

Series Individual Automatic



Individual 620.460 GANC

Operating instructions

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

Seriové číslo / Serien Nummer / Serial Number _____

Service and information

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7⁰⁰ – 16⁰⁰

Version:

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rev. 1

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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 : **Individual 620.460 GANC**
Serial number: 011 – 100 000
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, feeder, track of feeder
 Pneumatic **NO** ☒ **YES** ☐ Hydraulic **NO** ☐ **YES** ☐ Control system **NO** ☐ **YES** ☒

Technical data: Cutting speed 20–120 m.min⁻¹
 Cutting angle 0° to 60°
 Characteristic cutting range 620 x 460 mm

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**
2014/30/EU

The applied harmonized standards, National standards and technical specifications:

ČSN EN ISO 12100:2011	ČSN EN ISO 16093:2018	ČSN EN ISO 13857:2022
+ Opr.1:2020 + Opr.2 :2021		ČSN EN 60204 -1 ed.3:2019
ČSN EN ISO 4413:2011		
ČSN EN 55011 ed.4:2017	ČSN EN 61000-6-2 ed.4:2019	ČSN EN IEC 61000-6-4 ed.3:2019
+ A1: 2017+ A11:2020 + A2:2021		

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

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

Brno, 05.08.2022

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 of importer)

2) Person authorized to complete the technical documentation

!

If the equipment is installed without safety equipment offered by BOMAR, spol. s r.o. 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 r.o. have been declared "identical" to a safety device, as offered by BOMAR, spol. s r.o. or its agents.

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1. **Bezpečnostní pokyny / Sicherheitshinweise/ Safety notes**

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

Attention!

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

removal!

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 **Individual 620.460 GANC** is determined for cutting and shortening of rolled bars and drawn bars and profiles from steels, stainless steels, non-ferrous metals and plastics **with cutting angle from 0° to 60°**.

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.

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!

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

1.3. Safety notes for machine operator

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!

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

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!

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!

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.

1.5. Safety instructions for laser radiation sources

Laser radiation sources may be used on the machine.

Warning signs and information about the corresponding laser class are placed near each laser source.

It is forbidden to look into the laser beams!

Depending on the design and optional equipment of the saw, laser radiation sources can be located in particular:

- on the saw feeder
- before the main vice of the band saw
- on a safety fence (laser barrier)
- on the section line projection device



Commonly used laser safety classes:

- 1 (laser barriers)
- 1M (laser barriers)
- 3R (Laser-Liner)

Attention!

It is necessary for correct functionality of a laser to regularly check the patency of the laser ray on the sensor and to clean the laser from impurities (clean rag + spirit) after each shift. Be careful during the cleaning in order the laser was not been scratched and broken!.

If the machine is equipped with the first cut automatic (optional accessories) - laser sensors for control purposes are located on the feeder.

1.6. Safety instructions for the chip conveyor (optional accessories)

The chip extractor is an optional feature of the machine - these instructions only apply to machines equipped with this feature.



Attention!
Reaching into the chip conveyor area is prohibited when the saw is in operation. Any maintenance and work on the chip conveyor is only permitted when the machine is switched off.

Betä Operation of the chip extractor - see chapter "Chip extractor".

1.7. Emergency Stop Switch

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

If any damages or fault appears, immediately press Emergency Stop Switch!

It is possible to release the pressed button by twisting of the upper part of the button.

The **Emergency Stop Switch** is placed at the control panel of the machine.



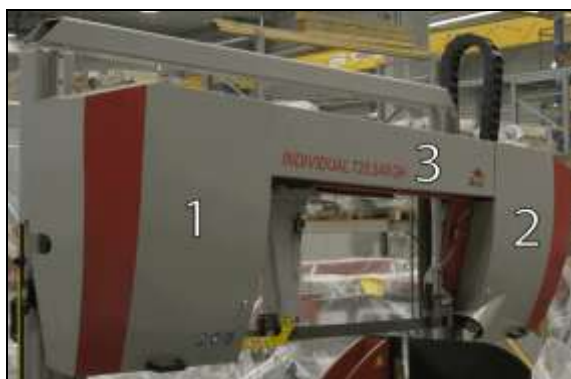
After push button is shown warning message on LCD.

1.7.1. Arm covers

Left cover – It covers tightening wheel. If the 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.

Right cover – It covers driving wheel. If the 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.

Central cover – It covers band saw.



The band saw is stated to the operation, when the covers is closed!



Two limit switches on saw arm control if covers are open or not.

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

Mechanical saw band tensioning



1.7.3. Band saw 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!

1.8. Safety notes for the cooling

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***

1.8.1. 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.

1.9. Safety notes for Swarf conveyor

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.

1.10. Protected space around saw - Protective fencing

The protective fencing prevents persons from entry and intervention in the device working area during the working cycle.

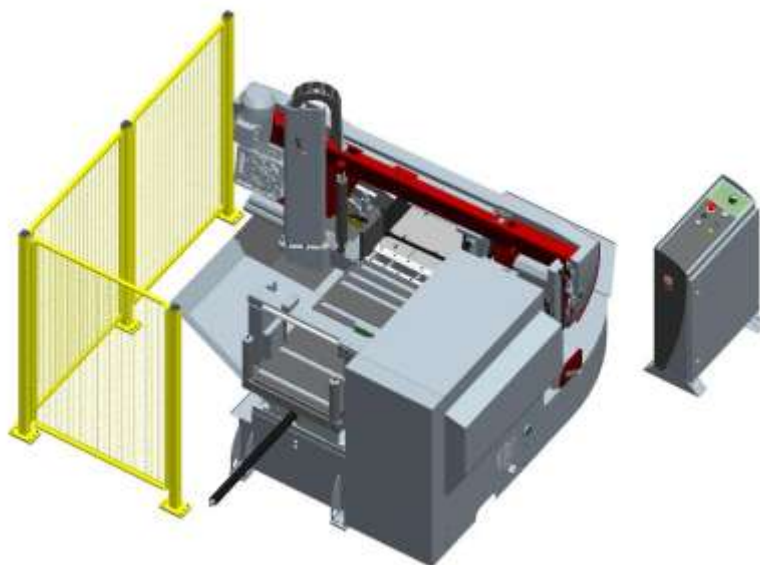
Caution!

The equipment operation can only be safe with the safety protective fencing according to EN ISO 13857!

Do not put the equipment in operation without the safety fencing according to EN ISO 13857!

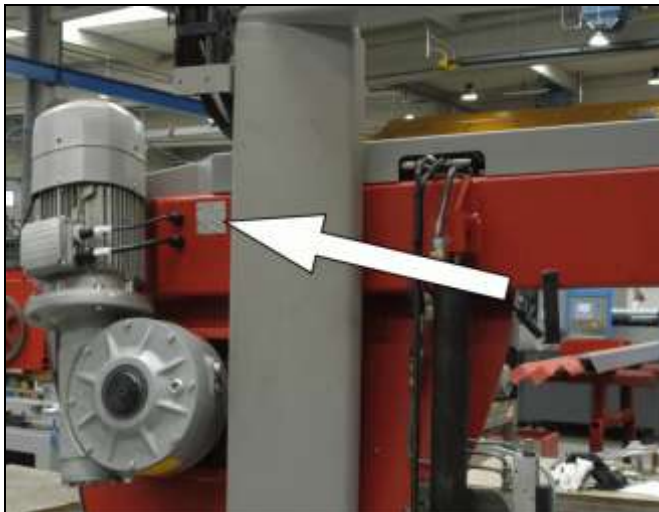
If the equipment is operated without the safety fencing according to EN ISO 13857, the submitted EC Declaration of Conformity expires!

Proposal of the safety fence



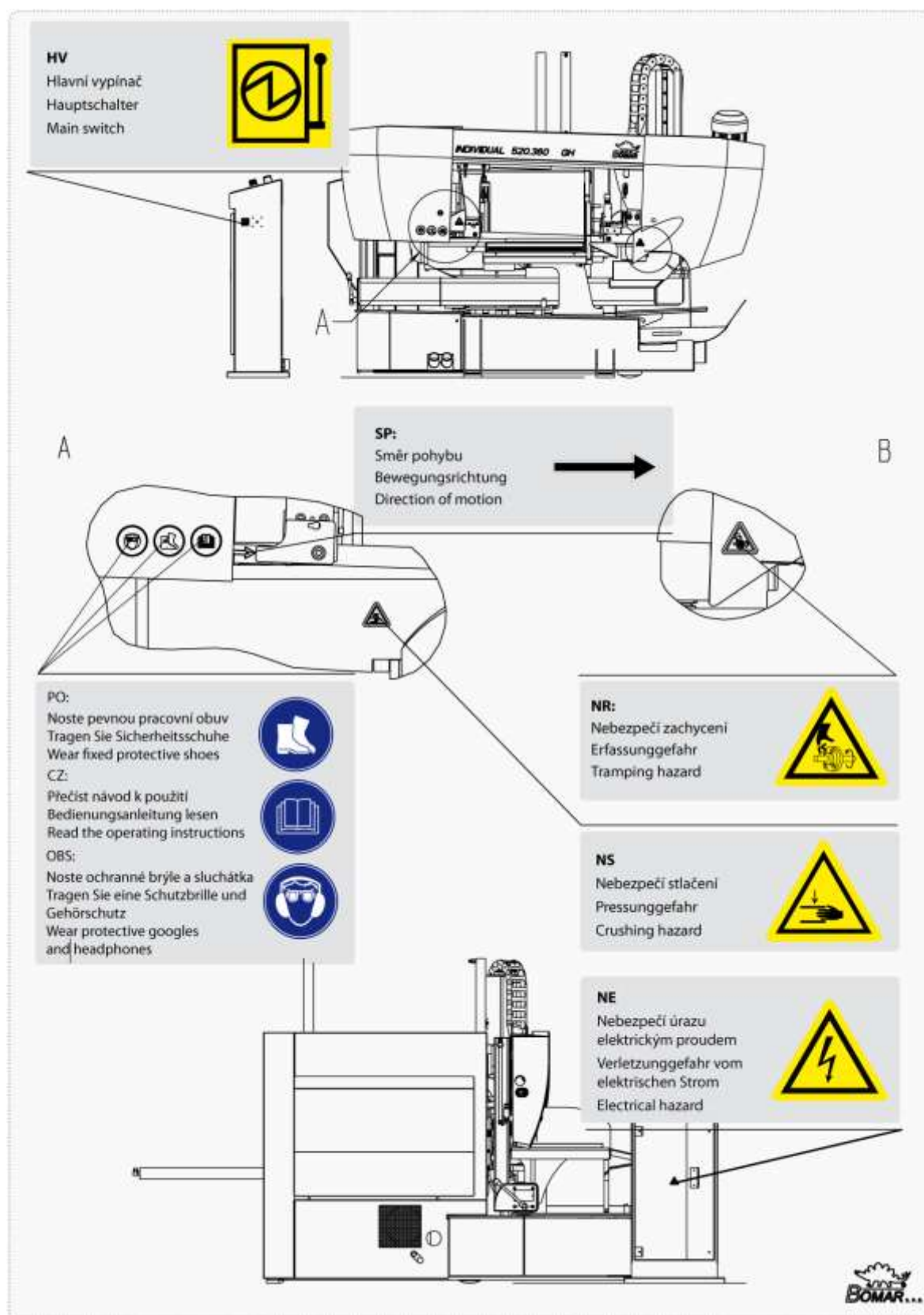
Machinery space should be protected by a fence to a height of 2000 mm.

**1.11. Umístění štítku stroje /
Maschinenschild position /
Position of machine label**



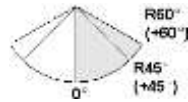
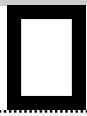
The machine label is located on the saw frame, between pillar and band drive.

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



2. **Dokumentace stroje / Dokumentation der Maschinen / Machine documentation**

2.1. Technická data /Technische Daten /Technical data

Hmotnost stroje / Maschinengewicht / Machine weight:				
• Hmotnost / Gewicht / Weight	2200 kg			
Rozměry stroje / Maschinenabmassen / Machine size :				
• Délka / Länge / Lenght	3700 mm			
• Šířka / Breite / Width	3040 mm			
• Výška / Höhe / Height	2400 mm			
Elektrické vybavení / Elektrische Ausrüstung / Electrical equipment:				
• Napájení / Stromversorgung / Supply voltage	3×400V, 50 Hz, TN-C-S/TN-S 3×230V, 50/60 Hz, TN-S			
• Příkon / Anschlusswert / Total Input	7 kW			
• Max.jištění / Max. Netzsicherung / Max. Fuse	20 A (3×400v) 40 A (3×230 V)			
• Krytí / Schutzart / Protection	IP 54			
Akustický tlak / Schallwechseldruck / Acoustic pressure:				
• Individual 620.460 GANC	L _{Aeqv} =76,3 dB			
Pohon / Antrieb / Drive:				
• Typ / Typ / Type	JMC 71 2/4 B14			
• Napájení / Stromversorgung / Supply voltage	~ 3×400 V, 50 Hz			
• Výkon / Leistung / Output	3 kW			
• Jmenovité otáčky / Nenndrehzahl / Nominal speed	1420 m.min ⁻¹			
Hydraulické zařízení / hydraulische Vorrichtung / Hydraulic equipment				
• Typ / Typ / Type	SMA03			
• Výkon / Leistung / Output	2,2 kW/6,5 MPa			
Chladicí zařízení / Kühlmittleinrichtung / Cooling equipment:				
• Typ / Typ / Type	3COA4-12			
• Obsah nádrže / Behälterinhalt / Capacity	35 dm3			
• MICRONISER	na přání / auf Wunsch / optional -			
Rozměr pásu / Sägebandoß / Band size:				
6100×41×1,3 mm				
Řezná rychlost / Schnittgeschwindigkeit / Cutting speed:				
20–120 m/min.				
Jeden Zdvih / ein Hub / One Upstroak:				
680 mm				
Max. Délka podání / Max. Vorschublänge / Max. feed:				
9999 mm				
Nejmenší řezaná výška / Kleinste Schnitthöhe / Minimum cut height:				
10 mm				
Řezné rozsahy / Schnittaussmaß / Cutting size:				
				
0°	Ø460 mm	620×460 mm	460×620 mm	460×460 mm
R 45°	Ø405 mm	410×280 mm	460×380 mm	405×405 mm
R 60°	Ø260 mm	265×320 mm	460×225 mm	265×265 mm

Attention!

In automatic mode, you can only cut up to a maximum rotation angle of 45°!

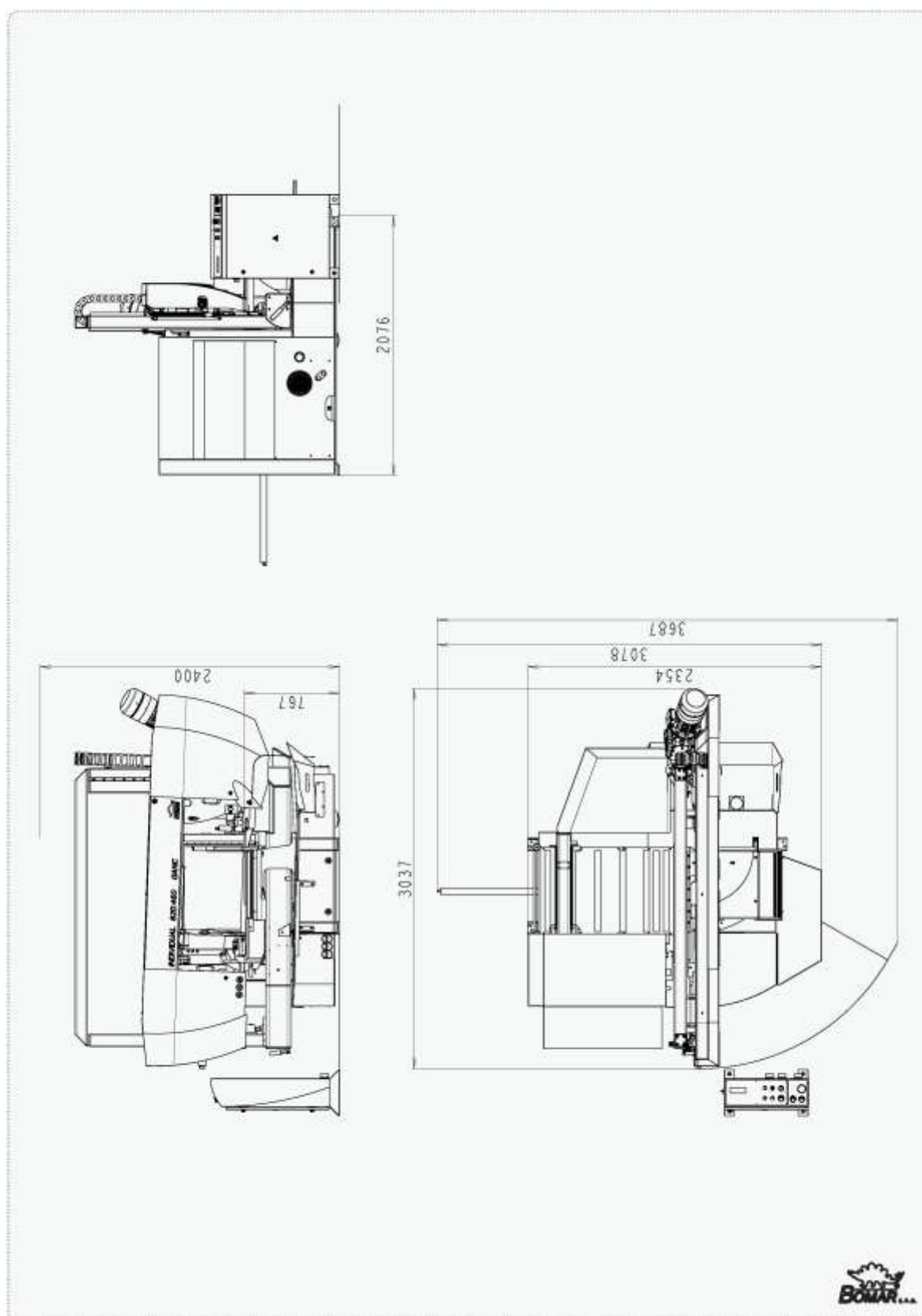
If the arm is rotated beyond 45°, it will collide with the feeder.

If the machine has an upper material clamping installed, cutting can only be carried out with an arm angle of 0°

Acoustic pressure level:

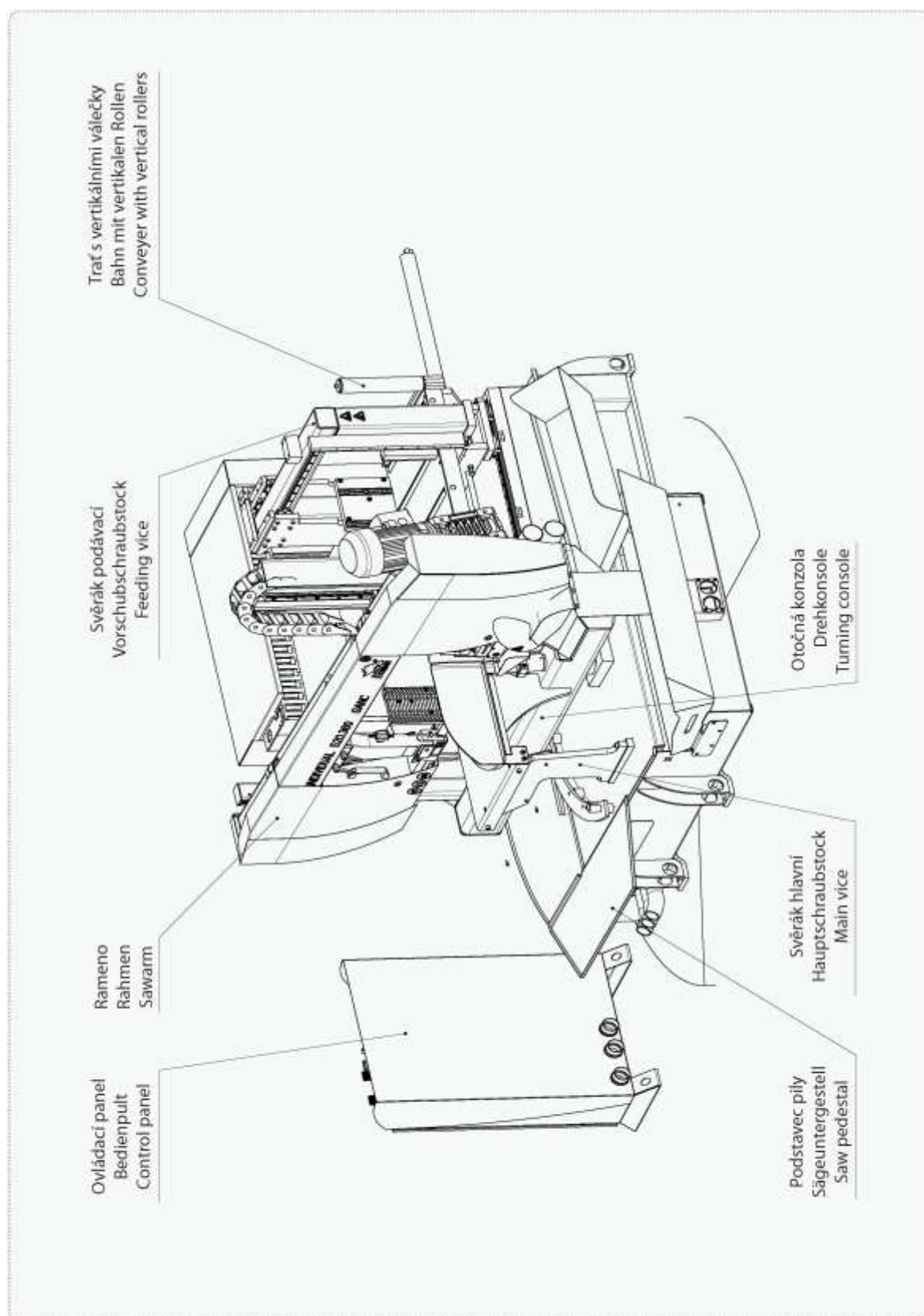
The equivalent level of the acoustic pressure A (noise) in the position of the operator is $L_{Aeq} = 76,3$ dB. The values are indicating the emission levels and may not present safety working levels. Among the factors, which influence the real values of the operator exposure, are properties of the workshop room, cut material and used saw bands – which may significantly influence the exposure levels

2.2. Rozměrové schéma / Aufstellzeichnung / Installation diagram



Dokumentace stroje
Dokumentation der Maschine
Machine documentation

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.

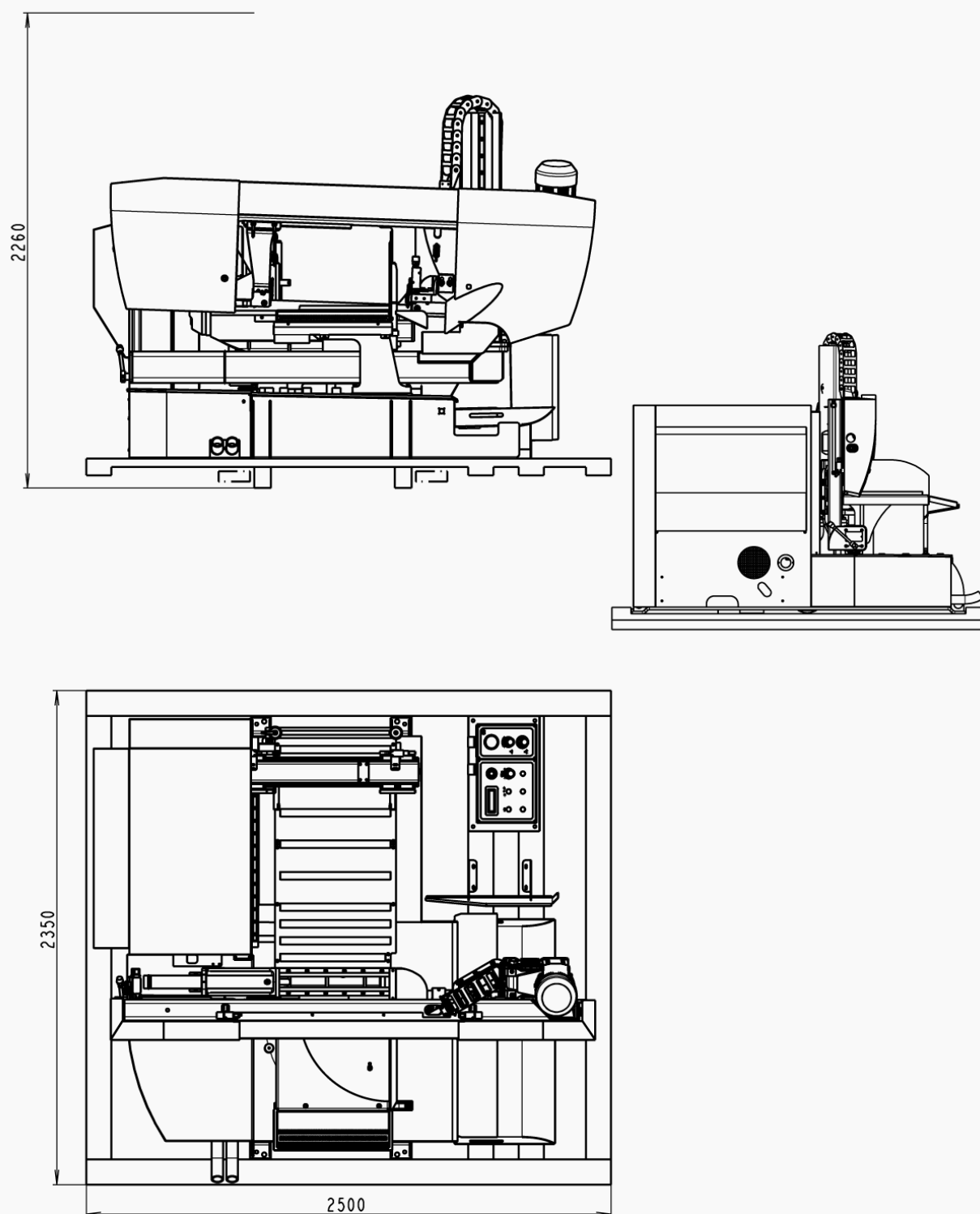
Fix the stickers stating the minimum approximate machine weight to at least five well visible places.

2.4.3. Transport and stocking

The machine must be secured during transportation. Screw on the palette to the floor of the van or the trailer. Be careful that the machine is not damaged during transportation. Store the machine only under conditions mentioned in the manual, to avoid damage of the machine.

It is forbidden to handle the machine any other way, than it is written in this operating instructions, the machine can be damaged.

2.4.4. Transportní schéma / Transport schema / Transport scheme



2.5. Activation

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).

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

Remove the packing from the machine and unpack all parts.

Attention!

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

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 – Individual 620.460 GANC – 2200 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.

2.7. 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.

2.8. 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.

2.8.1. 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.

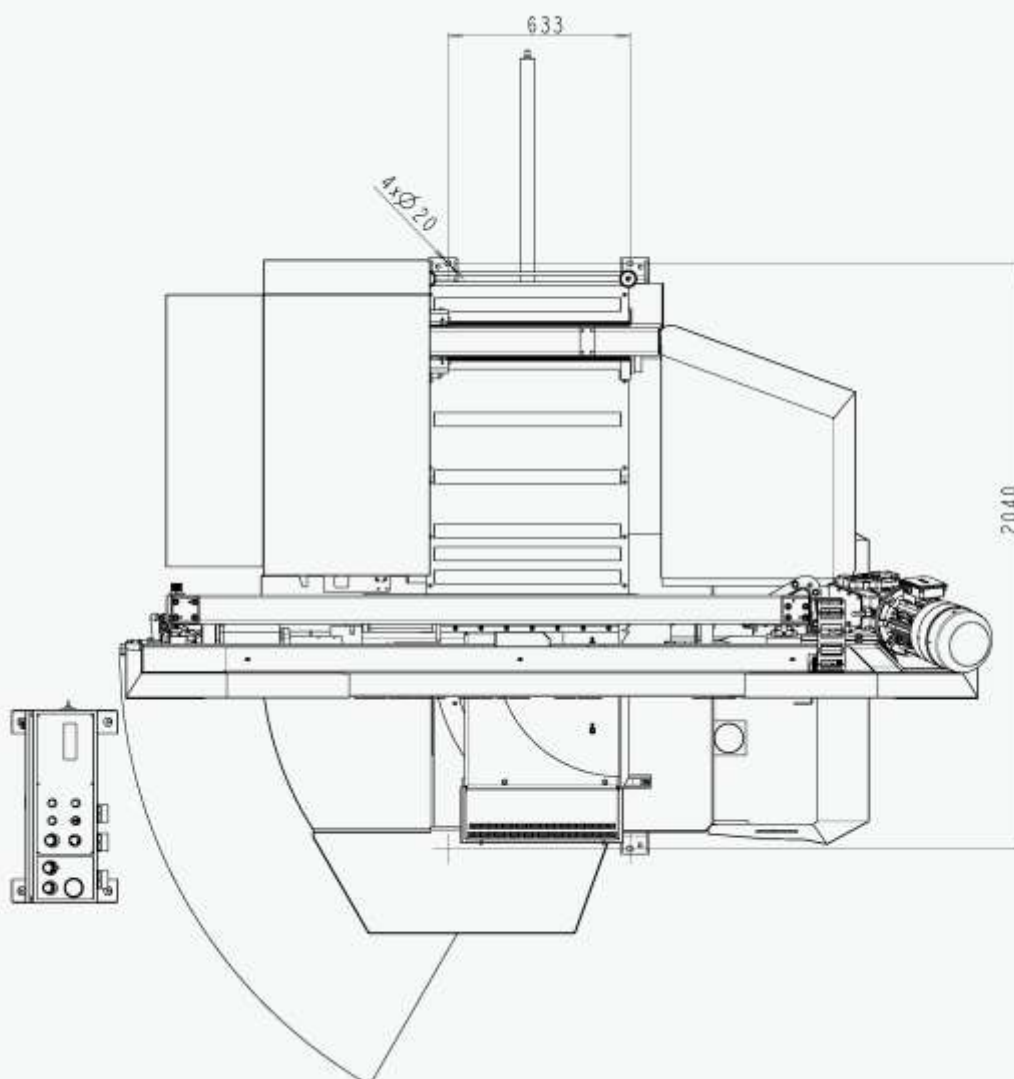
Power packs have to be filled up with clean, pre-filtered oil! The purity of the hydraulic fluid must correspond to the class 10 NAS 1638 (reachable with filter $\beta = 75$)!

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.

Oil type	Kinematic viscosity ν in mm^2/s in relationship to the fluid temperatur					Freezing point
	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

2.9. Kotevní plan / Verankerungsplan / Grounding plan



Kotvící materiál / Verankerungsmaterial / Grouding material

- 4x Chemická hmoždina / Chemische Dübel / Chemical Plug – $\varnothing 18$ mm
- Vrtáno do hloubky / In die Tiefe gebohrt / Drilled to – 140 mm
- 4x Šrouby / Schraube / Screws – M16

Šrouby podložit deskami o min. rozměrech P10x100-100
 Die Schrauben mit Platten mit Minimaldimensionen P10x100-100 unterlegen
 Screew must be bottomed with plates (min. dimensions P10x100-100)

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

± 10 mm / 1 m

2.10. 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.

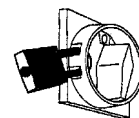
Electrical parameters of the machine:

- Service voltage: $\sim 3 \times 400 \text{ V}$, 50 Hz, TN-C-S
 $\sim 3 \times 230 \text{ V}$, 50/60 Hz, TN-S
- Total input / Max. fuse: 7,0 kW / 25 A (400 V) / 40 A (230 V)

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

Service voltage must agree with the line voltage!

Crosscut of the supply line must respond with rated current for max. machine load.



Note:

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

Note:

The socket with the fork can be used only at the machines with the rated current less than 16 A and total input less than 3 kW.

Attention!

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

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

2.10.1. Check the direction of the saw band



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.

2.10.2. Filling the cooling system

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!!!

Attention!

When connecting the machine to the mains, make sure that all phases are connected correctly!

THE ELECTRIC MOTOR OF THE HYDRAULIC UNIT MUST NOT BE OPERATED IN THE COUNTER-ROTATION DIRECTION FOR MORE THAN 10 SECONDS!!!

2.11. Filling the cooling system

Prepare a water-coolant mixture. When preparing the mixture, follow the manufacturer's instructions and maintain the mixture concentration prescribed by the manufacturer.

Gießen Sie das Wasser-Kühlmittel-Gemisch in den Kühlanlagebehälter. Kühlmittelvolumen finden Sie im Kapitel „Technisches Datenblatt“.

Pour the water-coolant mixture into the cooling system tank. For the coolant volume, see the chapter "Technical data sheet".

