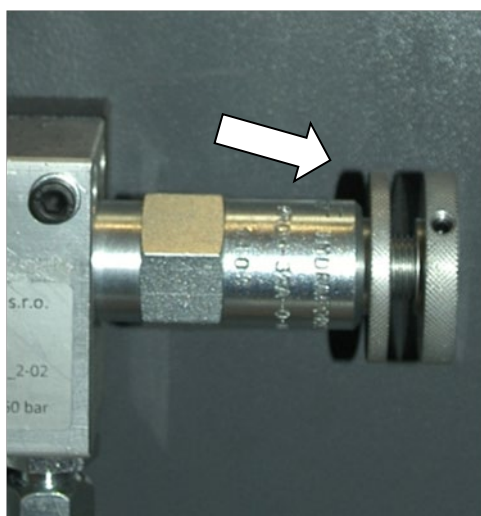


Warning !

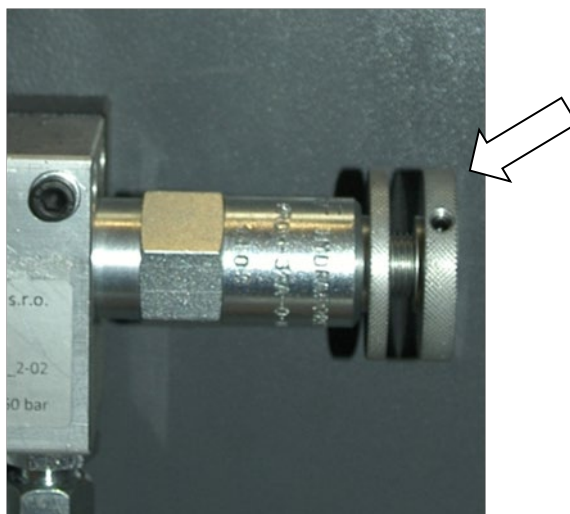
Because the hydraulic pressure equipment pressure 2,2 – 4 MPa, loosen the screws with caution!

Instruction for adjustment of clamping pressure

1. Release the locknut of the control screw at the pressure valve



2. Adjust the clamping pressure to the required value using the control screw.



- When turning the pressure valve *clockwise the pressure increases.*
- When turning the pressure valve *counterclockwise lowers the pressure.*

The indicator at the manometer at the device for clamping pressure adjustment indicates the set value.

The recommended pressure value is between the values defined through the green arrows at the manometer at the device for controlling of the clamping pressure.



3. Tighten the locknut of the control screw at the pressure valve.

Attention:

It isn't necessary to adjust the hydraulic pressure of the whole saw in order to adjust the clamping pressure

3.6.9. Setting the upper clamping (Hydraulic fixture bundles – optional accessories)

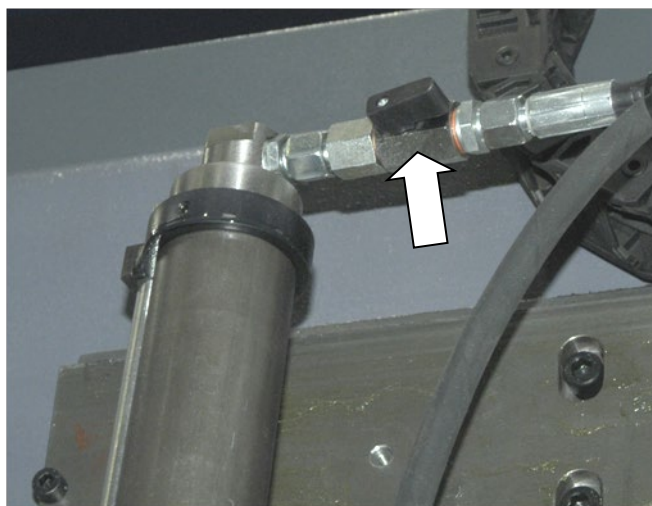
To better maintain the workpiece in the vise recommend using **hydraulic fixture bundles** of material that is not part of the standard equipment, optional accessories only. It is suitable especially in the case of uneven cutting material.

The band saw *Extend 900.720* can be equipped with upper clamping on the main vice of the band saw.



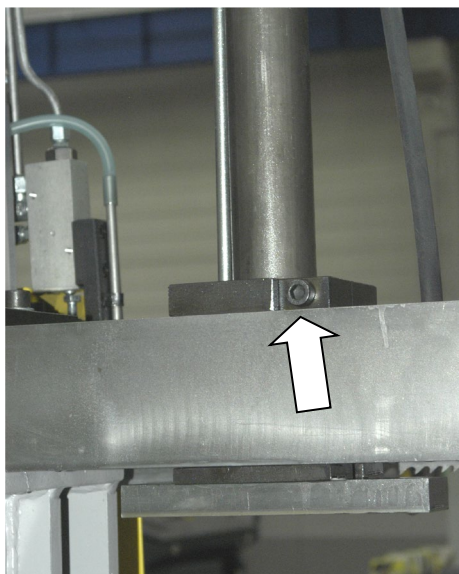
The upper clamping operates automatically with the main vice.

Lock the valve at the pipe supplying hydraulic oil into hydraulic cylinder (see arrow) to switch off the upper clamping.



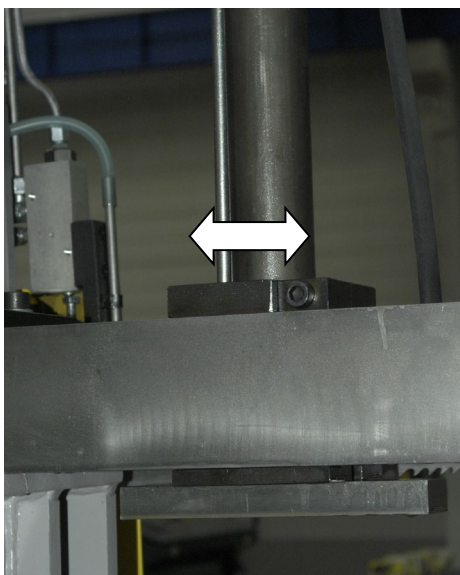
Before clamping of a material it is necessary to set the jaw of the upper clamping device to the elevation for proper clamping and above the centre of the material

It is possible to set the jaw vertically using the lock bolt (see arrow).



Release the screw and tight again after setting.

It is possible to set the jaw horizontally by shifting the jaw along the guide by hand.



3.7. Material insertion

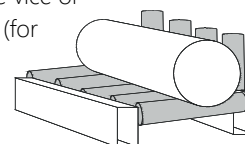
- Never walk under a suspended load!
- Never climb onto the gravity-roller conveyor!
- Do not hold the material for clamping material to the vice! The vice can cause injury!

3.7.1. Handling agent selection

- Use the strong handling agents to lift and transfer the material!
- Handle with the material only with the lift truck or use the suspension strands and the crane!
- Do not use the lift truck or crane in case that you do not have the license to handle with it!

3.7.2. Insertion

Insert material to the vice and ensure that the material cannot move in the vice or fall from the vice after the clamping. If you cut long pieces of the material (for example rod, tube), you must use the roller conveyors for material shifting to the band saw. Contact Bomar for more information about roller conveyors



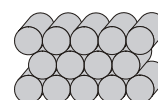
Make sure the conveyor is long enough and the material cannot tip off the conveyor.

Be especially careful with round materials that it always stays on two vertical rollers and that it cannot fall off the conveyor!

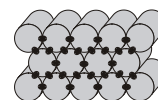
3.7.3. Bundle material cutting

If you want to cut the material in the bundle, there are suggestions for the positioning of bundles

Round material bundle: Take care especially with round material that the bars are put according to the picture. If the bars are put differently, you may have problems with movement.

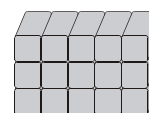


Always weld the material at the rear end of the bundle to secure it from moving.



Before welding always, switch the machine off at the main switch! The magnetic fields, which often occur during welding, may damage the controls!

Square material bundle:



Attention:

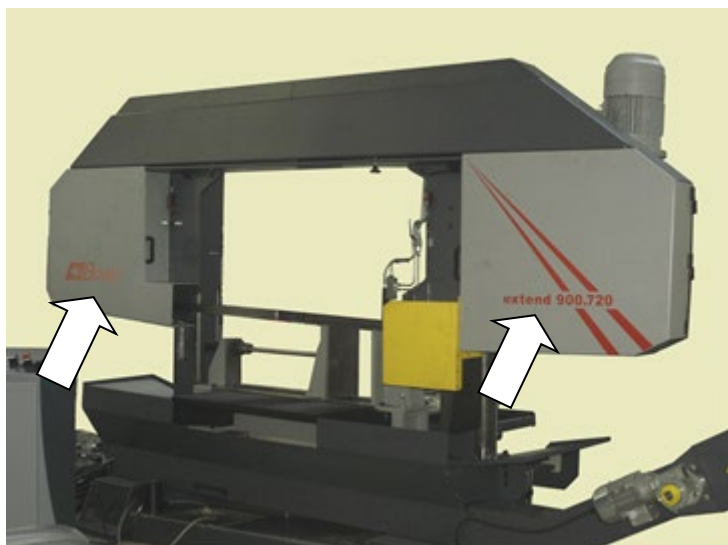
**Not all material shapes are suitable for bundle cuts.
Keep the recommendation of your supplier of the saw
bands for material insertion to the bundle.**

4. Machine service

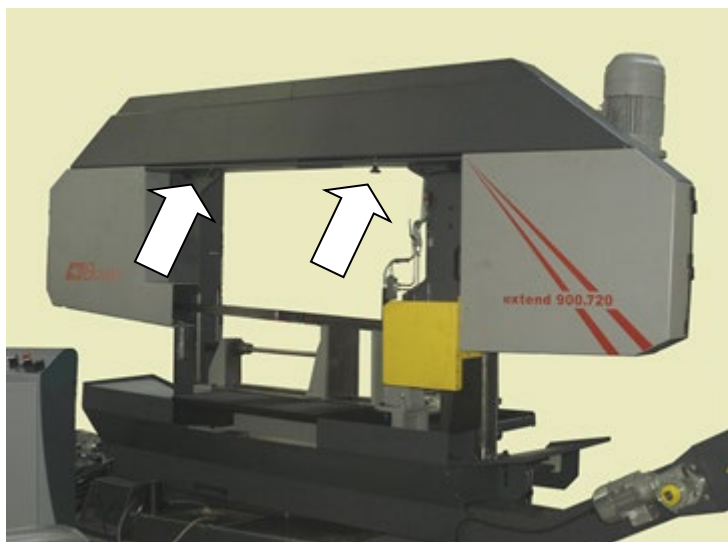
4.1. Saw band installation and dismantling

4.1.1. Saw band dismantling – mechanical saw band stretching

1. Lift the saw arm to maximum position using the button **Lift the saw arm** on the control panel.
2. Stop hydraulic with button **STOP** - on the control panel.
3. Open the covers of both driving wheels - this turns off safety circuit.



4. Dismantle the upper cover of the saw band.



5. Dismantle left protective cover of the band.



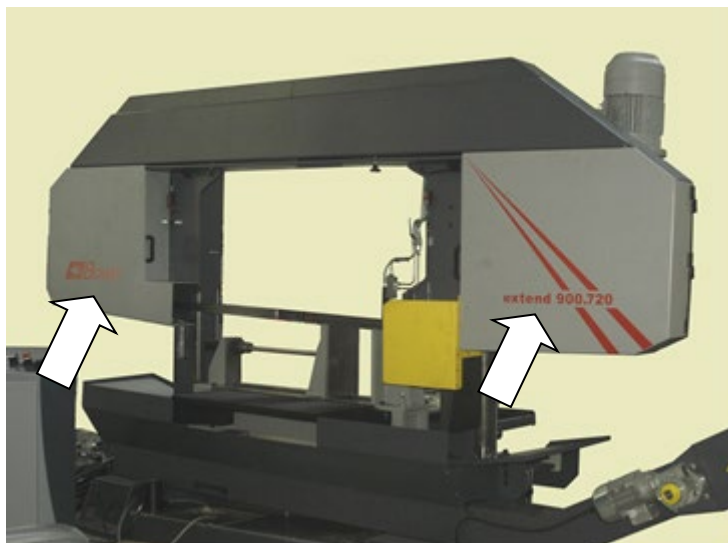
6. Release the screw holding the brush. Turn the brush to the side
7. Release the saw band stretching by means of screw (arrow), until it is possible to remove the saw band off the wheels.



8. Pull down the band from the wheels.
9. Pull up the saw band from the guiding cubes.

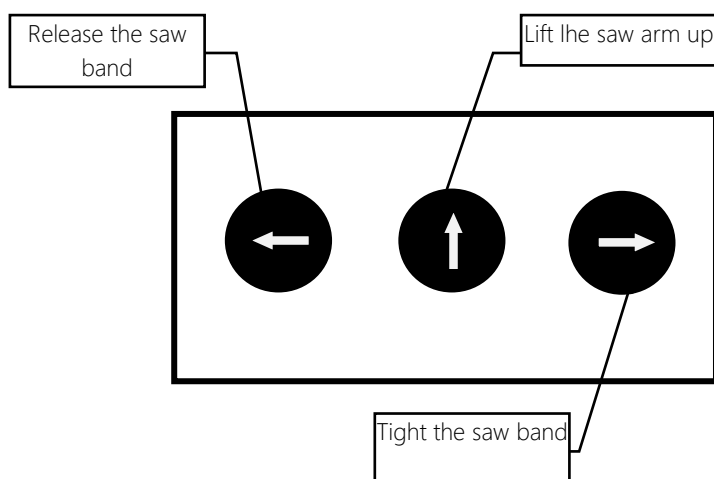
4.1.2. Saw band dismantling – hydraulic saw band stretching (optional accessories)

1. Open the covers of both driving wheels.

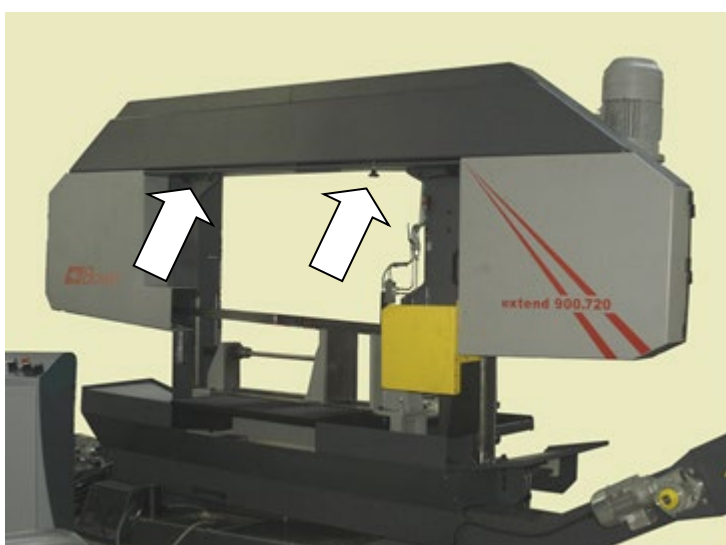


The opening of the left and the right cover of the saw arm turns off safety circuit and the buttons for the hydraulic saw band tensioning which are situated at a controller for hydraulic tensioning of the saw band are active





2. Dismantle the upper cover of the saw band.



3. Raise the arm to the top position with the button *Lift the saw arm up*



on the controller for hydraulic tensioning after the saw band.

4. Dismantle left protective cover of the band. Cover is fastened by screws.



5. Release the screw holding the brush. Turn the brush to the side



6. Use the button **Release the saw band** on the controller for hydraulic tensioning to loosen the saw band.
7. Pull down the band from the wheels.
8. Pull up the saw band from the guiding cubes.

4.1.3. Saw band installation

1. Prior to installation, clean all track wheels, guide cubes and inner side of the arm thoroughly of all traces of chips and dirt. **Keep in mind the teeth direction when installing the saw band.**
2. Insert new saw band into the guide cubes. Make sure the saw band runs between both guide rollers and it is pushed all the way to the top.
3. Put the saw band on both guide wheels. Make sure that the saw band ridge fits tightly to the wheel rim. Then push the saw band as far back as possible.
4. Stretch the saw band by means of the screw (mechanical saw band tensioning), that the band did not falls from wheels.

If the machine is equipped with a hydraulic tensioning of the saw band



(optional accessory), stretch the saw band with the button **Tight the saw band** on the controller for hydraulic tensioning of the saw band.

5. Install the protective cover of the band on its place.
6. Move the brush to the saw band. Tighten the securing screw.
7. Install the upper cover of the saw band and close the covers of both driving wheels.
8. Saw band installation is finished.

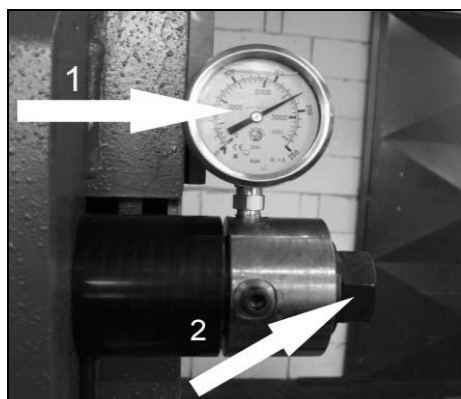
4.2. Saw band stretching and inspection

Right saw band stretching is one of the most important criteria's, which influents accuracy and saw band service life. Stretch the saw bands according to the selected saw band and the band saw. Keep the recommendation of your manufacturer.

Pilový pás Sägeband Saw band	Napětí pilového pásu Sägebandspannung Blade tension	Napětí pilového pásu PSI (pro Tenzomat) Sägebandspannung PSI (für Tenzomat) Blade tension PSI (for Tenzomat)
20 x 0,9 mm	160 N.mm ⁻²	23 500
27 x 0,9 mm	180 N.mm ⁻²	26 500
34 x 1,1 mm	210 N.mm ⁻²	30 500
41 x 1,3 mm	240 N.mm ⁻²	35 000
54 x 1,3 mm	240 N.mm ⁻²	35 000
54 x 1,6 mm	280 N.mm ⁻²	40 600
67 x 1,6 mm	290 N.mm ⁻²	42 000
80 x 1,6 mm	300 N.mm ⁻²	43 500

4.2.1. Saw band stretching – mechanical tensioning

- Switch on the hydraulic aggregate after the saw band installation check the saw band stretching on the manometer (arrow 1).



- Use the screw (arrow 2) to stretch the saw band until it is stretched to the recommended value.

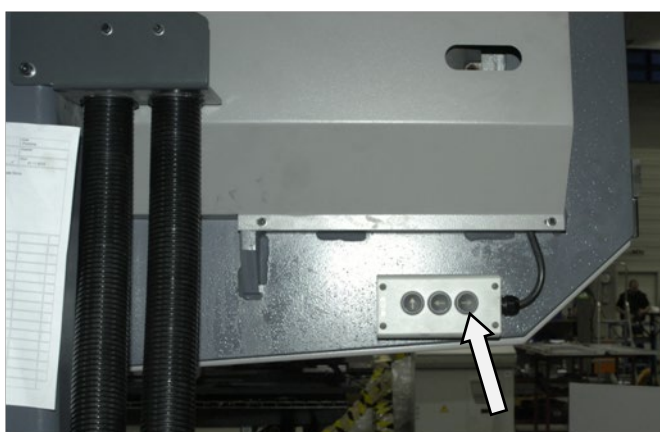
4.2.2. Hydraulic saw band tensioning

If the band saw is equipped with hydraulic tightening of the saw band, the band tightening value is adjusted by the manufacturer directly.

If the tension of the saw band isn't proper, the machine gives warning notice:



Push the button (see arrow) until the sawband isn't stretched.



Next confirm the warning notice by the button **F4**. If the saw band is stretched properly, the warning notice would disappear..

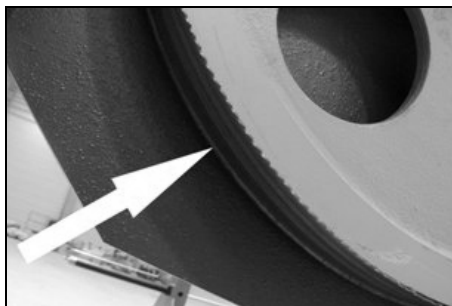
4.3. Setting of the saw band run at the tensioning wheel

Regularly check the saw band run at the tensioning wheel. Especially when the saw band was replaced, it is important to set the run properly.

4.3.1. Saw band inspection

If the saw band doesn't run properly these problems can occur::

- The saw band will fall from the tensioning wheel – the saw band and his cover can be damaged
- The saw band runs at mount of the tensioing wheel –the saw band and the mount at the tensioning wheel can be damaged



1. Switch on the saw band drive and then after 10 seconds switch off saw band drive. If the saw band drive is not possible to switch on, set the limit switch of the saw band stretching.
2. Switch off the main switch.
3. Open cover(s) of the wheels
4. Check position of the saw band on the both wheels..



- If the distance between backside of the saw band and the offset wheel is **1 mm**, setting is right..
 - If the distance is bigger than **1 mm**, or the saw band is on the offset of the wheel, set the saw band.
5. Close covers of the saw band.

4.3.2. Saw band run setting



Saw band run is set with screw (arrow) in the stretching cube on the saw arm. Right distance rear part of the saw band from wheel rim is **1 – 3 mm**.

- Turn with the screw to the right, the saw band is closer to the stretching wheel rim.
- Turn with the screw to the left, the saw band is far from the stretching wheel rim

Check saw band run adjustment again.

4.4. Saw arm lower position stop adjustment

The lower stop limits the lowest position of the saw arm. This stop point has to be checked at least once a month. If the lower stop point is wrongly adjusted, the cutting table can be deeply cut or the material will not be cut completely.





9. Lift the saw frame to the top position.
10. Release the nut of the screw and set it on the desired value.
11. Secure the screw with nut again.
12. Set the limit switch of the saw frame lower position.

4.5. Check and adjustment of control and security elements of the machine

Warning!

All control and security elements MUST regularly be checked, kept clean, or adjusted.

Damage to control elements, their incorrect position or contamination may result in MALFUNCTION of the machine!

Damage to control elements, their incorrect position or

The recommended check interval is less than 1x per month.

Check also the state of switches and counterparts in cases of the defects described below.

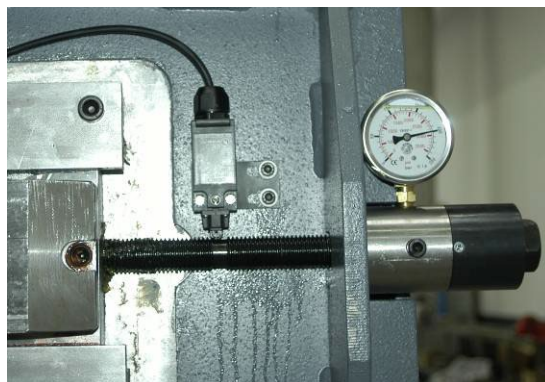
The switches and sensors have been primary adjusted by the manufacturer, don't adjust them without serious reason!

Bad adjustment of control elements may result in MALFUNCTION of the machine. The adjustment of these switches and sensors have to be done by trained person with special knowledge. If you aren't equipped with these knowledge, contact a special service!

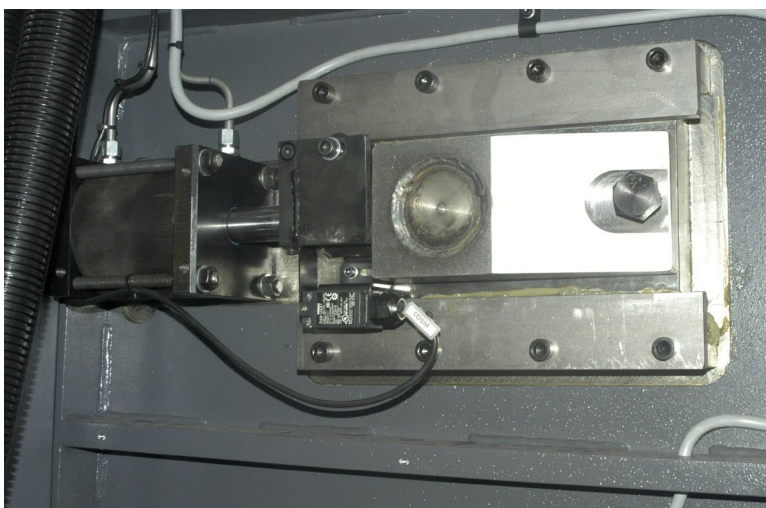
4.5.1. Adjusting of the limit switch of the saw band stretching

After the saw band is replaced, the saw band stretching must be checked. If the limit switch is not adjusted correctly, the band is stretched too little or too much.

The device for a machine where a mechanical saw band stretching is installed



The device for a machine where a hydraulic saw band stretching is installed



1. Remove the protective cover.
2. Tighten the saw band by means of the TENZOMAT on the optimal value (table is on the Tenzomat).
 - If the drive engine is switched on, but it is not running, turn with the screw clockwise, until the engine begins run..
 - If the drive engine is possible switched on, turn with the screw anticlockwise, until the engine is stopped and then turn with the screw clockwise, until the engine begins run.
3. Install the cover at its place

4.5.2. Limit switch adjustment of the saw frame lower positron

If we had adjusted lower stop point of the saw frame, the limit switch adjustment inspection is required.

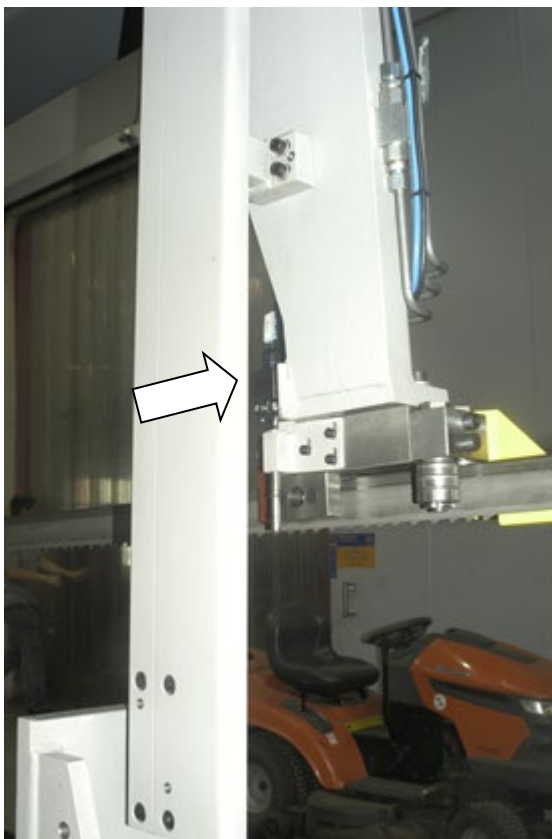
If the limit switch of the arm bottom position is wrongly adjusted, the cutting table can be deeply cut or the material will not be cut completely.

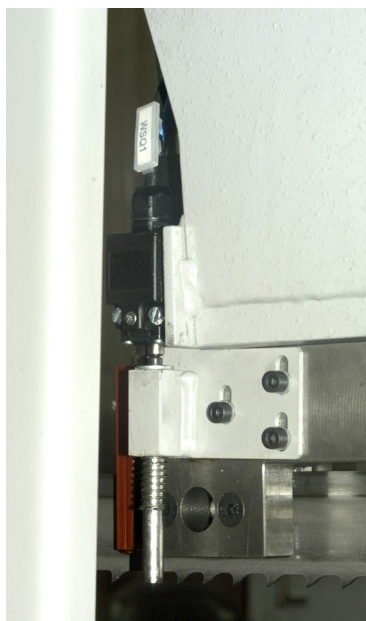
If the off-cut is inaccurate, check this switch and counterpart!

4.5.2.1. Setting inspection

Lower the saw frame to the lowest position. If the saw frame is on the lower stop and the limit switch responds, the limit switch adjustment is correct. Make the limit switch adjustment in failing which.

4.5.2.2. Limit switch setting



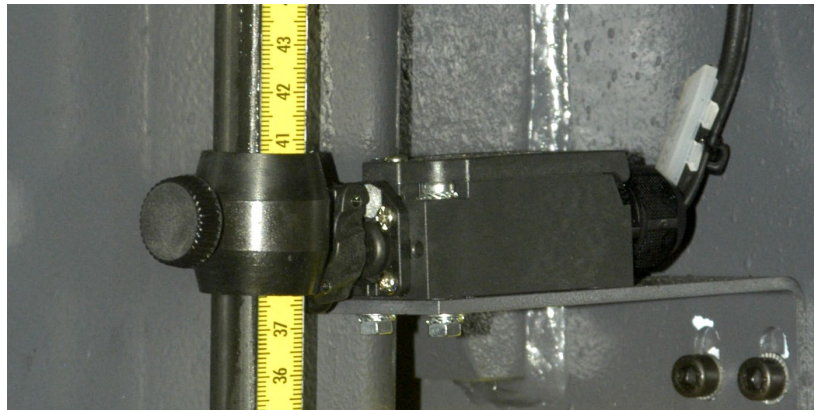


1. Release the locking nut of the stop screw of the limit switch and screw the screw.
2. Lower the saw frame to the lower stop and switch on the saw band drive (
3. Screw out the stop screw of the limit switch, until the saw band drive is not stopped.
4. Secure the screw with nut and check limit switch adjustment againLimit switch of the arm upper position.

4.5.3. Limit switch for Saw frame lift stop setting

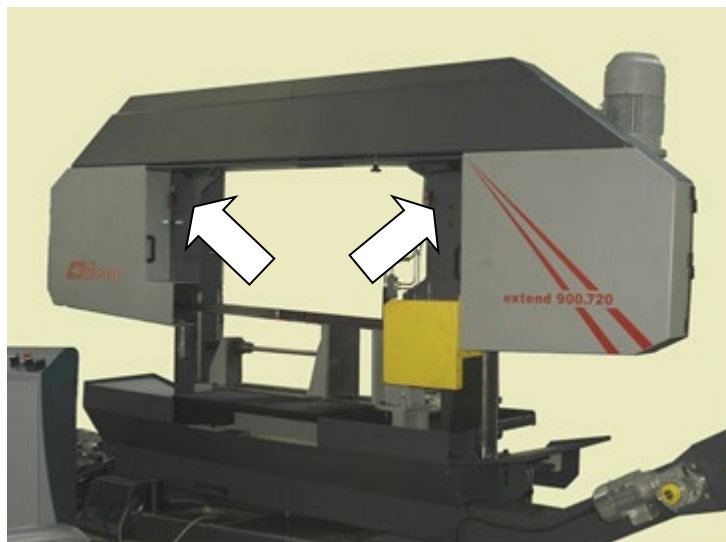
The limit switch is intended for stopping of the saw arm in the position which was set with movable stop when the saw arm is moving up.

When a malfunction of the setting of the arm occurs, check the limit switch and the movable stop.



4.5.4. Limit switches on the covers of guiding wheels of the saw band

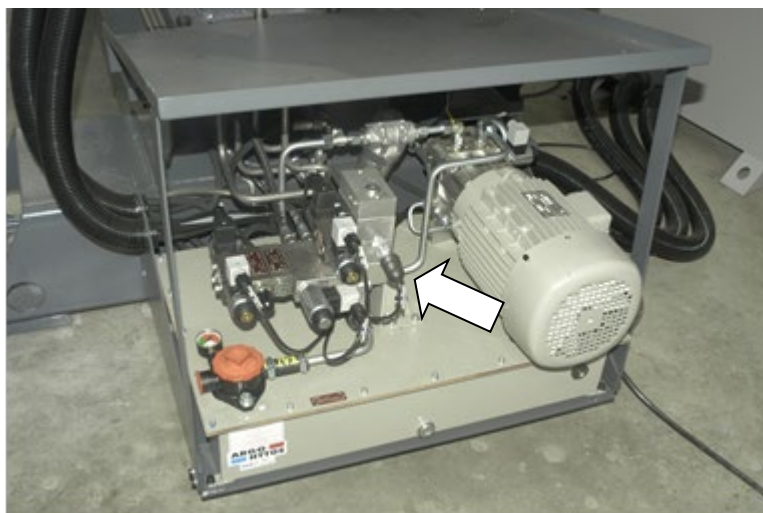
If it isn't possible to turn on the safety circuit using the button on the control panel, check these switches.



4.5.5. Adjusting of pressure switches

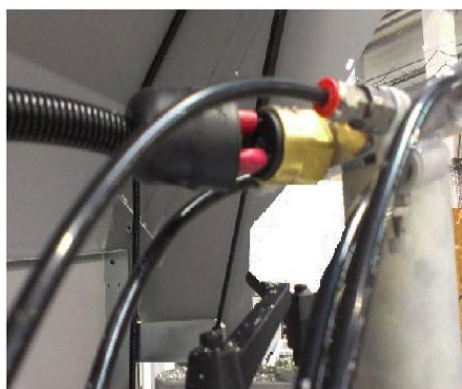
These pressure switches are installed at the machine:

- the pressure switch for function of clamping of the main vice



Adjusting of pressure switches:

1. Pull off the elastic cover of the pressure switch (carefully – outlets must not be broken)



(Photo for demonstration only)

2. Set the sensitivity of the pressure switch by means the screwdriver.



(Photo for demonstration only)

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Marhina servira

- Turn by the screwdriver to the left, the sensitivity of the switcher is bigger.
- Turn by the screwdriver to the right, the switch will be clip with higher pressure.

Check of the function of the pressure switch:

When the pressure switch is adjusted properly, it isn't possible to lower the saw arm into cut until the main vice is not clamped.

4.6. Adjustment of the cutting pressure regulation

The device for regulation of pressure to the cut was adjusted by customer!

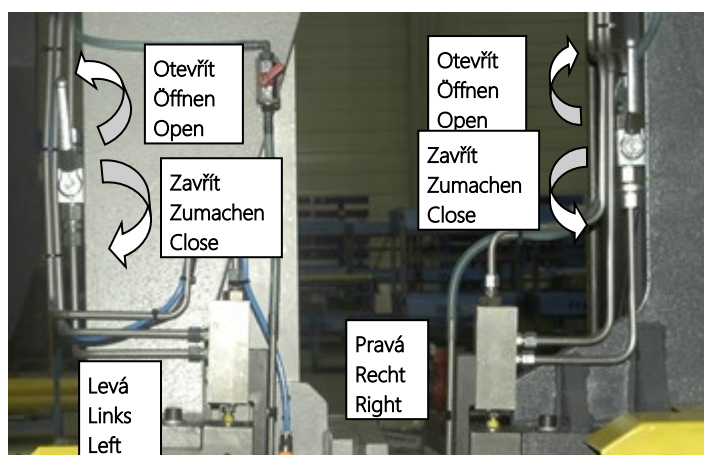
The device has influence on precision of the cut, quality of the cutted surfaces and service life of saw band.

Do not adjust this device, if you do not have serious reason and sufficient knowledge!

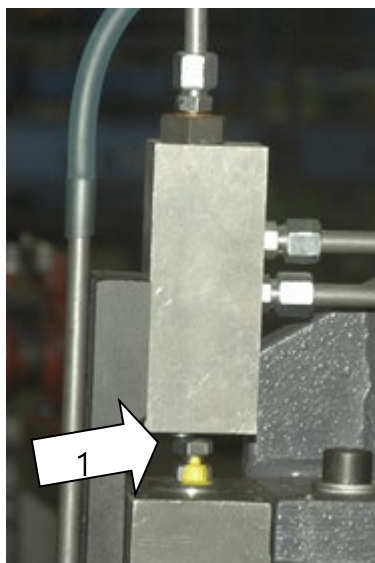
This chapter describes the basic speed setting of arm sinking to the cut for idle run. Saw is equipped with cutting pressure regulation on both guiding cubes. Cutting pressure regulation is set separately on every guiding cube.

4.6.1. Setting on the right guiding cube

1. Close the tap on the left guiding cube. Let the tap opened on the right guiding cube.

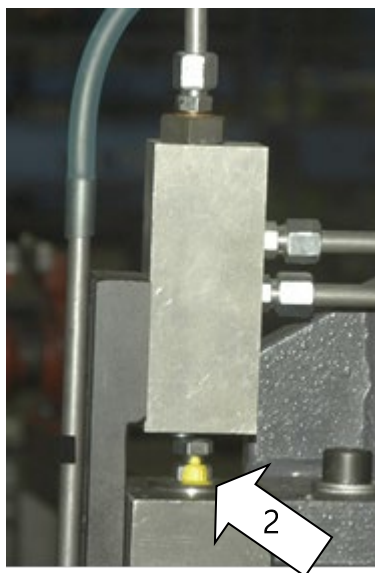


2. Screw off the set – screw (pos1) on the right guiding cube to the stop



The valve is blocked. You can move by arm only up, because the arm movement down is blocked with pressure regulation valve.

3. Press button „Arm down“ and slowly screw on the set – screw on the right guiding cube. Screw by set – screw until the optimal speed of the arm sinking is not reached. The optimum speed of the arm sinking to the cut from maximum lift until lower stop is about 55 seconds.
4. Secure the set – screw with nut (pos. 2) for reaching of the optimum speed of the arm sinking.



5. Pressure regulation on the right guiding cube is set.

4.6.2. Setting on the left guiding cube

1. Open the tap on the left guiding cube. Close it on the right guiding cube.
2. Set the cutting pressure regulation on the left guiding cube in the same way.
3. Open taps on both guiding cubes after pressure regulation setting.

ATTENTION! Both taps must be opened during operation!

Setting is ended.

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4.7. Cooling agents and chips disposal

The quality of the cooling agent will deteriorate due to:	If the solution is too weak:	If the solution is too strong:
• use of contaminated water • impurity • outside oil contamination (hydraulics, gears) • high operating temperatures • lack of air circulation • wrong concentration	• corrosion protection is diminished • lubrication decreases • microbial attack is more likely	• the cooling ability is decreased • foam behaviour increases • emulsions stability deteriorates • sticky residue develops

4.7.1. Coolant device inspection

The state of the cooling agent has significant influence on the cutting quality and on the operational life of the machine. Lifetime of the cooling liquid is 1 year, after this time we recommend change the cooling liquid. This time is dependent on the degree of pollution cooling liquid (especially with oils) and on the other factors.

Check level of the cooling liquid and function of the pump periodically!

Note:

If the state of the cooling liquid is not satisfactory, the cooling liquid must be changed.

Check the state of the cooling agent according to the following table:

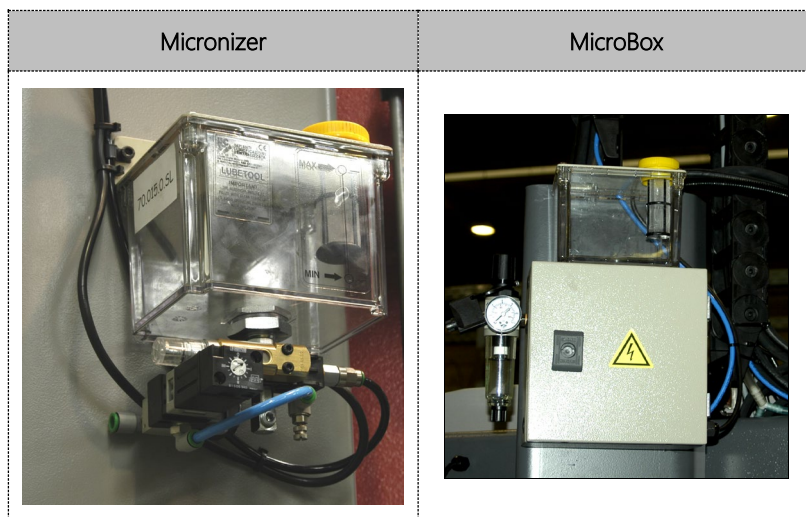
Testing	Interval	Method	Condition	Precaution
Liquid level	daily	visually	too low	after concentration check, refill with water or emulsion
Concentration	daily	refractometer densimeter	too high too low	refill water refill base emulsion
Smell	daily	by sense of smell	unpleasant smell	good ventilation, add biocides or renew coolant
Contamination	daily	by sense of smell	visible oil leaks, sludge fungi	surface cleaning, fix leaks, add biocides or fungicides, or coolant renewal after added system cleanser*
Corrosion-protection	when necessary	visually chip test Herbert-test	insufficient corrosion protection	test stability, if necessary – increase concentration or pH value
Stability	when necessary	refractometer	oiling	add concentrate, enquiries to supplier
Foam reaction	when necessary	shaking test	too much foam, foam disperses too slowly	avoid aeration, increase water hardness, ix with defoamer

* according to manufacturers' instructions

4.7.2. Micronizer / Micronizer BOX – mist lubrication 24V (optional accessory)

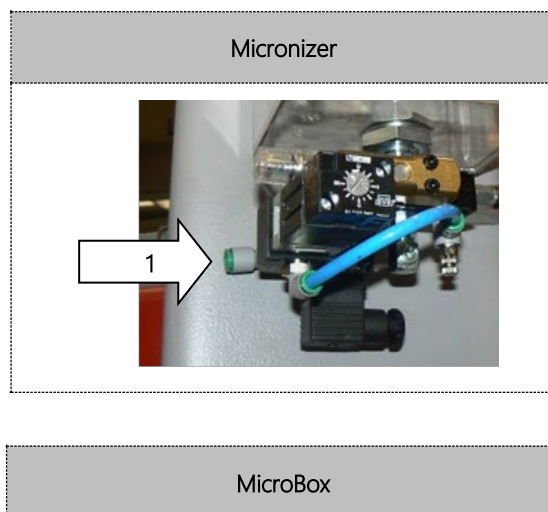
Photos are for illustrative purposes only.

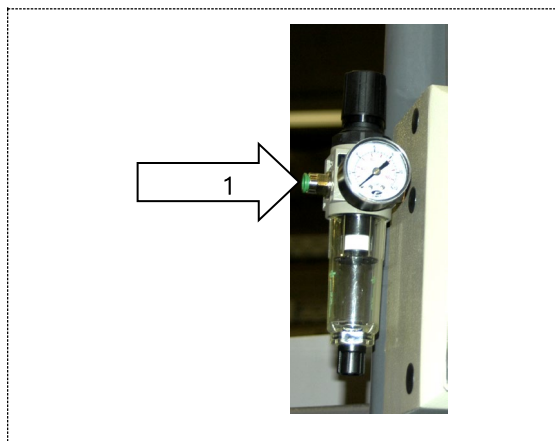
Microniser and MicroBOX are devices used to create a lubricating oil mist in precise doses of oil and air mixture, which is then applied directly to the saw band.



.Microniser setting:

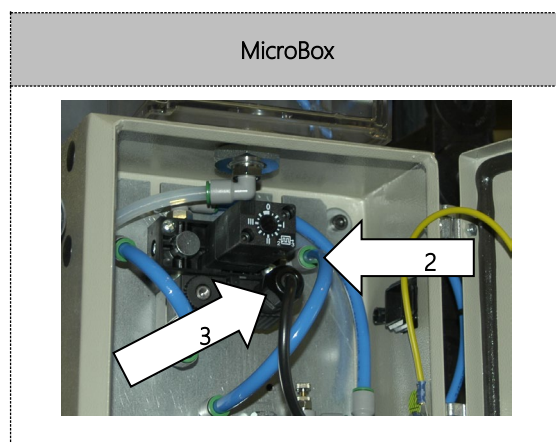
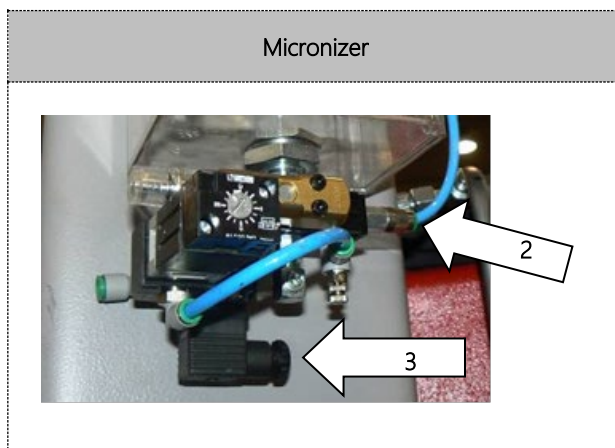
1. For proper function of the Microniser pressured air (in the range of 0.5 to 0.5 MPa (5-6 bar)) must supplied from the pneumatic system (dry, clean, free of particles) see - arrow 1



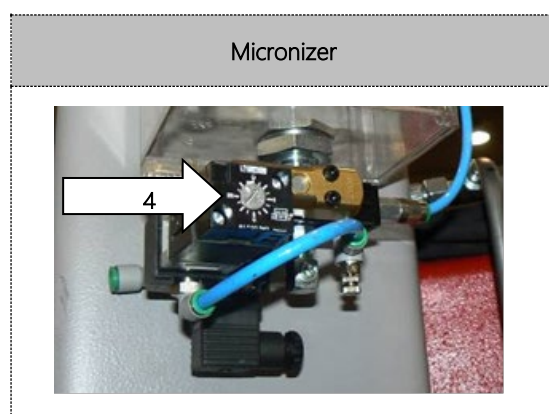


2. Arrow **2** - shows the output of the cooling medium (air + oil).

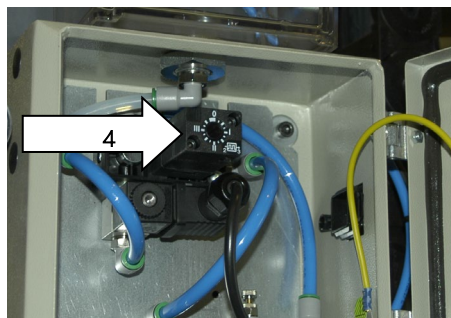
Arrow **3** - shows the inlet for the power supply cable.



3. Set the interval of cutting oil dispersion on the Microniser- **arrow 4** (3-20 pulses / min.). Adjust this interval to the parameters of the saw band and cut material.

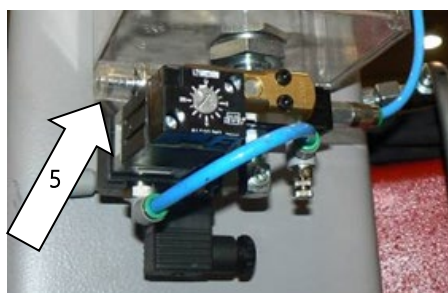


MicroBox

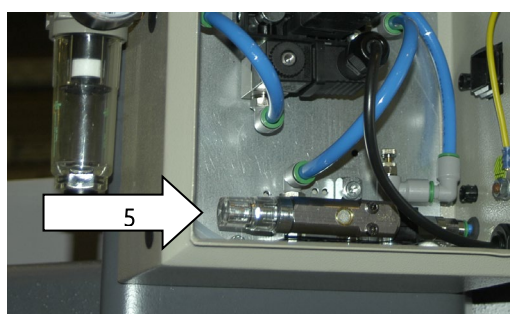


4. Adjust the amount of oil with a regulator - arrow 5

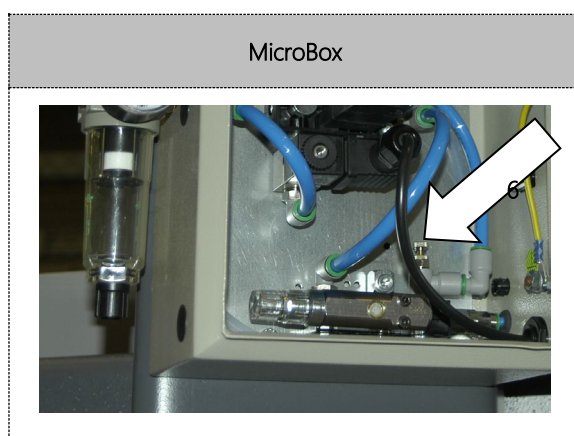
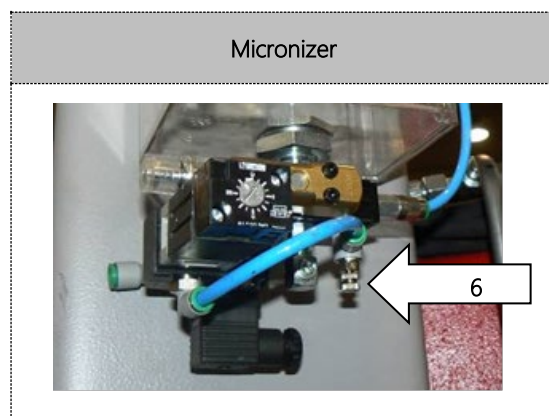
Micronizer



MicroBox



5. Setting the air quantity using another regulator - arrow 6



6. Switching on / off of the Microniser is depends on the control system of the machine it is installed on. See chapter "Machine control".

Recommended cutting oils for Micronisation:

Manufacturer	Cutting oil
Biona	Biocut
Paramo	Paramo cut 22

Featured are cutting oils with viscosity class 22.I

Adding of the coolant is possible after removing the filling cap. After the filing is finished the cap must be screwed in again.

Package Includes: a tank with regulators, connection 6m hose, diffuser..

4.7.3. Chips disposal

Chips resulting from cutting operations must be disposed of in accordance with the relevant regulations.

- Let the chips drip excess fluid!.
- Fill a watertight container with the chips! Be careful that the container does not leak, because even after a long dripping time, they still contain coolant residue.
- *Place the container into the care of a disposal company equipped for the disposal of chips contaminated with cooling liquid.* In case the machine is equipped with micro-spray installation, the chips must also be handed over to a disposal company.

4.8. Hydraulic, Greases and oils

4.8.1. Gearbox oils

In gearboxes, oil is used for the whole lifetime of the gearbox. We recommend replacing of the filling oil in case of repair.

Attention:

When replacing, use oils recommended by BOMAR or oils, which has comparable parameters from the other manufacturers.

Do not forget, that mineral and synthetic oils must not be mixed!

Use oils with specification DIN 51517 in the gearboxes. Select the viscosity grade ISO VG according to the original oil fill.

Recommended oils and quantity according to the type of the band saw

Band saw	Gearbox oil	Capacity
Extend 900.720		
Extend 900.720sx	Shell Tivela S 320	3,3 l
Swarf conveyor	Shell Tivela S 320	0,075 l

Comparative table of the gearbox oils

Manufacturer	Viscosity grade		
	ISO VG 100	ISO VG 220	ISO VG 320
BP	Energol GR-XP 100	Energol GR-XP 220	Energol GR-XP 320
Castrol	Alpha SP 100 Alpha MW 100	Alpha SP 220 Alpha MW 220	
Elf	Reductelf SP 100	Reductelf SP 220 Reductelf Synthese 220	Reductelf SP 320
Esso	Spartan EP 100	Spartan EP 220	Spartan EP 320
Mobil	Mobilgear 627	Mobilgear SHC 220 Mobilgear 630	Mobilgear 632
OMV		PG 220	
Paramo	PP 7	Paramo CLP 220	Paramo CLP 320
Shell	Shell Omala 100	Shell Omala 220 Shell Tivela S 220	Shell Omala 320 Shell Tivela S 320

Total	Carter EP 100	Carter EP 220	Carter EP 320
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4.8.2. Lubricant greases

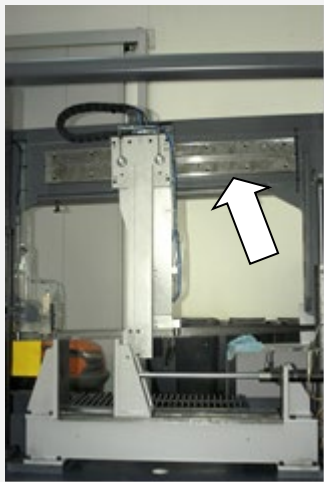
We recommend using lithium based saponified grease, class NGLI-2 for lubrication. Different greases are mixable, if their oil bases and consistence type are identical.

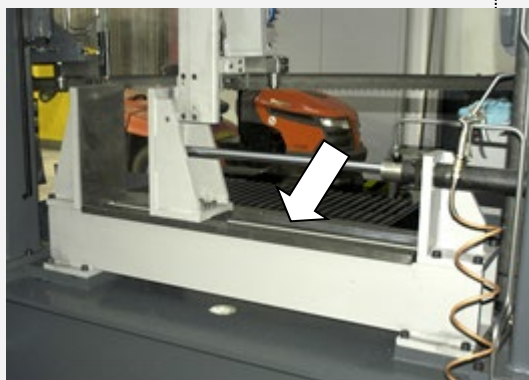
Comparative table of the lubricant greases:

Manufacturer	Type of the lubricant grease
BP	Energrease LS - EP
DEA	Paragon EP1
Esso	FETT EGL 3144
	Beacon EP 1
	Beacon EP 2
FINA	FINA LICAL M12
Klüber	Microlube GB0
	Staburags NBU8EP
	Isoflex Spezial
Optimol	Optimol Longtime PD 0, PD1, PD2
Shell Aseol AG	ASEOL Litea EP 806-077
Texaco	Multifak EP1

4.8.3. Lubrication

There are several places on the machine, which are necessary to grease periodically. It secures the right function of the machine.

Lubrication place	Lubrication
	The guiding cubes leading – grease with oil from both sides once a week.



the ledges of the guide for moving of movable jaw
the main vice

grease with oil the profiled edges from the both
sides once a week.



The linear guiding of the saw arm

– lubricate with grease once a three months (see
chapter **Lubricant greases**).

Use 3-5g grease on the every carriage of the linear
guiding. Use the grease gun to the lubrication.

Drive 3-5 times whole line of the linear guiding
during lubrication.

4.8.4. Hydraulic oils

Replace the hydraulic oil once in 2 years, because the oil can deteriorate its
properties and cause problems the hydraulic equipment. If the hydraulic system is
equipped with filter (2SF 56/48-0,063), replace the filter too.

Note:

**When replacing, use oils recommended by BOMAR or
oils, which has comparable parameters from the other
manufacturers. Do not forget, that mineral and
synthetic oils may not be mixed!**

Use oils with specification DIN 51524-HLP, ISO 6743-4 a and viscosity grade ISO VG
32 in hydraulic aggregates. Hydraulic oils quantity – see chapter **Hydraulic oil level
check**.

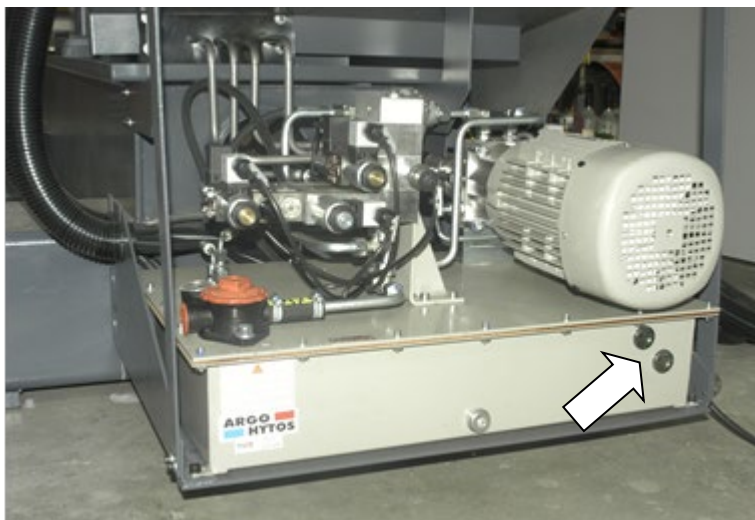
Comparative table of the hydraulic oils

Manufacturer	Type	Manufacturer	Type
Agip	Oso 32	Ina	Hidraol 32 HD
Aral	Vitam GF 32	Klüber	Lamora HLP 32
Avia	Avilub RSL 32	Maďarsko	Hidrokomol P 32
Benzina	OH-HM 32	Mobil	Mobil DTE 25
BP	Energol HLP 32	ÖMV	HLP 32
Bulharsko	MX-M/32	Polsko	Hydrol 30
Castrol	Hyspin AWS 32	Rumunsko	H 32 EP
Čepro	Mogul HM 32	Rusko	IGP 30

Manufacturer	Type	Manufacturer	Type
DEA	Astron HLP 32	Shell	Tellus Oil 32
Elf	Elfolna 32	Sun	Sunvis 832 WR
Esso	Nuto H 32	Texaco	Rando HD B 32
Fam	HD 5040	Valvoline	Ultramax AW 32
Fina	Hydran 32		

4.8.5. Hydraulic oil level check

Pull up the gauge and check the state of the oil. The oil level must be situated between water-glas.



Fill the hydraulic oil, if it is necessary. Use always the filter (10 μm or better) when you fill the oil. You avoid impurities penetration to the hydraulic system and troubles in hydraulic system.

4.8.6. Hydraulic unit service

After 50 hours working time, or the latest 3 month after the first run, the first service should be carried out. This includes:

- checking off all screws and connections, fixing points, tubes and hoses for leakage
- Check hydraulic oil level
- During time of duty the oil temperature shouldn't exceed 60-70°C
- check function of signaling components (thermometer, level gauge, dirty filter indicator)
- Check the adjustment of working pressure

To realise a high reliability of the power pack, the manufacturer lays down following inspection intervals

Interval	daily	weekly	monthly	three monthly	six monthly	annually
Hydraulic fluid						
Level	-	•	-	-	-	-
Temperature	-	•	-	-	-	-
Condition	-	-	•	-	-	-
Change interval	-	-	-	-	-	•
Filter						
Change interval	-	-	-	-	-	-
Other checks						
External Leakages	•	-	-	-	-	-
Contamination	•	-	-	-	-	-
Damages	•	•	-	-	-	-

Interval	daily	weekly	monthly	three monthly	six monthly	annually
Noise-(level)	•	-	-	-	-	-
Gauges	-	-	•	-	-	-

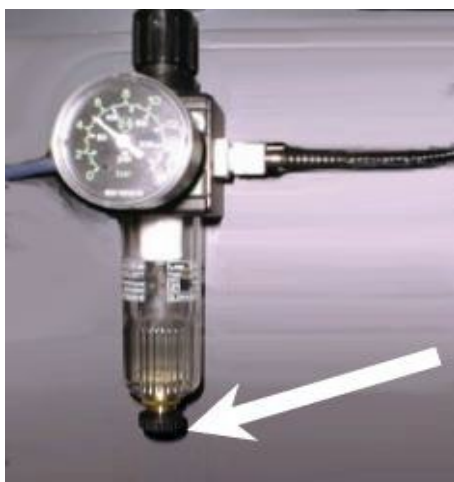
4.9. Machine cleaning

Clean the machine from the cooling liquid and impurities after every shift stopping. Conserve the guiding surfaces, mainly.

- Clamping jaws guiding of the vice.
- The guiding of the feeder.
- Loading surface of the vice.

4.10. Pressure system servicing

Filter of the pressure system is necessary to clean periodically, that means drain sediments and impurities from the reservoir.



Close the pressure air supply. Screw off the screw and let to drain sediments to the reservoir. Screw on the screw again.

WARNING!

There is the pressure 0,5 – 0,6 MPa in the pressure system, therefore you must release the screw very carefully!!

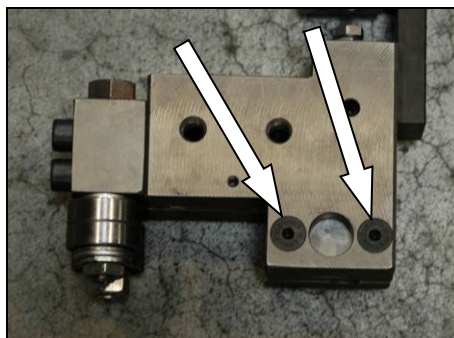
4.11. Worn pieces replacement

4.11.1. Pushing bearing replacement

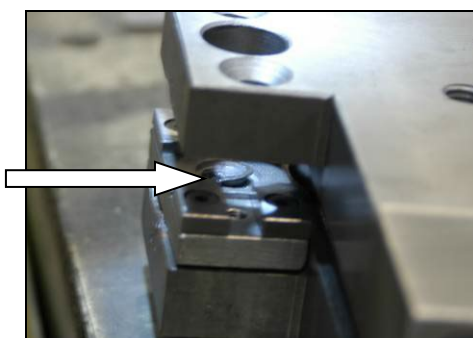
If it is impossible to adjust the bundle gripping assembly and the pushing bearing is worn, it needs to be replaced



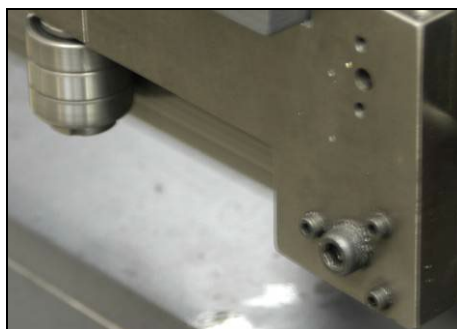
1. Dismantle the saw band.
2. Disconnect the hose from the cooling agent eventually unmount microniser.
3. Unmount guiding cube from holder on saw.



4. Loosen the 2 clamp screws solid carbide guides and remove them..
5. Remove fixed hardmetal.



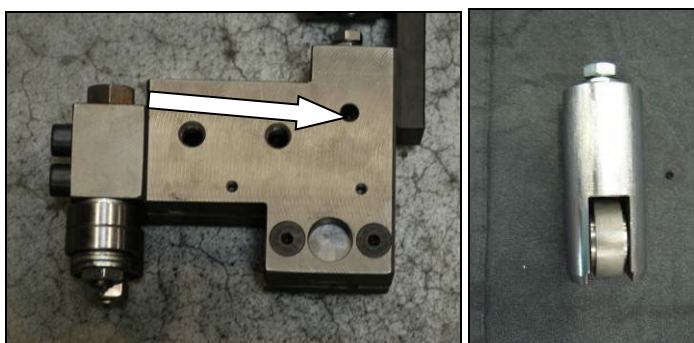
6. Remove retaining ring. Then unmount adjusting screw.



7. Remove other three screws.



8. Carefully remove the hardmetal. Remove disc springs.



9. Loosen the mounting worm (allen wrench no. 3). Remove the pivot with bearing from the guiding cube.



10. Insert the pivot to the vice.

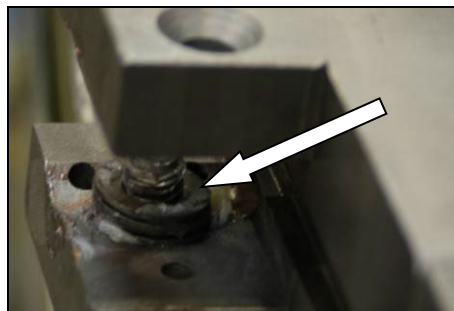
Attention:

The vice has aluminium jaws, eventually, there has to be an aluminium agent to protect the pivot from damage.

11. Remove the bearing pivot from the bearing holder by means of the swager.



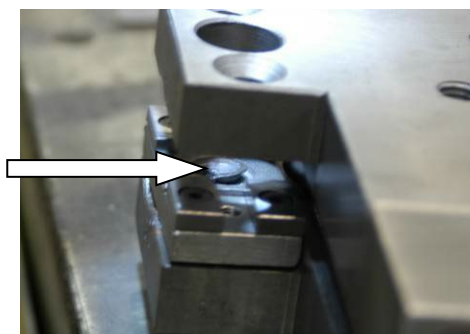
12. Remove the worn bearing and other damaged parts.
13. Fasten the holder to the vice.
14. Insert the bearing and washers and return the pivot to its original place.
15. Place the assembled piston guide cube. Piston must move freely in a guiding cube.
16. Worm screw defines the operation of the piston (piston has a slot in which is the worm). Tighten the worm, but with a minimum clearance to the piston could move.



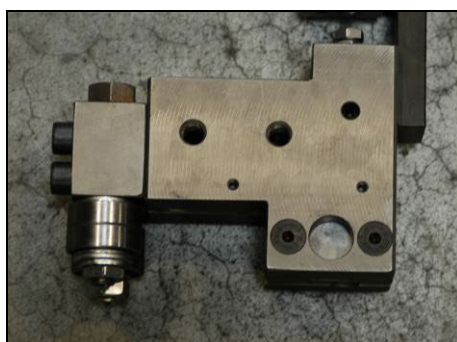
17. Insert the disc springs. The number of disc springs must match the number of dismantled springs. Disc springs are folded against each other 1 to 1 Odd plate spring is near the harmetal carbide.



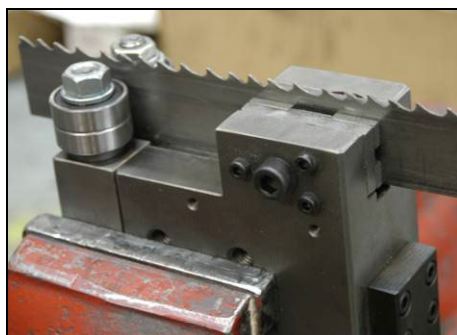
18. Insert the new hard metal guide. *Attention, Do not lose disc springs.* Ensure proper position of carbide guides – holes for 3 stop screws must be in the same position as the holes in a guiding cube.
19. Insert and tighten central screw.



20. Insert the retaining ring on central screw.
21. Insert 3 stop screw around central screw.



22. Insert fixed hardmetal guiding and mount hard metal with two screws.



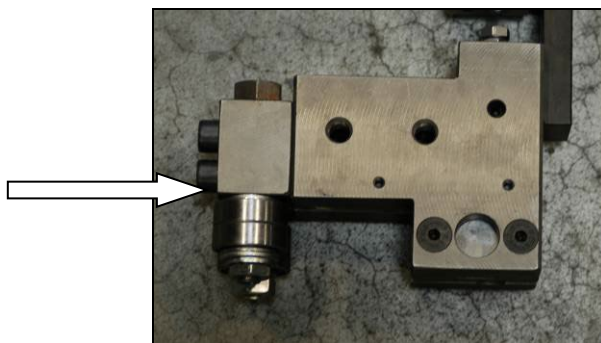
23. Using a short piece of the blade used on the machine, adjust the width of the gap between the guides. Loosen the central screw. Set the gap by central adjusting screw. Belt guides must walk freely without large and will also not scrub.

4.11.2. Saw band guiding pulleys replacement

Attention:

Guiding pulleys must be replaced together on both guiding cubes!

If the saw band is not sufficiently guided by guiding pulleys or if the pulleys are obviously worn, the pulleys should be replaced.



Attention:

Mark both eccentrics placing and components on the eccentric! Eccentrics must not be replaced with each other!

1. Release 2 screws, dismantle the holder of the pulleys and tighten the holder to the vice



2. Dismantle nut, washer and spacer ring from each eccentric.
3. Remove eccentrics from bearings by means of the swager.



4. Change all bearings and other worn parts.

5. Install eccentrics to the cubes. Install components on both eccentrics in given

Attention:

Do not replace the eccentrics placing in the cube.

order. Put bearings by means of the preparation on eccentrics.



6. Screw on nuts on both eccentrics and tighten them.



7. Insert the saw band to the guiding cube (cca 15 – 20 cm). Secure the movable hard metal guide with scotch so, that the saw band is pressed with guides and it is possible to move with saw band

Optimal distance between the band and the pulley is 0,05 mm.

8. Set the eccentrics by means of the wrenches, the saw band must run in the centre. Guide pulleys must not press too much on the band, but must spin freely during the band run
9. Tighten nuts on both eccentrics.
10. Remove the testing piece of saw band from the cube lead. Install the guiding cube on the machine.

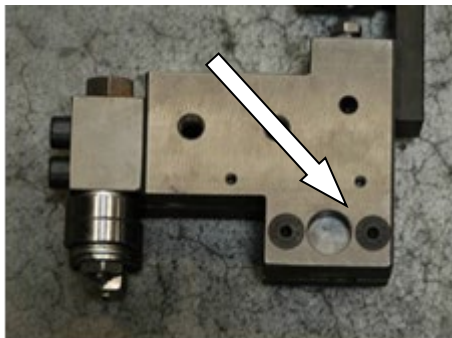
4.11.3. Hard metal guides replacement

ATTENTION!

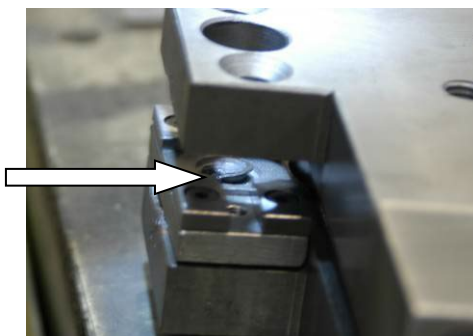
Hard metal guides must be replaced together on both guiding cubes!!

If the hard metal guides cannot be adjusted, they have to be replaced

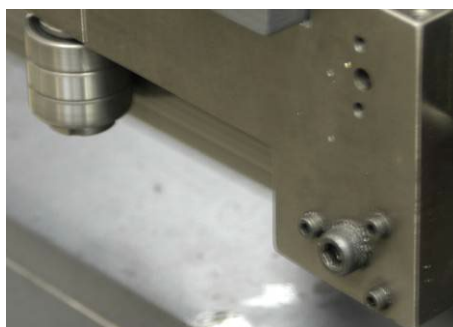
1. Dismantle the saw band. Disconnect the hose from the cooling agent eventually unmount microniser. Unmount guiding cube from holder on saw.



2. Loosen the 2 clamp screws solid carbide guides and remove them..
3. Remove fixed hardmetal.



4. Remove retaining ring. Then unmount adjusting screw.



5. Remove other three screws. .



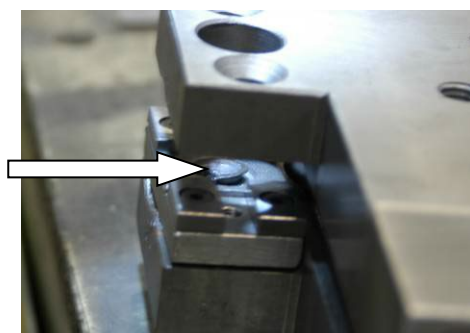
6. Carefully remove the hardmetal. *Caution! Don't loose the Belleville springs!*



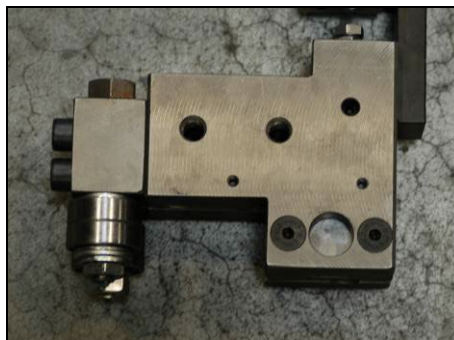
7. The number of disc springs must match the number of dismantled springs. Disc springs are folded against each other 1 to 1 Odd plate spring is near the harmetal carbide.



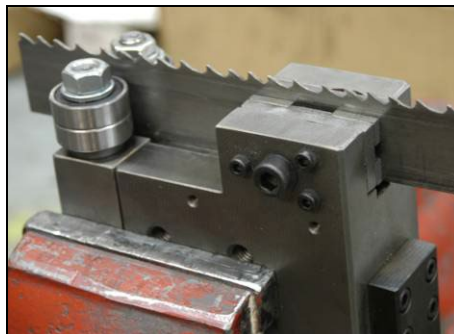
8. Insert the new hard metal guide. **Attention, Do not lose disc springs.** Ensure proper position of carbide guides – holes for 3 stop screws must be in the same position as the holes in a guiding cube.
9. Insert and tighten central screw.



10. Insert the retaining ring on central screw.
11. Insert three stop screw around central screw.



12. Insert fixed hardmetal guiding and mount hard metal with two screws.



13. Using a short piece of the blade used on the machine, adjust the width of the gap between the guides. Loosen the central screw. Set the gap by central adjusting screw. Belt guides must walk freely without large and will also not scrub.

4.11.4. Hard metal guides adjustment at the machine

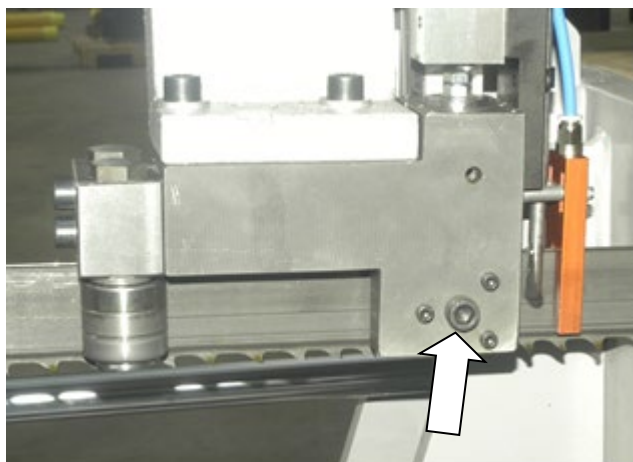
After the saw band replacement and after guide cubes mounting on the machine it is necessary to adjust hard metal guides at the machine.

Proper hard metal guides adjustment influences cutting accuracy and saw band life.

Hard metal guides have to be adjusted on both guiding cubes together!

1. Tighten the screw on the guiding cube; to release the saw band.
2. Loosen the screw and let the hard metal plate to sit on the saw band. The screw is turned slightly by hand.

Set the hard metal guides on the second cube in the same way.

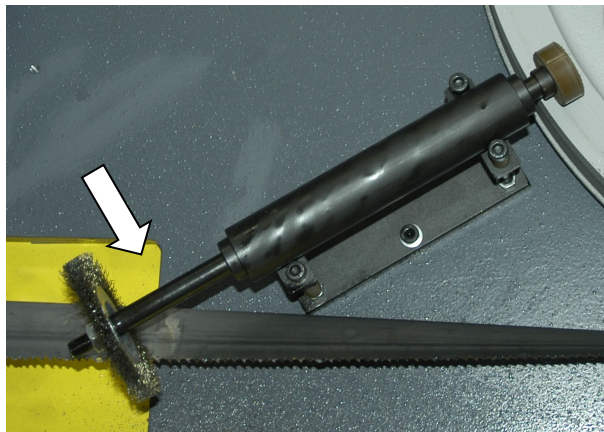


Údržba stroje
Wartung
Machine service

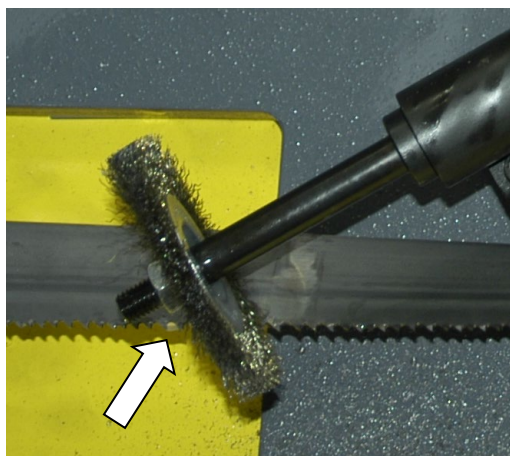
4.12. Round brush replacement

If the chip removing brush is not able to fulfil its function, it has to be replaced.

1. Open the cover of the band arm



2. Hold shaft of the brush by wrench.



3. Release the nut on the brush, replace worn brush on the new brush, screw on the nut.
4. Adjust the brush to the saw band
5. Close saw arm cover.

5. **Závady / Troubleshooting**

5.1. Mechanical problems

Problem	Possible causes	Repair
3. Slanting cut	- Wrongly adjusted hard metal guides.	Set according to the chapter „Servicing and adjustment“
	- Worn hard metal guides.	Replace to the chapter „Worn pieces replacement“
	- Wrongly adjusted cubes of the saw band guiding.	Set according to the chapter „Servicing and adjustment“
	- Worn bearings of the saw band guiding.	Replace according to the chapter „Worn pieces replacement“
	- Wrongly adjusted swarf brush.	Set according to the chapter „Servicing and adjustment“
	- Worn swarf brush.	Replace according to the chapter „Worn pieces replacement“
	- Insufficient saw band stretching.	Rise the saw band stretching and set the limit switch.
	- Wrongly chosen tooth system of the saw band.	Replace the saw band and keep the instructions of manufacturer on new saw band choice.
	- Worn saw band.	Replace the saw band.
	- Wrongly balanced roller conveyor.	Set the roller conveyor.
	- Dirty feeding board.	Cleanse the feeding board from debris, chip and residue material.
	- Guiding arm and guiding cube are loosened.	Clamp the guiding arm.
	- Guiding arm and cube are too far from the material.	Set the guiding cube to the material.
	- Too fast cutting rate.	Lower the material feeding speed.
	- Unexpected oscillation in material quality.	Set the cut and feeding speed to the relevant material.
4. The cut is not cut upon desired angle	- Securing lever is loosened.	Check the securing lever efficiency and carry out its adjustment according to chapter „Servicing and adjustment“.
	- Set angle does not match the cut angle.	Check the angle adjustment with a protractor and possibly set it according to chapter „Servicing and adjustment“.
	- Insufficient saw band stretching.	Stretch the saw band and set the limit switch according to chapter „Servicing and adjustment“.
	- Guiding arm and guiding cube are loosened.	Fasten the guiding arm and the cube.
	- Dirt between material and clamping jaw.	Cleanse the material and mating jaw.
5. Short lifetime of the saw band	- Insufficient saw band stretching.	Raise the tightening of the saw band set the scanner of saw band tightening according to chapter „Servicing and adjustment“.
	- Worn swarf brush.	Check the swarf brush condition and replace it in case of excessive use as described in chapter „Worn pieces replacement“
	- Wrongly adjusted swarf brush.	Check swarf brush adjustment, set it according to chapter „Servicing and adjustment“

Problem	Possible causes	Repair
	- Over stretched saw band	Lower stretching of the saw band and set the limit switch of the saw band stretching according to chapter „Servicing and adjustment“
	- Wrongly adjusted hard metal guides.	Check the adjustment of the hard metal guides and carry out adjustment as described in chapter „Servicing and adjustment“
	- Worn hard metal guides of the saw band.	Check the condition of the hard metal guide and if it is too worn, replace hard metal guides according to chapter „Worn pieces replacement“
	- Worn saw band guide bearings.	Check guiding bearings and if you notice some sort of excessive damage, replace them according to chapter „Worn pieces replacement“
	- Wrongly adjusted guiding cubes of the saw band.	Set guiding cube according to chapter „Servicing and adjustment“
	- Wrongly adjusted down feed and saw band speed.	Adjust the feeding and speed of a saw band according to values published by saw band manufacturer.
	- Different material quality.	Adjust feeding and speed of a saw band according to desired material (try cut-test).
	- Low-class saw band	Replace the saw band (contact your local accessory supplier for more information)
	- Wrongly chosen saw band tooth system.	Replace the saw band and keep instructions of the manufacturer on the choice.
	- Wrongly adjusted tracking.	Check the space between top of a saw band and driving wheel. Perhaps adjust the tracking as described in chapter „Servicing and adjustment“
6. Insufficient cut output.	- Worn saw band.	Replace the saw band and keep instructions of the manufacturer on the choice.
	- Wrong saw band tooth system.	Replace the saw band and keep instructions of the manufacturer on the choice.
	- Wrongly set down feed and speed of a saw band.	Set feed and speed of a saw band according to values published by saw band manufacturer.
7. The cut is not finished.	- Wrongly adjusted lower stop point of the saw frame.	Check lower limit switch and screw.
	- Stop point surface is messed-up.	Cleanse stop point surface of the limit switch from debris and residue material.
8. By choke is not possible turn	- Metal clamps between valve and panel.	Clamps must be removed and put on the shaft O-Ring about 10x2 mm.
	- Metal clams are in body of valve.	Valve must be cleared or changed.
9. Saw band drive cannot be started.	- Pressure switch is adjusted wrong.	Set the pressure switch according to chapter „Servicing and adjustment“
	- Pressure switch is defective.	Replace defective parts of the pressure switch.
10. The saw bands are cracked.	- In stretching wheel is wrong adjusting geometry.	Adjust distance band from recess wheel c.2 mm according to operating instructions.
	- Hard metal plates of circuit saw band are not adjusting.	Hard metal plates of circuit saw band must be adjusting according to operating instructions.
	- Guiding cubes are not adjusting (bearings + hard metal circuit)	Guiding cubes must be adjusting (bearings + hard metal circuit) according to operating

Problem	Possible causes	Repair
		instructions.
	- Bearings of guiding cubes are used (rolling elements are damaged or outside ring of bearing has conical form).	Bearings of guiding cubes must be replaced. Bearings must be adjusting according to operating instructions.
11. Damage tooth system of the saw band	- In gripping the lifting cylinder is backlash.	
	- Squeezed pin upper or downer holder of the lifting cylinder.	Exchange complete upper or downer holder of lifting cylinder.
12. The saw is cut downing.	- Geometry of hardmetal guiding cubes is wrong adjusted.	Hardmetal guiding cubes must be adjusted.
	- Bearings of guiding cubes are used.	Bearings of guiding cubes must be replaced.
13. Cleansing of the saw band is not functional.	- Elastic wheel of the brush drive is worn-down.	Elastic wheel of the brush must be changed.
	- Knurling of the driving wheel is worn-down.	Driving wheel must be changed.
	- The shaft of the brush drive is rusted.	The shaft of the brush must be cleaned and oiled.
	- The brush position and the brush cover is adjusted wrong – with the brush cannot be turned.	The brush cover must be posed, in order to the brush can be turned.
14. The saw arm periodically rise and fall during the cut; this cause short lifetime of the saw band.	- Backlash in driving wheel lodgement on the shaft.	Change the driving shaft for a long one, new bearings, distance ring, new driving wheel, spring, two covers on the forehead of the shaft + screws.
	- Worn channel for spring.	

5.2. Electric problems

Problem	Possible causes	Repair
15. Machine is not possible start.	- In socket is not voltage	Line voltage must be checked.
	- Transfer relay is closed (thermal protector)	Each FA relay must be checked.
	- Limit switch of saw band stretching, cover of frame or cover of saw band is not started.	Check of saw band stretching and covers closing.
16. When cut is finished, the frame is not raising.	- Bottom limit switch is adjusted wrong.	Bottom limit switch must be adjusted according to chapter ADJUSTING.
	- In hydraulic (pneumatic) ring is error. HYTOS (BOSCH) is not acting to frame uplift.	Function of magnetic valve must be checked, valve must be closed, voltage of clamps and inductor must be checked.
17. Electric motor and pump are without voltage. Between contactor and thermal protector is not voltage.	- Wrong contactor.	Replace contactor of engine.

Problem	Possible causes	Repair
18. The indicator of speed saw band is not functional.	- Sensor of speed is not adjusted.	Sensor of speed must be adjusted.
	- Defective display	The display must be changed.
	- Wrong sensor – diode of indicator speed is not light.	Sensor must be changed and adjusted.
19. Protector is switched off from engine hydraulic aggregate MA3 sometimes.	- Into hydraulic system is high working pressure.	Service engineer must reduce the pressure in hydraulic system.
20. The hydraulic aggregate cannot be started	Auxiliary contact on thermo-relay FA1 is defective.	Replace the defective contact on motor starter FA1.
21. Hydraulic aggregate is switched on but the saw arm or the main vice is not functional	- Wrong connection of electrical supply. The electrical phases are connected conversely.	The phases must be switched. Only service engineer can do this.
22. Cooling is not active	Lack of cooling agent.	Fill the tank with cooling agent.
	- Thermal relay is defective	Change the thermal relay
	- Input hosepipe is broken or obstructed.	Check the cooling circuit and perhaps cleanse cooling system.
	- Cooling pump protection is defective	Check the protection of cooling pump if need change it.
	- Cooling pump is defective.	Replace the cooling pump.

5.3. Hydraulic problems

Problem	Possible causes	Repair
23. Hydrogenerator not supplying oil	• reverse rotation	Check the connections of each phase. Reconnect properly connection of the electrical phases.
	• shortage of oil in the tank	Add hydraulic oil
	• Oil viscosity does not correspond prescribed viscosity value	Change hydraulic oil.
	• Hydrogenerator malfunction	Call service
	• Wrong power supply connection.	Check the connections of each phase. Reconnect properly connection of the electrical phases.
24. Hydraulic oil contains bubbles	• Hydraulic circuit is not adequately deaerated	Make deaeration of hydraulic circuit.
	• Low oil level	Add hydraulic oil

	the pump shaft seals damaged	Call service
25. Increased mechanical noise	damaged joint drive	Call service
	damaged or destroyed motor bearings	Call service
	air intake	Check for leaks.
26. Low pressure, pump supplies oil	problem in the safety valve	Wrong settings. Check the settings and adjust the safety valve.
	pump wear	Call service
	external or internal leakage	Call service
27. Hydrogenerator is seized	damage by solid particles in oil	Make oil filtration, or call the service.
	non-prescribed oil	Change hydraulic oil.
	wrong type of oil	Change hydraulic oil.
	exceeding the life of the pump	Call service
28. Overheating oil	cooler malfunction	Check the cooler function or call service.
	wear the pump, the energy is converted into heat	Call service
29. Hydraulic valve can not be readjusted	electromagnet has no signal (voltage) - interrupted supply lines	Check again.
	Electromagnet coil burnt	Replace coil – Call service.
	spool valve sticking	Replace valve – Call service

6. **Schémata / Schemas / Schematics**

Schémata
Schemas
Schematics

- 6.1. Elektrické schéma /Elektroschema /
Wiring diagrams –Extend 900.720
- 6.1.1. 3×400 V + PE, 50Hz

0	1	2	3	4	5	6	7	8	9			
 Extend 900.720 ES-62100-201/202-V6.4 Wiring diagram 3x400V+PE, 50Hz Bomar, spol. s r.o. Těžební 1236/1 627 00 Brno Czech republic												
 BOMAR			BOMAR, s.r.o. Těžební 1236/1 CZ 627 00, Brno		Stroj/Machine/Maschine: Extend 900.720		Název stránky/Name page/Name seiten: Úvodní strana / Start page / Startseite			Číslo řádku /Doc.No./Anzahl der Dokumentzeilen: ES-62100-201/202-V6.4	URL/Page/ Seite: 1	URL/Page/ Seite: 1

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3	Kusovník artiklů / Parts list / Artikelstückliste	18.3.2016
3.a	Kusovník artiklů / Parts list / Artikelstückliste	18.3.2016
3.b	Kusovník artiklů / Parts list / Artikelstückliste	11.4.2016
3.c	Kusovník artiklů / Parts list / Artikelstückliste	11.4.2016
3.d	Kusovník artiklů / Parts list / Artikelstückliste	11.4.2016
4	I/O řídicí systém / I/O Control station / I/O Steuerung	16.3.2016
5	Rozmístění prvků v rozvaděči R1/ Placement of elements in enclosure R1/ Platzierung der Elemente im Schaltschrank R1	11.4.2016
6	Ovládací panel na rozvaděči / Control panel / Bedienpult	21.3.2016
7	Silová část M1 / Power part M1 / Feld partie M1	11.4.2016
8	Silová část M2,M3 / Power part M1,M2 / Feld partie M1,M2	11.4.2016
9	Silová část M4 / Power part M4 / Feld partie M4	11.4.2016
10	Deska zdroje / Power board / Netzgerät-Platte	11.4.2016
11	Slykače motorů, M5 / Motor contactor, M5 / Motor-Schutzschalter, M5	11.4.2016
12	Hydraulické ventily / Hydraulic valve / Hydroventil	11.4.2016
13	Hydraulické ventily / Hydraulic valve / Hydroventil	11.4.2016
14	Vstupy / Inputs / Eingänge	5.4.2016
15	Tlačítka ovládací panel / Button control panel / Taste Bedienpult	18.3.2016
16	Bezpečnostní okruh / Safety circle / Sicherheitsbereich	11.4.2016
17	Řídicí systém / Control system / Steuersystem	11.4.2016
18	Snímač výšky ramene / Arm height sensor / Arm Höhensensor	18.3.2016
19	Příslušenství / Accessories / Zubehör	4.4.2016

Číslo dok./Doc.No./Anzahl der Dokumente:	ES-62100-201/202-V6.4	Účt./Page/
Název/Power supply/Einspeisung:	3x400V + PE, 50Hz	Seite:
Zpracoval/Processed/Her. verarbeitet:	Kadka	Účt./Page/
Datum/Date/Datum:	11.4.2016	Seite:

Název stránky/Page name/Name der Seite:	Obsah/ Table of contents/ Inhaltsverzeichnis
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Stroj/Machine/Maschine:	Extend 900.720
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BOMAR, s.r.o. Tržební 1236/1 CZ 627 00, Brno
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Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednávací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-ZD1	Napájecí zdroj - 15VAC/24VDC; 20VAC/28VDC Power supply unit - 15VAC/24VDC; 20VAC/28VDC Netzteil - 15VAC/24VDC; 20VAC/28VDC	ZDR-03	Bomar	265.915	1	/10.2
-BM1	Bezpečnostní relé 24VDC, 3NO Safety relay 24VDC, 3NO Sicherheitsrelais 24VDC, 3NO	BT50	ABB	91.051.063	1	/16.5
-CU1	Klávesnice - fóliová Touch-sensitive keyboard Folientastatur	31.R230-207	AKI ELECTRONIC, spol.s.r.o.	31.R230-207	1	/17.0
-FA1	Motorový spouštěč - 6.3A Motor starter - 6.3A Motorstarter - 6.3A	MS116-6.3	ABB	91.045.023	1	/7.4
-FA2	Motorový spouštěč - 0.4A Motor starter - 0.4A Motorstarter - 0.4A	MS116-0.4	ABB	91.045.017	1	/8.2
-FA3	Motorový spouštěč - 1A Motor starter - 1A Motorstarter - 1A	MS116-1,00	ABB	91.045.019	1	/8.6
-FU1	Pojistka trubičková - 500mA/250V, pomalá, 5x20 Tube fuse - 500mA/250V, slow, 5x20 Rohrsicherung - 500 mA / 250 V, langsam, 5x20	T500mA/250V	ESKA	91.230.011	1	/10.4
-FU4	Pojistka trubičková - 6.3A/250V, pomalá, 5x20 Tube fuse - 6.3A/250V, slow, 5x20 Rohrsicherung - T6,3A / 250V, langsam, 5x20	T6,3A/250V	ESKA	91.230.002	1	/10.4
-RP1	Potenciometr 4k7 Potentiometer 4k7 Potentiometer 4k7	TP195 4k7/N20A	Elektronické součástky CZ, a.s	91.283.015	1	/9.6
-RP1	Hlavice potenciometru - 24mm Head of potentiometer 24mm Leiter Potentiometer 24mm	S8877 BLK	GES-ELECTRONICS, a.s.	91.060.063	1	/9.6
-RCF1	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Vlček	91.041.015	1	/7.3
-RCF2	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Vlček	91.041.015	1	/8.1

The manufacturer reserves right to use an equivalent replacement device.

 BOMAR, s.r.o. Těšební 1236/1 CZ 627 00, Brno	Scioj/Machine/Maschine: Extend 900.720	Název stránky/Name page/Namen seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente: ES-62100-201/202-V6.4		List/Page/ Seite: 3
			Napájení/Power supply/Einspeisung: 3x400V + PE, 50Hz		List/Page/ Seite: 23
			Zpracování/Processed /Hier. verarbeitet: Datum/Date/Datum: 18.3.2016		

Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednávací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-RCF3	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Viček	91.041.015	1	/8.5
-RCF11	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Viček	91.041.015	1	/7.6
-RCF12	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Viček	91.041.015	1	/7.7
-FA1	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO + 1xNC	HK1-11	ABB	91.046.005	1	/7.4
-FA2	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO + 1xNC	HK1-11	ABB	91.046.005	1	/8.2
-FA3	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO + 1xNC	HK1-11	ABB	91.046.005	1	/8.6
-FU1	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THSI5U	WIELAND	91.251.102	1	/10.4
-FU2	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THSI5U	WIELAND	91.251.102	1	/10.4
-FU2	Pojistka trubičková - 800mA/250V, pomalá, 5x20 Tube fuse - 800A/250V, slow, 5x20 Rohrsicherung - 800A / 250V, langsam, 5x20	T800mA/250V	ESKA	91.230.010	1	/10.4
-FU3	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THSI5U	WIELAND	91.251.102	1	/10.4
-FU3	Pojistka trubičková - 1A/250V, pomalá, 5x20 Tube fuse - 1A/250V, slow, 5x20 Rohrsicherung - 1A / 250V, langsam, 5x20	T1A/250V	ESKA	91.230.031	1	/10.4
-FU4	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THSI5U	WIELAND	91.251.102	1	/10.4

The manufacturer reserves right to use an equivalent replacement device.

 BOMAR, s.r.o. Těšební 1236/1 CZ 627 00, Brno	Strojí/Machine/Maschine: Extend 900.720	Název stránky/Name page/Namen seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente: ES-62100-201202-V6.4 Napájení/Power supply/Einspeisung: 3x400V + PE, 50Hz Zpracování/Processed /Fert. verarbeitet: Kódka Datum/Date/Datum: 18.3.2016	List/Page/ Seite: 3.a
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Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednávací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-HL1	Signálka zelená na adaptér Green light for Eaton adapter Grünes Licht für Eaton-Adapter	M22-LED-G	EATON	91.061.023	1	/13.8
-KM1	Ministýkač 4kW/400V Minicontactor 4kW/400V Mini Schutz 4kW/400V	B6S-30-01-1.7-71	ABB	91.040.049	1	/11.1
-KM2	Ministýkač 4kW/400V Minicontactor 4kW/400V Mini Schutz 4kW/400V	B6S-30-01-1.7-71	ABB	91.040.049	1	/11.3
-KM3	Ministýkač 4kW/400V Minicontactor 4kW/400V Mini Schutz 4kW/400V	B6S-30-01-1.7-71	ABB	91.040.049	1	/11.4
-KM11	Stýkač 5,5kW/400V Contactor 5,5kW/400V Schütz 5,5kW/400V	AF12-30-01-11	ABB	91.040.051	1	/16.7
-KM12	Stýkač 5,5kW/400V Contactor 5,5kW/400V Schütz 5,5kW/400V	AF12-30-01-11	ABB	91.040.051	1	/16.8
-PA1	Pojistkový odpínač pro válcové vložky - 3P Switch fuse for the cylinder inserts - 3P Schalter Sicherung für den Zylinderseitsaize - 3P	E 93/32	ABB	91.241.014	1	/9.2
-PA2	Pojistkový odpojovač E-90 - 2P Fuse disconnector E-90 - 2P Sicherungstrenner E90 - 2P	E 92/32	ABB	91.241.013	1	/10.1
-QS1	3 pólový odřínač, 40A Disconnecter - 3P, 40A Trennschalter - 3P, 40A	OT40FT3	ABB	91.170.019	1	/7.0
-QS1	Rukojet' odřínače - černá Handle switch - black Griffschalter - schwarz	OHS2RJ	ABB	91.180.015	1	/7.0
-QS1	Kryt svorek Terminal shroud Klemmenabdeckung	OTS40T3	ABB	91.170.017	1	/7.0
-RP1	Svorka rychloupínací Fastconnect clamp Fast Connect Klemm	WAGO 224-112	WAGO	91.250.009	3	/9.6

The manufacturer reserves right to use an equivalent replacement device.

3.a	 BOMAR, s.r.o. Těšební 1236/1 CZ 627 00, Brno	Stroj/Machine/Maschine: Extend 900.720	Název stránky/Name page/Namen seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente: ES-62100-201/202-V6.4		Úč/Paper/ Seite: 3.a
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				Datum/Date/Datum: 11.4.2016		

Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednávací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-SB1	Hlavice prosvětleného tlačítka zelená Green transparent switch Grün transparent Schalter	M22-DL-G	EATON	91.060.031	1	/15.0
-SB1	Upevňovací adaptér + 1NO Attaching adapter + 1NO Montageadapter + 1NO	M22-AK10	EATON	91.061.021	1	/15.0
-SB2	Upevňovací adaptér + 1NO Attaching adapter + 1NO Montageadapter + 1NO	M22-AK10	EATON	91.061.021	1	/15.1
-SB2	Hlavice tlačítka - černá Head button - black Kopfaste - schwarz	M22-D-S	EATON	91.060.035	1	/15.1
-SB3	Hlavice 3 položového přepínače Head of 3 position switch Leiter der 3-Positionsschalter	M22-WRK3	EATON	91.060.051	1	/15.2
-SB3	Kontaktní blok - 1NO Contact block - 1NO Kontaktblock - 1NO	M22-K10	EATON	91.061.022	1	/15.2
-SB3	Upevňovací adaptér + 1NO Attaching adapter + 1NO Montageadapter + 1NO	M22-AK10	EATON	91.061.021	1	/15.2
-SB500	Total stop - hlavice + 3xNC Emergency-stop mushroom push - button + 3xNC Not-Aus-Plz - Taster + 3 xNC	YW1B-V4E02R	IDEC	91.060.084	1	/16.4
-SB500	Kontakt - 1x NO Contact - 1x NO Kontakt - 1x NO	YW-E10	IDEC	91.061.044	1	/16.4
-TR1	Toroidální transformátor - 0-230-400V/20V/15V, 150VA Toroidal transformer - 0-230-400V/20V/15V, 150VA Ringkerntransformator - 0-230V-400V/20V/15V, 150VA	400V/230V/20V/15V 6A/2A 150VA	KARBAN s.r.o.	91.080.026	1	/10.1
-SQ21	Bezpečnostní koncový spínač - 2xNC Safety Limit Switch - 2x NC Sicherheitsendschalter - 2x NC	QKS8	KEDU	91.173.012	1	/16.4
-SQ22	Bezpečnostní koncový spínač - 2xNC Safety Limit Switch - 2x NC Sicherheitsendschalter - 2x NC	QKS8	KEDU	91.173.012	1	/16.2

The manufacturer reserves right to use an equivalent replacement device.

3.b

 BOMAR, s.r.o. Těšební 1236/1 CZ 627 00, Brno	Scioj/Machine/Maschine: Extend 900.720	Název stránky/Name page/Namen seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente: ES-62100-201/202-V6.4 Napájení/Power supply/Einspeisung: 3x400V + PE, 50Hz Zpracováno/Processed/Abg. verarbeitet: Kadla Datum/Date/Datum: 11.4.2016	List/Page/ Seite: 3.c
				List/Page/ Seite: 23

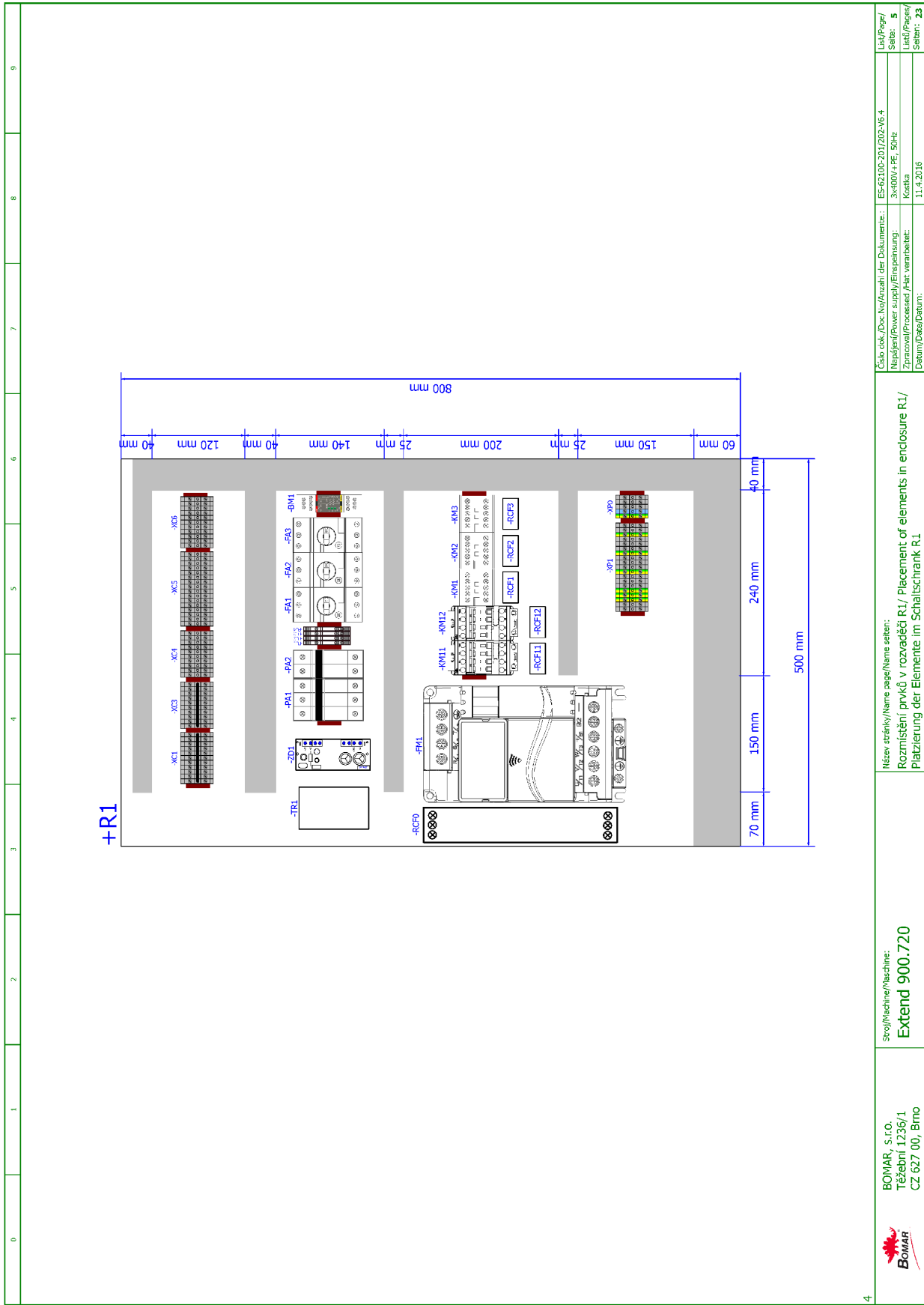
Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednávací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-PA1	Pojistka válcová - 16A, 10x38, rychlá Tube fuse - 16A, 10x38, fast Rohrsicherung - 16A, 10x38, schnell	PV10 16A gG	OEZ	91.230.020	1	/9.2
-PA2	Pojistka válcová - 2A, 10x38, pomalá Tube fuse - 2A, 10x38, slow Rohrsicherung - 2A, 10x38, langsam	PV10 2A gG	OEZ	91.230.034	2	/10.1
-SQ1	Koncový spínač - 1NC+1NO Limit switch - 1NC+1NO Endschalter - 1NC+1NO	D4N-4A31	OMRON	91.173.007	1	/14.3
-SQ2	Koncový spínač - 1NC+1NO, M20 Limit switch - 1NC+1NO, M20 Endschalter - 1NC+1NO, M20	D4N-4A62	OMRON	91.173.008	1	/14.5
-SQ3	Koncový spínač - 1NC+1NO, M20, pomalý Limit switch - 1NC+1NO, M20, slow Endschalter - 1NC+1NO, M20, langsam	D4N-4A32	OMRON	91.173.010	1	/14.6
-SQ4	Koncový spínač - 1NO + 1NC Limit switch - 1NO + 1NC Endschalter - 1NO + 1NC	FR 555-M2	PIZZATO	91.173.018	1	/14.7
-FM1	Frekvenční měnič - 5,5kW, 3x400VAC Frequency converter - 5,5kW, 3x400VAC Frequenzumrichter - 5,5kW, 3x400VAC	VFD055E43A	DELTA ELECTRONICS, INC.	91.012.129	1	/9.2
-SB7	Hlavice prosvětleného tlačítka žlutá The button head backlit yellow Der Knopf Kopf von hinten beleuchtet gelb	ZB5AW35	TELEMECANIQUE	91.060.023	1	/16.6
-CU1	Řídicí obvod Control circuit Die Steuerschaltung	PRO-5.X	Bomar	91.995.221	1	/17.0
-RCF0	Odušovací filtr 25A Noise filter 25A Rauschfilter 25A	25EB15/50/C2	WIDECOM TECHNOLOGY s.r.o.	91.041.063	1	/7.1
-M5	Ventilátor 24VDC, 154CFM Fan 24VDC, 154CFM Fan 24VDC, 154CFM	RDH1238 B2	Xinruilian Electronic Co.	91.015.126	1	/11.7

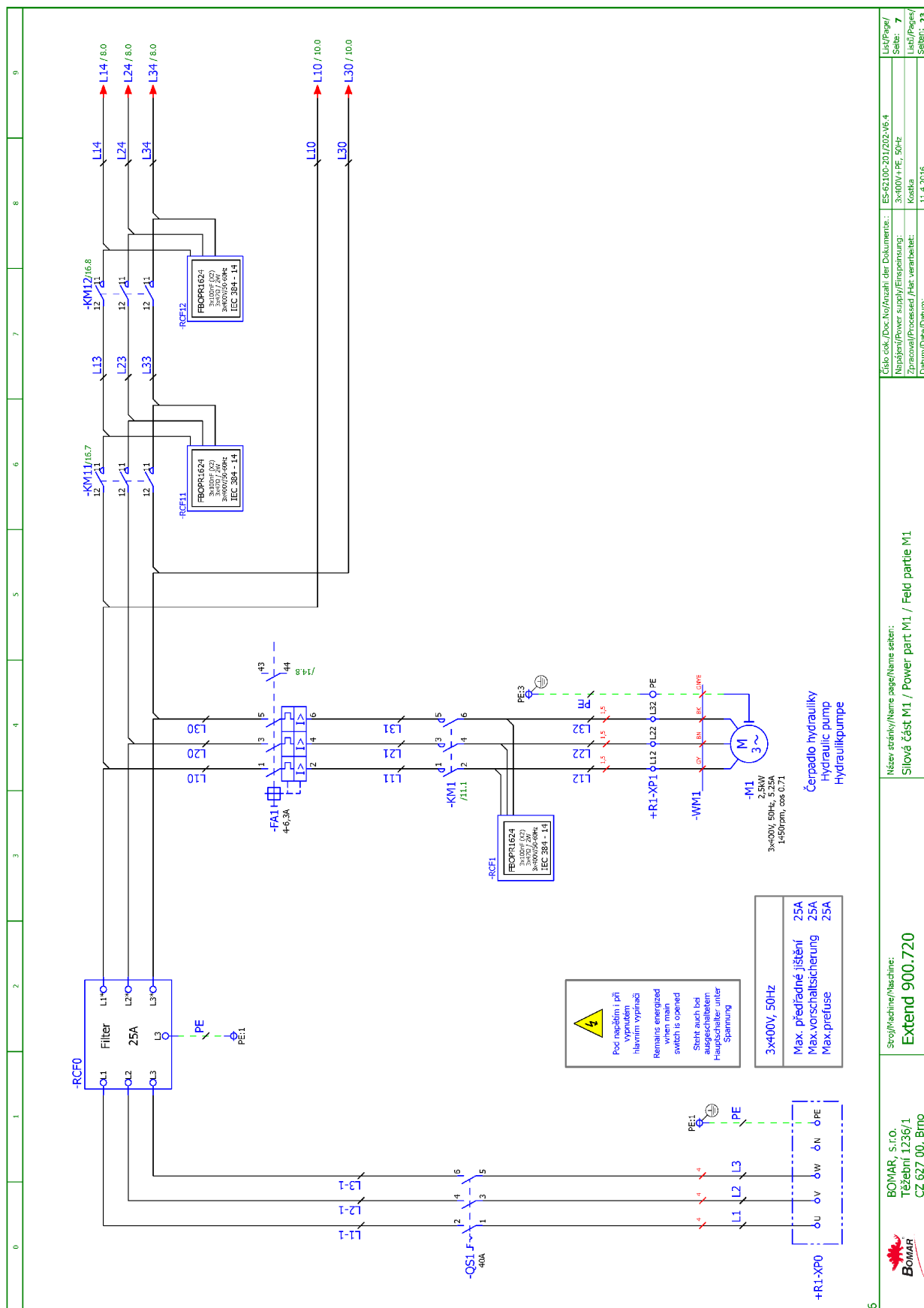
The manufacturer reserves right to use an equivalent replacement device.

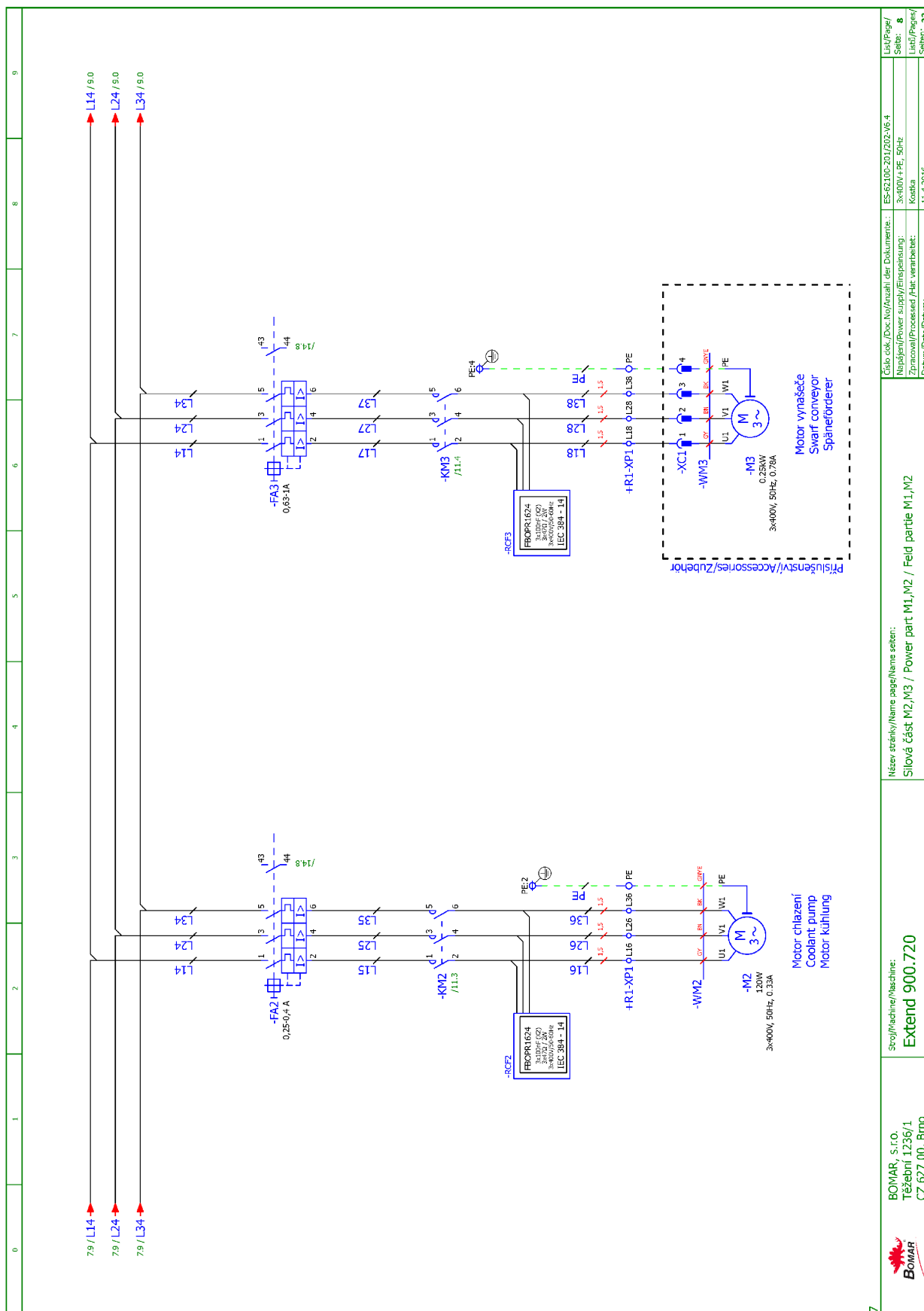
3.c	 BOMAR, s.r.o. Těšební 1236/1 CZ 627 00, Brno	Scioř/Machine/Maschine: Extend 900.720	Název stránky/Name page/Namen seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente: ES-62100-201/202-V6.4		List/Page/ Seite: 3.d
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I/O	CZE	ENG	DE
IN 01	Světlák upnutí	Vice is clamped	Schraubstock ist gespannt
IN 02	Rameno dole	Arm is down	Rahmen ist unten
IN 03	Rameno nahore	Arm is up	Rahmen ist oben
IN 04	Napnutí pásu	Blade tension	Bandspannung
IN 05	Motorů OK	Motors OK	Motoren OK
IN 06	Bezpečnostní okruh uzavřen	Safety circle shut down	Sicherheitserschaltung gespernt
IN 07	Tlačítko TOTAL STOP	Button TOTAL STOP	Taste TOTAL STOP
IN 08	Tlačítko START	Button START	Taste START
IN 09	Tlačítko STOP	Button STOP	Taste STOP
IN 10	MANUAL	MANUAL	MANUAL
IN 11	CYKLUS	CYCLE	ZYKLUS
IN 12	Kolize kostky	Cube collision	Klotzollision
IN 13	NC	NC	NC
IN 14	NC	NC	NC
IN 15	NC	NC	NC
IN 16	NC	NC	NC
IN 17	NC	NC	NC
IN 18	NC	NC	NC
IN 19	Tlačítko napnutí pás	Button band tension	Taste band spannen
IN 20	Tlačítko povolit pás	Button band release	Taste band lösen
IN 21	Tlačítko rameno nahoru	Button arm up	Taste Rahmen nach oben
IN 22	NC	NC	NC
IN 23	Přítlak upnutí	Upper vice is clamped	Ober Schraubstock ist gespannt
IN 24	NC	NC	NC
OUT 01+	Start FM1	Start FM1	Start FM1
OUT 02+	NC	NC	NC
OUT 03+	NC	NC	NC
OUT 03-	NC	NC	NC
OUT 04	Motor chlazení	Coolant pump	Motor Kühlung
OUT 05	Cerpadlo hydrauliky	Hydraulic pump	Hydraulikpumpe
OUT 06	2. stupňů hydrauliky	Second level of hydraulic pump	Hydraulikpumpe 2. Stufe
OUT 07	Světlák upnutí	Vice clamp	Schraubstock spannen
OUT 08	Světlák povolit	Release vice	Schraubstock lösen
OUT 09	NC	NC	NC
OUT 10	NC	NC	NC
OUT 11	Rameno nahoru	Arm up	Rahmen nach oben
OUT 12	Rameno dole	Arm down	Rahmen nach unten
OUT 13	Rameno rychle	Arm fast	Rahmen schnell
OUT 14	Přítlak upnutí	Upper vice clamp	Ober Schraubstock spannen
OUT 15	Přítlak povolit	Release upper vice	Ober Schraubstock lösen
OUT 16	Napnutí pás	Sawblade tension	Spannen des Sägebandes
OUT 17	Uvolnit pás	Sawblade leave	Entspannen des Sägebandes
OUT 18	Mikronizer	Mikronizer	Mikronizer
OUT 19	Kontrolka start	Indicator start	Kontrolllicht start



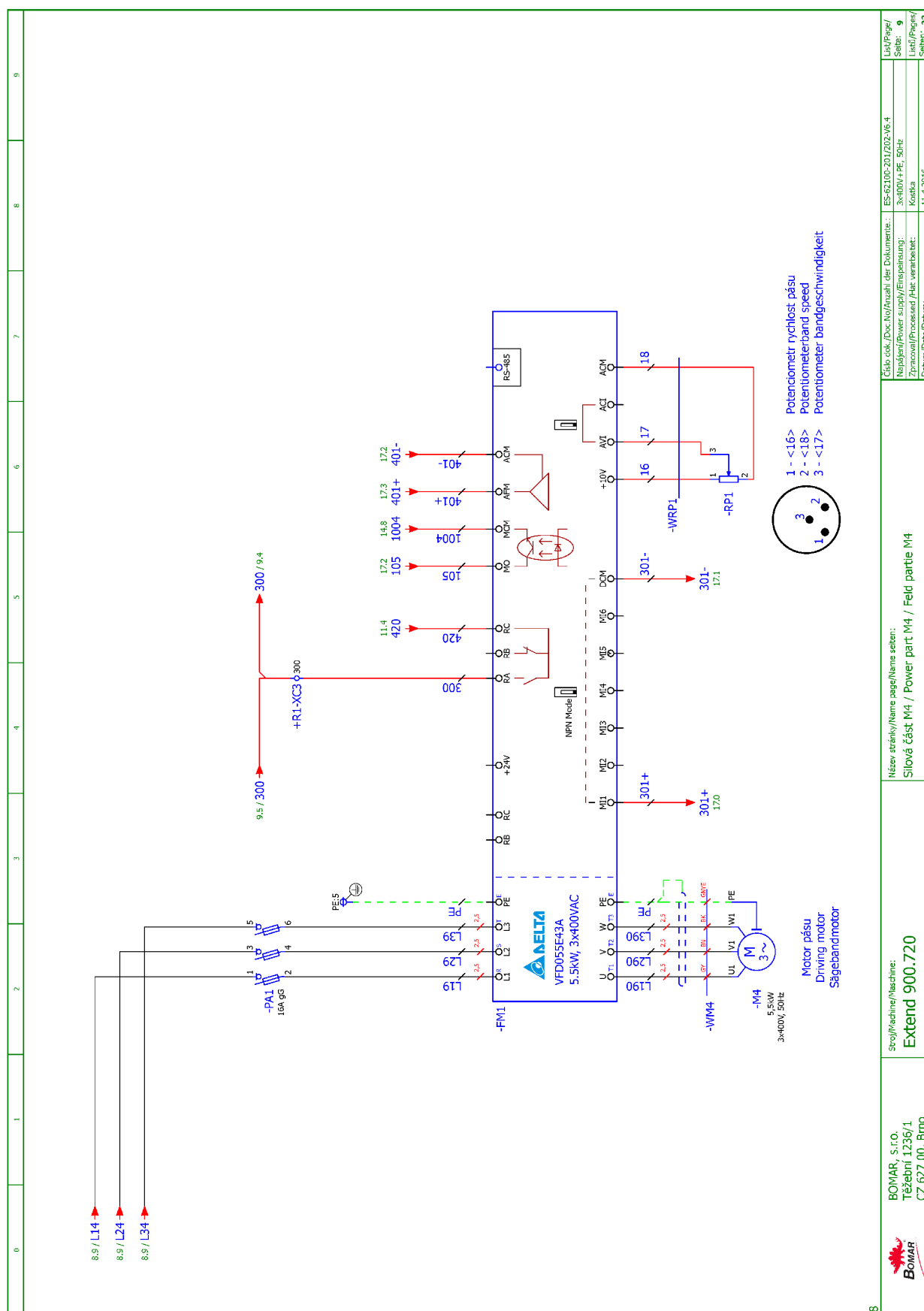
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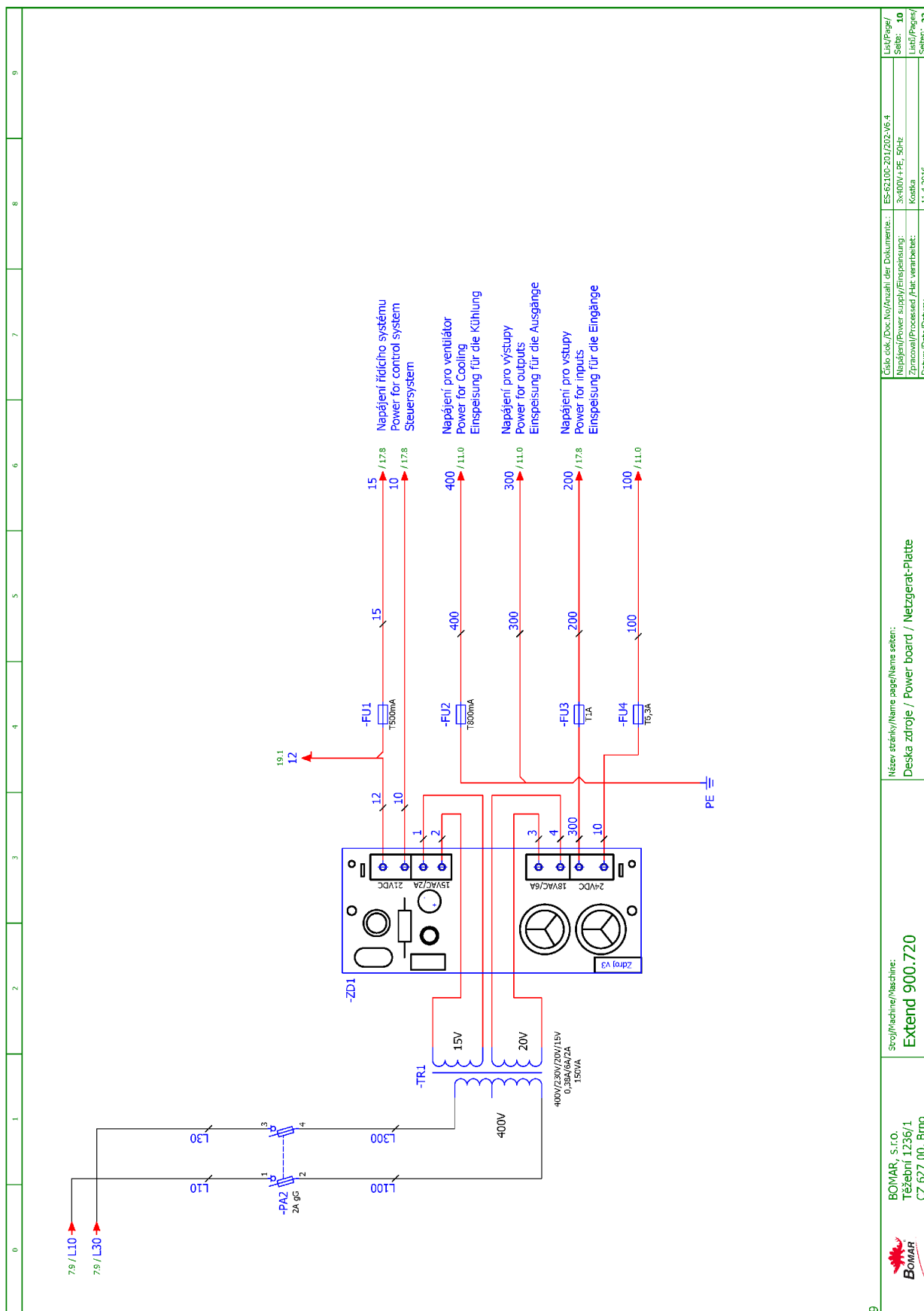


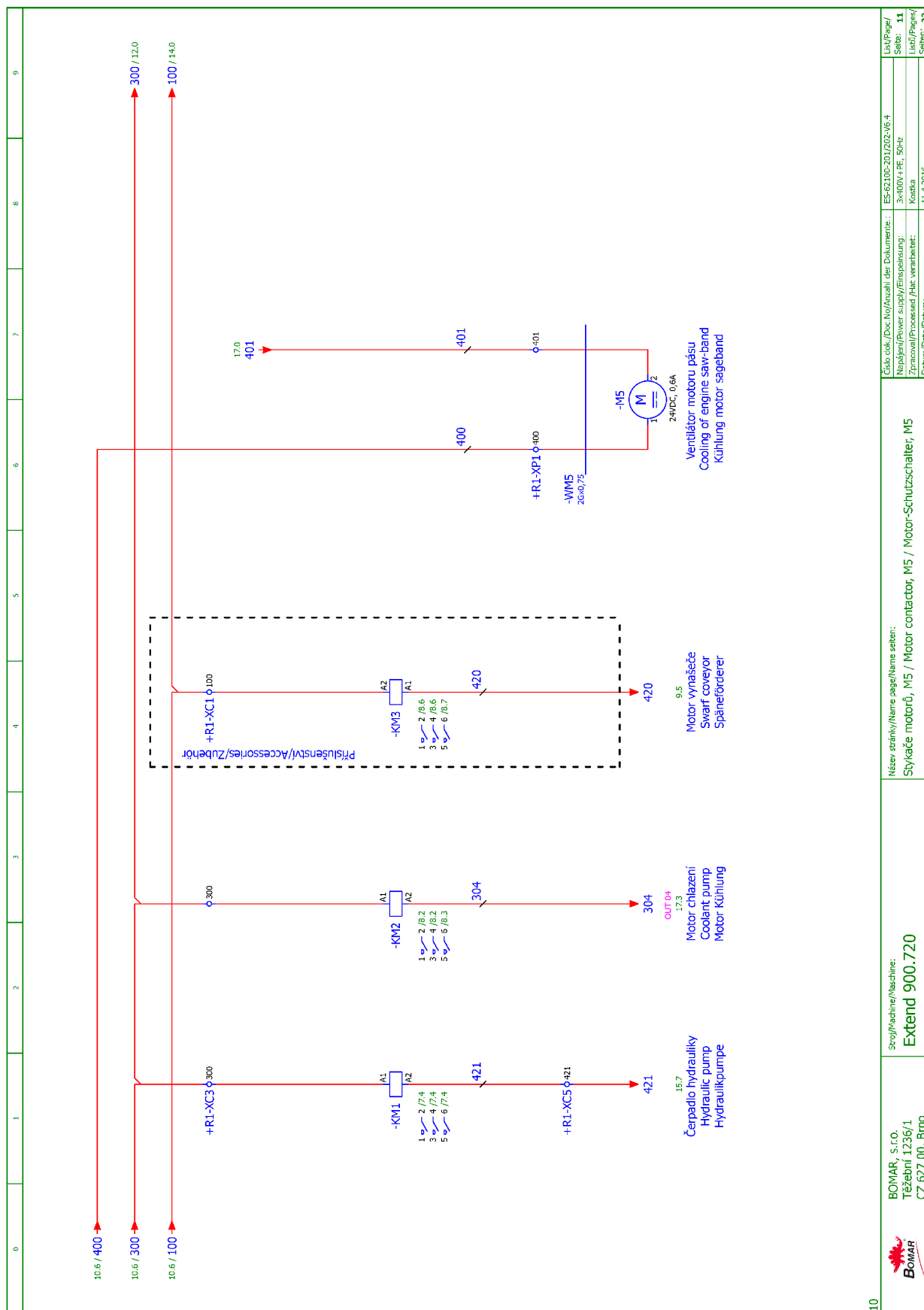


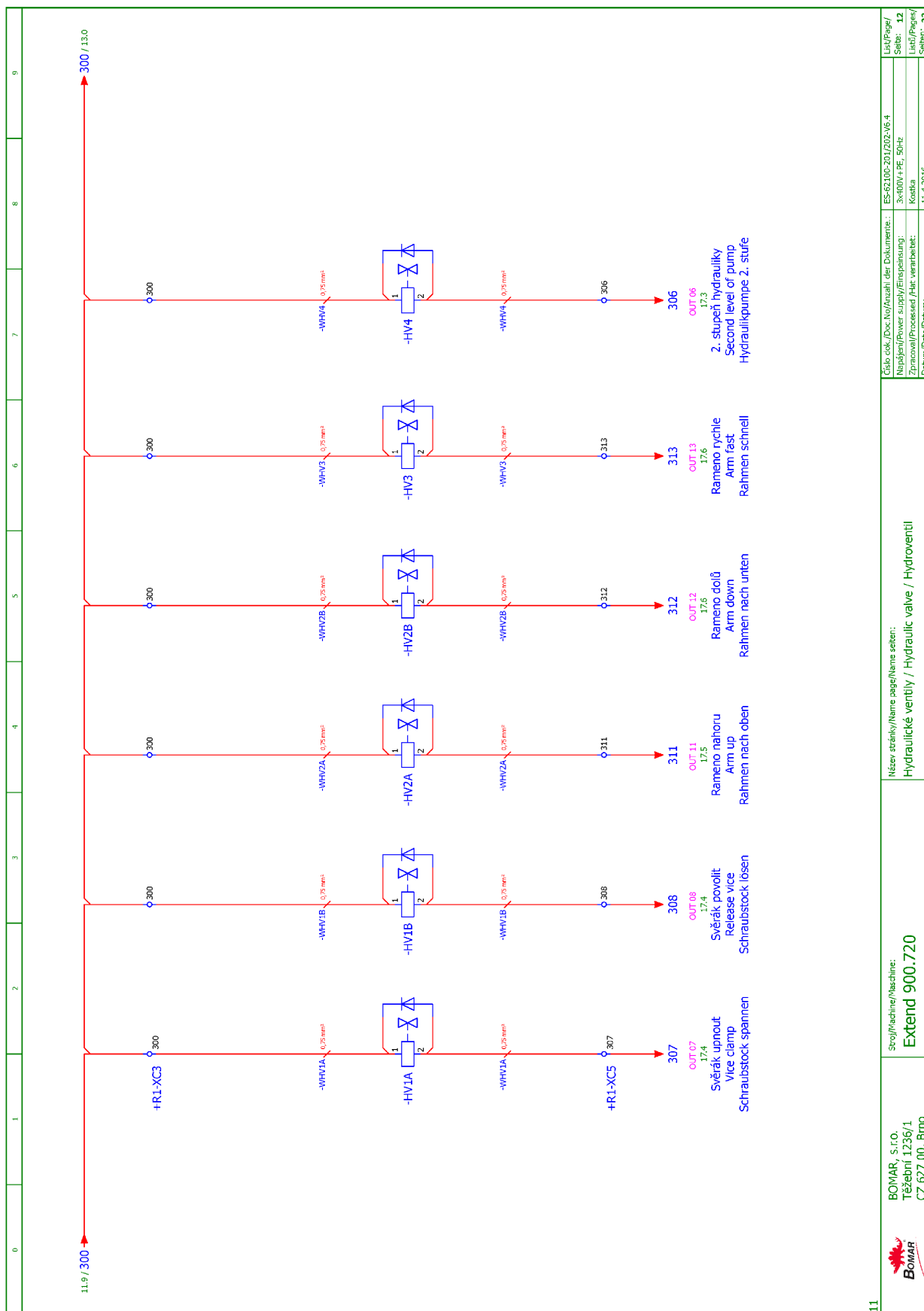
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BOMAR, s.r.o.
Těšební 1236/1
CZ 627 00, Brno

Stroj/Machine/Maschine:
Extend 900.720

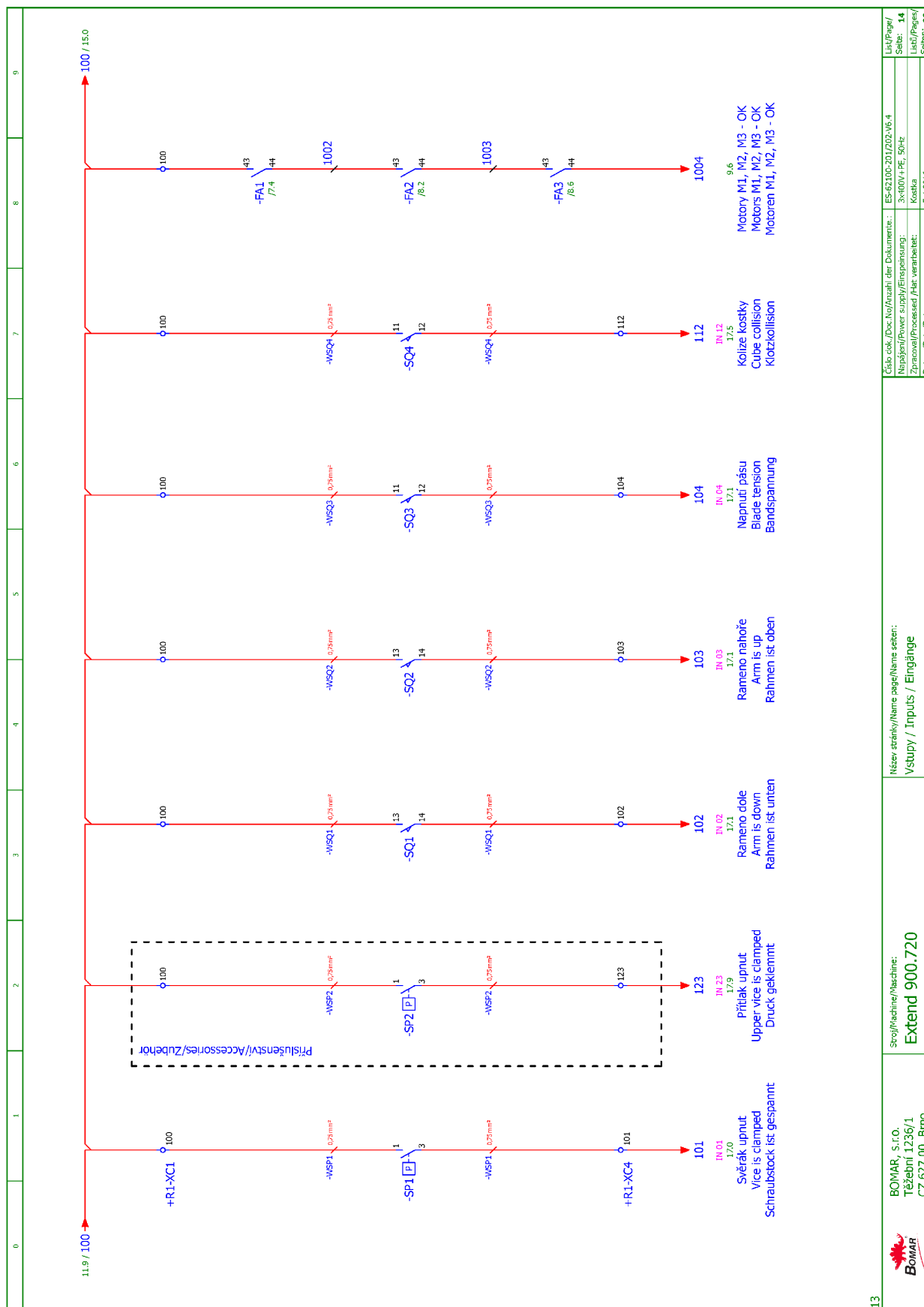
Název stránky/Name page/Namen seiten:
Hydraulic ventily / Hydraulic valve / Hydroventil