Whenever filling the cooling system, make sure that the coolant does not flow next to the tank and overflow the tank.

When adding the anti-corrosion and anti-freeze additive, or other substances, follow the instructions of the coolant manufacturer! A toxic and aggressive mixture of 2 different products may result, which may damage your health or the machine!

2.12. Function test of the machine

Before starting the functional check, read the chapter "Operating the machine" thoroughly. Do not carry out the functional check of the machine until you understand all the keys and all the machine functions.

Check that the machine is not damaged.

Check that all covers are fitted and in working order.

Check with Tenzomat (see "Accessories") whether the saw blade is correctly tensioned or tension the saw blade according to the chapter "Selecting and replacing the saw blade". You will find the correct saw blade tension values on Tenzomat.

Switch on the main switch and check a run of all motors and aggregates (saw band drive, hydraulic aggregate, coolant pump, chip conveyor etc.).

Open the main and feed vise fully and then clamp both vices (without material). Move the feed from one limit position to the other. Rotate the saw frame from one limit position to the other. Raise the saw frame and then lower it.

Switch on the bandsaw with the cooling system and let it run empty to fill the cooling system with a coolant. As soon as the coolant flows out of the nozzles, the cooling system is ready for operation.

Carry out a cycle of sawing without material. Check that there are no irregularities during the cycle. If the band saw works correctly, the machine is ready for operation.

2.13. Saw band

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



2.13.1. Saw band size

6100×41×1,3 mm

2.13.2. 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

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.

BOMAR for recommended Variable tooth system for band saw.

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

Footnotes:

ZpZ – 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.

2.13.3. Saw band running-in

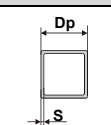
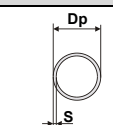
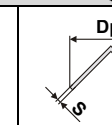
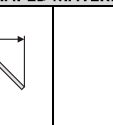
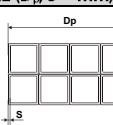
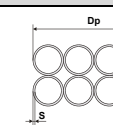
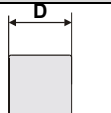
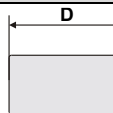
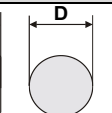
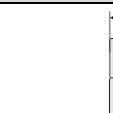
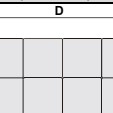
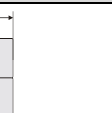
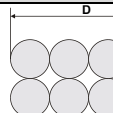
Running-in: Cut the material with the frame lowering reduced to 50% only. When vibrations occur increase or decrease the band speed.

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



Note: Run regrinding saw bands too.

2.13.4. Tables for teeth selection

SHAPED MATERIAL ($D_p, S = \text{mm}$)						
						
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 2xS). In table, there are tooth systems constant and variable.						
Size of the wall S [mm]	Tooth system (Z_p, Z) Outer diameter of the profile D_p [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 (Z_p, Z) Outer diameter of the profile D_p [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 ($D = \text{mm}$)						
						
Constant tooth system		Variable tooth system				
length of the cut D	tooth system (Z_p, Z)	length of the cut D	tooth system (Z_p, Z)			
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. **Ovládání stroje / Bedienung der Maschine / Machine control**

3.1. Starting the band saw

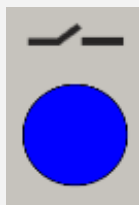
»

1. Switch on the main switch of the circular saw. The main switch is located on the side of the control panel.



After switch-on, the system is initialized and initialization screens appear.

2. When prompt appears activate the machine safety circuit with the button on the machine control panel.

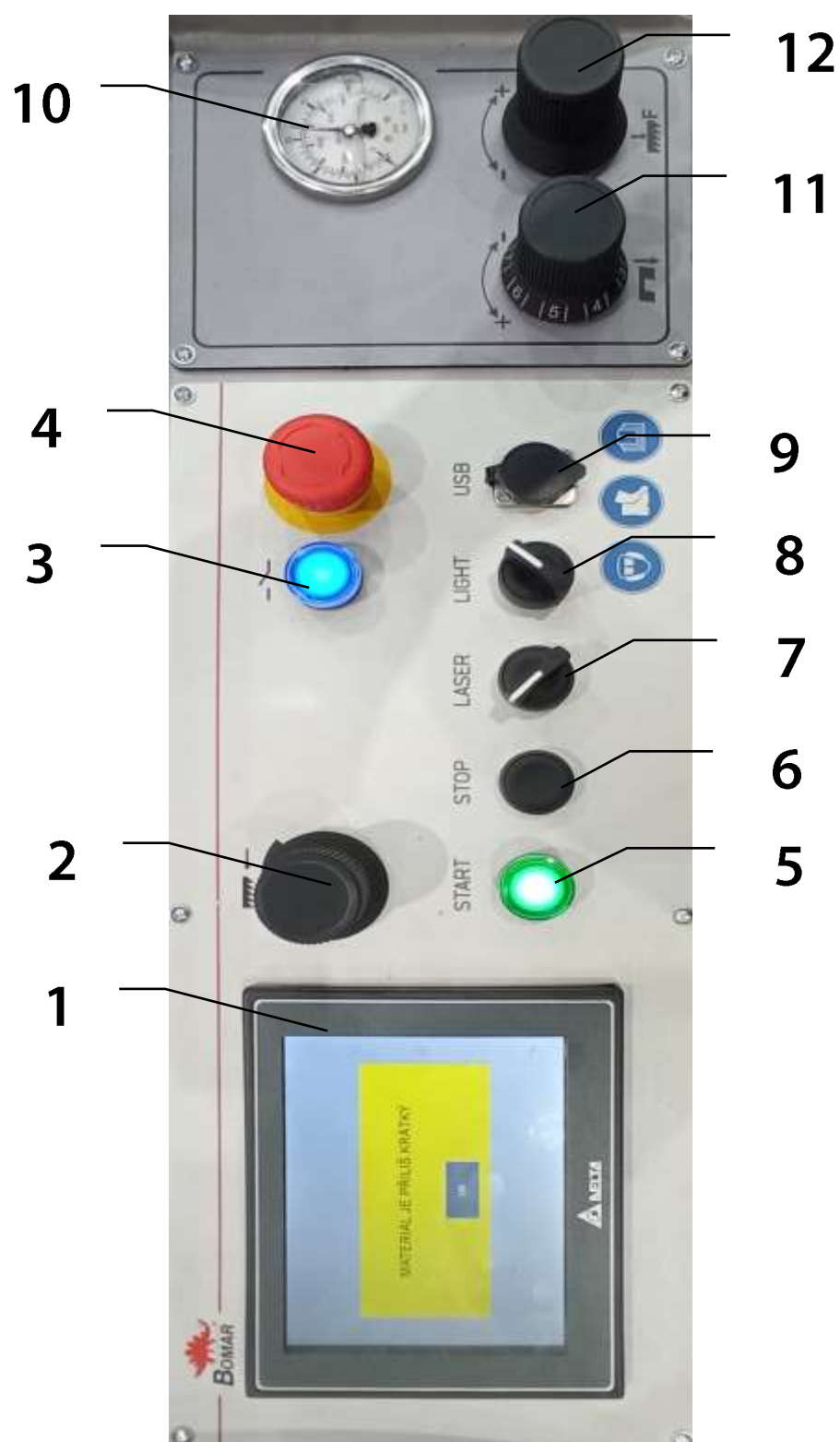


Unless the safety circuit is activated, the machine cannot be started.

If the safety circuit cannot be activated with the button on the machine control panel, check all safety elements.

3. After the safety circuit is activated, the first screen of the selected mode appears according to the mode selected (see the mode selector position).
4. Refering the machine – see the chapter on the machine referencing

3.2. Control panel

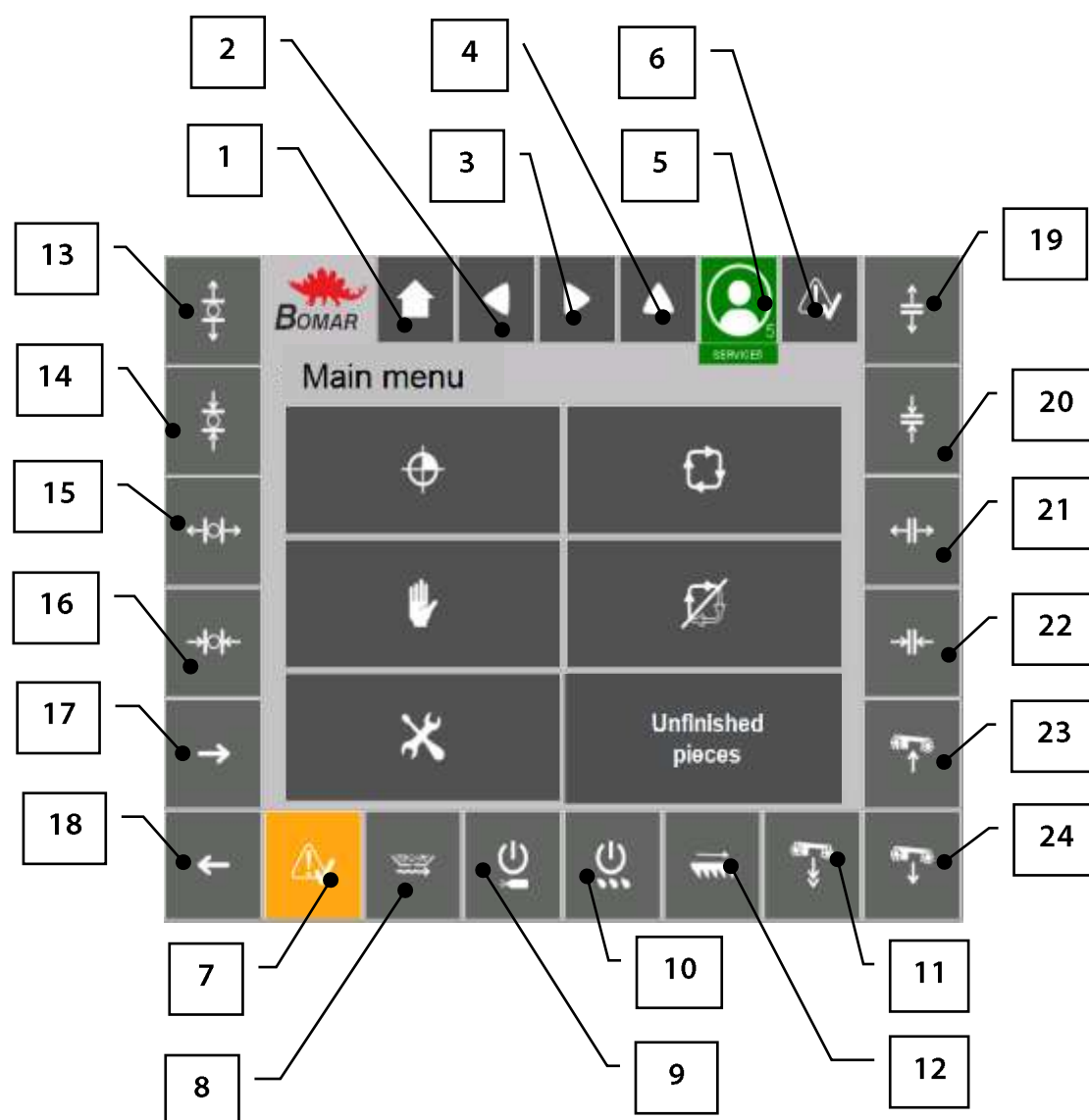


Ovládání stroje
Bedienung der Maschine
Machine control

1	Display It shows the operating mode and it allows dialogue with the service workers.
2	Frequency converter, selection of the saw bladespeed (optional accessory) Using the frequency converter you can adjust the saw band speed in a continuous range.
3	Safety circuit Press button to start the safety circuit
4	Emergency Stop Switch Immediately stops the machine in a case of emergency.
5	START button Switch on the automatic cycle.
6	STOP button Switch off the automatic cycle
7	LASER Without function
8	LIGHT Halogen lighting of the work area. Illuminates the working area of the machine with natural light. Proper lighting of the work area significantly increases the ergonomics of the machine.
9	USB port (optional accessories) Can be used when retrieving or saving data.
10	Control of the speed of lifting the arm into the cut The control wheel adjusts the speed at which the saw blade is raised into the cut.
11	Controlling the speed at which the arm moves into the cut. The speed at which the saw blade lifts into the cut is set with the adjusting wheel.
12	Regulation of the clamping pressure of vices The clamping pressure of the main and feed vice is adjusted by raising and turning the control wheel. The pressure value is selected according to the material to be cut.

3.3. Screen of the control software – general description

3.3.1. Control buttons on the control panel



The meaning of the icons on the touchscreen screens

1		Home Return to the main screen. The main screen can also be initialized by selecting from any control software screen.
2		Browsing between screens at the same hierarchical level (e.g., if parameter control or setting is divided into several screens or if there are more elements controlled or more units to set service parameters)
3		
4		Return to the nearest higher screen in the hierarchy
5		User login SERVICE1 heslo 1234 SERVICE2 heslo 3467 SERVICE3 heslo 2468 SERVICE4 heslo 135248
6	 	Icon indicating errors If this icon is lit on the display, an error has occurred on the machine. By touching the icon, you can hide the error message and activate control screens..
7		ACK Button Quoting – malfunction confirmation. If the malfunction is not confirmed, the operating cycle cannot be started
8		Chip extractor (optional accessory) Button on / off chip extractor. Notice: The chip extractor can also be switched on/off during the semi/automatic cycle. To turn off the chip extractor (at the moment of pressing the button on the touch panel), it is necessary to set a time of 0.1 s in the service parameters for the chip extractor.
9		Microniser (optional equipment) Press to start/stop cooling the band with micronisation
10		Liquid cooling (optional equipment) Button to turn on / off the cooling of the saw band using cooling emulsion.
11		Blowing (optional equipment) Button to turn on / off the machine's blowing
12		Saw blade drive Pressing the button switches the blade drive on/off.

13		Releasing the upper clamp on the feeder vise
14		Clamping the upper clamp on the feeder vise
15		Loosening of the feeder vise
16		Tightening of the feeder vise
17		Feeder movement - to the blade For the time the button is pressed, the feeder moves in the chosen direction
18		Feeder movement - away from the blade For the time the button is pressed, the feeder moves in the chosen direction
19		Release of the upper clamping at the main vice
20		Clamp of the upper clamping at the main vice
21		Release of the main vice
22		Clamp of the main vice
23		Movement of the arm upwards To move the arm, the button must be held down.
24		Downward movement of the arm To move the arm, the button must be held down.

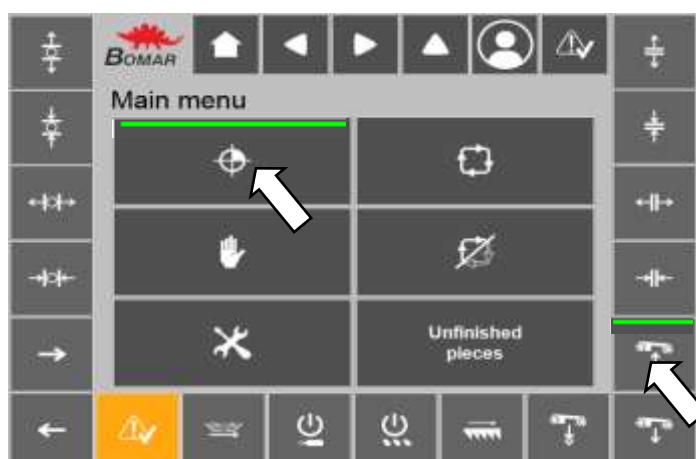
3.3.2. Touch display

Attention!

Take extra care when working with the touch panel. Make selections by lightly pressing the display with your bare finger or with a touch pen designed for touchscreen operation. Never use sharp objects or other tools for this!

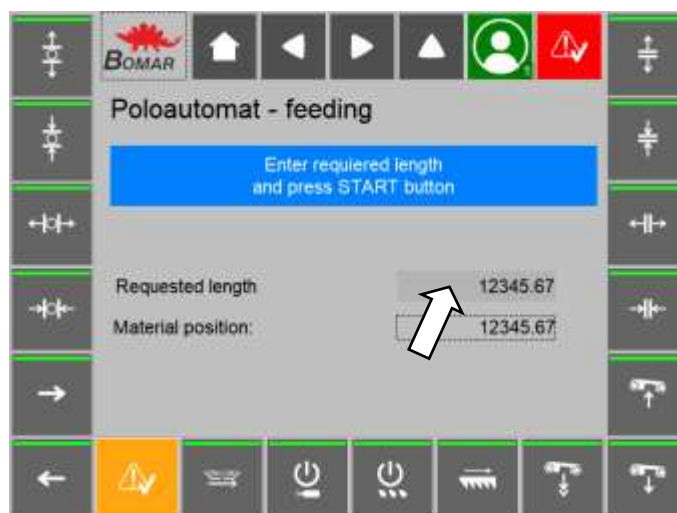
The individual options on the touch screen can be chosen by **direct touch on the pertinent icon.**

If the window is highlighted in green, the corresponding function is in progress (e.g. closing the vice) or the corresponding function is finished (e.g. reporting)



3.3.3. Touch screen keyboards

Touching of the parameter filling window activates a **keyboard** which appears on the display.



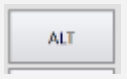
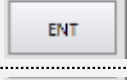
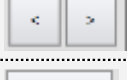
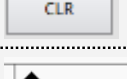
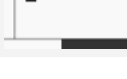
Keyboards types

- a) If only numeric values can be entered in the window, (such as in the window for recipe setting), only the **numeric keypad** appears:



- b) If both figures and text can be entered in the window, the **combined keyboard** appears:

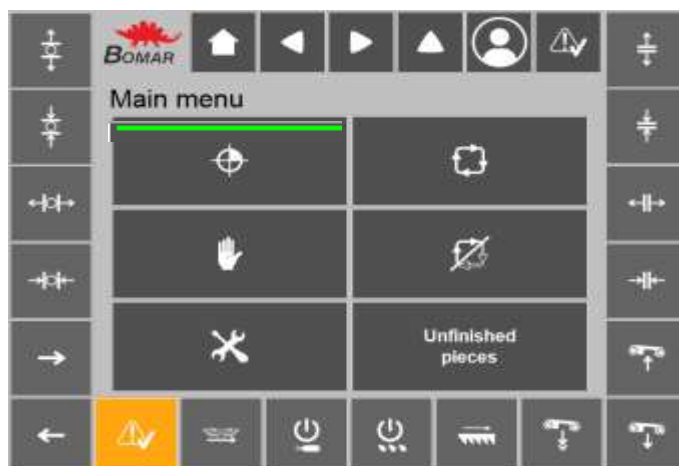


Position	Funktion
	Close the keyboard without saving the entered data
	Caps Lock function
	Deleting the last typed character
	Closing the keyboard with saving the entered data (confirmation of the entered value)
	Moving the cursor
	To delete the coments of the calculator display
	Shift function (uppercase letters and uppercase characters)

3.4. Main screen of the control software, machine modes

The main screen can be initialized by selecting  it from any screen of the control software.

The main screen of the control software displays a basic menu for selecting the operating modes, setup modes and machine refresh mode.



Working modes:



Manual mode– used to control the individual machine functions manually



Semiautomatic mode– used to execute one cut according to the given conditions (accessible from the manual mode).

The semiautomatic mode is recommended for cutting smaller number of pieces.



Automatic mode– used to execute the entire cutting cycle automatically according to the recipe entered or for cutting a single long piece.

Referencing mode:



Referencing – used to refering the machine – that is, after setting the machine in the operating state.

Service mode:



Servis --- entry in the menu used for setting and modifications of the machine service parameters.

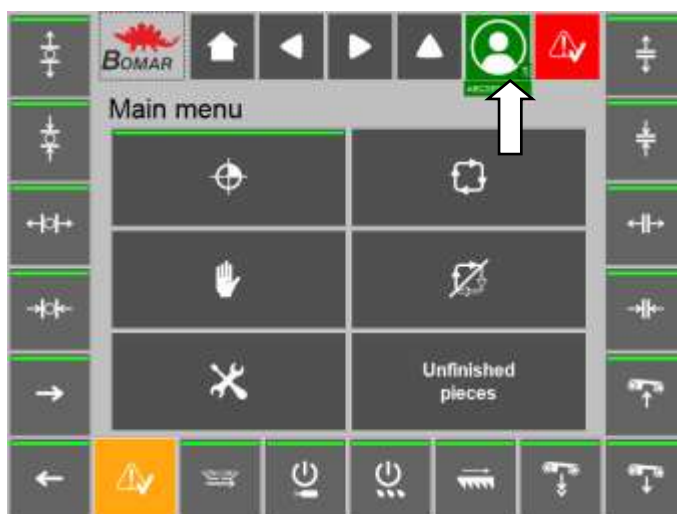
Mode for displaying unfinished pieces :



Unfinished (uncut) pieces – used to display unfinished pieces from the recipe, "RODS".

3.4.1. Warning (Error) messages

A red icon will light up in the header of the screen to signal an error - that alerts the operator to situations that prevent the continuation of an initiated operation or that prevent the continuation of a cycle.



If a warning (error) message appears on the screen, eliminate the cause of the error condition and then always acknowledge (confirm) the error message.

The **ACKNOWLEDGE (ACK)** icon is used to confirm the signaled error.



Once the cause of the error has been successfully resolved, the error message disappears from the screen after the confirmation.



After pressing the error message icon, a screen listing the error messages will appear.



The top of the screen shows the current error messages.

At the bottom of the screen is the history of error messages.

Position	Function
	Return to the main screen of the control software
	Icon to confirm the current error marked
	After pressing the icon, the error listing is saved to the inserted USB

3.5. Complete working cycle of the machine

The complete working cycle of the machine consists of the following steps:

1. Switching on the machine and safety circuits (see chapter "Switching on the machine and safety circuits")
2. Refering the machine (see chapter "Referencing the machine")
3. Setting the service parameters (see chapter "Setting the service parameters")
4. Adjusting the band saw (see chapter (see chapter "Adjusting the band saw")
5. Making a cut:
 - Cutting in semi-automatic mode (see chapter "Semi-automatic mode")
 - Cutting cycle in automatic mode (see chapter "Automatic mode" and chapter "Recipes")
6. Making another cut or cutting cycle or stopping the machining and switching off the machine
7. Manual control of individual machine elements - see chapter "Manual mode".

3.6. Machine refering

The machine must be referred:

- after each switching on of the machine by the main switch
- after pressing the emergency stop button
- after the safety circuits have been interrupted
- in other cases, whenever the machine's refering is disturbed (announced on the display by a message or if the sign indicating that the machine is refereeing disappears)

If the machine is refereed, there is a green line above the icon for initiating the referencing:



Attention!

Remove all material from the saw and the feeder before starting the resawing operation. Do not referee the machine with material clamped in one of the vises. If there is material on the feed track, open the feed vise in manual mode sufficiently before starting the resawing operation so that the material is not trapped by it.

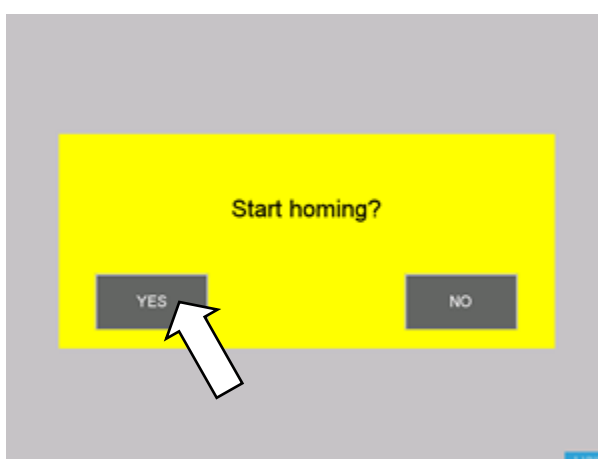
Attention!

The shoulder must be rotated to 0° before the start of the refereing!

1. Turn the saw arm to 0°.
2. On the main control menu screen, select the option for **Refering**



3. A screen appears asking if the operator wants to perform a refereing

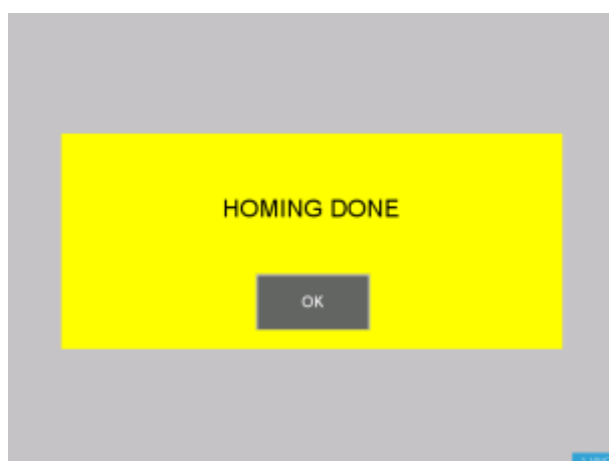


4. Press "YES" to start the refereing process
5. A screen with information about the **rerering is in progress** will appear::



The referencing takes place as a sequence of movements of the individual saw units, which are set from their current positions to their referring positions.

Successful completion of the referring is indicated by a message on the control panel display



If the referencing of any unit fails, first check the status of the referring position limit switch and the switching counterpart.

3.7. Manual mode

- The manual mode is intended for manual control of the individual machine elements.
It isn't possible to make a cut using touch control.

Caution!

Pay increased attention when moving the material towards the main vice, there is the risk of collisions particularly during manual operation!

- To put the machine in manual mode, select the option to initialize **manual mode** on the main screen:



- The following screen is used for **manual control of the saw**:



Position	Function
Feeder position	Actual feeder position
Belt speed	Actual belt speed

For manual control of the individual machine elements – see chapter "Control buttons on the control panel"

3.8. Semiautomatic mode

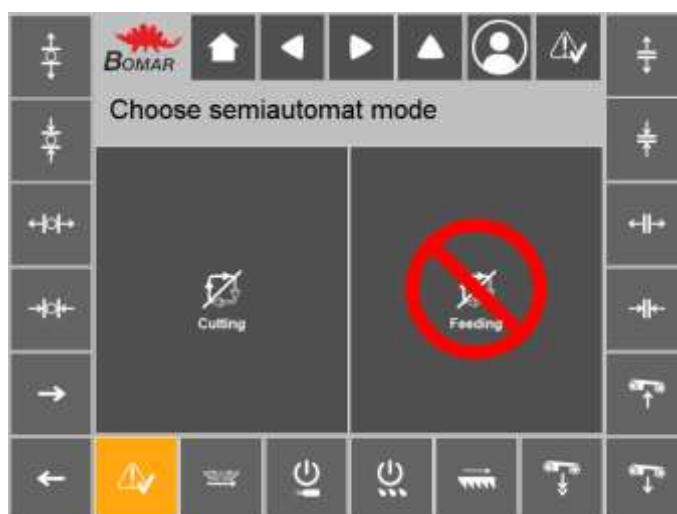
3.8.1. Initializing semi-automatic mode

1. To initiate semi-automatic mode, select **"Semi-automatic"** on this screen



2. The screen for operating the machine in semi-automatic mode appears, in either of the following options **a)** or **b)**:

a) Invalid material



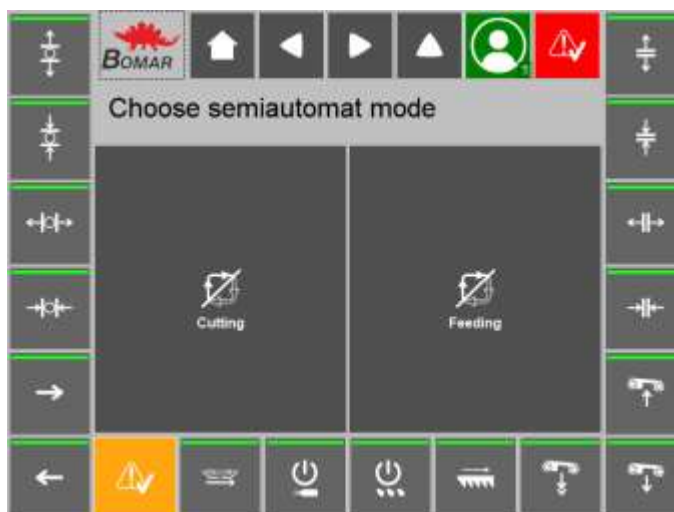
If the material is invalid - i.e. the machine has no information about the position of the front of the material, it is possible to select only the "Cutting" option.

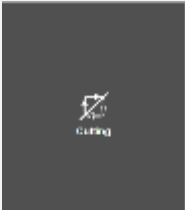
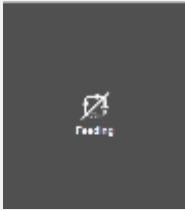
The "Material feeding" option cannot be selected.

Without a valid material, the semiautomatic mode enables:

- entry of parameters
- cutting of material without a length entered

b) valid material



Position	Function
	Option for setting and performing semi-automatic cutting
	Option for semi-automatic winding of the desired length by the feeder

3.8.2. Cutting in semi-automatic mode

1. In manual mode, drive the **arm all the way up**
2. In manual mode, **open the saw vise and the feeder vise sufficiently** for the width of the material to be loaded.
3. **Rotate the arm** to the desired angle.
4. **Insert the material**

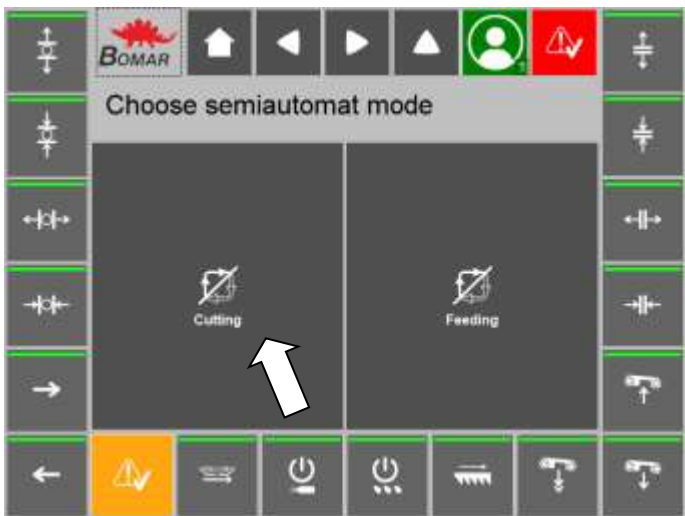
The material can be loaded

manually operated feeder - to the estimated length.

After loading, the material must be clamped with the main vise using the manual control.

automatically controlled feeder to the specified length - see chapter "Loading the desired length of material in semi-automatic mode".

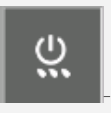
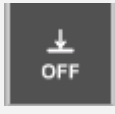
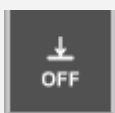
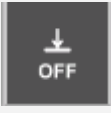
5. Select the "Cutting" option.



6. On the following screen, set the semi-automatic cutting conditions



Position	Function
Cutting speed setting	
Belt speed	Set belt speed
Chip extractor	
 	Selecting on/off of the Chip extractor During the cycle it is possible to switch the chip extractor on/off. You can select the extractor over the start of the semi-automatic cycle. If the extractor is switched on, then it is switched on with the start of cutting. If the extractor option is disabled, then it does not start with the cut. If it is running and the operator deactivates the extractor option, then it is switched off.

Cooling	
  	Cooling method Repeatedly press to select between cooling methods  - liquid cooling  - Micronizer cooling *  - without cooling
Switch off cooling after cutting	
 	Option to switch off cooling after cutting By repeatedly pressing it is possible to select between the positions of the arm after the cut in which cooling will be stopped.  - cooling is switched off when the arm is down  - cooling is switched off when the arm is in the up position
Saw band	
 	Option to stop the saw blade after cutting Press repeatedly to select between the following options  the saw blade stops in the down position after the cut  the saw blade stops in the up position after the cut

* Option is functional only for the machine with the given equipment

Semi-automatic cutting progress screen and changes in the status of the chip extractor and cooling:



7. Setting the **starting position of the arm** above the material to start the cut

The machine is equipped as standard with a device for detecting the position of the arm above the material. In automatic mode, the arm starts above the material at a height determined by the setting of the device

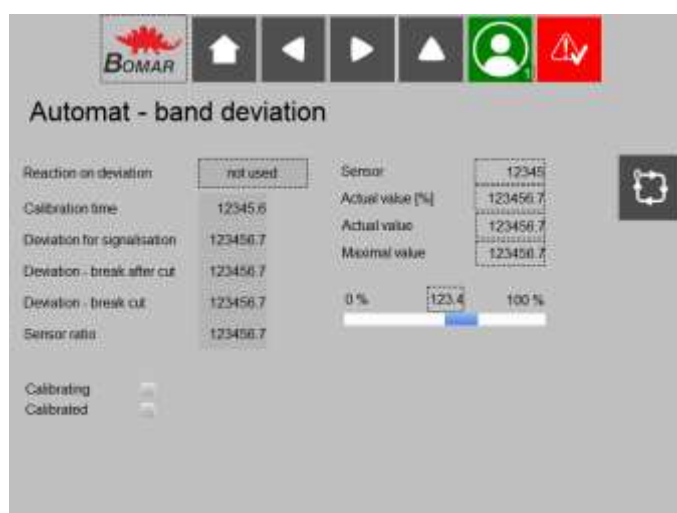
8. Use the potentiometer **on the saw control panel to set the desired cutting speed**
9. Adjust the speed of the arm's descent into the cut via the valve on the control panel.
10. Press the **START** button on the control panel to **start the cut**.
11. After pressing START:
 - a) The saw blade will start running and the arm will begin advancing into the cut.
 - b) During the descent of the arm into the cut, or even during the cut, you can adjust the speed of the saw blade and the speed of the arm descent into the cut via the controls on the machine control panel.
 - c) The display on the control panel will show a screen with information about the cutting progress.

Semi-automatic cutting progress screen



Position	Function
Belt speed	Set belt speed
	Option to display belt deflection A belt deflection monitoring device is an optional extra. If the device is not installed on the machine or if it is not functional, the option to display the belt deflection parameters will not be displayed. When the "Belt deflection" option is pressed on the automatic cycle progress display screen, the belt deflection parameter display screen appears To set the belt deflection parameters, see Service parameters

Belt deflection parameters display screen:



If the value for signalling is exceeded and any of the machine response options to belt deflection is selected except "Not used":

- If the permitted value is exceeded, the beacon flashes and the machine reacts according to the selected option.

A button for resetting the deviation appears on the screen displaying the belt

deflection parameters 

- After eliminating the cause that led to exceeding the permissible deviation limit, the operator resets the measured deviation using the displayed reset button.

The deviation is cleared and the beacon stops flashing.

Resetting the beacon interrupts the deviation measurement until the cut is completed. When the next cut is started, the deviation measurement will start again

- After finishing the cut in semi-automatic mode:

- The arm will automatically return to the position from which the cut was started or remain in the cut - depending on the selection made on the screen to start the semi-automatic cut, the belt drive will stop
- The end of the cut in semi-automatic mode is indicated by a message on the control panel display that the cut has been completed.

13. **Remove the crosscut** Now you can repeat the whole procedure.

3.8.3. Loading the required material length in the semiautomatic mode

Attention!

To load the given length, the material must be valid – that is, the machine should have information on the material beginning position!

Information on the material beginning position is kept even if the semiautomatic cycle follows on the automatic cycle and the material has remained clamped in at least one of the vices.

For semi-automatic loading, the following applies:

- after starting the loading by pressing the START button, the feeder grabs material immediately at the point, where the jaw of its vice is currently located
- the feeder does not automatically re-grip the material

Therefore, it is necessary::

- either before starting the loading, to set the feeder to suitable distance from the main vice (maximum length of feeder travel is 500mm)
- or to load one or two pieces manually and then load automatically the last section of required length (see following text for respective procedure).

Note:

In the semiautomatic cycle the feeder performs multiple feedings automatically. Thus, cutting a material of a big length may be better with the use of the automatic cycle with a procedure programmed for a single piece.

If before starting to weigh the material to the desired length in the semi-automatic mode, the "feed" option is not available - i.e. that is not a valid material, cut the material!



To make trim cut before loading of the length in the semiautomatic mode, proceed as follows:

- a) load the material under the saw band manually
- b) start the cut in the semiautomatic mode

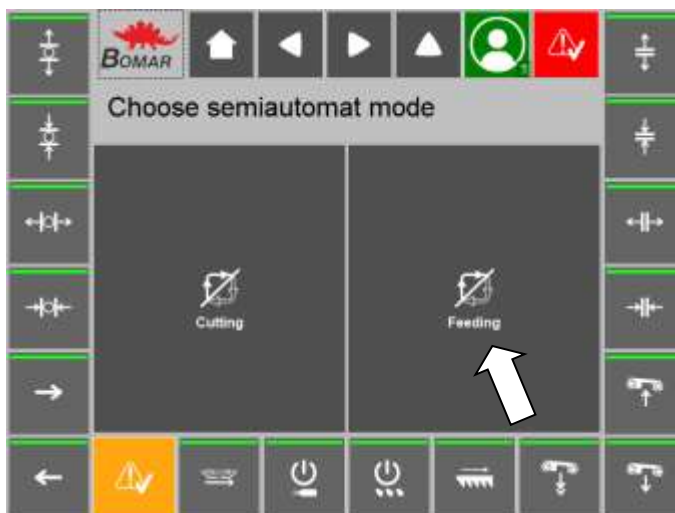
Attention!

To keep the information on the material position, the material must remain clamped in the feeder vice after the cut-in!

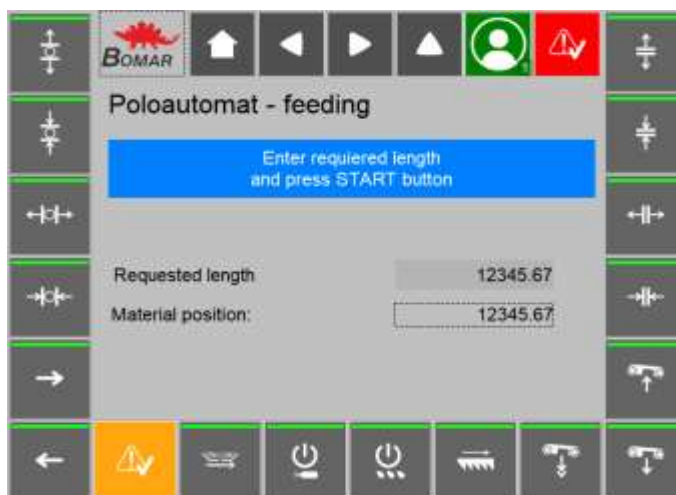
Attention!

After the cut-in, open the main vice manually so that the feeder can handle the material in order to load the length!

1. If the material is valid, select the length setting option and the **START** button will flash.



2. A screen appears to enter the desired length of material to be load



Position	Function
Required length	Window for entering the desired length for tying
Enter required lenght and press START button	Instructions for further action

3. In the parameter entry window on the screen for entering the desired length for the stringing, enter the desired length
4. The feeder clamps the material where it is and does not automatically perform multiple feeds in this mode.

If the required length of material cannot be loaded with one feed of the feeder :

- either set the feeder to a suitable position that allows the desired length to be threaded per feeder stroke (max. 500mm)
- or manually load the overhanging part of the material length via the auxiliary feeding

Attention!

During the auxiliary feeding, the machine must not lose information about the material in order to be able to correctly count the individual fed lengths - i.e. the material must be continuously clamped in at least one of the vises during the auxiliary feeding!

Auxiliary feeding procedure:

- Clamp the material in the main vise.
- Open the feeder vise sufficiently.
- Drive the open feeder to the beginning of the feeder path.
- Clamp the material through the feeder vise.
- Open the jaw of the main vise sufficiently.
- Manually drive the feeder with the clamped material towards the main vise.
- Check the length on the display (see Figure 1)

If the difference between the loaded length and the specified length for loading is still greater than the length of the feeder path, make another auxiliary feed.

- Press the START button to start loading material

Attention!

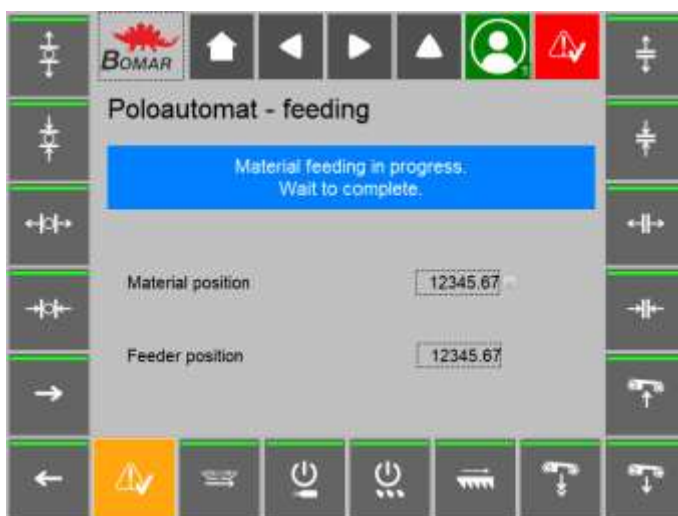
The main vise must be opened sufficiently before starting the loading process to avoid collision between the material to be loaded and the vise jaw!

Attention!

The upper clamp on the barrel vise can only be used with zero arm rotation!

- If the length for loading is less than the length of the feeder track, press the **START** button to start automatic loading of the material.
- Press the Start button to start loading material:

A screen will appear with information about the progress of the loading



- the feeder clamps the material and winds it to the desired length
- after the material is loaded, it is automatically clamped by the main vise

3.9. Semiautomatic sequence interruption

3.9.1. With the STOP button

- **1 x push - interruption of the executed sequence of the „pause“ type**
- This interruption is only possible if the cut has not been started.
- After the Start button is pushed, the interrupted sequence (material loading to the given length, arm rotation to the given angle) is resumed from the interruption place.
- **2 x pushes – complete stop and finish of the sequence or cut executed**
- If cutting was started in the semiautomatic mode, the machine does not respond to 1 push; only after the 2nd push of the STOP button, the cut is stopped.
- Double-push of the STOP button can also be used to finish another sequence started in the semiautomatic mode.
- The interrupted sequence cannot be resumed; it must be restarted from the beginning.

3.9.2. With the Emergency Stop Switch button

- In emergency cases, push the **Emergency Stop Switch** on the control panel.
1 push
- **interruption of safety circuits**
- **complete stop and finish of the sequence executed**
- The interrupted sequence cannot be resumed; the safety circuits must be switched on again and the interrupted sequence restarted from the beginning.

3.9.3. Interruption of safety circuits

- The interrupted sequence cannot be resumed; you must restart the safety circuits and start the interrupted sequence again from the beginning.

3.10. Automatic mode

In the automatic mode on this machine:

- **cutting is executed in automatic cycles**
- **cutting of required lengths of final pieces is controlled by predefined plans – called “recipes”.**
Recipes are software plans controlling the cutting procedure for final pieces of various lengths in the automatic cycle;
- necessary intervention of operators within one automatic cycle are only limited to material handling – that is, loading semi-products and handling cut-up and residual pieces.

One automatic cycle is controlled by one recipe and used for cutting of final pieces from one or more bar semi-products or one or more bundles of bar semi-products.

All semi-products loaded to be cut within one automatic cycle:

- **must have identical section parameters;**
- **can have identical or different length parameters.**

This machine enables execution of the automatic cycle of two types:

1. **"PIECES" type automatic cycle ("Pieces" automat)**

In the "Pieces" type automatic cycle, final pieces are cut in continuous sequence by the recipe, **as long as further required length can be loaded**.

If the material is too short so that the next required length cannot be loaded any more, loading of another semi-product is required.

2. **"RODS" type automatic cycle ("Rods" automat)**

In the "RODS" type automatic cycle, final pieces are cut in batches precisely defined by the recipe, being specified in the recipe for every individual semi-product piece. By the customer's requirements, batches of final pieces can be specified either individually for one semi-product piece or by means of a uniform specification common to the entire batch of semi-products.

Another semi-product must be loaded:

- either after cutting up the batch of final pieces specified for the given semi-product piece – if a semi-product is loaded in a defined length which must be sufficient to cut up all of the pieces specified;
- or after another required length cannot be loaded – if a semi-product is loaded in a length not sufficient for cutting of all specified pieces.

Cutting in the RODS type automatic cycle enables a residual piece of a predefined minimum length to be preserved from every standard length bar so that this residual piece can be utilized for further processing.

Note:

If in the "RODS" type automatic cycle a semi-product is loaded, being of insufficient length for cutting of all specified pieces, you are asked to load another semi-product according to laser detection – similarly to the "PIECES" automatic cycle.

However, uncut pieces from the short semi-product will not be cut from the next semi-product; they will just be registered in the table of unfinished pieces..

		Length	Count	Length	Count	Length	Count	Length	Count	Length	Count
1	12345.67	1234	11	12345.67	1234	21	12345.67	1234	31	12345.67	1234
2	12345.67	1234	12	12345.67	1234	22	12345.67	1234	32	12345.67	1234
3	12345.67	1234	13	12345.67	1234	23	12345.67	1234	33	12345.67	1234
4	12345.67	1234	14	12345.67	1234	24	12345.67	1234	34	12345.67	1234
5	12345.67	1234	15	12345.67	1234	25	12345.67	1234	35	12345.67	1234
6	12345.67	1234	16	12345.67	1234	26	12345.67	1234	36	12345.67	1234
7	12345.67	1234	17	12345.67	1234	27	12345.67	1234	37	12345.67	1234
8	12345.67	1234	18	12345.67	1234	28	12345.67	1234	38	12345.67	1234
9	12345.67	1234	19	12345.67	1234	29	12345.67	1234	39	12345.67	1234
10	12345.67	1234	20	12345.67	1234	30	12345.67	1234	40	12345.67	1234

Another semi-product loaded within the same automatic cycle will be cut precisely according to the pertinent batch of final pieces specified, regardless of whether or not all pieces of the previous semi-product have been cut up according to its recipe.

The automatic cycle executed on this machine can be controlled:

- **by means of a recipe created on this machine directly** – that is, by the software included in this machine.

The software included in this machine enables creation of recipes:

- for the **"PIECES"** type automatic cycle
- for the **"RODS"** type automatic cycle
- **by means of an imported recipe created on a computer by the Saw Manager software** (software for creation of recipes with optimized use of material, supplied by Bomar spol.s.r.o.)

From the Saw Manager software, recipes are imported:

- for the **"RODS"** type automatic cycle

Cooperation between the machine and Saw Manager software is subject to purchase of a Saw Manager software license. For information on purchase of the licensed software, please contact the sales department of the Bomar spol.s.r.o. company.

3.10.1. Preparing of cutting and cutting execution in automatic mode

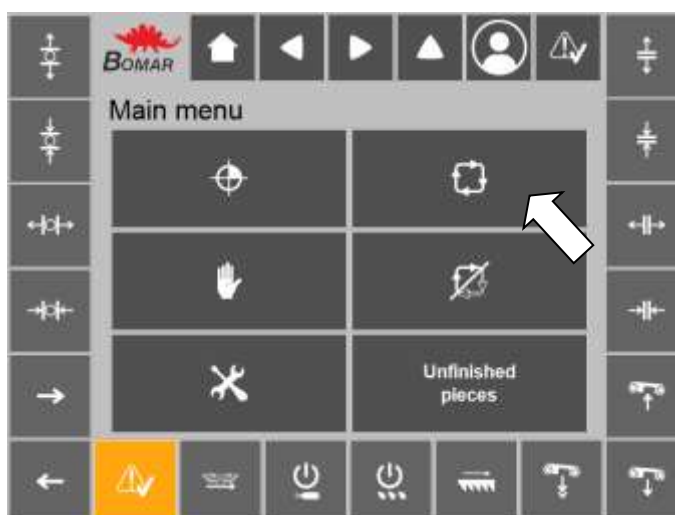
Attention!

**Short pieces that cannot be fed by the feeder to the main vise cannot be cut in automatic mode!
There is a risk of collisions!**

Attention!

The size of the burrs and unevenness of the material face affect the accuracy of the feed length!

1. On this screen, select the option to **initiate an automatic cycle**:



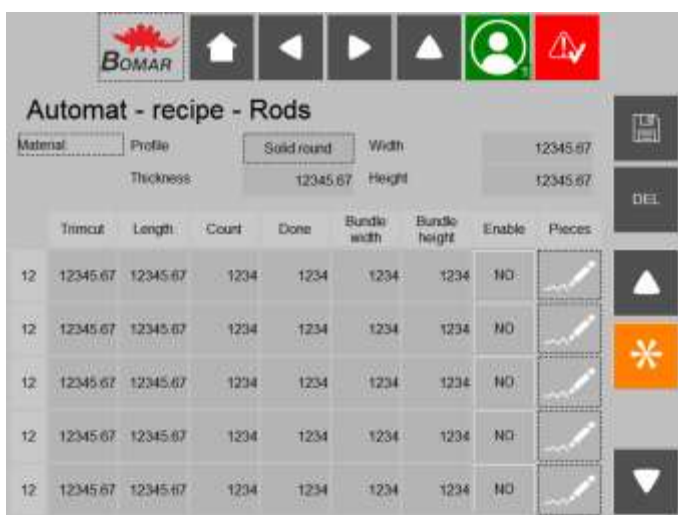
- After pressing the option to enter the automatic mode, **the screen of the last loaded recipe will appear.**

Recipe screen for automatic cycle type **"PIECES"**



	Length	Count	Done	Box	Enable
1	12345.67	1234	1234	1234	NO
2	12345.67	1234	1234	1234	NO
3	12345.67	1234	1234	1234	NO
4	12345.67	1234	1234	1234	NO
5	12345.67	1234	1234	1234	NO
6	12345.67	1234	1234	1234	NO
7	12345.67	1234	1234	1234	NO
8	12345.67	1234	1234	1234	NO
9	12345.67	1234	1234	1234	NO
10	12345.67	1234	1234	1234	NO
11	12345.67	1234	1234	1234	NO
12	12345.67	1234	1234	1234	NO
13	12345.67	1234	1234	1234	NO
14	12345.67	1234	1234	1234	NO
15	12345.67	1234	1234	1234	NO
16	12345.67	1234	1234	1234	NO
17	12345.67	1234	1234	1234	NO
18	12345.67	1234	1234	1234	NO
19	12345.67	1234	1234	1234	NO
20	12345.67	1234	1234	1234	NO

Recipe screen for the automatic cycle type **"RODS"**



Automat - recipe - Rods

Material: Solid round Width: 12345.67
 Thickness: 12345.67 Height: 12345.67

	Trimcut	Length	Count	Done	Bundle width	Bundle height	Enable	Pieces
12	12345.67	12345.67	1234	1234	1234	1234	NO	
12	12345.67	12345.67	1234	1234	1234	1234	NO	
12	12345.67	12345.67	1234	1234	1234	1234	NO	
12	12345.67	12345.67	1234	1234	1234	1234	NO	
12	12345.67	12345.67	1234	1234	1234	1234	NO	

The recipe that is displayed in this step, i.e. The currently loaded recipe will control the automatic cycle that is set up by this procedure and which will be started via the **START** button. V tomto kroku je možné provést:

- modifications to an existing recipe without saving - touch in the parameter input window to make the desired modifications"



- saving of the recipe - through the icon

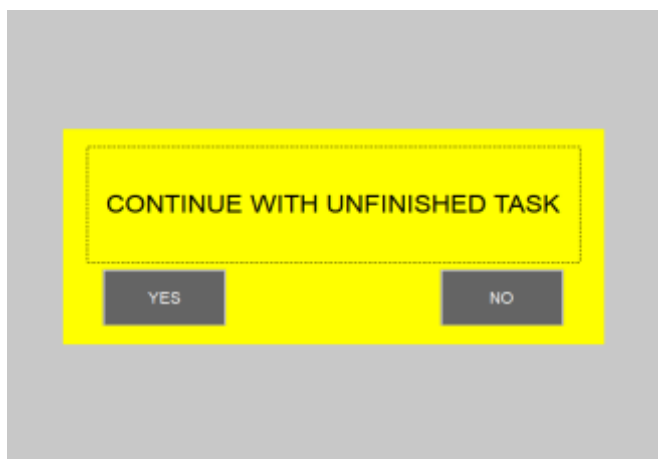


- loading another current recipe through the icon

For further work with recipes, see the chapter "Recipes".

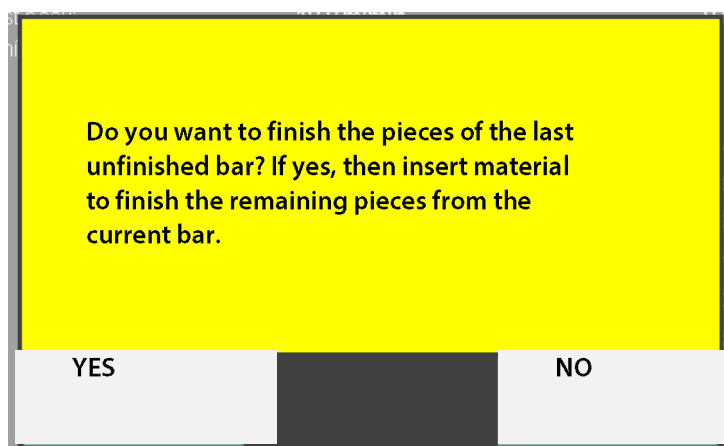
3. Once you have set the recipe you need, scroll to the next screen using the scroll between screens option:
 - a) If the previous automatic cycle has not been completed, this step will first bring up a screen with options for continuing the incomplete automatic cycle.

On this screen, the operator selects whether to continue with the incomplete automatic cycle or to start another automatic.



For more details on the individual "YES" "NO" options, see also the section on ending and interrupting the automatic cycle.

If the automatic cycle is interrupted while the entire blank is still unfinished, after selecting "YES", another screen will appear on the options screen for continuing the unfinished automatic cycle asking if the operator wants to continue cutting with the work in progress:



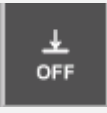
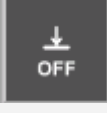
Attention!

The operator must consider the selection on this screen, especially if an automatic cycle of the TYPE TYPE has been interrupted! If the operator leaves the work in progress in the machine and starts to resume the automatic TYPE cycle, the work in progress will be cut as a new piece and may be unintentionally degraded.

- b) If the previous automatic cycle has been properly completed, or after pressing one of the Yes/No options on the automatic cycle interrupt options screen, the belt cooling and shutdown **selection screen will appear**



Position	Function
Cooling	
  	Cooling method Repeatedly press to select between cooling methods
	 - liquid cooling
	 - Micronizer cooling*
Switch off cooling after cutting	
 	Option to switch off cooling after cutting By repeatedly pressing i tis to select between the positon of the arm after the cut in which cooling will be stopped.
	 - cooling is switched off when the arm is down  - cooling is switched off when the arm is in the up position

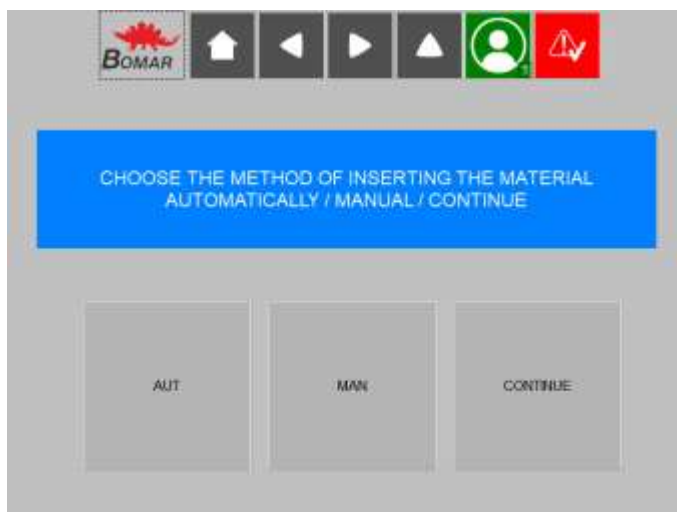
Position	Function
Chip extractor	
 ON  OFF	Selecting on/off of the Chip extractor During the cycle it is possible to switch the chip extractor on/off. You can select the extractor over the start of the semi-automatic cycle. If the extractor is switched on, then it is switched on with the start of cutting. If the extractor option is disabled, then it does not start with the cut. If it is running and the operator deactivates the extractor option, then it is switched off.
Saw band	
 OFF  OFF	Option to stop the saw band after cutting Press repeatedly to select between the following options:  OFF the saw band stops in the down position after cut.  OFF the saw band stops in the up position after cut.

Automatic cutting progress screen and changes in the status of the chip extractor and cooling:



4. Use the scroll option  to move the screen for selecting the cooling and band shutdown to the screen **for selecting how to feed material into the saw.**

Complete screen for selecting the method of inserting material into the saw:



The screen can be displayed in different variations - according to the specific machine equipment and the specific state of the cutting process.

Positon	Function
AUT	Automatic material insertion - Material will be loaded into the feeder either manually by the operator or vis an external weighing system - The feeder feeds the material into the saw vice The cut length is set automatically according to the value entered in the recipe. See note 1
MAN	Manual insertion of material - Material will be loaded manually by the operator up to the saw vice The length of the cut is set manually by the operator, with an accuracy corresponding to the accuracy of the operator's estimation or measurement. It is optimal if the length of the cut corresponds to the value written in the recipe. Otherwise, there is a risk that the material will not be sufficient to cut all of the intended pieces.

Positon	Function
CONTINUE	Familiar material is embedded in the saw This option is only displayed if the machine software has information about the position of the face of the material, i.e. if the material has remained clamped in at least one of the vices of the saw after the previous cut (known material). If this option is selected, the material is not automatically cut (even if it is prescribed in the prescription).

Note:

The automatic loading option (**AUT**) will only be displayed if the saw is equipped with an automatic loading device that will lock the feed float during automatic loading - this device is an option and must be ordered separately by the customer.

If the saw is equipped with an automatic loading device (feed float lock), then:

- on the screen for selecting the method of material loading, the option for automatic loading "AUT" is displayed (otherwise this option is not displayed at all)
- in the service parameters, the option for automatic weighing is checked on the screen for Accessories from the manufacturer



On the screen displayed for selecting the method of feeding material into the saw, select the method of feeding material into the saw.

Select an option by touching the icon.

The highlighted icon will be coloured - e.g.:



5. Once all parameters have been set, go to the screen to **start the automatic cycle**.

Screen to start the automatic cycle



Position	Function
SET CUTTING SPEEDS. SET SAW ARM POSITION. PRESS START BUTTON TO START AUTOMATIC CYCLE	instruction for the further action
Band speed	Set band speed

When this screen is displayed, the START button will flash.

6. Use the potentiometer on the saw control panel to **set the desired cutting speed**
7. Adjust the speed of the arm's descent into the cut via the valve on the control panel.
8. **Adjust the height of the arm to start the cut**

Set the starting position of the arm above the material to start the cut

To reduce the time required to cut a given blank profile, it is advisable if the arm is set at the optimum starting position (height) before cutting. The optimum starting position of the arm depends on the height of the profile of the blank to be inserted.

The machine is equipped as standard with a device for detecting the position of the arm above the material.

In automatic mode, the arm goes above the material to the height determined by the device setting (see chapter Arm position detection device above the material for more details).

9. **Press the START button**

10. **Insert the first piece of material before starting the automatic cycle**

The following actions of the operator and the machine during material insertion depend on the following:

- what is the currently selected material loading method
- and, if applicable, whether the saw is equipped with an external material loading

device  **valid material is embedded in the saw**

If the "CONTINUE" option is selected, then:

- if the known material remains clamped in the saw vice, the cut will start immediately after the first press of the **START button (see previous step)**

if the known material has remained clamped in the feeder's vice, then after the first press of the START button (see previous step) the feeder will load the first desired length of the final piece, which is next in line, the saw vice will clamp the material and the cut will start

The cut will be as follows:

- a new automatic cycle is started
- resumption of the interrupted automatic cycle

Warning!

If this option is selected the automatic material cut will not take place (even if it is prescribed in the recipe)

If you need to cut the face of a valid material:

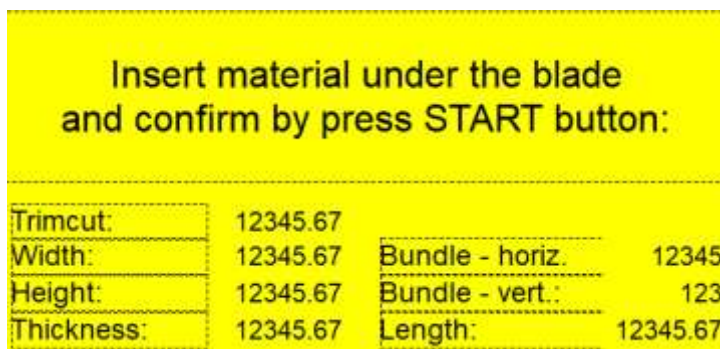
- switch the machine to semi-auto mode
- clamp the material in the feeder vise
- then release the material from the main vise
- semi-automatically feed the material to the specified length of the cut
- make a semi-automatic cut

If this procedure is followed, the machine will not lose information about cut and

uncut pieces. 

If manual material insertion is selected, then:

After pressing the START button for the first time (see previous step), you will be prompted to insert the material into the saw vice:



Manual material loading without external weighing equipment

- a) The operator manually inserts the material into the saw vice and presses the START button again
- b) After the second press of the START button, the saw vice clamps the material and starts cutting.
 - This cut will be, as the case may be:
 - new automatic cycle is initiated
 - resumption of the interrupted automatic cycle

Manual material loading with external weighing device

If the saw is equipped with an external weighing device, only the first piece can be manually inserted before starting a new automatic cycle.

The insertion of the first piece takes place in the same way as described in the previous paragraph.

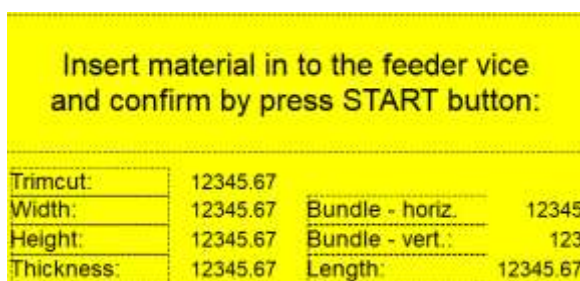
All other pieces of blanks in the cycle will be weighed automatically.



Automatic material loading without external weighing equipment

If automatic material loading is selected and if the saw is NOT equipped with an external device for automatic material loading, then

- a) After the first press of the START button (see previous step), the feeder moves to the material loading position
- b) You will be prompted to insert material into the feeder vise



- c) The operator manually inserts the material into the feeder vise and presses the START button again
- d) After the second press of the START button, the feeder locates the face of the material, then clamps the material and loads the material under the saw blade to the specified length
- e) The saw vise clamps the material, starting the cut.

- This cut will be, as the case may be:
- a new automatic cycle is initiated
- resumption of the interrupted automatic cycle

Automatic material loading with external weighing device

- a) If automatic material loading is selected **and if the saw IS equipped with an external device for automatic** material loading, then:
 - b) After pressing the START button (see previous step), the feeder moves to the position for inserting the material. Externí zařízení pro navážení materiálu naveze materiál do podavače pily
 - c) After the material is detected on the feeder's laser, the feeder locates the face of the material, then clamps the material and loads the material under the saw blade to the specified length
 - d) The saw clamp clamps the material, starting the cut.
 - This cut will be as follows:
 - a new automatic cycle is started
 - resumption of the interrupted automatic cycle
11. After starting a new automatic cycle or resuming an interrupted automatic cycle, a screen will appear showing the **progress of the automatic cycle**



Actual task:									
	Timeout	Length	Number	Done	Bundle width	Bundle height	Enable		
1	0.00	0.00	1	0	0	0	YES		Material position
2	0.00	0.00	0	0	0	0	NO		0.00
3	0.00	0.00	0	0	0	0	NO		
4	0.00	0.00	0	0	0	0	NO		Feeder position
5	0.00	0.00	0	0	0	0	NO		2.05

Length	Number	Done	Box	Enable	Length	Number	Done	Box	Enable
1	5.00	5	0	YES	11	0.00	0	0	NO
2	0.00	0	0	NO	12	0.00	0	0	NO
3	0.00	0	0	NO	13	0.00	0	0	NO
4	0.00	0	0	NO	14	0.00	0	0	NO
5	0.00	0	0	NO	15	0.00	0	0	NO
6	0.00	0	0	NO	16	0.00	0	0	NO
7	0.00	0	0	NO	17	0.00	0	0	NO
8	0.00	0	0	NO	18	0.00	0	0	NO
9	0.00	0	0	NO	19	0.00	0	0	NO
10	0.00	0	0	NO	20	0.00	0	0	NO

Band speed: 20.9

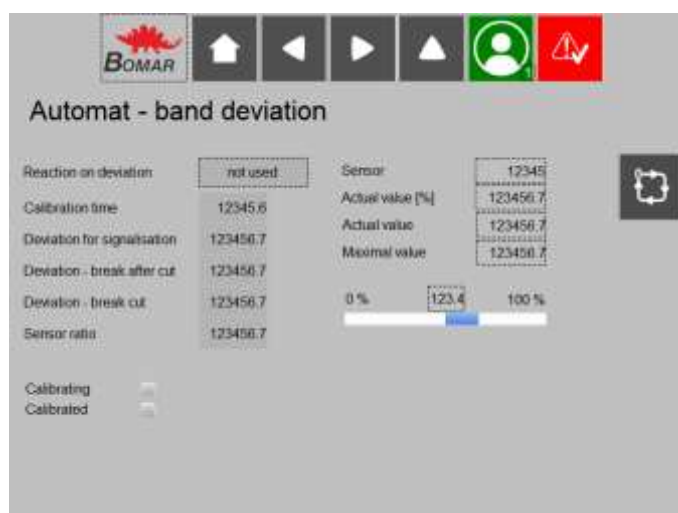
Band deviation

The screen displays the status of the job in progress and other information:

Position	Funktion
	Option for displaying belt deflection parameters The belt deflection monitoring device is an optional extra. If the device is not installed on the machine or if it is not functional, the option to display the belt deflection parameters will not be displayed. When the "Belt deflection" option is pressed on the automatic cycle progress display screen, the belt deflection parameter display screen appears To set the belt deflection parameters, see Service parameters

Position	Funktion
Material position	Information about the current position of the head of the material
Feeder position	Information about the current position of the feeder
Belt speed	Set belt speed

Belt deflection parameters display screen



If the value for signalling is exceeded and any of the machine response options to belt deflection is selected except "Not used":

- If the permitted value is exceeded, the beacon flashes and the machine reacts according to the selected option

A button for resetting the deviation appears on the screen displaying the belt



deflection parameters

- Once the cause that led to exceeding the permissible deviation limit has been eliminated, the operator resets the measured deviation using the displayed reset button.