Číslo dok./Doc.No./Anzahl der Dokumente: ES-62100-201/202-V6.4
Napájení/Power supply/Einspeisung: 3x400V + PE, 50Hz
Zpracování/Processed /Hier verarbeitet: Rostka
Datum/Date/Datum: 11.4.2016

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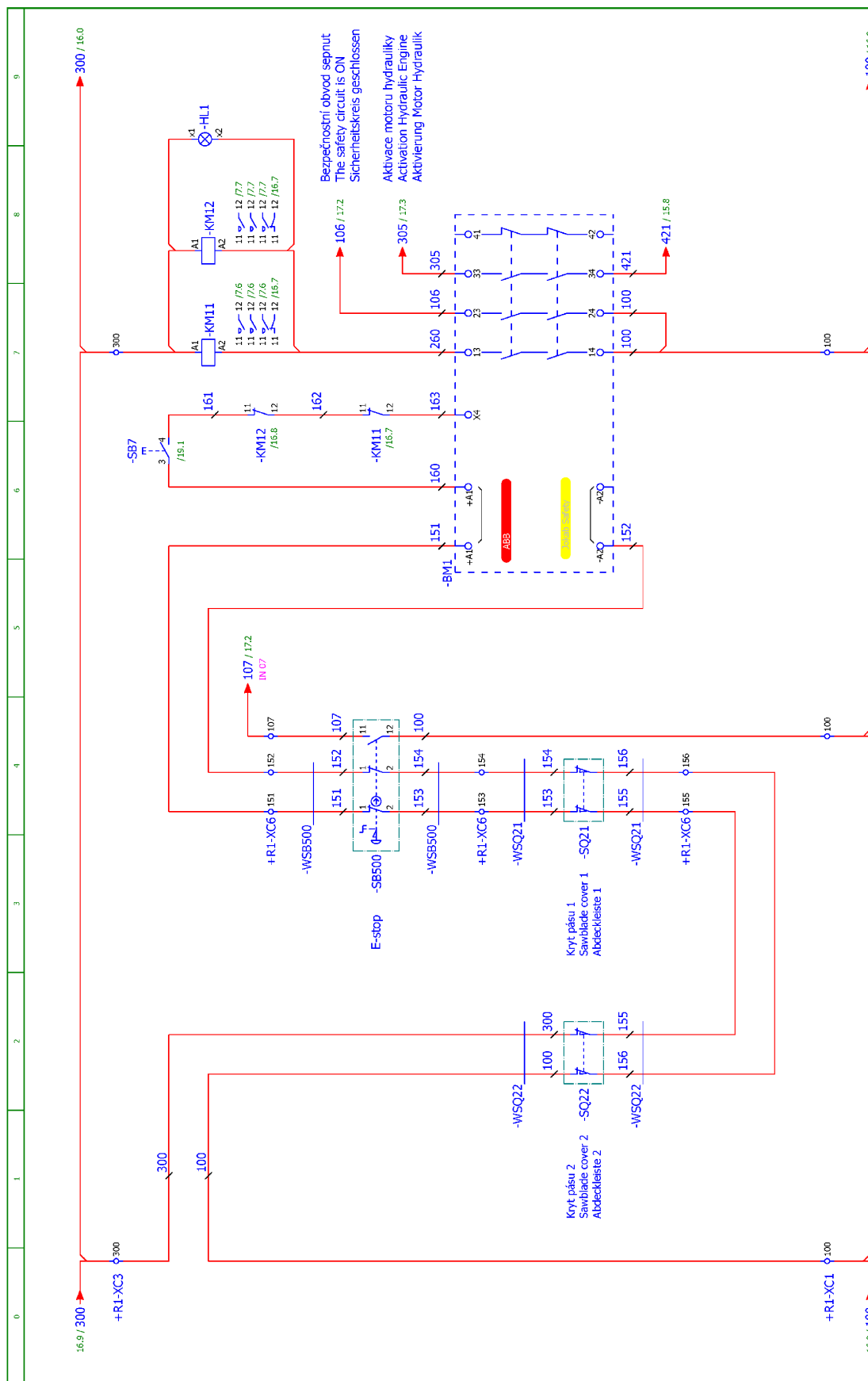
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Manual rev.: 1



	BOMAR, S.r.o. Třesná 1236/1 CZ 627 00, Brno		Stroji/Machine/Maschine: Extend 900.720		Název stránky/Name page/Noms seiten: Vstup / Inputs / Eingänge		Číslo dok./Doc.No./Anzahl der Dokumente.: ES-62100-201/202-V6.4 Napájení/Power supply/Einspannung: 3x400V + PE, 50-Hz Zpracování/Processed /Fert. verarbeitet: Kladka Datum/Date/Datum: 5.4.2016		List/Page/ Seite: 14 List/Page/ Seiten: 23	



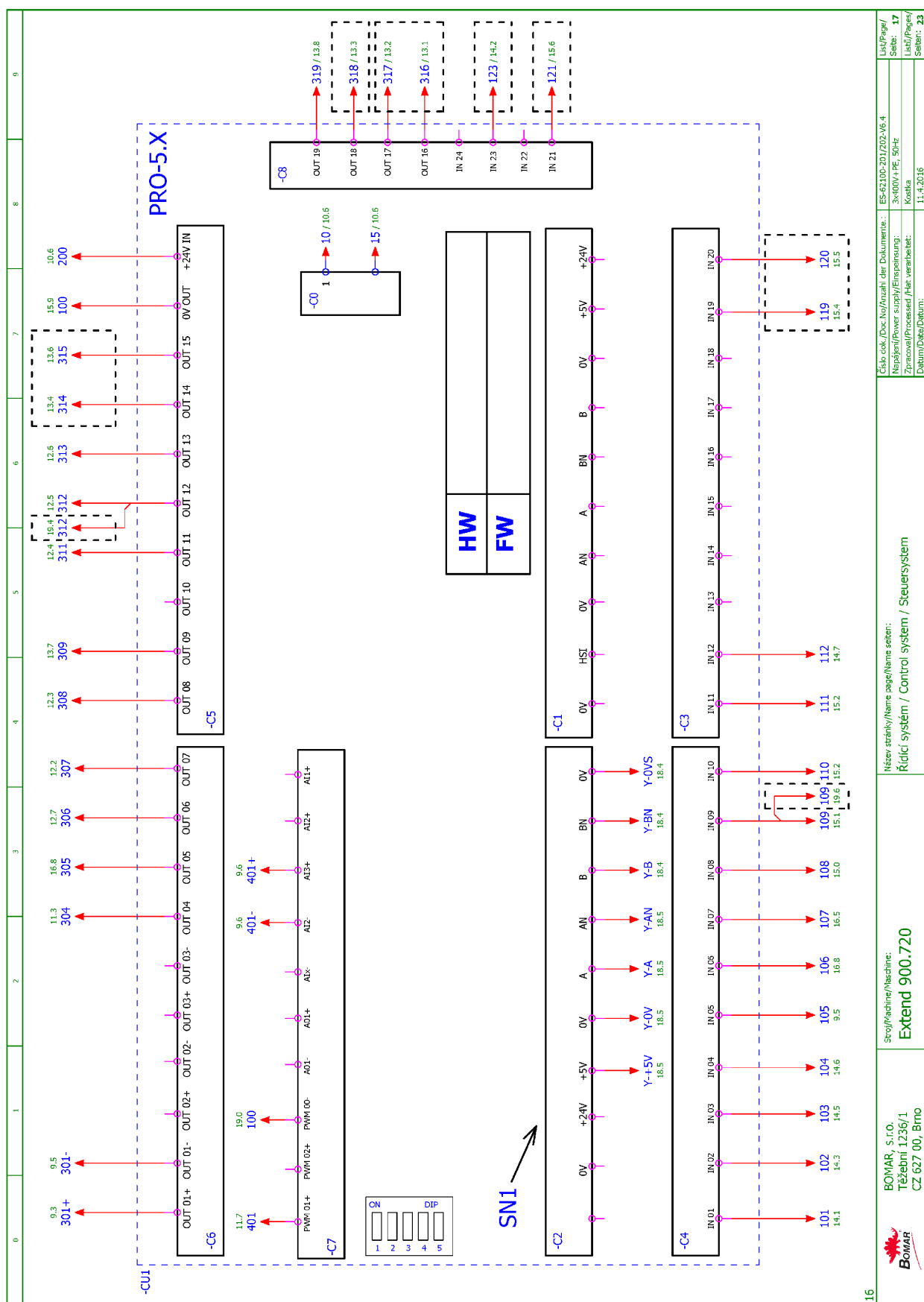
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Manual rev.: 1



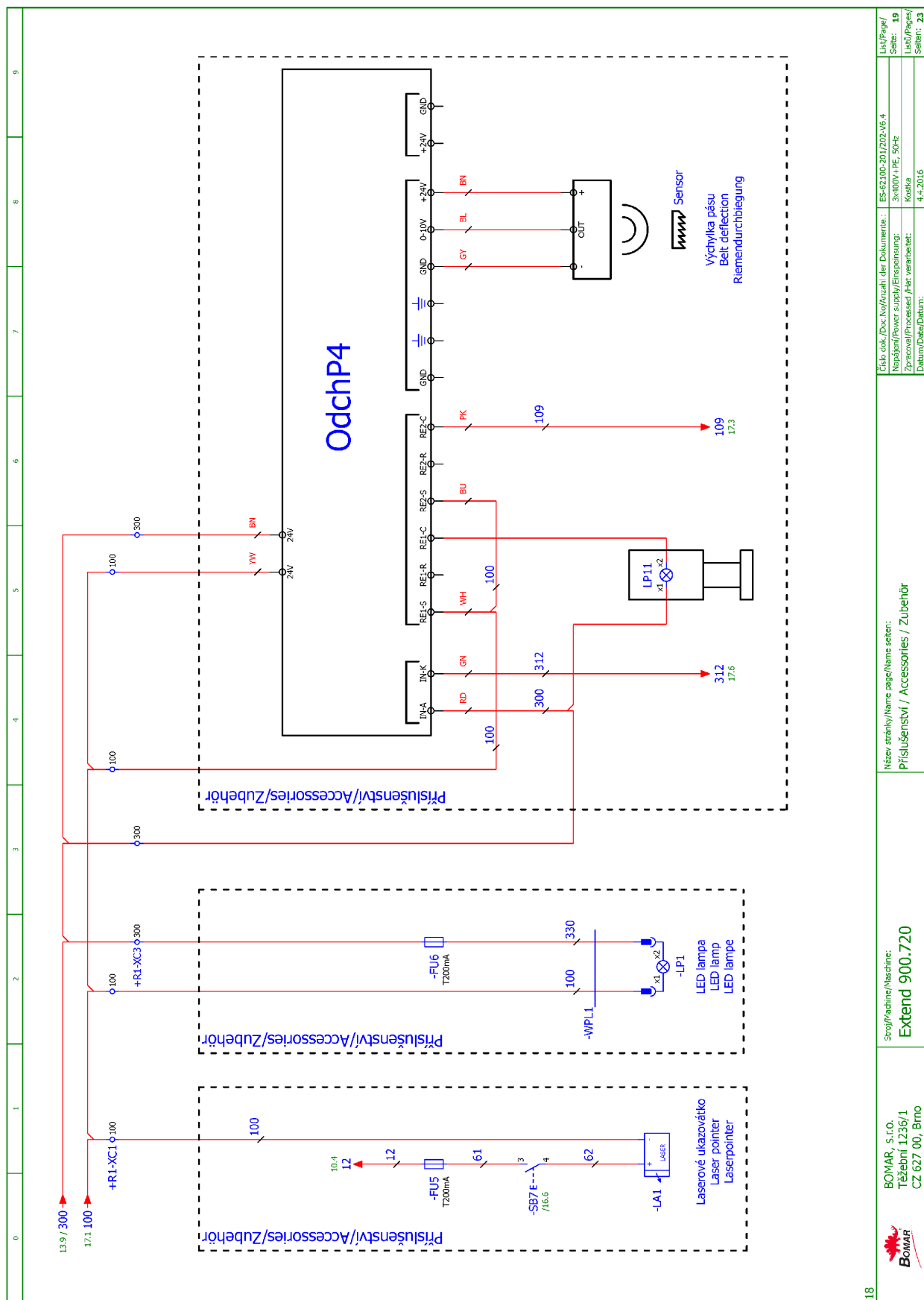
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 BOMAR, s.r.o. Třebenín 1236/1 CZ 627 00, Brno	Stroj/Machine/Maschine: Extend 900.720	Název stránky/Name page/Noms seiten: Bezpečnostní okruh / Safety circle / Sicherheitsbereich	Cílo dok./Doc.No./Anzahl der Dokumente.: ES-62100-201/202-V6.4 Napájení/Power supply/Einspeisung: 3x400V + PE, 50-Hz Zpracování/Processed /Fert. verarbeitet: Kvalita Datum/Date/Datum: 11.4.2016	Lič/Page/ Seite: 16 Lič/Page/ Seite: 23
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Schémas
Schemas
Schematics



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Schematics

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 Extend 900.720 ES-62100-203-V6.4 Wiring diagram 3x230V+PE, 50Hz Bomar, spol. s r.o. Těžební 1236/1 627 00 Brno Czech republic									
 BOMAR, s.r.o. Těžební 1236/1 CZ 627 00, Brno		Stroj/Machine/Maschine: Extend 900.720		Název stránky/Name page/Name section: Úvodní strana / Start page / Startseite		Číslo dok./Doc. No./Název der Dokumente.: ES-62100-203-V6.4 Napájení/Power supply/Einspeisung: 3x230V + PE, 50Hz Zpracování/Processed For: verarbeit. Kód: 21.3.2016		Úd/Pag/ Side.: 1 Úd/Pag/ Side.: 24	

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3.b	Kusovník artiklů / Parts list / Artikelstückliste	11.4.2016
3.c	Kusovník artiklů / Parts list / Artikelstückliste	11.4.2016
3.d	Kusovník artiklů / Parts list / Artikelstückliste	11.4.2016
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7	Silová část M1 / Power part M1 / Feld partie M1	11.4.2016
8	Silová část M2,M3 / Power part M1,M2 / Feld partie M1,M2	11.4.2016
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12	Hydraulické ventily / Hydraulic valve / Hydroventil	11.4.2016
13	Hydraulické ventily / Hydraulic valve / Hydroventil	11.4.2016
14	Vstupy / Inputs / Eingänge	6.4.2016
15	Tlačítka ovládací panel / Button control panel / Taste Bedienpult	30.3.2016
16	Bezpečnostní okruh / Safety circle / Sicherheitsbereich	11.4.2016
17	Řídicí systém / Control system / Steuersystem	11.4.2016
18	Snímač výšky ramene / Arm height sensor / Arm Höhensensor	16.3.2016
19	Příslušenství / Accessories / Zubehör	6.4.2016

BOMAR, s.r.o. Třábová 1236/1 CZ 627 00, Brno	Scrol/Machine/Maschine: Extend 900.720	Název stránky/Page name/Name seiten: Obsah/ Table of contents/ Inhaltsverzeichnis	Číslo dok./Doc.No./Anzahl der Dokumente.: ES-62100-203-v6.4 Napájení/Power supply/Einspeisung: 3x230V + PE 50-Hz Zpracování/Processed /Fert. verarbeitet: Koska Datum/Date/Datum: 11.4.2016	Úkl./Page/ Seite: 2 Úkl./Page/ Seite: 24
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Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednávací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-RCF11	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Vlček	91.041.015	1	/7.6
-RCF12	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Vlček	91.041.015	1	/7.7
-FA1	Motorový spouštěč - 10A Motor starter - 10A Motorstarter - 10A	MS116-10,0	ABB	91.045.024	1	/7.4
-FA1	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO + 1xNC	HK1-11	ABB	91.046.005	1	/7.4
-FA2	Motorový spouštěč - 0.63A Motor starter - 0.63A Motorstarter - 0.63A	MS116-0,63	ABB	91.045.018	1	/8.2
-FA2	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO + 1xNC	HK1-11	ABB	91.046.005	1	/8.2
-FA3	Motorový spouštěč - 1.6A Motor starter - 1.6A Motorstarter - 1.6A	MS116-1,6	ABB	91.045.020	1	/8.6
-FA3	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO + 1xNC	HK1-11	ABB	91.046.005	1	/8.6
-FU1	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THSI5U	WIELAND	91.251.102	1	/10.4
-FU2	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THSI5U	WIELAND	91.251.102	1	/10.4
-FU2	Pojistka trubičková - 800mA/250V, pomalá, 5x20 Tube fuse - 800A/250V, slow, 5x20 Rohrsicherung - 800A / 250V, langsam, 5x20	T800mA/250V	ESKA	91.230.010	1	/10.4
-FU3	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THSI5U	WIELAND	91.251.102	1	/10.4

The manufacturer reserves right to use an equivalent replacement device.

 BOMAR, s.r.o. Těšební 1236/1 CZ 627 00, Brno	Scro/Machine/Maschine: Extend 900.720	Název stránky/Name page/Name seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente.: ES-62100-203-v6.4 Nápis/Power supply/Einspeisung: 3x230V + PE, 50-Hz Zpracoval/Processed /Fert. verarbeitet: Kozla Datum/Date/Datum: 11.4.2016	List/Page/ Seite: 3.a
				List/Page/ Seite: 24

Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednávací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-FU3	Pojistka trubičková - 1A/250V, pomalá, 5x20 Tube fuse - 1A/250V, slow, 5x20 Rohrsicherung - 1A / 250V, langsam, 5x20	T1A/250V	ESKA	91.230.031	1	/10.4
-FU4	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THS1U	WIELAND	91.251.102	1	/10.4
-HL1	Signálka zelená na adaptér Green light for Eaton adapter Grünes Licht für Eaton-Adapter	M22-LED-G	EATON	91.061.023	1	/13.8
-KM1	Minisýkač 4kW/400V Minicontactor 4kW/400V Minischutz 4kW/400V	B6S-30-01-1-7-71	ABB	91.040.049	1	/11.1
-KM2	Minisýkač 4kW/400V Minicontactor 4kW/400V Minischutz 4kW/400V	B6S-30-01-1-7-71	ABB	91.040.049	1	/11.3
-KM3	Minisýkač 4kW/400V Minicontactor 4kW/400V Minischutz 4kW/400V	B6S-30-01-1-7-71	ABB	91.040.049	1	/11.4
-KM11	Sýkač 7,5kW/400V Contactor 7,5kW/400V Schütz 7,5kW/400V	AF16-30-10-11	ABB	91.040.056	1	/16.7
-KM11	Pomocný kontakt - 1xNC Auxiliary contact - 1xNC Hilfskontakt - 1 xNC	CA4-01	ABB	91.041.043	1	/16.7
-KM12	Sýkač 7,5kW/400V Contactor 7,5kW/400V Schütz 7,5kW/400V	AF16-30-10-11	ABB	91.040.056	1	/16.8
-KM12	Pomocný kontakt - 1xNC Auxiliary contact - 1xNC Hilfskontakt - 1 xNC	CA4-01	ABB	91.041.043	1	/16.8
-PA2	Pojistkový odpojovač E-90 - 2P Fuse disconnector E-90 - 2P Sicherungstrenner E90 - 2P	E 92/32	ABB	91.241.013	1	/10.1
-QS1	3 pólový odpináč, 63 A Disconnecter - 3P, 63A Trennschalter - 3P, 63A	OT63FT3	ABB	91.170.110	1	/7.0

The manufacturer reserves right to use an equivalent replacement device.

3.a	 BOMAR, s.r.o. Těšební 1236/1 CZ 627 00, Brno	Stroj/Machine/Maschine: Extend 900.720	Název stránky/Name page/Name seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente: ES-62100-203-v6.4		Úkl./Page/
				Napájení/Power supply/Einspeisung: 3x230V + PE, 50Hz		Seite: 3.b
				Zpracování/Processed /Aht. verarbeitet: Kvalita		Libri./Pages/
				Datum/Date/Datum: 11.4.2016		Seite: 24

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Kusovník artiklů / Parts list / Stückliste									
Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednávací číslo Type number Typennummer		Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer		Množství Quantity Menge	Umístění Location Stelle	
-QS1	Rukojeť odpináče - černá Handle switch - black Griffschalter - schwarz	OHBS2RJ		ABB	91.180.015		1	/7.0	
-QS1	Kryt svorek Terminal shroud Klemmenabdeckung	OTS40T3		ABB	91.170.017		1	/7.0	
-RP1	Svorka rychloupínací Fastconnect clamp Fast Connect Klemm	WAGO 224-112		WAGO	91.250.009		3	/9.6	
-SB1	Hlavice prosvětleného tlačítka zelená Green transparent switch Grün transparent Schalter	M22-DL-G		EATON	91.060.031		1	/15.0	
-SB1	Upevňovací adaptér + 1NO Attaching adapter + 1NO Montageadapter + 1NO	M22-AK10		EATON	91.061.021		1	/15.0	
-SB2	Upevňovací adaptér + 1NO Attaching adapter + 1NO Montageadapter + 1NO	M22-AK10		EATON	91.061.021		1	/15.1	
-SB2	Hlavice tlačítka - černá Head button - black Kopftaste - schwarz	M22-D-S		EATON	91.060.035		1	/15.1	
-SB3	Hlavice 3 položového přepínače Head of 3 position switch Leiter der 3-Positionsschalter	M22-WRK3		EATON	91.060.051		1	/15.2	
-SB3	Kontaktní blok - 1NO Contact block - 1NO Kontaktblock - 1NO	M22-K10		EATON	91.061.022		1	/15.2	
-SB3	Upevňovací adaptér + 1NO Attaching adapter + 1NO Montageadapter + 1NO	M22-AK10		EATON	91.061.021		1	/15.2	
-SB500	Total stop - hlavice + 3xNC Emergency-stop mushroom push - button + 3xNC Not-Aus-Platz - Taster + 3 xNC	YW1B-V4E02R		IDEC	91.060.084		1	/16.4	
-SB500	Kontakt - 1x NO Contact - 1x NO Kontakt - 1x NO	YW-E10		IDEC	91.061.044		1	/16.4	

The manufacturer reserves right to use an equivalent replacement device.

3.b	BOMAR, s.r.o. Těšební 1236/1 CZ 627 00, Brno	Scroj/Machine/Maschine: Extend 900.720	Název stránky/Name page/Namen seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente.: ES-62100-203-v6.4 Napájení/Power supply/Einspeisung: 3x230V~PE, 50-Hz Zpracování/Processed Part: verarbeitet: Kvalita Datum/Date/Datum: 11.4.2016	Úkl./Page/ Seite: 3.c List./Pages/ Seite: 24
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Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednávací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-TR1	Toroidal transformer - 0-230-400V/20V/15V, 150VA Ringkerntransformator - 0-230-400V/20V/15V, 150VA	400V/230V/20V/15V 6A/2A 150VA	KARBAN s.r.o.	91.080.026	1	/10.1
-SQ21	Bezpečnostní koncový spínač - 2xNC Safety Limit Switch - 2x NC Sicherheitsendschalter - 2x NC	QKS8	KEDU	91.173.012	1	/16.4
-SQ22	Bezpečnostní koncový spínač - 2xNC Safety Limit Switch - 2x NC Sicherheitsendschalter - 2x NC	QKS8	KEDU	91.173.012	1	/16.2
-PA2	Pojistka válcová - 2A, 10x38, pomalá Tube fuse - 2A, 10x38, slow Rohrsicherung - 2A, 10x38, langsam	PV10 2A gG	OEZ	91.230.034	2	/10.1
-SQ1	Koncový spínač - 1NC+1NO Limit switch - 1NC+1NO Endschalter - 1NC+1NO	D4N-4A31	OMRON	91.173.007	1	/14.3
-SQ2	Koncový spínač - 1NC+1NO, M20 Limit switch - 1NC+1NO, M20 Endschalter - 1NC+1NO, M20	D4N-4A62	OMRON	91.173.008	1	/14.5
-SQ3	Koncový spínač - 1NC+1NO, M20, pomalý Limit switch - 1NC+1NO, M20, slow Endschalter - 1NC+1NO, M20, langsam	D4N-4A32	OMRON	91.173.010	1	/14.6
-SQ4	Koncový spínač - 1NO + 1NC Limit switch - 1NO + 1NC Endschalter - 1NO + 1NC	FR 555-M2	PIZZATO	91.173.018	1	/14.7
-FM1	Frekvenční měnič - 5,5kW, 3x230VAC Frequency converter - 5,5kW, 3x230VAC Frequenzumrichter - 5,5kW, 3x230VAC	VFD055E23A	DELTA ELECTRONICS, INC.	91.012.135	1	/9.2
-PA1	Pojistka válcová - 32A, 10x38, gG Tube fuse - 32A, 10x38, fast Rohrsicherung - 32A, 10x38, schnell	PV10 32A gG	OEZ	91.230.019	1	/9.2
-SB7	Hlavice prosvětleného tlačítka žlutá The button head backlit yellow Der Knopf Kopf von hinten beleuchtet gelb	ZB5AW35	TELEMECANIQUE	91.060.023	1	/16.6
-CU1	Řídicí obvod Control circuit Die Steuerung	PRO-5 X	Bomar	91.995.221	1	/17.0

The manufacturer reserves right to use an equivalent replacement device.

3.c	BOMAR, s.r.o. Těšební 1236/1 CZ 627 00, Brno	Scroj/Machine/Maschine: Extend 900.720	Název stránky/Name page/Namen seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente.: ES-62100-203-v6.4		Úkl./Page/
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I/O	CZE	ENG	DE
IN 01	Světlík upnutí	Vice is clamped	Schraubstock ist gespannt
IN 02	Rameno dole	Arm is down	Rahmen ist unten
IN 03	Rameno nahoře	Arm is up	Rahmen ist oben
IN 04	Napnutí pásu	Blade tension	Bandspannung
IN 05	Motory OK	Motors OK	Motoren OK
IN 06	Bezpečnostní okruh uzavřen	Safety circle shut down	Sicherheitsschaltung gesperrt
IN 07	Tlačítko TOTAL STOP	Button TOTAL STOP	Taste TOTAL STOP
IN 08	Tlačítko START	Button START	Taste START
IN 09	Tlačítko STOP	Button STOP	Taste STOP
IN 10	MANUAL	MANUAL	MANUAL
IN 11	CYKLUS	CYCLE	ZYKLUS
IN 12	Kolize kostky	Cube collision	Klotzkollision
IN 13	NC	NC	NC
IN 14	NC	NC	NC
IN 15	NC	NC	NC
IN 16	NC	NC	NC
IN 17	NC	NC	NC
IN 18	NC	NC	NC
IN 19	Tlačítko napnutí pás	Button band tension	Taste band spannen
IN 20	Tlačítko povolit pás	Button band release	Taste band lösen
IN 21	Tlačítko rameno nahoru	Button arm up	Taste Rahmen nach oben
IN 22	NC	NC	NC
IN 23	Přítlak upnutí	Upper vice is clamped	Ober Schraubstock ist gespannt
IN 24	NC	NC	NC
OUT 01+	Start FM1	Start FM1	Start FM1
OUT 02+	NC	NC	NC
OUT 03+	NC	NC	NC
OUT 04	Motor chlazení	Coolant pump	Motor Kühlung
OUT 05	Čerpadlo hydrauliky	Hydraulic pump	Hydraulikpumpe
OUT 06	2.stupeň hydrauliky	Second level of hydraulic pump	Hydraulikpumpe 2.Stufe
OUT 07	Světlík upnutí	Vice clamp	Schraubstock spannen
OUT 08	Světlík povolit	Release vice	Schraubstock lösen
OUT 09	NC	NC	NC
OUT 10	NC	NC	NC
OUT 11	Rameno nahoru	Arm up	Rahmen nach oben
OUT 12	Rameno dolů	Arm down	Rahmen nach unten
OUT 13	Rameno rychle	Arm fast	Rahmen schnell
OUT 14	Přítlak upnutí	Upper vice clamp	Ober Schraubstock spannen
OUT 15	Přítlak povolit	Release upper vice	Ober Schraubstock lösen
OUT 16	Napnutí pás	Sawblade tension	Spannen des Sägebandes
OUT 17	Lvolnit pás	Sawblade leave	Entspannen des Sägebandes
OUT 18	Mikronizer	Microniser	Mikronizer
OUT 19	Kontrolka start	Indicator start	Kontrolllicht start

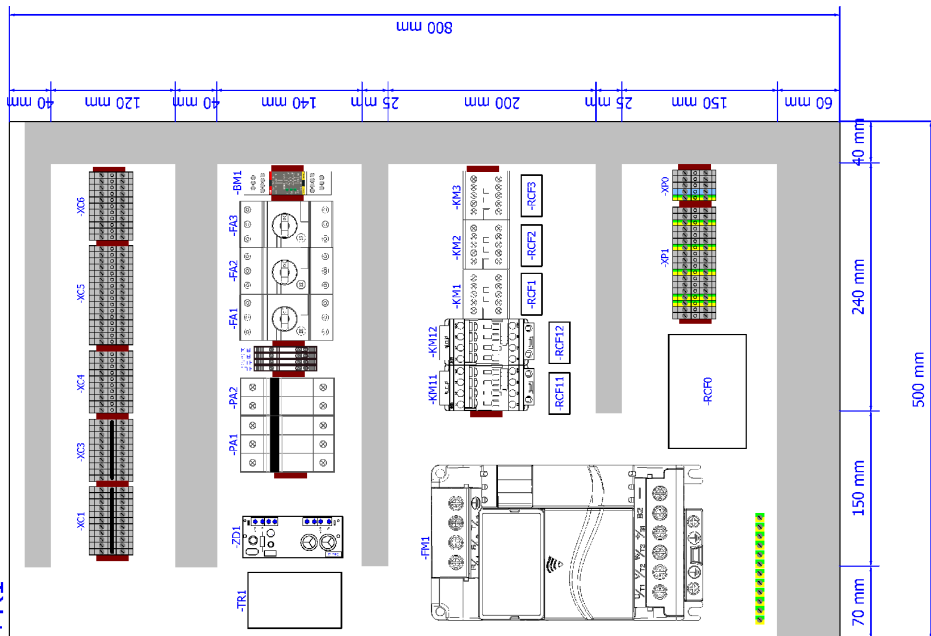
Pohled ze spodu/From under view/Blick nach

Extend 700.520

PLC

The diagram shows two rows of circular terminals representing PLC inputs and outputs. The top row contains 24 terminals labeled IN 01 through IN 24. The bottom row contains 24 terminals labeled OUT 01 through OUT 19, followed by three unlabeled terminals. Lines connect specific input and output terminals to various components listed in the adjacent tables, such as safety circuits, motors, pumps, and mechanical actuators.

+R1



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BOMAR, s.r.o.
Třebatín 1256/1
CZ 627 00, Brno

Stroj/Machine/Maschine:
Extend 900.720

Název stránky/Name page/Noms Seiten:

Rozmístění prvků v rozvaděči R1, Placement of elements in enclosure R1/
Platzierung der Elemente im Schaltschrank R1

Číslo dok./Doc.No./Anzahl der Dokumente.: ES-62100-203-v6.4

Nápis/Power supply/Einspeisung:
Zpracoval/Processed /Hr. verarbeitet:

Koska

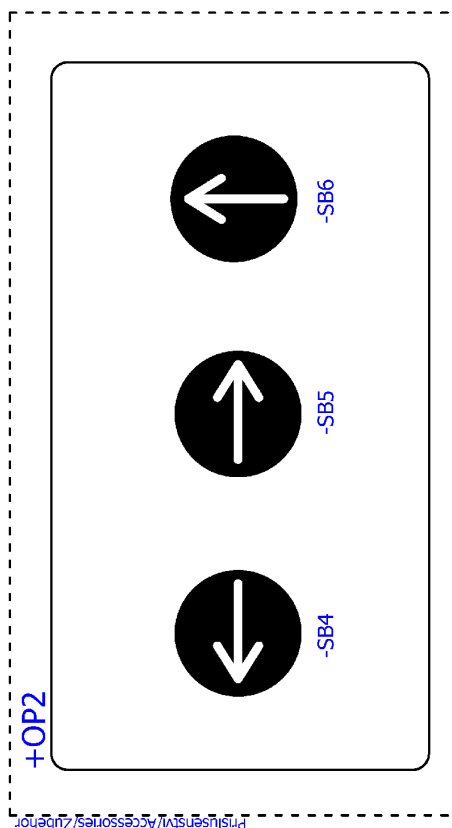
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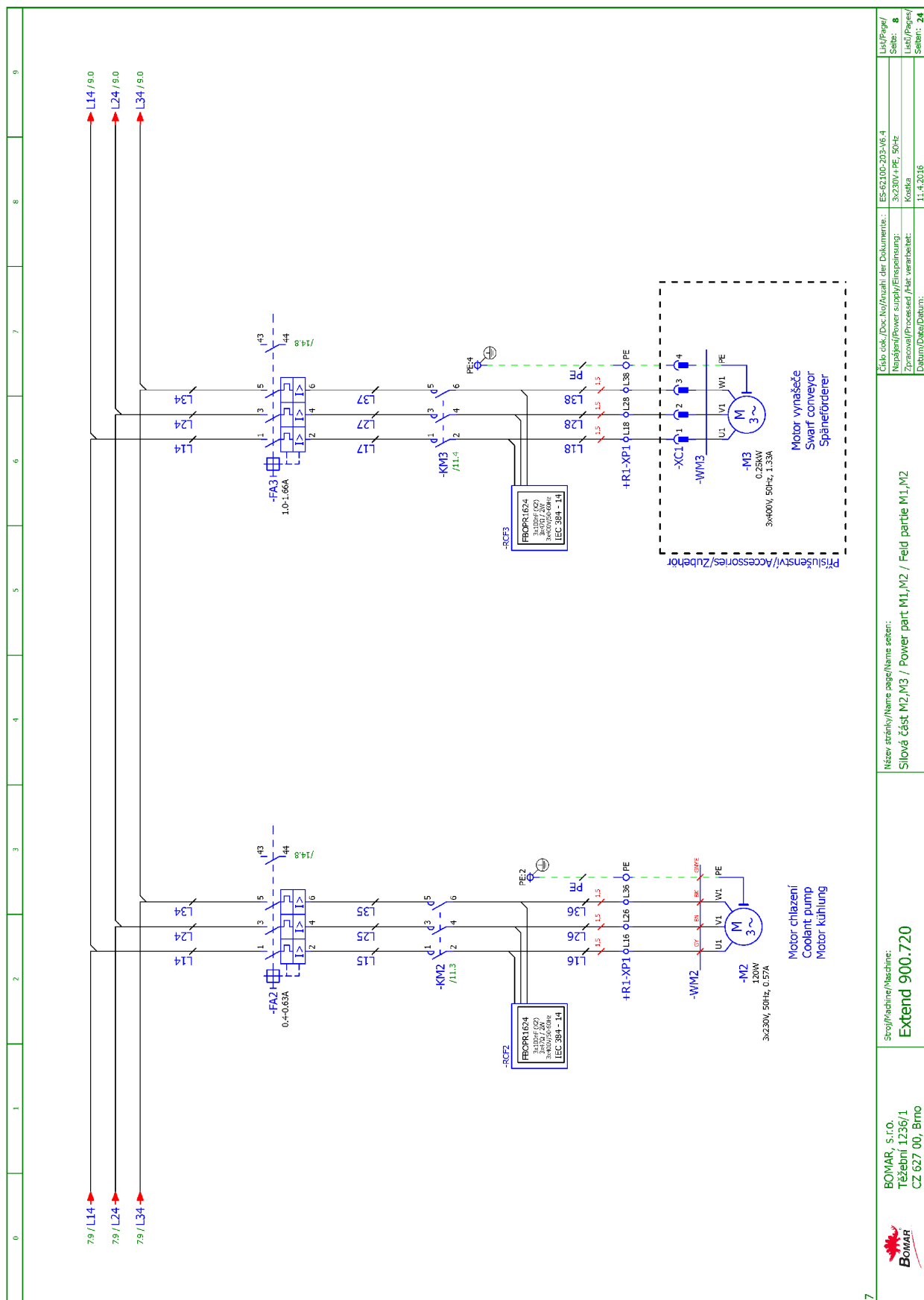
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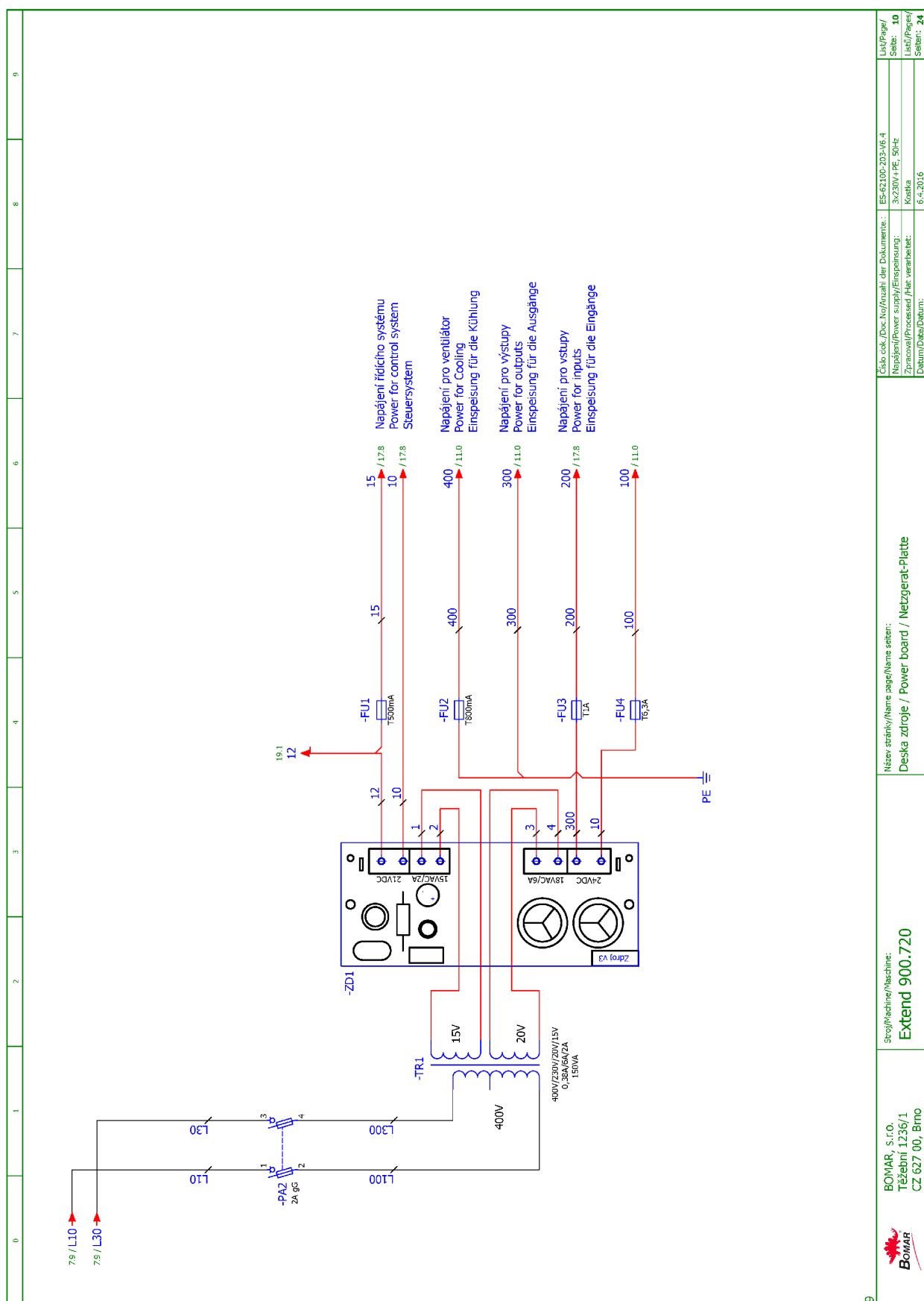




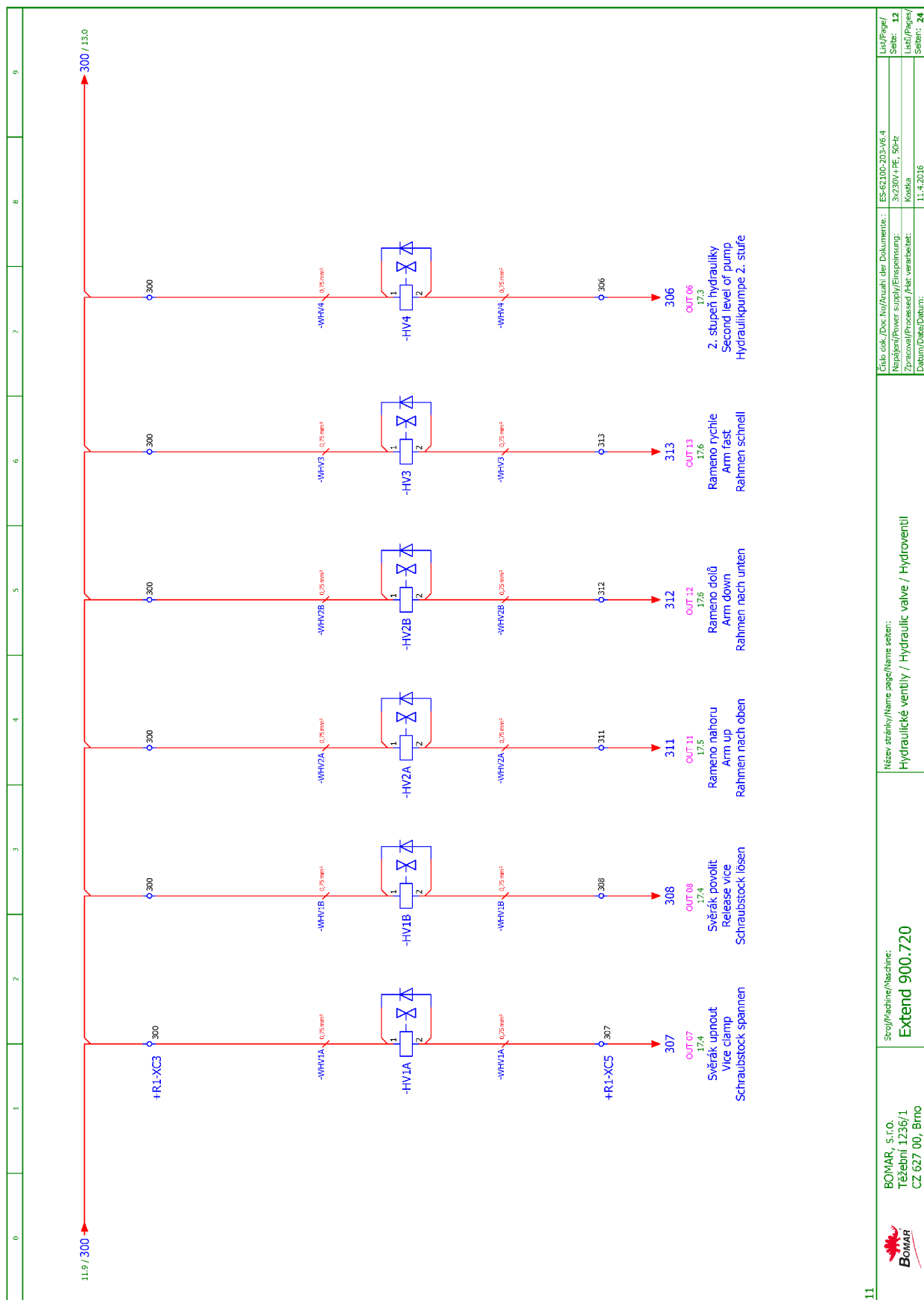


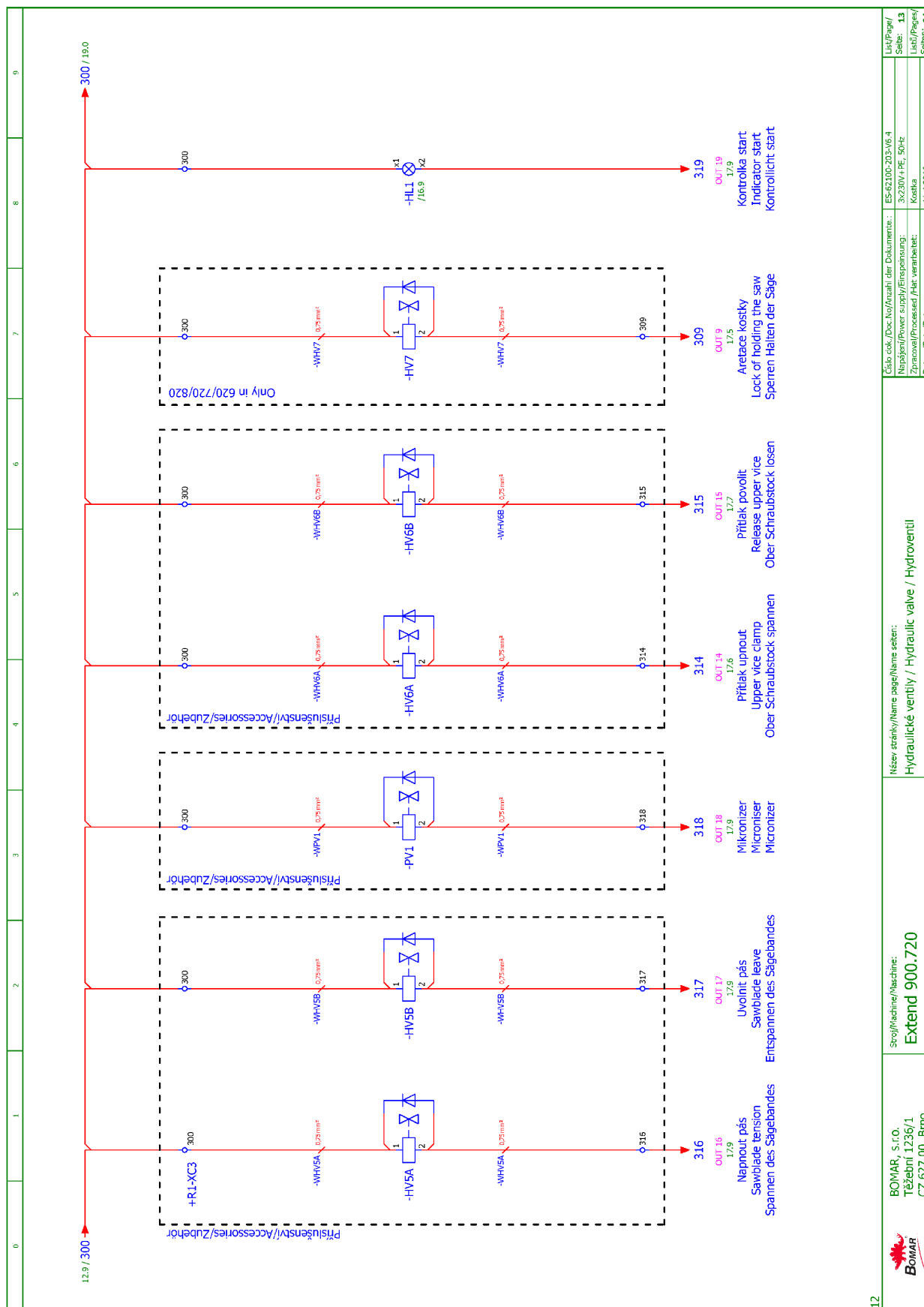
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BOMAR, s.r.o.
Třápení 1236/1
CZ 627 00, Brno

Stroj/Machine/Machine:
Extend 900.720

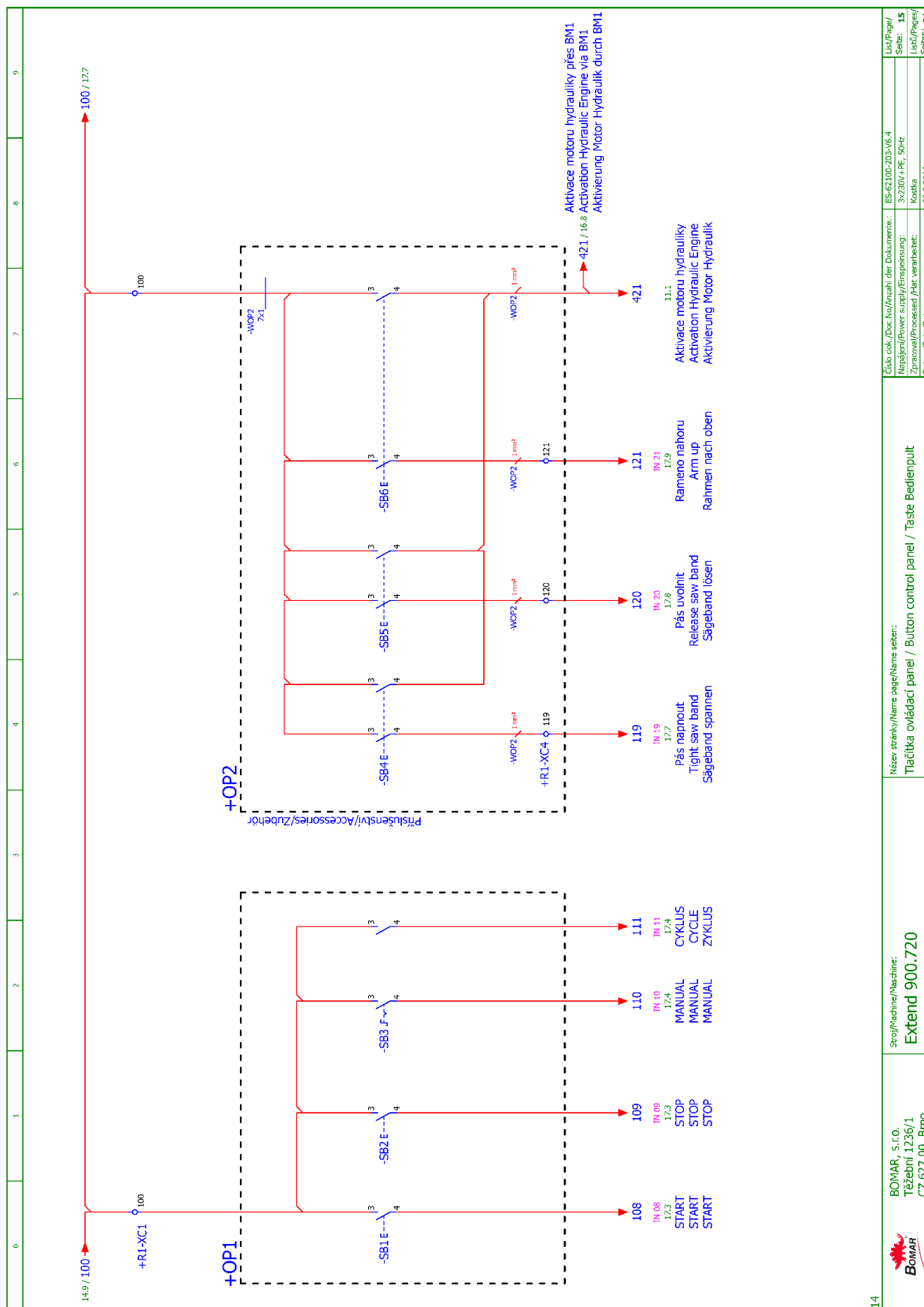
Název stránky/Name page/Noms seiten:
Hydraulické ventily / Hydraulic valve / Hydroventil

Číslo dok./Doc.No./Anzahl der Dokumente.: ES-62100-203-v6.4
Napájení/Power supply/Einspeisung: 3x230V + PE, 50-Hz
Zpracování/Processed /Fert. verarbeitet: Kostičky
Datum/Date/Datum: 11.4.2016

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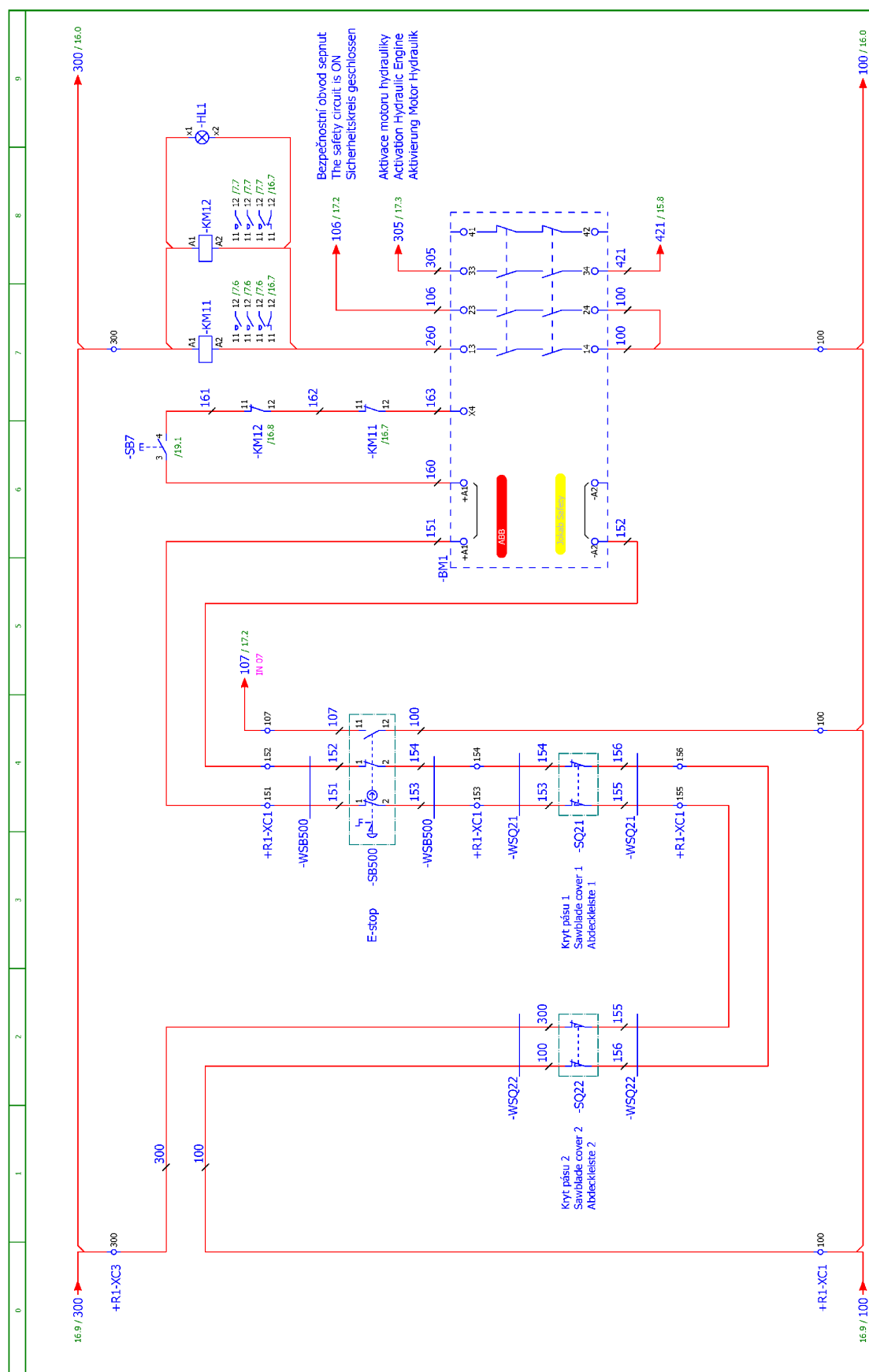
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Manual rev.: 1

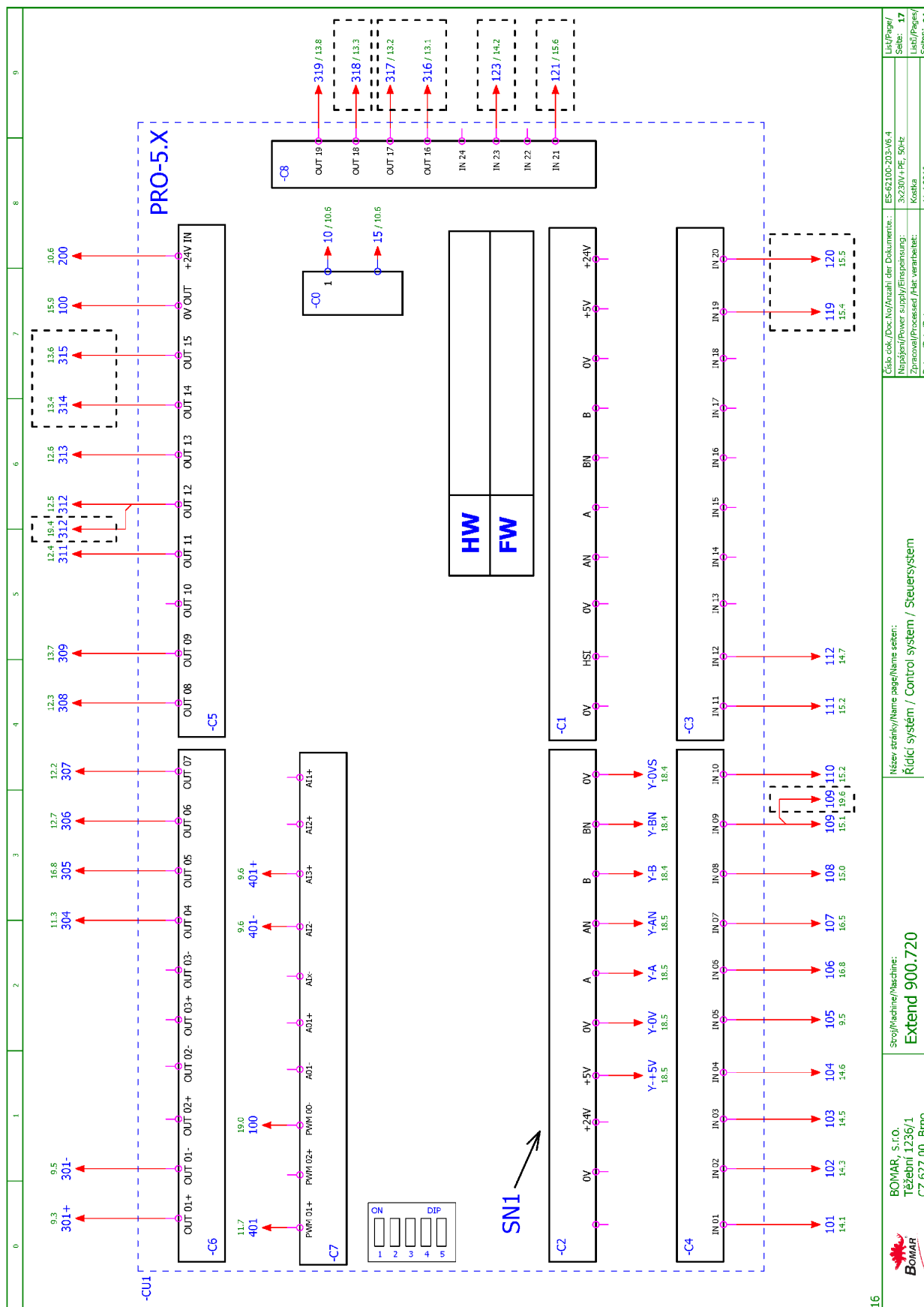


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	BOMAR, s.r.o. Třebenčí 1236/1 CZ 627 00, Brno	Stroj/Machine/Maschine: Extend 900.720	Název stránky/Name page/Noms seiten: Tlačítka ovládací panel / Button control panel / Taste Bedienpult	Cílo dok./Doc.No./Anzahl der Dokumente.: ES-62100-203-v6.4 Napájení/Power supply/Einspeisung: 3x230V + PE, 50-Hz Zpracování/Processed /Hr. verarbeitet: Kvalita Datum/Date/Datum: 30.3.2016	Liš/Page/ Seite: 15 Liš/Page/ Seite: 24
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Schématas
Schemas
Schematics





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- 6.2. Elektrické schéma /Elektroschema /
Wiring diagrams –Extend 900.720sx
- 6.2.1. 3×400 V + PE, 50Hz

0	1	2	3	4	5	6	7	8	9
 Extend 900.720 SX ES-621SX-201/202-V6.2 Wiring diagram 3x400V+PE, 50Hz Bomar, spol. s r.o. Těžební 1236/1 627 00 Brno Czech republic									
 BOMAR, s.r.o. Těžební 1236/1 CZ 627 00, Brno		Stroj/Machine/Maschine: Extend 900.720 SX		Název stránky/Name page/Name seiten: Úvodní strana / Start page / Startseite		Číslo dok./Doc.Nr./Nazihi der Dokumente.: ES-621SX-201/202-V6.2 Napájení/Power supply/Einspeisung: 3x400V + PE, 50Hz Zpracování/Processed/For verarbeitet: Kódová Datum/Date/Datum: 26.9.2016		Číslo/No./Nazihi der Dokumente.: ES-621SX-201/202-V6.2 Seiten: 1 Číslo/No./Nazihi der Dokumente.: ES-621SX-201/202-V6.2 Seiten: 23	

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2	Obsah / Table of contents / Inhaltsverzeichnis	26.9.2016
3	Kusovník artiklů / Parts list / Artikelstückliste	26.9.2016
3.a	Kusovník artiklů / Parts list / Artikelstückliste	26.9.2016
3.b	Kusovník artiklů / Parts list / Artikelstückliste	26.9.2016
3.c	Kusovník artiklů / Parts list / Artikelstückliste	26.9.2016
3.d	Kusovník artiklů / Parts list / Artikelstückliste	26.9.2016
3.e	Kusovník artiklů / Parts list / Artikelstückliste	26.9.2016
4	I/O řídicí systém / I/O Control station / I/O Steuerung	26.9.2016
5	Rozmístění prvků v rozvaděči RJ / Placement of elements in enclosure RJ / Platzierung der Elemente im Schaltschrank RJ	26.9.2016
6	Ovládací panel na rozvaděči / Control panel / Bedienpult	21.3.2016
7	Silová část M1 / Power part M1 / Feld partie M1	26.9.2016
8	Silová část M2,M3 / Power part M1,M2 / Feld partie M1,M2	26.9.2016
9	Silová část M4 / Power part M4 / Feld partie M4	26.9.2016
10	Deska zdroje / Power board / Netzgerat-Platte	26.9.2016
11	Sýkače motorů, M5 / Motor contactor, M5 / Motor-Schutzschalter, M5	26.9.2016
12	Hydraulické ventily / Hydraulic valve / Hydroventil	26.9.2016
13	Hydraulické ventily / Hydraulic valve / Hydroventil	26.9.2016
14	Vstupy / Inputs / Eingänge	26.9.2016
15	Tlačítka ovládací panel / Button control panel / Taste Bedienpult	26.9.2016
16	Bezpečnostní okruh / Safety circle / Sicherheitsbereich	26.9.2016
17	Řídicí systém / Control system / Steuersystem	26.9.2016
18	Snímač výšky ramene / Arm height sensor / Arm Höhensensor	26.9.2016
19	Příslušenství / Accessories / Zubehör	26.9.2016

 BOMAR, s.r.o. Třávná 1236/1 CZ 627 00, Brno	Scrofl/machine/Maschine: Extend 900.720 SX	Název stránky/Page name/Name seiten: Obsah / Table of contents / Inhaltsverzeichnis	Cílo doc./Doc.No./Anzahl der Dokumente.: ES-6215X-201/202-V6.2 Náplně/Power supply/Einsparung: 3x400V + PE, 50-Hz Kvalita Datum/Date/Datum: 26.9.2016	Úkl./Page/ Seite: 2 Úkl./Page/ Seite: 23
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Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednávací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-ZD1	Napájecí zdroj - 15VAC/24VDC, 20VAC/28VDC Power supply unit - 15VAC/24VDC, 20VAC/28VDC Netzteil - 15VAC/24VDC, 20VAC/28VDC	ZDR-03	Bomar	265.915	1	/10.2
-BM1	Bezpečnostní relé 24VDC, 3NO Safety relay 24VDC, 3NO Sicherheitsrelais 24VDC, 3NO	BT50	ABB	91.051.063	1	/16.5
-CU1	Klávesnice - fóliová Touch-sensitive keyboard Folientastatur	31.R230-207	AKI ELECTRONIC, spol.s.r.o.	31.R230-207	1	/17.0
-FA1	Motorový spouštěč - 6.3A Motor starter - 6.3A Motorstarter - 6.3A	MS116-6.3	ABB	91.045.023	1	/7.4
-FA2	Motorový spouštěč - 0.4A Motor starter - 0.4A Motorstarter - 0.4A	MS116-0.4	ABB	91.045.017	1	/8.2
-FA3	Motorový spouštěč - 1A Motor starter - 1A Motorstarter - 1A	MS116-1.00	ABB	91.045.019	1	/8.6
-FU1	Pojistka trubičková - 500mA/250V, pomalá, 5x20 Tube fuse - 500mA/250V, slow, 5x20 Rohrsicherung - 500 mA / 250 V, langsam, 5x20	T500mA/250V	ESKA	91.230.011	1	/10.4
-FU4	Pojistka trubičková - 6.3A/250V, pomalá, 5x20 Tube fuse - 6.3A/250V, slow, 5x20 Rohrsicherung - T6,3A / 250V, langsam, 5x20	T6,3A/250V	ESKA	91.230.002	1	/10.4
-RP1	Potenciometr 4k7 Potentiometer 4k7 Potentiometer 4k7	TP195 4k7/N20A	Elektronické součástky CZ, a.s	91.283.015	1	/9.6
-RP1	Hlavice potenciometru - 24mm Head of potentiometer 24mm Leiter Potentiometer 24mm	S8877 BLK	GES-ELECTRONICS, a.s.	91.060.063	1	/9.6
-RCF1	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Vlček	91.041.015	1	/7.3
-RCF2	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Vlček	91.041.015	1	/8.1

The manufacturer reserves right to use an equivalent replacement device.

 BOMAR, s.r.o. Těšební 1236/1 CZ 627 00, Brno	Scrol/Machine/Maschine: Extend 900.720 SX	Název stránky/Name page/Name seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente.: ES-6215X-201/202-V6.2 Napájecí/Power supply/Einsparung: 3x400V + PE, 50-Hz Zpracováno/Processed /Art. verarbeitet: Koska Datum/Date/Datum: 26.9.2016	Lst./Page/ Seiten: 3
				Lst./Page/ Seiten: 23

Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednávací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-RCF3	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Viček	91.041.015	1	/8.5
-RCF11	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Viček	91.041.015	1	/7.6
-RCF12	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Viček	91.041.015	1	/7.7
-FA1	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO + 1xNC	HK1-11	ABB	91.046.005	1	/7.4
-FA2	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO + 1xNC	HK1-11	ABB	91.046.005	1	/8.2
-FA3	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO + 1xNC	HK1-11	ABB	91.046.005	1	/8.6
-FU1	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THSI5U	WIELAND	91.251.102	1	/10.4
-FU2	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THSI5U	WIELAND	91.251.102	1	/10.4
-FU2	Pojistka trubičková - 800mA/250V, pomalá, 5x20 Tube fuse - 800A/250V, slow, 5x20 Rohrsicherung - 800A / 250V, langsam, 5x20	T800mA/250V	ESKA	91.230.010	1	/10.4
-FU3	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THSI5U	WIELAND	91.251.102	1	/10.4
-FU3	Pojistka trubičková - 1A/250V, pomalá, 5x20 Tube fuse - 1A/250V, slow, 5x20 Rohrsicherung - 1A / 250V, langsam, 5x20	T1A/250V	ESKA	91.230.031	1	/10.4
-FU4	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THSI5U	WIELAND	91.251.102	1	/10.4

The manufacturer reserves right to use an equivalent replacement device.

	BOMAR, s.r.o. Těšební 1256/1 CZ 627 00, Brno	Stroj/Machine/Maschine: Extend 900.720 SX	Název stránky/Name page/Namen Seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente.: Napájení/Power supply/Einspeisung: Zpracováno/Processed /Art. verarbeitet: Datum/Date/Datum:	ES-6215X-201202-V6.2 3x400V + PE, 50-Hz Koska 26.9.2016	Úkl./Page/ Seite: 3.a List./Pages/ Seiten: 23
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Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednáací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-HL1	Signálka zelená na adaptér Green light for Eaton adapter Grünes Licht für Eaton-Adapter	M22-LED-G	EATON	91.061.023	1	/13.8
-KM1	Ministýkač 4kW/400V Minicontactor 4kW/400V Mini Schutz 4kW/400V	B65-30-01-1.7-71	ABB	91.040.049	1	/11.1
-KM2	Ministýkač 4kW/400V Minicontactor 4kW/400V Mini Schutz 4kW/400V	B65-30-01-1.7-71	ABB	91.040.049	1	/11.3
-KM3	Ministýkač 4kW/400V Minicontactor 4kW/400V Mini Schutz 4kW/400V	B65-30-01-1.7-71	ABB	91.040.049	1	/11.4
-KM11	Stýkač 11kW/400V Contactor 11kW/400V Schütz 11kW/400V	AF26-30-00-11	ABB	91.040.052	1	/16.7
-KM11	Pomocný kontakt - 1xNC Auxiliary contact - 1xNC Hilfskontakt - 1 xNC	CA4-01	ABB	91.041.043	1	/16.7
-KM12	Stýkač 11kW/400V Contactor 11kW/400V Schütz 11kW/400V	AF26-30-00-11	ABB	91.040.052	1	/16.8
-KM12	Pomocný kontakt - 1xNC Auxiliary contact - 1xNC Hilfskontakt - 1 xNC	CA4-01	ABB	91.041.043	1	/16.8
-PA1	Pojistkový odpínač pro válcové vložky - 3p Switch fuse for the cylinder inserts - 3p Schalter Sicherung für den Zylindereinsätze - 3P	E 93/32	ABB	91.241.014	1	/9.2
-PA2	Pojistkový odpojovač E-90 - 2P Fuse disconnector E-90 - 2P Sicherungstrenner E90 - 2P	E 92/32	ABB	91.241.013	1	/10.1
-QS1	3 pólový odpínač, 40A Disconnector - 3P, 40A Trennschalter - 3P, 40A	OT40FT3	ABB	91.170.019	1	/7.0
-QS1	Rukojeť odpináče - černá Handle switch - black Griffschalter - schwarz	OHBS2RJ	ABB	91.180.015	1	/7.0

The manufacturer reserves right to use an equivalent replacement device.

3.a	 BOMAR, s.r.o. Těšební 1236/1 CZ 627 00, Brno	Stroj/machine/Maschine: Extend 900.720 SX	Název stránky/Name page/Namen seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente.: ES-6215X-201202-V6.2		Úkl./Page/
				Napájení/Power supply/Einspeisung.: 3x400V + PE, 50-Hz		Seite: 3.b
				Zpracování/Processed /Aht. verarbeitet:		Libri./Pages/
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Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednávací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-QS1	Krýt svorek Terminal shroud Klemmenabdeckung	QTS40T3	ABB	91.170.017	1	/7.0
-RP1	Svorka rychloupínací Fastconnect clamp Fast Connect Klemm	WAGO 224-112	WAGO	91.250.009	3	/9.6
-SB1	Hlavice prosvětleného tlačítka zelená Green transparent switch Grün transparent Schalter	M22-DL-G	EATON	91.060.031	1	/15.1
-SB1	Upevňovací adaptér + INO Attaching adapter + INO Montageadapter + INO	M22-AK10	EATON	91.061.021	1	/15.1
-SB2	Upevňovací adaptér + INO Attaching adapter + INO Montageadapter + INO	M22-AK10	EATON	91.061.021	1	/15.1
-SB2	Hlavice tlačítka - černá Head button - black Kopfaste - schwarz	M22-D-S	EATON	91.060.035	1	/15.1
-SB3	Hlavice 3 položového přepínače Head of 3 position switch Leiter der 3-Positionsschalter	M22-WRK3	EATON	91.060.051	1	/15.2
-SB3	Kontaktní blok - INO Contact block - INO Kontaktblock - INO	M22-K10	EATON	91.061.022	1	/15.2
-SB3	Upevňovací adaptér + INO Attaching adapter + INO Montageadapter + INO	M22-AK10	EATON	91.061.021	1	/15.2
-SB500	Total stop - hlavice + 3xNC Emergency-stop mushroom push - button + 3xNC Not-Aus-Pilz - Taster + 3 xNC	YW1B-VAE02R	IDEC	91.060.084	1	/16.4
-SB500	Kontakt - 1x NO Contact - 1x NO Kontakt - 1x NO	YW-E10	IDEC	91.061.044	1	/16.4
-TR1	Toroidální transformátor - 0-230-400V/20V/15V, 150VA Toroidal transformer - 0-230-400V/20V/15V, 150VA Ringkerntransformator - 0-230V-400V/20V/15V, 150VA	400V/230V/20V/15V 6A/2A 150VA	KARBAN s.r.o.	91.080.026	1	/10.1

The manufacturer reserves right to use an equivalent replacement device.

3.b	 BOMAR, s.r.o. Těšební 1256/1 CZ 627 00, Brno	Scroj/Machine/Maschine: Extend 900.720 SX	Název stránky/Name page/Namen seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente.: Napájení/Power supply/Einspeisung: Zpracování/Processed Part. verarbeitet: Datum/Date/Datum:	ES-6215X-201202-V6.2 3x400V + PE, 50Hz Koska 26.9.2016	Lst./Page/ Seite: 3.c List./Page/ Seite: 23
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Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednávací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-SQ21	Bezpečnostní koncový spínač - 2xNC Safety Limit Switch - 2x NC Sicherheitsendschalter - 2x NC	QKS8	KEDU	91.173.012	1	/16.4
-SQ22	Bezpečnostní koncový spínač - 2xNC Safety Limit Switch - 2x NC Sicherheitsendschalter - 2x NC	QKS8	KEDU	91.173.012	1	/16.2
-PA1	Pojistka válcová - 20A, 10x38, rychlá Tube fuse - 20A, 10x38, fast Rohrsicherung - 20A, 10x38, schnell	PV10 20A gG	OEZ	91.230.038	3	/9.2
-PA2	Pojistka válcová - 2A, 10x38, pomalá Tube fuse - 2A, 10x38, slow Rohrsicherung - 2A, 10x38, langsam	PV10 2A gG	OEZ	91.230.034	2	/10.1
-SQ1	Koncový spínač - 1NC+1NO Limit switch - 1NC+1NO Endschalter - 1NC+1NO	D4N-4A31	OMRON	91.173.007	1	/14.3
-SQ2	Koncový spínač - 1NC+1NO, M20 Limit switch - 1NC+1NO, M20 Endschalter - 1NC+1NO, M20	D4N-4A62	OMRON	91.173.008	1	/14.5
-SQ3	Koncový spínač - 1NC+1NO, M20, pomalý Limit switch - 1NC+1NO, M20, slow Endschalter - 1NC+1NO, M20, langsam	D4N-4A32	OMRON	91.173.010	1	/14.6
-SQ4	Koncový spínač - 1NO + 1NC Limit switch - 1NO + 1NC Endschalter - 1NO + 1NC	FR 555-M2	PIZZATO	91.173.018	1	/14.7
-FM1	Frekvenční měnič - 7.5kW, 3x400VAC Frequency converter - 7.5kW, 3x400VAC Frequenzumrichter - 7.5 kW, 3x400VAC	VFD075E43A	DELTA ELECTRONICS, INC.	91.012.092	1	/9.2
-SB7	Hlavice prosvětleného tlačítka žlutá The button head backlit yellow Der Knopf Kopf von hinten beleuchtet gelb	ZB5AW35	TELEMECANIQUE	91.060.023	1	/16.6
-CU1	Řídicí obvod Control circuit Die Steuerung	PRO-5.X	Bomar	91.995.221	1	/17.0
-M5	Ventilátor 24VDC, 154CFM Fan 24VDC, 154CFM Fan 24VDC, 154CFM	RDH1238 B2	Xinruilian Electronic Co.	91.015.126	1	/11.7

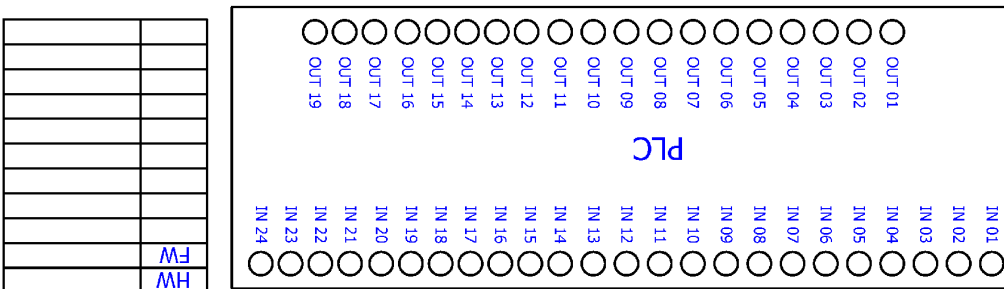
The manufacturer reserves right to use an equivalent replacement device.

3.c	BOMAR, s.r.o. Těšební 1236/1 CZ 627 00, Brno	Scop/Machine/Maschine: Extend 900.720 SX	Název stránky/Name page/Name seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente.: ES-6215X-201202-V6.2		Úkl./Page/
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				Zpracování/Processed Part: zpracovat:		Libri/Page/
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3.p		BOMAR, s.r.o. Třávní 1256/1 CZ 627 00, Brno	Scrip/Machine/Machine: Extend 900.720 SX	Název stránky/Name page/Name sheet: I/O řídicí systém / I/O Control station / I/O Steuerung	Číslo dok./Doc.No./Anzahl der Dokumente.: ES-6215x-201/202-v6.2 Napájení/Power supply/Einspeisung: 3x400V + PE 50-Hz Kvalita Datum/Date/Datum: 26.9.2016	Lst/Page/ Seite: 4 Lst/Total/Seite/ Seiten: 23

I/O	Světlák upnutí	Arm is down	Vice is clamped	DE
IN 01	Rameno dole	Arm is up	Rahmen ist unten	
IN 02	Rameno nahore	Blade tension	Rahmen ist oben	
IN 03	Napnutí pásu	Motor OK	Bandspannung	
IN 04	Bezpečnostní okruh uzavřen	Safety circle shut down	Sicherheitsschaltung gesperrt	
IN 05	Tlačítko TOTAL STOP	Button TOTAL STOP	Taste TOTAL STOP	
IN 06	Tlačítko START	Button START	Taste START	
IN 07	Tlačítko STOP	Button STOP	Taste STOP	
IN 08	MANUAL	CYCLE	ZYKLUS	
IN 09	Kolize kostky	Cube collision	Klotzkollision	
IN 10	NC	NC	NC	
IN 11	NC	NC	NC	
IN 12	NC	NC	NC	
IN 13	NC	NC	NC	
IN 14	NC	NC	NC	
IN 15	NC	NC	NC	
IN 16	NC	NC	NC	
IN 17	NC	NC	NC	
IN 18	NC	NC	NC	
IN 19	Tlačítko napnutí pás	Button band tension	Taste band spannen	
IN 20	Tlačítko povolit pás	Button band release	Taste band lösen	
IN 21	Tlačítko rameno nahoru	Button arm up	Taste Rahmen nach oben	
IN 22	NC	NC	NC	
IN 23	Přítlak upnutí	Upper vice is clamped	Ober Schraubstock ist gespannt	
IN 24	NC	NC	NC	
OUT 01+	Start FM1	Start FM1	Start FM1	
OUT 02+	NC	NC	NC	
OUT 03+	NC	NC	NC	
OUT 04	Motor chlazení	Coolant pump	Motor Kühlung	
OUT 05	Čerpadlo hydrauliky	Hydraulic pump	Hydraulikpumpe	
OUT 06	2.stupeň hydrauliky	Second level of hydraulic pump	Hydraulikpumpe 2.Stufe	
OUT 07	Světlák upnutí	Vice clamp	Schraubstock spannen	
OUT 08	Světlák povolit	Release vice	Schraubstock lösen	
OUT 09	NC	NC	NC	
OUT 10	NC	NC	NC	
OUT 11	Rameno nahoru	Arm up	Rahmen nach oben	
OUT 12	Rameno dolů	Arm down	Rahmen nach unten	
OUT 13	Rameno rychle	Arm fast	Rahmen schnell	
OUT 14	Přítlak upnutí	Upper vice clamp	Ober Schraubstock spannen	
OUT 15	Přítlak povolit	Release upper vice	Ober Schraubstock lösen	
OUT 16	Napnutí pás	Sawblade tension	Spannen des Sägebandes	
OUT 17	Uvolnit pás	Sawblade leave	Entspannen des Sägebandes	
OUT 18	Mikronizer	Mikronizer	Mikronizer	
OUT 19	Kontrolka start	Indicator start	Kontrolllicht start	

Pohled ze spodu/From under view/Blick nach



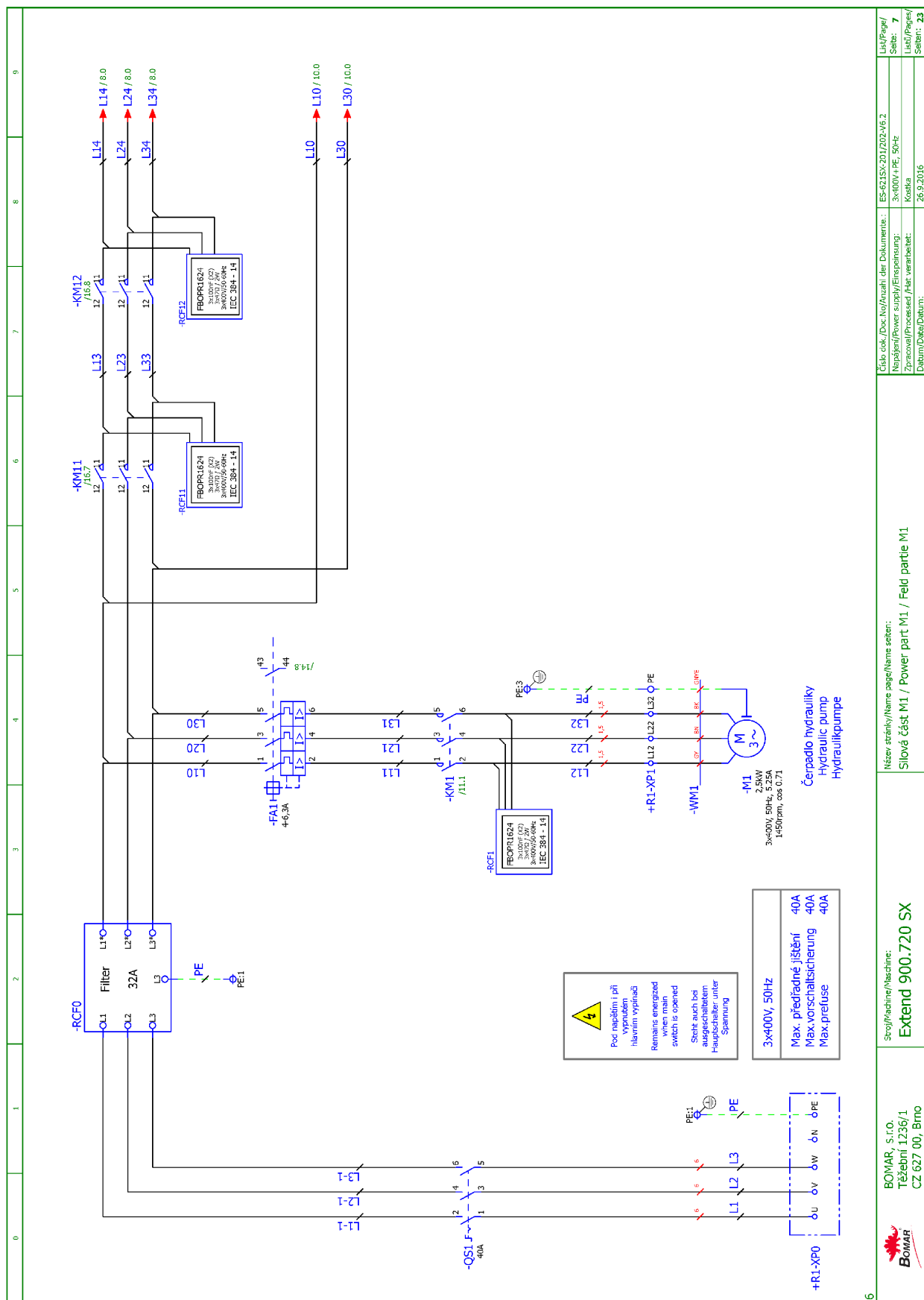
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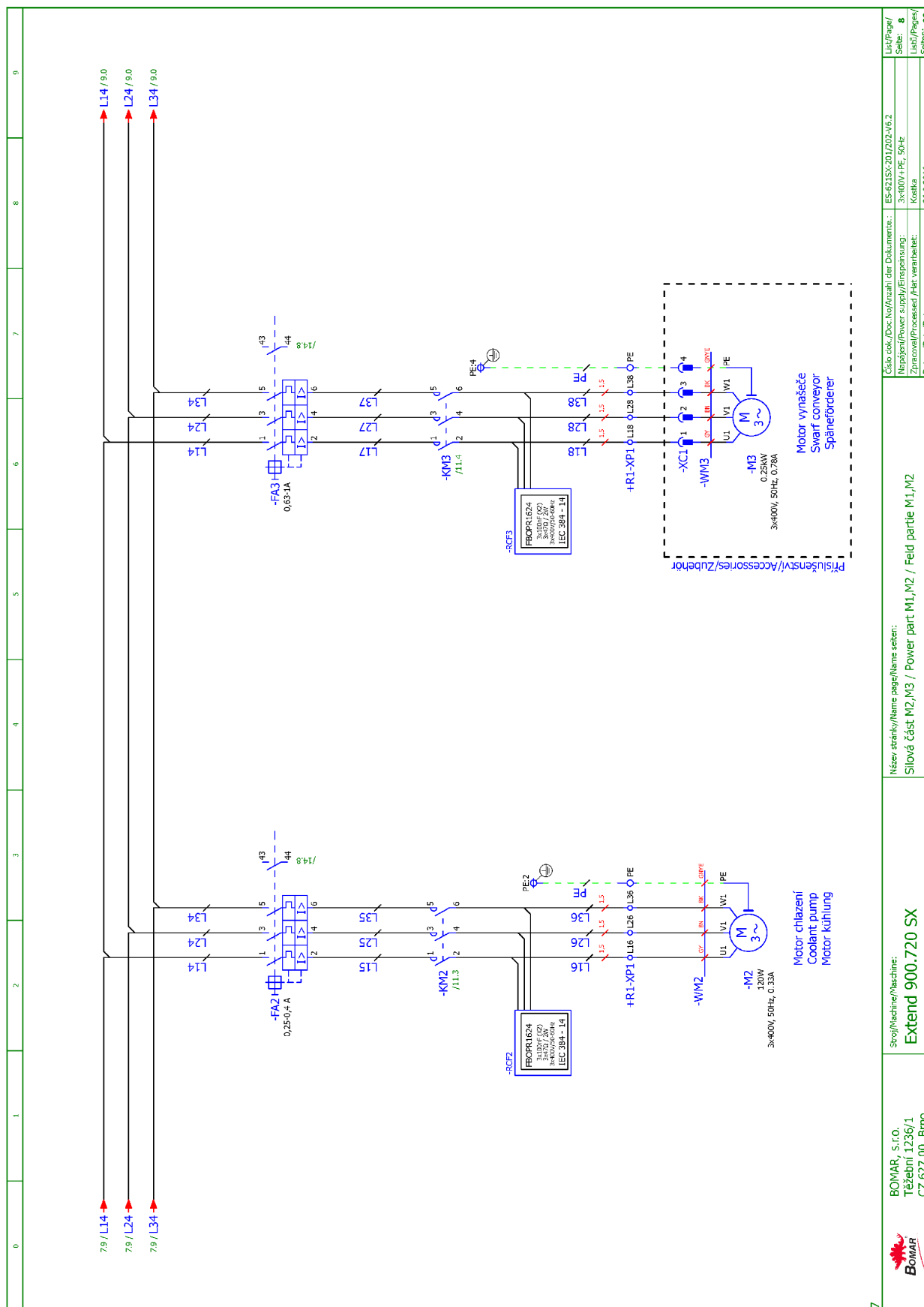
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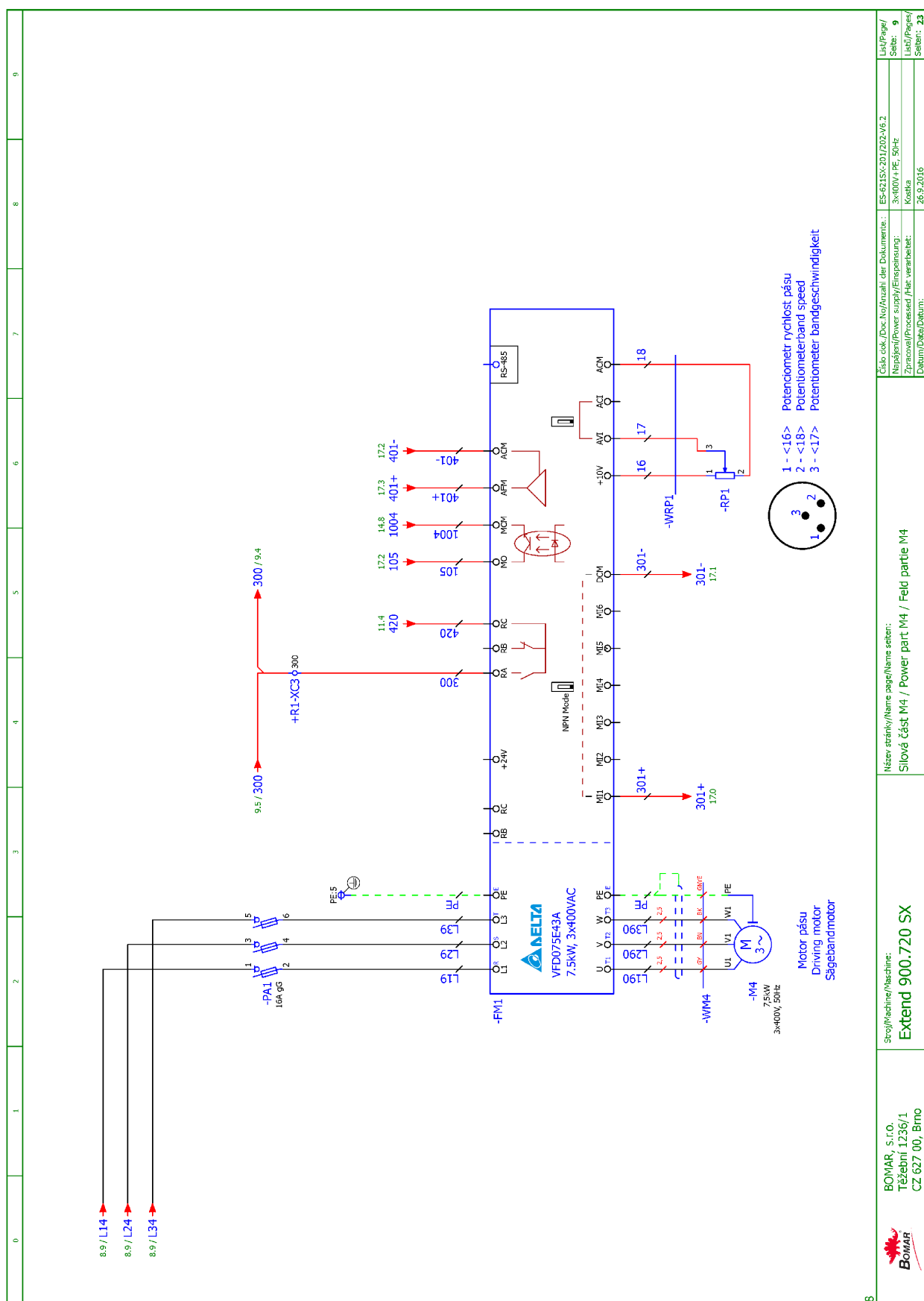
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0	1	2	3	4	5	6	7	8	9
+OP1									
+OP2									
Príslušenství/Accessories/Zubehör									
5									
BOMAR, s.r.o. Těžební 1236/1 CZ 627 00, Brno Stroj/Machine/Maschine: Extend 900.720 SX Název stránky/Name page/Název seiten: Ovládací panel na rozvaděči / Control panel / Bedienpult Cílo dok./Doc.No./Anzahl der Dokumente.: ES-6215X-201202-V6.2 Napájení/Power supply/Einspeisung: 3x400V + PE, 50Hz Zpracování/Processed /Hr. verarbeitet: Kódka Datum/Date/Datum: 21.3.2016 Lst/Page/ Seite: 6 Lst/ /Pages/ Seiten: 23									

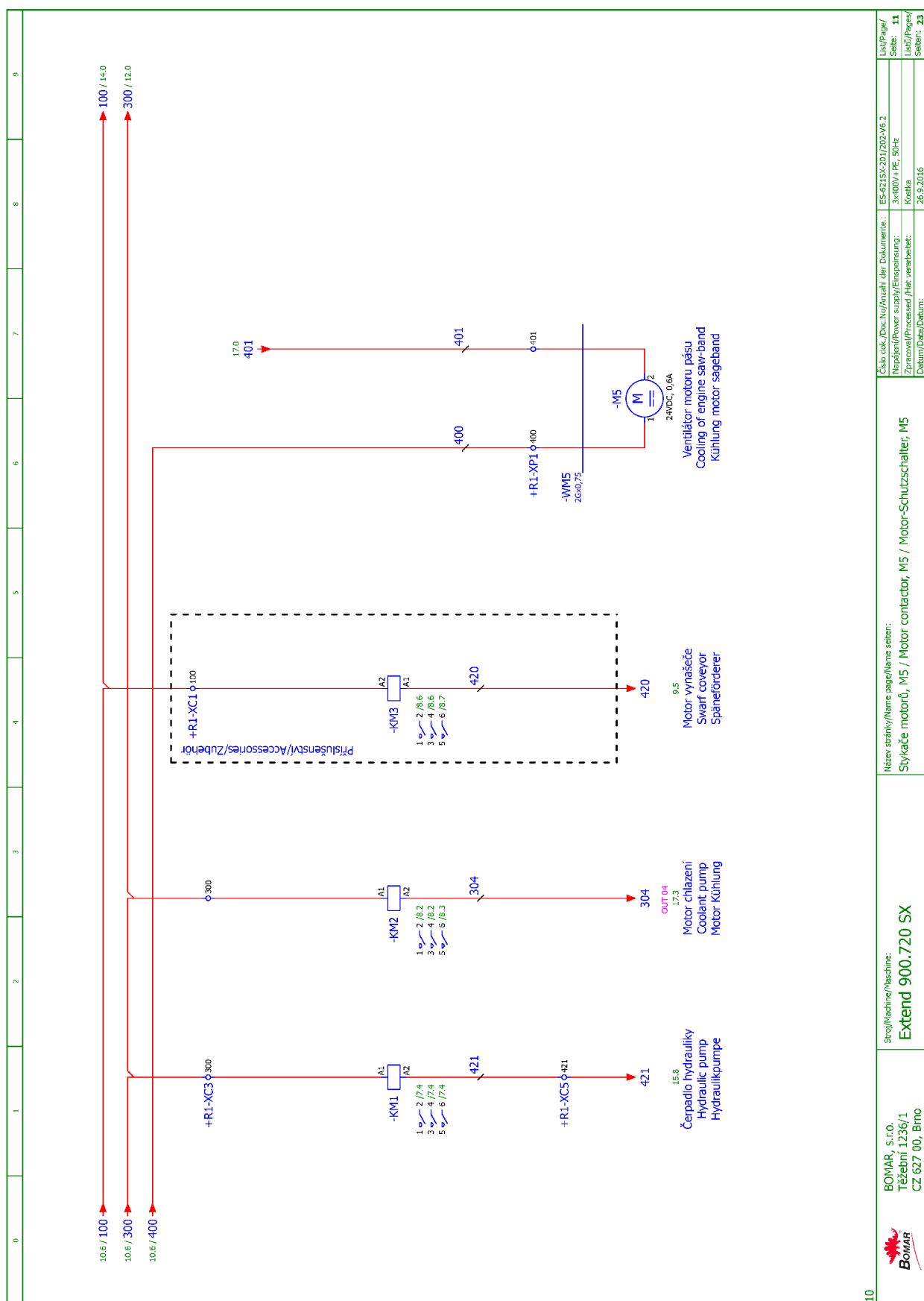


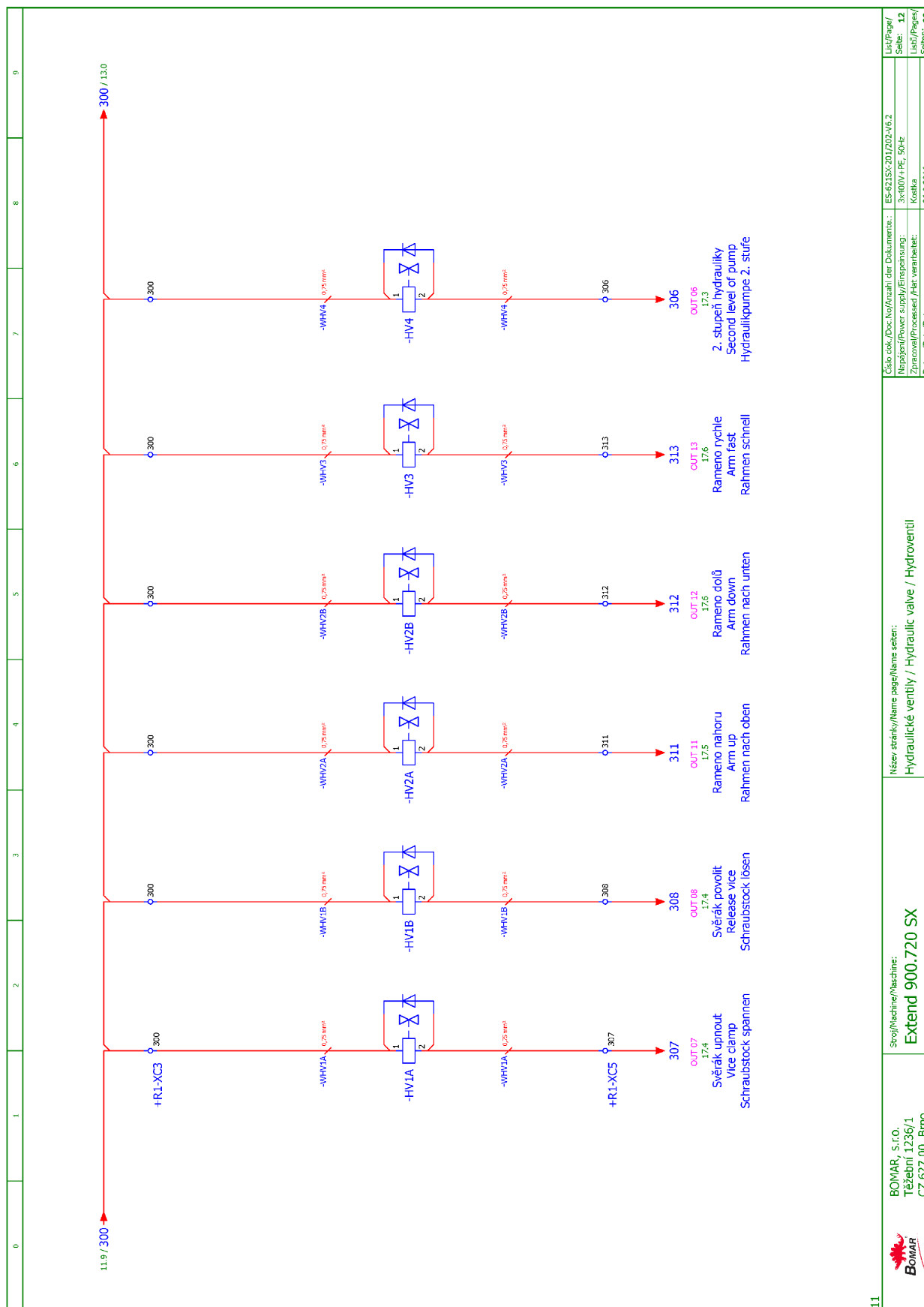


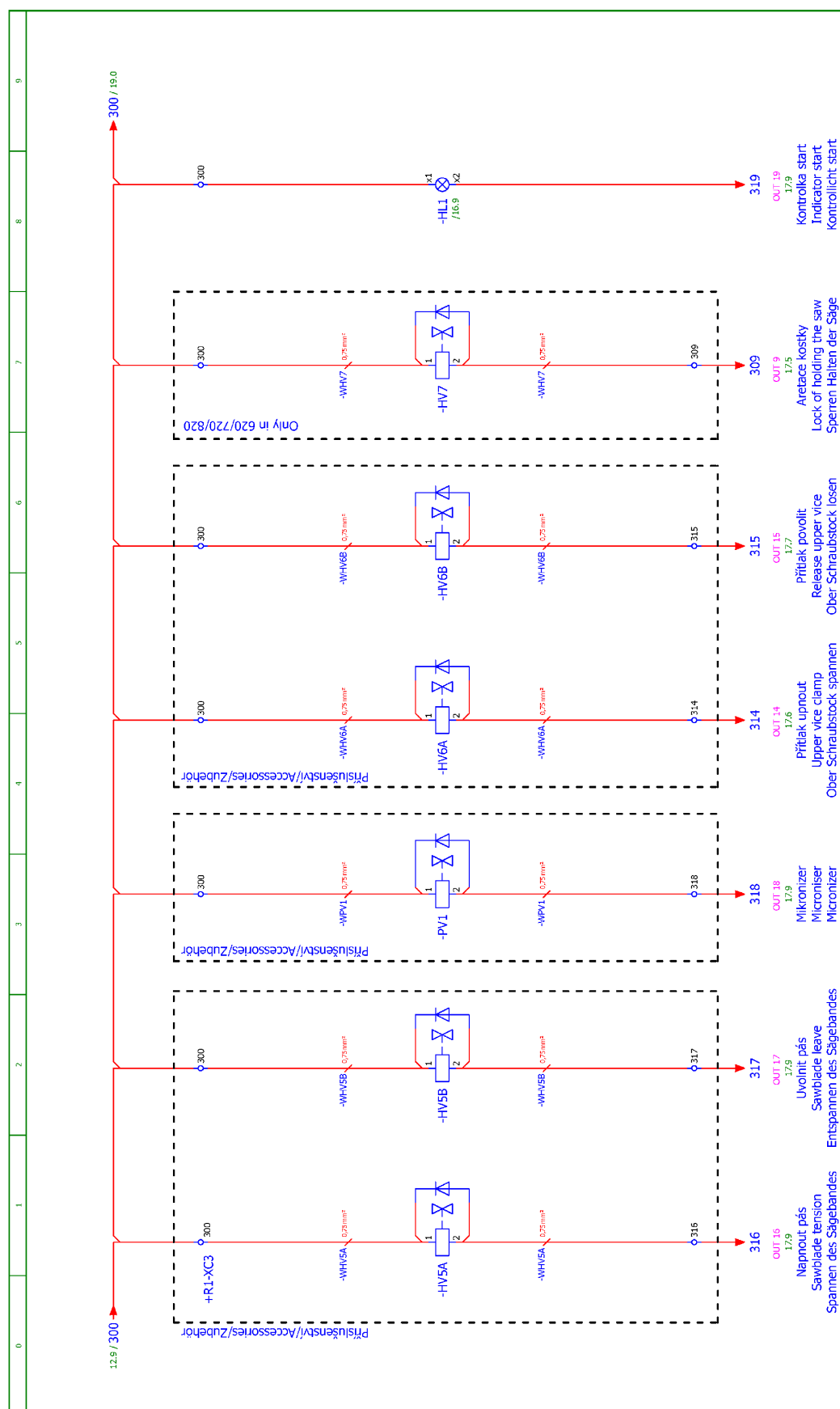


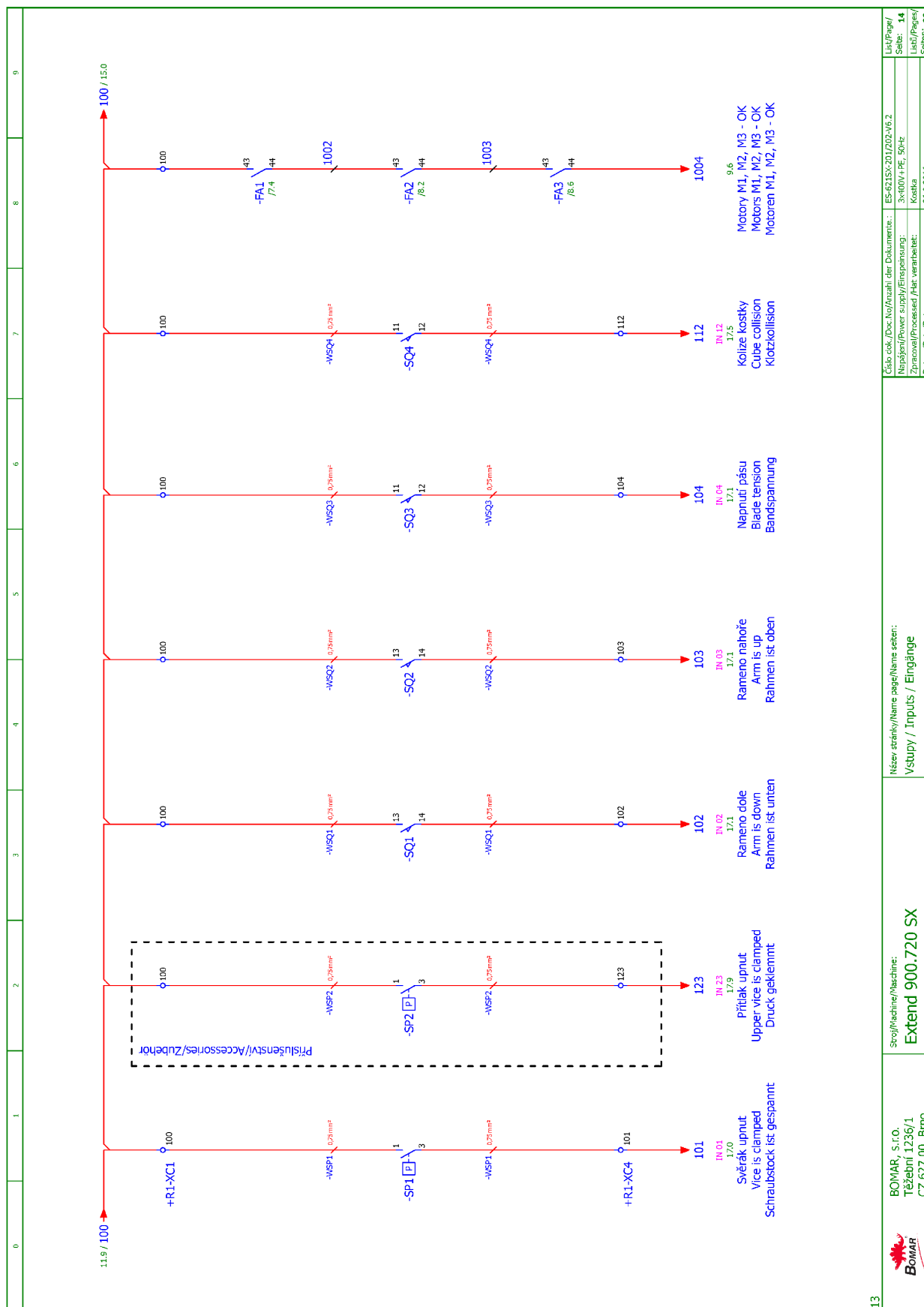


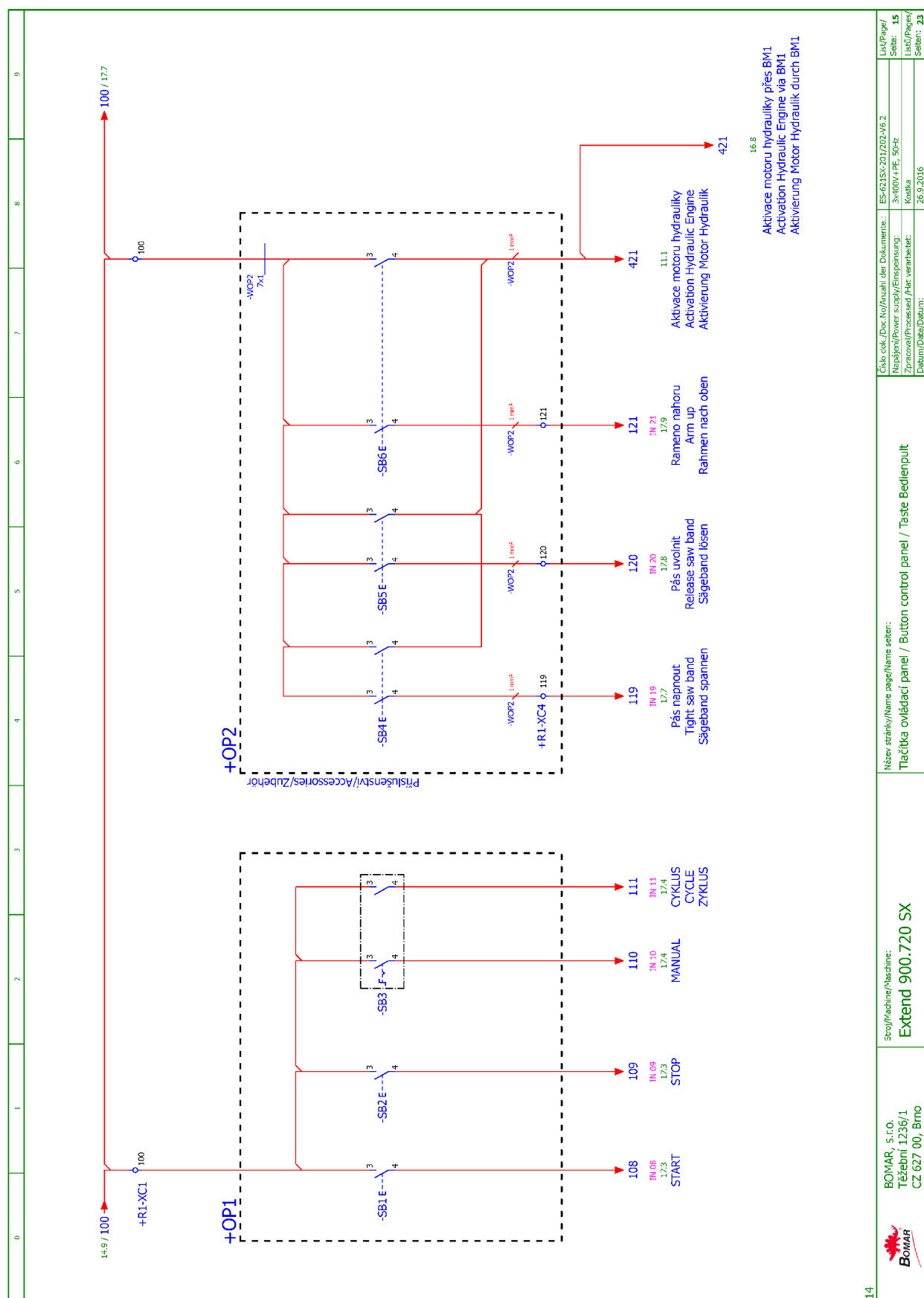
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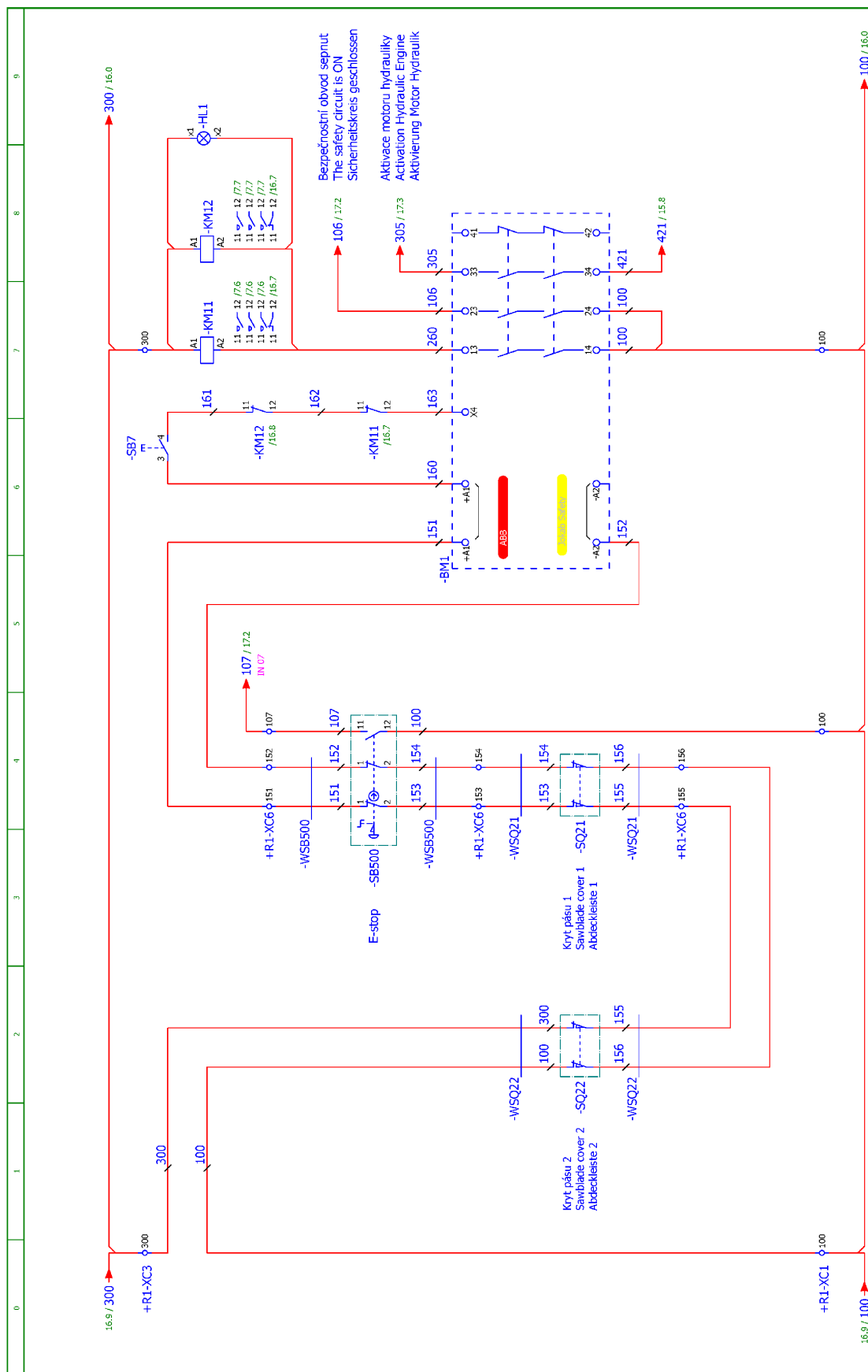




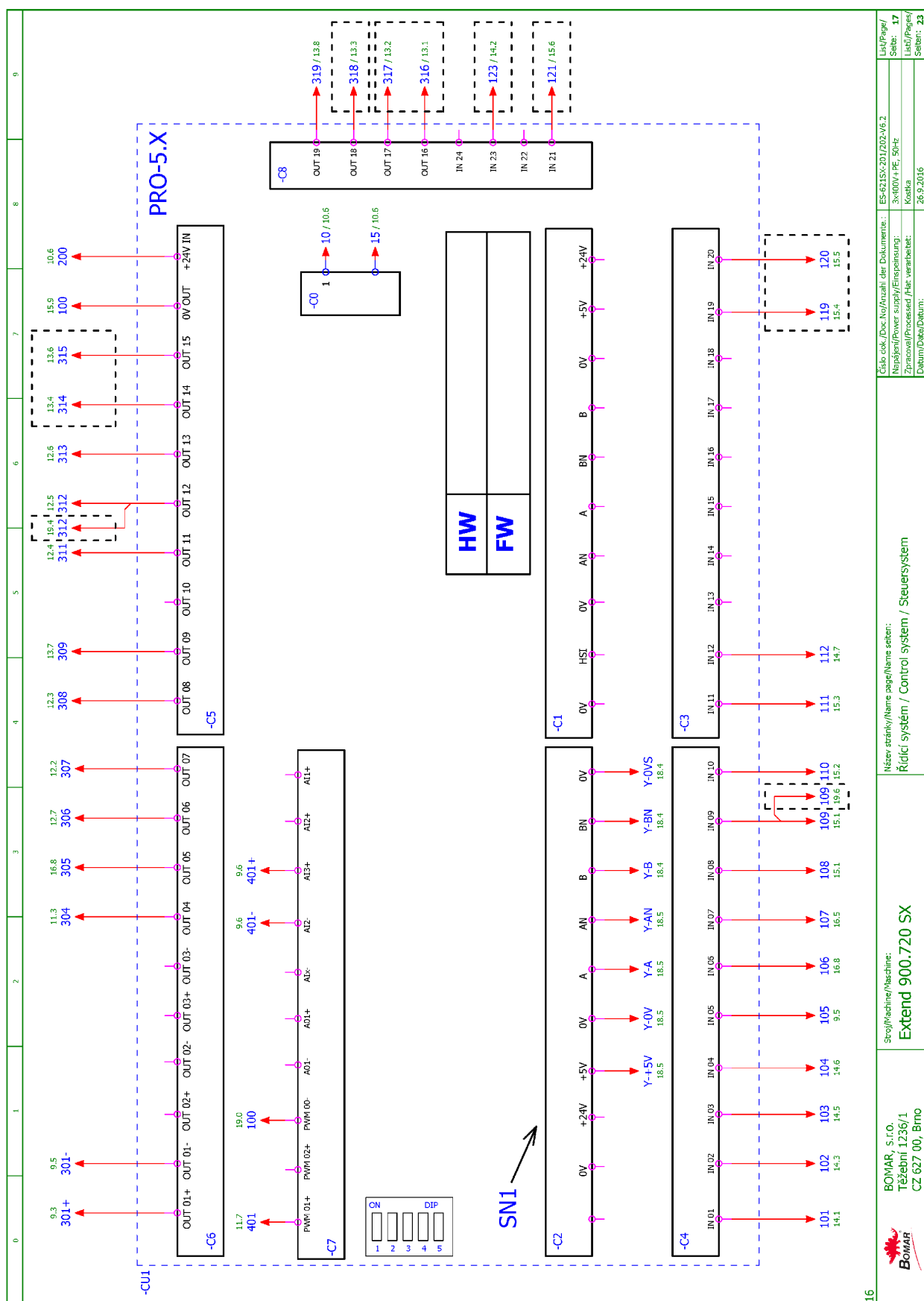








15	 BOMAR, s.r.o. Třávní 1236/1 CZ 627 00, Brno Stroj/Machine/Machine: Extend 900.720 SX Název stránky/Name page/Name seiten: Bezpečnostní okruh / Safety circle / Sicherheitsbereich Cílo dok./Doc.No./Anzahl der Dokumente.: ES-6215X-201202-v6.2 Napájení/Power supply/Einspeisung: 3x400V + PE, 50-Hz Zpracování/Processed /Fert. verarbeitet: Kvalita Datum/Date/Datum: 26.9.2016	Lib/Pages/ Seite: 16 List/Pages/ Seite: 23
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203



0	1	2	3	4	5	6	7	8	9
 Extend 900.720 SX ES-621SX-203-V6.2 Wiring diagram 3x230V+PE, 50Hz Bomar, spol. s r.o. Těžební 1236/1 627 00 Brno Czech republic									
 BOMAR, s.r.o. Těžební 1236/1 CZ 627 00, Brno		Stroj/Machine/Maschine: Extend 900.720 SX		Název stránky/Name page/Name sheet: Úvodní strana / Start page / Startseite		Číslo dok./Doc. No./Nºzahl der Dokumente.: ES-621SX-203-V6.2 Napájení/Power supply/Einspeisung: 3x230V + PE, 50Hz Zpracováno/Processed/Verarbeitet: Kotelna Datum/Date/Datum: 26.9.2016		List/Page/ Seite: 1 List/Page/ Seite: 23	

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3.a	Kusovník artiklů / Parts list / Artikelstückliste	26.9.2016
3.b	Kusovník artiklů / Parts list / Artikelstückliste	26.9.2016
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4	I/O řídicí systém / I/O Control station / I/O Steuerung	26.9.2016
5	Rozmístění prvků v rozvaděči R1 / Placement of elements in enclosure R1 / Platzierung der Elemente im Schaltschrank R1	26.9.2016
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7	Silová část M1 / Power part M1 / Feld partie M1	26.9.2016
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9	Silová část M4 / Power part M4 / Feld partie M4	26.9.2016
10	Deska zdroje / Power board / Netzgerät-Platte	26.9.2016
11	Slykače motorů, M5 / Motor contactor, M5 / Motor-Schutzschalter, M5	26.9.2016
12	Hydraulické ventily / Hydraulic valve / Hydroventil	26.9.2016
13	Hydraulické ventily / Hydraulic valve / Hydroventil	26.9.2016
14	Vstupy / Inputs / Eingänge	26.9.2016
15	Tlačítka ovládací panel / Button control panel / Taste Bedienpult	26.9.2016
16	Bezpečnostní okruh / Safety circle / Sicherheitsbereich	26.9.2016
17	Řídicí systém / Control system / Steuersystem	26.9.2016
18	Snímač výšky ramene / Arm height sensor / Arm Höhensensor	26.9.2016
19	Příslušenství / Accessories / Zubehör	26.9.2016



BOMAR, s.r.o.
Třávební 1236/1
CZ 627 00, Brno

Scrol/Machine/Machine:
Extend 900.720 SX

Název stránky/Page name/Name seiten:
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Napájení/Power supply/Einspeisung: 3x230V + PE, 50-Hz
Zpracování/Processed /Hr. verarbeitet: Kvalita
Datum/Date/Datum: 26.9.2016

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Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednáací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-ZD1	Napájecí zdroj - 15VAC/24VDC; 20VAC/28VDC Power supply unit - 15VAC/24VDC; 20VAC/28VDC Netzteil - 15VAC/24VDC; 20VAC/28VDC	ZDR-03	Bomar	265.915	1	/10.2
-BM1	Bezpečnostní relé 24VDC, 3NO Safety relay 24VDC, 3NO Sicherheitsrelais 24VDC, 3NO	BT50	ABB	91.051.063	1	/16.5
-CU1	Klávesnice - fóliová Touch-sensitive keyboard Folientastatur	31.R230-207	AKI ELECTRONIC, spol.s.r.o.	31.R230-207	1	/17.0
-FU1	Pojistka trubičková - 500mA/250V, pomalá, 5x20 Tube fuse - 500mA/250V, slow, 5x20 Rohrsicherung - 500 mA / 250 V, langsam, 5x20	T500mA/250V	ESKA	91.230.011	1	/10.4
-FU4	Pojistka trubičková - 6,3A/250V, pomalá, 5x20 Tube fuse - 6,3A/250V, slow, 5x20 Rohrsicherung - 16,3A / 250V, langsam, 5x20	T6,3A/250V	ESKA	91.230.002	1	/10.4
-RP1	Potenciometr 4k7 Potentiometer 4k7 Potentiometer 4k7	TP195 4k7/N20A	Elektronické součástky CZ, a.s	91.283.015	1	/9.6
-RP1	Hlavice potenciometru - 24mm Head of potentiometer 24mm Leiter Potentiometer 24mm	S8877 BLK	GES-ELECTRONICS, a.s.	91.060.063	1	/9.6
-RCF0	RFC-filtr - 7,5 kW, 3x230V, 50A RFC-filter - 7,5 kW, 3x230V, 50A RFC-filter - 7,5 kW, 3x230V, 50A	ATV 31 / 7,5 kW / V	Ing. Miroslav Vlček	91.041.054	1	/9.2
-RCF1	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Vlček	91.041.015	1	/7.3
-RCF2	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Vlček	91.041.015	1	/8.1
-RCF3	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Vlček	91.041.015	1	/8.5
-RCF11	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Vlček	91.041.015	1	/7.6

The manufacturer reserves right to use an equivalent replacement device.

	BOMAR, s.r.o. Těšební 1236/1 CZ 627 00, Brno	Scroj/Machine/Maschine: Extend 900.720 SX	Název stránky/Name page/Name seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente.: ES-6215X-203-v6.2		Úkl./Page/
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Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednáací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-RCF12	Filtr RFC vývodový Effluent RFC filter Ableitenden RFC Filter	FBOPR1624	Ing. Miroslav Vlček	91.041.015	1	/7.7
-FA1	Motorový spouštěč - 10A Motor starter - 10A Motorstarter - 10A	MS116-10,0	ABB	91.045.024	1	/7.4
-FA1	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO + 1xNC	HK1-11	ABB	91.046.005	1	/7.4
-FA2	Motorový spouštěč - 0.63A Motor starter - 0.63A Motorstarter - 0.63A	MS116-0.63	ABB	91.045.018	1	/8.2
-FA2	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO + 1xNC	HK1-11	ABB	91.046.005	1	/8.2
-FA3	Motorový spouštěč - 1.6A Motor starter - 1.6A Motorstarter - 1.6A	MS116-1,6	ABB	91.045.020	1	/8.6
-FA3	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO + 1xNC	HK1-11	ABB	91.046.005	1	/8.6
-FU1	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THS15U	WIELAND	91.251.102	1	/10.4
-FU2	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THS15U	WIELAND	91.251.102	1	/10.4
-FU2	Pojistka trubičková - 800mA/250V, pomalá, 5x20 Tube fuse - 800A/250V, slow, 5x20 Rohrsicherung - 800A / 250V, langsam, 5x20	T800mA/250V	ESKA	91.230.010	1	/10.4
-FU3	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THS15U	WIELAND	91.251.102	1	/10.4
-FU3	Pojistka trubičková - 1A/250V, pomalá, 5x20 Tube fuse - 1A/250V, slow, 5x20 Rohrsicherung - 1A / 250V, langsam, 5x20	T1A/250V	ESKA	91.230.031	1	/10.4

The manufacturer reserves right to use an equivalent replacement device.

	BOMAR, s.r.o. Třeborní 1236/1 CZ 627 00, Brno	Svojí/Machine/Maschine: Extend 900.720 SX	Název stránky/Name page/Namen seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente.: ES-6215X-203-v6.2		Úkl./Page/ Seite: 3.a
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				Zpracováno/Processed Part. verarbeitet: Kvalita		Úkl./Page/ Seite: 23
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Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednávací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-FU4	Svorka pojisková Fuse terminal Sicherungsklemme	WK4/TH5IU	WIELAND	91.251.102	1	/10.4
-HL1	Signálka zelená na adaptér Green light for Eaton adapter Grünes Licht für Eaton-Adapter	M22-LED-G	EATON	91.061.023	1	/13.8
-KM1	Minisýkač 4kW/400V Minicontactor 4kW/400V Minischutz 4kW/400V	B6S-30-01-1.7-71	ABB	91.040.049	1	/11.1
-KM2	Minisýkač 4kW/400V Minicontactor 4kW/400V Minischutz 4kW/400V	B6S-30-01-1.7-71	ABB	91.040.049	1	/11.3
-KM3	Minisýkač 4kW/400V Minicontactor 4kW/400V Minischutz 4kW/400V	B6S-30-01-1.7-71	ABB	91.040.049	1	/11.4
-KM11	Stýkač - 30kW/400V, 3P Contactor - 30kW/400V, 3P Schütz - 30kW/400V, 3P	AF63-30-11	ABB	91.040.058	1	/16.7
-KM12	Stýkač - 30kW/400V, 3P Contactor - 30kW/400V, 3P Schütz - 30kW/400V, 3P	AF63-30-11	ABB	91.040.058	1	/16.8
-PA1	Pojiskový odpojovač E-930 - 3P Fuse breaker E-930 - 3P Lasttrennschalter E-930 - 3P	E 933/50	ABB	91.241.015	1	/9.2
-PA2	Pojiskový odpojovač E-90 - 2P Fuse disconnecter E-90 - 2P Sicherungstrenner E90 - 2P	E 92/32	ABB	91.241.013	1	/10.1
-QS1	3 pólový odpínač, 63 A Disconnecter - 3P, 63A Trennschalter - 3P, 63A	OT63FT3	ABB	91.170.110	1	/7.0
-QS1	Rukojeť odpínače - černá Handle switch - black Griffschalter - schwarz	OHBS2RJ	ABB	91.180.015	1	/7.0
-QS1	Kryt svorek Terminal shroud Klemmenabdeckung	OTS63T3	ABB	91.170.024	1	/7.0

The manufacturer reserves right to use an equivalent replacement device.

3.a	BOMAR, s.r.o. Těšební 1236/1 CZ 627 00, Brno	Scroj/Machine/Maschine: Extend 900.720 SX	Název stránky/Name page/Name seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente.: ES-6215X-203-v6.2		Úkl./Page/
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				Zpracování/Processed /Aht. verarbeitet: Kvalita		Libri./Pages/
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Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednáací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-RP1	Svorka rychloupínací Fast Connect Kleim	WAGO 224-112	WAGO	91.250.009	3	/9.6
-SB1	Hlavice prosvětleného tlačítka zelená Green transparent switch Grün transparent Schalter	M22-DL-G	EATON	91.060.031	1	/15.1
-SB1	Upevňovací adaptér + 1NO Attaching adapter + 1NO Montageadapter + 1NO	M22-AK10	EATON	91.061.021	1	/15.1
-SB2	Upevňovací adaptér + 1NO Attaching adapter + 1NO Montageadapter + 1NO	M22-AK10	EATON	91.061.021	1	/15.2
-SB2	Hlavice tlačítka - černá Head button - black Kopftaste - schwarz	M22-D-S	EATON	91.060.035	1	/15.2
-SB3	Hlavice 3 položového přepínače Head of 3 position switch Leiter der 3-Positionsschalter	M22-WRK3	EATON	91.060.051	1	/15.2
-SB3	Kontaktní blok - 1NO Contact block - 1NO Kontaktblock - 1NO	M22-K10	EATON	91.061.022	1	/15.2
-SB3	Upevňovací adaptér + 1NO Attaching adapter + 1NO Montageadapter + 1NO	M22-AK10	EATON	91.061.021	1	/15.2
-SB500	Total stop - hlavice + 3xNC Emergency-stop mushroom push - button + 3xNC Not-Aus-Pliz - Taster + 3 xNC	YW1B-V4E02R	IDEC	91.060.084	1	/16.4
-SB500	Kontakt - 1x NO Contact - 1x NO Kontakt - 1x NO	YW-E10	IDEC	91.061.044	1	/16.4
-TR1	Toroidální transformátor - 0-230-400V/20V/15V, 150VA Toroidal transformer - 0-230-400V/20V/15V, 150VA Ringkerntransformator - 0-230V-400V/20V/15V, 150VA	400V/230V/20V/15V 6A/2A 150VA	KARBAN s.r.o.	91.080.026	1	/10.1
-SQ21	Bezpečnostní koncový spínač - 2xNC Safety Limit Switch - 2x NC Sicherheitsendschalter - 2x NC	QKS8	KEDU	91.173.012	1	/16.4

The manufacturer reserves right to use an equivalent replacement device.

3.b

 BOMAR, s.r.o. Těšební 1236/1 CZ 627 00, Brno	Scrol/Machine/Maschine: Extend 900.720 SX	Název stránky/Name page/Name seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente.: ES-6215X-203-V6.2 Nápis/Power supply/Einsparung: 3x230V + PE, 50-Hz Zpracoval/Processed/Patr. verarbeitet: Kosta Datum/Date/Datum: 26.9.2016	List/Page/ Seite: 3.c List/Page/ Seite: 23

Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednávací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-SQ22	Bezpečnostní koncový spínač - 2xNC Safety Limit Switch - 2x NC Sicherheitsendschalter - 2x NC	QKS8	KEDU	91.173.012	1	/16.2
-PA1	Pojistka válcová - 40A, 14x51, rychlá, gG Cylindrical fuse - 40A, 14x51, fast, gG Zylindersicherungs - 40A, 14x51, schnell, gG	PV14 40A gG	OEZ	91.230.060	3	/9.2
-PA2	Pojistka válcová - 2A, 10x38, pomalá Tube fuse - 2A, 10x38, slow Rohrsicherung - 2A, 10x38, langsam	PV10 2A gG	OEZ	91.230.034	2	/10.1
-SQ1	Koncový spínač - 1NC+1NO Limit switch - 1NC+1NO Endschalter - 1NC+1NO	D4N-4A31	OMRON	91.173.007	1	/14.3
-SQ2	Koncový spínač - 1NC+1NO, M20 Limit switch - 1NC+1NO, M20 Endschalter - 1NC+1NO, M20	D4N-4A62	OMRON	91.173.008	1	/14.5
-SQ3	Koncový spínač - 1NC+1NO, M20, pomalý Limit switch - 1NC+1NO, M20, slow Endschalter - 1NC+1NO, M20, langsam	D4N-4A32	OMRON	91.173.010	1	/14.6
-SQ4	Koncový spínač - 1NO + 1NC Limit switch - 1NO + 1NC Endschalter - 1NO + 1NC	FR 555-M2	PIZZATO	91.173.018	1	/14.7
-FM1	Frekvenční měnič - 7,5kW, 3x230VAC Frequency converter - 7,5kW, 3x230VAC Frequenzumrichter - 7,5kW, 3x230VAC	VFD075E23A	DELTA ELECTRONICS, INC.	91.012.136	1	/9.2
-SB7	Hlavice prosvětleného tlačítka žlutá The button head backlit yellow Der Knopf Kopf von hinten beleuchtet gelb	ZB5AW35	TELEMECANIQUE	91.060.023	1	/16.6
-CU1	Řídicí obvod Control circuit Die Steuerung	PRO-5-X	Bomar	91.995.221	1	/17.0
-M5	Ventilátor 24VDC, 154CFM Fan 24VDC, 154CFM Fan 24VDC, 154CFM	RDH1238 B2	Xinruilian Electronic Co.	91.015.126	1	/11.7

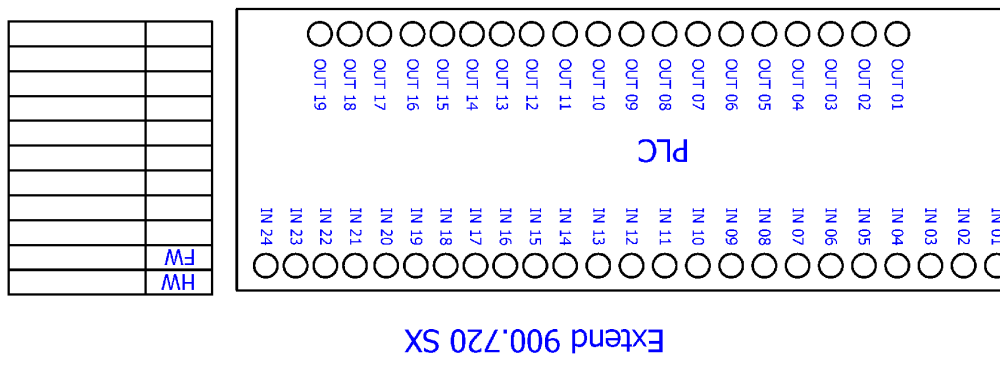
The manufacturer reserves right to use an equivalent replacement device.