The deviation is cleared and the beacon stops flashing.

By resetting, the deviation measurement is interrupted until the cut is completed. When the next cut is started, the deviation measurement will start again.

12. **Material replenishment during the automatic cycle**

The replenishment of material takes place from the moment of start until the end of the entire automatic cycle.

During the automatic cycle, the operator replenishes the material each time it is required by means of a message that is displayed on the display on the control panel

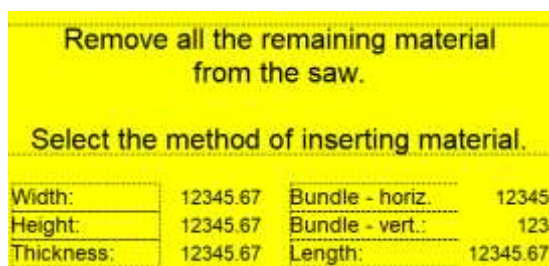
Invitation to insert material in an automatic "In Pieces" cycle



The prompt is displayed if the material is short and it is no longer possible to string the next length for cutting that is prescribed by the current recipe (automatic cycle of the "PIECES" type).

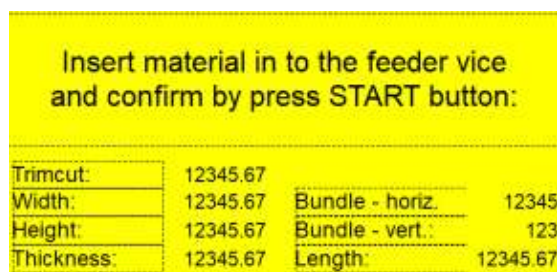
After pressing the "OK" option, the main screen of the control software appears and the operator goes through the screens for setting the automatic cycle only after confirming the insertion of the material with the OK button.

Invitation to insert material in an automatic "On Bars" cycle"



The prompt is displayed if the prescribed batch for the inserted blank is finished or if the material is short and it is no longer possible to cut the next length prescribed by the current recipe (automatic cycle of the "TYPE" type)

After pressing the desired option, the recipe screen appears and then prompts you to insert the piece - according to the selected option:





**Insert material under the blade
and confirm by press START button:**

Trimcut:	12345.67	Bundle - horiz.	12345
Width:	12345.67	Bundle - vert.:	123
Height:	12345.67	Length:	12345.67
Thickness:	12345.67		

The operator inserts a new piece of material and confirms the insertion with the START button.

Attention!

When handling the material, observe all safety regulations in this manual and other general regulations that apply to the production conditions at the specific workplace.

13. Termination of the automatic cycle:

Automatically the cycle is automatically terminated according to type:

- after all the final pieces specified in the recipe have been cut (automatic cycle of the "PIECES" type)
- after all the semi-finished pieces specified in the recipe have been cut (automatic cycle of type "BARS")

At the end of the automatic cycle:

- after all the final pieces specified in the recipe have been cut (automatic cycle of the "PIECES" type)
- after all the semi-finished pieces specified in the recipe have been cut (automatic cycle of type "BARS")



If it was not possible to cut all the final pieces according to the recipe for the automatic cycle of the "TYPE" type, then after pressing the OK option, a table with unfinished pieces appears on the screen with a message about the termination of the automatic cycle:

		Length	Count			Length	Count			Length	Count
1	12345.67	1234	11	12345.67	1234	21	12345.67	1234	31	12345.67	1234
2	12345.67	1234	12	12345.67	1234	22	12345.67	1234	32	12345.67	1234
3	12345.67	1234	13	12345.67	1234	23	12345.67	1234	33	12345.67	1234
4	12345.67	1234	14	12345.67	1234	24	12345.67	1234	34	12345.67	1234
5	12345.67	1234	15	12345.67	1234	25	12345.67	1234	35	12345.67	1234
6	12345.67	1234	16	12345.67	1234	26	12345.67	1234	36	12345.67	1234
7	12345.67	1234	17	12345.67	1234	27	12345.67	1234	37	12345.67	1234
8	12345.67	1234	18	12345.67	1234	28	12345.67	1234	38	12345.67	1234
9	12345.67	1234	19	12345.67	1234	29	12345.67	1234	39	12345.67	1234
10	12345.67	1234	20	12345.67	1234	30	12345.67	1234	40	12345.67	1234

1. At the end of the automatic cycle, remove the last cut piece and remove the remaining piece from the machine if necessary.
2. Now you can repeat the whole procedure.

3.10.2. Unfinished pieces

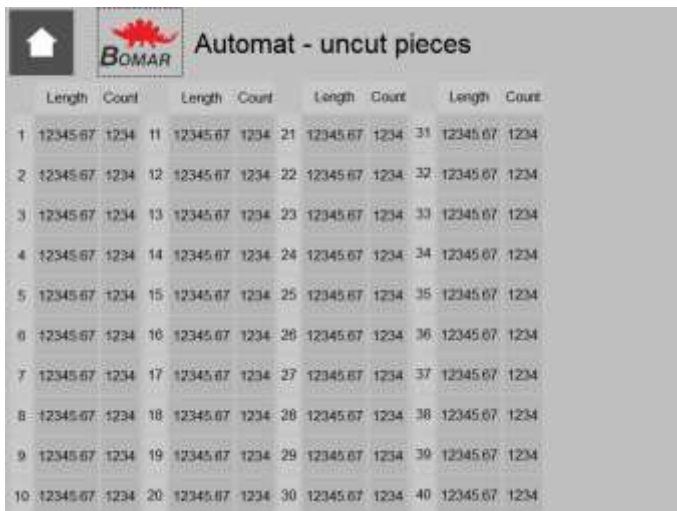
If a blank is inserted during the automatic cycle of the "TYPE" type, which is not long enough to cut all the prescribed pieces, the insertion of another blank is requested.

The unfinished pieces from the batch prescribed for the incorrectly inserted blank will not be re-cut from the next blank, they will only be recorded in the table of unfinished pieces.

The table of unfinished pieces can be viewed from the main screen of the control software:



A table of unfinished pieces will also be displayed at the end of an automatic "CUT" cycle in which not all pieces have been cut.



	Length	Count	Length	Count	Length	Count	Length	Count
1	12345.67	1234	11	12345.67	1234	21	12345.67	1234
2	12345.67	1234	12	12345.67	1234	22	12345.67	1234
3	12345.67	1234	13	12345.67	1234	23	12345.67	1234
4	12345.67	1234	14	12345.67	1234	24	12345.67	1234
5	12345.67	1234	15	12345.67	1234	25	12345.67	1234
6	12345.67	1234	16	12345.67	1234	26	12345.67	1234
7	12345.67	1234	17	12345.67	1234	27	12345.67	1234
8	12345.67	1234	18	12345.67	1234	28	12345.67	1234
9	12345.67	1234	19	12345.67	1234	29	12345.67	1234
10	12345.67	1234	20	12345.67	1234	30	12345.67	1234
						40	12345.67	1234

If the operator continues the same automatic cycle after the interruption, the data in the uncut table will not be deleted.

The uncut table will be automatically cleared:

- if the preparation of the next automatic cycle will be started after the previous cycle has finished
- if the option NO is selected when an automatic cycle is interrupted - i.e. do not continue with an incomplete job

3.10.3. Interruption and termination of the automatic cycle

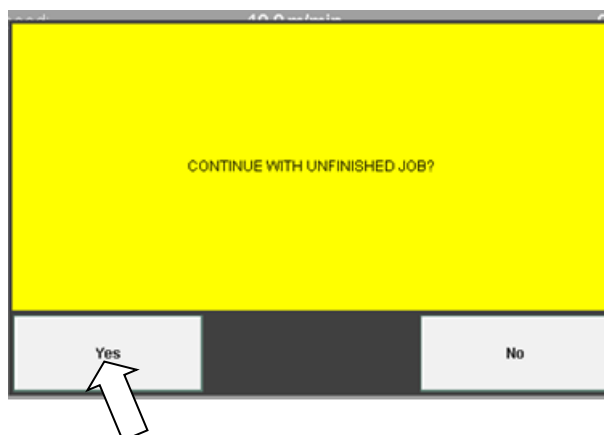
1. Interruption automatic cycle

When the automatic cycle is interrupted, it is always possible in a standard situation:

- to keep in the machine memory the information at which point in the recurrence the interrupted automatic cycle was at the time of the interruption (information about the number of pieces already cut), which allows the cycle to continue automatically from the last piece cut onwards
- retain the information archived in the table of uncut pieces for the automatic cycle of type TYPE, which allows to evaluate the status of uncut pieces after the automatic cycle has been automatically terminated
- to continue the interrupted cycle from the point at which the interruption occurred, either automatically (Pause type interruptions) or after checking and adjusting the automatic cycle settings (other types of interruptions).

If the operator wants to use the above mentioned option when interrupting a cycle, he must not terminate the automatic cycle at the same time during the interruption, i.e:

- must not open another recipe
- must select "YES" on the screen asking if he/she wants to continue the job in progress



- **Attention!**

If the automatic cycle is interrupted and it is obvious that you want to continue the interrupted automatic cycle without cutting the currently inserted material, make sure that the machine does not lose information about the position of the material - i.e. the material must remain clamped, at least in one of the two vises ("known material")!

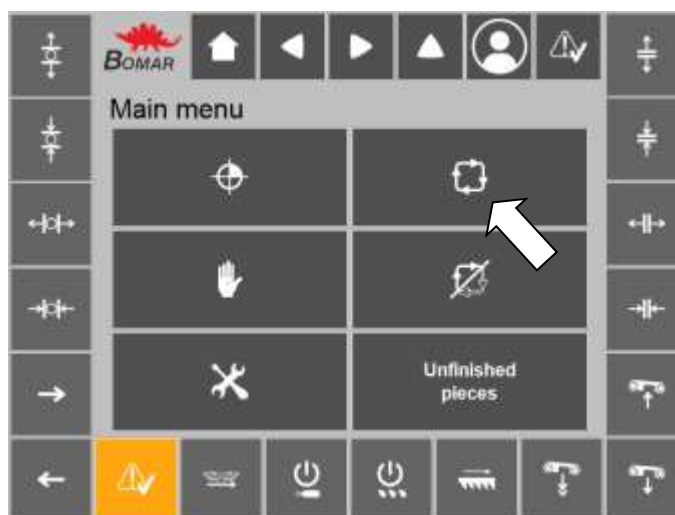
2. Standard procedure for resuming an interrupted automatic cycle

1. Remove the cause that interrupted the automatic cycle
2. Bring the machine back into operating condition

If the Emergency Stop Switch is pressed, release the button by turning it.

If the safety circuits are interrupted, switch on the safety circuits by pressing the button on the control panel.

3. Confirm the messages that appear on the control display.
4. After confirming the last message, the screen will appear:

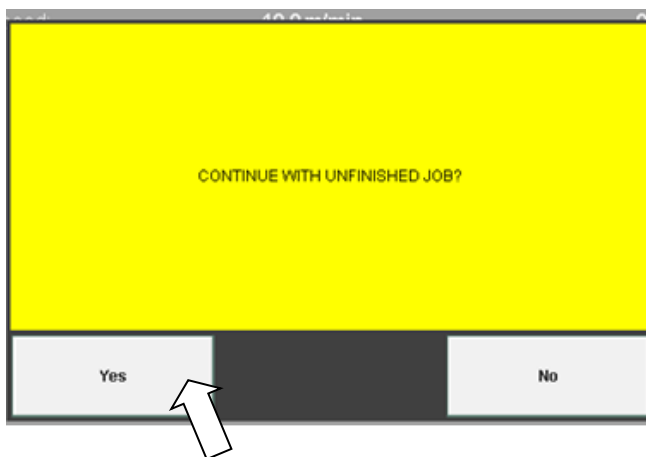


On this screen, select the option to enter the automatic cycle settings

5. Scroll through the automatic cycle settings to the step where pressing START initiates the continuation of the automatic cycle

Attention!

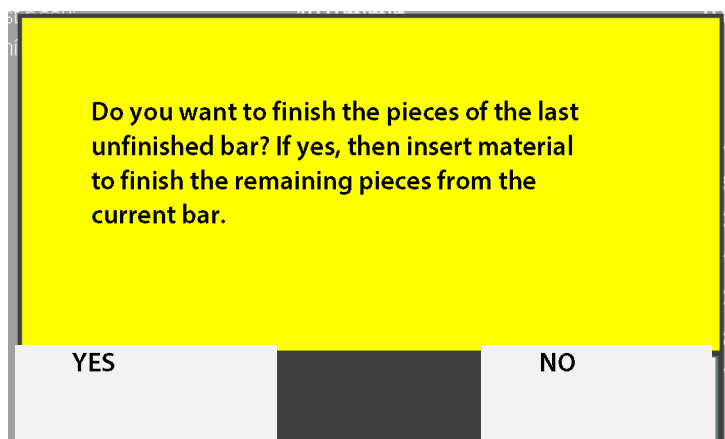
The operator must select "YES" on the screen asking if they want to continue with the job in progress.



Attention!

Before resuming an interrupted automatic cycle, pay special attention to the material status of the machine - i.e., consider next steps if material remains in the machine after the interruption

If the machine has information that the entire blank was not cut during the interruption, then after selecting YES/NO, another screen will appear on the options screen to continue the incomplete automatic cycle asking if the operator wants to continue cutting with the work in progress:



If the operator selects "YES", the material currently loaded in the machine will be cut.

Attention!

Inconsiderate initiation of the continuation of the automatic cycle may result in deterioration of the inserted material

If the cycle was interrupted by pressing the STOP button twice at the moment the cut was started, and if valid material remains in the machine, then the interrupted cut will be completed immediately after restarting the interrupted cycle - i.e. the next prescribed length will not be fed immediately.

If invalid material is inserted in the machine, it will be picked up by the feeder and fed to the first required length.

If the operator selects NO, the machine will request the material to be inserted in the next steps.

If the face of the material is damaged after interrupting the cut and you want to continue cutting this damaged material, consider whether it is necessary to trim the face before continuing cutting - the procedure for trimming the face for known material is described in the text about inserting the material, in the paragraph:

valid material is embedded in the saw

3. Automatic cycle interruption methods

Automatic interruption - material depleted

The machine control software evaluates that it has run out of material if all final pieces are not cut in the automatic "PIECES" cycle or if all blanks are not cut in the automatic "BARS" cycle and the saw cannot continue cutting more pieces.

The saw cannot continue cutting more pieces if any of these circumstances occur:

- it is not possible to cut the next required length from the remaining length of the piece clamped in the feeder, and it is not possible to feed another piece of material into the feeder for cutting using the external feeding system.
- the length of the remaining piece clamped in the feeder will not be sufficient to push the cut piece out of the saw

In case **ad a)**, the machine stops automatically and the ongoing automatic cycle is interrupted.

In case **ad b)**, depending on the circumstances and **the operator's choices, either the rest can be cut further or the machine will also stop and the automatic cycle will be interrupted.**

The procedure for continuing the interrupted cycle after material replenishment is described in the chapter on material replenishment in the automatic cycle of the type PIECES and in the automatic cycle of the type BARS.

4. Button STOP

- **1x press – interrupt automatic cycle of „Pause“ type**

If the operator presses 1x STOP when the cut has not yet started, the automatic cycle is interrupted immediately.

If the operator presses 1x STOP while the cut is in progress, the automatic cycle is interrupted only after the saw has finished cutting.

When the automatic cycle is interrupted by pressing 1x STOP, the machine is set to "Pause" mode.

The "Pause" mode can be terminated **by pressing the START** button and the cycle interrupted by the pause will immediately resume automatically from the point of interruption.

- **2x press – interrupt automatic cycle.**

Pressing the STOP button twice can be used to interrupt the automatic cycle.

To resume the cycle, follow the **standard procedure for resuming an interrupted automatic cycle** – as described above.

- **Emergency stop switch .**

The resume thy cycle follow the **standard procedur efor resuming an interrupted automatic cycle** as described above

- **By interrupting the safety circuits**

Use the button on the saw's control panel to activate the saw's safety switches



To resume the cycle, follow **the standard procedure for resuming an interrupted automatic cycle** – as described above.

5. Automatic cycle ending

- It will no longer be possible to resume the ended automatic cycle from the step at which it was interrupted.

When the automatic cycle is ended, information on the number of cut up pieces is always deleted and the machine loses information on the step in which the system was before being ended.

If the operator wants to resume the interrupted cycle from the step in which it was interrupted, s/he must adapt the recipe so that the machine gets information on from where cutting should be resumed or s/he must compile a special recipe for the rest of the cycle.

If the operator wants to adapt the recipe, s/he can mark with cross the lines which you do not want to cut or modify the number of pieces in the line which has not been finished.

If the adapted recipe is not saved, the corrected data will only be entered until they are adapted again or until another recipe is opened.

- If the BARS type automatic cycle is ended during the cycle, all information in the table of unfinished pieces will be deleted automatically.
- If the BARS type automatic cycle is ended automatically after the cycle has been completed, information in the table of unfinished pieces will be preserved.

6. Methods of automatic cycle ending

- **Automatic ending – after the cycle is completed**

The automatic cycle is terminated after its completion – i.e. after all dinal pieces have been cut in the automatic cycle type "PIECES" o rafter all blanks have been cut in the automatic cycle type "BARS"

When a completed automatic cycle is automatically terminated an automatic cycle termination message always appears on the control display.



- **Opening a new recipe**

If the operator, after interrupting the currently running automatic cycle, opens a different recipe than the one according to which the interrupted cycle was running.

After opening a new recipe, if the operator goes through the automatic cycle preparation and presses the **START** button – a according to the new recipe

By the "NO" option on the screen with enquiry whether s/he wants to continue in the unfinished job:



If the operator selects "NO":

- it will not be possible to continue the interrupted automatic cycle from the step in which the interruption occurred.
- If the operator goes through the automatic cycle preparation and presses the **START button** - then the interrupted automatic cycle will be restarted from the beginning - i.e. from the first non-zero checked recipe line

4. **Receptury/ Rezepturen / Recipes**

4.1. Recipes

- Recipes are software plans controlling the cutting procedure for final pieces of various lengths in the automatic cycle.
- One automatic cycle is controlled by one recipe and used to cut final pieces from bar semi-products or bundles of semi-products which have:

- identical section parameters
- identical or different length parameters

If you need to cut material with different section parameters, it is necessary to create a specific recipe for every section and cut every section in a specific automatic cycle.

Note:

Everything stated below for “bar semi-products” also applies to “bundles of bar semi-products”.

- The machine software enables two types of recipes to be created on the machine directly:
 - recipes for the “PIECES” type automatic cycle
 - recipes for the “RODS” type automatic cycle
- Another option for creation of recipes for this machine is use of the independent Saw Manager software (supplied by Bomar spol. s.r.o.).

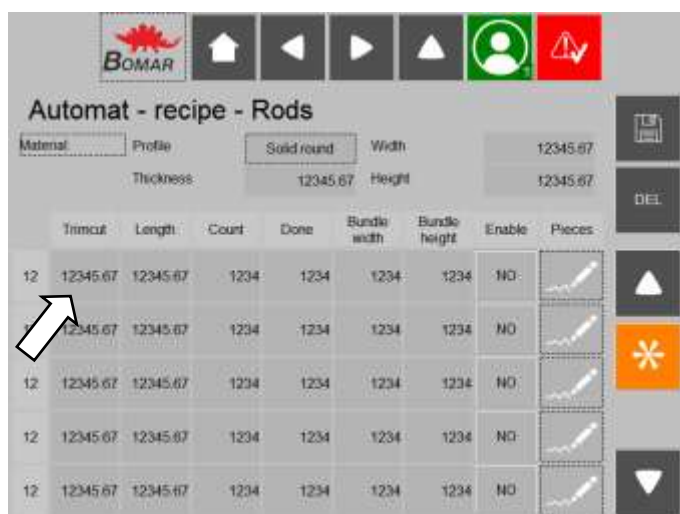
The Saw Manager software is used to create recipes with optimized material; recipes for the “RODS” type automat are created by means of it.

A recipe created in Saw Manager is put together on computer (independently of the machine) and can be imported to this machine memory via network connection or USB connector by the procedure described in the chapter on work with recipe files.

Cooperation between the machine and Saw Manager software is subject to purchase of a Saw Manager software license.

- The machine software also enables the loaded (current) recipe to be modified and saved with the changes made.

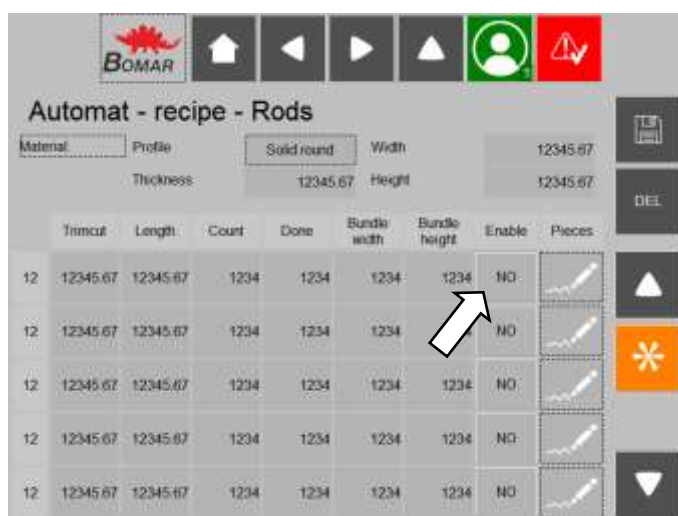
- To enter parameters on all recipe screens, you can touch the field in which you want to enter the parameter to activate a numeric keyboard with which you can enter and confirm the given value.



- By means of ticks and crosses at the line ends, you can also operatively modify the given recipe configuration additionally:

Mark the lines to be executed in the given automatic cycle with **"YES"**

Mark the lines not to be executed in the given automatic cycle with **"NO"**



Procedures for working with recipe files – see chapter , 'Managing recipe files'.

Attention!

If you do not save the changed or newly entered recipe according to the procedure described in the chapter "Managing recipe files":

- unsaved data written in the recipe will be automatically saved only in the machine cache after you select the icon on the edit screen to move to the next



screen

The machine will follow this data for each subsequent automatic cycle run, i.e. the cycle or cycles will run according to the modified but not properly stored current recipe.

- when another recipe is opened, the cached data will be lost and it will not be possible to return to the unsaved data

4.2. Modification of currently loaded recipe

On the screens of currently loaded recipes, the currently loaded recipes can be modified to any extent.

Unless these modifications are saved, they will only be valid until you choose the "New" option on any recipe screen.

If the modification should be kept, the modified recipe must be saved.

Modification procedure:

1. As necessary delete the entire display as needed by selecting

DEL

2. Adjust the required parameters in the individual fields of the recipe as required.
3. Through the „Enable“ option it is possible to modify the configuration of the current recipe so that:

- non-zero rows confirmed via the "YES" option will be executed
- non-zero rows rejected via the 'NO' option will not be executed.

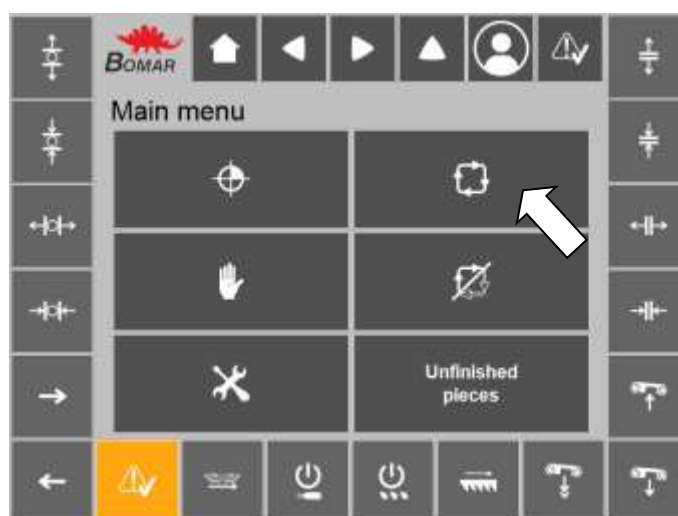
The automatic loop always starts with the first confirmed non – zero row and continues sequentially with all subsequent confirmed non – zero rows according to the numerical order in which the rows are marked.

4. If necessary, save the modified recipe - see the chapter on working with recipe files

4.3. Selecting the recipe type when creating a new recipe on the machine

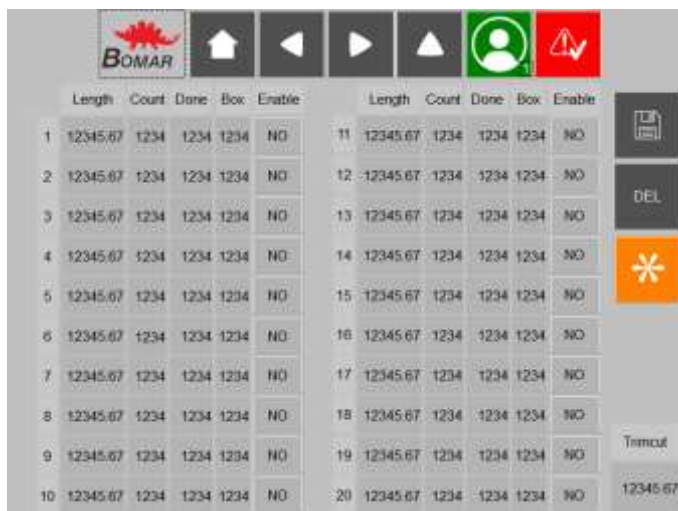
Since the machine software reproduces the execution of the automatic cycle according to two different types of recipe, it is necessary to select the type of recipe to be created before a **new recipe is created**.

1. On the **main screen** of the control software, select the option to initialize **the automatic mode**



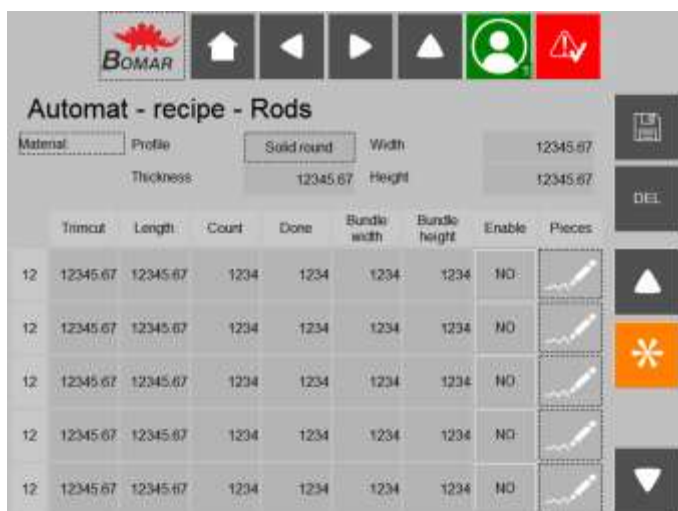
- After pressing the option to enter the automatic mode, the **screen of the last loaded recipe will appear**

Recipe screen for the **"PIECES"** type automatic cycle.



	Length	Count	Done	Box	Enable
1	12345.67	1234	1234	1234	NO
2	12345.67	1234	1234	1234	NO
3	12345.67	1234	1234	1234	NO
4	12345.67	1234	1234	1234	NO
5	12345.67	1234	1234	1234	NO
6	12345.67	1234	1234	1234	NO
7	12345.67	1234	1234	1234	NO
8	12345.67	1234	1234	1234	NO
9	12345.67	1234	1234	1234	NO
10	12345.67	1234	1234	1234	NO
11	12345.67	1234	1234	1234	NO
12	12345.67	1234	1234	1234	NO
13	12345.67	1234	1234	1234	NO
14	12345.67	1234	1234	1234	NO
15	12345.67	1234	1234	1234	NO
16	12345.67	1234	1234	1234	NO
17	12345.67	1234	1234	1234	NO
18	12345.67	1234	1234	1234	NO
19	12345.67	1234	1234	1234	NO
20	12345.67	1234	1234	1234	NO

Recipe screen for the automatic cycle type **"RODS"**.



	Trimcut	Length	Count	Done	Bundle width	Bundle height	Enable	Pieces
12	12345.67	12345.67	1234	1234	1234	1234	NO	
12	12345.67	12345.67	1234	1234	1234	1234	NO	
12	12345.67	12345.67	1234	1234	1234	1234	NO	
12	12345.67	12345.67	1234	1234	1234	1234	NO	
12	12345.67	12345.67	1234	1234	1234	1234	NO	

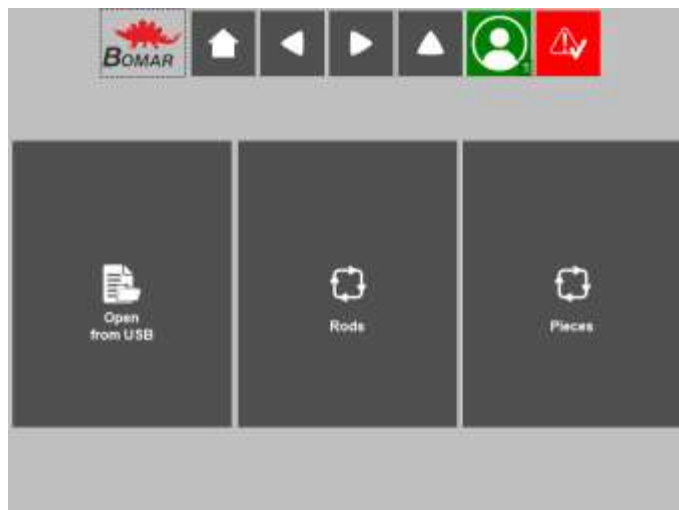
- On the corresponding screen of the currently loaded recipe, select the option

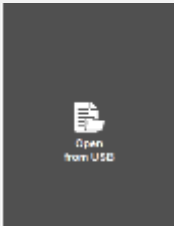


to open a new recipe



- After pressing the option to open a new recipe, a screen will appear with the selection of type of new recipe and the option to open the recipe from USB:



Position	Function
PIECES	Entry in the menu enabling creation of a recipe for the "PIECES" type automatic cycle.
RODS	Entry in the menu enabling creation of a recipe for the "RODS" type automatic cycle.
	Enter menu to load receptury from USB

4.4. Recipe creation on the machine for the "PIECES" type automatic cycle.

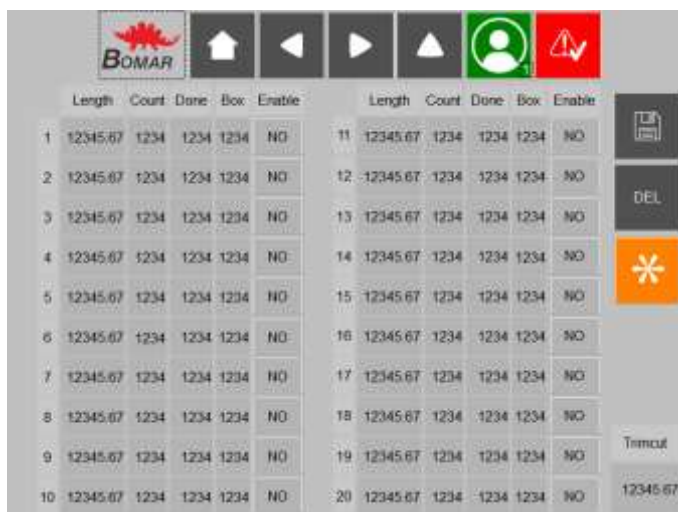
4.4.1. Entry in the menu for recipe creation for the "PIECES" type automat.

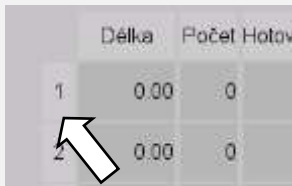
1. On the screen for selection of the automat types choose the "PIECES" automat type.



2. The first recipe screen appears

This screen is used to enter information on lengths quantities and cutting sequence of final pieces.



Position	Funktion
	Scrolling between screens
	Line number number of the batch of final pieces, to which parameters entered in the given line apply. If more than 1 piece is entered in the field for the required number of pieces, all pieces of this batch will be cut in immediate succession
Length	Required length of the final piece
Number	Required number of pieces of a given length
Done	Number of final pieces of the given length already cut from the batch specified on the given line
Box	Option for sorting pieces The option is only functional if the machine is equipped with an external device for sorting the cut pieces.
Enable	YES - cut the specified recipe line NO - do not cut the specified recipe line
	Save recipe on USB
	Deleting the contents of a recipe

Position	Funktion
	Opening of a new recipe
Trimcut	Length if cut

4.4.2. Description of the recipe creation screen for the "PIECES" type automat

During recipe composition, the following rules must be taken into account:

- The recipe for the automatic cycle type "PIECES" requires the input of information about:
 - the required length of the final pieces
 - the number of angles on the leading edge
 - the values of the angles on the leading and trailing edges
 - the required number of final pieces
- Enter the information on the individual lines **in the order in which the final pieces will be cut in sequence.**
 - One or more pieces can be entered on one line on the recipe screen that have the same length and the same cutting angles
 - Once the final piece parameters have been completely entered, it is possible to further adjust the configuration of the final pieces by checking the lines that are actually to be cut in the automatic cycle

On the recipe screen:

Mark **"YES"** for the pieces (lines) to be cut in the cycle.

Mark **"NO"** for the pieces (lines) that are not to be cut.

4.4.3. Cutting according to the recipe for the automatic cycle type "PIECES"

- The automatic cycle of type "PIECES" starts cutting according to the corresponding recipe of type "PIECES" from the first non-zero checked line.
- All pieces on the current line are always cut immediately after each other and only then the cycle continues with the next line.
- The insertion of additional material is requested whenever it is no longer possible to feed the next required length for cutting, which is prescribed by the current recipe.

4.5. Recipe creation on the machine for the "RODS" type automatic cycle

4.5.1. Cutting plan

Before creating a recipe for the automatic cycle of the "TYPE" type, it is necessary to prepare a cutting plan in which all the required final pieces on each semi-finished product will be lined up so that each semi-finished product will have a residue of the minimum length required by the machine user.

If the recipe for the automatic cycle of the "TYPE" type is created using the independent software Saw Manager (**recommended procedure**), then the above mentioned cutting plan is created automatically by this software and the output of the Saw Manager software is already a finished recipe for the control of the automatic cycle of the "TYPE" type on the machine.

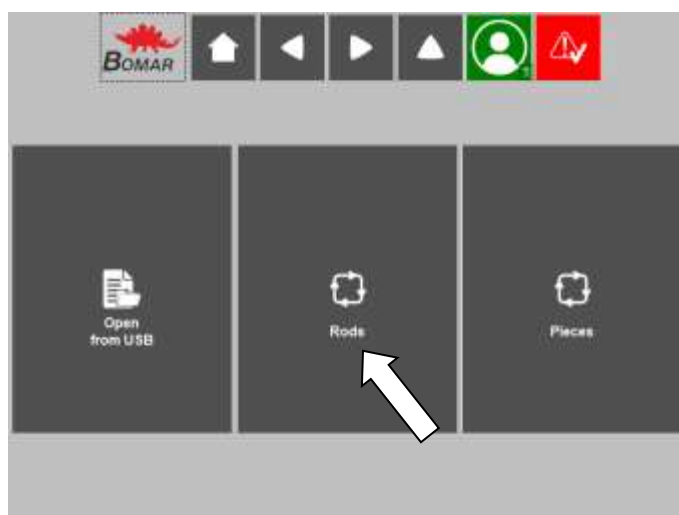
If the recipe for the automatic cycle of the "TYPE" type is created by the software on this machine, then the said plan must be created in advance by the user's authorised person and only on the basis of this plan is the recipe entered on the machine.

Attention!

The required length of the minimum residue must not be less than the length of the minimum technological residue for the machine with the given equipment (e.g. the upper clamping has an influence on the length of the technological residue).

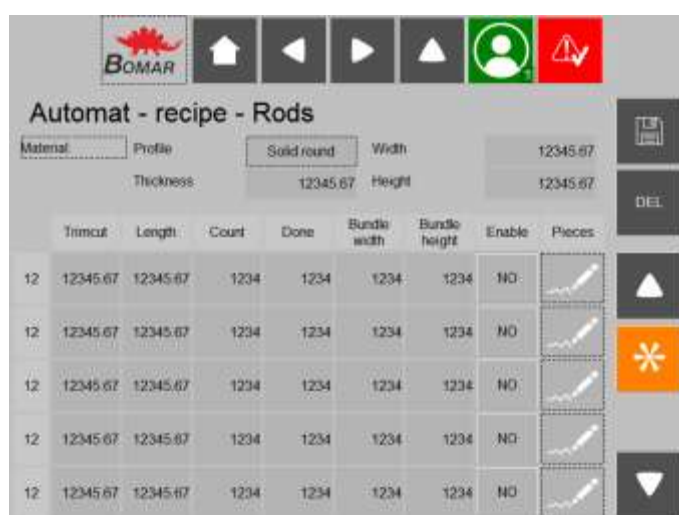
4.5.2. Entry to the menu for recipe creation for the "RODS" type machine.

1. On the recipe type selection screen „RODS“.

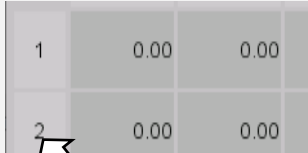


2. After pressing the „RODS“ option, **the first screen of the recipe appears first.**

The first recipe screen is always used to enter information about the parameters and sequence of batches of bar blanks as they will be fed into the machine in succession during the automatic cycle:



Position	Funktion
Profile	Select the profile that matches the blank. If it is not possible to select a matching profile, select the most similar one.
Width Height	Enter the dimensions of the blank profile

Position	Funktion
Thickness	For hollow blanks, enter the wall thickness according to reality. If a solid wall blank is selected in the "Profile" field, no value entered will be taken into account
	Line number identification number of the aggregate batch of bar stock in question
Trimcut	Length of incision
Lenght	Length of bar blanks in a given batch
Number	The total number of bars to be inserted in a given batch
Finished	The number of bars already cut from a given batch
Volume Width	Number of bars in the bundle per total width
Volume Height	Number of bars in the bundle úer total height
Enable	YES – cut the specified recipe line NO – do not cut the specified recipe line
Pieces 	Go to the screen to specify the pieces that will be cut from a given bar
	Recipe storage on USB
	Deleting the contents of a recipe
	Open a new recipe
	Scrolling between lines

Second screen for each of the rows - the "Pieces" screen

For each line of the initial "bars" screen, it is possible to display a toolbar that is used to enter information about the placement of the final pieces on the bars of the blanks (the "PIECES" screen).



	Length	Count	Done	Box	Enable		Length	Count	Done	Box	Enable
1	12345.67	1234	1234	1234	NO	11	12345.67	1234	1234	1234	NO
2	12345.67	1234	1234	1234	NO	12	12345.67	1234	1234	1234	NO
3	12345.67	1234	1234	1234	NO	13	12345.67	1234	1234	1234	NO
4	12345.67	1234	1234	1234	NO	14	12345.67	1234	1234	1234	NO
5	12345.67	1234	1234	1234	NO	15	12345.67	1234	1234	1234	NO
6	12345.67	1234	1234	1234	NO	16	12345.67	1234	1234	1234	NO
7	12345.67	1234	1234	1234	NO	17	12345.67	1234	1234	1234	NO
8	12345.67	1234	1234	1234	NO	18	12345.67	1234	1234	1234	NO
9	12345.67	1234	1234	1234	NO	19	12345.67	1234	1234	1234	NO
10	12345.67	1234	1234	1234	NO	20	12345.67	1234	1234	1234	NO

Position	Funktion
Length	Length of bar blanks in a given batch
Number	Total number of bars to be inserted in a given batch
Done	The number of bars already cut from the batch
Box	Option for sorting pieces This option is only functional if the machine is equipped with an external device for sorting cut pieces.
Enable	YES - cut the specified recipe line NO - do not cut the specified recipe line

4.5.3. Procedure of recipe creation for the "RODS" type automatic cycle

- It is possible to insert blanks of different lengths in one automatic cycle, each different length must be indicated on a separate line on the TYPE home screen.
- One recipe line on the BAR screen lists one cutting batch of bar blanks of the same length.
- On each line of the recipe on the TYPE screen, enter the data for the batches of bar stock in the order in which these batches will be loaded into the machine in sequence.
- In addition, a separate recipe must be created for each line that is created on the "BARS" turnaround screen that specifies the placement of the final pieces on each of the bars of that batch.
- All bars from one line on the "BARS" screen will be cut according to this one prescription that is created specifically for that line.
- The prescription for the placement of the final pieces can be entered on the screen that you find by using the icon to move between the recipe screens



- Thus, one line on the screen that is used to enter information about the placement of the final pieces on the bars is used to enter information about one continuous series of final pieces which:
- match in length
- and are to be cut in immediate succession
- Fill in the rows on the CUTS screen in the order in which the final pieces will be lined up and cut consecutively on each bar of the blank from a given cutting batch.

4.5.4. Cutting by a recipe for the "RODS" type automatic cycle

- **The automatic cycle of the "RODS" type starts cutting by the pertinent recipe so that:**
 - It starts from the first non-zero line ticked off on the "RODS" screen.
 - On the first bar in this line, it cuts all pieces entered on the pertinent "PIECES" screen created for this line.
 - If more bar semi-products are entered in the cutting batch of bar semi-products on the "RODS" screen, the same configuration of all final pieces is repeatedly cut on every bar according to the same "RODS" screen.
 - After all bar semi-products in the given line have been cut, the cycle passes on the next line on the "RODS" screen and again cuts the first and all the other rods in the given line according to the uniform specification created on the "PIECES" screen which belongs to this line.
- **If bar semi-products of sufficient length are loaded, loading of another material is required any time when the whole configuration entered on the "PIECES" screen has been cut on one loaded bar.**
- **If a bar is loaded with insufficient length for cutting the whole entered batch, loading of another piece is required as soon as it is no longer possible to load another length for cutting.**

Unfinished pieces of the given semi-product will then not be cut from the next semi-product; they will just be registered in the table of unfinished pieces (see chapter "Unfinished pieces").

The new loaded material will be cut from the beginning precisely according to the given semi-product specification created on the "PIECES" screen.

4.6. Administration of recipe files

4.6.1. Recipe file extensions

Recipe files saved in the machine memory have always the **.bcpl** extension.

The **.bcpl** extension will be assigned to any recipe file saved in the machine memory, even if the original file had another extension.

Recipes exported from the independent Saw Manager software have the **.csv** extension.

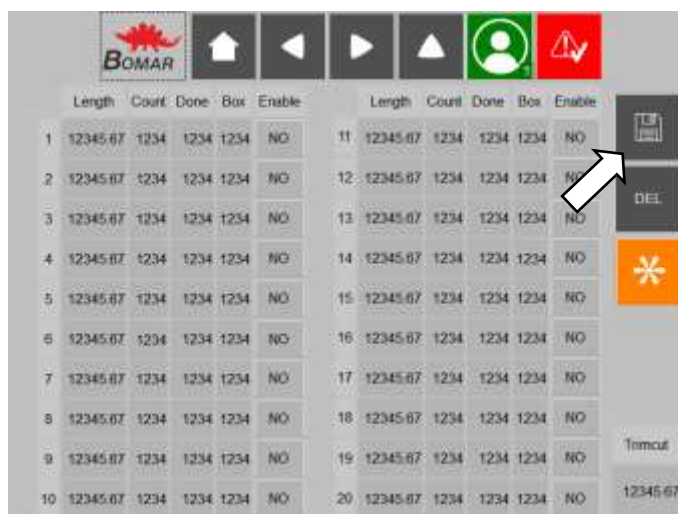
4.6.2. Administration of recipe files

Recipe file management includes:

- saving newly created recipes
- opening already saved recipes

4.6.3. Saving the recipe on USB

1. On the relevant screen of the currently loaded recipe, select the option to save the recipe



2. The screen for **saving the recipe** appears:



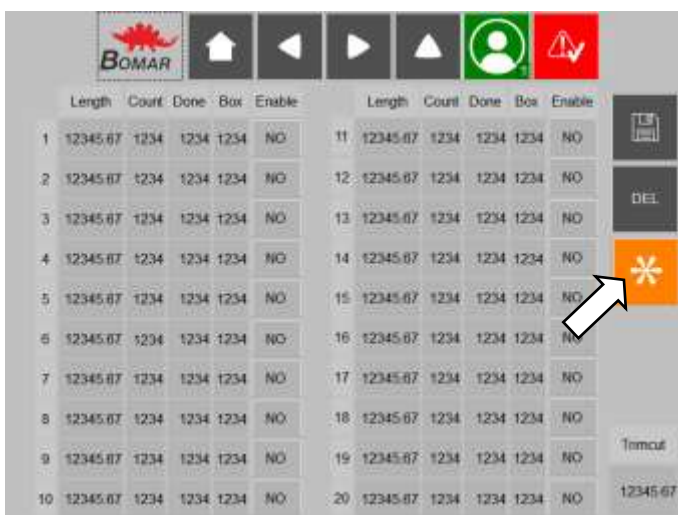
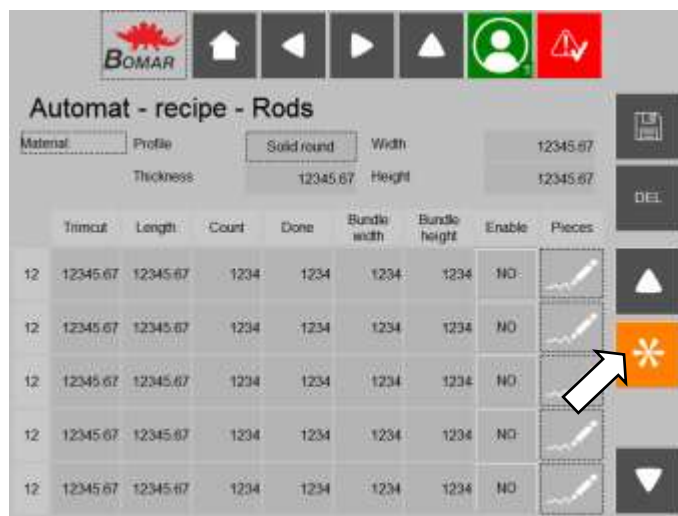
3. On this screen, enter the **name** of the recipe to be stored

4.6.4. Loading a recipe from USB

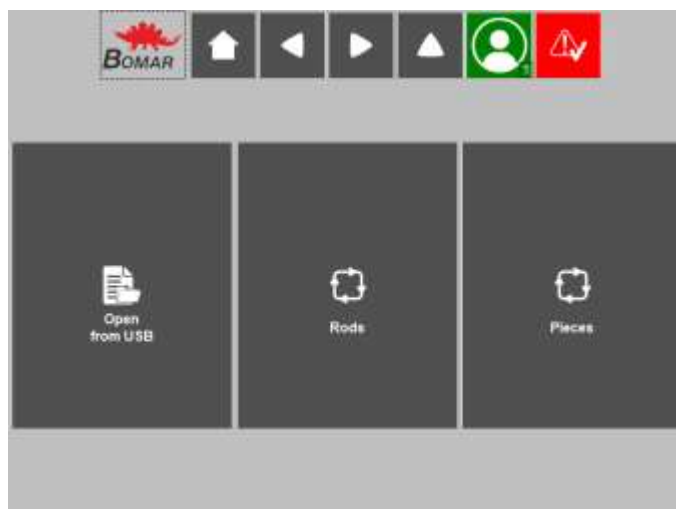
1. On the corresponding screen of the currently loaded recipe, select the option



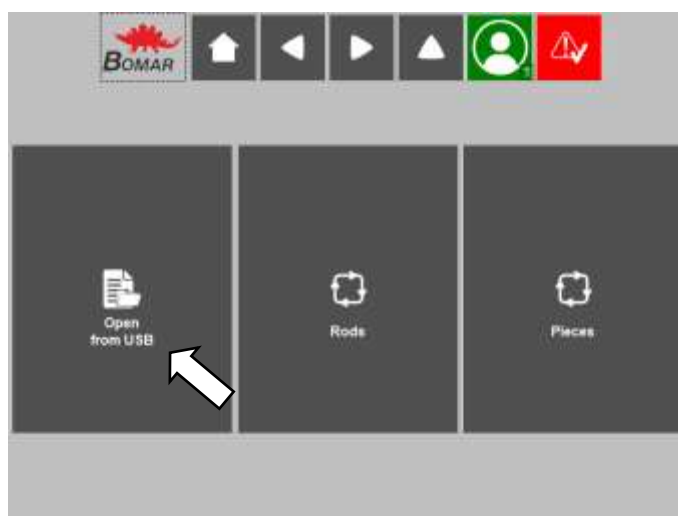
to open a new recipe



2. When you press the option to open a new recipe  a screen appears with selection of type of new recipe:



3. On the recipe type selection screen, select "Open from USB"



Screen for loading recipe from USB



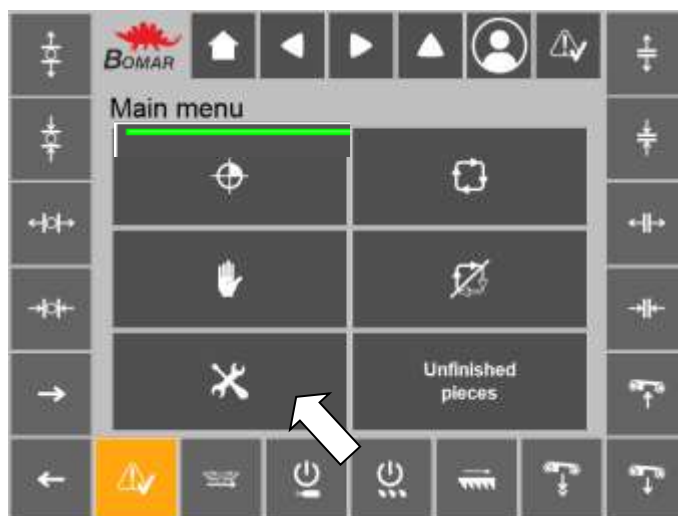
Position	Function
	Load USB Pressing this option will display the contents of the inserted USB drive. Caution! The files that are displayed on the screen may not correspond to the actual contents of the inserted USB! This option must therefore be pressed each time a new USB is inserted.
	Open the marked recipe file - once opened, the recipe is loaded into the machine's memory
	Listing/labelling a folder

5. **Nastavení servisních parametrů/ Einstellung der Serviceparameter/ Setting of service parameters**

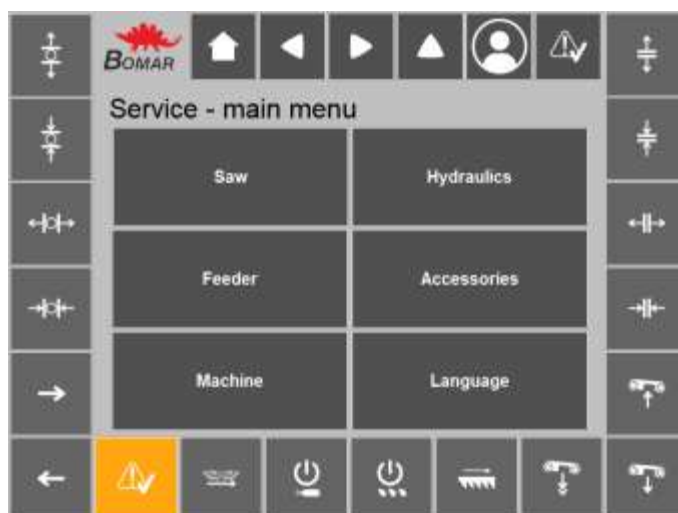
Nastavení servisních parametrů
Einstellung der Serviceparameter
Setting of service parameters

5.1. Setting of service parameters

1. Select the option for entering service parameters **on the main screen of the control software:**



2. The options screen **appears to select options for the settings**



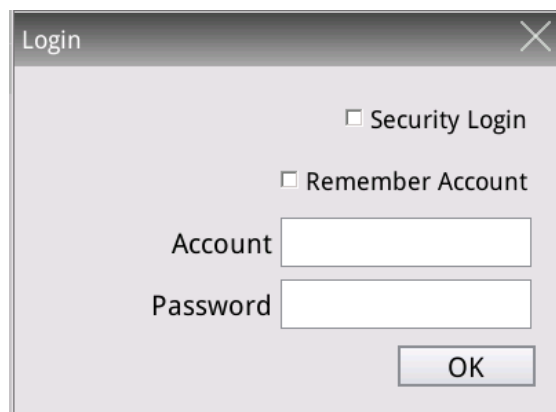
5.2. Entering a password to insert service parameters

In the individual screens, it is only possible to set the parameters which are coloured immediately or after the password at the certain hierarchical level is entered. Parameters the boxes of which remain uncoloured can only be set at a higher hierarchical level.

Parameter setting options are protected by passwords at several hierarchical levels.

Hierarchical level	Password
SERVICE1	1234
SERVICE2	3467
SERVICE3	2468
SERVICE4	135248

When you **touch the user login icon**  a menu for entering the password will pop up. The password can be entered at any time during parameter setting.

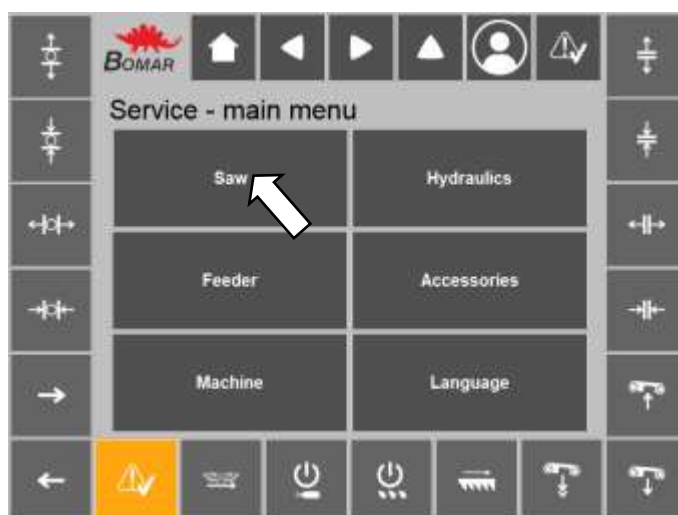


A login dialog box titled "Login" with a close button (X) in the top right corner. It contains two checkboxes: "Security Login" and "Remember Account". Below these are two input fields labeled "Account" and "Password". An "OK" button is located at the bottom right.

The password can again be set by activating the keypad after touching it in the password entry window.

5.3. Setting the service parameters of the saw

1. On the unit selection screen, select "Saw"



2. The following screen shows the **options for setting the saw units:**



5.3.1. Service parameters of hydraulic cylinders of the saw

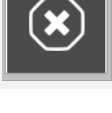
Nastavení servisních parametrů
Einstellung der Serviceparameter
Setting of service parameters



At the bottom of the screen is the **current status indication**.

The description of the cylinder screens applies to all cylinder service parameter setting screens:

Position	Funktion
Expandable SP filter	Switching filter time, filter to filter out oscillations on the end sensor when leaving the position
SP filter time	Switching filter time, filter for filtering out oscillations on the end encoder, when moving in the direction of the end encoder
Bounce time	Vise rebound time
Opening time	Vise opening time
Clamping time	Vise closing time
Timeout	Time limit for opening and closing the hydraulic cylinder

Position	Funktion
Error ID	If an error occurs, the error number is displayed (corresponds to the error listing)
  	Icons for controlling the hydraulic cylinder  Open  Close  ...Bounce
	Restart, the values remain set.
	Interrupt and restart the line.
	Error message.
	Confirmation of error
	Stop unit movement

Nastavení servisních parametrů
Einstellung der Serviceparameter
Setting of service parameters

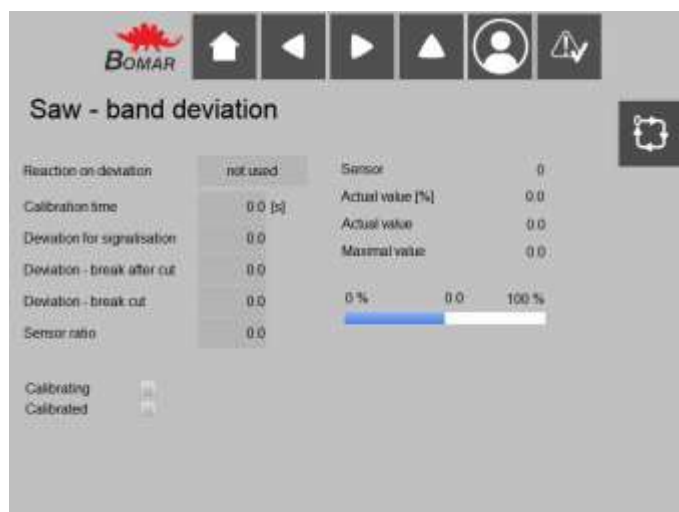
5.3.2. Setting the saw

Nastavení servisních parametrů
Einstellung der Serviceparameter
Setting of service parameters



At the bottom of the screen is the current status indication.

Position	Function
Minimum belt speed Maximum belt speed	Saw blade running speed limit values
Transfer	A constant that ensures that the displayed speed matches the actual speed
Delay Sensor on top Delay stroke limitation	Setting the deceleration of the unit in a given axis
Error ID	If an error occurs, the error number is displayed (matches the error listing)

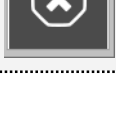


Position	Function
Response to deflection	Select the desired machine response in case the set deviation limit is exceeded Not used - no reaction Only to signal - light signalling only Finish the cut - the started cut is completed and the machine stops when the cut is finished Interrupt cut (Stop) - the machine stops immediately
Calibration time	The time of the belt run to reset the deflection. It is recommended to keep the settings from the manufacturer.
Deviation for signalling Deviation - interruption after cut Deviation - interruption of cut	Deflection values for individual machine reactions
Sensor conversion ratio	Machine transmission constant. The parameter has been set by the manufacturer. Do not change the parameter value! The parameter affects the accuracy of the device.

The sensor for checking the deflection of the blade is located in the holder of the adjustable saw blade guide cube:

The signal light for indicating when the belt deflection is exceeded is located on the upper side of the arm.

The meaning of the symbols on the screens for setting up the saw:

Position	Function
	Arm upward movement. The button must be pushed continually during movement. If you release the button, the movement stops..
	Arm downward movement The button must be pushed continually during movement. If you release the button, the movement stops.
	Arm downward movement with fast feed The button must be pushed continually during movement. If you release the button, the movement stops.
	Start the saw band
	Restart, values remain set.
	Error message.
	Error confirmation
	Stop the belt

5.3.3. Service parameters of saw frequency converters



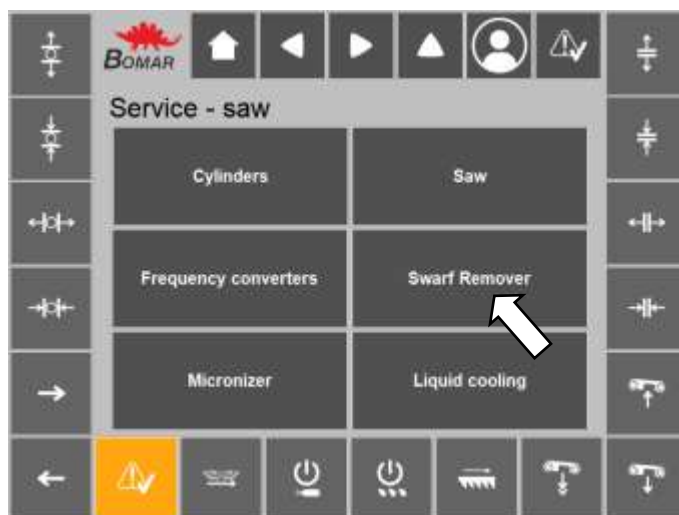
Position	Function
Required frequency	Frequency with which the controlled unit will move when the option is pressed 
Error ID	If an error occurs, the error number is displayed (matches the error listing)
Warning ID	If a warning message is issued, the ID of that message is displayed
	Switch the frequency converter on/off
	Restart, the values remain set.
	Error message.

Nastavení servisních parametrů
Einstellung der Serviceparameter
Setting of service parameters

Position	Function
	Error confirmation

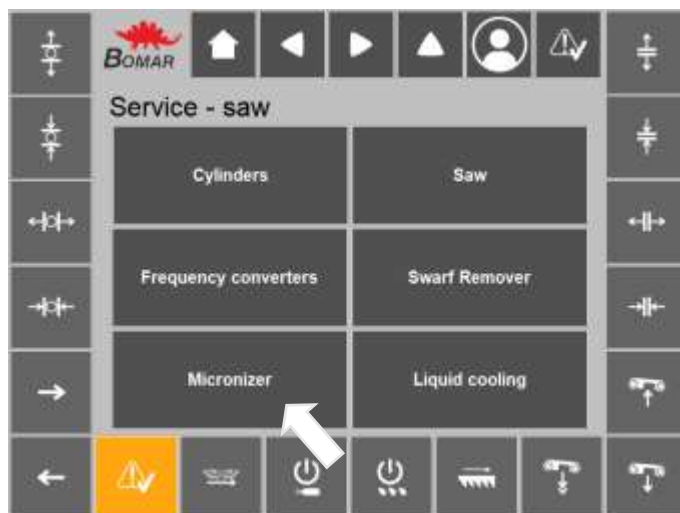
5.3.4. Setting up the chip ejector (optional equipment)

Nastavení servisních parametrů
Einstellung der Serviceparameter
Setting of service parameters

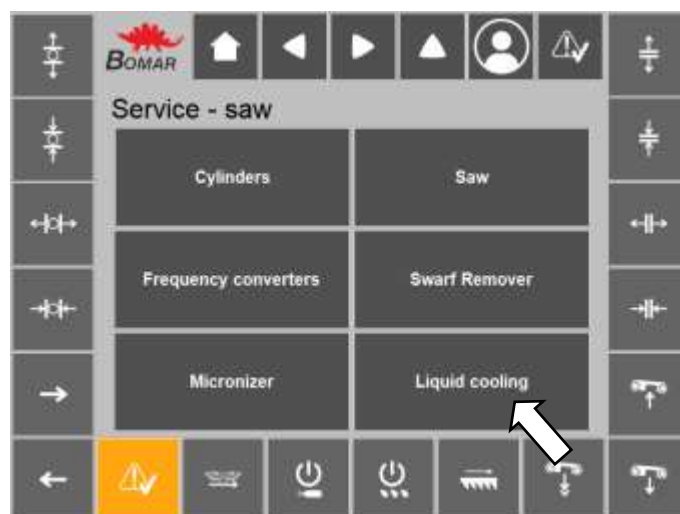


Position	Function
Cut-off time	The amount of time the chip ejector will continue to run after the saw blade is stopped. Notice: To turn off the chip extractor (at the moment of pressing the button on the touch panel), it is necessary to set a time of 0.1 s in the service parameters for the chip extractor.

5.3.5. Micronizer setting (optional equipment)



5.3.6. Cooling setting



Nastavení servisních parametrů
Einstellung der Serviceparameter
Setting of service parameters



5.4. Setting hydraulic service parameters

1. On the setup options screen, select "Hydraulics"



2. The following screen shows the options for **setting the hydraulics options**:



Position	Function
Enable timing Timeout	If the value "1" is entered, then after setting the controlled unit to the desired position, the hydraulic unit will still run for the time specified in the "Timeout" window.

5.5. Setting the service parameters of the feeder

- From the setup options screen, select **"Feeder"**



- The following screen shows the options for **setting the feeder options**.



5.5.1. Service parameters of hydraulic cylinders on feeders

Nastavení servisních parametrů
Einstellung der Serviceparameter
Setting of service parameters



In the service parameter "Cylinders" under the setting of service parameters of the feeder it is possible to set individual service parameters for hydraulic cylinders.