3.c

 BOMAR, s.r.o. Těšební 1236/1 CZ 627 00, Brno	Stroj/Machine/Maschine: Extend 900.720 SX	Název stránky/Name page/Name seiten: Kusovník artiklů / Parts list / Artikelstückliste	Číslo dok./Doc.No./Anzahl der Dokumente.: ES-615X-203-v6.2 Napájení/Power supply/Einspeisung: 3x230V + PE, 50-Hz Zpracování/Processed /Aht. verarbeitet: Kostka Datum/Dates/Datum: 26.9.2016	Úkl./Page/ Seite: 3.d Libri./Pages/ Kostka Seiten: 23
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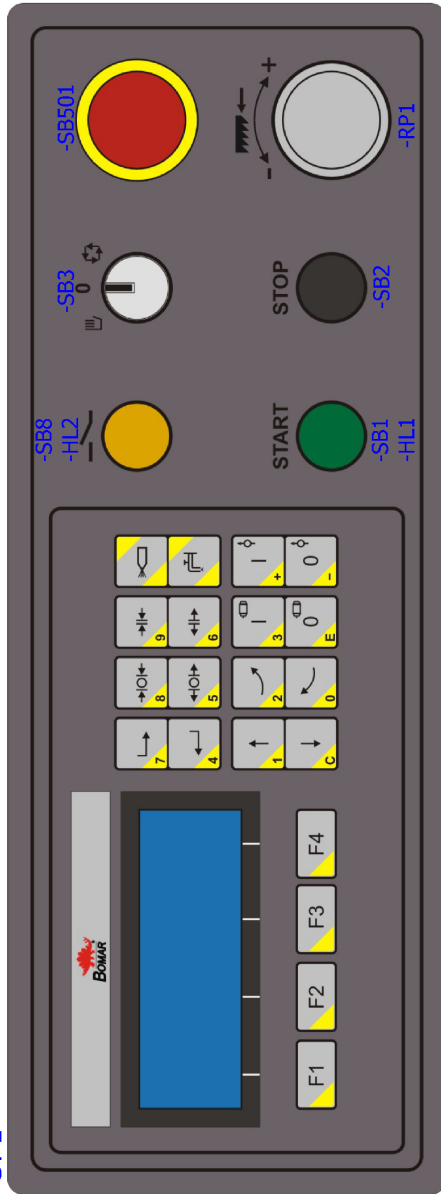
I/O	CZE	ENG	DE
IN 01	Světlák upnutí	Vice is clamped	Schraubstock ist gespannt
IN 02	Rameno dole	Arm is down	Rahmen ist unten
IN 03	Rameno nahore	Arm is up	Rahmen ist oben
IN 04	Napnutí pásu	Blade tension	Bandspannung
IN 05	Motorů OK	Motors OK	Motoren OK
IN 06	Bezpečnostní okruh uzavřen	Safety circle shut down	Sicherheitsschaltung gesperrt
IN 07	Tlačítko TOTAL STOP	Button TOTAL STOP	Taste TOTAL STOP
IN 08	Tlačítko START	Button START	Taste START
IN 09	Tlačítko STOP	Button STOP	Taste STOP
IN 10	MANUAL	MANUAL	MANUAL
IN 11	CYKLUS	CYCLE	ZYKLUS
IN 12	Kolize kostky	Cube collision	Klotzollision
IN 13	NC	NC	NC
IN 14	NC	NC	NC
IN 15	NC	NC	NC
IN 16	NC	NC	NC
IN 17	NC	NC	NC
IN 18	NC	NC	NC
IN 19	Tlačítko napnutí pás	Button band tension	Taste band spannen
IN 20	Tlačítko povolit pás	Button band release	Taste band lösen
IN 21	Tlačítko rameno nahoru	Button arm up	Taste Rahmen nach oben
IN 22	NC	NC	NC
IN 23	Přítlak upnutí	Upper vice is clamped	Ober Schraubstock ist gespannt
IN 24	NC	NC	NC
OUT 01+	Start FM1	Start FM1	Start FM1
OUT 01-	NC	NC	NC
OUT 02+	NC	NC	NC
OUT 02-	NC	NC	NC
OUT 03+	NC	NC	NC
OUT 03-	NC	NC	NC
OUT 04	Motor chlázení	Coolant pump	Motor Kühlung
OUT 05	Cerpadlo hydrauliky	Hydraulic pump	Hydraulikpumpe
OUT 06	2. stupeň hydrauliky	Second level of hydraulic pump	Hydraulikpumpe 2. Stufe
OUT 07	Světlák upnutí	Vice clamp	Schraubstock spannen
OUT 08	Světlák povolit	Release vice	Schraubstock lösen
OUT 09	NC	NC	NC
OUT 10	NC	NC	NC
OUT 11	Rameno nahoru	Arm up	Rahmen nach oben
OUT 12	Rameno dolů	Arm down	Rahmen nach unten
OUT 13	Rameno rychle	Arm fast	Rahmen schnell
OUT 14	Přítlak upnutí	Upper vice clamp	Ober Schraubstock spannen
OUT 15	Přítlak povolit	Release upper vice	Ober Schraubstock lösen
OUT 16	Napnutí pás	Sawblade tension	Spannen des Sägebandes
OUT 17	Uvolnit pás	Sawblade leave	Entspannen des Sägebandes
OUT 18	Mikronizer	Mikronizer	Mikronizer
OUT 19	Kontrolka start	Indicator start	Kontrolllicht start

Pohléd ze spodu/From under view/Blick nach

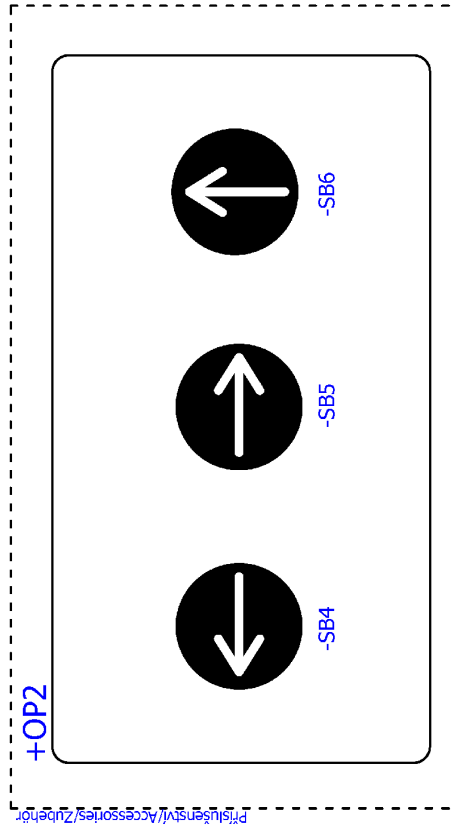


0	1	2	3	4	5	6	7	8	9

+OP1



+OP2



5



BOMAR, s.r.o.
Třeborní 1236/1
CZ 627 00, Brno

Stroj/Machine/Maschine:

Extend 900.720 SX

Název stránky/Name page/Noms seiten:

Ovládací panel na rozvaděči / Control panel / Bedienpult

Číslo dok./Doc.No./Anzahl der Dokumente.: ES-621SX-203-v6.2

Nápisání/Power supply/Einspeisung: 3x230V + PE, 50-Hz

Zpracování/Processed /Hr. verarbeitet: Kvalita

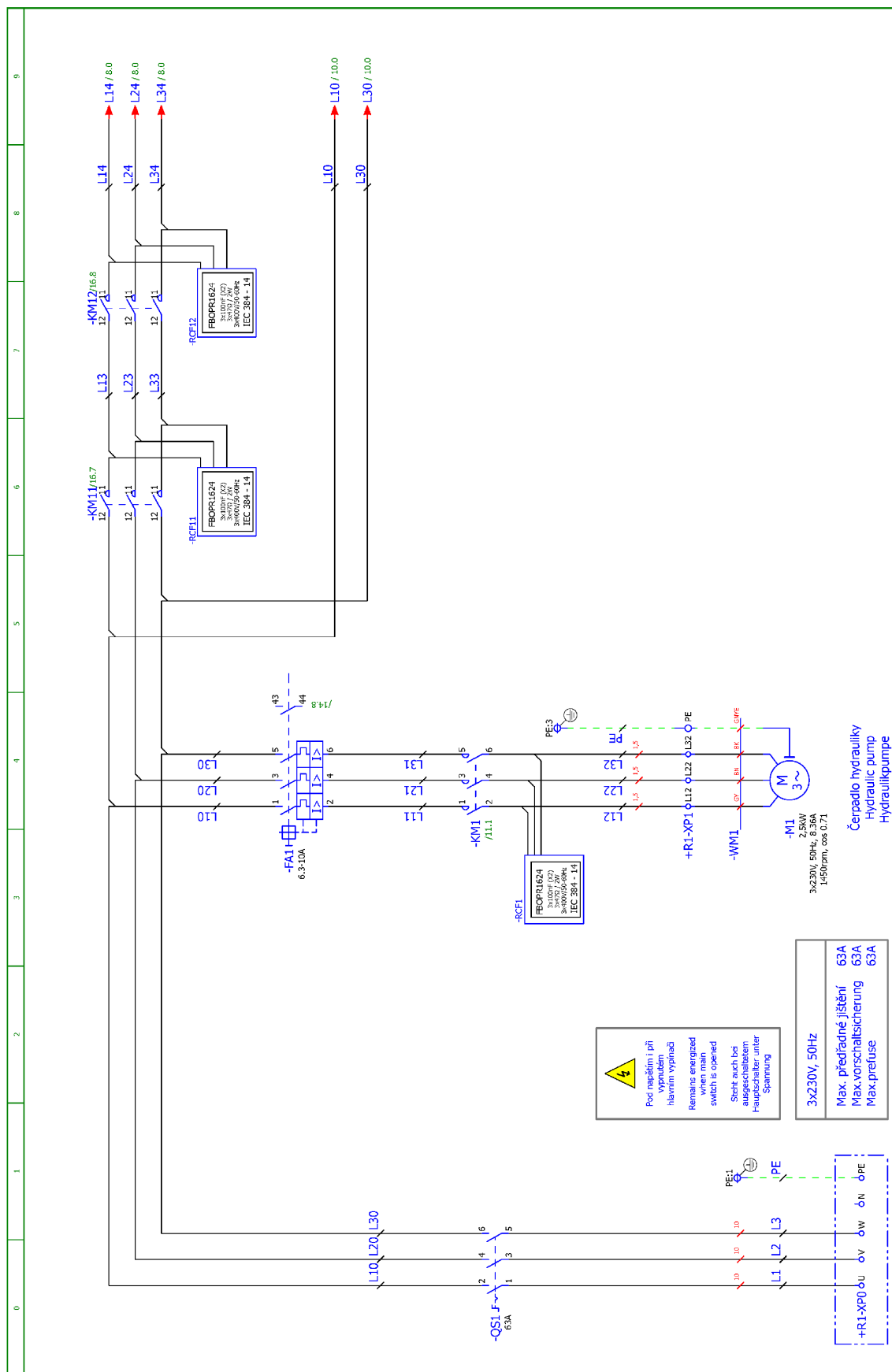
Datum/Date/Datum: 21.3.2016

Liší/Page/

Seite: 6

Liší/Page/

Seite: 23

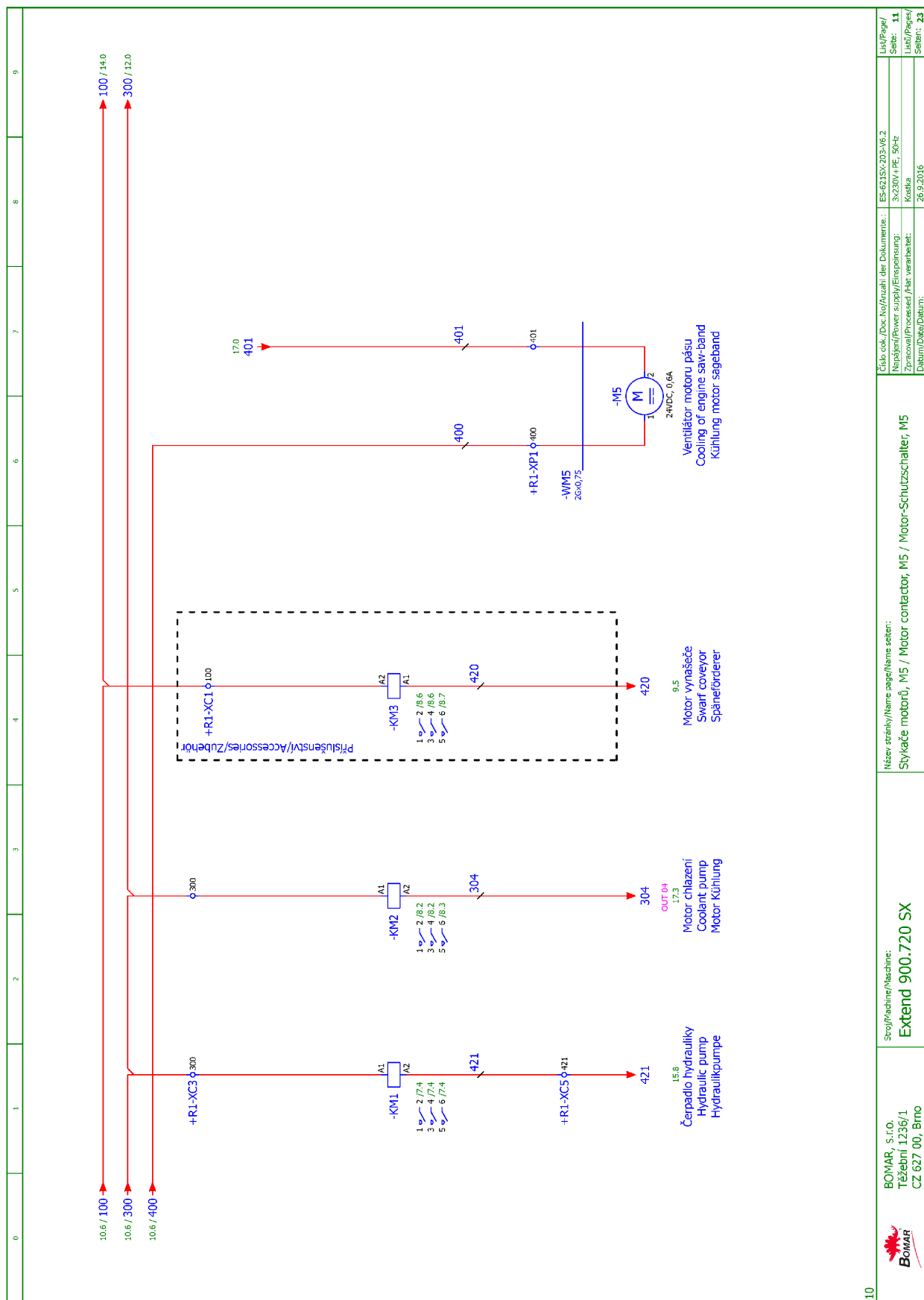


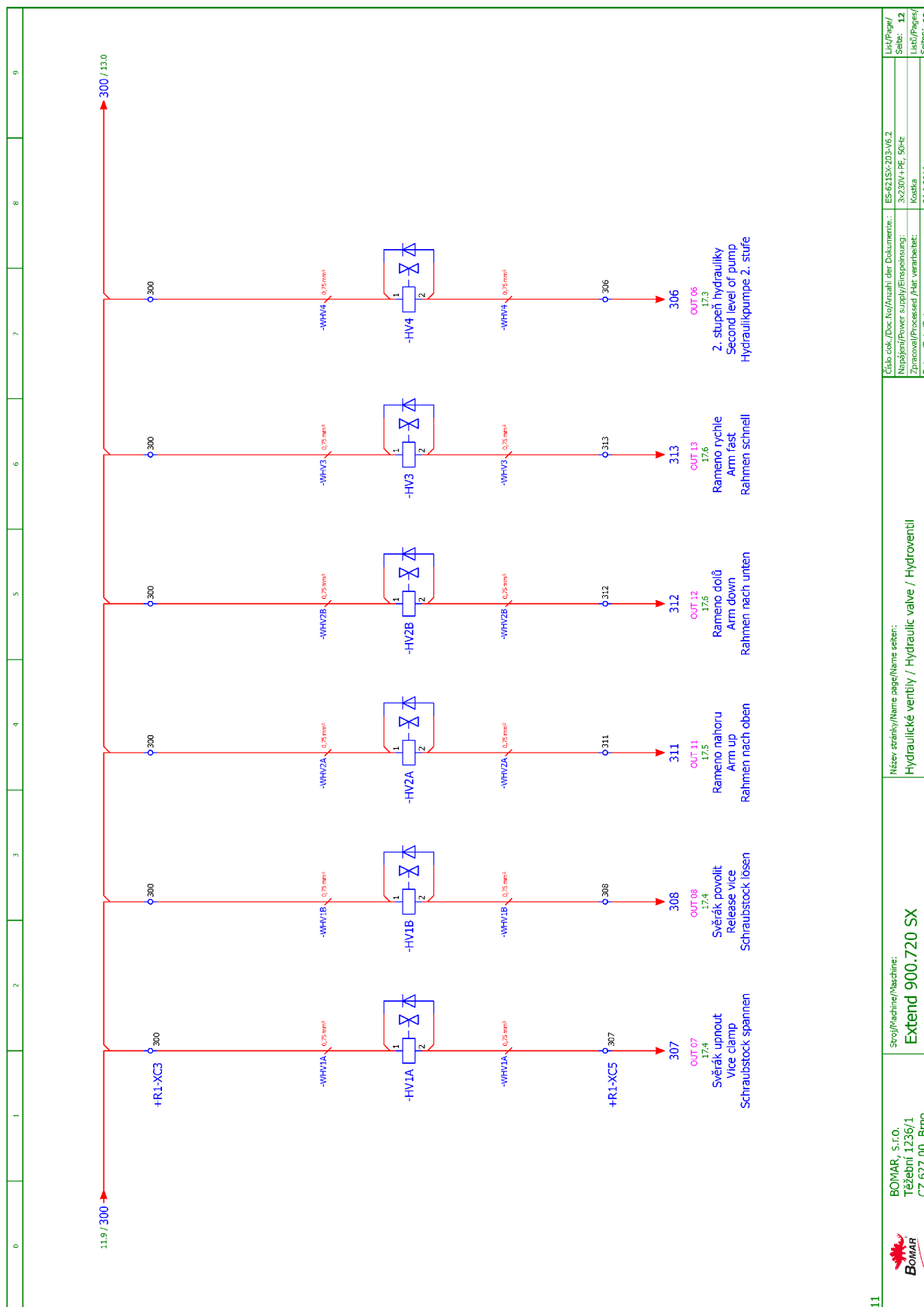


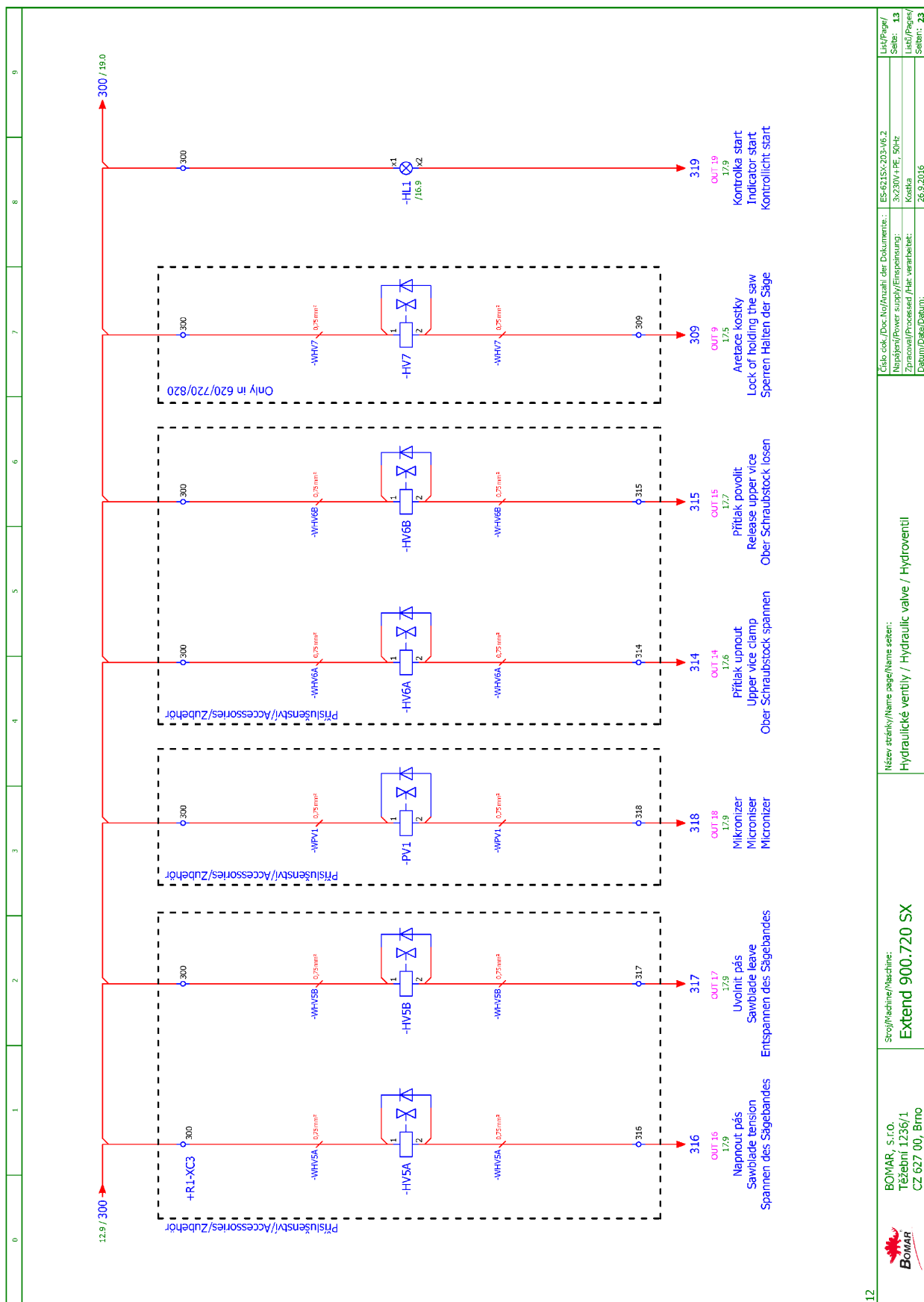


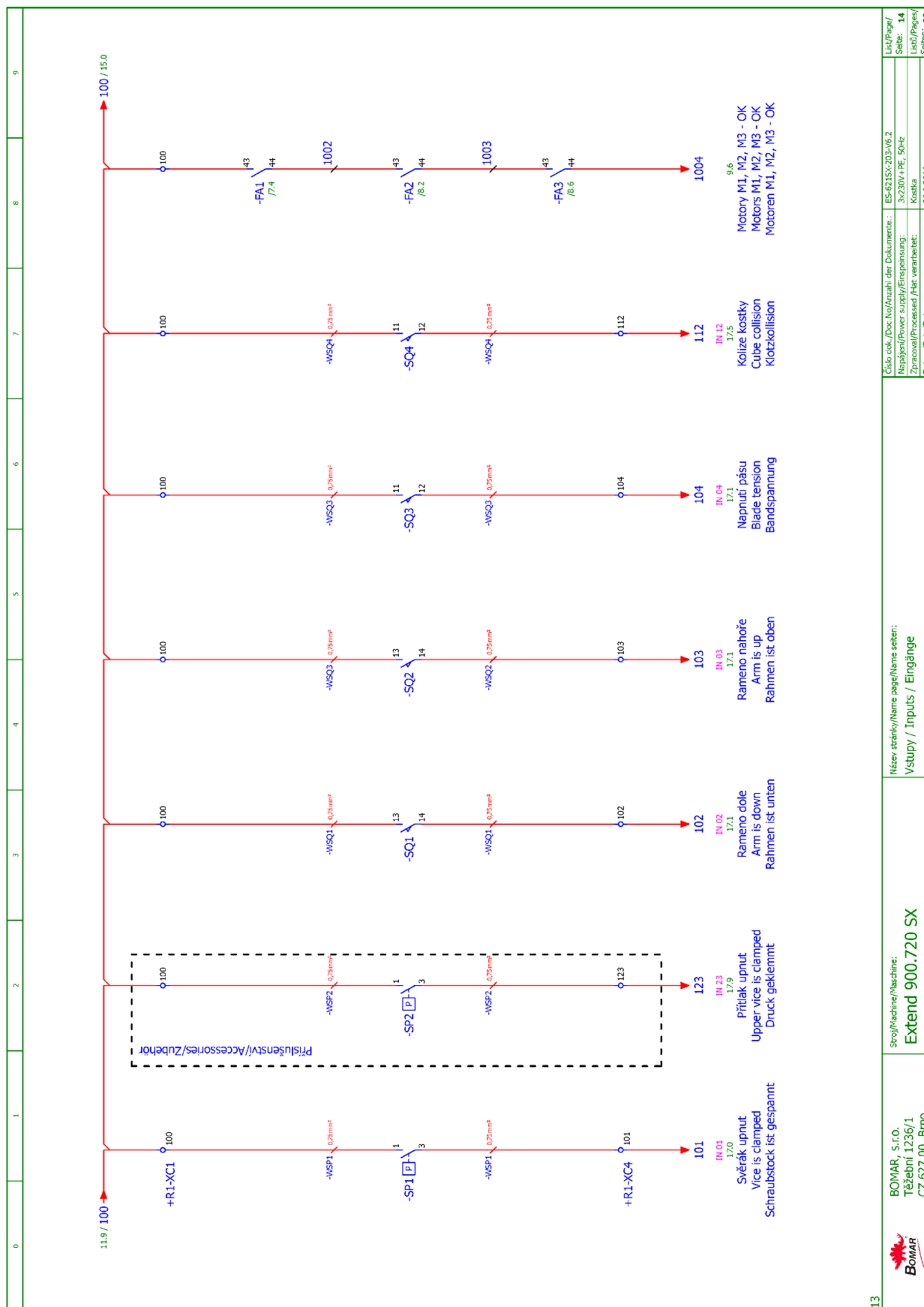
Potenciometr rychlost pásu
Potentiometerband speed
Potentiometer bandgeschwindigkeit

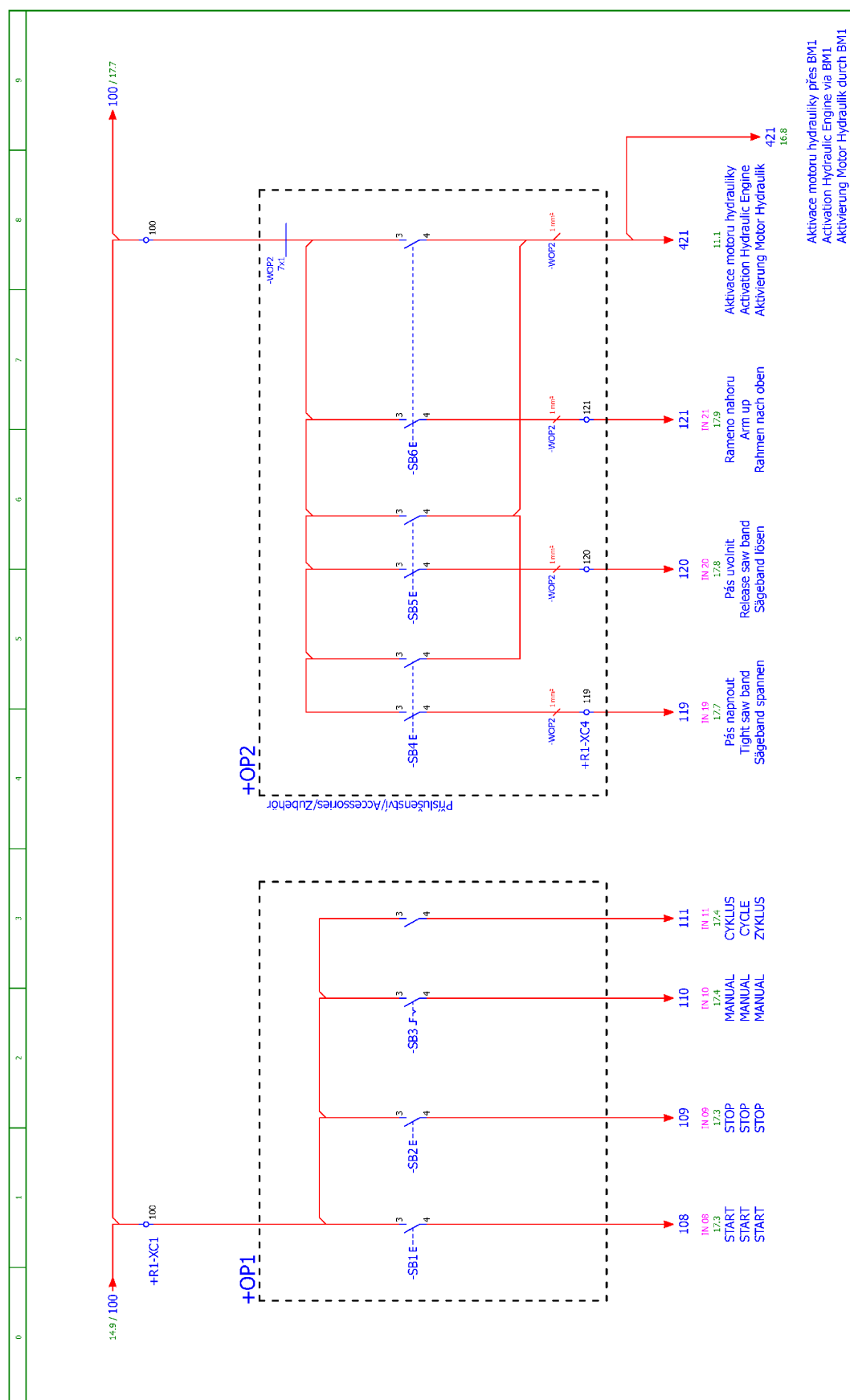


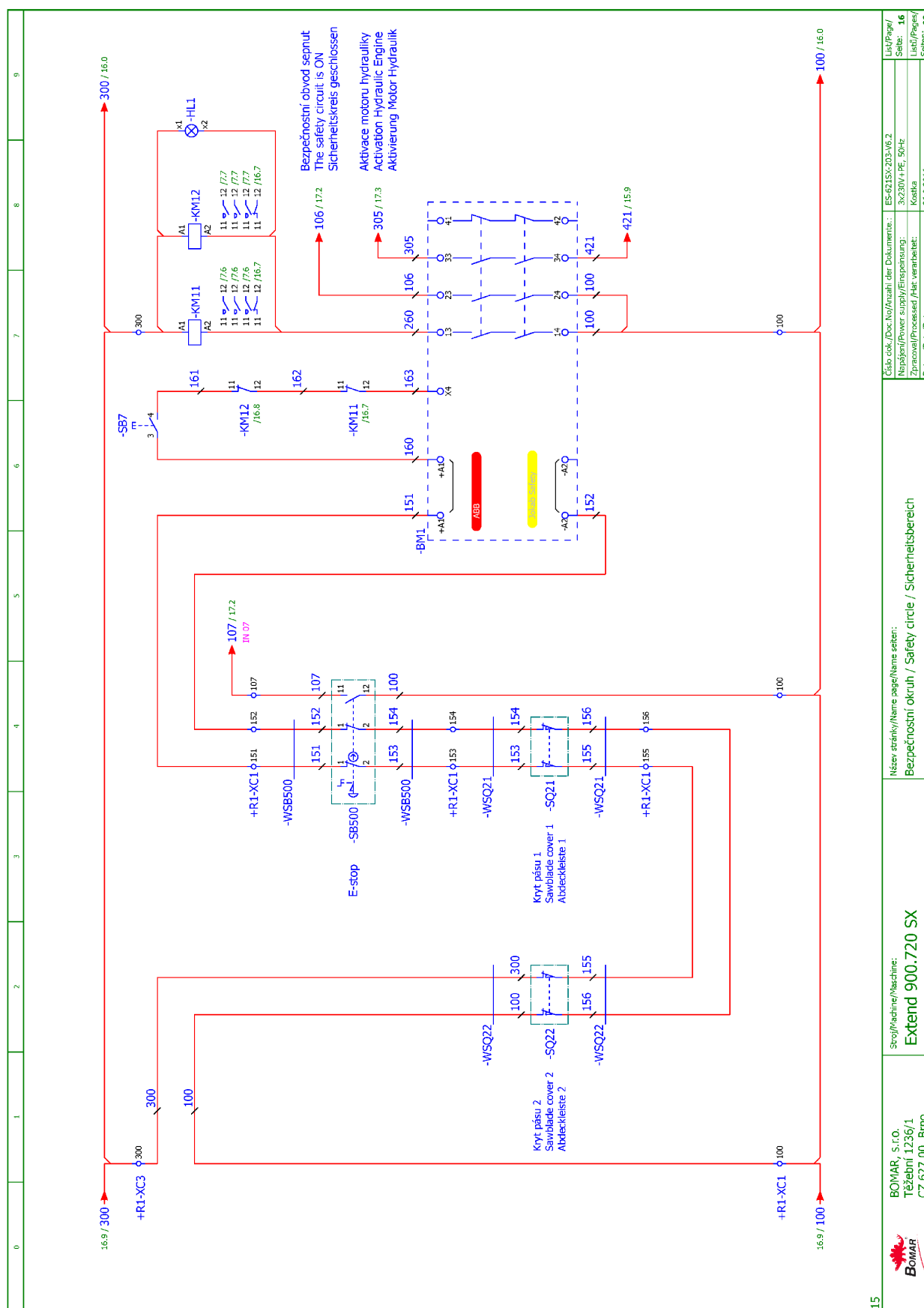


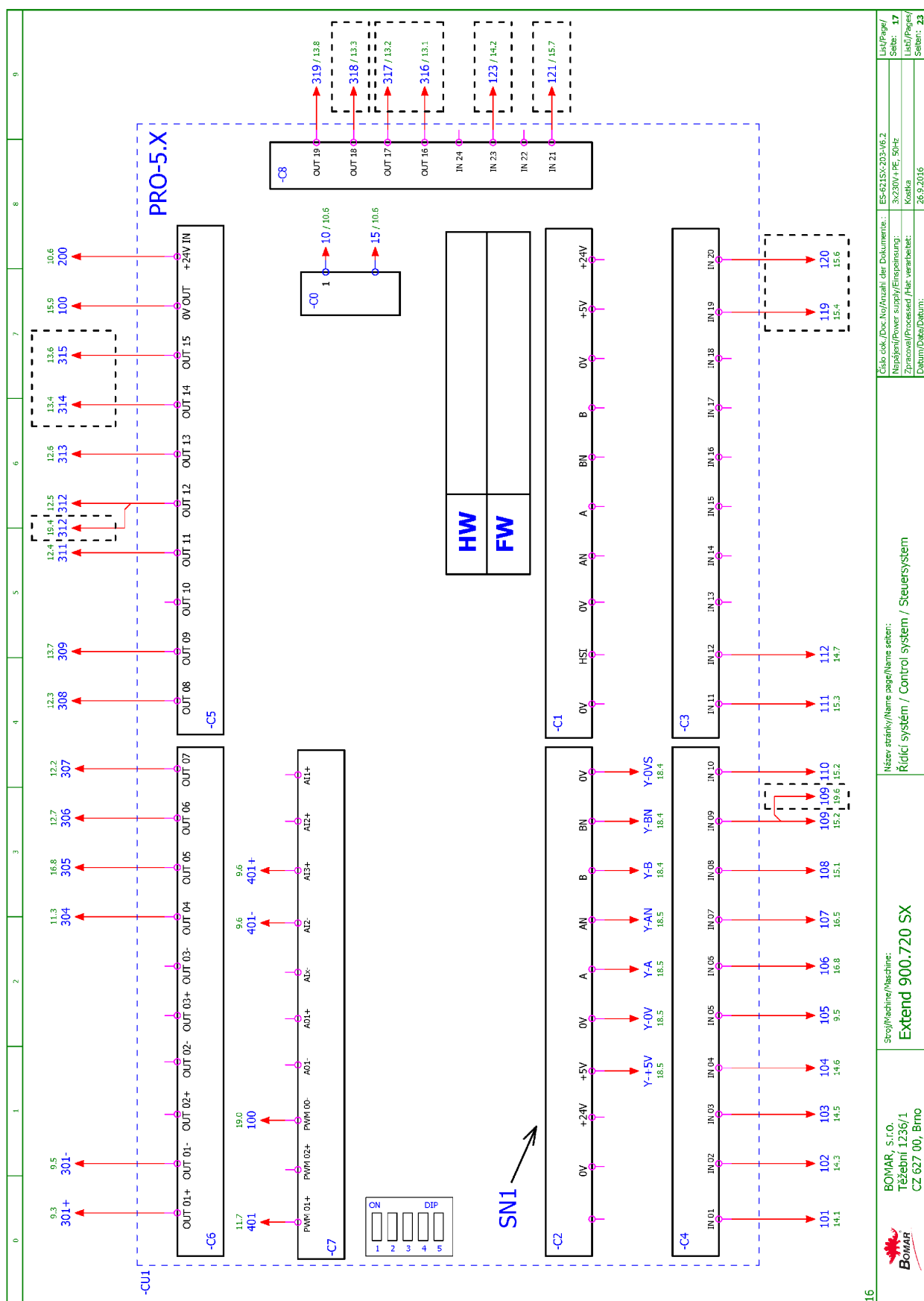








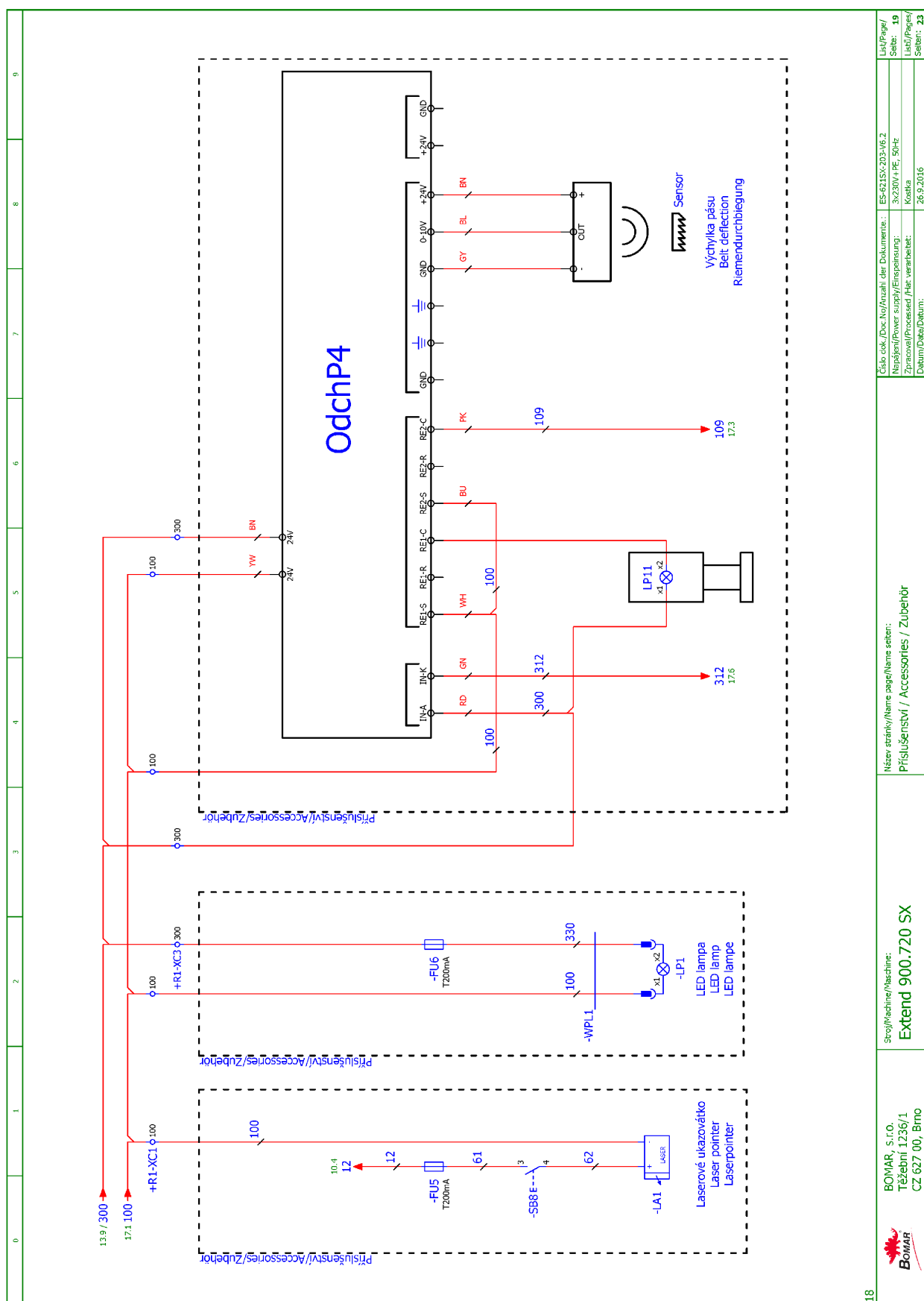






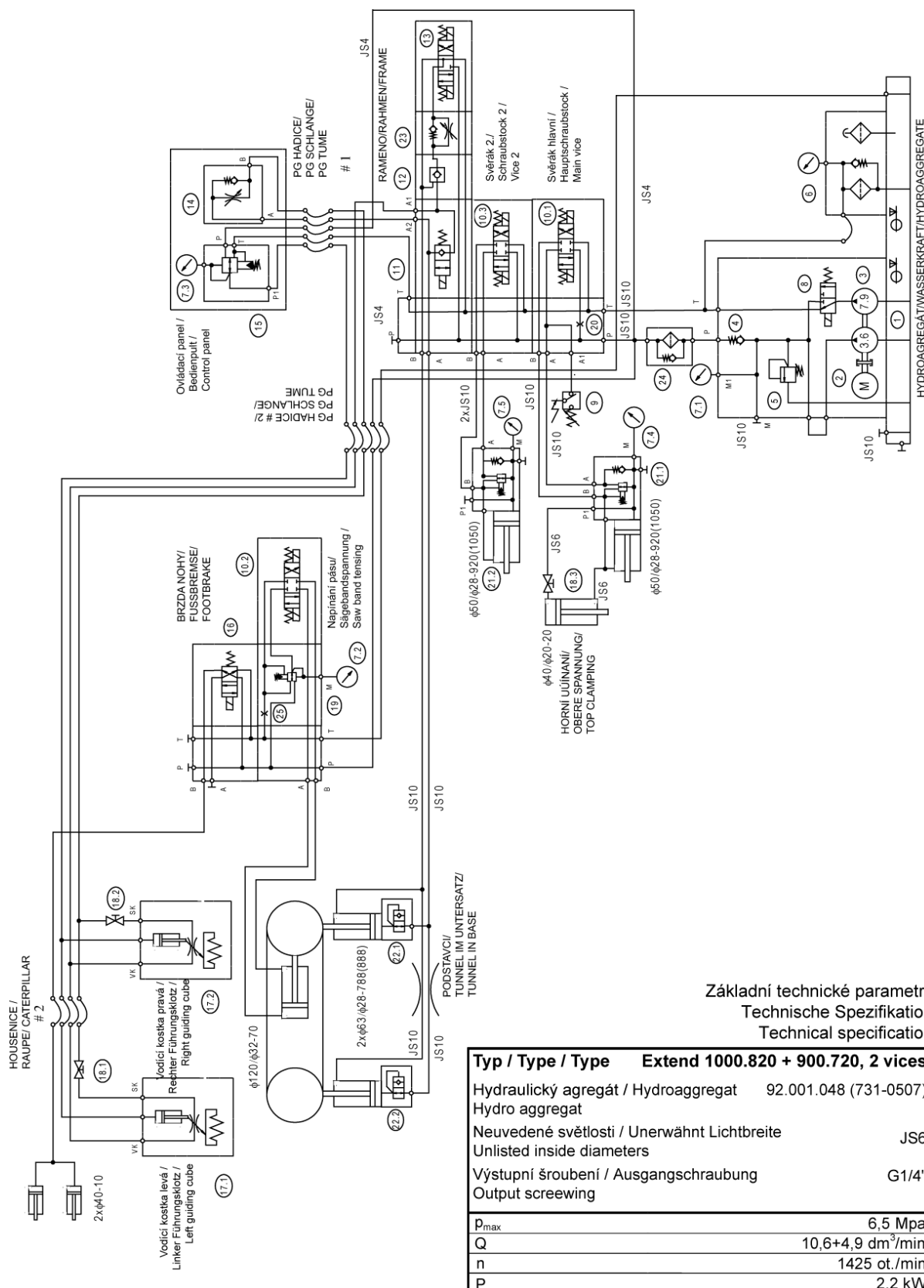
BOMAR, s.r.o.
Těšební 1236/1
CZ 627 00, Brno

Stroj/Machine/Maschine:
Extend 900.720 SX



Poz.	Název položky		ks
Pos.	Bezeichnung		Menge
Pos.	Item		Pcs.
1	Nádrž / Behälter / Tank	N30-BO	1
2	Elektromotor / Elektromotor / Electromotor	MA-AL100L 2,2 kW	1
3	Hydrogenerátor / Hydraulikgenerator / Hydrogenerator	P23-7,9/3,6 L65334	1
4	Jednosměrný ventil / Einwegventil / One-way valve	VJ01-06/SG-1	1
5	Přepouštěcí ventil / Bypassventil / By pass valve	VPN1-06/S-10S	1
6	Zpětný filtr / Filter / Filter	FR 043-166/0 10um	1
7	Manometr / Manometer / Manometer	Ø68 0 s glycerinem/mit glycerin/with glycerin	4(3)
8	Rozváděč / Schaltschrank / Switchboard	SD2E-A3/H2D21	1
9	Tlakový spínač / Druckschalter / Pressure switch 92.201.001	166415031059	1
10	Rozváděč / Schaltschrank / Switchboard	RPE3- 043Z11/02400E1K1	2
11	Blok rychloposuvu / Eilgangsblok / Speed shift block	729-0084	1
12	Hydraulický zámek / Hydraulisches Schloß / Hydraulic lock	VJR1-04/MA	1
13	Rozváděč / Schaltschrank / Switchboard	RPE3- 043Y11/02400E1K1	1
14	Škrťací ventil / Drosselventil / Throttle-valve	VS01-04/R2,5-0	1
15	Redukční ventil / Reduktionventil /Control valve	VRN2-06/S-6R	1
16	Rozváděč / Schaltschrank / Switchboard	RPE3- 042X11/02400E1K1	1
17	Kostka regulace / Regulationklotz / Regulation cube	201.6816-100	2
18	Kulový ventil /Kugelventil / Globe valve		3(2)
19	Redukční ventil / Reduktionventil /Control valve	VRP2-04/PS-6,9	1
20	Clona/Blende/Shield	Ø1,5	1
21	Redukční ventil / Reduktionventil /Control valve	VRN2-06/S-6R	1(0)
22	Pojistný ventil / Sicherungventil / Safety valve	VPNH 1/4	2
23	Krycí deska / Schutzplatte / Cover platte	DK 1-04/32-2	1
24	Tlakový filtr / Druckfilter / Pressure filter	D 042-153 (3µm)	1
25	Clona/Blende/Shield	Ø1,2	1
26	Škrťací ventil / Drosselventil / Throttle-valve	VS01-04/ME S	1

6.4. Hydraulické schéma / Hydraulikschema / Hydraulic diagram – 2 svěráky / 2 Schr. / 2 Vices

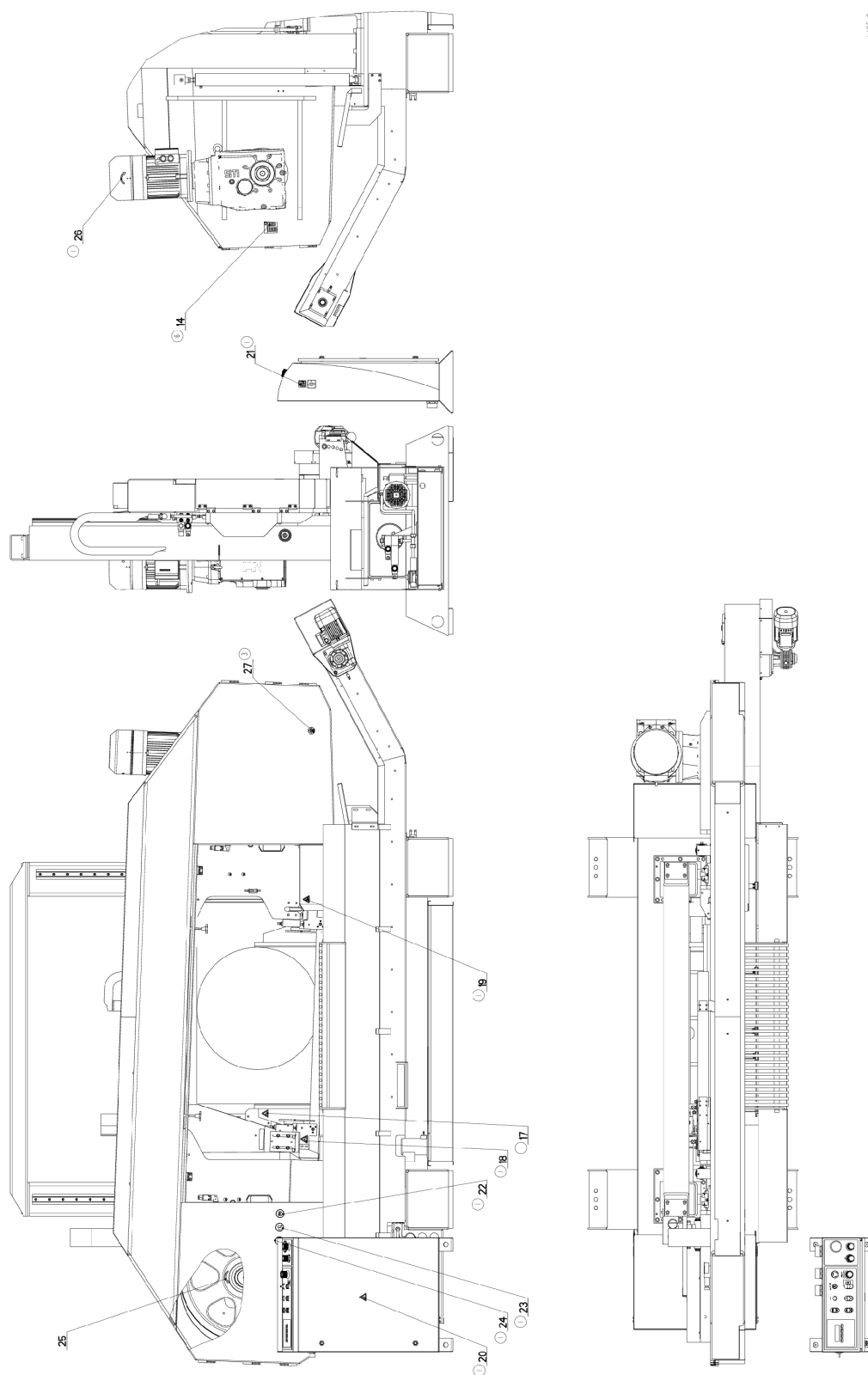


Poz.	Název položky		ks
Pos.	Bezeichnung		Menge
Pos.	Item		Pcs.
1	Nádrž / Behälter / Tank	N30-BO	1
2	Elektromotor / Elektromotor / Electromotor	MA-AL100L 2,2 kW	1
3	Hydrogenerátor / Hydraulikgenerator / Hydrogenerator	P23-7,9/3,6 L65334	1
4	Jednosměrný ventil / Einwegventil / One-way valve	VJ01-06/SG-1	1
5	Přepouštěcí ventil / Bypassventil / By pass valve	VPN1-06/S-10S	1
6	Zpětný filtr / Filter / Filter	FR 043-166/0 10um	1
7	Manometr / Manometer / Manometer	Ø68 0 s glycerinem/mit glycerin/with glycerin	5(3)
8	Rozváděč / Schaltschrank / Switchboard	SD2E-A3/H2D21	1
9	Tlakový spínač / Druckschalter / Pressure switch 92.201.001	166415031059	1
10	Rozváděč / Schaltschrank / Switchboard	RPE3- 043Z11/02400E1K1	1
11	Blok rychloposuvu / Eilgangsblok / Speed shift block	729-0084	1
12	Hydraulický zámek / Hydraulisches Schloß / Hydraulic lock	VJR1-04/MA	1
13	Rozváděč / Schaltschrank / Switchboard	RPE3- 043Y11/02400E1K1	1
14	Škrťací ventil / Drosselventil / Throttle-valve	VS01-04/R2,5-0	1
15	Redukční ventil / Reduktionventil /Control valve	VRN2-06/S-6R	1
16	Rozváděč / Schaltschrank / Switchboard	RPE3- 042X11/02400E1K1	1
17	Kostka regulace / Regulationklotz / Regulation cube	201.6816-100	2
18	Kulový ventil /Kugelventil / Globe valve		3(2)
19	Redukční ventil / Reduktionventil /Control valve	VRP2-04/PS-6,9	1
20	Clona/Blende/Shield	Ø1,5	1
21	Redukční ventil / Reduktionventil /Control valve	VRN2-06/S-6R	2(0)
22	Pojistný ventil / Sicherungventil / Safety valve	VPNH 1/4	2
23	Škrťací ventil / Drosselventil / Throttle-valve	VS01-04/ME S	1
24	Tlakový filtr / Druckfilter / Pressure filter	D 042-153 (3µm)	1
25	Clona/Blende/Shield	Ø1,2	1

**7. Výkresy sestav pro
objednání náhradních
dílů /
Zeichnungen für
Bestellung der
Ersatzteile /
Drawing assemblies for
spare parts order**

- Při objednávání náhradních dílů vždy uvádějte: typ stroje (např. practix Extend 900.720) , výrobní číslo (např. 125) a rok výroby (např. 1999).
- In die Bestellung der Ersatzteile führen Sie immer an: Maschinentyp (z. B. Extend 900.720), Serien Nr. (z. B. 125) und Baujahr (z. B. 1999).
- For spare parts order, you must always to allege: type of machine (for example Extend 900.720), serial number (for example 125, see cover page) and year of construction (for example 1999).

7.1. Extend 900.720



LIST 2

NOME DEL MODELLO	COLORE DEL MODELLO	ESCLUSIVO
P.L.A. PASOVA	20 - 6700 - 100	EX 720
REQUISITI SPECIALI	20 - 6700 - 100	EX 720
REQUISITI SPECIALI	20 - 6700 - 100	EX 720
REQUISITI SPECIALI	20 - 6700 - 100	EX 720
REQUISITI SPECIALI	20 - 6700 - 100	EX 720

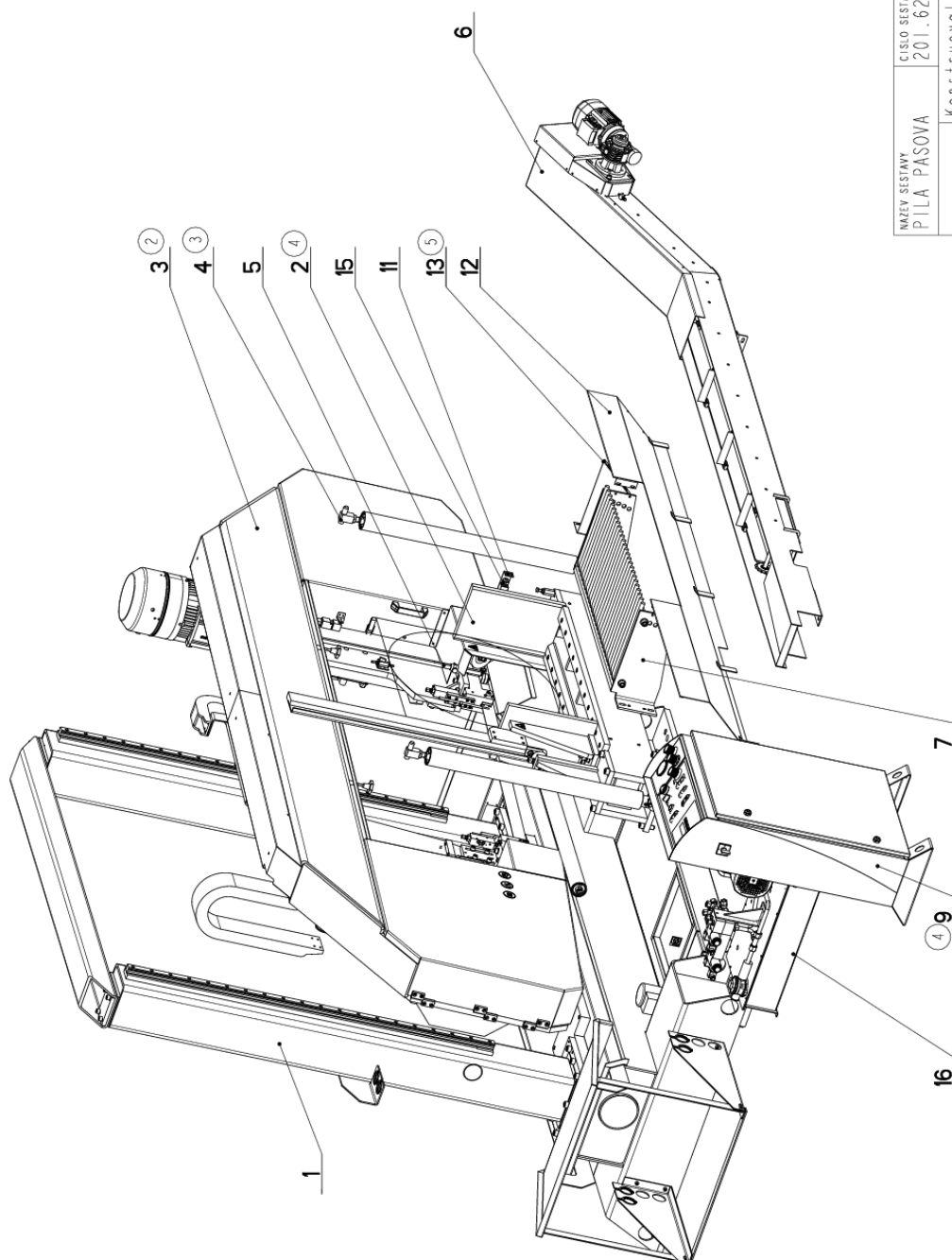
7.2. Kusovník / Piece list / Stückliste - Extend 900.720

Císlo Sestavy 201.6200-100		Ver. 6	Název sestavy PILA PASOVA/BAND SAW/BANDSÄGE			
Poz.	Objednací číslo	Ver.	Název položky	Rožmer	Ks	
1	201.6201-100	3	PODSTAVEC / BASE / UNTERSATZ		1	
2	201.6203-150 (4)	0	SVERAK / VICE / SCHRAUBSTOCK		1	
3	201.6204-200 (2)	5	RAMENO / SHOULDER / SÄGERAHMEN		1	
4	201.6207-600 (3)	3	VALEC ZVEDACI / LIFTING CYLINDER / HEBEZYLINDER		2	
5	201.6214-020	0	ODMEROVANI / MEASURING / GEHRUNGSMESSUNG		1	
6	201.6217-100	4	VYNASEC TRISKOVY / CHIP EXTRACTOR / SPANABFÜHRUNG		1	
7	201.6218-100	0	ROST / GRILL / GITTER		1	
8	201.6299-100	0	SAMOLEPKA / STICKER / AUFLEBER		1	
9	201.Y430-000 (4)	2	OVLADACI PANEL / CONTROL PANEL / BEDIENPULT		1	
10	202.6220-100 (1)	6	PRISLUSENSTVI / /		1	
11	30.6104-006	0	DRZAK / HOLDER / HALTER	P 3x35	1	
12	30.6214-154	2	KRYT / COVER / ABDECKUNG		1	
13	30.6214-159 (5)	0	KRYT / COVER / ABDECKUNG	P 2x466	1	
14	30.6299-101 (6)	4	STITEK TYPOVY / MACHINE LABEL / MASCHINE SCHILD	P 0.5x65	1	
15	91.173.009	0	SPINAC KONCOVY / END SWITCH / ENDSCHALTER		1	
16	92.001.048	0	AGREGAT HYDRAULICKY / HYDRAULIC GENERATOR / HYDRAULIKAGGREGAT		1	
17	99.900.039 (1)	0	SAMOLEPKA / STICKER / AUFLEBER	NEBEZP.STLACENI	1	
18	99.900.040 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		1	
19	99.900.043 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		1	
20	99.900.045 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		1	
21	99.900.046 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		1	
22	99.900.047 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		1	
23	99.900.048 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		1	
24	99.900.049 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		1	
25	99.900.050 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		2	
26	99.900.051 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		1	
27	99.901.032 (3)	0	SAMOLEPKA / STICKER / AUFLEBER	CETIFIKACNI SAMOLEPKA	1	

1. PRIDANY DO KUSOVNIKU BEZPECNISTNI SAMOLEPKY, PRID. PRISLUSENSTVI 202.6220-100 26.4.07 RYSAVY 1507/M178,289
2. ZRUSENO RAMENO 201.6204-100 A NAHRAZENO RAMENEM 201.6204-200. 137/ZM328 7.10.2008 SLEZACKOVA
3. ZRUS. VALEC 201.6207-500 A NAHR. 201.6207-600. DOPL. CERTIFIKACNI SAMOLEPKA 99.901.032 . 040/ZM226-3 26.8.2010 SLEZACKOVA
4. ZRUS. SVERAK 201.6203-100 A NAHR. 201.6203-150, ZRUS. ROZVADEC 201.6230-100 A NAHR. 201.Y430-000. 002/ZM017 23.1.2012 SLEZACKOVA
5. ZRUSEN KRYT 30.6214-156 A NAHR. 30.6214-159. 009/ZM199 27.8.2015 SLEZACKOVA
6. ZRUSEN TYPOVY STITEK 31.6299-101 A NAHR. 30.6299-101. 095/ZM251 26.7.2017 SLEZACKOVA

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version); Název sestavy/Assembly title/Name der Baugruppe; Pozice (Pos./Position/Position);
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rožmer/Stock size/Abmessung

7.3. Extend 900.720



LIST I

NAZEV SESTAVY PILA PASOVA	CISLO SESTAVY 201.6200-100	STROJ EX 720
Konstruoval:		
Datum: 22. 04.2015		
Meritko: 667:10000		

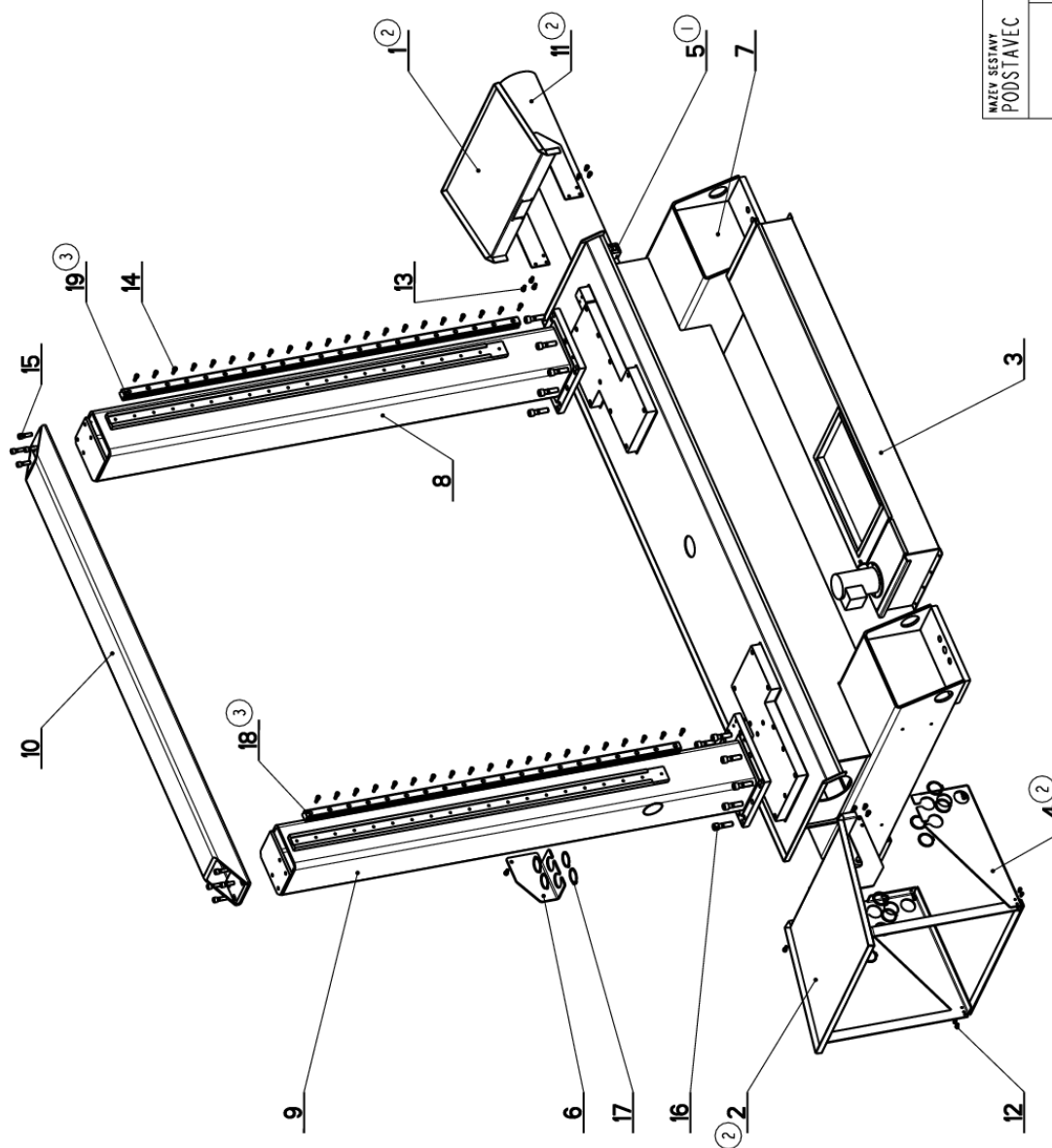
7.4. Kusovník / Piece list / Stückliste - Extend 900.720

Císlo Sestavy 201.6200-100		Ver. 6	Název sestavy PILA PASOVA/BAND SAW/BANDSÄGE			
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks	
1	201.6201-100	3	PODSTAVEC / BASE / UNTERSATZ		1	
2	201.6203-150 (4)	0	SVERAK / VICE / SCHRAUBSTOCK		1	
3	201.6204-200 (2)	5	RAMENO / SHOULDER / SÄGERAHMEN		1	
4	201.6207-600 (3)	3	VALEC ZVEDACI / LIFTING CYLINDER / HEBEZYLINDER		2	
5	201.6214-020	0	ODMEROVANI / MEASURING / GEHRUNGSMESSUNG		1	
6	201.6217-100	4	VYNASEC TRISKOVY / CHIP EXTRACTOR / SPANABFÜHRUNG		1	
7	201.6218-100	0	ROST / GRILL / GITTER		1	
8	201.6299-100	0	SAMOLEPKA / STICKER / AUFLEBER		1	
9	201.Y430-000 (4)	2	OVLADACI PANEL / CONTROL PANEL / BEDIENPULT		1	
10	202.6220-100 (1)	6	PRISLUSENSTVI / /		1	
11	30.6104-006	0	DRZAK / HOLDER / HALTER	P 3x35	1	
12	30.6214-154	2	KRYT / COVER / ABDECKUNG		1	
13	30.6214-159 (5)	0	KRYT / COVER / ABDECKUNG	P 2x466	1	
14	30.6299-101 (6)	4	STITEK TYPOVY / MACHINE LABEL / MASCHINE SCHILD	P 0.5x65	1	
15	91.173.009	0	SPINAC KONCOVY / END SWITCH / ENDSCHALTER		1	
16	92.001.048	0	AGREGAT HYDRAULICKY / HYDRAULIC GENERATOR / HYDRAULIKAGGREGAT		1	
17	99.900.039 (1)	0	SAMOLEPKA / STICKER / AUFLEBER	NEBEZP.STLACENI	1	
18	99.900.040 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		1	
19	99.900.043 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		1	
20	99.900.045 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		1	
21	99.900.046 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		1	
22	99.900.047 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		1	
23	99.900.048 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		1	
24	99.900.049 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		1	
25	99.900.050 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		2	
26	99.900.051 (1)	0	SAMOLEPKA / STICKER / AUFLEBER		1	
27	99.901.032 (3)	0	SAMOLEPKA / STICKER / AUFLEBER	CETIFIKACNI SAMOLEPKA	1	

- PRIDANY DO KUSOVNIKU BEZPECNOSTNI SAMOLEPKY, PRID. PRISLUSENSTVI 202.6220-100 26.4.07 RYSAVY 1507/M178,289
- ZRUSENO RAMENO 201.6204-100 A NAHRAZENO RAMENEM 201.6204-200. 137/ZM328 7.10.2008 SLEZACKOVA
- ZRUS. VALEC 201.6207-500 A NAHR. 201.6207-600. DOPL. CERTIFIKACNI SAMOLEPKA 99.901.032 . 040/ZM226-3 26.8.2010 SLEZACKOVA
- ZRUS. SVERAK 201.6203-100 A NAHR. 201.6203-150, ZRUS. ROZVADEC 201.6230-100 A NAHR. 201.Y430-000. 002/ZM017 23.1.2012 SLEZACKOVA
- ZRUSEN KRYT 30.6214-156 A NAHR. 30.6214-159. 009/ZM199 27.8.2015 SLEZACKOVA
- ZRUSEN TYPOVY STITEK 31.6299-101 A NAHR. 30.6299-101. 095/ZM251 26.7.2017 SLEZACKOVA

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version); Název sestavy/Assembly title/Name der Baugruppe; Pozice (Pos./Position/Position);
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.5. Podstavec / Base / Untersatz



NÁZEV SESTAVY PODSTAVEC	ČÍSLO SESTAVY 201.6201-100	STŘOJ EXT20
Konstruoval: HOLCNER		
Datum: 18. 04. 2012		
Měřítko: 7:100		

7.6. Kusovník / Piece list / Stückliste -
Podstavec / Base / Untersatz

Císlo Sestavy 201.6201-100	Ver. 3	Název sestavy PODSTAVEC/BASE/UNTERSATZ			
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.6201-111	2	KRYT / COVER / ABDECKUNG	SESTAVA	1
2	201.6201-121	2	KRYT / COVER / ABDECKUNG		1
3	201.6206-100	0	CHLAZENÍ / COOLING / KÜHLUNG		1
4	30.6101-110	2	DRŽÁK / HOLDER / HALTER		1
5	30.6101-111	1	DRŽÁK / HOLDER / HALTER	PROFIL 40x40x4	1
6	30.6114-136	1	DRŽÁK / HOLDER / HALTER	P5x210	1
7	30.6201-101	4	PODSTAVEC / BASE / UNTERSATZ		1
8	30.6201-102	1	SLOUP / POLE / SAULE		1
9	30.6201-103	1	SLOUP / POLE / SAULE		1
10	30.6201-104	0	PRICKA / BRACE / QUERLATTE		1
11	30.6201-109	2	TRUBKA / TUBE / ROHR	D 150	1
12	90.001.25.016	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M6x12	4
13	90.001.25.031	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	8x16	18
14	90.001.25.033	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	8x25	41
15	90.001.25.060	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M12x40	8
16	90.001.25.092	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M16x60	16
17	95.800.019	0	SEGR HRÍDEL. / OUTSIDE SAFETY RING / SICHERUNGSRING AUFEN	POJISTNÝ KROUŽEK 52	12
18	99.200.278	3	VEDENÍ LINEARNÍ / LINEAR GUIDE / LINEARE FÜHRUNG	MSA 35R 1560 E=20	1
19	99.200.279	3	VEDENÍ LINEARNÍ / LINEAR GUIDE / LINEARE FÜHRUNG	MSA 35R 1650 E=25	1

1. PRIDANA SOUCAST 30.6101-111 ZM-102 7.3.2007 RYSAVY

2. ZRUS. KRYTY 201.6114-134, 201.6114-131 A NAHRAZENY 201.6201-111, 201.6201-121, ZRUS. TRUBKA 30.6101-109 A NAHR. 30.6201-109.