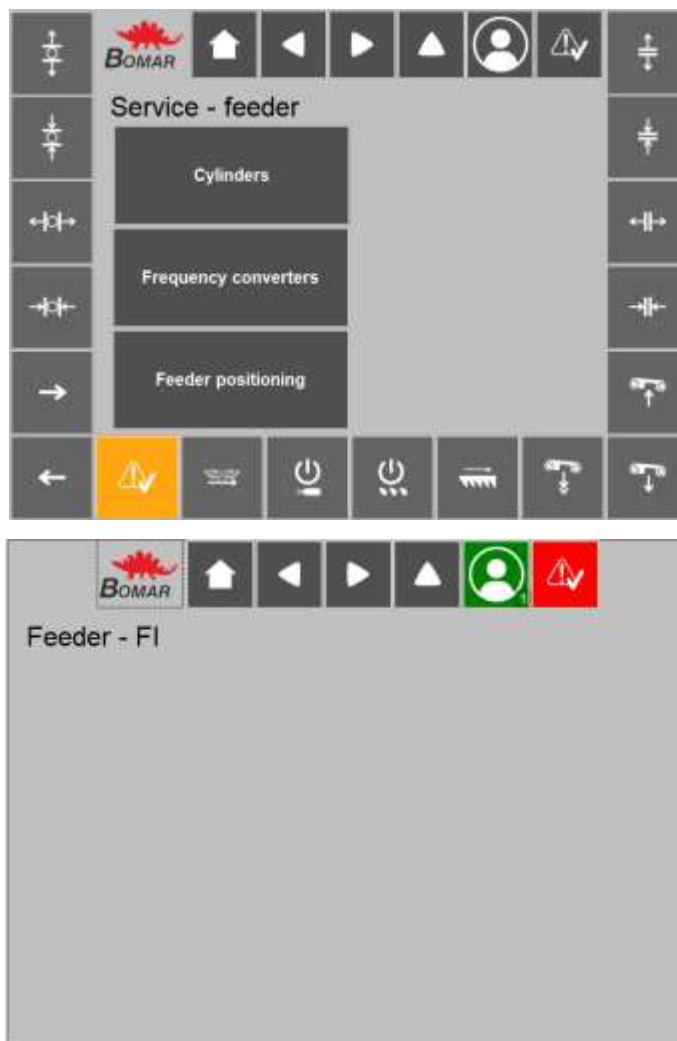




Position	Function
Expandable SP filter	Switching filter time, filter to filter out oscillations on the end sensor when leaving the position
SP filter time	Switching filter time, filter for filtering out oscillations on the end encoder, when moving in the direction of the end encoder
Rebound time	Vise rebound time
Opening time	Vise opening time
Clamping time	Vise closing time
Timeout	Time limit for opening and closing the hydraulic cylinder
	Icons for controlling the hydraulic cylinder  Open  Close  ... Bounce
	Restart, the values remain set.
	Interrupt and restart the line.

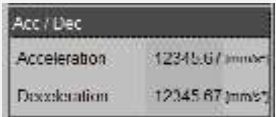
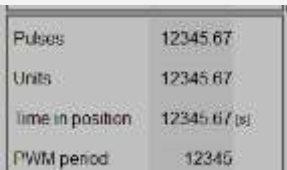
Position	Function
	Error message.
	Confirmation of error

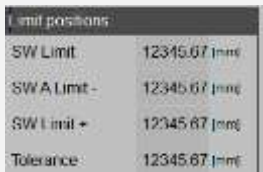
5.5.2. Service parameters of the feeder frequency converters



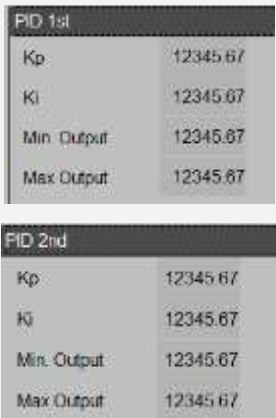
5.5.3. Setting the feeder positioning parameters

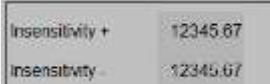


Position	Function
	Setting speed parameters for positioning
	Setting the acceleration / deceleration of the unit's movement
	Pulses, Units - position measurement - used for correction of measurement Time in position - the time the unit must be in position for the movement to be judged complete

Position	Function								
 Limit positions <table border="1"> <tr><td>SW Limit</td><td>12345.67 [mm]</td></tr> <tr><td>SWA Limit -</td><td>12345.67 [mm]</td></tr> <tr><td>SW Limit +</td><td>12345.67 [mm]</td></tr> <tr><td>Tolerance</td><td>12345.67 [mm]</td></tr> </table>	SW Limit	12345.67 [mm]	SWA Limit -	12345.67 [mm]	SW Limit +	12345.67 [mm]	Tolerance	12345.67 [mm]	Settings SW LIMIT - :minimum permitted unit positions SW LIMIT A - : when the arm is rotated to the collision state, the feeder shortens its travel to the saw by this set value SW LIMIT + : maximum permitted unit positions SW LIMIT + :permitted tolerances of unit TOLERANCE :positions
SW Limit	12345.67 [mm]								
SWA Limit -	12345.67 [mm]								
SW Limit +	12345.67 [mm]								
Tolerance	12345.67 [mm]								
 Homing mode Direct Homing position 12345.67[mm] Max. lagerror 1234567	Referring mode – referring type • Directly • To referring switch • To limit switch • Torque Reference position - setting the reference position of the unit Max. trailing error - if the requested parameter value differs by more than this specified value, the machine will declare an error.								



Position	Function																
 PID 1st <table border="1"> <tr><td>Kp</td><td>12345.67</td></tr> <tr><td>Ki</td><td>12345.67</td></tr> <tr><td>Min. Output</td><td>12345.67</td></tr> <tr><td>Max. Output</td><td>12345.67</td></tr> </table> PID 2nd <table border="1"> <tr><td>Kp</td><td>12345.67</td></tr> <tr><td>Ki</td><td>12345.67</td></tr> <tr><td>Min. Output</td><td>12345.67</td></tr> <tr><td>Max. Output</td><td>12345.67</td></tr> </table>	Kp	12345.67	Ki	12345.67	Min. Output	12345.67	Max. Output	12345.67	Kp	12345.67	Ki	12345.67	Min. Output	12345.67	Max. Output	12345.67	PID controller Switching - position tolerance after parameter switching KP1 - parameter , proportional component 1 • Tn1 - parameter, integration component
Kp	12345.67																
Ki	12345.67																
Min. Output	12345.67																
Max. Output	12345.67																
Kp	12345.67																
Ki	12345.67																
Min. Output	12345.67																
Max. Output	12345.67																

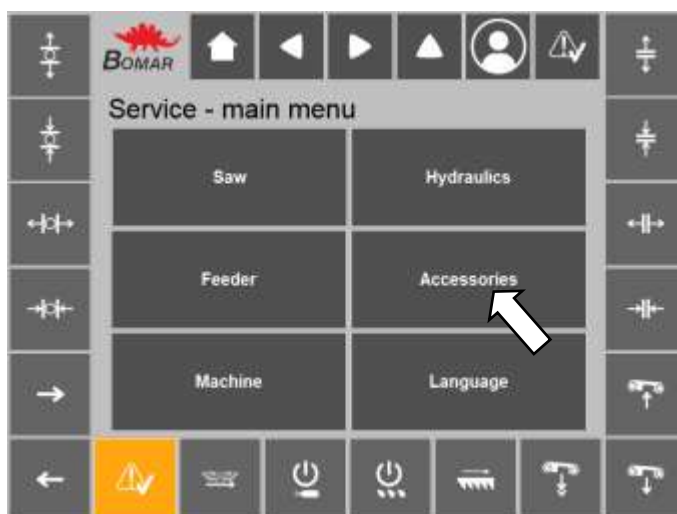
Position	Function
	Position measurement - used for measurement correction
	Max. allowed deviations from zero origin.
	Time in position - the time the unit must be in position for the movement to be judged complete Position tolerance - unit position tolerance

Meaning of other symbols on the positioning screens:

Position	Function
	Unit is/is not referring
	Unit is/is not in position
	Restart, the values remain set.
	Interrupt and restart the line.
	Error message.
	Error confirmation
	Stop unit movement

5.6. Accessories

1. On the setup options screen, select, "Accessories"



2. The following screen shows the options for setting accessory options:



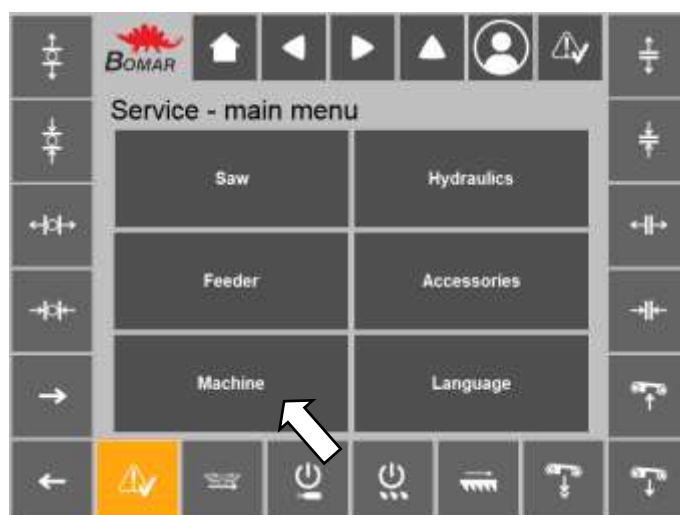
If the saw has an automatic loading device installed (feeder lock), then the option for automatic loading is checked in the service parameters on the Accessories screen from the manufacturer

On the screen for selecting the method of material loading, the option "AUT" is displayed (otherwise this option is not displayed at all)



5.7. Setting machine service parameters

1. On the setup options screen, select "**Machine**"



2. The following screen shows the options for **setting machine options**:

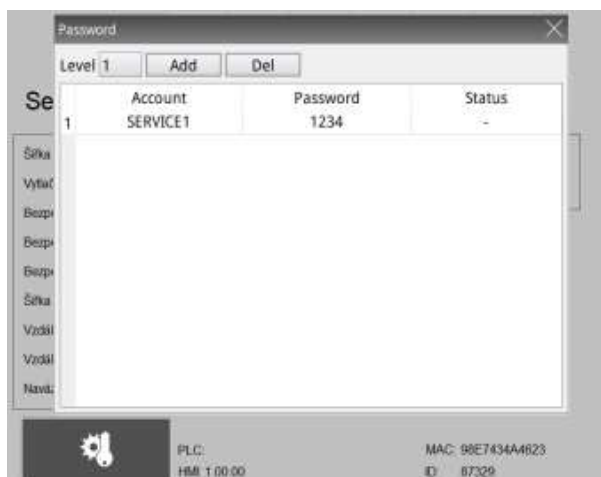


Position	Function
Belt width	Specified actual belt width
Extrusion distance	Distance from the belt at 0° to the rear end of the material to be extruded.
Safe grip - saw	The minimum length beyond which the clamp will safely clamp the material.
Safe grip - feeder	The minimum length over which the clamp can safely clamp the material. If a smaller length for clamping is found on the cut piece, the piece will be evaluated as residue.
Safe grip - feeder	The minimum length over which the clamp can safely clamp the material. If a smaller length for clamping is found on the cut piece, the piece will be evaluated as residue.
Laser distance - feeder	Distance of the laser beam on the feeder from the nearest edge of the feeder jaw
Laser distance - saw	Distance of the laser beam on the saw from the nearest edge of the jaw of the vise on the saw
Feeding position of the machine	The position to which the feeder enters to grip the material in automatic mode with automatic material loading.
Width of the main vise	Vise width = width of the movable jaws of the vise
Automatic loading	The option is identical to the option on the "Accessories" screen
Application of pressure	Do not/do not use When using hydraulic material bundles (optional accessory)



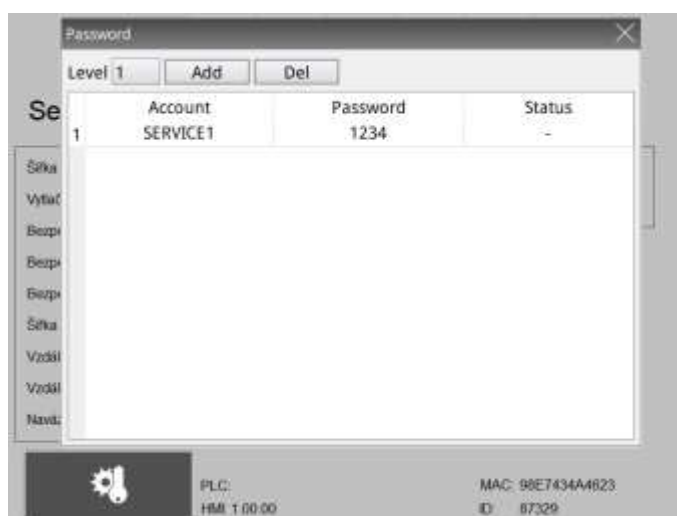
The user management option allows you to create, edit, and delete accounts of authorized users for software management.

When you press the option, the user management screen appears



Position	Function
Level	Allowed user level
Add	Add account
Del	Delete selected account

When entering a new user, a table will appear in which you must enter the account name and password to enter the account:



5.8. Choice of language

1. On the setup option screen select „Language“



2. The following screen shows the **options for setting the language options:**

In the service parameter, "Language" it is possible to set the language version for controlling the device.



There is usually a menu on the specific machine for selecting the language:

- for communication with the manufacturer
- for communication with the operator - according to the customer's order

6. **Seřízení pásové pily/ Einstellung der Bandsäge Machine adjustment**

6.1. Cutting angle setting

Band saw **Individual 620.460 GANC** allows to make cuts in angles between **0°** to **60°**.
For easy setting of the positions **0° – 60°** the machine is equipped with stops.

1. Move the vice to the required position

Attention!

Moving parts of the vice must be moved when saw arm has zero angle of rotation and closed vice jaws.

Moving vice jaw of vice must be in endmost position otherwise there is a danger of collision saw arm with vice.

2. Release the fastening lever.



3. Turn the frame to the desired angle by pulling the saw arm.

Set angle is shown on the scale which is placed at the turnable console (see the arrow)



If the machine is equipped with an electronic angular cut setting (optional accessory) the angle is shown on the display of this device.

Electronic admeasurement (optional accessories)



How to use electronic admeasurement is described in special instructions.

4. After cutting angle setup tighten securing lever.
5. Check Adjusting of the movable saw band guide

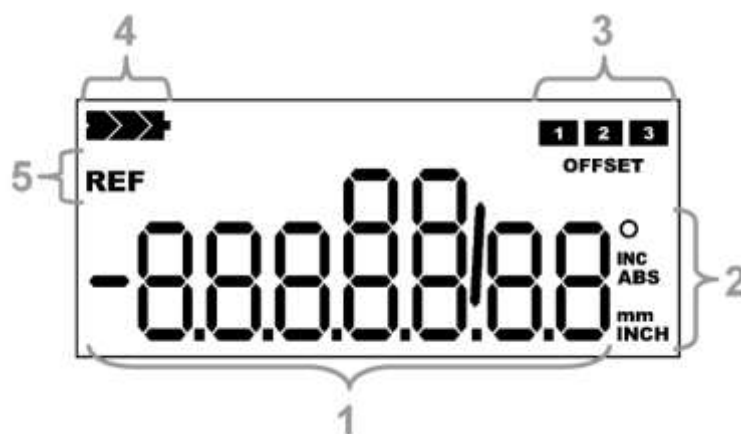
6.2. Electronic measuring device (optional accessory)



Zero position setting:

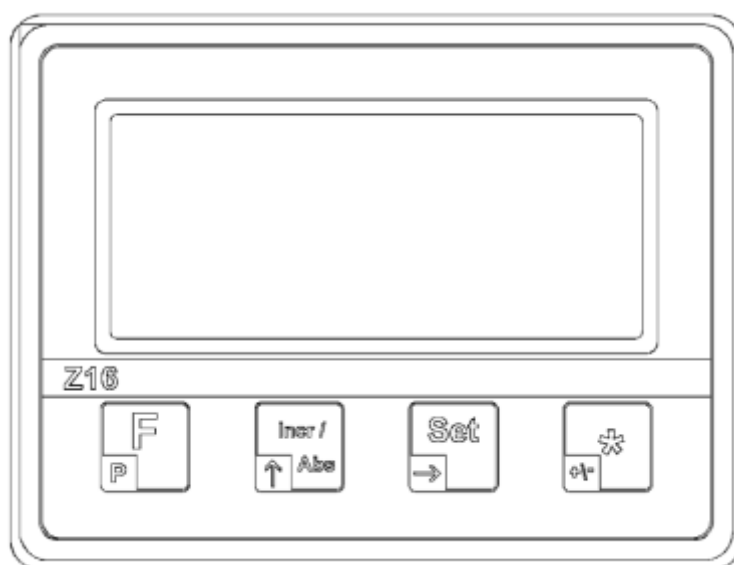
6. Turn the saw arm to a zero angle position.
7. Push the Incr/Abs key (even several times) until "0" is shown on the display.

Description of the display of the digital measuring device



Position	Description
1	Current position
2	Unit, measuring mode
3	Active additional constant (* key)
4	Battery status
5	Reference record shall be made – after the apparatus is switched on.

Description of key functions:



Each button may have several functions depending on the current mode of the device.

When the device is switched on, it can be in one of the following modes:

Initializing the device — this mode is active immediately after switching the device on by inserting the batteries

Parameter setting mode — it is possible to enter and exit the parameter setting by

long press of the button  (for approx. 3 sec)

Measuring mode — this is the standard mode for the device if the device has been initialized and if the device is not switched to the parameter setting mode.

Note:

Calibration of the instrument is not specifically used for Bomar measurement purposes; the table below shows the functions of the buttons during instrument calibration for information only.

Button	Device calibration	Parameter setting mode	Measuring mode
	When the device is switched on (by inserting the batteries), it initiates device calibration.	Enter the mode for editing the device parameters (long-press - 3 sec.)	Basic button
		Switching between individual parameters (repeated press)	
		Selection of the chosen parameter to enter the desired value - 1x press	
		Saving the parameters and exiting the mode for editing the device parameters (long-press - 3 sec.)	

Button	Device calibration	Parameter setting mode	Measuring mode
 + 	x	x	Registration of reference ...in absolute measuring mode, the value of parameter P09 is assigned to the current position of the measuring unit as reference position ... in incremental measuring mode, only the value of parameter P09 is shown on the display
	x	The choice of the next decade	Change the display in inches
	When the device is switched on (by inserting the batteries), it initiates device calibration + resets the settings to the default parameters that were set by the device manufacturer	Change of active decade (+1)	Switching between absolute and incremental measuring
	x	Change of sign (+ / -)	Activation of additional constants. Its pressing activates constants according to the setting of the parameter P13 A . If the given constant is active, the symbol is shown on the display: P10 –  P11 –  P12 –  The value of the active constant is added to the indicated value – only within absolute measurement.

Setting of parameters parameters:

	1. Push the button F for 3 sec. The display shows the value of the first parameter P01.
	2. The parameter value will be displayed.
	3. Selection of changed decade - active decade flashes, movement from left to right.

	4. Change the value of the selected decade. Each time you press, the selected decade increases by 1.
	5. Change the +/- sign.
	6. Use the F key to select the following parameter. The display and change of the parameter value is identical to the previous description.
	7. Press the F button for 3 seconds. The display shows the indicated value - parameter setting is completed.

Parameters

Parameter	Description	Default value
P01 A	Measuring configuration: A = 0: positive direction of measuring A = 1: negative direction of measuring	0
P02 A	Measuring unit: A = 0: mm / symbol "mm" A = 1: inch / symbol "Inch" A = 2: mm / symbol "m" A = 3: mm / symbol "mm" A = 4: mm / no symbol	0
P03 A	Decimal point (0...4) > only for mm	2
P05 ABC	Key blocking: A: "Set" key (0 = active / 1 = inactive) B: "Incr/Abs" key (0 = active / 1 = inactive) C: "*" key (0 = active / 1 = inactive)	000
P08	Correction factor (0.0001...9.9999)	1.0000
P09	Reference (-9999999 ... +9999999)	0
P10	Additional constant 1 (-9999999 ... +9999999)	0
P11	Additional constant 2 (-9999999 ... +9999999)	0
P12	Additional constant 3 (-9999999 ... +9999999)	0
P13 A	Configuration of additional constants (0...3) A = 0: inactive (cannot be selected) A = 1: Additional constant 1 active A = 2: Additional constants 1 & 2 active A = 3: Additional constants 1 & 2 & 3 active	3
P90	No function	0
P99	Displaying firmware version	xx.xx

Replacement of batteries

The batteries are stored in a space under the cover on the lower side of the display.

If necessary, remove the cover and replace the batteries.



6.2.1. Digital indicator of the saw arm set angle (optional accessory)



Desired cutting angle is shown on LCD. How to use electronic admeasurement is described in special instruction manual.

Intended for applications with frequent mitre cuts

The digital indicator of the arm turning angle prevents possible mistakes caused by inaccurate reading of an angle on the scale, and increases the speed of preparation for cutting. In connection with LaserLine, the digital indicator will make every band saw the most effective tool for mitre cuts.

A large, easy to read display and accurate measuring of the arm position with a magnetic tape allow the angle to be set with the maximum accuracy.

The measuring unit is set by the manufacturer. However, its further functions may be easily controlled with four keys.

6.2.2. Speed adjustment of the arm lowering (optional accessory)

The current speed of vertical movement of the arm is displayed on a digital display which is mounted on the saw arm.



The measuring unit is set by the manufacture.

6.2.3. Setting of the cutting speed

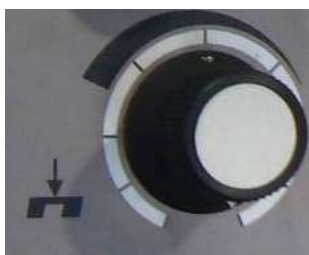


The speed of the saw band can be gradually adjusted from 20 to 120 m.min⁻¹. Set the speed as follows:

Set the switch of the frequency changer on the control panel to required speed. The band speed is displayed during *semiautomatic cycle*.

6.2.4. Speed adjustment of the arm lowering

Set the speed of the arm lowering to the cut by control valve for Cutting pressure regulation on 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.

6.2.5. 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.



1. Press button **STOP** on control panel to switch off the hydraulics and stop on 2 second.
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.
4. Tighten the lever of the gib and check the guide cube setting for possible collision with binding table or vice jaw.

6.2.6. Saw frame lift stop setting (standard machine)

The position of the stop of the upper position of the arm is monitored by an limit switch, which is located in the back side of the arm.

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.



Note:

If the switching arm of the limit switch is set above the limit stop for adjustment of the height of the arm, the automatic cycle can not be started.

1. Lift the saw arm to the upper position using button **Arm up** on the machine control panel.
2. Insert a material into the vice and carefully lower the saw arm to the material using the button **Arm down** or **"Arm rapid speed down"**
3. Stop the saw arm **5 -10mm** above the material.
4. Set the stop for saw arm height adjustment just above the limit switch – it means unlock the stop by turning of the locking wheel and move it close to the limit switch switching arm.
5. Press the **START** button to the beginning of the cutting cycle.

6.2.7. Setting of the saw frame height before a cut from the machine control panel (optional accessory)

1. Lift the saw arm to the upper position.
2. Insert a material into the vice and carefully lower the saw arm to the material using the button **Arm down** or with **rapid**.
3. Stop the saw arm **5 -10mm** above the material.
4. Press the **START** button to the beginning of the cutting cycle.
5. After sawing material to the bottom position of the arms incremental encoder returns to the upper position of the arm, ie. to the position it was in before being put into action by pressing the **START** button (remember you saw this position – frame lift stop)



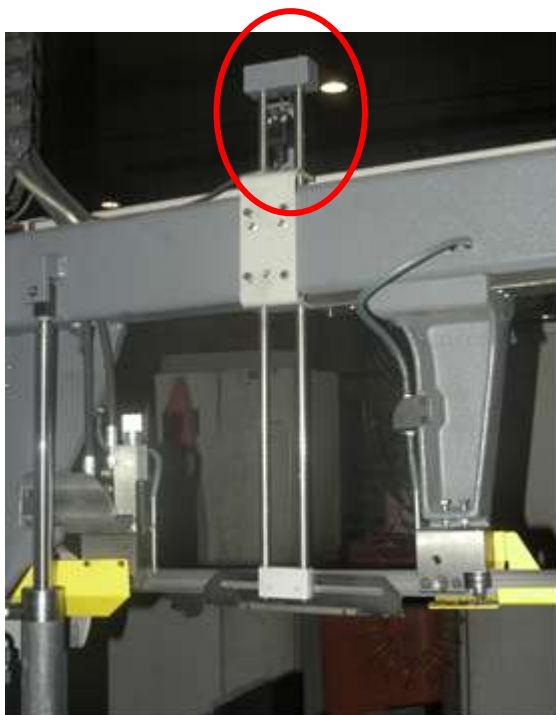
6.2.8. Device detecting the arm position above the material - speed movement of the saw arm to a cut (optional accessory)

The device is installed on the machine to detect the arm position above the material.



The device is used to adjust the arm lifting:

1. Before the first cut, lift the arm to the uppermost position.
2. Insert a material into the vice
3. If the arm is lowered to cut from a sufficient height above the material, the fast feed can be enabled automatically or manually.
4. If the device arm gets into contact with the material, the limit switch is activated and the arm movement slows down automatically to the preset speed of the arm feed to cut..



5. Then, in the automatic cycle, the arm is lifted only to the height above the material until the limit switch is reactivated.

The device is also used to control the arm lowering to cut:

After starting the cut, the arm moves with fast feed.

If the device arm touches the material, the speed is switched from fast feed to the preset speed of the arm lowering to cut..

The device has been adjusted by the manufacturer, do not interfere with the adjustment!

Regularly check the free running of equipment and keep sliding surfaces of guiding rods clean and lubricated!

In the event that the arm does not fall into the cut, check the status of the device, especially if it is not released limit switch or bent guide rod.

In case of a fault, contact the manufacturer!

6.2.9. Frame bottom stop position setting

The bottom stop position of the frame limits the lowest position of the frame. This position must be checked once per month. In case of wrong setting the vice may be cut or the material is not cut completely.



Setting of frame bottom stop position is made by adjustable excenter on the frame beam.

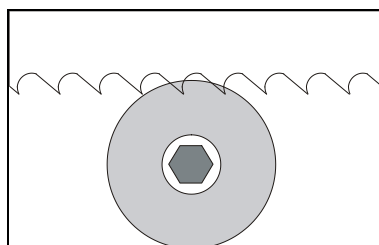
6.2.10. Brush adjustment

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 the saw arm cover.

6.2.11. Laserliner (optional accessory)

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..



The switch for Laserliner is located on the control board.



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

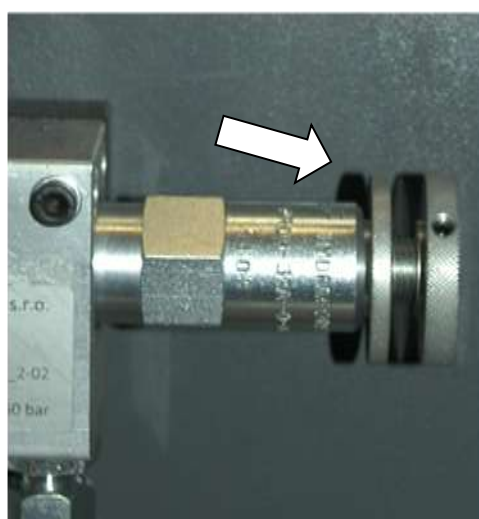
The hydraulic pressure device is determined for pressure setting on the main vice and feed vise.



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

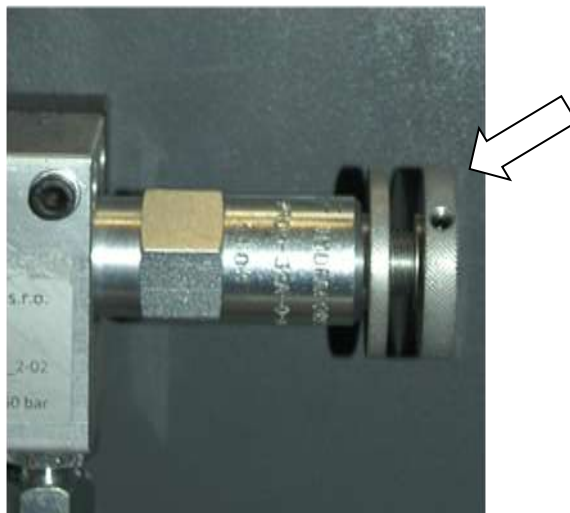
Instruction for adjustment of clamping pressure

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



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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:

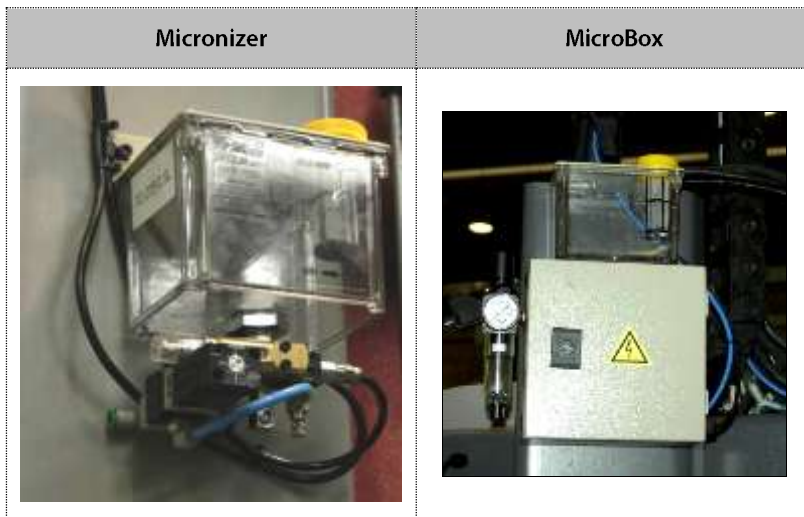
It isn't necessary to adjust the hydraulic pressure of the whole saw in order to adjust the clamping pressure

6.2.13. Mikroniser(box) – mist lubrication

The placement of a Microniser at the machine is pursuant to this photo

Next 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.



The device serves for ideal cooling and lubrication of the cutting blade when closed profiles are cut, and helps to maximize ease of cut.

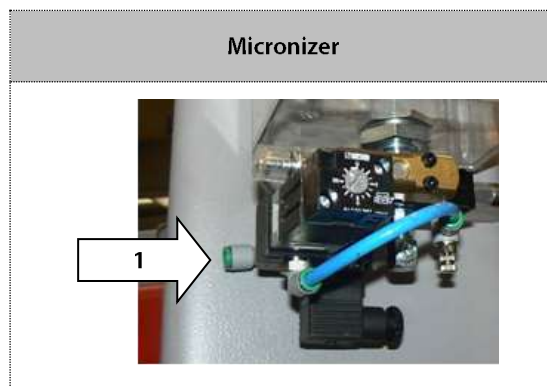


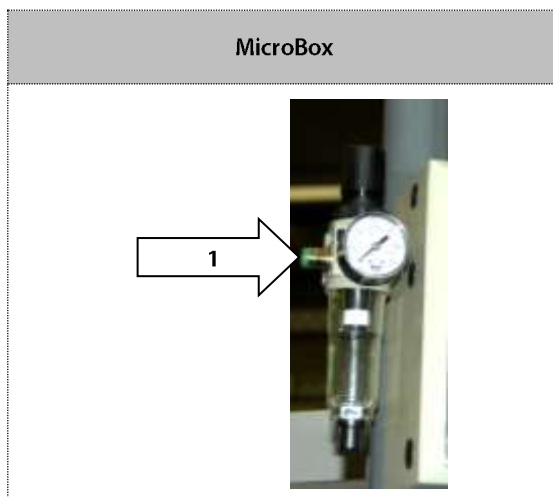
There is no leakage of coolant outside the work area of the saw when a profile material is cut.

The device is suitable for all Bomar saws

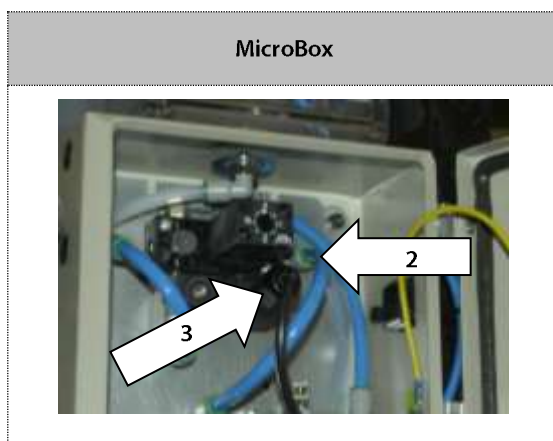
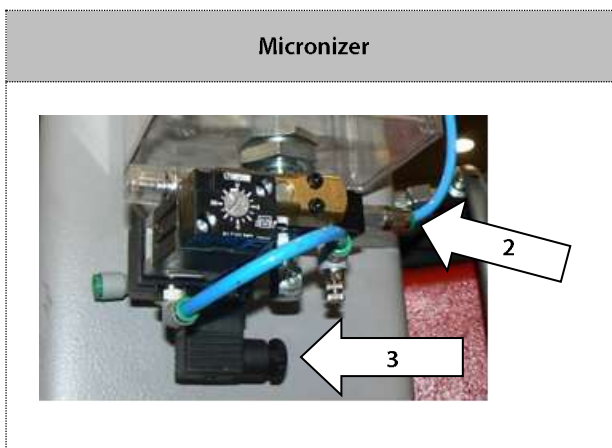
Microniser setting:

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**

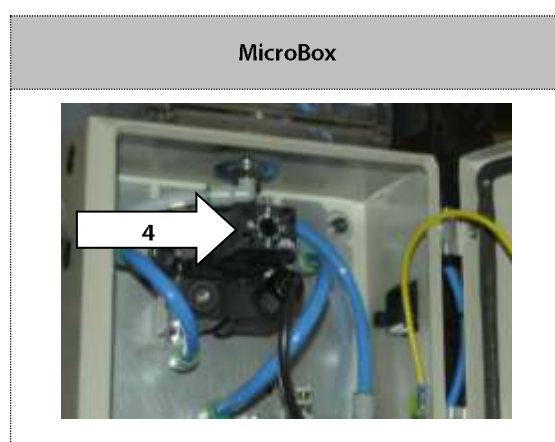
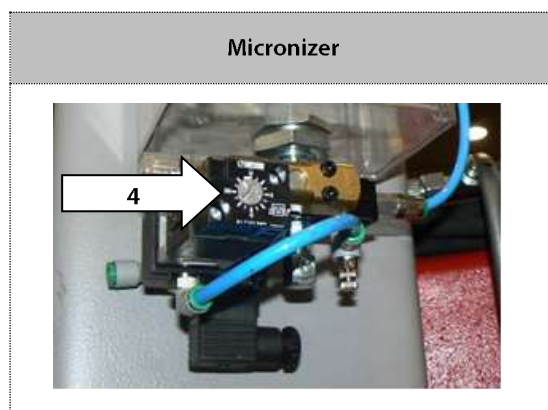




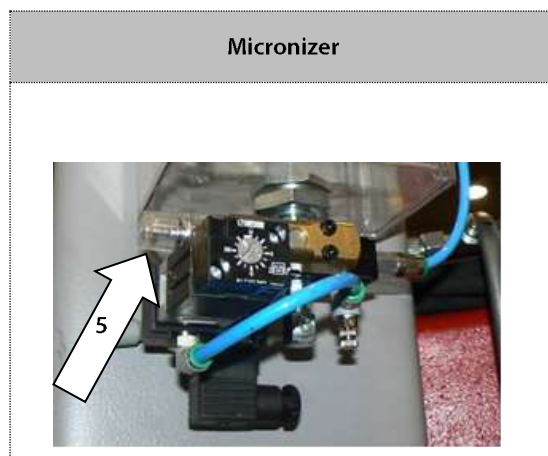
2. Arrow **2** - shows the output of the cooling medium (air + oil).
 Arrow **3** - shows the inlet for the power supply cable.



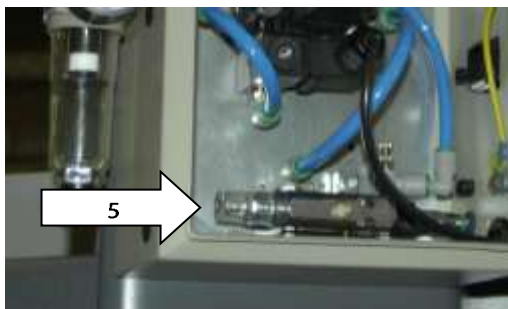
3. Set the interval of cutting oil dispersion on the Microniser- **arrow 4** (3-20 pulses / min.).
Adjust this interval to the parameters of the saw band and cut material.



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

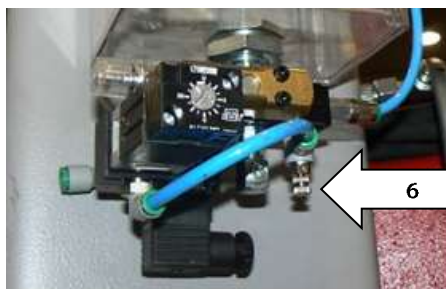


MicroBox



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

Micronizer



MicroBox



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.

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

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

6.2.14. Halogen lighting of working area (optional accessory)

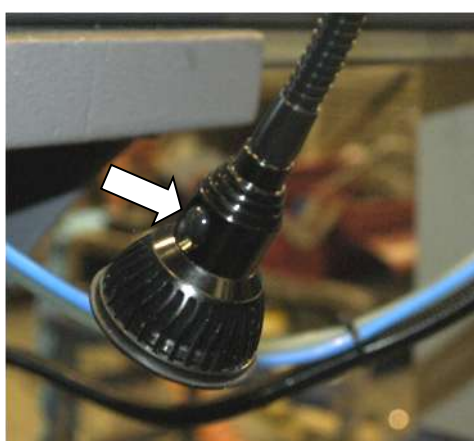
Light the working area of the machine with natural light and helps to facilitate cutting with a band saw.

Proper lighting in your work area greatly enhances ergonomics machines

Thanks flexible arm halogen light can accurately adjust to the desired location.



Turn on and off light switch is made directly to the halogen light.



Design lighting unit meets IP54 - Protection against water jets.

Technical data halogen light :

Supply voltage	230 V
Lenght flexible arm	300 mm
average	Ø 5,5 mm
lenght	80 mm

Package includes: lighting unit, flexible arm, holder for attachment to the machine, transformer, wiring.

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6.2.15. Third cooling inflow (optional accessory)

Flexible coolant supply allows to bring the coolant to the desired location.

Third, easily routable and adjustable coolant supply with nozzle ensures sufficient lubrication and cooling of the strip in the middle of the cut material



Particularly suitable for cutting materials with a larger average, where the opening of the guide blocks larger blade and prevents proper lubrication and cooling of the entire length of the cut

For normal cutting off the third cooling inflow may be easily disconnected by closure



When adjusting the nozzle, pay increased attention that the inlet hose does not stand in the way of the saw band.

The third coolant inflow get in the package complete package including all jumpers and hoses - just connect to existing cooling divorce

Complete package includes: flexible hose (length 600 mm), shunt valve, inlet plastic hose (depending on the type of machine - min. 1 m), interconnection schedule, holderto the machine screws (2xM5), transformer and wiring.



6.3. 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!

6.3.1. Handling agent selection

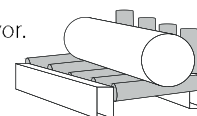
- Use the strong handling agents to lift and transfer the material!
- Handle with the material only with the lift truck or use the suspension strands and the crane!
- Do not use the lift truck or crane in case that you do not have the license to handle with it!

6.3.2. 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

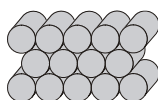
Make sure the conveyor is long enough and the material cannot tip off the conveyor.

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



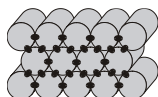
6.3.3. Bundle material cutting

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

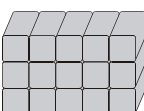


Round material bundle:

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.



Square material bundle:

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

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.

6.3.4. Hydraulic fixture bundles (Top clamping - auxiliary vice) (optional accessory)

To better maintain the workpiece in the vise we 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 top clamping is clamped automatically together with the relevant vice.

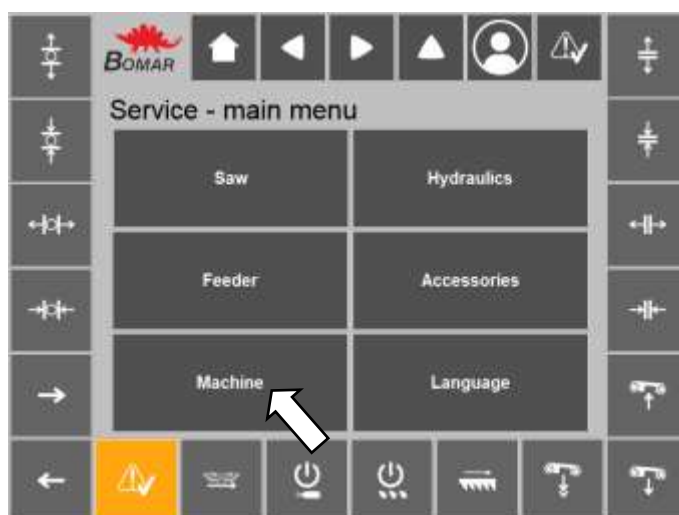
In manual mode it is possible to control the top clamping manually – by means of buttons at control panel.

In automatic cycle the jaws are controlled automatically.

Attention!

Do not leave the guide cube under the clamping jaw. Otherwise the guide cube will be clamped by the jaw and damaged!

The process of clamping of horizontal and vertical vices is in accordance with preset which was made in service parameters."





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7. Údržba stroje / Wartung / Machine service

7.1. Saw band dismantling

1. Lift the saw arm to maximum position.
2. **STOP hydraulic.**



3. Open all three covers on the saw arm.



4. Dismantle left protective cover of the band (arrow). Cover is fastened by screws..
5. Release the screw holding the brush. Turn the brush to the side



6. Turn by stretching star to the left side, release saw band stretching and pull down the saw band from the wheels.



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

7.2. 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 in 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, that the band did not falls from wheels.
5. Install yellow protective cover of the band.
6. Move the brush to the saw band. Tighten the securing screw.
7. Close the covers of both driving wheels.
8. Saw band installation is finished.

7.3. 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.

7.3.1. Saw band stretching

- 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.

7.3.2. Saw band inspection

Check the saw band in the guiding cubes and on the wheels

1. Check, if the saw band is right in the guiding cubes..
2. 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.
3. Switch off the main switch.
4. Open cover(s) of the wheels and 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 cover of the saw band.

7.4. 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.

7.5. 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.



- 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.

7.6. 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

7.6.1. 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

7.6.2. 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.

7.7. Hydraulic, Greases and oils

7.7.1. 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.

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

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!

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

Band saw	Gearbox oil	Capacity
Individual 620.460 GANC	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
ÖMV		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

7.7.2. 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.

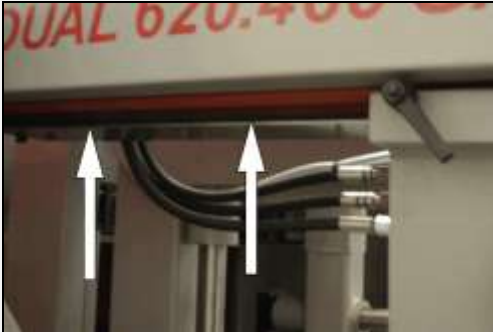
Comparative table of the lubricant greases:

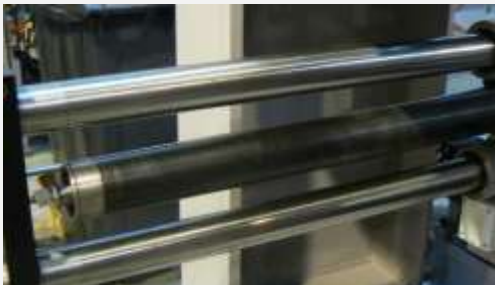
Manufacturer	Type of the lubricant grease
BP	Energ grease LS - EP
DEA	Paragon EP1
Esso	FETT EGL 3144
	Beacon EP 1
	Beacon EP 2
FINA	FINA LICAL M12
Klüber	Microlube GB0
	Staburags NBU8EP
	Isoflex Spezial
Optimol	Optimol Longtime PD 0, PD1, PD2

Manufacturer	Type of the lubricant grease
Shell Aseol AG	ASEOL Litea EP 806-077
Texaco	Multifak EP1

7.7.3. Lubrication

There are several placing 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 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.
	The linear guiding – 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.
	The linear guiding – 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.

Lubrication place	Lubrication
	Grease guiding if feeding vice.

7.7.4. Hydraulic oils

Replace the hydraulic oil once a year, 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.

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

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!

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	Hungary	Hidrokomol P 32
Benzina	OH-HM 32	Mobil	Mobil DTE 25
BP	Energol HLP 32	ÖMV	HLP 32
Bulgaria	MX-M/32	Poland	Hydrol 30
Castrol	Hyspin AWS 32	Rumania	H 32 EP
Čepro	Mogul HM 32	Russia	IGP 30
DEA	Astron HLP 4hy6	Shell	Tellus Oil 32
Elf	Elfolna 32	Sun	Sunvis 832 WR
Esso	Nuto H 32	Texaco	Rando HDB 32
Fam	HD 5040	Valvoline	Ultramax AW 32
Fina	Hydran 32		

7.7.5. 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.

7.8. 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.

7.9. Worn pieces replacement

7.9.1. Pushing bearing replacement

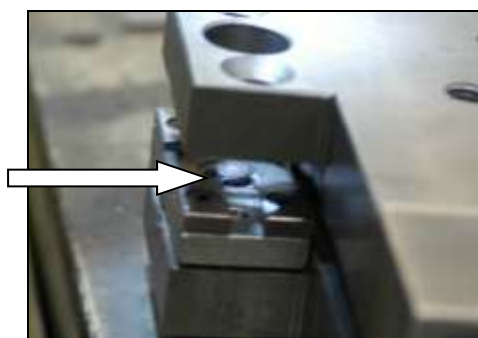
If it is impossible to adjust the bundle gripping assembly and the pushing bearing is worn, it needs to be replaced



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.



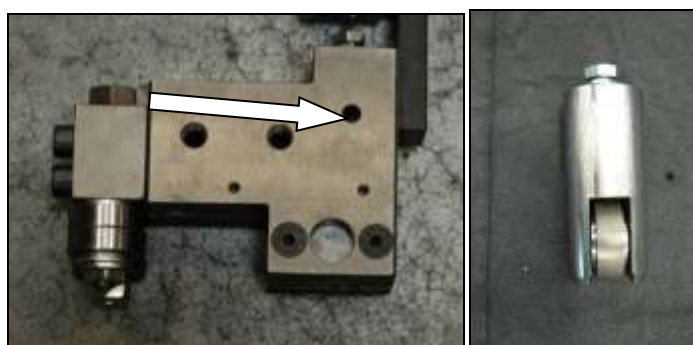
6. Remove retaining ring. Then unmount adjusting screw.



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.



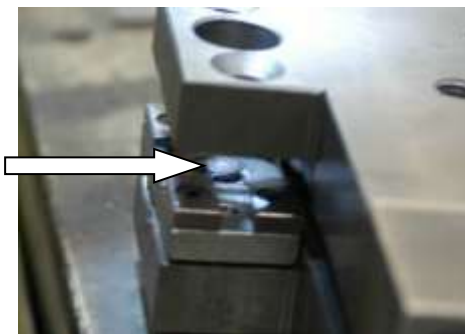
12. Remove the worn bearing and other damaged parts.
13. Fasten the holder to the vice.
14. Insert the bearing and washers and return the pivot to its original place.
15. Place the assembled piston guide cube. Piston must move freely in a guiding cube.
16. Worm screw defines the operation of the piston (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.

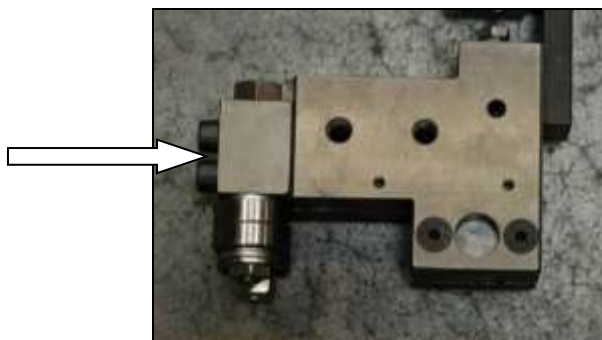


23. Using a short piece of the blade used on the machine, adjust the width of the gap between the guides. Loosen the central screw. Set the gap by central adjusting screw. Belt guides must walk freely without large and will also not scrub.

7.9.2. 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.



1. Release 2 screws. Dismantle the guiding cube of the saw band.

Attention:

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



2. Tighten the guiding cube to the vice and dismantle both eccentrics with bearings following way.
3. Screw off nuts from eccentrics.
4. Remove eccentrics from bearings by means of the swager.



5. Change all bearings and other worn parts.
6. Install eccentrics to the cubes. Install components on both eccentrics in given order. Put bearings by means of the preparation on eccentrics.

Attention:

Do not replace the eccentrics placing in the cube.



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



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

8. 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
9. 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
10. Tighten nuts on both eccentrics.
11. Remove the testing piece of saw band from the cube lead. Install the guiding cube on the machine.

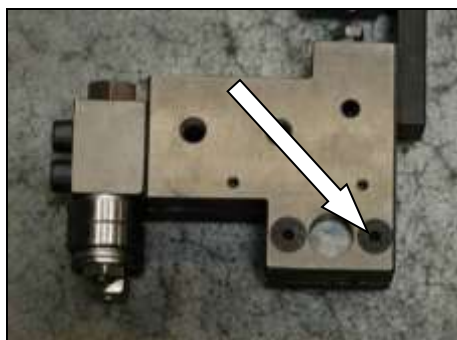
7.9.3. Hard metal guides replacement

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

ATTENTION!

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

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. .



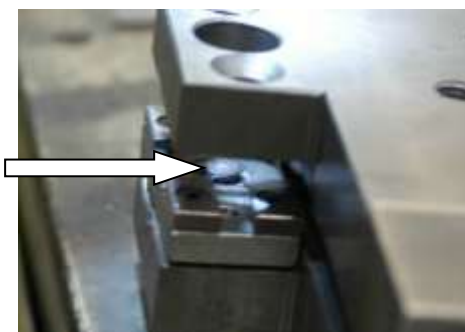
8. Carefully remove the hardmetal. **Pozor, nesmí dojít ke ztrátě talířových pružin.**



9. 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.



10. 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.
11. Insert and tighten central screw.



12. Insert the retaining ring on central screw.
13. Insert three stop screw around central screw.



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



15. 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.

7.9.4. Brush replacement

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

1. Hold shaft of the brush by wrench.



2. Release the nut on the brush, replace worn brush on the new brush, screw on the nut.
3. Set the brush to the saw band.

8. **Závady/ Störungen / Troubleshooting**

8.1. Mechanical problems

Problem	Possible causes	Repair
1. 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.
2. 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.
3. 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“
	- 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“

Problem	Possible causes	Repair
	- 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“
4. 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.
5. 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.
6. 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.
7. 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.
8. 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 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.
9. 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.
10. 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.
11. Cleansing of the saw	- Elastic wheel of the brush drive is worn-down.	Elastic wheel of the brush must be changed.

Problem	Possible causes	Repair
band is not functional.		
	- 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.
12. 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.	

8.2. Electric and hydraulic problems

Problem	Possible causes	Repair
1. Machine is not possible start.	- In socket is not voltage - Transfer relay is closed (thermal protector) - Limit switch of saw band stretching, cover of frame or cover of saw band is not started.	Line voltage must be checked. Each FA relay must be checked. Check of saw band stretching and covers closing.
2. When cut is finished, the frame is not raising.	- Bottom limit switch is adjusted wrong. - In hydraulic (pneumatic) ring is error. HYTOS (BOSCH) is not acting to frame uplift.	Bottom limit switch must be adjusted according to chapter ADJUSTING. Function of magnetic valve must be checked, valve must be closed, voltage of clamps and inductor must be checked.
3. Electric motor and pump are without voltage. Between contactor and thermal protector is not voltage.	- Wrong contactor.	Replace contactor of engine.
4. The indicator of speed saw band is not functional.	- Sensor of speed is not adjusted. - Defective display - Wrong sensor – diode of indicator speed is not light.	Sensor of speed must be adjusted. The display must be changed. Sensor must be changed and adjusted.
5. 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.
6. The hydraulic aggregate cannot be started	Auxiliary contact on thermo-relay FA1 is defective.	Replace the defective contact on motor starter FA1.
7. 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.
8. Cooling is not active	- Lack of cooling agent. - Thermal relay is defective	Fill the tank with cooling agent. Change the thermal relay

Problem	Possible causes	Repair
	- 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.

9. **Schémata / Schemas / Schematics**

9.1. Elektrické schema / Elektroschema / Wiring diagrams



Individual 620.460 GANC

3x400V + PE, 50Hz

Wiring diagram

ES-101.426-B1/B2-V1.3.0

Bomar, spol. s r.o.
Těžební 1236/1
627 00 Brno
Czech republic



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

Wiring Diagrams/Rechnen:
Individual 620.460 GANC

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/5	Ovládací panel na mřížku/Control panel/Bedienpult	15.03.2022
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/6.a	Polon přívodů pět / Saw filament cable	01.12.2022
/7	Připojení potrubí M2, M3 / Draining connection M2, M3 / Abfließenanschluss M2, M3	09.03.2022
/9	Náhlaví zdroj 24V DC / Power supply 24V DC / Stromversorgung 24V DC	22.11.2022
/10	Bezpečnostní okruh / Safety circle / Sicherheitsbereich	22.11.2022
/11	Bezpečnostní akce / Safety actions / Sicherheitsmaßnahmen	19.09.2022

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/16	PLC CAMD - AI	01.11.2022
/17.a	PLC CAMD - DO	01.11.2022
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/19	Topologie / Topology / Topologie	22.11.2022
/21	Průslabenství (Accessories/Zubehör	11.10.2022
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/23	Společnost	11.10.2022

	BOMAR s.r.o. Těšínská 1226/1 CZ 672 03, Brno	Long Machine Function: Individual 620-460 GANC	Notes and Assembly Instructions: (Obsah / Contents / Inhalt)	Serial Number/Version: Type of machine system/Configuration: Date of manufacture: Drawing/Technical Drawing Code:	10-112-000-0101-01 1.0 BOMAR s.r.o. 1000 11.12.2022 40
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Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
→OP1.1	Deska ovládacího panelu - AI Control panel board - AI Bedienplatte - AI	31.26210.022	IFRISER	31.26210.022	1	/14.a.1
→OP1.1-RI.1	Signálka Indicator light Kontrollleuchte	ZALYB6	TELEMECANIQUE	91.060.035	1	/14.b.9
→OP1.1-OP1.1	Potenciometr 4k7 Potentiometer 4k7 Potentiometer 4k7	TP195 4k7/N20A	Elektronická součástky CZ, a.s.	91.283.015	1	/6.a.5
→OP1.1-OP1.1	Svorka rychlospojná Fastconnect (cable) Fast Connect Klemm	WAGO 224-112	WAGO	91.256.050	3	/6.a.5
→OP1.1-OP1.1	Hlavice potenciometru - 24mm Head of potentiometer 24mm Leiter Potentiometer 24mm	50877 BLK	GES-ELECTRONICS, s.r.o.	91.060.063	1	/6.a.5
→OP1.1-5A10.1	Physicad - 4x6 pushy Switch 1 positions Schalter 2 Positionen	ZB5-A01	Harmony	91.060.035	1	/21.1
→OP1.1-5A10.2	Physicad - 4x6 pushy Switch 2 positions Schalter 2 Positionen	ZB5-A03	Harmony	91.060.035	1	/21.4
→OP1.1-5B1.1	Harmonie potěrač prosvětlová - Harmony Head green backlit - Harmony Kopf grün hintergrundbeleuchtung - Harmony	ZB5ANV33	TELEMECANIQUE	91.060.010	1	/14.a.1
→OP1.1-5B1.2	Hlavice tlačítka černá Button black head Taste Messer	ZB5A02	TELEMECANIQUE	91.060.013	1	/14.a.2
→OP1.1-5B1.3	Hlavice prosvětleného tlačítka modrá The button head backlit blue Der Knopfkopf blau hinterleuchtet	ZB6A736	TELEMECANIQUE	91.060.062	1	/10.7
→OP1.1-5B1.50	Tlačítko stop - Hlavice + 2xNC Emergency-stop - button + 2xNC Not-Aus-PU - Taste + 2xNC	YW1B-VREUR	IDEC	91.060.084	1	/10.4
→OP1.1-5B1.50	Kontakt - 1x NO Contact - 1x NO Kontakt - 1x NO	YW-E10	IDEC	91.061.044	1	/14.a.3

The manufacturer reserves right to use an equivalent replacement device.

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
+CP1.1-XUSB1.1	Konektor USB Connector USB Anschluss USB	CLIFF CP10110	CLIFF	91.141.110	1	/12.3
+CP1.1-XUSB1.1	Kryt zásuvky USB USB socket cover Abdeckung der USB-Buchse	CLIFF CP10112	CLIFF	91.141.111	1	/12.3
-H1.1.1	PS-41289x74mm - šedá PS-41289x74mm - grey PS-41289x74mm - grau	Z54	SOS Electronic, spol. s r.o.	91.190.036	1	/16.1
-H1.1.1	Kabelová vývodka Cable gland Kabelverschraubung	AG-1545.12.06	Schmalz AG	91.070.010	2	/16.1
-H1.1.1	Matice černá Nut black Nuss schwarz	AGB45.12	Schmalz AG	91.072.010	1	/16.1
-A1.1.A	PLC řadič jednokanálový PLC Control unit SPS Steuergerät	DELAS228P-A	DELTA ELECTRONICS, INC.	91.995.939	1	/11.0
-A1.1.A	Baterie CR-1620 Battery CR-1620 Batterie CR-1620	CR-1620	Panasonic	52.745.015	1	/11.0
-A1.3.1	Modul analogových vstupů 4x Analog input module 4x Analoga Eingangsmodul 4x	DELAS04AD-A	DELTA ELECTRONICS, INC.	91.995.933	1	/16.0
-A1.7.1	Modul reléových výstupů 8x Relay output module 8x Relais Ausgangsmodul 8x	DELAS08M01R-A	DELTA ELECTRONICS, INC.	91.995.930	1	/17.a.0
-A1.9.1	Směrňový modul 8A/16, 8xOUT Rised module 8A/16, 8xOUT Gemeinschtes Modul 8A/16, 8xOUT	DELAS16AP11R-A	DELTA ELECTRONICS, INC.	91.995.934	1	/18.a.0
-B01.1	Bezpečnostní relé 24VDC, 3NO/1NC Safety relay 24VDC, 3NO/1NC Sicherheitsrelais 24VDC, 3NO/1NC	ABB JT1A010046R0000	ABB	91.051.076	1	/10.6
-B010.10	Bezpečnostní spínač přímý Safety switch Sicherheitschalter	SICK 1063343	SICK	91.051.071	1	/11.6

The manufacturer reserves right to use an equivalent replacement device.

 BOMAR, s.r.o. Těšínská 1226/1 CZ-672 03, Brno	Long Machine Number: Individual 620.460 GANC	Main article Name (name of item) Kusovník artiklů / Parts list / Artikelstükliste	Code and Price Information (if applicable) Reguliert Preis nach Verpackung Reguliert Preis nach Packung Preis nach Verpackung Preis nach Packung	Part Number Ersatzteil-Nr. Ersatzteil-Nr.	Unit Stück Stück
				91.051.076 91.051.071	1
				91.051.076 91.051.071	1
				91.051.076 91.051.071	1

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
-EKCL.1	Lineární inkrementální snímač - 10-30VDC/10-30VDC Linear Encoder - 10-30VDC / 10-30VDC Linearenncoder - 10-30VDC / 10-30VDC	LMD2-026-08.0-1-00	ELGO	91.270.011	1	/14.1
-EKCL.1	Magnetická páska Magnetic tape Magnetband	ME20.50	ELGO	91.271.002	1	/14.1
-EKCL.2	Lineární inkrementální snímač - 10-30VDC/10-30VDC Linear Encoder - 10-30VDC / 10-30VDC Linearenncoder - 10-30VDC / 10-30VDC	LMD2-026-08.0-1-00	ELGO	91.270.011	1	/14.3
-EKCL.2	Magnetická páska Magnetic tape Magnetband	ME20.50	ELGO	91.271.002	1	/14.3
-FAL.1	Motorový spouštěč - 0,4A Motor starter - 0,4A Motorschützer - 0,4A	MS116-0,4	ABB	91.045.017	1	/7.2
-FAL.1	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO+1xNC	HKF1-11	ABB	91.046.002	1	/7.2
-FAL.2	Motorový spouštěč - 6,3A Motor starter - 6,3A Motorschützer - 6,3A	MS116-6,3	ABB	91.045.013	1	/6.4
-FAL.2	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO+1xNC	HKF1-11	ABB	91.046.002	1	/6.4
-FAL.3	Motorový spouštěč - 1A Motor starter - 1A Motorschützer - 1A	MS116-1,00	ABB	91.045.019	1	/7.2
-FAL.3	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO+1xNC	HKF1-11	ABB	91.046.002	1	/7.2
-FAL.3	Frekvenční měnič - 3,7kW, 3x400VAC Frequency converter - 3,7kW, 3x400VAC Frequenzumrichter - 3,7kW, 3x400VAC	VFD500P250T4A	DELTA ELECTRONICS, INC.	91.012.191	1	/6.6.1
-FAL.3	Pojistka Inkočková - 6,3A/250V, pomalá, 5x20 Tube fuse - 6,3A/250V, slow, 5x20 Röhrenschmelze - 6,3A / 250V, langsam, 5x20	TE, 3A/250V	ESKA	91.230.002	1	/9.1

The manufacturer reserves right to use an equivalent replacement device.

Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-F01.1	Svorka pojistková Fuse terminal Sicherungsklemme	500 - 2.30	SHS Technology	91.251.102	1	/9.1
-F01.1	Svorka pojistková - konečné Celo Fuse terminal - termination Sicherungsklemme - Abschluss	500 - 2.5 RIDG	SHS Technology	91.251.123	1	/9.1
-F01.2	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/TH56U	WIELAND	91.251.107	1	/9.1
-F01.2	Pojistka trubková - 2A/250V, pomalá, 5x20 Tube fuse - 2A/250V, slow, 5x20 Röhrensicherung - 2A / 250V, langsam, 5x20	T2A/250V	ESKA	91.230.001	1	/9.3
-F01.3	Pojistka trubková - 6.3A/250V, pomalá, 5x20 Tube fuse - 6.3A/250V, slow, 5x20 Röhrensicherung - 6.3A / 250V, langsam, 5x20	T6.3A/250V	ESKA	91.230.002	1	/9.3
-F01.3	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/TH56U	WIELAND	91.251.102	1	/9.3
-F01.4	Pojistka trubková - 700mA/250V, pomalá, 5x20 Tube fuse - 700mA/250V, slow, 5x20 Röhrensicherung - 700mA / 250V, langsam, 5x20	T700mA/250V	ESKA	91.230.009	1	/9.3
-F01.4	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/TH56U	WIELAND	91.251.102	1	/9.3
-F01.5	Pojistka trubková - 1A/250V, pomalá, 5x20 Tube fuse - 1A/250V, slow, 5x20 Röhrensicherung - 1A / 250V, langsam, 5x20	T1A/250V	ESKA	91.230.031	1	/9.3
-F01.5	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/TH56U	WIELAND	91.251.102	1	/9.3
-F01.7	Pojistka trubková - 500mA/250V, pomalá, 5x20 Tube fuse - 500mA/250V, slow, 5x20 Röhrensicherung - 500 mA / 250 V, langsam, 5x20	T500mA/250V	ESKA	91.230.011	1	/21.1
-F01.7	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/TH56U	WIELAND	91.251.102	1	/21.1

The manufacturer reserves right to use an equivalent replacement device.

 BOMAR, s.r.o. Těšínská 1236/1 CZ 672 03, Brno	Hong Kong Branch Individual 620.460 GANC	Main branch/Service center/Service address Kustovník artiklů / Parts list / Geräteidentifikation	Date and the Revision of the Document: Datum a číslo revize dokumentu		Date of the last revision Datum der letzten Änderung		Last Page Strana Seite
			Prepared by Vypracoval		Checked by Ověřil		
			Approved by Schválil		Date of approval Datum schválení		

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
-F11.B	Proječka indukční - 200mA/250V, jemná, 5x20 Tube fuse - 200mA/250V, slow, 5x20 Röhrenschmelze - 160mA / 250V, langsam, 5x20	T200mA/250V	ESKA	91.230.037	1	/21.4
-F13.B	Svorka pojistková Fuse terminal Sicherungsklemme	WKA/TH5SU	WIELAND	91.251.102	1	/21.4
-F11.B	Svorka pojistková - koncové čepo Fuse terminal - termination Sicherungsklemme - Abschluß	SKJ - 2,5 HUG	SHS Technology	91.252.123	1	/21.4
-H10.4B	Magik - modrá Lighthouse - Blue Leuchtturm - Blau	SL7-L-8	EATON	91.063.063	1	/14.b.7
-H10.4B	Žárovka 24V Lamp 24V Lampe 24V	SL7-L24	EATON	91.063.061	1	/14.b.7
-H10.4G	Magik - zelená Lighthouse - green Leuchtturm - grün	SL7-L-G	EATON	91.063.060	1	/14.b.6
-H10.4G	Žárovka 24V Lamp 24V Lampe 24V	SL7-L24	EATON	91.063.061	1	/14.b.6
-H10.4R	Magik - červená Lighthouse - red Leuchtturm - rot	SL7-L-R	EATON	91.063.062	1	/14.b.6
-H10.4R	Žárovka 24V Lamp 24V Lampe 24V	SL7-L24	EATON	91.063.061	1	/14.b.6
-H10.4Y	Magik - žlutá Lighthouse - Yellow Leuchtturm - Gelb	SL7-L-Y	EATON	91.063.058	1	/14.b.5
-H10.4Y	Žárovka 24V Lamp 24V Lampe 24V	SL7-L-Y	EATON	91.063.059	1	/14.b.5
-H10.4Y	Žárovka 24V Lamp 24V Lampe 24V	SL7-L24	EATON	91.063.061	1	/14.b.5

The manufacturer reserves right to use an equivalent replacement device.