ZRUS. SOUC. 30.6101-101-5, 30.6101-101-6, 30.6101-101-8 A NAHR. SVARKEM 30.6101-1110, 031/ZM098 30.6.2010 SLEZACKOVA

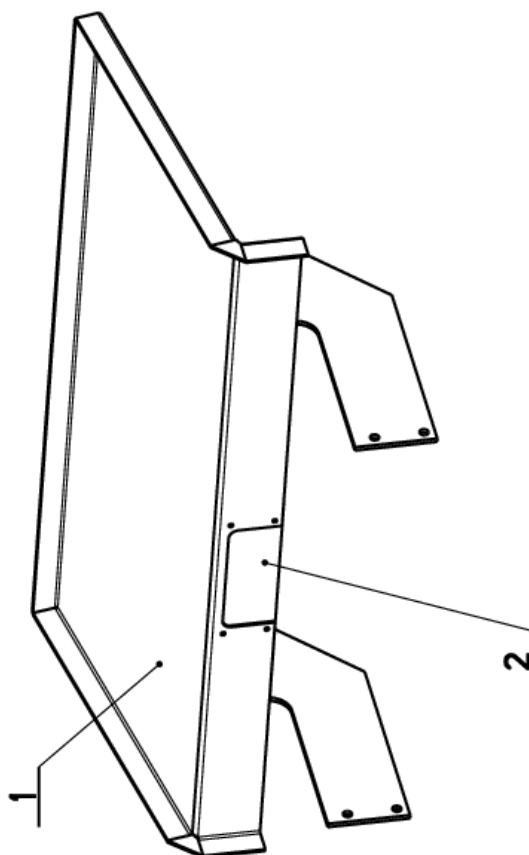
3. ZRUS. LIN. VEDENÍ 99.200.070(HIWIN) A NAHR. 99.200.278(PMI), ZRUS. LIN. VEDENÍ 99.200.072(HIWIN) A NAHR. 99.200.200(PMI).

056/ZM129 18.4.2012 SLEZACKOVA

7.7. Kryt/ Cover/ Abdeckung

Cislo Sestavy 201.6201-III		Ver. 0	Název sestavy KRYT/COVER/ABDECKUNG	
Poz.	Objednací číslo	Ver.	Název položky	Ks
1	30.6201-110	0	SKLIZ / SLIDE / RUTSCH	I
2	31.6114-129	0	DESKA / BOARD / PLATTE	2x81

GUMOVE TESNENI LEPIT, PRI MONTAZI NARIZNOUT PODLE TRUBEK HYDRAULIKY

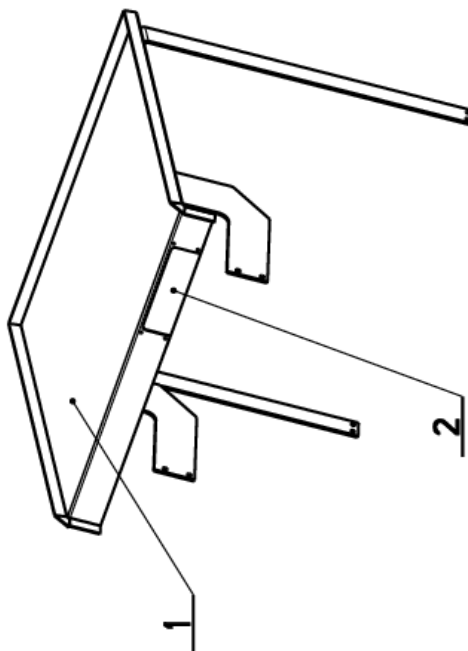


Cislo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.8. Kryt/ Cover/ Abdeckung

Cislo Sestavy 201.6201-121		Ver. 0	Název sestavy KRYT/COVER/ABDECKUNG		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.6201-120	0	SKLIZ / SLIDE / RUTSCH		1
2	31.6114-129	0	DESKA / BOARD / PLATTE	2x81	1

GUMOVE TESNENI LEPIT,PRI MONTAZI NARIZNOUIT PODLE TRUBEK HYDRAULIKY

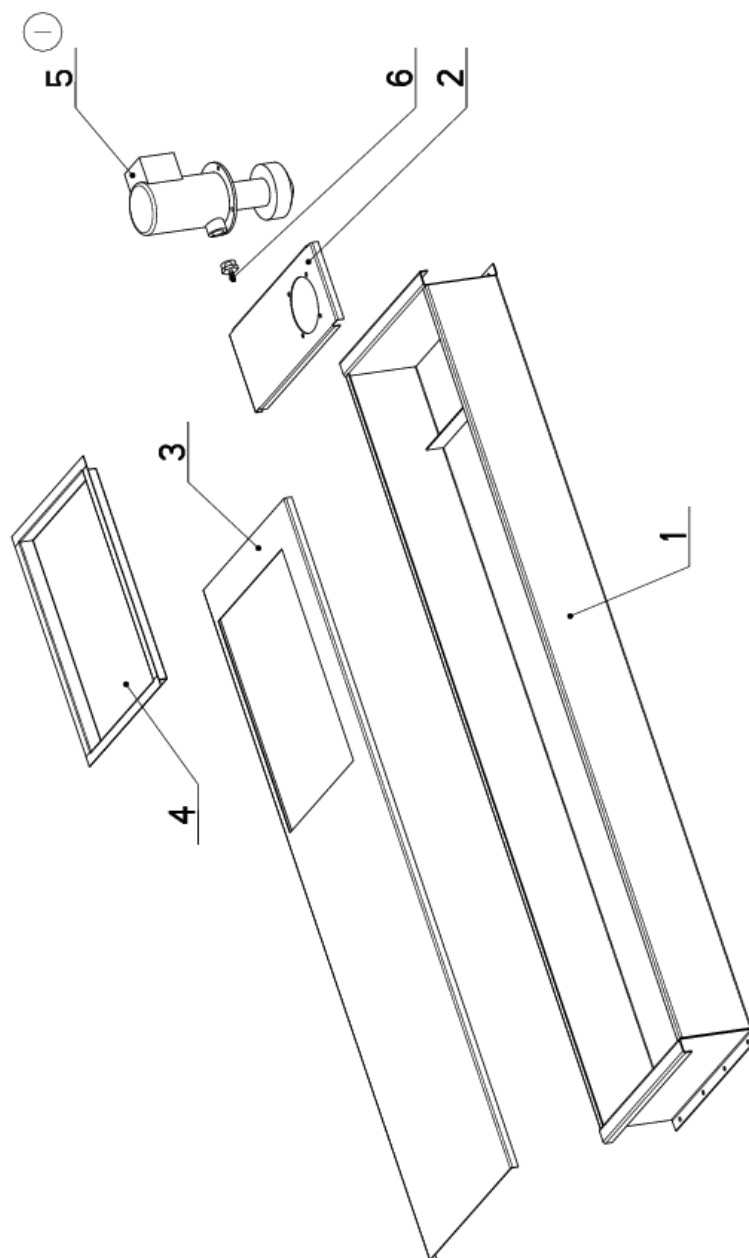


Cislo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.9. Chlazení/ Cooling/ Kühlung

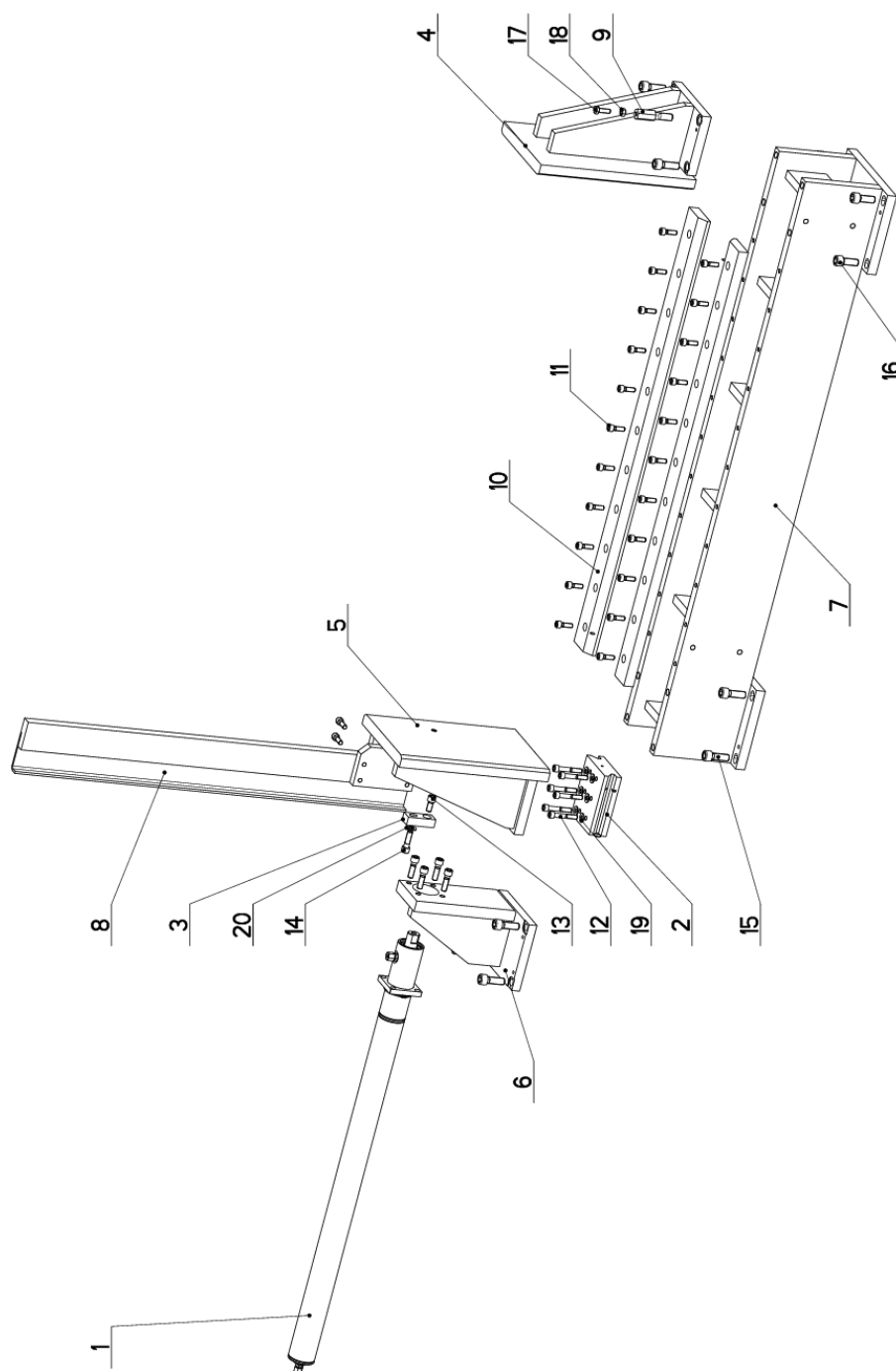
Císlo Sestavy 201.6206-100		Ver. I	Název sestavy CHLAZENÍ / COOLING / KÜHLUNG		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.6206-101	I	VANA / TANK / WANNE		I
2	30.6206-102	0	PLECH / PLATE / BLECH	P 1.5x186	I
3	30.6206-103	0	KRYT / COVER / ABDECKUNG	P 1.5 - 410	I
4	30.6206-104	0	SÍTO / SIEVE / GITTERWERK	P 1x387	I
5	91.020.016	0	CERPADLO / PUMP / PUMPE	4COM4-14HP I	I
6	94.202.005	0	REDUKCE / REDUCTION / ADAPTOR / REDUKTION	3/4"-6	I

I. ZRUSENO CERPADLO 91.020.009 A NAHR. 91.020.016. 009/ZM216 23.9.2015 SLEZACKOVA



Cislo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.10. Svěrák / Vice / Schraubstock



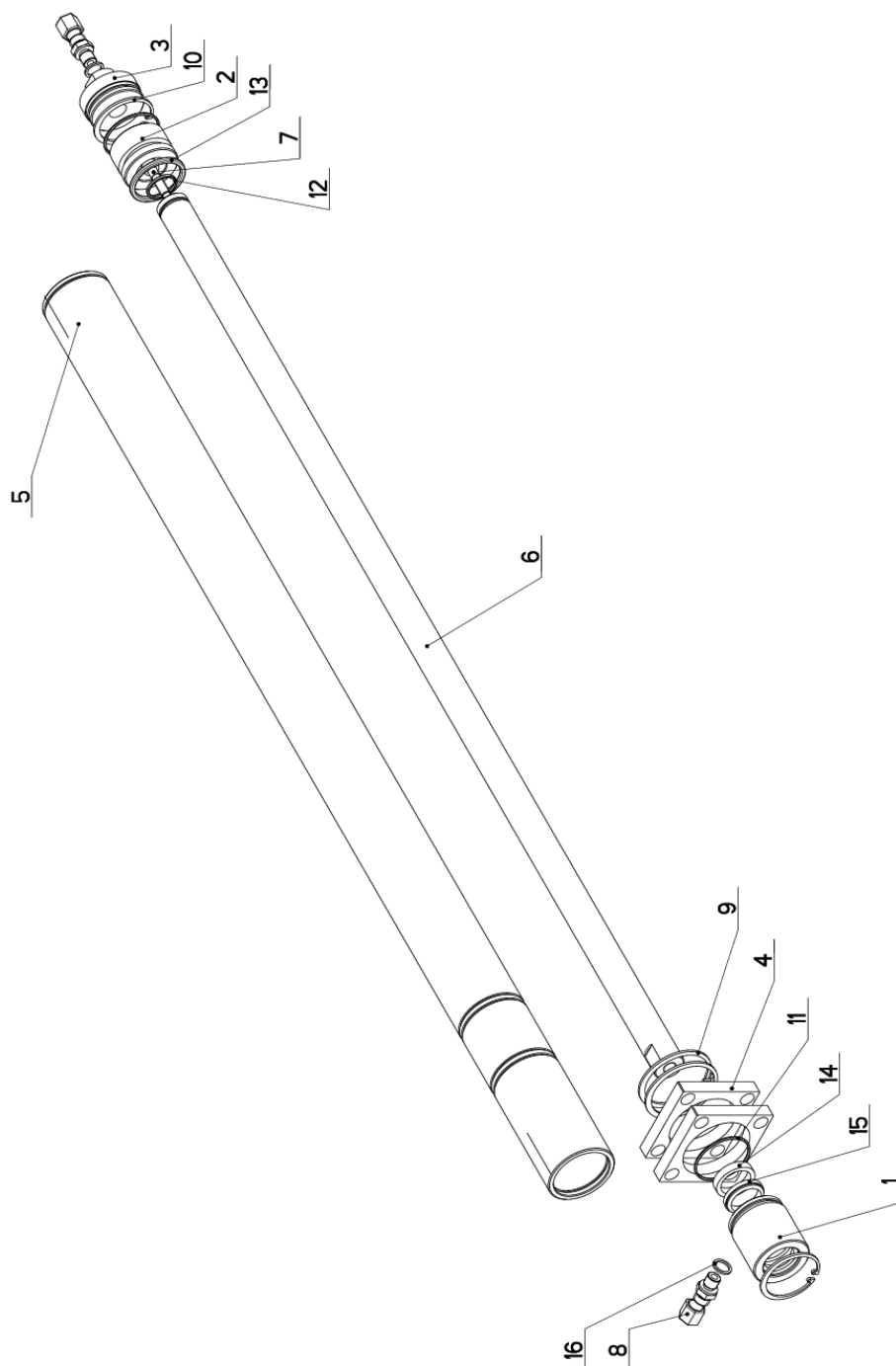
NÁZEV SOUSTAVY SVĚRÁK	ČÍSLO SOUSTAVY 201.6203-150	STROJ EX 720
Konstruoval: HOLCNER		
Datum: 23. 06. 2016		
Měřítko: 1:100		

7.11. Kusovník / Piece list / Stückliste - Svěrák / Vice / Schraubstock

Císlo Sestavy 201.6203-150		Ver. 0	Název sestavy SVĚRAK/VICE/SCHRAUBSTOCK		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.6207-100	0	VALEC SVĚRAKU / VICE CYLINDER / SCHRAUBSTOCKZYLINDER		1
2	30.6003-552	0	KLUZAK / GLIDER / GLEITER	HR 130x50	1
3	30.6103-005	0	DRŽAK / HOLDER / HALTER	HR 30x20	1
4	30.6203-001	3	CELIST PEVNÁ / SOLID JAW / FESTE BACKE		1
5	30.6203-102	4	CELIST POHYBLIVÁ / MOVING JAW / BEWEGLICHE BACKE		1
6	30.6203-108	0	KONZOLA / CONSOLE / KONSOLE		1
7	30.6203-109	4	PODSTAVEC SVĚRAKU / VICE BASE / SCHRAUBSTOCKUNTERSATZ		1
8	30.6203-110	0	LISTA VODÍČI / LEAD TRIM / FÜHRUNGSLISTE		1
9	30.6203-111	0	DORAZ / STOP PIECE / ANSCHLAG	TYC 6HR 22	1
10	30.6203-151	0	LISTA SVĚRAKU / VICE TRIM / SCHRAUBSTOCKLEISTE	HR 82x27	2
11	90.001.25.048	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x30	26
12	90.001.25.054	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x60	6
13	90.001.25.057	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M12x25	1
14	90.001.25.060	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M12x40	5
15	90.001.25.074	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M16x45	11
16	90.001.25.086	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M16x40	4
17	90.005.55.025	0	SROUB 6HRANNÝ / 6 SIDED BOLT / SECHSKANTSCHRAUBE	SROUB M10x30	1
18	90.100.55.006	0	MATICE / NUT / MÜTTER	MATICE _ M10	1
19	90.150.50.006	0	PODLOŽKA / WASHER / UNTERLEGSCHETBE	PODLOŽKA 10,5	6
20	90.150.50.007	0	PODLOŽKA / WASHER / UNTERLEGSCHETBE	PODLOŽKA 13	1

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Pos./Position/Position;
Objednáací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.12. Válec svěráku / Vice cylinder / Schraubstockzylinder



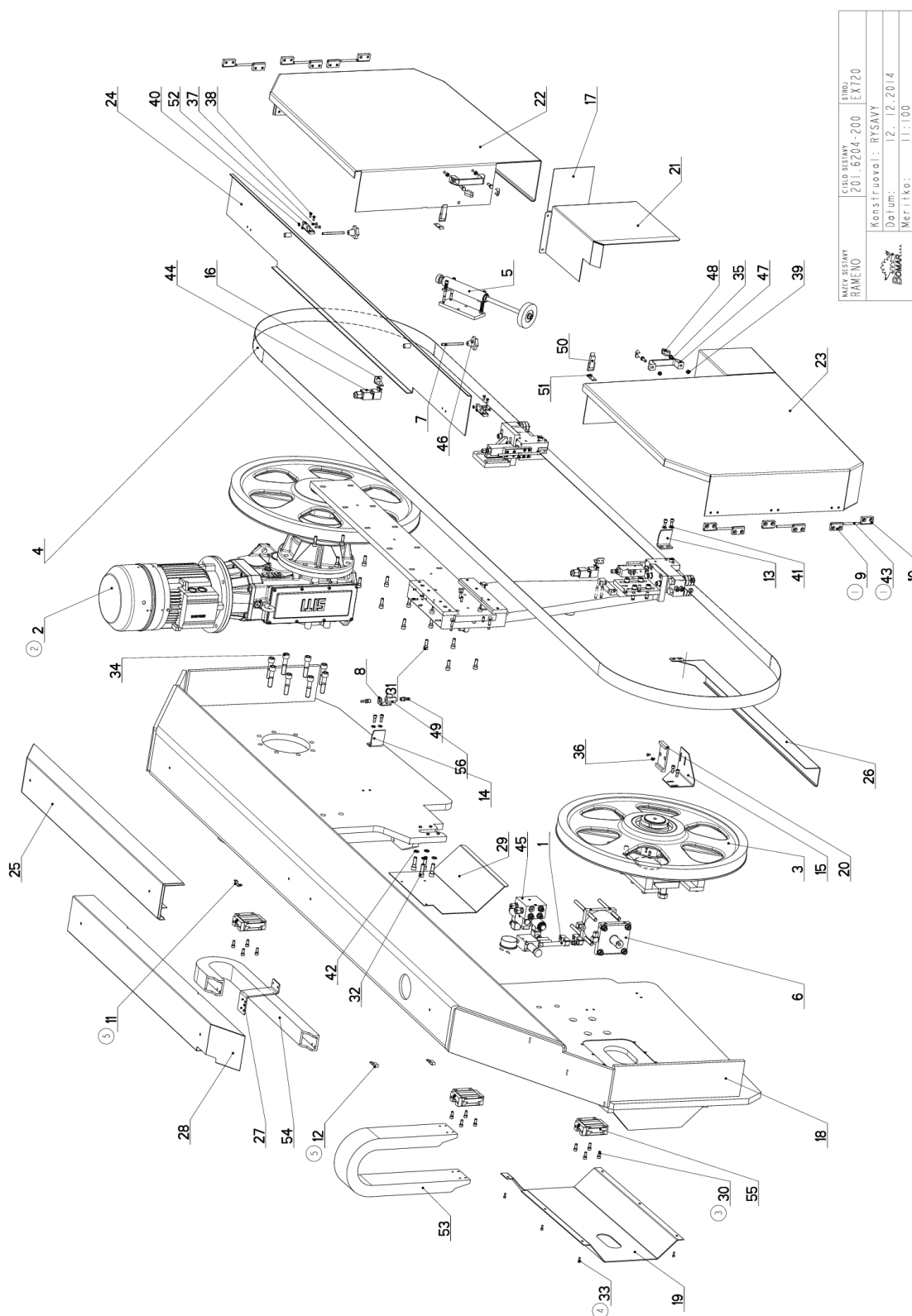
NÁZEV SOUSTAVY VÁLEC SVĚRÁKU	ČÍSLO SOUSTAVY 201.6207-100	STROJ SL-720
Konstruoval: STASTNA		
Datum: 14. 08. 2015		
Měřítko: 1:2		

7.13. Kusovník / Piece list / Stückliste -
Válec svěráku / Vice cylinder / Schraubstockzylinder

Císlo Sestavy 201.6207-100		Ver. 0	Název sestavy VALEC SVĚRAKU/VICE CYLINDER/SCHRAUBSTOCKZYLINDER		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.1807-104	2	VÍKO / COVER / DECKEL	TYC 55	1
2	30.2007-302	0	PIST / PISTON / KOLBEN	d 55	1
3	30.2007-304	1	VÍKO / COVER / DECKEL	d 55	1
4	30.6007-107	0	PRÍLOŽKA / STRAP / LASCHE	HR 80x12	2
5	30.6207-101	2	VALEC / ROLLER / ZYLINDER	TRUBKA 62/50	1
6	30.6207-102	2	PISTNICE / PISTON ROD / KOLBENSTANGE	d 28	1
7	90.001.25.083	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M8x30	1
8	92.002.101	0	SROUBENÍ PRÍME / DIRECT BOLTING / GERADE VERSCHRAUBUNG		2
9	95.800.021	0	SEGR HRÍDEL. / OUTSIDE SAFETY RING / SICHERUNGSRING AUSSEN	POJISTNÝ KROUZEK 62	2
10	95.801.009	0	SEGR DÍRA / OUTSIDE SAFETY RING / SICHERUNGSRING AUSSEN	POJISTNÝ KROUZEK 52	2
11	96.001.013	0	O-KROUZEK STATICKÝ / STATIC O RING / O-RING STATISCH	45x2	2
12	96.002.011	0	KROUZEK O DYNAMICKÝ / DYNAMIC O RING / O-RING DYNAMISCH	24x2	1
13	96.020.005	0	KROUZEK TESNÍČÍ / SEAL RING / DICHTUNGSRING	39.2x5.33	1
14	96.041.003	0	TESNĚNÍ / SEALING / DICHTUNG	601-28x36x7.1	1
15	96.060.003	0	KROUZEK STÍRAČÍ / SCRAPER RING / ABSTREIFRING	KROUZEK STÍRAČÍ 28	1
16	96.082.002	0	TESNĚNÍ / SEAL RING / DICHTUNGSRING	13/17x1.5 CU	2

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.14. Rameno / Shoulder / Sägerahmen Extend 900.720



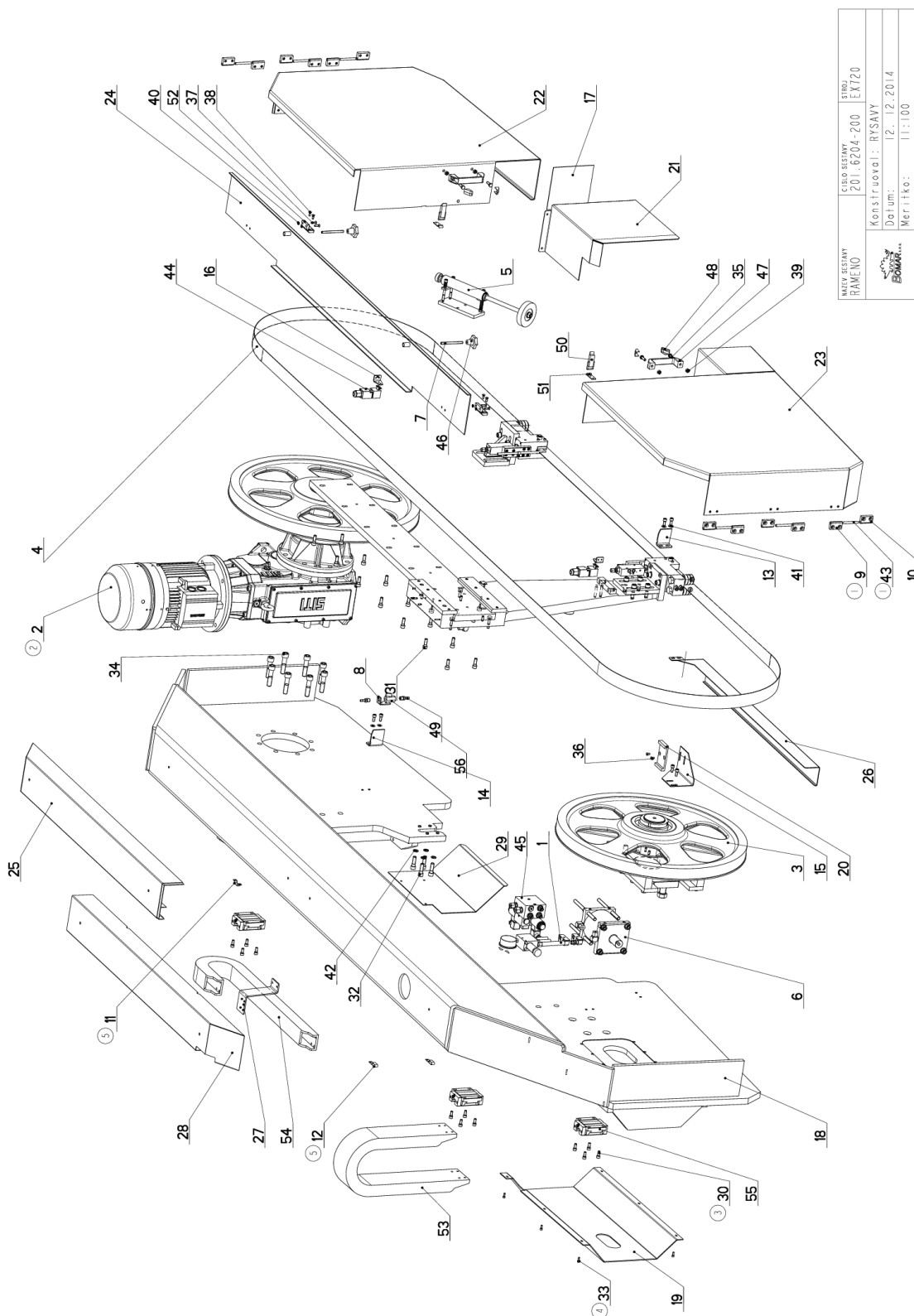
WATK. SISÄVY RAMENO	CISLO. SISÄVY 201.6204-200	STUHL EXT20
Konstruoval: RYSAVY		
Datum: 12.12.2014		
Veriiko: 1:100		

7.15. Kusovník / Piece list / Stückliste -
Rameno / Shoulder / Sägerahmen
Extend 900.720

Císlo sestavy 201.6204-200		Ver. 5	Název sestavy RAMENO/SHOULDER/SÄGERAHMEN		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.2115-200	1	REGULACE TL. SVERAKU / VICE PRESSURE REGULATION / SCHRAUBSTOCK-DRUCKREGELUNG		1
2	201.6205-450 (2)	1	POHON / DRIVE / ANTRIEB		1
3	201.6208-100	2	NAPINANI / /		1
4	201.6210-080	2	VEDENÍ PASU / BELT GUIDE / SÄGEBANDFÜHRUNG		1
5	201.6214-250	0	KARTAC / BRUSH / BÜRSTE		1
6	201.6707-400	3	VALEC NAPINACÍ / TENSIONING CYLINDER / SPANNZYLINDER		1
7	30.0203-005	0	SROUB / BOLT / SCHRAUBE	M8	2
8	30.1814-011	2	DRŽAK / HOLDER / HALTER	P 3x76	1
9	30.6014-109.1 (1)	1	DESKA / /	HR 30x12	6
10	30.6014-110	1	PANT / HINGE / TÜRBAND	HR 30x12	6
11	30.6014-456 (5)	0	DRŽAK / HOLDER / HALTER	P 1x12	1
12	30.6014-457 (5)	0	DRŽAK / HOLDER / HALTER	P 1x12	2
13	30.6114-123	0	DRŽAK / HOLDER / HALTER	P 4x55	1
14	30.6114-124	1	DRŽAK / HOLDER / HALTER	P 4x55	1
15	30.6114-146	2	DRŽAK / HOLDER / HALTER	P 3x150	1
16	30.6114-147	0	DRŽAK / HOLDER / HALTER	P 3x30x60	2
17	30.6114-160	0	CLONA / CURTAIN / SCHÜRZE	2x180	1
18	30.6204-201	1	RAMENO / SHOULDER / SÄGERAHMEN		1
19	30.6214-119	1	KRYT NAPINANI / TENSIONING COVER / BANDSPANNUNGSABDECKUNG	P 3x507	1
20	30.6214-124	0	KLUZAK / GLIDER / GLEITER	TYC 50x60 natur	1
21	30.6214-125	2	KRYT KARTACKU / BRUSH COVER / BÜRSTENABDECKUNG	P 2x566x593	1
22	30.6214-131	2	DVERE / DOOR / TÜR		1
23	30.6214-132	2	DVERE / DOOR / TÜR		1
24	30.6214-133	1	KRYT / COVER / ABDECKUNG		1
25	30.6214-135	0	KRYT RAMENE / SHOULDER COVER / RAHMENABDECKUNG		1
26	30.6214-136	0	KRYT PASU / BELT COVER / BANDABDECKUNG	P 2 - 196	1
27	30.6214-139	1	DRŽAK / HOLDER / HALTER	P 4x60	1
28	30.6214-140	2	KRYT RAMENE / SHOULDER COVER / RAHMENABDECKUNG	P 1,5- 324	1
29	30.6214-206	0	KRYT / COVER / ABDECKUNG	P 2x 410	1
30	90.001.25.032	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	8x20	22
31	90.001.25.048	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10X30	14
32	90.001.25.060	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M12X40	4
33	90.001.25.087 (4)	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M5X14	6
34	90.001.25.093	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M16X70	8

Císlo sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Pos./Position/Position;
Objednáci číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.16. Rameno / Shoulder / Sägerahmen Extend 900.720



WATY SĄSIĄG RAMENO	CIEŁO SĄSIĄG 201.6204-200	STRUBA EXT20
Konstruował: RYSAWY		
Datum: 12.12.2014		
Wersja: 11:100		

7.17. Kusovník / Piece list / Stückliste -
Rameno / Shoulder / Sägerahmen
Extend 900.720

35	90.005.55.016	0	SROUB 6HRANNÝ / 6 SIDED BOLT / SECHSKANTSCHRAUBE	SROUB M8X25	4
36	90.011.21.005	0	ZAPUSTNÝ IMBUS / COUNTERSINK BOLT / SENKSCHRAUBE	SROUB M6X12	2
37	90.011.21.006	0	ZAPUSTNÝ IMBUS / COUNTERSINK BOLT / SENKSCHRAUBE	SROUB M6X20	4
38	90.011.21.017	0	ZAPUSTNÝ IMBUS / COUNTERSINK BOLT / SENKSCHRAUBE	SROUB M6X16	4
39	90.100.55.005	0	MATICE / NUT / MUTTER	MATICE - M8	4
40	90.101.55.008	0	MATICE / NUT / MUTTER	MATICE M6	4
41	90.150.50.005	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	PODLOŽKA 8,4	6
42	90.163.00.003	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	NORD-LOCK	4
43	90.300.07.017	1	KOLÍK VALC. KAL. / CYLINDRICAL PIN TEMPERED / ZYLINDERSTIFT GEHÄRTET	KOLÍK 8X70	6
44	91.173.012	0	SPINAC KONCOVÝ / END SWITCH / ENDSCHALTER	OKS8-2XNC	2
45	92.153.048	0	BLOK / BLOCK / BLOCK	881-0027*RAMENO	1
46	94.003.001	0	HLAVICE / HEAD / KOPF		2
47	94.012.001	0	RUKOJET / HANDLE / GRIFF		2
48	94.012.002	0	KRYT / COVER / ABDECKUNG		4
49	94.202.002	0	REDUKCE / REDUCTION / ADAPTOR / REDUKTION	GES 6/R1/4"	2
50	99.100.003	0	ZAMEK / LOCK / SCHLOSS		2
51	99.100.004	0	ZAMEK / LOCK / SCHLOSS	D13-00	2
52	99.100.007	0	PANT / HINGE / TÜRBAND		2
53	99.170.001	0	RETEZ ENERGII / ENERGY BELT / ENERGIEKETTE	36x75/R-100	1
54	99.170.021	0	RETEZ ENERGII / ENERGY BELT / ENERGIEKETTE		1
55	99.201.056	3	VOZÍK LINEÁRNÍHO VEDENÍ / LINEAR GUIDE CART / LINEARFÜHRUNGSWAGEN	MSA3SESSFON	4
56	99.260.003	0	VENTIL / VALVE / VENTIL	1/4"	1

1. ZRUSEN PANT 30.6014-109 A NAHRAZEN KOLÍKEM 8x70 (90.300.07.017) A DESKOU 30.6014-109.1. 054/ZM072 16.3.2010 SLEZACKOVA

2. POHON 201.6205-100 A NAHR.201.6205-450. 220/ZM279 10.10.2011 SLEZACKOVA

3. ZRUS.VOZÍK LIN.VEDENÍ(HWIN) 99.201.011 A NAHR.99.201.056(PMI). 056/ZM129 18.4.2012 SLEZACKOVA

4. PRIDAN 6xSROUB M5x14(90.001.25.087). 176/ZM210 9.10.2014 SLEZACKOVA

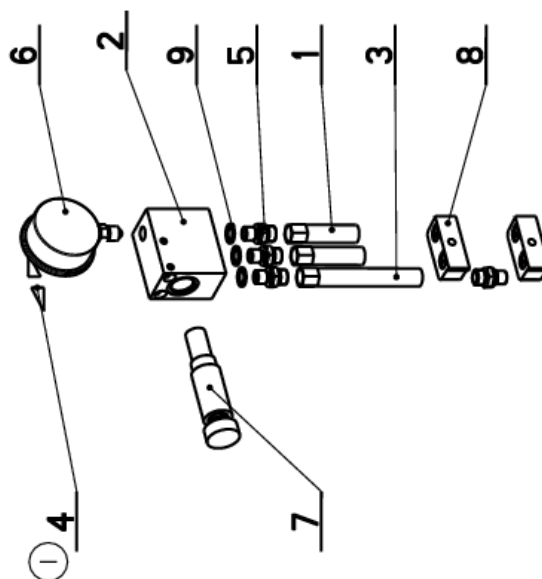
5. PRIDAN 1xDRZAK 30.6014-456,2xDRZAK 30.6014-457. 220/ZM245 12.12.2014 SLEZACKOVA

Cislo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Nazev sestavy/Assembly title/Name der Baugruppe; Pozice (Pos./Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Nazev položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.18. Regulace tl. Svěráku/ Vice pressure regulation/ Schraubstock-druckregelung

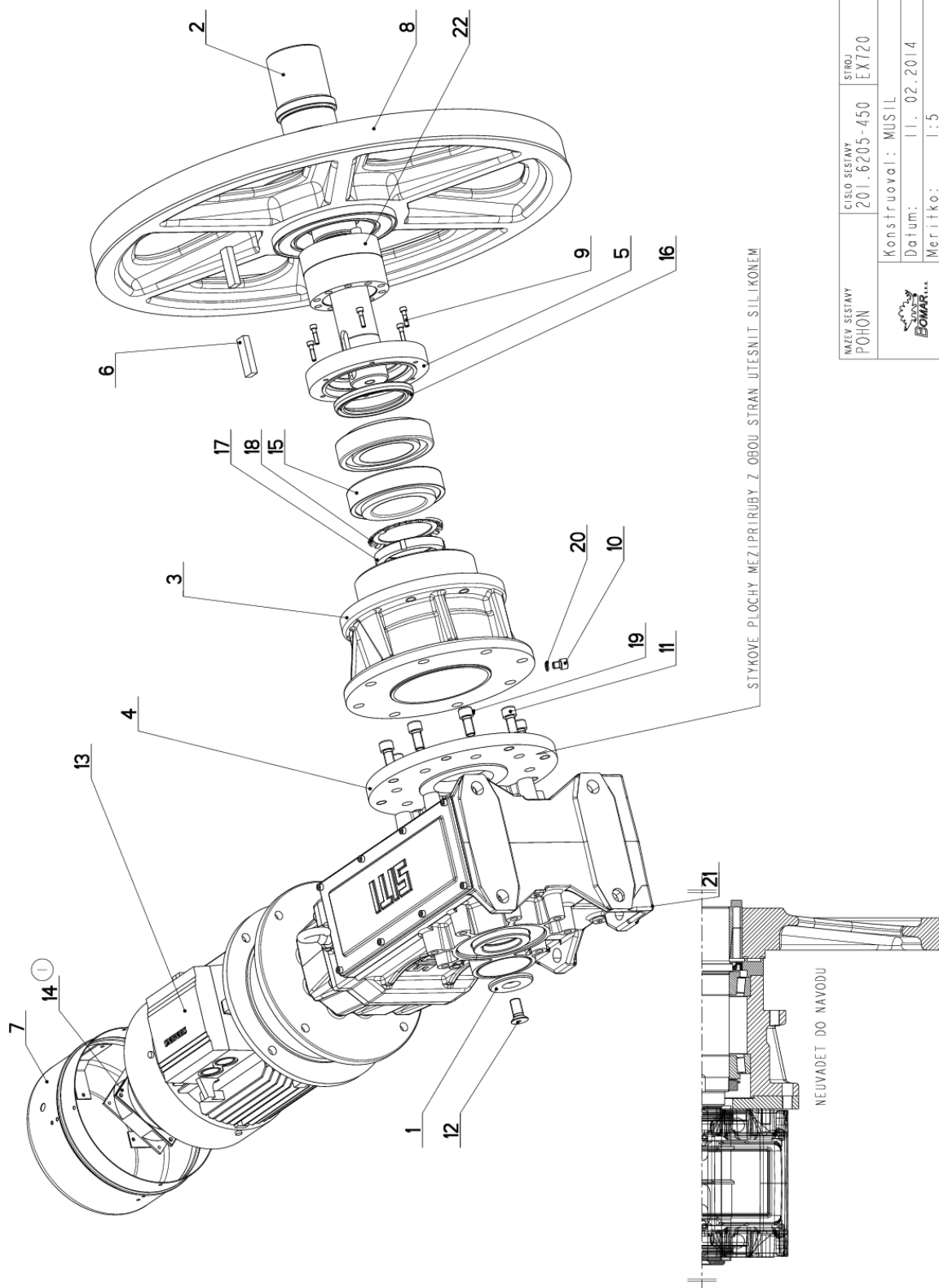
Cislo Sestavy 201.2115-200		Ver. 1	Název sestavy REGULACE TL. SVĚRÁKU/VICE PRESSURE REGULATION/SCHRAUBSTOCK-DRUCKREGELUNG	
Poz.	Objednací číslo	Ver.	Název položky	Ks
1	30.1816-102	0	HADICE / HOSE / SCHLAUCH	2
2	30.2115-101	2	KOSTKA / BOARD / PLATTE	1
3	30.2116-008	0	HADICE / HOSE / SCHLAUCH	1
4	31.0899-004 (1)	0	SAMOLEPKA / STICKER / AUFLEBER	2
5	92.002.001	0	SROUBENÍ PRÍME / DIRECT BOLTING / GERADE VERSCHRAUBUNG	4
6	92.080.001	0	MANOMETR-HYDRAULICKÝ / /	1
7	92.154.001	0	VENTIL REDUKČNÍ / REDUCTION VALVE / DRUCKMINDERUNGSVENTIL	1
8	94.204.005	0	DRŽÁK / HOLDER / HALTER	2
9	96.082.002	0	TESNĚNÍ / SEALING / DICHTUNG	3

I.PRID.2xSAMOLEPKA SIPKA 31.0899.004 . 101/ZM131 29.5.2009 SLEZACKOVA



Cislo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.19. Pohon / Drive / Antrieb



NÁZEV SOUSTAVY POHON	ČÍSLO SOUSTAVY 201.6205-450	STROJ EXT20
Konstruoval: MUSIL		
Datum: 11. 02. 2014		
Měřítko: 1:5		

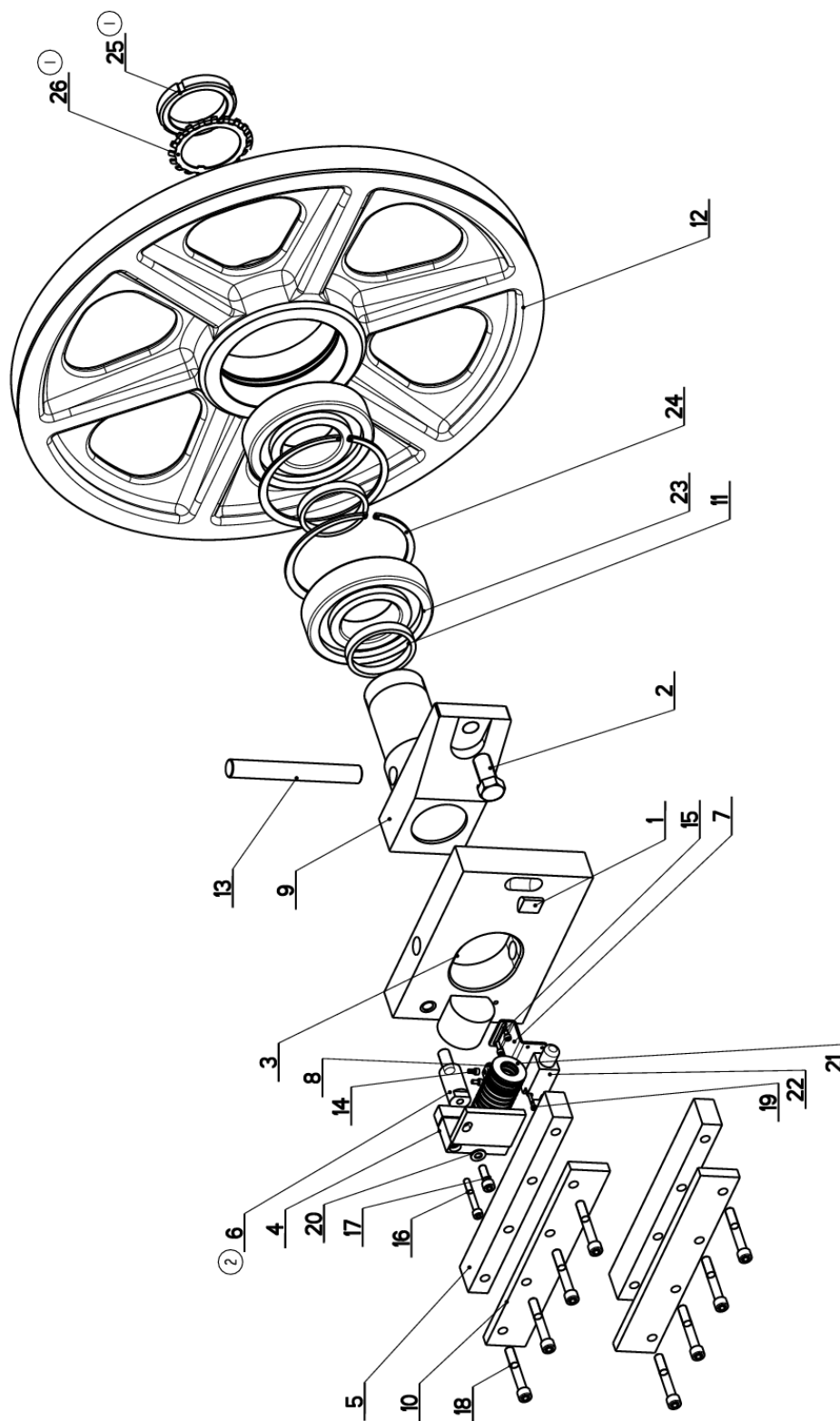
7.20. Kusovník / Piece list / Stückliste -
Pohon / Drive / Antrieb

Cislo Sestavy 201.6205-450		Ver. 1	Navez sestavy POHON/DRIVE /ANTRIEB		
Poz	Objednaci cislo	Ver.	Navez polozky	Rozmer	Ks
1	30.1804-005	0	PODLOZKA / WASHER / UNTERLEGSCHIEBE	d 70	1
2	30.6205-401	0	HRDEL / SHAFT / WELLE	D 100	1
3	30.6205-402	2	PRIRUBA / FLANGE / FLANSCH		1
4	30.6205-403	1	KROUZEK DISTANCI / DISTANCE RING / DISTANZRING	P 25x300	1
5	30.6205-407	0	VIKO / COVER / DECKEL	P30x192	1
6	30.6305-109	0	PERO / SPRING / FEDER	TYC 18x11	2
7	30.6704-018	3	VENTILATOR / VENTILATOR / VENTILATOR		1
8	30.7504-007	2	KOLO HNACI / DRIVE WHEEL / ANTRIEBSRAD	KOLO	1
9	90.001.25.019	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M6x25	6
10	90.001.25.043	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x12	1
11	90.001.25.166	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M14x30	7
12	90.011.27.040	0	ZAPUSTNY IMBUS / COUNTERSINK BOLT / SENKSCHRAUBE	SROUB M16x35	1
13	91.001.118	0	ELEKTROMOTOR / ELECTRIC MOTOR / ELEKTROMOTOR	ILA7130-4AA11	1
14	91.015.126	0	VENTILATOR / VENTILATOR / VENTILATOR	VENTILATOR RDH1238,B2	1
15	95.300.018	0	LOZISKO KUZELIK / BEARING / LAGER	32217A	2
16	95.830.009	0	GUFERO / GIT SEAL / DICHTUNG	GUFERO 95x125x12	1
17	95.850.012	0	MATICE KM / KM NUT / KM-MUTTER	MATICE KM17	1
18	95.855.011	0	PODLOZKA / WASHER / UNTERLEGSCHIEBE	POJISTNA PODLOZKA MB17	1
19	95.860.001	0	MAZNICE / LUBRICATOR / ÖLER	KULOVA PRIMA M5	1
20	96.082.001	0	KROUZEK TESNICI / SEAL RING / DICHTUNGSRING	10714x1.5 CU	1
21	99.003.023	0	PREVODOVKA KUZELOCEL / CONICAL TRANSMISSION / KEGELRADGETRIEBE	MBH125C PAM132	1
22	99.710.013	0	SPOJKA / JOINT / KUPPLUNG	85x125	1

1. ZRUS. VENTILATOR 91.015.100 A NAHR. 91.015.126. 074/ZM018 11.2.2014 SLEZACKOVA

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version); Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz./Position/Position);
Objednáci číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.21. Napínání / Tensioning / Spannung



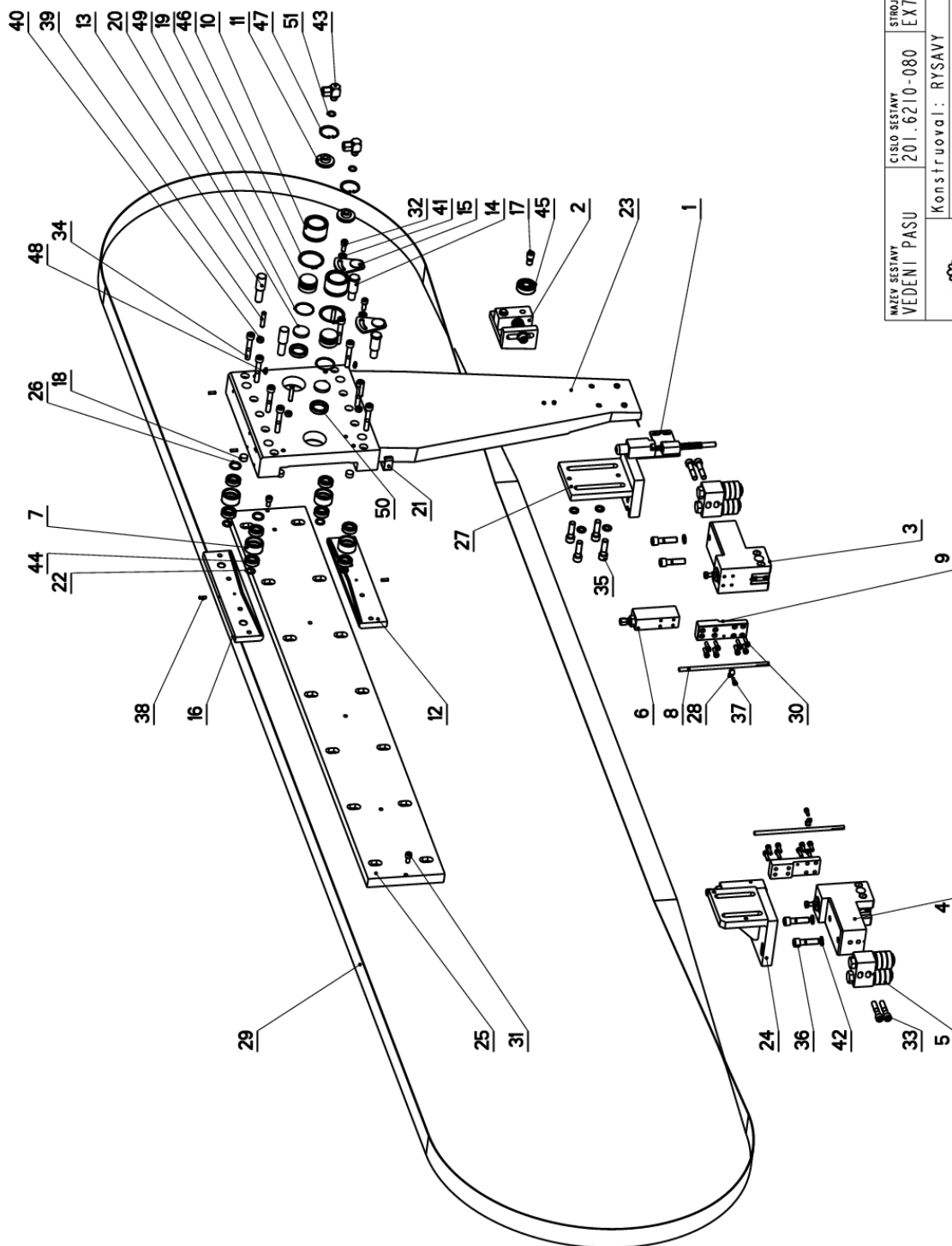
NAZEV SESTAVY NAPÍNÁNÍ	ČÍSLO SESTAVY 201.6208-100	STŘOJ EX720
Konstruoval: HOLCNER		
Datum: 11. 01. 2010		
Měřítko: 1:5		

7.22. Kusovník / Piece list / Stückliste -
Napínání / Tensioning / Spannung

Číslo sestavy 201.6208-100		Ver.	Název sestavy -NAPÍNÁNÍ/NAPÍNÁNÍ/6208-100		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.6208-003	0	CEP / LUG / BOLZEN	d 25	1
2	30.6208-004	0	SROUB / BOLT / SCHRAUBE	TYC 32	1
3	30.6208-102	0	KOSTKA NAPÍNÁNÍ / TENSIONING CUBE / BANDSPANNUNGSWÜRFEL		1
4	30.6208-104	1	TRMEN / BINDER / BÜGEL		1
5	30.6208-105	2	LISTA / TRIM / LEISTE	TYC 50x30	2
6	30.6208-109	0	DORAZ / STOP PIECE / ANSCHLAG	D 30	1
7	30.6708-303	1	DRŽAK / HOLDER / HALTER	P3x50	1
8	30.6708-304	0	DORAZ / STOP PIECE / ANSCHLAG	P 2x20x76	1
9	30.7508-001	3	CEP NAPÍNÁNÍ / TENSIONING LUG / SPANNUNGSBOLZEN		1
10	30.7508-004	2	LISTA / TRIM / LEISTE	TYC 60x15	2
11	30.7508-005	3	KROUZEK / RING / RING	TR 102x10	2
12	30.7508-006	2	KOLO NAPÍNACÍ / TENSIONING WHEEL / UMLENRAD	KOLO	1
13	30.7508-007	0	CEP / LUG / BOLZEN	TYC 25j6	1
14	90.001.25.007	0	SROUB IMBUS ČERNÝ / /	M5x10	2
15	90.001.25.009	0	SROUB IMBUS ČERNÝ / /	M5x16	2
16	90.001.25.040	0	SROUB IMBUS / /	M8x60	1
17	90.001.25.048	0	SROUB IMBUS / /	M10x30	1
18	90.001.25.065	0	SROUB IMBUS / /	M12x80	8
19	90.012.50.006	0	SR. S VALC. HLAV. / ROLLER BOLT / ZYLINDERSCHRAUBE	SROUB M4x25	2
20	90.150.50.006	0	PODLOZKA / WASHER / UNTERLEGSCHIEBE	PODLOZKA 10.5	1
21	90.350.02.004	0	TAL. PRUŽINA DIN 2093 A / DISC SPRING / TELLERFEDER	50x25.4x3	12
22	91.173.007	0	SPÍNAC KONCOVÝ / END SWITCH / ENDSCHALTER	-RIWK	1
23	95.001.053	0	LOŽISKO / BEARING / LAGER	6317A	2
24	95.801.033	0	KROUZEK POJIST.VNITR / INSIDE SAFETY RING / SICHERUNGSRING INNEN	POJISTINY KROUZEK 180	2
25	95.850.012	0	MATICE KM / KM NUT / KM-MUTTER	MATICE KM17	1
26	95.855.011	0	PODLOZKA / WASHER / UNTERLEGSCHIEBE	POJISTNA PODLOZKA MB17	1

1 ZRUSENA POLOZKA 90.011.27.016 - 6x, 30.7508-011 - 1x; NOVA POLOZKA - 95.850.012 - 1x, 95.855.011, - 1x
ZM 286-2007 23.6.2007 RYSAVY
2.7RUS.DORAZOVY SROUB 30.6208-103 A NAHR.30.6208-109. 284/7M321 8.12.2011 SLEZACKOVA

7.23. Vedení pásu / Belt guide / Sägebandführung

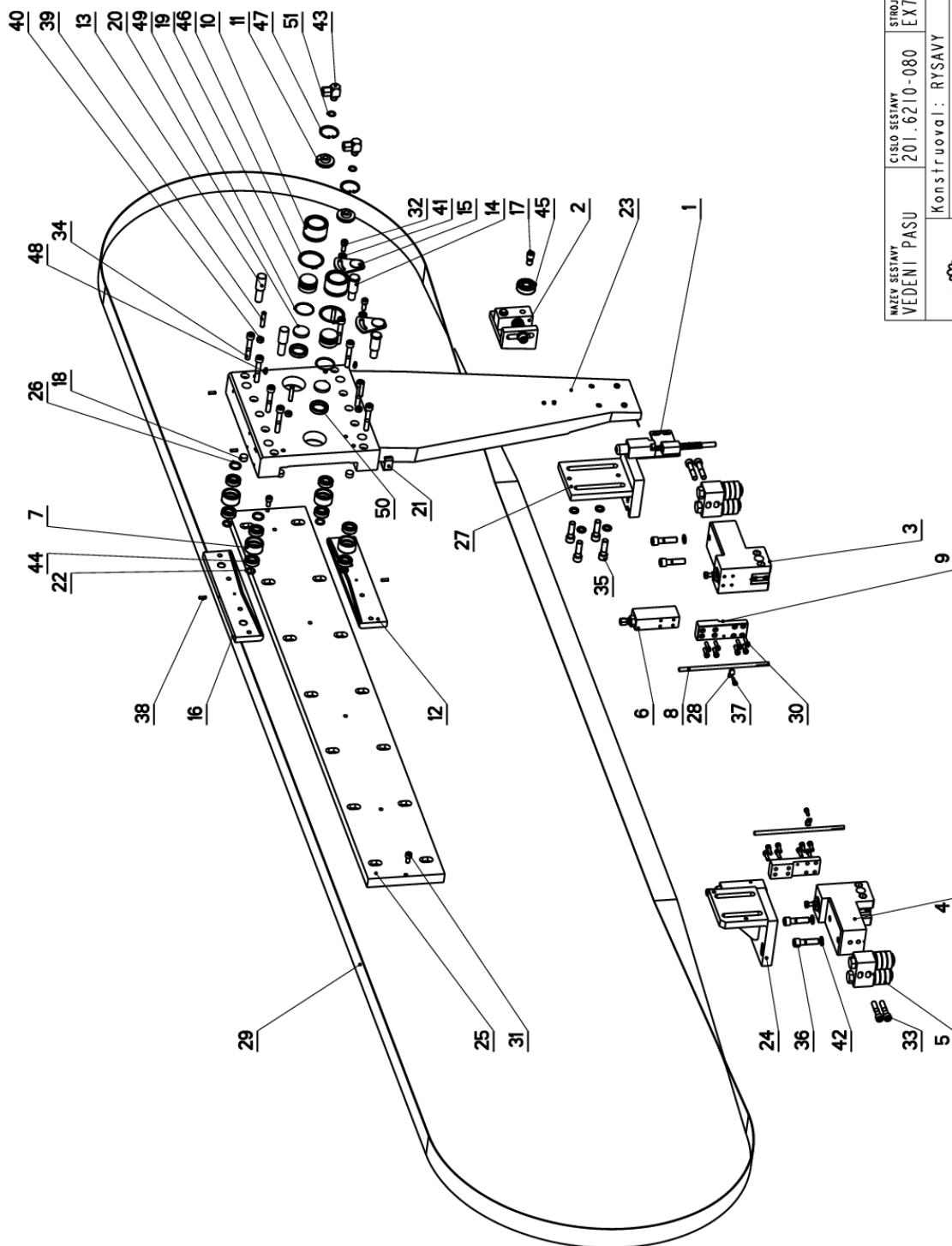


NAZEV SESTAVY VEDENÍ PÁSU	ČÍSLO SESTAVY 201.6210-080	STŘOJ EXT20
Konstruoval: RYŠAVÝ		
Datum: 11. 01. 2010		
Meritko: 13:100		

7.24. Kusovník / Piece list / Stückliste -
Vedení pásu / Belt guide / Sägebandführung

Císlo Sešitový 201.6210-080		Ver. 2	Název sešitový VEDENÍ PASU/BELT GUIDE/SÄGEBANDFÜHRUNG		
Poz.	Objednací číslo	Ver.	Název položky	Rožner	Ks
1	201.6110-020	1	DORAZ / STOP PIECE / ANSCHLAG		1
2	201.6210-090	0	DORAZ / STOP PIECE / ANSCHLAG		1
3	201.6210-100	3	KOSTKA VODICI / LEAD CUBE / FÜHRUNGSKLOTZ		1
4	201.6210-200	3	KOSTKA VODICI / LEAD CUBE / FÜHRUNGSKLOTZ		1
5	201.6210-300	3	VEDENÍ PASU / BELT GUIDE / SÄGEBANDFÜHRUNG		2
6	201.6816-100	0	KOSTKA REGULATE / REGULATION CUBE / REGULUNGSWÜRFEL		2
7	30.1503-006	0	KLADKA / PULLEY / ROLLE	d 45	4
8	30.6010-315	0	TRUBKA / TUBE / ROHR	TR 8x 1	2
9	30.6016-002	0	DESKA / BOARD / PLATTE	HR 40x20	2
10	30.6210-053	0	TRUBKA / TUBE / ROHR	TR 52/40	2
11	30.6210-054	0	VÍKO / COVER / DECKEL	TYC KR TAZ 42	2
12	30.6210-055	0	LISTA VODICI / LEAD TRIM / FÜHRUNGSLEISTE	TYC PL T 65x15	1
13	30.6210-056	0	CEP / LUG / BOLZEN	TYC 22	2
14	30.6210-057	0	CEP / LUG / BOLZEN	TYC 6HR	2
15	30.6210-058	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE		2
16	30.6210-060	0	LISTA VODICI / LEAD TRIM / FÜHRUNGSLEISTE	TYC PL T 65x15	1
17	30.6210-061	0	SROUB / BOLT / SCHRAUBE	SROUB 12x20	1
18	30.6210-062	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	TYC 16	4
19	30.6210-063	0	PIST / PISTON / KOLBEN	D 40	2
20	30.6210-064	1	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	TYC d 36	2
21	30.6210-065	0	DRŽAK / HOLDER / HALTER	P 2 - 18	1
22	30.6210-068	1	KROUZEK DISTANČNÍ / DISTANCE RING / DISTANZRING	TR 20 x 4	4
23	30.6210-070	0	DRŽAK / HOLDER / HALTER		1
24	30.6304-003	1	DRŽAK / HOLDER / HALTER		1
25	30.6310-002	2	LISTA / TRIM / LEISTE	HR 180x25	1
26	30.6310-052	0	KROUZEK DISTANČNÍ / DISTANCE RING / DISTANZRING	TR 25x2.5	2
27	30.6310-053	1	DRŽAK / HOLDER / HALTER		1
28	30.9010-003	0	DRŽAK / HOLDER / HALTER	PI. 5x10	2
29	44.900.013	0	PAS PÍLOVÝ / SAW BELT / SÄGEBAND	PAS 54x1,6	1
30	90.001.25.018	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M6x20	16
31	90.001.25.031	0	SROUB IMBUS CERNÝ / ALLEN HEAD BOLT / IMBUSSCHRAUBE	8x16	2
32	90.001.25.032	0	SROUB IMBUS CERNÝ / ALLEN HEAD BOLT / IMBUSSCHRAUBE	8x20	2
33	90.001.25.052	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x50	4
34	90.001.25.054	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x60	8
35	90.001.25.060	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M12x40	4

7.25. Vedení pásu / Belt guide / Sägebandführung

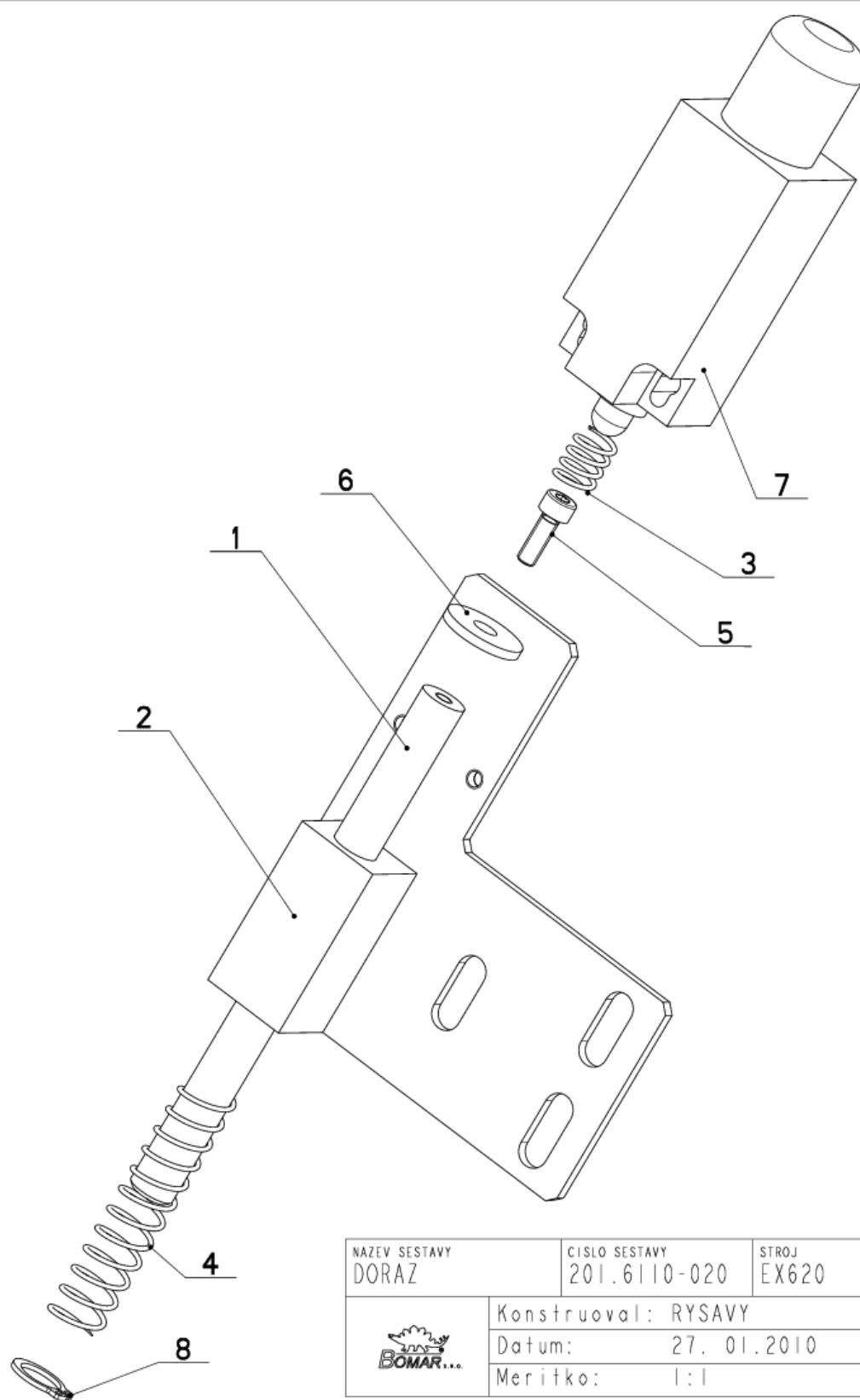


NAZEV SESTAVY VEDENÍ PÁSU	ČÍSLO SESTAVY 201.6210-080	STROJ EXT20
Konstruoval: RYŠAVÝ		
Datum: 11. 01. 2010		
Meritko: 13:100		

7.26. Kusovník / Piece list / Stückliste -
Vedení pásu / Belt guide / Sägebandführung

36	90.001.25.061	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M12x15	4
37	90.001.25.087	0	SROUB IMBUS CERNÝ / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M5x14	2
38	90.002.20.007	0	SROUB STAVEČI / ADJUSTMENT BOLT / STELLSCHRAUBE	SROUB M5x16	4
39	90.002.20.xxx	0	SROUB STAVEČI / ADJUSTMENT BOLT / STELLSCHRAUBE	SROUB M8x40	4
40	90.100.55.005	0	MATICE / NUT / MUTTER	MATICE - M8	4
41	90.150.50.005	0	PODLOŽKA / WASHER / UNTERLEGSCHLEIBE	PODLOŽKA 8,4	2
42	90.163.00.003	0	PODLOŽKA / WASHER / UNTERLEGSCHLEIBE	NORD-LOCK	8
43	92.003.001	0	SROUBENÍ UHLOVÉ / ANGLE BOLTING / WINKELVERSCHRAUBUNG	P-RSWS-08LR	2
44	95.001.006	0	LOŽISKO / BEARING / LAGER	6002 2RS	8
45	95.001.023	0	LOŽISKO / BEARING / LAGER	6302 2RS	1
46	95.800.019	0	SEGR HRÍDEL. / OUTSIDE SAFETY RING / SICHERUNGSRING AUßEN	POJISTNÝ KROUZEK 52	2
47	95.801.005	0	KROUZEK POJIST. VNITR. / INSIDE SAFETY RING / SICHERUNGSRING INNEN	POJISTNÝ KROUZEK 40	2
48	95.860.001	0	HLAVICE MAZACÍ / HEAD / KOPF	KMS	2
49	96.001.010	0	KROUZEK O STATICKY / STATIC O RING / O-RING STATISCH	36x2	2
50	96.042.001	0	TESNĚNÍ / SEALING / DICHTUNG	40x30x8 K606	2
51	96.082.002	0	TESNĚNÍ / SEALING / DICHTUNG	KROUZEK CU 13/17	2

7.27. Doraz / Stop piece / Anschlag



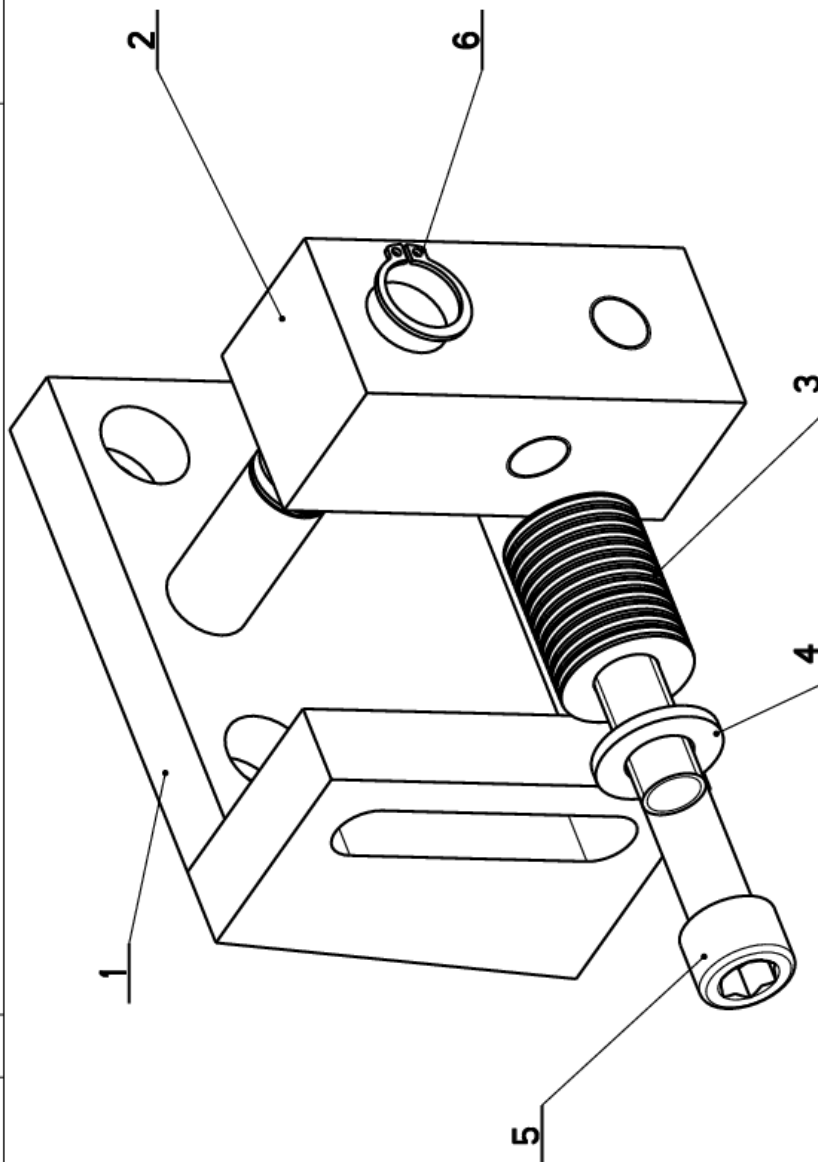
NAZEV SESTAVY DORAZ	CISLO SESTAVY 201.6110-020	STROJ EX620
	Konstruoval: RYSAVY	
	Datum: 27. 01.2010	
	Meritko: 1:1	

7.28. Kusovník / Piece list / Stückliste -
Doraz / Stop piece / Anschlag

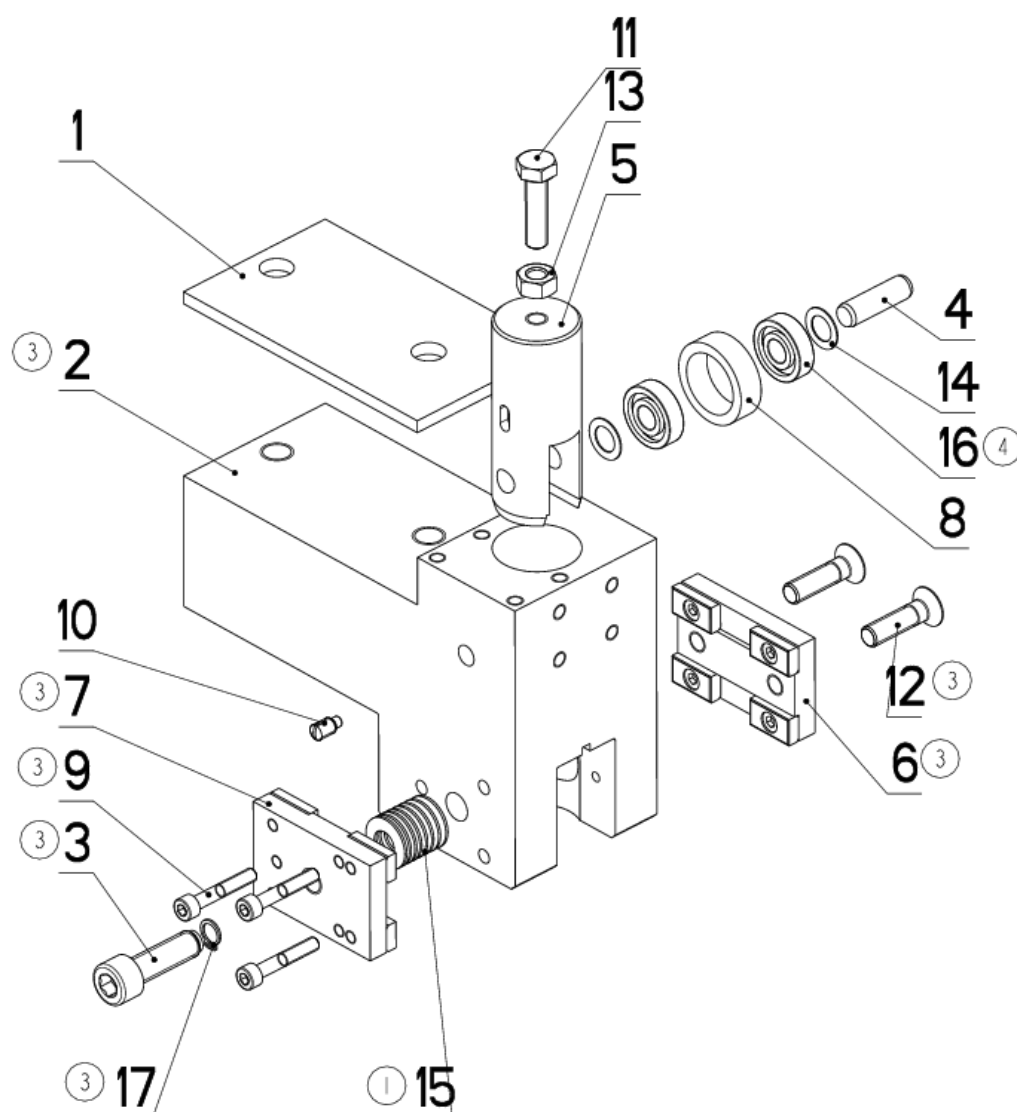
Číslo sestavy 201.6110-020		Ver. 1	Název sestavy DORAZ/STOP PIECE/ANSCHLAG		
Poz.	Objednávací číslo	Ver.	Název položky	Rozměr	Ks
1	30.6110-114	0	TYC / POLE / STANGE	d 10	1
2	30.6110-116	0	DORAZ / STOP PIECE / ANSCHLAG		1
3	31.1605-121	0	PRUŽINA / SPRING / FEDER	1x9.5x12x4	1
4	31.2801-014	0	PRUŽINA / SPRING / FEDER	1x12.5x60x12	1
5	90.001.25.003	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M4x12	1
6	90.151.50.006		PODLOŽKA / WASHER / UNTERLEGSCHLEIBE	PODLOŽKA 5	1
7	91.173.007	0	SPINAC KONCOVÝ / END SWITCH / ENDSCHALTER	-RIWK	1
8	95.800.003	0	SEGR HRDEL. / OUTSIDE SAFETY RING / SICHERUNGSRING AUSSEN	POJISTNÝ KROUZEK 10	1

7.29. Doraz/ Stop piece/ Anschlag

Cislo Sestavy 201.6210-090		Ver. 0	Název sestavy DORAZ/STOP PIECE/ANSCHLAG		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.6210-085	0	DRŽÁK / HOLDER / HALTER		1
2	30.6310-062	0	KOSTKA / CUBE / WÜRFEL	TC 35x35	1
3	90.350.02.021	0	PRŮŽINA TALÍŘOVÁ / DISC SPRING / TELLERFEDER	DexDixTzL	24
4	90.150.50.007	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	PODLOŽKA 13	1
5	90.001.25.063	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M12x60	1
6	95.800.007	0	KROUZEK POJIST.VNĚJŠÍ / OUTSIDE SAFETY RING / SICHERUNGSRING AUßEN	POJISTNÝ KROUZEK 16	1



7.30. Kostka vodící / Lead cube / Führungsklotz



PAS 54x1,3-1,6

NAZEV SESTAVY KOSTKA VODICI	CISLO SESTAVY 201.6210-100	STROJ EXTEND 720
	Konstruoval: STASTNA	
	Datum: 23. 06.2015	
	Meritko: 1:2	

7.31. Kusovník / Piece list / Stückliste -
Kostka vodící / Lead cube / Führungsklotz

Císlo Sestavy 201.6210-100		Ver. 4	Název sestavy KOSTKA VODICÍ / LEAD CUBE / FÜHRUNGSKLOTZ		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.6210-103	1	DESKA / BOARD / PLATTE	P 5x70x120	1
2	30.6210-104 (3)	0	KOSTKA / CUBE / WÜRFEL	TYC 120 x 80	1
3	30.6210-107 (3)	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x35	1
4	30.6710-108	1	KOLÍK / PIN / BOLZEN	TYC 10	1
5	30.6710-109	0	PIST / PISTON / KOLBEN	d 32	1
6	30.7610-110 (3)	0	DRŽÁK TVRDOKOVU / POA HOLDER / HW-HALTER		1
7	30.7610-120 (3)	0	DRŽÁK TVRDOKOVU / POA HOLDER / HW-HALTER		1
8	31.6710-110 (4)	1	KROUZEK / RING / RING	LH 2403210	1
9	90.001.25.012 (3)	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M5x30	3
10	90.004.20.002	0	SROUB STAVEČÍ / ADJUSTMENT BOLT / STELLSCHRAUBE	SROUB M6x12	1
11	90.005.55.017	0	SROUB 6HRANNÝ / 6 SIDED BOLT / SECHSKANTSCHRAUBE	SROUB M8x30	1
12	90.011.27.043 (3)	0	ZAPUSTNÝ IMBUS / COUNTERSINK BOLT / SENKSCHRAUBE	SROUB M8x30	2
13	90.100.55.005	0	MATICE / NUT / MÜTTER	MATICE - M8	1
14	90.154.50.003	0	PODLOŽKA / WASHER / UNTERLEGSCHEIBE	10x16x0.50	2
15	90.350.02.005 (1)	0	PRUŽINA TALIROVÁ / DISC SPRING / TELLERFEDER	20x10.2x1	8
16	95.001.044	0	LOŽISKO / BEARING / LAGER	609 2RS	2
17	95.800.002 (3)	0	SEGR HŘÍDEL. / OUTSIDE SAFETY RING / SICHERUNGSRING AUSSEN	POJISTNÝ KROUZEK 8	1

1. ZRUS. SOUC. KROUZEK DYNAMICKY 16x2.5 96.002.008, PIST 30.6010-117, 2xSROUB M6x25 90.001.25.019 A NAHR. SROUBEM M6x20 90.001.25.018, PRIDANA 8xTAL. PRUŽINA 20x10.2x1.1 90.350.02.005, 1xPOJISTNÝ KROUZEK 16 95.801.035, 1xSROUB M10x25 90.015.30.003. 358/ZM405 1.11.2007 SLEZACKOVA

2. ZRUSENA KOSTKA 30.6210-101 A NAHR. KOSTKOU 30.6210-102. 191/ZM267 14.8.2008 SLEZACKOVA

3. ZRUS. KOSTKA 30.6210-102 A NAHR. 30.6210-104, ZRUS. DESKA VODICÍ 30.7510-114 A NAHR. DESKOU 30.7610-120, ZRUS. DESKA 30.7510-104 A NAHR. DESKOU 30.7610-110, ZRUS. SOUCASTI 30.7510-118, 95.801.035, 90.015.30.003, 90.001.25.018, 90.001.25.046, PRID. SOUC. 30.6210-107, 90.001.25.012, 90.011.27.043, 95.800.002. 142/ZM198 5.10.2009 SLEZACKOVA

4. ZRUS. SOUC. 30.6710-110 A NAHR. 31.6710-110. 175/ZM178 27.7.2015 SLEZACKOVA

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version); Název sestavy/Assembly title/Name der Baugruppe; Pozice (Pos./Position/Position);
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.33. Kusovník / Piece list / Stückliste -
Kostka vodící / Lead cube / Führungsklotz

Císlo Sestavy 201.6210-200	Ver. 4	Název sestavy KOSTKA VODICÍ / LEAD CUBE / FÜHRUNGSKLOTZ			
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.6210-103	1	DESKA / BOARD / PLATTE	P 5x70x120	1
2	30.6210-107 (3)	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x35	1
3	30.6210-203 (3)	0	KOSTKA VODICÍ / LEAD CUBE / FÜHRUNGSKLOTZ	TYC 120 x 80	1
4	30.6710-108	1	KOLÍK / PIN / BOLZEN	TYC 10	1
5	30.6710-109	0	PIST / PISTON / KOLBEN	d 32	1
6	30.7610-110 (3)	0	DRŽÁK TVRDOKOVU / POA HOLDER / HW-HALTER		1
7	30.7610-120 (3)	0	DRŽÁK TVRDOKOVU / POA HOLDER / HW-HALTER		1
8	31.6710-110 (4)	1	KROUZEK / RING / RING	LH 2403210	1
9	90.001.25.012 (3)	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M5x30	3
10	90.004.20.002	0	SROUB STAVEČÍ / ADJUSTMENT BOLT / STELLSCHRAUBE	SROUB M6x12	1
11	90.005.55.017	0	SROUB 6HRANNÝ / 6 SIDED BOLT / SECHSKANTSCHRAUBE	SROUB M8x30	1
12	90.011.27.043 (3)	0	ZAPUSTNÝ IMBUS / COUNTERSINK BOLT / SENKSCHRAUBE	SROUB M8x30	2
13	90.100.55.005	0	MATICE / NUT / MÜTTER	MATICE - M8	1
14	90.154.50.003	0	PODLOŽKA / WASHER / UNTERLEGSCHLEIBE	10x16x0.50	2
15	90.350.02.005 (1)	0	PRUŽINA TALIROVA / DISC SPRING / TELLERFEDER	20x10.2x1	8
16	95.001.044	0	LOŽISKO / BEARING / LAGER	609 2RS	2
17	95.800.002 (3)	0	SEGR HRÍDEL. / OUTSIDE SAFETY RING / SICHERUNGSRING AUSSEN	POJISTNÝ KROUZEK 8	1

1. ZRUS. SOUC. KROUZAK DYNAMICKY 16x2.5 96.002.008, PIST 30.6010-117, 2xSROUB M6x25 90.001.25.019 A NAHR. SROUBEM M6x20 90.001.25.018, PRIDANA 8x TAL. PRUŽINA 20x10.2x1 90.350.02.005, 1xPOJISTNÝ KROUZEK 16 95.801.035
1xSROUB 90.015.30.003. 358/ZM405 1.11.2007 SLEZACKOVA

2. ZRUSENA KOSTKA 30.6210-201 A NAHRAZENA KOSTKOU 30.6210-202. 191/ZM267 14.8.2008 SLEZACKOVA

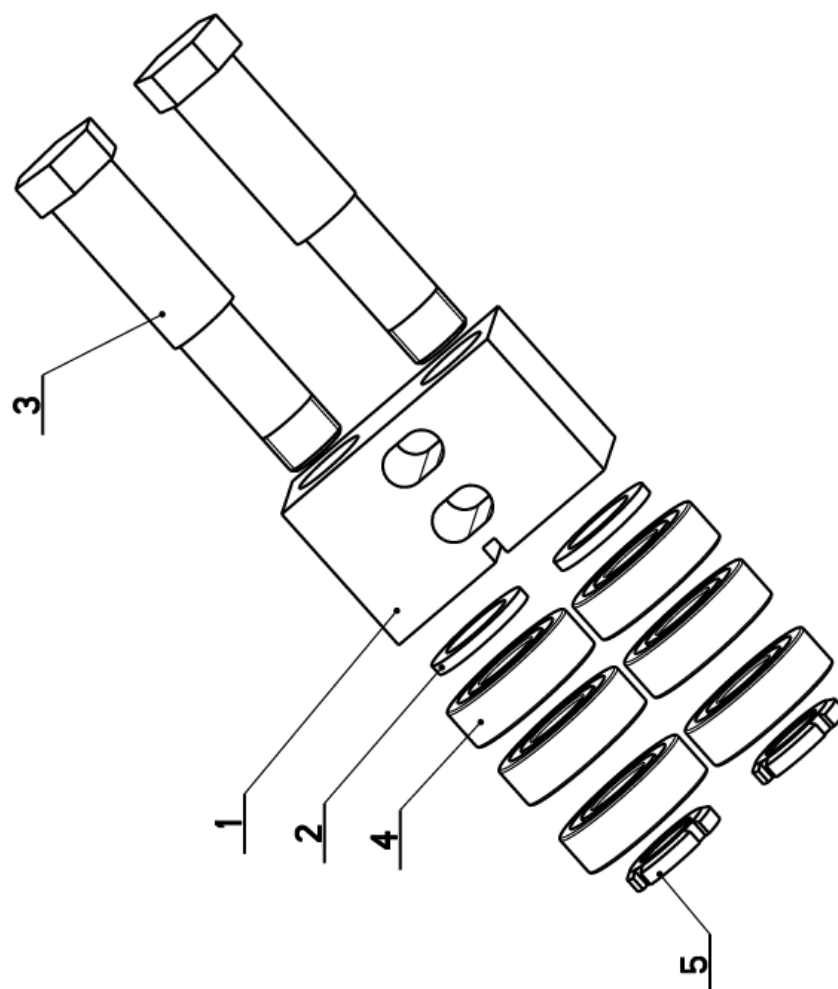
3. ZRUS. KOSTKA 30.6210-202 A NAHR. KOSTKOU 30.6210-203, ZRUS. DESKA VODICÍ 30.7510-104 A NAHR. 30.7610-110, ZRUS. DESKA VODICÍ 30.7510-114 A NAHR. 30.7610-120, ZRUS. SOUCASTI 90.001.25.048, 30.7510-118, 90.001.25.018, 95.801.035, 90.015.30.003, PRIDANY SOUC. 90.001.25.012, 95.800.002, 30.6210-107, 90.011.27.043. 142/ZM198 5.10.2009 SLEZACKOVA

4. ZRUS. SOUC. 30.6710-110 A NAHR. 31.6710-110. 175/ZM178 27.7.2015 SLEZACKOVA

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version); Název sestavy/Assembly title/Name der Baugruppe; Pozice (Pos./Position/Position);
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

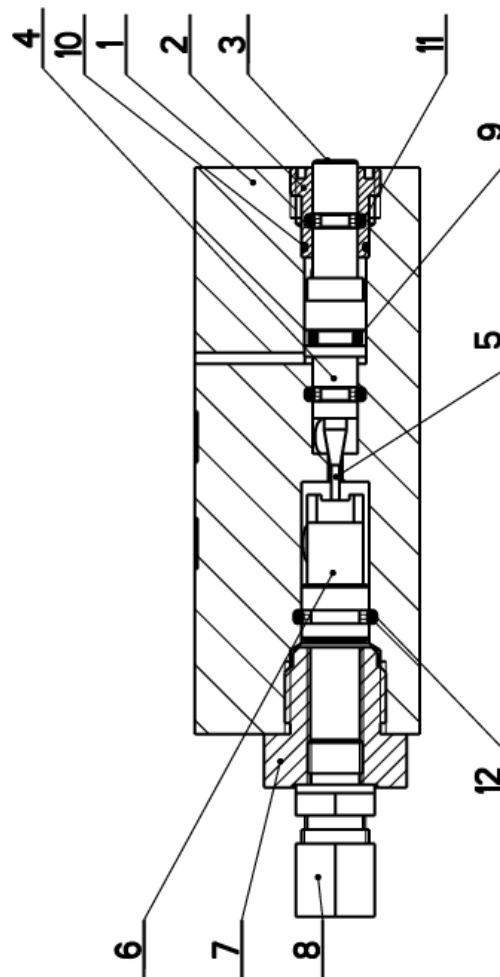
7.34. Kostka/ Cube / Würfel

Cislo Sestavy 201.6210-300		Ver. 3	Název sestavy VEDENÍ PASU/BELT GUIDE/SÄGEBANDFÜHRUNG		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.5910-109	0	KOSTKA / CUBE / WÜRFEL	TYC 70x50	1
2	30.6210-301	0	PODLOŽKA / WASHER / UNTERLEGSCHEIBE	TR 30/5	2
3	30.7510-103	3	CEP / LUG / BOLZEN	6HR24	2
4	95.001.016	0	LOŽISKO / BEARING / LAGER	6203 2RS	6
5	95.850.004	0	MATICE KM / KM NUT / KM-MUTTER	MATICE KM3	2



7.35. Kostka regulace / Regulation cube / Regelungswürfel

Císlo Sestavy 201.6816-100		Ver. 0	Název sestavy KOSTKA REGULACE/REGULATION CUBE/REGELUNGSWÜRFEL		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.6816-101	1	KOSTKA REGULACE / REGULATION CUBE / REGELUNGSWÜRFEL	TYC 40x40	1
2	30.6816-104	2	VÍKO / COVER / DECKEL	TYC 16	1
3	30.6816-103	0	PIST / PISTON / KOLBEN	TYC 12	1
4	30.6816-108	1	JEHLA / NEEDLE / NADEL	TYC 8	1
5	95.690.001	0	JEHLA / NEEDLE / NADEL	1.5x11.8	1
6	30.6816-106	3	PIST / PISTON / KOLBEN	TYC 12	1
7	30.6816-107	0	VÍKO / COVER / DECKEL	TYC 22	1
8	92.002.102	0	SROUBENÍ / BOLTING / VERSCHRAUBUNG	S-GEV-8LLR	1
9	96.002.003	0	KROUZEK O DYNAMICKY / DYNAMIC O RING / O-RING DYNAMISCH	6x2	1
10	96.002.041	0	KROUZEK O DYNAMICKY / DYNAMIC O RING / O-RING DYNAMISCH	10x1	1
11	96.001.001	0	KROUZEK O STATICKY / STATIC O RING / O-RING STATISCH	4x1.8	2
12	96.001.003	0	KROUZEK O STATICKY / STATIC O RING / O-RING STATISCH	8x2	1



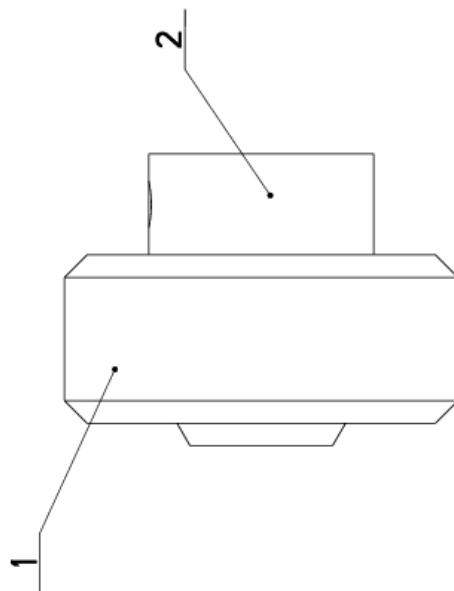
7.37. Kusovník / Piece list / Stückliste - Kartáč / Brush / Bürste

Číslo Sestavy 201.6214-250		Ver. 0	Název sestavy KARTAC/BRUSH/BÜRSTE		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.0814-204	0	KOLEČKO / WHEEL / ROLLE	SESTAVA	1
2	30.6114-105	0	DESKA / BOARD / PLATTE	HR. 70x12	1
3	30.6114-119	1	KROUZEK / RING / RING	d 28	2
4	30.6114-128	1	DRŽÁK / HOLDER / HALTER		1
5	30.6214-251	0	HRIDEL / SHAFT / WELLE	D 15	1
6	31.1506-115	0	PRUŽINA / SPRING / FEDER	1.6x12x25x7.5	2
7	31.2107-206	0	PRUŽINA / SPRING / FEDER	2x12x84x25.5	1
8	49.250.017	0	KARTAC / BRUSH / BÜRSTE	SPB 100x12	1
9	90.001.25.067	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M8x80	2
10	90.001.25.095	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M8x70	1
11	90.002.20.003	0	SROUB STAVEČI / ADJUSTMENT BOLT / STELLSCHRAUBE	SROUB M5x6	3
12	90.100.55.005	0	MATICE / NUT / MUTTER	MATICE _ M8	1
13	90.100.55.007	0	MATICE / NUT / MUTTER	MATICE _ M12	1
14	90.150.50.007	0	PODLOŽKA / WASHER / UNTERLEGSCHLEIBE	PODLOŽKA 13	1
15	95.001.006	0	LOŽISKO / BEARING / LAGER	6002 2RS	2

Číslo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz./Position/Position;
Objednávací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

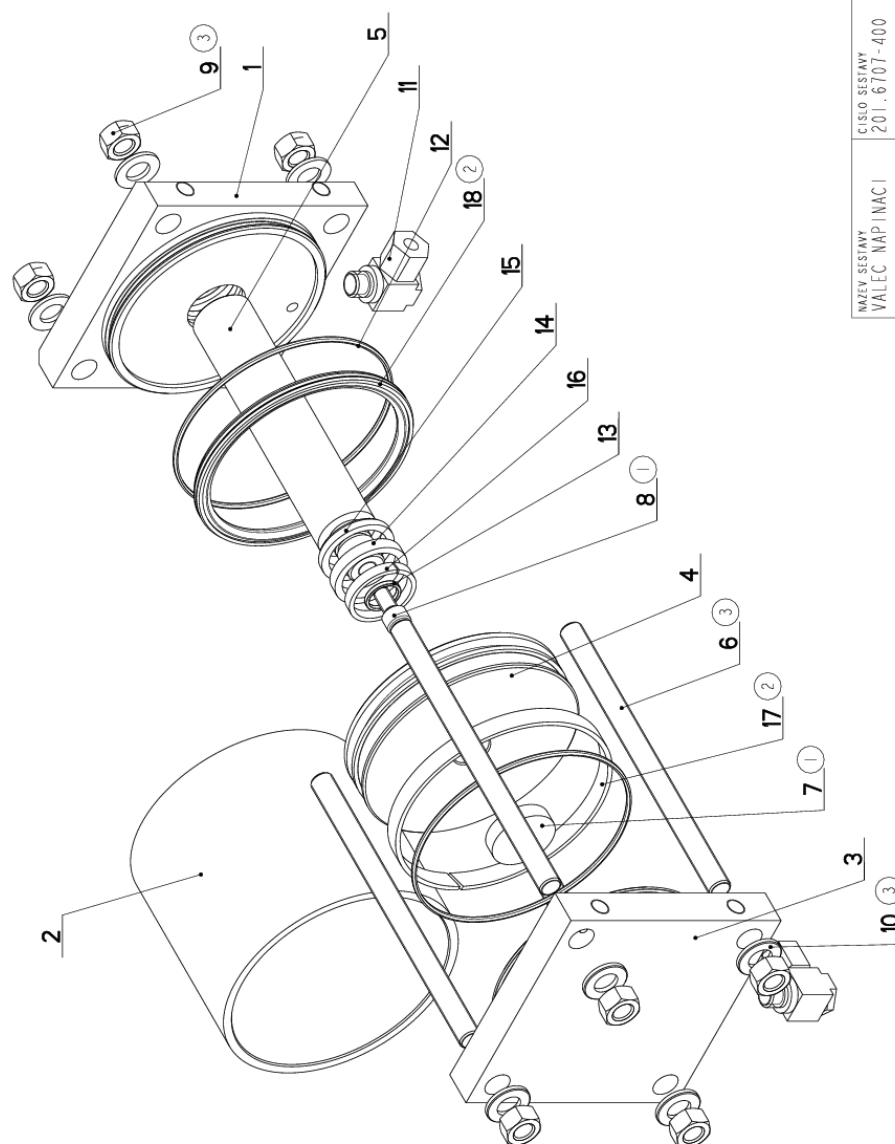
7.38. Kolečko / Wheel / Rolle

Císlo Sestavy 201.0814-204		Ver. 0	Název sestavy KOLEČKO/WHEEL/ROLLE		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.0814-204,1	0	KOLEČKO / /	d 35	1
2	30.0814-204,2	0	NABOJ / /	d 20	1



Cislo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Nazev sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Nazev položky/Volume title/Name der Position; Rozmer/Stock size/Abmessung

7.39. Válec napínací / Tensioning cylinder / Spannzyylinder



NAZEV SOUSTAVY VÁLEC NAPÍNACÍ	ČÍSLO SOUSTAVY 201.6707-400	STROJ EXTENDT20
Konstruoval: STASTNA		
Datum: 22. 07.2015		
Měřítko: 1:2		

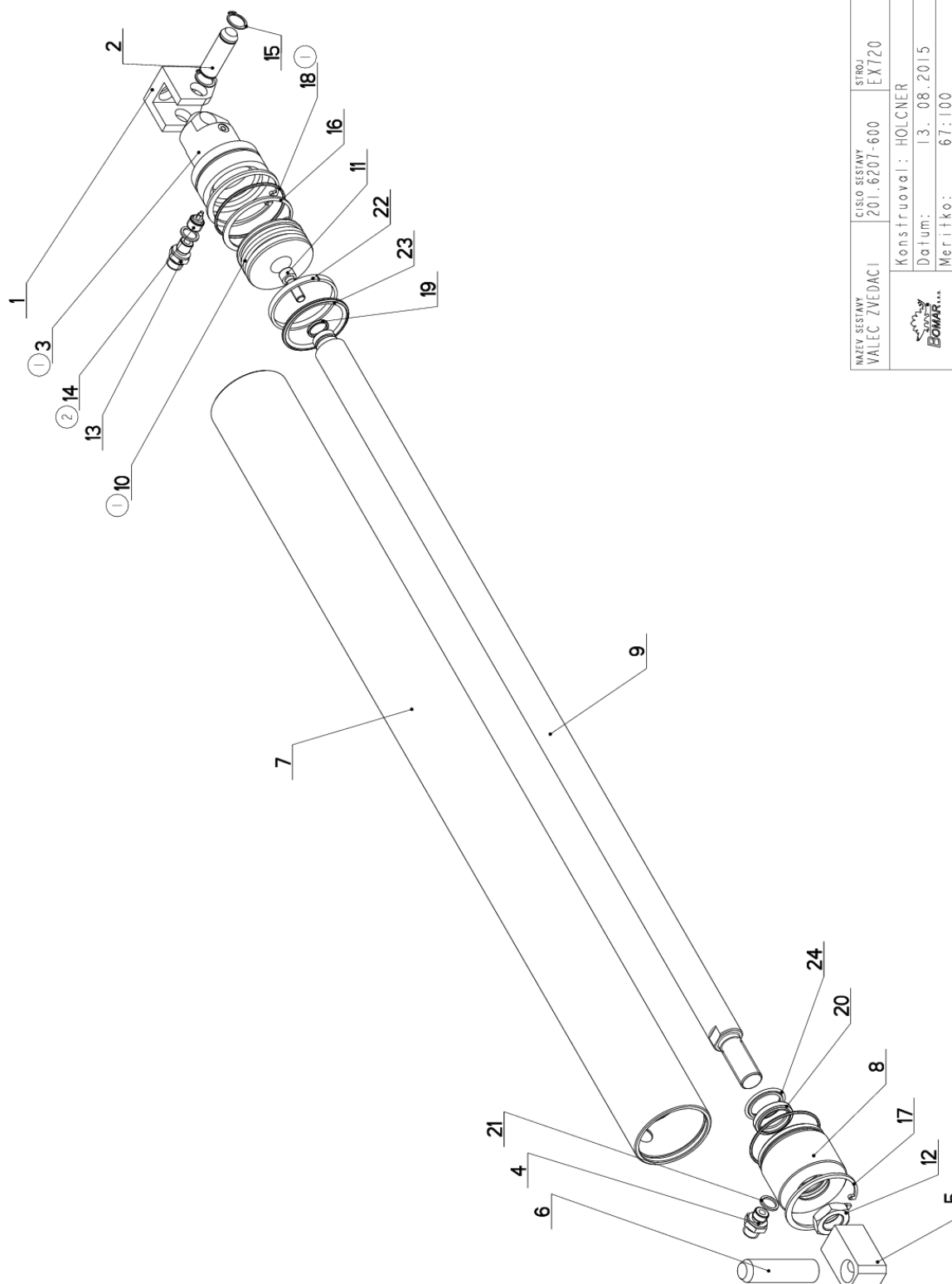
7.40. Kusovník / Piece list / Stückliste -
Válec napínací / Tensioning cylinder / Spannzyylinder

Cislo Sestavy 201.6707-400		Ver. 3	Název sestavy VALEC NAPÍNACÍ / TENSIONING CYLINDER / SPANNZYLINDER		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.6707-401	2	VÍKO / COVER / DECKEL	HR 130x40	1
2	30.6707-402	0	VALEC / ROLLER / ZYLINDER	TRUBKA 130/120	1
3	30.6707-403	2	VÍKO / COVER / DECKEL	HR 130x30	1
4	30.6707-404	1	PIST / PISTON / KOLBEN	d 125	1
5	30.6707-405	1	PISTNICE / PISTON ROD / KOLBENSTANGE	TYC 32	1
6	30.6707-407	1	TYC ZAVITOVÁ / THREADED POLE / GEWINDESTANGE	TYC M12	4
7	30.6707-005	1	PODLOŽKA / WASHER / UNTERLEGSCHLEIBE	P 8x35	1
8	90.001.25.031	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	8x16	1
9	90.100.25.006	0	MATICE / NUT / MUTTER	MATICE - M12 - PEVNOSTNÍ	8
10	90.150.50.013	0	PODLOŽKA / WASHER / UNTERLEGSCHLEIBE	PODLOŽKA B13	8
11	92.003.001	0	SROUBENÍ UHLOVÉ / ANGLE BOLTING / WINKELVERSCHRAUBUNG	P-RSWS-08LR	2
12	96.001.031	0	KROUZEK O STATICKÝ / STATIC O RING / O-RING STATISCH	114X3	2
13	96.002.007	0	KROUZEK O DYNAMICKÝ / DYNAMIC O RING / O-RING DYNAMISCH	16x2 NBR 70SH	1
14	96.042.007	0	TESNĚNÍ / SEALING / DICHTUNG	32x40x6.3	1
15	96.060.009	0	KROUZEK STÍRAČÍ / SCRAPER RING / ABSTREIFRING	32x40x5x6	1
16	96.084.003	0	KROUZEK VODÍČÍ / LEAD RING / FÜHRUNGSRING	GR 6500320	1
17	96.084.014	0	KROUZEK VODÍČÍ / LEAD RING / FÜHRUNGSRING	Páska	1
18	96.900.028	0	TESNĚNÍ KOMBINOVANÉ / COMBINATION SEALING / KOMBIDICHTUNG		1

1. ZRUS. PODLOŽKA 8 90.151.50.005 A NAHR. PODLOŽKOU 30.6707-005, ZRUS. SROUB M8x10A NAHR. SROUBEM M8x16 90.001.25.031. 191/ZM224 4.6.2007 SLEZACKOVA
2. ZRUS. "O" KROUZEK 96.002.044 A NAHRÁZENÍ TESNĚNÍ KOMBINOVANÉ 96.900.028. ZRUS. PASKA 95.780.001 A NAHR. 96.084.014.
316/ZM337 27.8.2007 SLEZACKOVA
3. ZRUS. TYC 30.6707-406 A NAHR. 30.6707-407, ZRUS. PODLOŽKA 90.150.50.006 A NAHR. 90.150.50.007, ZRUS. MATICE 90.100.55.006 A
NAHR. 90.100.25.006. 377/ZM098 4.5.2011 SLEZACKOVA

Cislo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version); Název sestavy/Assembly title/Name der Baugruppe; Pozice (Pos./Position/Position);
Objednávací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.41. Válec zvedací / Lifting cylinder / Hebezyylinder



NAZEV SOUSTAVY VÁLEC ZVEDACÍ	ČÍSLO SOUSTAVY 201.6207-600	STROJ EXT20
Konstruoval: HOLCNER		
Datum: 13. 08. 2015		
Meritko: 67:100		

7.42. Kusovník / Piece list / Stückliste -
Válec zvedací / Lifting cylinder / Hebezyylinder

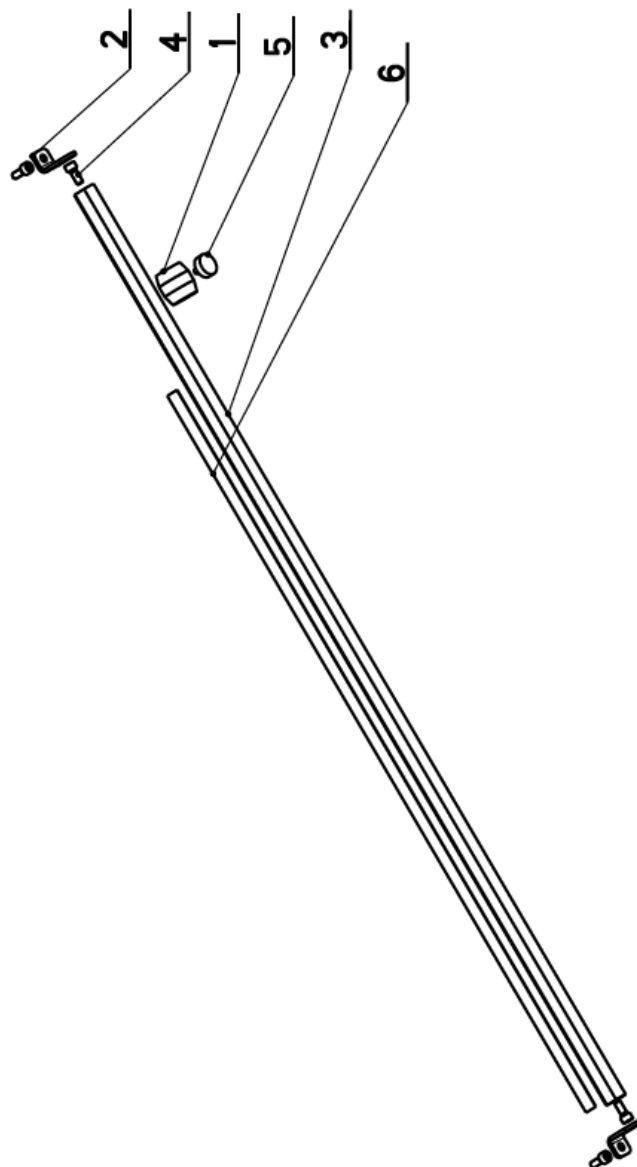
Cislo Sestavy 201.6207-600		Ver. 2	Název sestavy VALEC ZVEDACÍ / LIFTING CYLINDER / HEBEZYLYNDER		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.0807-008	3	DRŽAK / HOLDER / HALTER	HR 40x40	1
2	30.0807-009	2	CEP / LUG / BOLZEN	d 16H9	1
3	30.1807-008(1)	1	VÍKO / COVER / DECKEL	d 65	1
4	30.2807-109	0	SROUBENÍ PRÍME / DIRECT BOLTING / GERADE VERSCHRAUBUNG		1
5	30.4707-206	0	DRŽAK / HOLDER / HALTER	HR 30x30	1
6	30.6107-505	0	CEP / LUG / BOLZEN	d 20	1
7	30.6207-501	4	VALEC / ROLLER / ZYLINDER	TRUBKA 73/63	1
8	30.6207-502	3	VÍKO / COVER / DECKEL	TYC 70	1
9	30.6207-505	0	PISTNICE / PISTON ROD / KOLBENSTANGE	TYC 28	1
10	30.6207-507(1)	1	PIST / PISTON / KOLBEN	D65	1
11	90.001.25.033	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSHSCRAUBE	8x25	1
12	90.101.55.007	0	MATICE / NUT / MUTTER	MATICE M20x1,5	1
13	92.002.001	0	SROUBENÍ PRÍME / DIRECT BOLTING / GERADE VERSCHRAUBUNG	G 1/4"	1
14	92.151.008(2)	0	VENTIL POJISTNÝ / SAFETY VALVE / SICHERUNGSVENTIL	VPN-H 1/4"	1
15	95.800.007	0	SEGR HRÍDEL. / OUTSIDE SAFETY RING / SICHERUNGSRING AUSSEN	POJISTNÝ KROUZEK 16	2
16	95.801.011	0	SEGR DIRA / OUTSIDE SAFETY RING / SICHERUNGSRING AUSSEN	POJISTNÝ KROUZEK 63	1
17	95.801.012	0	SEGR DIRA / OUTSIDE SAFETY RING / SICHERUNGSRING AUSSEN	POJISTNÝ KROUZEK 65	2
18	96.001.016(1)	0	O-KROUZEK STATIC / STATIC O RING / O-RING STATISCH	60x2	2
19	96.002.007	0	KROUZEK O DYNAMICKY / DYNAMIC O RING / O-RING DYNAMISCH	16x2 NBR 70SH	1
20	96.061.009	0	KROUZEK STÍRACÍ / SCRAPER RING / ABSTREIFRING	WD200280 Z201	1
21	96.082.002	0	TESNENÍ / SEAL RING / DICHTUNGSRING	13/17x1,5 CU	2
22	96.084.002	0	KROUZEK VODICÍ / LEAD RING / FÜHRUNGSRING	GP6500630-T47	1
23	96.900.016	0	TESNENÍ KOMBINOVANÉ / COMBINATION SEALING / KOMBIDICHTUNG	PT0200630	1
24	96.900.021	0	TESNENÍ KOMBINOVANÉ / COMBINATION SEALING / KOMBIDICHTUNG	RSK200280-46N	1

1. ZRUS. REDUKCE 30.9107-509. ZRUS. VÍKO 30.6207-506 A NAHR. 30.1807-008. ZRUS. KROUZEK VODICÍ 96.001.015 A NAHR. 96.001.016.
ZRUS. PIST 30.6207-504 A NAHR. 30.6207-507. ZRUS. 1x VODICÍ KROUZEK 96.084.002.026/ZM041 15.3.2011 SLEZACKOVA

2. VENTIL 92.151.001 PRECISLOVAN NA 92.151.008. 222/ZM211 29.7.2013 SLEZACKOVA

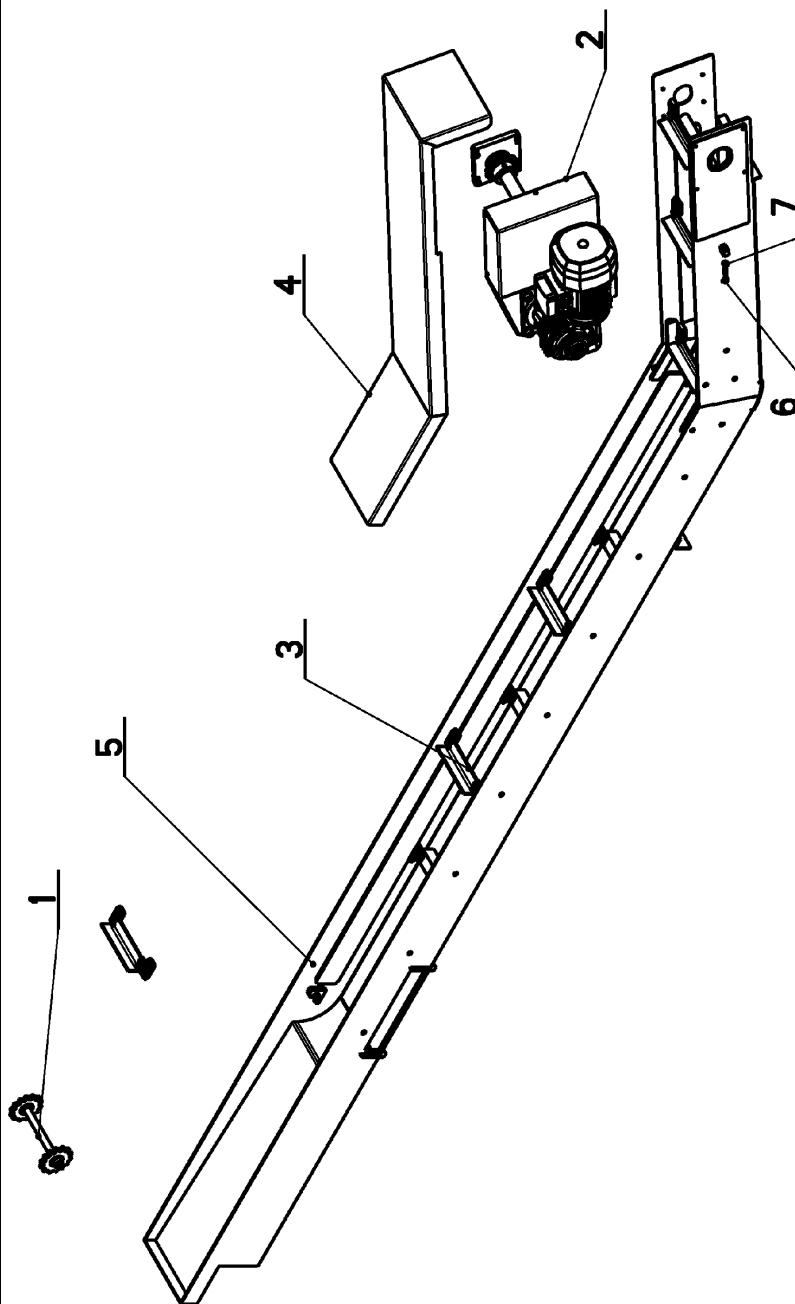
7.43. Odměrování / Measuring / Gehrungsmessung

Cislo sestavy 201.6214-020		Ver. 0	Název sestavy ODMEROVÁNÍ / MEASURING / GEHRUNGSMESSUNG		
Poz.	Objednací číslo	Ver.	Název položky	Rožmer	Ks
1	30.2014-001	0	OBJÍMKA / CLAMP / KLAMMERSTÜCK		1
2	30.6114-023	0	DRŽÁK / HOLDER / HALTER	P 3x20	2
3	30.6214-021	0	TYC / POLE / STANGE	d 20	1
4	90.001.25.092	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M6x14	4
5	94.007.001	0	SROUB / BOLT / SCHRAUBE	M5x10	1
6	99.120.002	0	PRAVÍTKO / RULER / SKALENBANDMAß		1



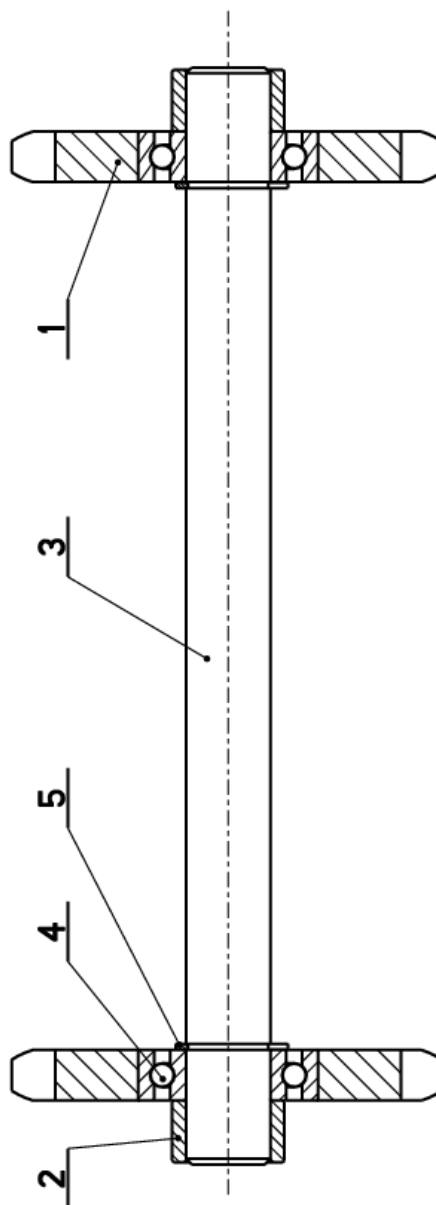
7.44. Vynašeč třískový / Chip extractor / Spanabführung

Císlo Sestavy 201.6217-100	Ver. 4	Název sestavy VYNAŠEČ TRÍSKOVÝ/CHIP EXTRACTOR/SPANABFÜHRUNG			
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.6017-103	0	KOLO NAPÍNAČÍ / TENSIONING WHEEL / UMLENRAD		1
2	201.6017-250	1	POHON / DRIVE / ANTRIEB		1
3	201.6717-304	1	RETEZ / CHAIN / KETTE		11
4	30.6217-205	2	KRYT / COVER / ABDECKUNG		1
5	30.6217-301	0	KORYTO / CHANNEL / RINNE		1
6	90.005.55.012	0	6 HR ŠROUB ZIN / 6 SIDED BOLT / SECHSKANTSCHRAUBE	ŠROUB M6x40	2
7	90.100.55.004	0	MATICE / NUT / MUTTER	MATICE _ M6	2

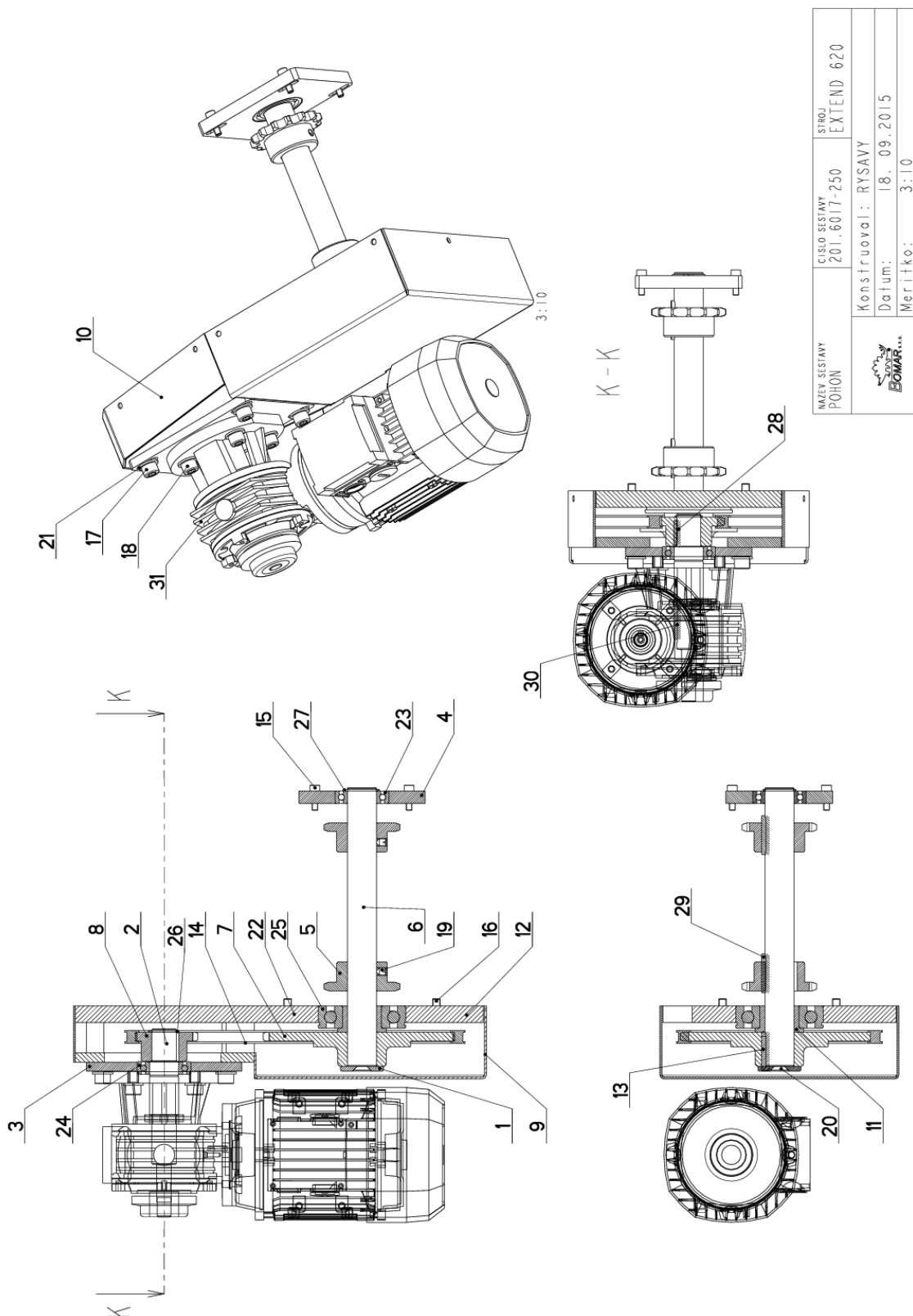


7.45. Kolo napínací / Tensioning wheel / Umlenkrad

Číslo Sestavy 201.6017-103		Ver. 0	Název sestavy KOLO NAPÍNACÍ / TENSIONING WHEEL / UMLENKRAD		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.6017-111	0	KOLO RETEZOVÉ / CHAIN WHEEL / KETTENRAD	RETEZKA z=14	2
2	30.6017-114	0	KROUZEK DISTANČNÍ / DISTANCE RING / DISTANZRING	TR. 20x3	2
3	30.6017-117	0	HRDEL / SHAFT / WELLE	d15	1
4	95.001.006	0	LOŽISKO KULÍ / RADE / BEARING / LAGER	6002 2RS	2
5	95.800.006	0	KROUZEK POJISTNÝ VNEJŠÍ / OUTSIDE SAFETY RING / SICHERUNGSRING AUßEN	POJISTNÝ KROUZEK 15	2



7.46. Pohon / Drive / Antrieb



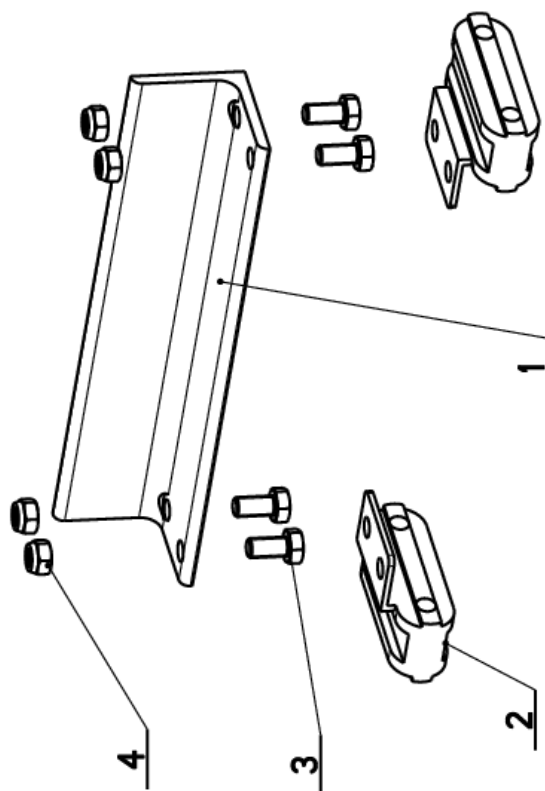
7.47. Kusovník / Piece list / Stückliste -
Pohon / Drive / Antrieb