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
-HW1.1	H-motor_driver H-motor_driver H-motor_driver	3121-002	BOCMAR s.r.o.	91.995.200	1	/11.a.2
	HW1 ovládací panel 7" ¹ HW1 control panel 7" ¹ Bedienfeld 7" ¹	DEL DOP-107EG	DELTA ELECTRONICS, INC.	91.995.912	1	/11.0
	Baterie CR-1630 Battery CR-1630 Batterie CR-1630	CR-1630	Panasonic	57.745.015	1	/11.0
-HW1.1A	Ventilový konektor, LED Valve Plug, LED Ventilanschluss, LED	VCAFA0322-LED	Finecables Co., Ltd.	93.017.077	1	/12.a.1
-HW1.1B	Ventilový konektor, LED Valve Plug, LED Ventilanschluss, LED	VCAFA0322-LED	Finecables Co., Ltd.	93.017.077	1	/12.a.2
-HW1.2A	Ventilový konektor, LED Valve Plug, LED Ventilanschluss, LED	VCAFA0322-LED	Finecables Co., Ltd.	93.017.077	1	/12.a.3
-HW1.2B	Ventilový konektor, LED Valve Plug, LED Ventilanschluss, LED	VCAFA0322-LED	Finecables Co., Ltd.	93.017.077	1	/12.a.4
-HW1.3	Ventilový konektor, LED Valve Plug, LED Ventilanschluss, LED	VCAFA0322-LED	Finecables Co., Ltd.	93.017.077	1	/12.a.5
-HW1.4	Ventilový konektor, LED Valve Plug, LED Ventilanschluss, LED	VCAFA0322-LED	Finecables Co., Ltd.	93.017.077	1	/12.a.6
-HW1.5A	Ventilový konektor, LED Valve Plug, LED Ventilanschluss, LED	VCAFA0322-LED	Finecables Co., Ltd.	93.017.077	1	/12.a.6
-HW1.5B	Ventilový konektor, LED Valve Plug, LED Ventilanschluss, LED	VCAFA0322-LED	Finecables Co., Ltd.	93.017.077	1	/12.a.7
-HW10.8	Ventilový konektor, LED Valve Plug, LED Ventilanschluss, LED	VCAFA0322-LED	Finecables Co., Ltd.	93.017.077	1	/12.a.8

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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
-HV20A	Ventilový konektor, LED Valve Plug, LED Ventilanschlus, LED	VCAF0122-LED	Finccables Co., Ltd.	93.017.077	1	/14.C.5
-HV20B	Ventilový konektor, LED Valve Plug, LED Ventilanschlus, LED	VCAF0122-LED	Finccables Co., Ltd.	93.017.077	1	/14.C.6
-HV25A	Ventilový konektor, LED Valve Plug, LED Ventilanschlus, LED	VCAF0122-LED	Finccables Co., Ltd.	93.017.077	1	/22.1
-HV25B	Ventilový konektor, LED Valve Plug, LED Ventilanschlus, LED	VCAF0122-LED	Finccables Co., Ltd.	93.017.077	1	/22.2
-K01.1	Stiskací - 4kW/400V, 3P Contactor - 4kW/400V, 3P Schütz - 4 kW / 400V, 3P	A059-30-01-11	ABB	91.040.047	1	/14.b.1
-K01.2	Stiskací - 5.5kW/400V, 3P Contactor - 5.5kW/400V, 3P Schütz - 5.5kW/400V, 3P	AF12-30-10-11	ABB	91.040.051	1	/14.b.2
-K01.11	Stiskací 5.5kW/400V Contactor 5.5kW/400V Schütz 5.5kW/400V	AF12-30-01-11	ABB	91.040.051	1	/10.7
-K01.11	Pomocný kontakt - 1xNO Auxiliary contact - 1xNO Hilfskontakt - 1xNO	CA4-10	ABB	91.041.044	1	/10.7
-K01.12	Stiskací 5.5kW/400V Contactor 5.5kW/400V Schütz 5.5kW/400V	AF12-30-01-11	ABB	91.040.051	1	/10.8
-K01.12	Pomocný kontakt - 1xNO Auxiliary contact - 1xNO Hilfskontakt - 1xNO	CA4-10	ABB	91.041.044	1	/10.8
-K010.3	Stiskací - 4kW/400V, 3P Contactor - 4kW/400V, 3P Schütz - 4 kW / 400V, 3P	A059-30-01-11	ABB	91.040.047	1	/14.b.3
-LPI	LED lamp LED lamp LED Lampe	PL-T-24-1X3W	WATTECO	91.100.115	1	/21.1

The manufacturer reserves right to use an equivalent replacement device.

 BOMAR, s.r.o. Třinec 1226/1 CZ-672 00, Břevč	Typ přístroje / Device Individual 620.460 GAMC	Kusovník / Parts list / Artikelexemplar Kusovník / Parts list / Art
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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
-LP10.2	Laser Laser	Laser 24VDC	HOFMAN SYSTEMS s.r.o.	91.100.109	1	/21.4
-LQ1.1a	Jednosměrná světelná zářivka - vysilač; M12-konektor, 0,3 m Through-beam sensor transmitter; M12 male; 0,3 m Einweglichtstrahlende Sende; M12-male; 0,3 m	IFM O6S700	IFM electronic	91.401.031	1	/14.7
-LQ1.1b	Jednosměrná světelná zářivka - přijímač; M12-konektor, 0,3 m Through-beam sensor receiver; M12 male; 0,3 m Einweglichtstrahlende Empfänger; M12-male; 0,3 m	IFM O6E700	IFM electronic	91.401.030	1	/14.8
-LQ10.6a	Jednosměrná světelná zářivka - vysilač; M12-konektor, 0,3 m Through-beam sensor transmitter; M12 male; 0,3 m Einweglichtstrahlende Sende; M12-male; 0,3 m	IFM O6S700	IFM electronic	91.401.031	1	/18.a.1
-LQ10.6b	Jednosměrná světelná zářivka - přijímač; M12-konektor, 0,3 m Through-beam sensor receiver; M12 male; 0,3 m Einweglichtstrahlende Empfänger; M12-male; 0,3 m	IFM O6E700	IFM electronic	91.401.030	1	/18.a.2
-ML1	Čerpadlo číselník 120W Cooling pump 120W Kühlpumpe 120W	PA70120	SAP srl	91.000.032	1	/7.7
-ML5	Ventilátor 24VDC, 15ACFH Fan 24VDC, 15ACFH Fan 24VDC, 15ACFH	80H1238 B2	Xinruan Electronic Co.	91.015.126	1	/6.a.9
-ML0.3	Asynchronní motor 3x230/400V, 50Hz, 0,25kW Asynchronous motor 3x230 / 400V, 50Hz, 0,25 kW Asynchronmotor 3x230 / 400V, 50Hz, 0,25 kW	BM71A4	BONFIGLIOLI	91.001.255	1	/7.2
-PAL.1	Pojistka vřetová - 12A, 10x38, rychlá Tube fuse - 12A, 10x38, fast Rohrsicherung - 12A, 10x38, schnell	PA10 12A gG	DEZ	91.231.057	3	/6.a.1
-PAL.1	Pojistkový odpínač pro vřetové vložky - 3P Switch fuse for the cylinder inserts - 3P Schalter Sicherung für den Zylindersteckste - 3P	E 91/32	ABB	91.241.034	1	/6.a.1
-QSL.1	3 pólový odpojovač, 25A Disconnecter - 3P, 25A Trennschalter - 3P, 25A	OT25PT3	ABB	91.170.016	1	/6.1
-QSL.1	Kryt šroubků Terminal strand Klemmenabdeckung	GT540T3	ABB	91.170.017	1	/6.1

The manufacturer reserves right to use an equivalent replacement device.

 BOMAR s.r.o. Těšínská 1236/1 CZ 672 03, Brno	Long Machine Number: Individual 620.460 GANC	Name article/Name des/Name des (Kategorie artikel) / Parts list / Artikelübersicht	Date and the Revision of the document Revision/Date of last change Datum/Revision/Änderung	Drawn and the checked by the customer Signature/Signature Unterschrift	Date of the last change Datum 1.11.2020	Part Name Name Teil	Qty Menge Stück	Unit Einheit Stück

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
-QS1.1	Rukojeť odpojovače - černá Handle switch - black Griffschalter - schwarz	0H8530J	ABB	91.100.015	1	/6.1
-RE10.1	Přibívací rýle CR-# Plug-in relay CR-# Stecken Ste in Relais CR-#	CR-P0240C2	ABB	91.051.049	1	/23.3
-RE10.1	Přibívací pro rýle Relay socket Relaissockel	CR-P55	ABB	91.051.04H	1	/23.3
-RE10.8	Přibívací rýle CR-# Plug-in relay CR-# Stecken Ste in Relais CR-#	CR-P0240C2	ABB	91.051.040	1	/14.b.4
-RE10.8	Přibívací pro rýle Relay socket Relaissockel	CR-P55	ABB	91.051.048	1	/14.b.4
-RT10.7	Modem router eWON COSY 111, WAN Modem router eWON COSY 111, WAN Modem router eWON COSY 111, WAN	EOCL100	eWON	91.990.014	1	/20.3
-RT10.7	Modem router eWON COSY 111, WiFi Modem router eWON COSY 111, WiFi Modem router eWON COSY 111, WiFi	EOCL10C	eWON	91.990.015	1	/20.3
-RT10.7	Ethernet kabel 1m Ethernet cable 1m Ethernetkabel 1m	KEL-CE-S-010-KEL1m	Cable with connector	91.142.120	1	/20.3
-SQ1.1	Koncový spínač - INC+INO Unit switch - INC+INO Endschalter - INC+INO	DHR-4A31	OMRON	91.171.007	1	/14.a.7
-SQ1.1	Kabelová vývodka H20 Cable gland H20 Kabelverschraubung	KANMAT AG-1545.20.13	Agro	91.070.012	1	/14.a.7
-SQ1.2	Koncový spínač - INC+INO Unit switch - INC+INO Endschalter - INC+INO	DHR-4A31	OMRON	91.171.007	1	/14.6
-SQ1.2	Kabelová vývodka H20 Cable gland H20 Kabelverschraubung	KANMAT AG-1545.20.13	Agro	91.070.012	1	/14.6

The manufacturer reserves right to use an equivalent replacement device.

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
-SQ1.5	Koncový spínač - 1NO + 1NC, klacka, pomalá akce Limit switch - 1NO + 1NC, pusher, slow action Endschalter - 1NO + 1NC, rollé, langsame Einwirkung	FK 605-M2	PIZZATO	91.173.009	1	/14.1
-SQ1.5	Kabeľová vývodka H20 Cable gland H20 Kabelverschraubung	KANMAT AG 15-45.20.13	Agro	91.070.012	1	/14.1
-SQ1.6	Koncový spínač - 1NC+1NO, M20, pomalý Limit switch - 1NC+1NO, M20, slow Endschalter - 1NC+1NO, M20, langsam	DIN-4632	OMRON	91.173.010	1	/14.a.5
-SQ1.6	Kabeľová vývodka H20 Cable gland H20 Kabelverschraubung	KANMAT AG 15-45.20.13	Agro	91.070.012	1	/14.a.5
-SQ1.16	Koncový spínač - 1NO + 1NC, klacka, pomalá akce Limit switch - 1NO + 1NC, pusher, slow action Endschalter - 1NO + 1NC, rollé, langsame Einwirkung	FK 605-M2	PIZZATO	91.173.009	1	/14.3
-SQ1.16	Kabeľová vývodka H20 Cable gland H20 Kabelverschraubung	KANMAT AG 15-45.20.13	Agro	91.070.012	1	/14.3
-SQ1.51	Bezpečnostní koncový spínač - 2x NC Safety Limit Switch - 2x NC Sicherheitslimitschalter - 2x NC	QKSB	KEDU	91.173.012	1	/10.4
-SQ1.52	Bezpečnostní koncový spínač - 2x NC Safety Limit Switch - 2x NC Sicherheitslimitschalter - 2x NC	QKSB	KEDU	91.173.012	1	/10.4
-SQ10.4	Indukční snímač vzdálenosti Inductive proximity sensor Induktive Näherungssensor	BMW R50AC-UMF20B-EP13	BALLUFF	91.173.016	1	/16.1
-SQ11.1	Koncový spínač - 1NO + 1NC Limit switch - 1NO + 1NC Endschalter - 1NO + 1NC	FK 3301-M1	PIZZATO	91.173.015	1	/14.a.4
-SQ11.1	V-80VED M16x1,5 - žemě V-80VED M16x1,5 - black V-80VED M16x1,5 - schwarz	AG-1540.17.10	KANMAT spol. s r.o.	91.070.011	1	/14.a.4
-SZ10.10A	Vzduškový bezpečnostní světelný závor - přijímač Safety multi-beam light curtain - receiver Sicherheits-Mehrstrahl-Lichtvorhang - Empfänger	PMHE-0340206R0	SICK	91.401.039	1	/11.3

The manufacturer reserves right to use an equivalent replacement device.

1.0	BOMAR s.r.o. Těšínská 1236/1 CZ 672 00, Brno	Long Machine Number: Individual 620.460 GANC	Name article/Name article/Name article Kusovník artiklů / Parts list / Artikelstückliste	Code and Price Marked on Packaging: Original Price marked on packaging Price with discount (10% on 4 items) Price with 20% discount	Part Number Kusovník artiklů / Parts list / Artikelstückliste 101112000	Part Name Kusovník artiklů / Parts list / Artikelstückliste 101112000
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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
-SZ10.100	Vysípací světlo bezpečnostní světelná zábrana - vysílač Safety multi-beam light curtain - transmitter Sicherheits Mehrstrahl-Lichtvorhang-Sender	MH05-034000A00	STCK	91.101.030	1	/11.0
-WETH1.1	Ethernet kabel 1m Ethernet cable 1m Ethernetkabel 1m	8EL-CE-5-010-8EL106	Cables with connector	91.102.129	1	/12.4
-WH10.4	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, Farbmarkierung	32-500-760,75	Cables	41.130.011	1	/14.b.5
-WHV1.1A	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/12.a.1
-WHV1.1B	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/12.a.2
-WHV1.2A	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/12.a.3
-WHV1.2B	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/12.a.4
-WHV1.3	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/12.a.5
-WHV1.4	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/12.a.6
-WHV1.5A	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/12.a.6
-WHV1.5B	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/12.a.7
-WHV10.8	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/12.a.0

The manufacturer reserves right to use an equivalent replacement device.

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
-WHV20A	PVC, Realbíl, barevné značení PVC, Realbille, color marking PVC, Realbel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/14.C.5
-WHV20B	PVC, Realbíl, barevné značení PVC, Realbille, color marking PVC, Realbel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/14.C.6
-WHV25A	PVC, Realbíl, barevné značení PVC, Realbille, color marking PVC, Realbel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.007	1	/22.1
-WHV25B	PVC, Realbíl, barevné značení PVC, Realbille, color marking PVC, Realbel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/22.2
-WHP10.1	PUH, záruka M8, 3-pin, nesíťový, LED, přímý, 10 m Cable with straight connector M8, 3pin Kabel mit geradem Stecker M8, 3pin	BOM-809903-06/10M	Cables with connector	91.142.032	1	/21.1
-WHP10.2	PUH, záruka M8, 3-pin, nesíťový, LED, přímý, 10 m Cable with straight connector M8, 3pin Kabel mit geradem Stecker M8, 3pin	BOM-809903-06/10M	Cables with connector	91.142.032	1	/21.4
-WLQ1.1a	PUH, záruka M12, 4-pin, nesíťový, přímý, 10 m Cable 10m with connector M12 4pin Kabel 10m mit Stecker M12 4-polig	DOL-1204-G10M	Cables with connector	91.142.033	1	/14.7
-WLQ1.1b	PUH, záruka M12, 4-pin, nesíťový, přímý, 10 m Cable 10m with connector M12 4pin Kabel 10m mit Stecker M12 4-polig	DOL-1204-G10M	Cables with connector	91.142.033	1	/14.7
-WLQ10.1a	PUH, záruka M12, 4-pin, nesíťový, přímý, 10 m Cable 10m with connector M12 4pin Kabel 10m mit Stecker M12 4-polig	DOL-1204-G10M	Cables with connector	91.142.033	1	/18.a.1
-WLQ10.1b	PUH, záruka M12, 4-pin, nesíťový, přímý, 10 m Cable 10m with connector M12 4pin Kabel 10m mit Stecker M12 4-polig	DOL-1204-G10M	Cables with connector	91.142.033	1	/18.a.1
-WHL1	PVC, Realbíl, barevné značení PVC, Realbille, color marking PVC, Realbel, Farbmarkierung	H05VV-F 4G1,5 C černý	Cables	41.100.005	1	/7.7
-WHL2	PVC, Realbíl, barevné značení PVC, Realbille, color marking PVC, Realbel, Farbmarkierung	H05VV-F 4G1,5 C černý	Cables	41.100.005	1	/6.4

The manufacturer reserves right to use an equivalent replacement device.

	BOMAR s.r.o. Těšínská 1226/1 CZ-672 00, Brno	Hlavní oddělení: Strojní Individuální 620.460 GANC	Název zařízení/Name of device Elektronický artikl / Parts list / Artikelextrakt	Číslo a typ zařízení/Device number Replicator 620.460 GANC Elektronický artikl / Parts list / Artikelextrakt	Datum vydání/Issue date 10.11.2020	List Page 1 z 1
						List Page 1 z 1
						List Page 1 z 1

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
-WHL.4	PVC, flechtěn, sfvěřný, číslování značení PVC, flexible, steepled, numbered marking PVC, flechtel, gestiebelt, nummeriert	P-CY-3Z 462,5	Cables	41.140.008	1	/6.a.1
-WHL.5	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/6.a.9
-WHL10.3A	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, farbmarkierung	H05VV-F 4G1,5 C černý	Cables	41.100.005	1	/7.2
-WHL10.3B	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, farbmarkierung	H05VV-F 4G1,5 C černý	Cables	41.100.005	1	/7.2
-WSP.25	PVC, flechtěn, číslování značení PVC, flexible, numbered marking PVC, flechtel, nummerierung	3Z-500 10G0,5	Cables	41.136.008	1	/22.3
-WSP10.6	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/14.c.1
-WRL.1	UTP 4x2x0,4mm ² , kroucené páry UTP 4x2x0,4mm ² , twisted in pairs UTP 4x2x0,4mm ² , paarweise verdreh	FTP 4x2x0,4 Category 5	Cables	41.145.007	1	/13.3
-WSP1.1	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/14.5
-WSP1.2	PVC, výsoka flechtěn, číslování značení PVC, highly flexible, numbered marking PVC, hochflechtel, nummeriert	3Z-HF 2x0,75	Cables	41.135.001	1	/14.6
-WSP1.1	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/14.a.7
-WSP1.2	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/14.6
-WSP1.3	PVC, flechtěn, barevné značení PVC, flexible, color marking PVC, flechtel, farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/14.1

The manufacturer reserves right to use an equivalent replacement device.

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
-WSQ1.6	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/14.a.5
-WSQ1.16	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/6.a.3
-WSQ1.51	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 4x0,75 C černý	Cables	41.100.004	1	/10.4
-WSQ1.52	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 4x0,75 C černý	Cables	41.100.004	1	/10.4
-WSQ10.4	PVC, barevné značení PVC, color marking PVC, Farbmzeichnung	TRONIC 3x0,34	Cables	41.145.016	1	/16.1
-WSQ11.1	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/14.a.4
-WSYMC	PVC, flexibilní, číselné značení PVC, flexible, numbered marking PVC, flexibel, Nummernang	32-500 16x0,5	Cables	41.130.032	1	/23.2
-WS210.10A	PUR, záruška M12, 8 pin, silný, přímý, 15 m Cable with straight connector M12, 8pin Kabel mit geradem Stecker M12, 8pin	DOI-1275G15HE25KH0	Cables with connector	91.142.015	1	/11.3
-WS210.10B	PUR, záruška M12, 8 pin, silný, přímý, 15 m Cable with straight connector M12, 8pin Kabel mit geradem Stecker M12, 8pin	DOI-1275G15HE25KH0	Cables with connector	91.142.015	1	/11.0
-WS581.1	Kabel USB 0,5 m USB cable 0,5 m USB-Kabel 0,5 m	GG08AY 93016	GG08AY	91.142.133	1	/12.3
-X10.3	Záruška konektoru 7pin Connector socket 7 pin Anschlusbuchse 7-polig	SOS 211398-1	SOS Electronic, spol. s r.o.	91.141.001	1	/7.2
-X10.3	Záruška konektoru 7pin Connector plug 7pin Anschlusstecker 7-pol	SOS 211402-1	SOS Electronic, spol. s r.o.	91.141.002	1	/7.2

The manufacturer reserves right to use an equivalent replacement device.

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
-X10.3	Zásuvkový kontakt Multimate III+ F Contact Multimate III+ F Buchsenkontakt Multimate III+ F	SOS.163084-1	SOS Electronic, spol. s r.o.	91.141.006	4	/7.2
-X10.3	Realizace pro 7 pin konektor Reduction for 7 pin connector Reduzierung für 7-poligen Stecker	BOMAR.30.2806-103	BOMAR s.r.o.	30.2806.103	2	/7.2
-X10.3	Zásuvkový kontakt Multimate III+ M Plug contact Multimate III+ M Steckkontakt Multimate III+ M	SOS.163082-1	SOS Electronic, spol. s r.o.	91.141.007	4	/7.2
-X10.3	V-BRED M16x1,5 - černá V-BRED M16x1,5 - black V-BRED M16x1,5 - schwarz	AG-1545-17-10	KAMAT spol. s r.o.	91.070.011	2	/7.2
-XSYMC	Zásuvka konektoru 14pin Connector socket 14 pin Anschlusbuchse 14-polig	SOS.163041-1	SOS Electronic, spol. s r.o.	91.141.013	1	/23.3
-XSYMC	Zásuvka konektoru 14pin Connector plug 14pin Anschlusstecker 14pol	SOS.163049-1	SOS Electronic, spol. s r.o.	91.141.014	1	/23.3
-XSYMC	Zásuvkový kontakt Multimate III+ F Contact Multimate III+ F Buchsenkontakt Multimate III+ F	SOS.163084-1	SOS Electronic, spol. s r.o.	91.141.006	12	/23.3
-XSYMC	Zásuvkový kontakt Multimate III+ M Plug contact Multimate III+ M Steckkontakt Multimate III+ M	SOS.163082-1	SOS Electronic, spol. s r.o.	91.141.007	12	/23.3
-XSYMC	Realizace pro 14 pin konektor Reduction for 14 pin connector Reduzierung für 14-poligen Stecker	BOMAR.30.6130-025	BOMAR s.r.o.	30.6130-025	2	/23.3
-XSYMC	V-BRED M16x1,5 - černá V-BRED M16x1,5 - black V-BRED M16x1,5 - schwarz	AG-1545-17-10	KAMAT spol. s r.o.	91.070.011	2	/23.3
-Z01.1	Kapacitní zdroj 24VDC 10A Power supply 24VDC 10A Stromversorgung 24VDC 10A	DEL ORL-24V240W10EH	DELTA ELECTRONICS, INC.	91.005.041	1	/9.0
+OP25	Krabička se 4 otvory Box with 4 holes Box mit 4 Löchern	NU2-FH	EATON	91.190.025	1	/23.3

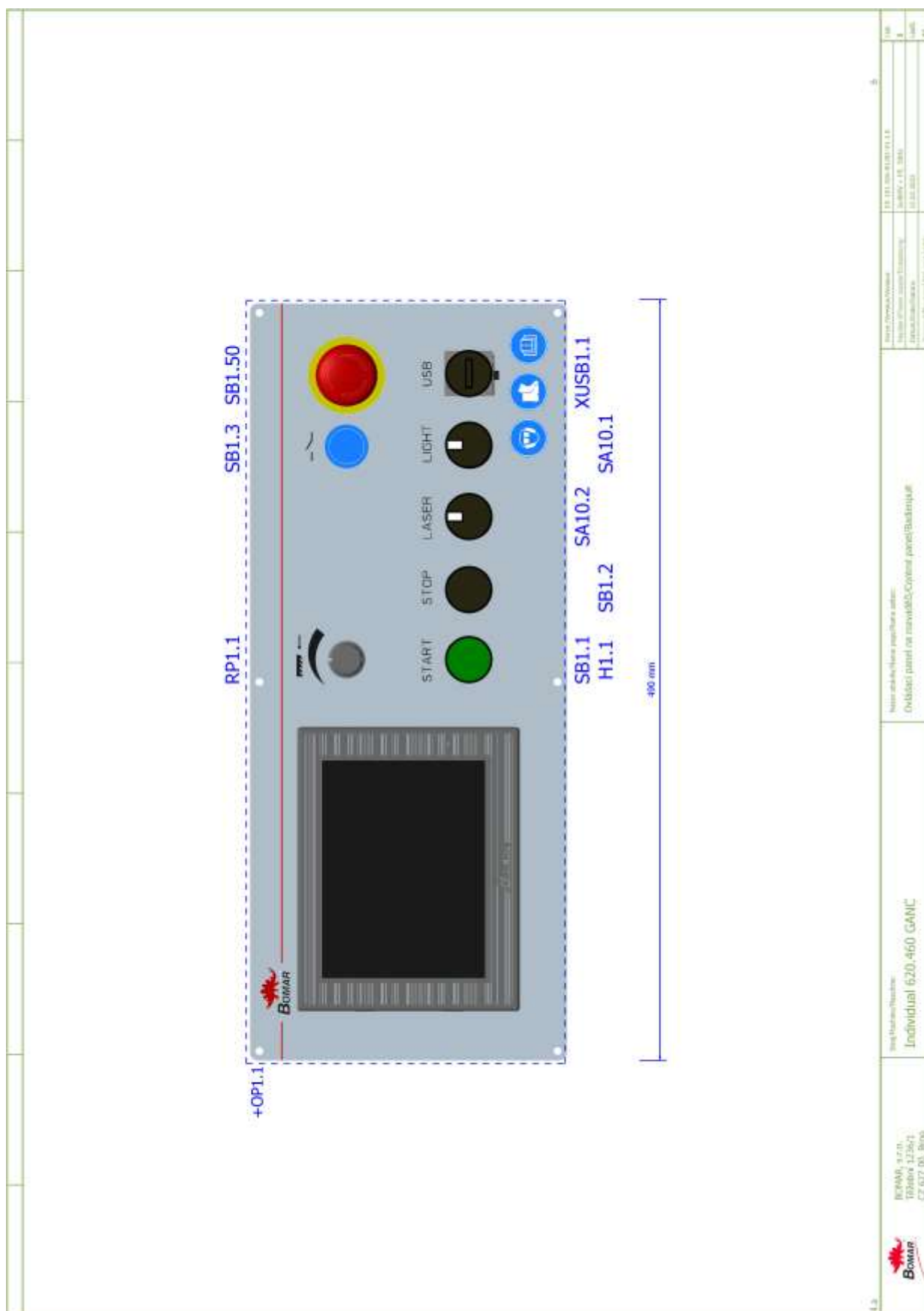
The manufacturer reserves right to use an equivalent replacement device.

Kusovník artiklů / Parts list / Stückliste

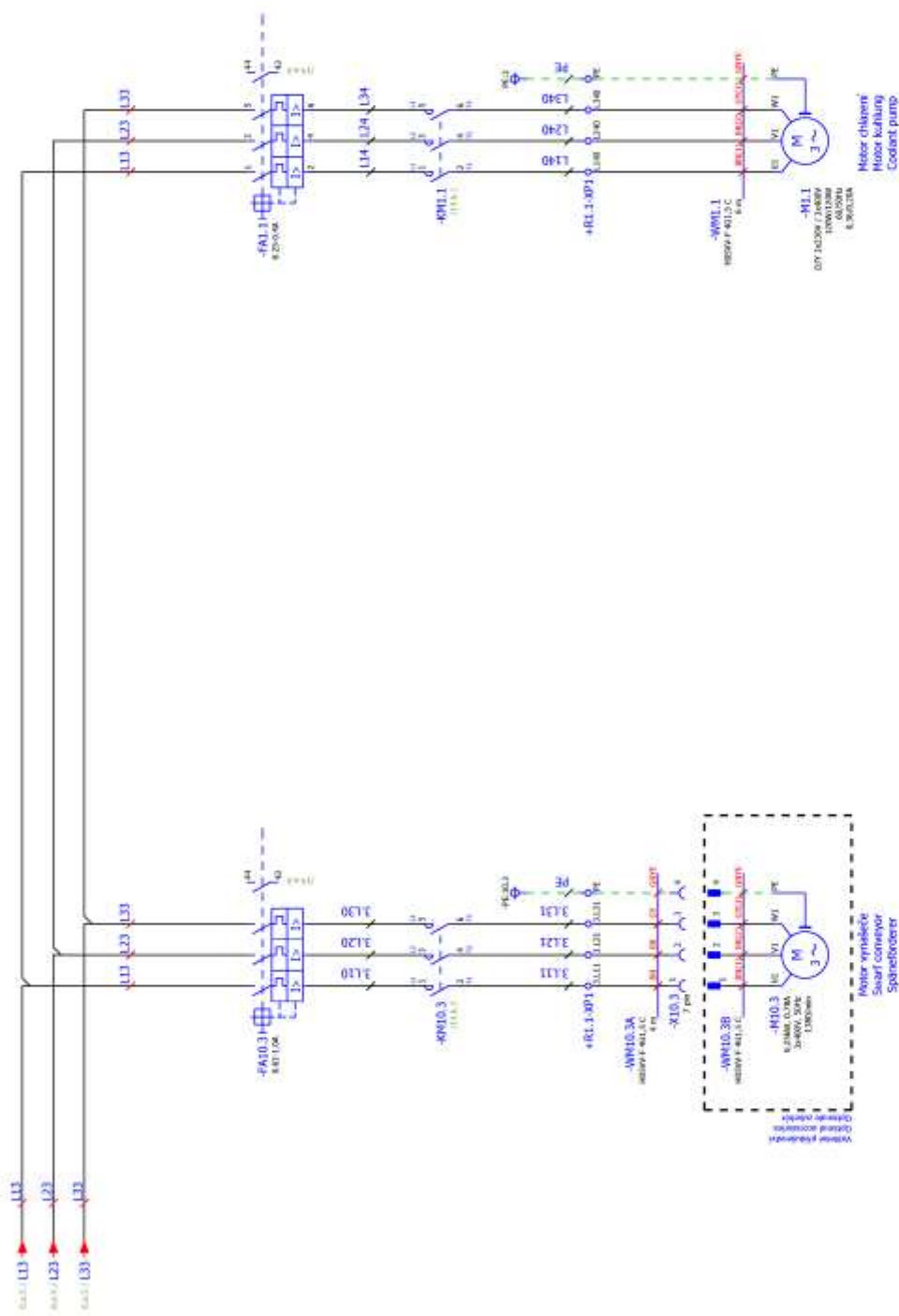
Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
+OP25	Kabelová vstředka H20 Cable gland H20 Kabelverschraubung	KOMAT AG 1545 20 13	Agro	91.070.012	1	/22.3
+OP25	Hevlice černá M20x1,5 Black nut M20x1,5 Schwarze Mutter M20x1,5	KOMAT AG 6245 20	Agro	91.072.012	1	/22.3
+OP25-5Q05	Hevlice 2 položehového přepínače, klíč Head 2 position switch, key Heisl 2-Positionsmechanischer - Schlüssel	M22-WB57	EATON	91.060.070	1	/22.3
+OP25-5Q25	Kontaktní blok - INO; do krabíčky Contact block - INO; to box Hilfskontakt INO; zu Box	M22-KC01	EATON	91.061.035	2	/22.3