Císlo Sestavy 201.6017-250		Ver. 1	Název sestavy POHON/DRIVE / ANTRIEB		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.1502-465	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	d 45	1
2	30.6017-203	1	HRIDEL / SHAFT / WELLE	D 32	1
3	30.6017-206	0	DESKA / BOARD / PLATTE	HR 130x10	1
4	30.6017-207	0	DESKA / BOARD / PLATTE	HR 130x15	1
5	30.6017-208	0	KOLO RETEZOVÉ / CHAIN WHEEL / KETTENRAD	RET.KOLO z=14	2
6	30.6017-209	0	HRIDEL / SHAFT / WELLE	D 30	1
7	30.6017-211	0	KOLO RETEZOVÉ / CHAIN WHEEL / KETTENRAD	10B-1	1
8	30.6017-212	0	KOLO RETEZOVÉ / CHAIN WHEEL / KETTENRAD		1
9	30.6017-213	0	KRYT / COVER / ABDECKUNG	P 2x334	1
10	30.6017-214	0	KRYT / COVER / ABDECKUNG	P 2x58	1
11	30.6017-215	1	KROUZEK DISTANČNÍ / DISTANCE RING / DISTANZRING	D 50	1
12	30.6017-216	0	DRŽÁK / HOLDER / HALTER	SVARENO	1
13	30.6017-218	0	PERO / SPRING / FEDER	PERO 8x10	1
14	49.200.027	0	RETEZ / CHAIN / KETTE	10B-1	1
15	90.001.25.018	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M6x20	4
16	90.001.25.031	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	8x16	4
17	90.001.25.046	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x20	4
18	90.001.25.106	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x22	4
19	90.003.20.010	0	SROUB STAVEČNÍ / ADJUSTMENT BOLT / STELLSCHRAUBE	SROUB M8x10	2
20	90.011.27.008	0	SROUB ZAPUSTNÝ / COUNTERSINK BOLT / SENKSCHRAUBE	SROUB M10x20	1
21	90.150.50.006	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	PODLOŽKA 10,5	8
22	90.163.00.002	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	PODLOŽKA 8	4
23	95.001.009	0	LOŽISKO / BEARING / LAGER	6006 2RS	1
24	95.003.005	0	LOŽISKO / BEARING / LAGER	6006AN	1
25	95.003.006	0	LOŽISKO / BEARING / LAGER	6308AN	1
26	95.800.012	0	SEGR HRIDEL. / OUTSIDE SAFETY RING / SICHERUNGSRING AUSSEN	POJISTNÝ KROUZEK 25	1
27	95.800.013	0	SEGR HRIDEL. / OUTSIDE SAFETY RING / SICHERUNGSRING AUSSEN	POJISTNÝ KROUZEK 30	1
28	95.810.007	1	PERO TESNÉ / TIGHT SPRING / PASSFEDER	PERO 8x7x25	1
29	95.810.010	0	PERO TESNÉ / TIGHT SPRING / PASSFEDER	PERO 10x8x40	3
30	95.810.016	0	PERO TESNÉ / TIGHT SPRING / PASSFEDER	PERO 8x7x40	1
31	99.001.073	0	PREVODOVKA / TRANSMISSION / GETRIEBE	VF 49 L2 F2 60 P71 B14 B8	1

1. PRIDANO 1xPERO 8x7x25 95.810.007, 228/ZM223 9.8.2008 SLEZACKOVA

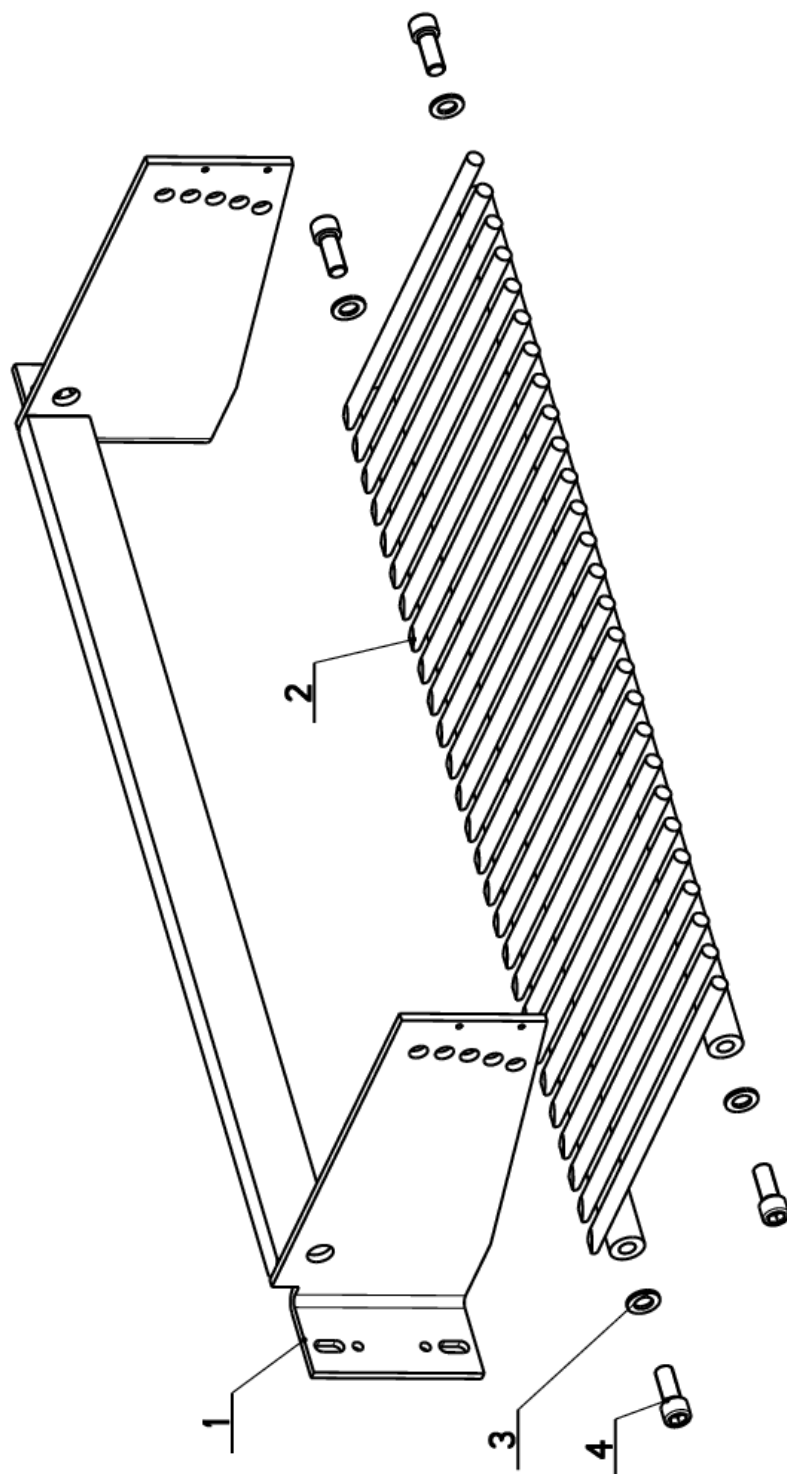
7.48. Řetěz / Chain / Kette

Císlo Sestavy 201.6717-304		Ver. 1		Název sestavy RETEZ/CHAIN/KETTE	
Poz.	Objednací číslo	Ver.	Název položky	Rožmer	Ks
1	30.6017-115	0	STERAC / WIPER / ABSTREIFER	PROFIL 30x30x3	1
2	30.6717-305	0	RETEZ PŮHOŇOVÝ / DRIVE BELT / ANTRIEBSKETTE	210BK3 (1 1/4x3/8)+un	2
3	90.005.55.002	0	6 HR SROUB ZIN / 6 SIDED BOLT / SECHSKANTSCHRAUBE	SROUB M5x10	4
4	90.100.08.005	0	MATICE / NUT / MUTTER	M5	4

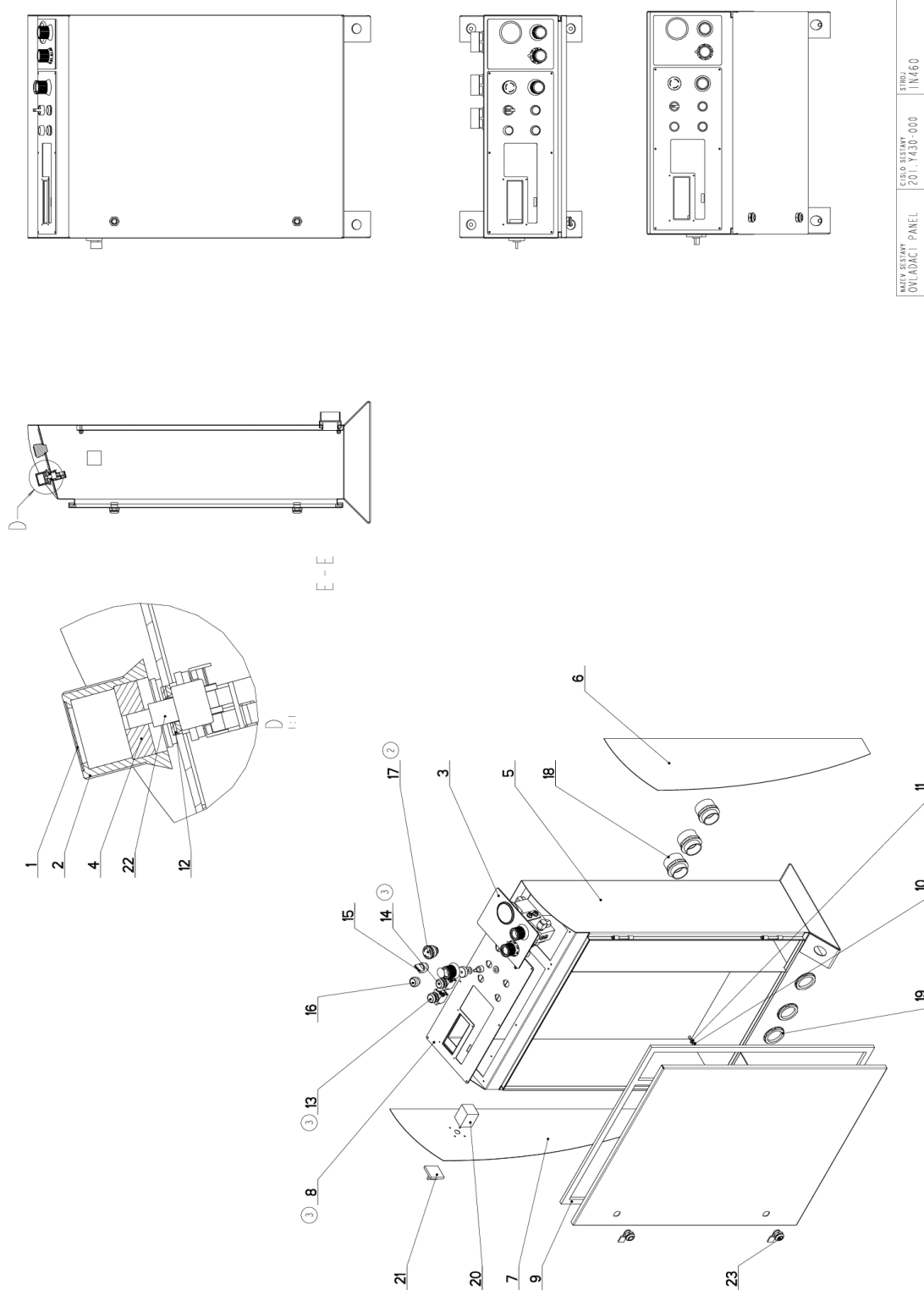


7.49. Rošt / Grill / Gitter

Cislo Setuavy		Ver.		Nazev sestavy	
201.6218-100		0		ROST/GRILL/GITTER	
Poz.	Objednací číslo	Ver.	Nazev položky	Rožer	Ks
1	30.6218-101	1	DRŽAK / HOLDER / HALTER		1
2	30.6218-102	1	ROST / GRILL / GITTER		1
3	90.150.50.009	0	PODLOŽKA DIN125 / WASHER / UNTERLEGSCHIEBE	PODLOŽKA 17	4
4	90.001.25.086	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M16X40	4



7.1. Ovladačí panel / Control panel / Bedienpult



MATEV SESTAVY OVLADACI PANEL	CÍSLO SESTAVY 201.7430-000	STROJ IN460
Konstruoval: HLADIL		
Datum: 22. 09. 2017		
Verzika: 7-50		

7.2. Kusovník / Piece list / Stückliste - Ovladačí panel / Control panel / Bedienpult

Císlo Sestavy 201.Y430-000		Ver. 3	Název sestavy OVLADACÍ PANEL/CONTROL PANEL/BEDIENPULT		
Poz.	Objednáací číslo	Ver.	Název položky	Rozměr	Ks
1	30.6130-012	0	VÍKO / COVER / DECKEL	P 0,5x30	3
2	31.6130-008	0	HLAVICE / HEAD / KOPF		1
3	201.R230-220	1	OVLADACÍ PANEL / CONTROL PANEL / BEDIENPULT		1
4	30.R230-010	0	MEZIKUS / INTERMEDIATE PIECE / PASSSTÜCK	d 32	1
5	30.R230-201	4	SKRIN / BOX / KASTEN		1
6	30.R230-204	0	PLECH / PLATE / BLECH	P 1x220	1
7	30.R230-206	1	PLECH / PLATE / BLECH	P 1x220	1
8	31.R230-207	0	PANEL ELEKTRO / ELECTRO PANEL / PANEL	P 3x205	1
9	61.352.001	0	TESNENÍ / SEALING / DICHTUNG	TESNENÍ 19x10	1
10	90.100.55.004	0	MATICE / NUT / MUTTER	MATICE - M6	4
11	90.150.50.004	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	PODLOŽKA 6,4	4
12	90.150.50.006	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	PODLOŽKA 10,5	2
13	91.060.031	0	SPINAC / SWITCH / SCHALTER	zelené - prosvětlené	1
14	91.060.035	0	SPINAC / SWITCH / SCHALTER	černé	1
15	91.060.051	0	PREPINAC / SWITCH / UMSCHALTER		1
16	91.060.053	0	HLAVICE / HEAD / KOPF		1
17	91.060.084	0	HLAVICE TOTAL STOP / TOTAL STOP HEAD / TASTE TOTAL STOP		1
18	91.071.022	0	VÝVODKA / BUSHING / TÜLLE		3
19	91.072.016	0	MATICE / NUT / MUTTER		3
20	91.170.003	0	SPINAC VÁČKOVÝ / CAM SWITCH / SCHALTER	LE2-12-1763	1
21	91.180.001	0	DESKA SPINACE / ELECTRIC BOARD / PLATINE		1
22	91.283.015	0	POTENCIOMETR / POTENTIOMETER / POTENTIOMETER	TP 195 4K7/N 20A	1
23	99.104.002	0	ZAMEK / LOCK / SCHLOSS	ZAMEK ČERNÝ	2

1.ZRUS.VÍKO 30.R230-203,PANEL 30.R230-202,2xCEP 30.7217-028,2XPOJ.KROUZEK 95.802.003 (PRIDANO DO SKRINE 30.R230-201).

061/ZM110 29.3.2012 SLEZACKOVA

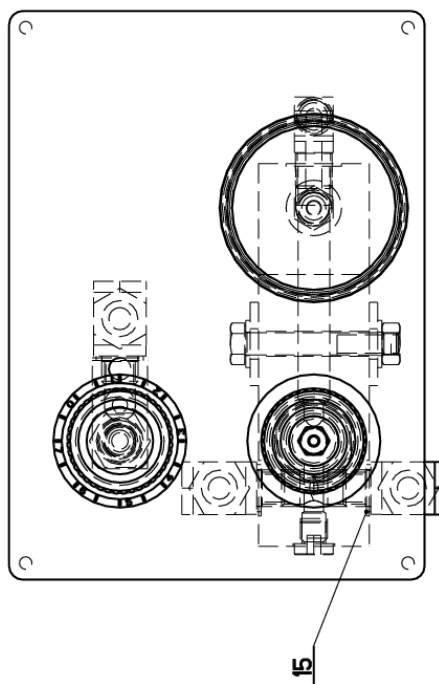
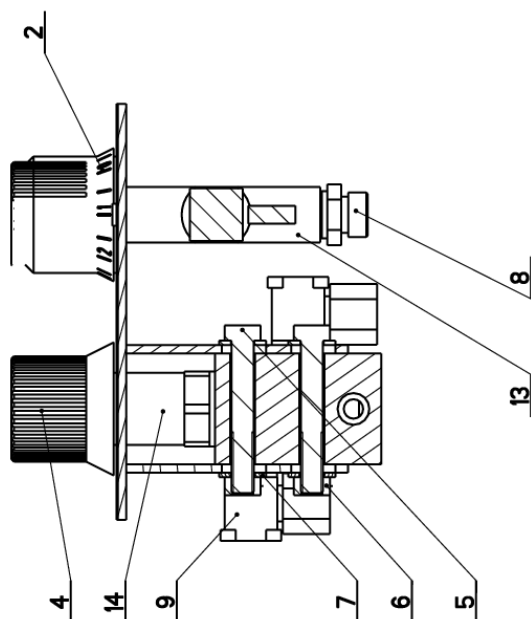
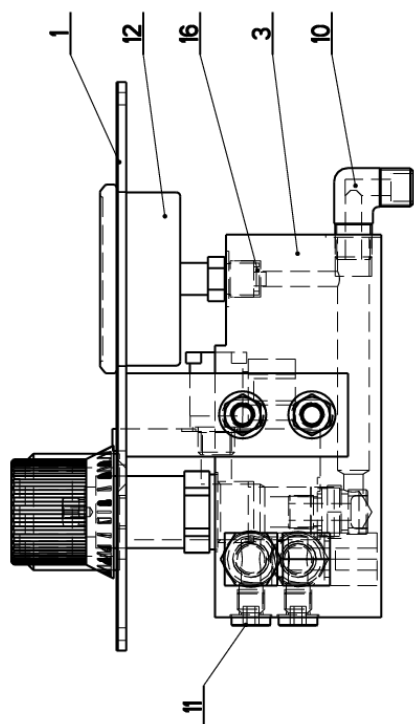
2.ZRUS.HLAVICE TOTAL STOP 91.060.030 A NAHR.91.060.084 147/ZM184 2.7.2013 SLEZACKOVA

3.ZRUS.PANEL ELEKTRO 251.654 A NAHR. 31.R230-207,ZRUS TLACITKA 91.060.034 A 91.060.055 A

91.060.054 A 91.060.033, PRID. TLACITKA 91.060.031 A 91.060.035 201/ZM304 22.9.2017 ČERNÝ

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz./Position/Position;
Objednáací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.3. Ovladací panel / Control panel / Bedienpult



NAZEV SESTAVY OVLADACÍ PANEL	ČÍSLO SESTAVY 201.R230-220	STŘOJ PL, EX, IN
Konstruoval: ODVARKA		
Datum: 05. 04. 2012		
Meritko: 7:10		

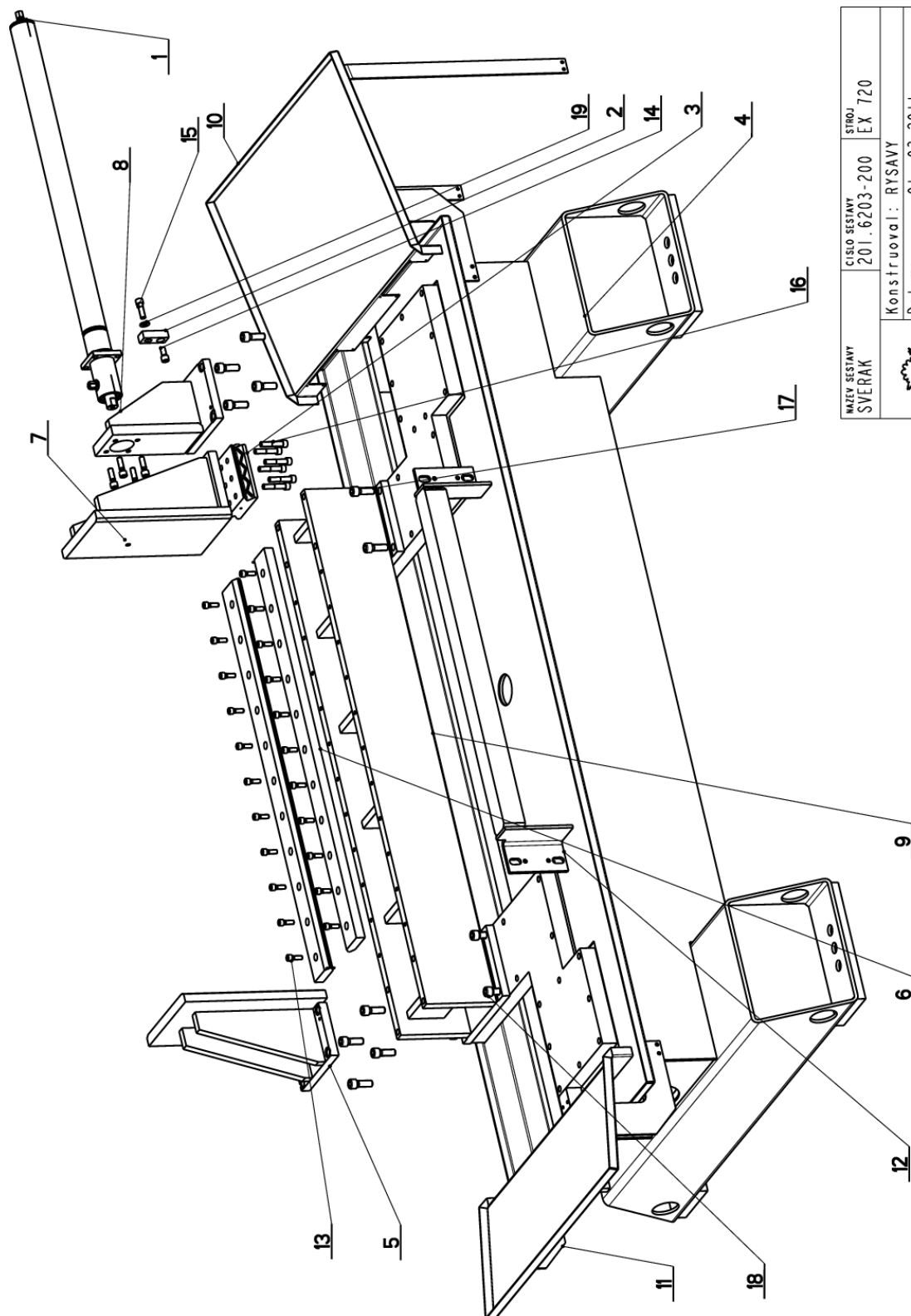
7.4. Kusovník / Piece list / Stückliste -
Ovladačí panel / Control panel / Bedienpult

Císlo Sestavy 201.R230-220		Ver. I	Název sestavy OVLADAČÍ PANEL/CONTROL PANEL/BEDIENPULT	
Poz.	Objednací číslo	Ver.	Název položky	Ks
1	251.652	0	PANEL / PANEL / PANEL	1
2	30.6130-018	0	HLAVICE / HEAD / KOPF	1
3	30.6130-103	2	KOSTKA REGULATE / REGULATION CUBE / REGELUNGSWÜRFEL	1
4	31.6130-008	0	HLAVICE / HEAD / KOPF	1
5	90.005.55.064	0	SROUB 6HRANNÝ / 6 SIDED BOLT / SECHSKANTSCHRAUBE	2
6	90.100.55.005	0	MATICE / NUT / MUTTER	2
7	90.150.50.005	0	PODLOŽKA / WASHER / UNTERLEGSCHIBE	4
8	92.002.103	0	SROUBENÍ PRÍME / DIRECT BOLTING / GERADE VERSCHRAUBUNG	1
9	92.003.001	0	SROUBENÍ UHLÖVE / ANGLE BOLTING / WINKELVERSCHRAUBUNG	3
10	92.004.001	0	SROUBENÍ UHLÖVE / ANGLE BOLTING / WINKELVERSCHRAUBUNG	1
11	92.019.003	0	ZATKA / PLUG / STOPFEN	2
12	92.080.002	0	MANOMETR / MANOMETER / MANOMETER	1
13	92.152.001	0	VENTIL SKRTICI / CHOKE VALVE / DROSSELVENTIL	1
14	92.154.001	0	VENTIL REDUKČNÍ / REDUCTION VALVE / DRUCKMINDERUNGSVENTIL	1
15	96.082.002	0	TESNĚNÍ / SEALING / DICHTUNG	4
16	96.082.005	0	KROUZEK TESNÍCÍ / SEAL RING / DICHTUNGSRING	2

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Pos.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

8. **Příslušenství/ Accessories/ Zubehör**

8.1. Svěrák / Vice / Schraubstock

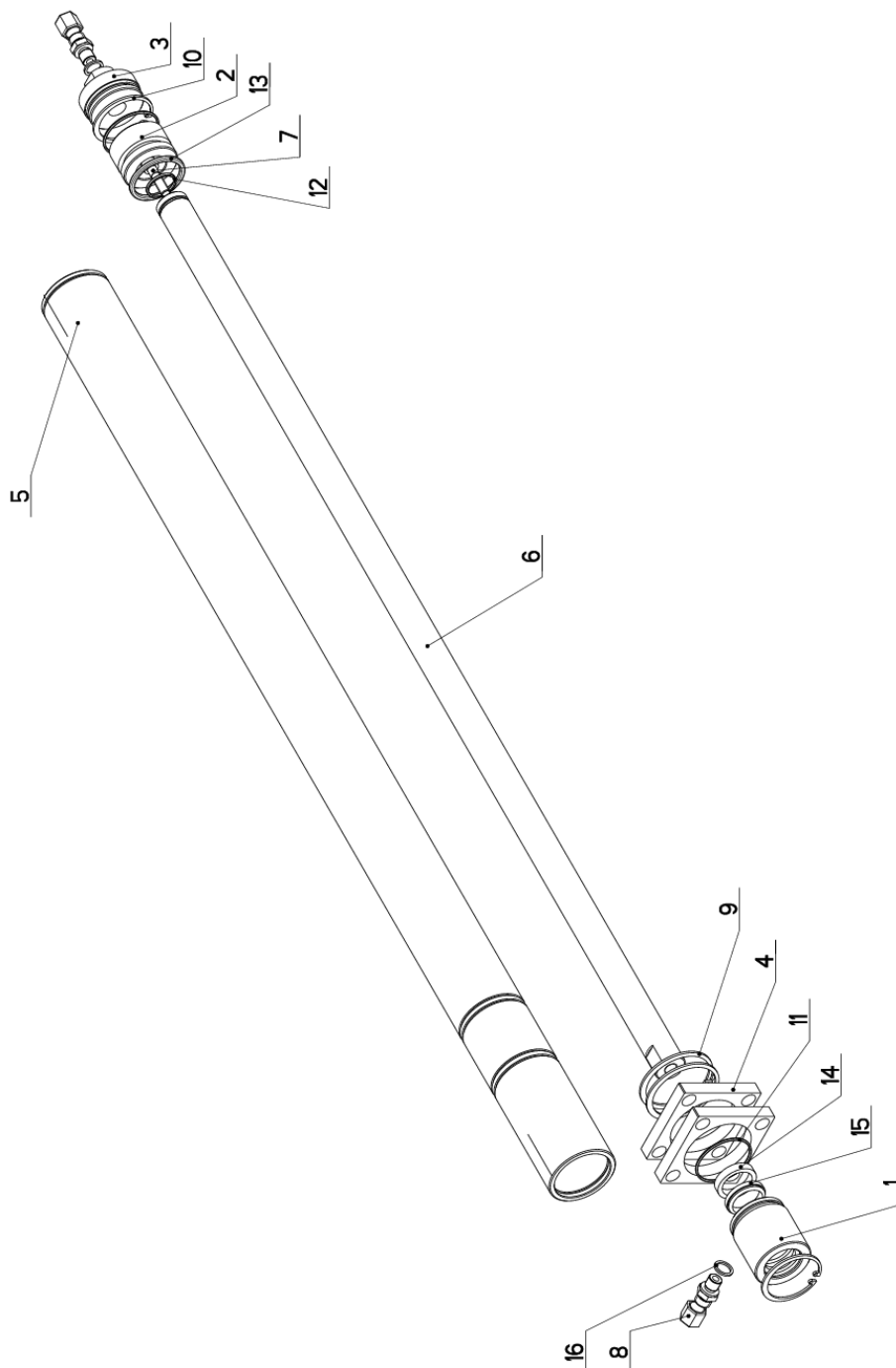


NAZEV SESTAVY SVĚRÁK	ČÍSLO SESTAVY 201.6203-200	STROJ EX 720
Konstruoval: RYSAVÝ		
Datum: 01. 03.2011		
Meritko: 7:50		

8.2. Kusovník / Piece list / Stückliste -
Svěrák / Vice / Schraubstock

Císlo Seřady 201.6203-200		Ver. 0	Název seřady SVERAK/VICE/SCHRAUBSTOCK		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.6207-100	0	VALEC SVERAKU / VICE CYLINDER / SCHRAUBSTOCKZYLINDER		1
2	30.6103-005	0	DRŽAK / HOLDER / HALTER	HR 30x20	1
3	30.6103-105	2	KOSTKA / CUBE / WÜRFEL	TYC 130x50	1
4	30.6201-201	0	PODSTAVEC / BASE / UNTERSATZ		1
5	30.6203-001	3	CELIST PEVNA / SOLID JAW / FESTE BACKE		1
6	30.6203-104	2	LISTA SVERAKU / VICE TRIM / SCHRAUBSTOCKLEISTE	TYC 82x27	2
7	30.6203-202	0	CELIST POHYBLIVÁ / MOVING JAW / BEWEGLICHE BACKE		1
8	30.6203-208	0	KONZOLA / CONSOLE / KONSOLE		1
9	30.6203-209	0	PODSTAVEC SVERAKU / VICE BASE / SCHRAUBSTOCKUNTERSATZ		1
10	30.6214-209	0	OKAP / GUTTER CHANNEL / BLECH		1
11	30.6214-210	0	OKAP / GUTTER CHANNEL / BLECH		1
12	30.6218-201	0	LISTA / TRIM / LEISTE		1
13	90.001.25.048	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x30	22
14	90.001.25.057	0	SROUB IMBUS ČERNÝ / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M12x25	1
15	90.001.25.060	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M12x40	5
16	90.001.25.063	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M12x60	6
17	90.001.25.074	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M16x45	12
18	90.001.25.086	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M16x40	4
9	90.150.50.007	0	PODLOŽKA / WASHER / UNTERLEGSCHEIBE	PODLOŽKA 13	1

8.3. Válec svěráku/ Vice cylinder/ Schraubstockzylinder



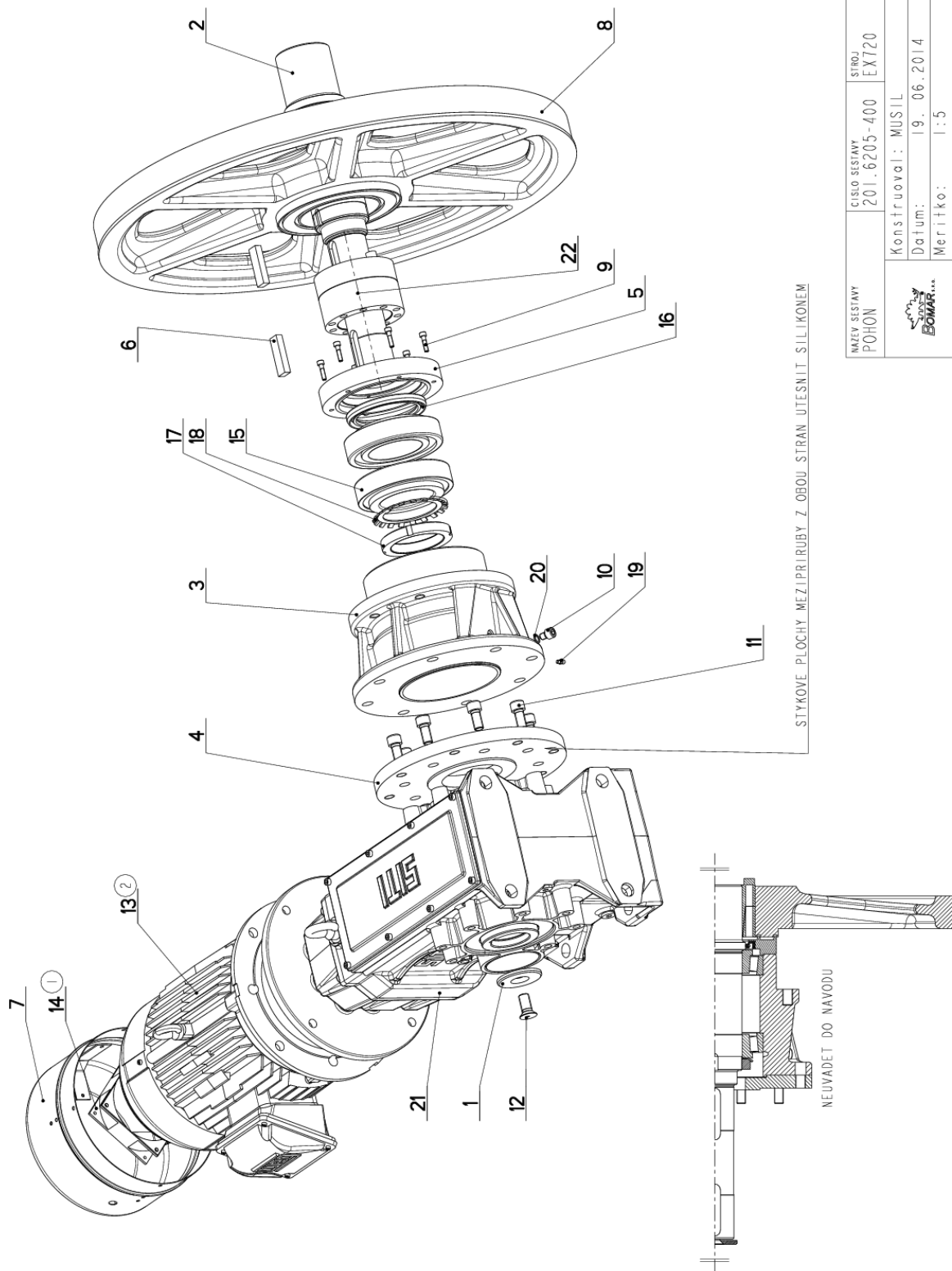
MAVEJ SESTAVY	CISLO SESTAVY	STROJ
VALEC SVERAKU	201.6207-100	SL-720
Konstruoval: STASNA		
Datum: 14. 08.2015		
Meritko: 1-2		

8.4. Kusovník / Piece list / Stückliste -Válec svěráku/ Vice cylinder/ Schraubstockzylinder

Cislo Sestavy 201.6207-100		Ver. 0	Název sestavy VALEC SVĚRAKU/VICE CYLINDER/SCHRAUBSTOCKZYLINDER		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.1807-104	2	VÍKO / COVER / DECKEL	TYC 55	1
2	30.2007-302	0	PIST / PISTON / KOLBEN	d 55	1
3	30.2007-304	1	VÍKO / COVER / DECKEL	d 55	1
4	30.6007-107	0	PRÍLOŽKA / STRAP / LASCHE	HR 80x12	2
5	30.6207-101	2	VALEC / ROLLER / ZYLINDER	TRUBKA 62/50	1
6	30.6207-102	2	PISTNICE / PISTON ROD / KOLBENSTANGE	d 28	1
7	90.001.25.083	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M8x30	1
8	92.002.101	0	SROUBENÍ PRÍME / DIRECT BOLTING / GERADE VERSCHRAUBUNG		2
9	95.800.021	0	SEGR HRÍDEL. / OUTSIDE SAFETY RING / SICHERUNGSRING AUSSEN	POJISTNÝ KROUZEK 62	2
10	95.801.009	0	SEGR DIRA / OUTSIDE SAFETY RING / SICHERUNGSRING AUSSEN	POJISTNÝ KROUZEK 52	2
11	96.001.013	0	O-KROUZEK STATIC / STATIC O RING / O-RING STATISCH	45x2	2
12	96.002.011	0	KROUZEK O DYNAMICKY / DYNAMIC O RING / O-RING DYNAMISCH	24x2	1
13	96.020.005	0	KROUZEK TESNICÍ / SEAL RING / DICHTUNGSRING	39.2x5.33	1
14	96.041.003	0	TESNENÍ / SEALING / DICHTUNG	601-28x36x7.1	1
15	96.060.003	0	KROUZEK STÍRACÍ / SCRAPER RING / ABSTREIFRING	KROUZEK STÍRACÍ 28	1
16	96.082.002	0	TESNENÍ / SEAL RING / DICHTUNGSRING	13/17x1.5 CU	2

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz./Position/Position;
Objednací číslo/purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

8.5. Pohon / Drive / Antrieb



NAZEV SESTAVY POHON	CÍSLO SESTAVY 201.6205-400	STROJ EX720
Konstruoval: MUSIL		
Datum: 19. 06.2014		
Měřítko: 1:5		

8.6. Kusovník / Piece list / Stückliste - Pohon / Drive / Antrieb

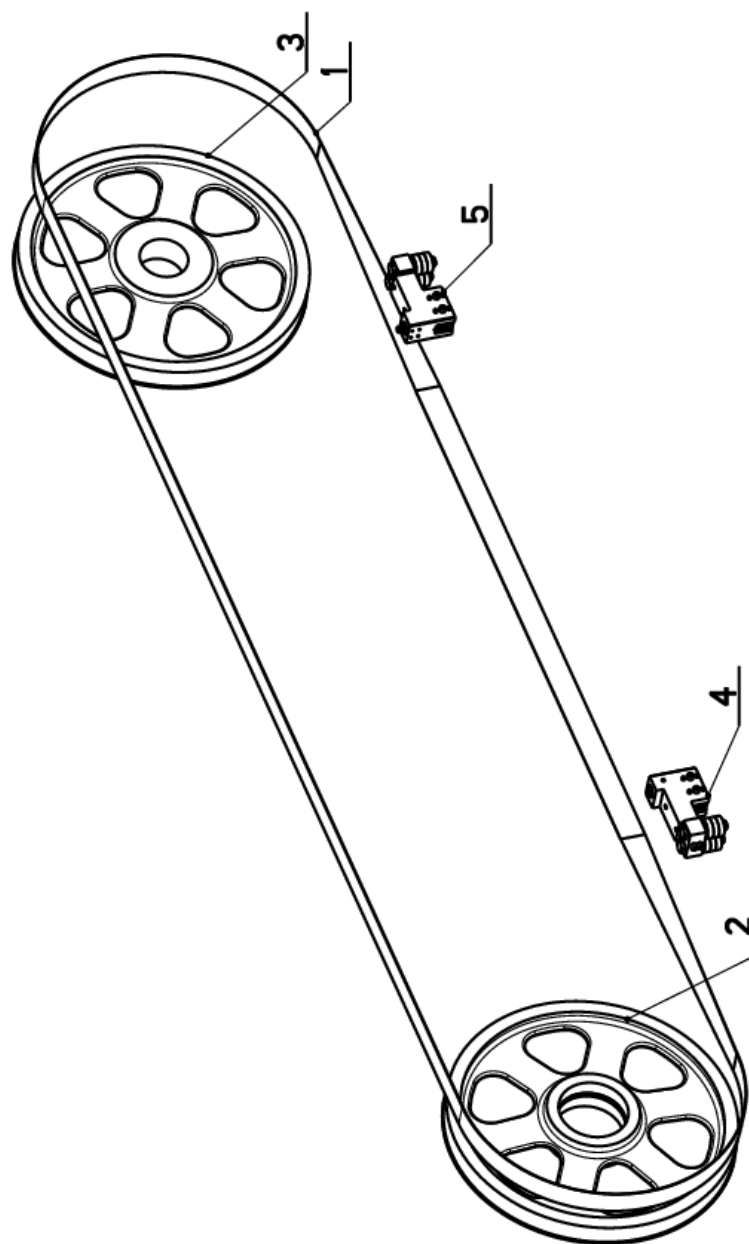
Císlo Sestavy 201.6205-400		Ver. 2	Název sestavy POHON/DRIVE /ANTRIEB		
Poz	Objednací číslo	Ver.	Název položky	Rozmer	Ks
1	30.1804-005	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	d 70	1
2	30.6205-401	0	HRDEL / SHAFT / WELLE	D 100	1
3	30.6205-402	2	PRIRUBA / FLANGE / FLANSCH		1
4	30.6205-403	1	KROUZEK DISTANČNÍ / DISTANCE RING / DISTANZRING	P 25x300	1
5	30.6205-407	0	VÍKO / COVER / DECKEL	P30x192	1
6	30.6305-109	0	PERO / SPRING / FEDER	TYC 18x11	2
7	30.6704-018	3	VENTILATOR / VENTILATOR / VENTILATOR		1
8	30.7504-007	2	KOLO HNACÍ / DRIVE WHEEL / ANTRIEBSRAD	KOLO	1
9	90.001.25.019	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M6x25	6
10	90.001.25.043	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x12	1
11	90.001.25.166	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M14x30	7
12	90.011.27.040	0	ZAPUSTNÝ IMBUS / COUNTERSINK BOLT / SENKSCHRAUBE	SROUB M16x35	1
13	91.001.167	2	ELEKTROMOTOR / ELECTRIC MOTOR / ELEKTROMOTOR	7.5kW 4P B5 132	1
14	91.015.126	1	VENTILATOR / VENTILATOR / VENTILATOR	VENTILATOR RDH1238,B2	1
15	95.300.018	0	LOŽISKO KUŽELIK / BEARING / LAGER	32217A	2
16	95.830.009	0	GUFRERO / GIT SEAL / DICHTUNG	GUFRERO 95X125X12	1
17	95.850.012	0	MATICE KM / KM NUT / KM-MUTTER	MATICE KM17	1
18	95.855.011	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	POJISTNA PODLOZKA MB17	1
19	95.860.001	0	MAZNICE / LUBRICATOR / ÖLER	KULOVA PRIMA M5	1
20	96.082.001	0	KROUZEK TESNICI / SEAL RING / DICHTUNGSRING	10/14x1.5 CU	1
21	99.003.023	0	PREVODOVKA KUZELOCEL / CONICAL TRANSMISSION / KEGELRADGETRIEBE	MBH125C PAM132	1
22	99.710.013	0	SPOJKA / JOINT KUPPLUNG	85x125	1

1. ZRUS. VENTILATOR 91.015.100 A NAHR. 91.015.126. 074/ZM018 11.2.2014 SLEZACKOVA
2. ZRUS. ELEKTROMOTOR 91.001.131 A NAHR. 91.001.131. 117/ZM138 19.6.2014 SLEZACKOVA

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Pos./Position/Position;
Objednací číslo/purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

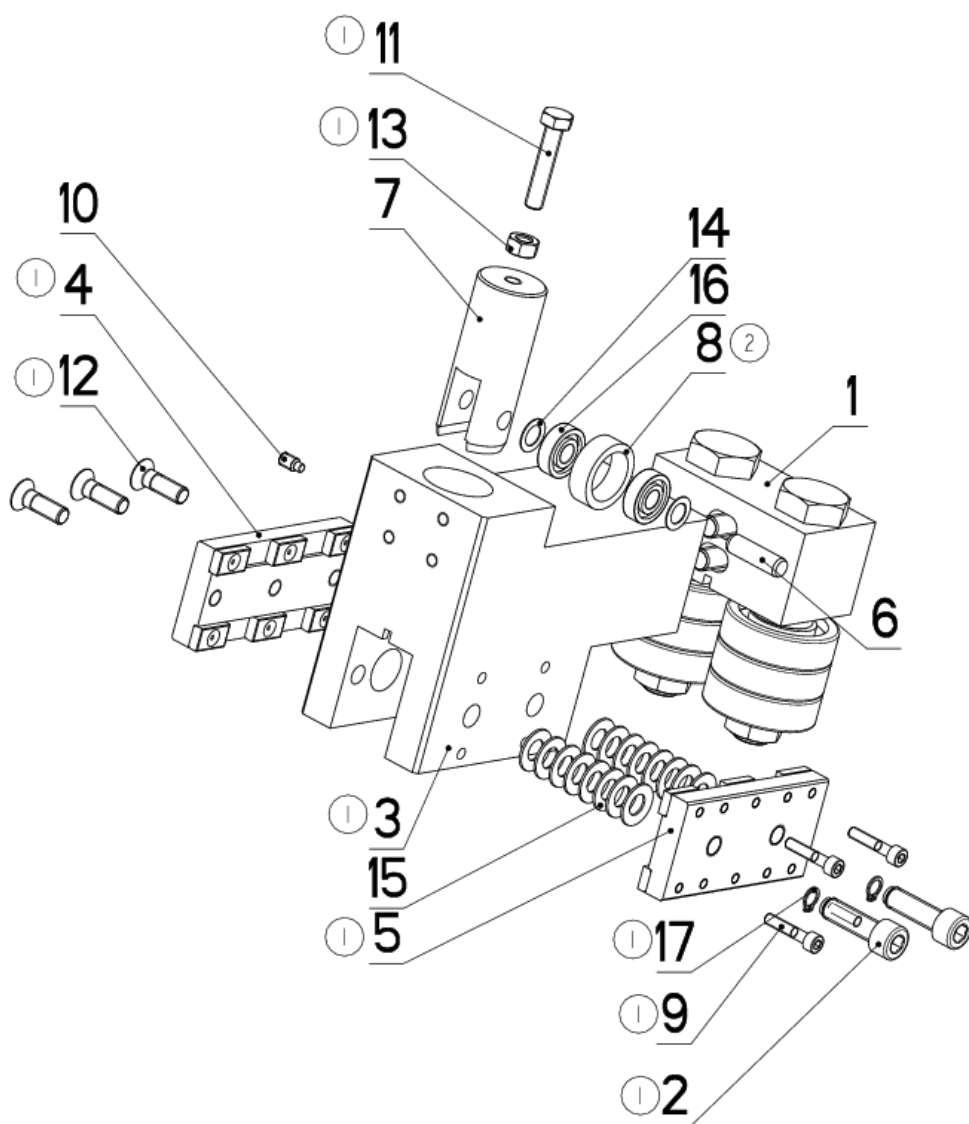
8.7. Vedení pásu/ Belt guide/ Sägebandführung

Cislo Sestavy 201.6210-400		Ver. 0	Název sestavy VEDENÍ PASU/BELT GUIDE/SÄGEBANDFÜHRUNG		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	44.103.010	0	PAS PÍLOVÝ / SAW BELT / SÄGEBAND	PAS 67x1,6	1
2	30.6208-110	1	KOLO NAPÍNAČI / TENSIONING WHEEL / UMLENKRAD	KOLO	1
3	30.6205-110	1	KOLO HNACÍ / DRIVE WHEEL / ANTRIEBSRAD	KOLO	1
4	201.6410-060	1	KOSTKA VODICÍ / LEAD CUBE / FÜHRUNGSKLOTTZ		1
5	201.6410-050	1	KOSTKA VODICÍ / LEAD CUBE / FÜHRUNGSKLOTTZ		1



Cislo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rožer/Stock size/Abmessung

8.8. Kostka vodící / Lead cube / Führungsklotz



NAZEV SESTAVY KOSTKA VODICI	CISLO SESTAVY 201.6410-050	STROJ EX1120
	Konstruoval: RYSAVY	
	Datum: 27. 07.2015	
	Meritko: 2:5	

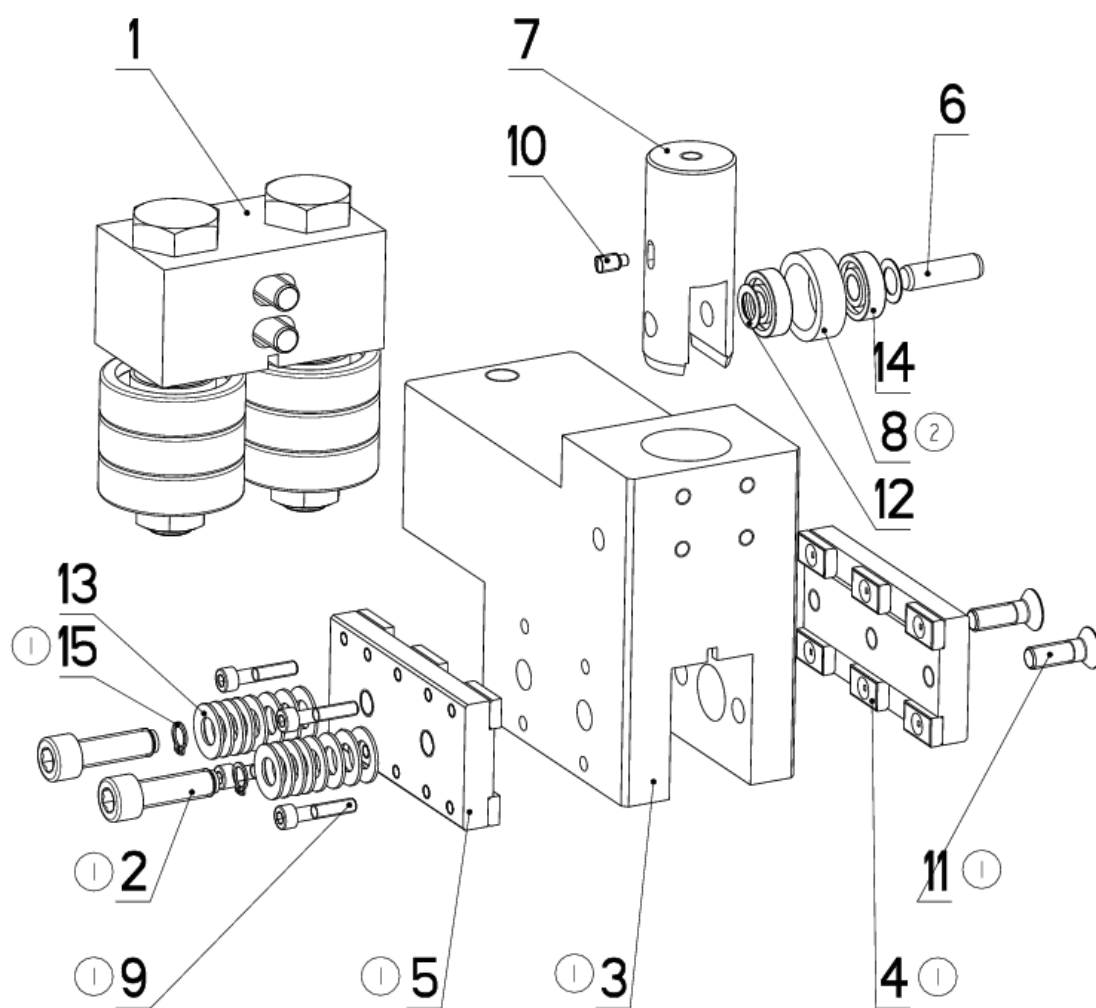
8.9. Kusovník / Piece list / Stückliste - Kostka vodící / Lead cube / Führungsklotz

Císlo Sestavy 201.6410-050		Ver. 2	Název sestavy KOSTKA VODICÍ/LEAD CUBE/FÜHRUNGSKLOTZ		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.5910-320	0	VEDENÍ / GUIDE / BACKENFÜHRUNG		1
2	30.6210-107 (1)	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10X35	2
3	30.6410-051 (1)	0	KOSTKA VODICÍ / LEAD CUBE / FÜHRUNGSKLOTZ	TYC 130 x 80	1
4	30.6410-100 (1)	0	DRŽÁK TVRDOKOVU / POA HOLDER / HW-HALTER		1
5	30.6410-200 (1)	0	DRŽÁK TVRDOKOVU / POA HOLDER / HW-HALTER		1
6	30.6710-108	1	KOLÍK / PIN / BOLZEN	TYC 10	1
7	30.6710-109	0	PIST / PISTON / KOLBEN	d 32	1
8	31.6710-110 (2)	1	KROUZEK / RING / RING	LH 2403210	1
9	90.001.25.011 (1)	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M5X25	4
10	90.004.20.002	0	SROUB STAVEČÍ / ADJUSTMENT BOLT / STELLSCHRAUBE	SROUB M6X12	1
11	90.005.55.019 (1)	0	SROUB 6HRANNÝ / 6 SIDED BOLT / SECHSKANTSCHRAUBE	SROUB M8X40	1
12	90.011.27.016 (1)	0	ZAPUSTNÝ IMBUS / COUNTERSINK BOLT / SENKSCHRAUBE	SROUB M8X25	3
13	90.100.55.005 (1)	0	MATICE / NUT / MÜTTER	MATICE - M8	1
14	90.154.50.003	0	PODLOŽKA / WASHER / UNTERLEGSCHLEIBE	10x16x0.50	2
15	90.350.02.005	0	PRUŽINA TALIROVÁ / DISC SPRING / TELLERFEDER	20x10.2x1	16
16	95.001.044	0	LOŽISKO / BEARING / LAGER	609 2RS	2
17	95.800.002 (1)	0	SEGR HRÍDEL. / OUTSIDE SAFETY RING / SICHERUNGSRING AUSSEN	POJISTNÝ KROUZEK 8	2

1.ZRUS.KOSTKA 30.6410-013 A NAHR.KOSTKOU 30.6410-051.ZRUS.DESKA VODICÍ 30.5910-104 A NAHR.30.6410-100.ZRUS.DESKA VODICÍ 30.6410-015 A NAHR.30.6410-200.ZRUS.SOUC.90.001.25.046,90.001.25.018,90.015.30.003,95.801.035,30.6410-012,PRID.SOUC.90.001.25.011,95.800.002,90.011.27.016,30.6210-107,90.005.55.019,90.100.55.005.142/ZM205 13.10.2009 SLÉZACKOVA 2.ZRUS.SOUC.30.6710-110 A NAHR.31.6710-110.175/ZM178 27.7.2015 SLÉZACKOVA

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Pos./Position/Position; Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

8.10. Kostka vodící / Lead cube / Führungsklotz



NAZEV SESTAVY KOSTKA VODICI	CISLO SESTAVY 201.6410-060	STROJ EX1120
	Konstruoval: RYSAVY	
	Datum: 27. 07.2015	
	Meritko: 1:2	

8.11. Kusovník / Piece list / Stückliste -
Kostka vodící / Lead cube / Führungsklotz

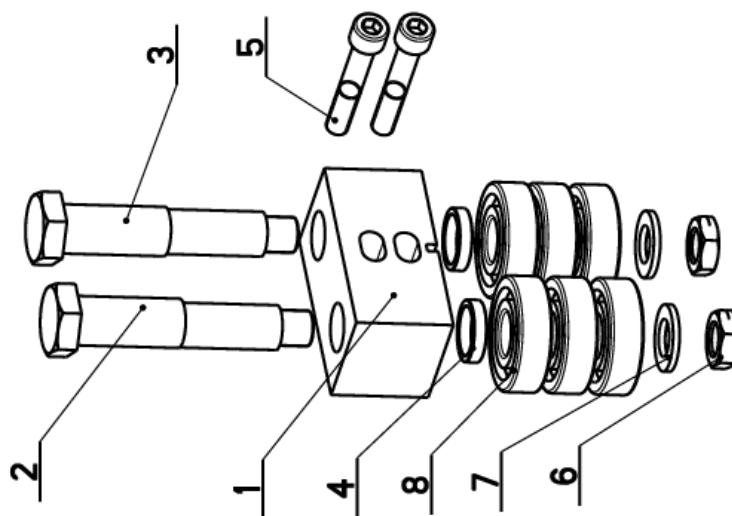
Císlo Sestavy 201.6410-060		Ver. 2	Název sestavy KOSTKA VODÍCI / LEAD CUBE / FÜHRUNGSKLOTZ	
Poz.	Objednací číslo	Ver.	Název položky	Měr
1	201.5910-320	0	VEDENÍ / GUIDE / BACKENFÜHRUNG	Ks
2	30.6210-107	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x35
3	30.6410-061	0	KOSTKA VODÍCI / LEAD CUBE / FÜHRUNGSKLOTZ	HR 130 x 80
4	30.6410-100	0	DRŽÁK TVRDOKOVU / POA HOLDER / HW-HALTER	
5	30.6410-200	0	DRŽÁK TVRDOKOVU / POA HOLDER / HW-HALTER	
6	30.6710-108	1	KOLÍK / PIN / BOLZEN	TTC 10
7	30.6710-109	0	PIST / PISTON / KOLBEN	d 32
8	31.6710-110	2	KROUZEK / RING / RING	LH 2403210
9	90.001.25.011	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M5x25
10	90.004.20.002	0	SROUB STAVECI / ADJUSTMENT BOLT / STELLSCHRAUBE	SROUB MEX12
11	90.011.27.016	0	ZAPUSTNÝ IMBUS / COUNTERSINK BOLT / SENKSCHRAUBE	SROUB M8x25
12	90.154.50.003	0	PODLOŽKA / WASHER / UNTERLEGSCHIBE	10x16x0.50
13	90.350.07.005	0	PRUŽINA TALÍŘOVÁ / DISC SPRING / TELLERFEDER	20x10.2x1
14	95.001.044	0	LOŽISKO / BEARING / LAGER	609 285
15	95.800.002	0	SEGR HRÍDEL. / OUTSIDE SAFETY RING / SICHERUNGSRING AUSSEN	POJISTNÝ KROUZEK 8

I. ZRUS. KOSTKA 30.6410-014 A NAHR. KOSTKOU 30.6410-061, ZRUS. DESKA VODÍCI 30.5910-104 A NAHR. DESKOU 30.6410-100,
ZRUS. DESKA VODÍCI 30.6410-015 A NAHR. 30.6410-200, ZRUS. SOUC. 90.001.25.046, 90.001.25.018, 90.015.30.003, 95.801.035,
30.6410-012, PRÍD. SOUC. 90.001.25.011, 90.011.27.016, 95.800.002, 30.6210-107, 142/ZM205 19.11.2009 SLEZACKOVA
2. ZRUS. SOUC. 30.6710-110 A NAHR. 31.6710-110, 175/ZM178 27.7.2015 SLEZACKOVA

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz./Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

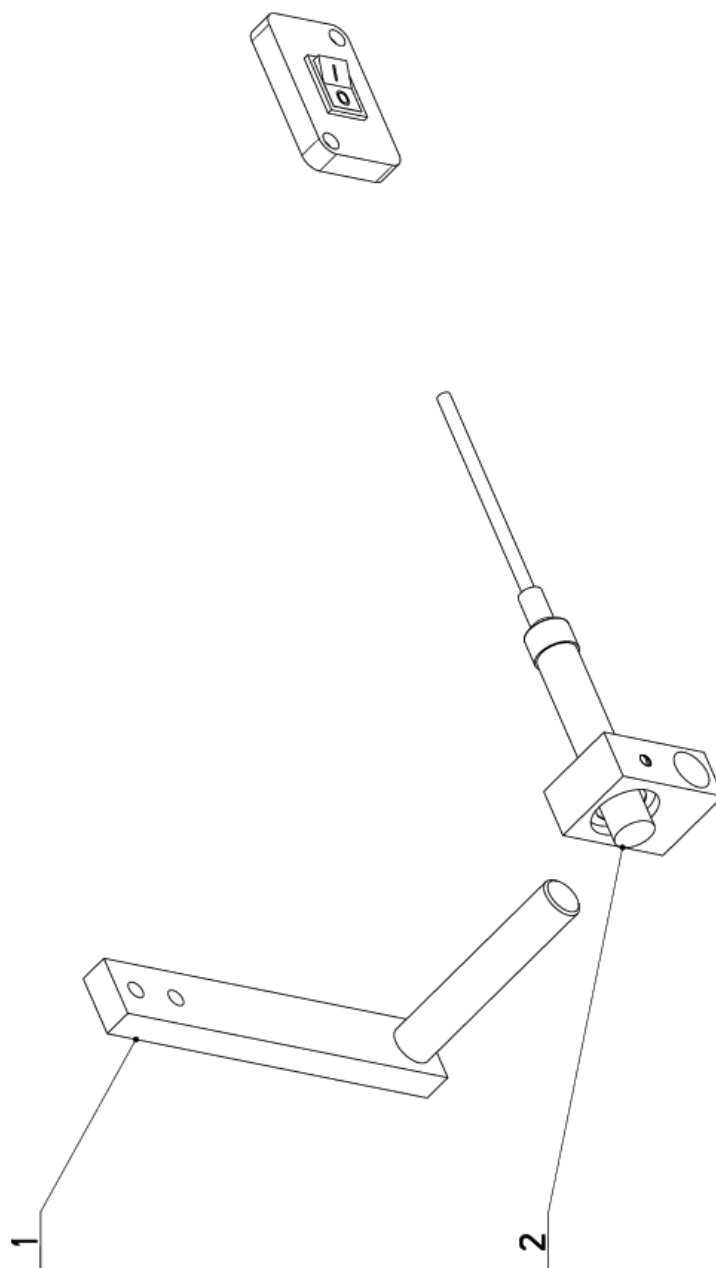
8.12. Vedení/ Guide/ Führung

Cislo Sestavy 201.5910-320		Ver. 0	Název sestavy VEDENÍ/GUIDE/BACKENFÜHRUNG		
Poz.	Objednací číslo	Ver.	Název položky	Rožmer	Ks
1	30.5910-321	0	KOSTKA / CUBE / WÜRFEL	HR 50x50	1
2	30.5910-322	0	CEP / LUG / BOLZEN	6HR 30	1
3	30.5910-323	0	CEP / LUG / BOLZEN	6HR 30	1
4	30.5910-325	0	POUZDRO / SLEEVE / BÜCHSE	TR 28x4	2
5	90.001.25.054	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x60	2
6	90.101.55.003	0	MATICE PR.NÍZKA ZN / NUT / MUTTER	MATICE M16	2
7	90.150.50.009	0	PODLOŽKA DIN125 / WASHER / UNTERLEGSCHIEBE	PODLOŽKA 17	2
8	95.001.024	0	LOŽISKO KUL I RADE / BEARING / LAGER	6304 2RSA	6



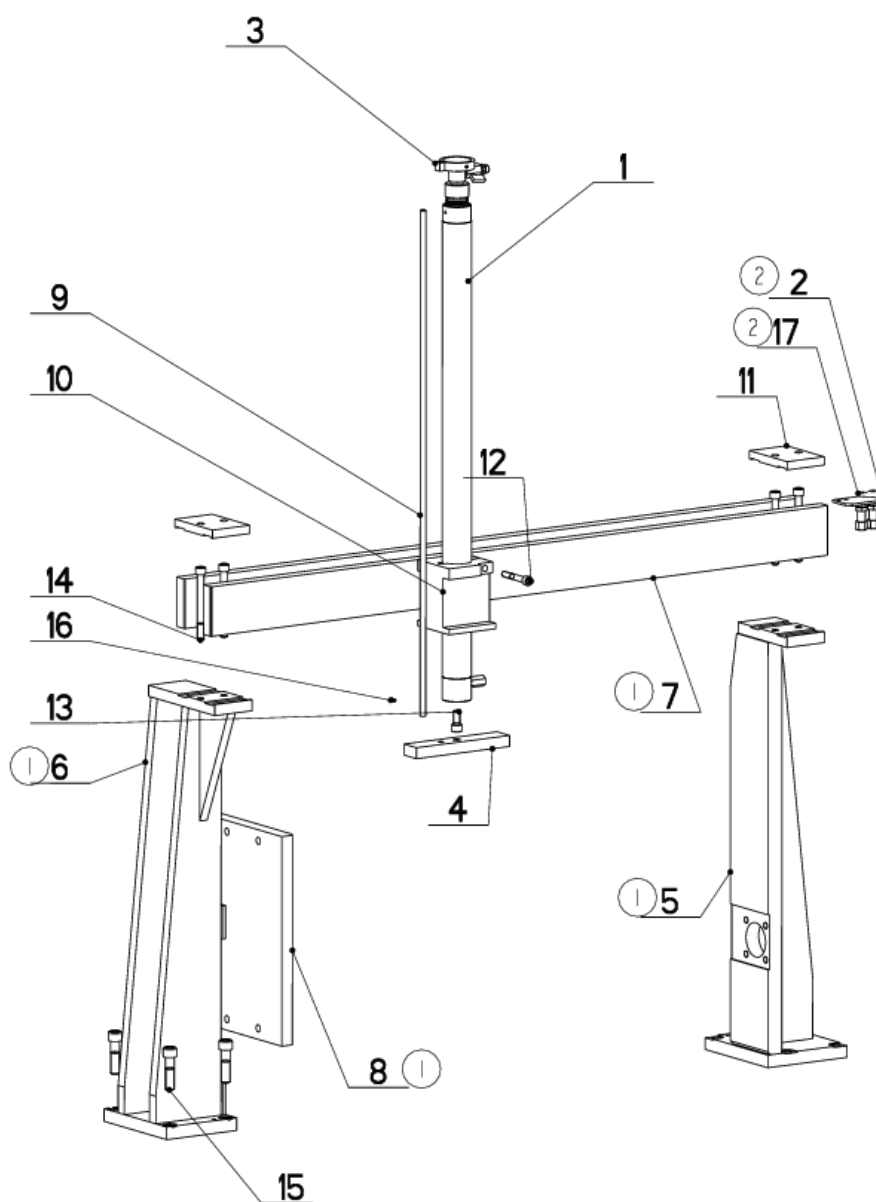
8.13. Laser-ukazovátko / Laser / Laser

Cislo Sestavy		Ver.	Název sestavy	
202.6121-000		0	LASER-UKAZOVATKO/LASER/LASER	
Poz.	Objednací číslo	Ver.	Název položky	Ks
1	30.6120-001	I	DRŽAK / HOLDER / HALTER	I
2	202.5012-000	0	LASER-UKAZOVATKO / LASER / LASER	I



Cislo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

8.14. Upínání horní / Top clam / Spannvorrichtung oben



NAZEV SESTAVY UPINANI HORNÍ	CISLO SESTAVY 202.6214-400	STROJ EX720
	Konstruoval: RYSAVY	
	Datum: 14. 09.2015	
	Meritko: 1:10	

8.15. Kusovník / Piece list / Stückliste -
Upínání horní / Top clam / Spannvorrichtung oben

Císlo Sestavy 202.6214-400		Ver. 2	Název sestavy UPÍNÁNÍ HORNÍ / &NAZEVE_EN / &NAZEVE_DE		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.6207-400	2	VALEC UPÍNACÍ / FIXING CYLINDER / SPANNZYLINDER		1
2	30.1816-210 (2)	0	DRŽAK / HOLDER / HALTER	P 4x50	1
3	30.2014-107	0	DRŽAK / HOLDER / HALTER		1
4	30.2014-108	1	DESKA / BOARD / PLATTE	HR 40x20	1
5	30.6214-301 (1)	1	KONZOLA / /		1
6	30.6214-302 (1)	0	SLOUP / /		1
7	30.6214-303 (1)	0	LISTA / /	HR. 90x25	2
8	30.6214-304 (1)	0	CELIST / /	P 30 - 250	1
9	30.6214-405	1	TYC ODMEROVÁNÍ / /	TYC 10	1
10	30.6214-406	0	KOSTKA / /	HR 100x100	1
11	30.6214-505	1	DESKA / /	TYC 120x15	2
12	90.001.25.055	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x70	1
13	90.001.25.057	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M12x25	1
14	90.001.25.066	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M12x120	4
15	90.001.25.092	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M16x60	4
16	90.003.20.003	0	SROUB STAVEČI / ADJUSTMENT BOLT / STELLSCHRAUBE	SROUB M5x12	1
17	92.008.101 (2)	0	SROUBENÍ / BOLTING / VERSCHRAUBUNG	G 1/4"	2

1. ZRUŠENÝ DÍLY 30.6214-402; 30.6214-404; 30.6214-407; 30.6214-401, NOVA SOUCAST 30.6214-302; 30.6214-301;
30.6214-303; 30.6214-304 . ZM 204-2007 RYSAVY 8.6.2007

2. PRIDANO 1xDRŽAK 30.1816-210, 2xPRUCHODKA 92.008.101. 375/ZM415 2.11.2007 SLEZACKOVA

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Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung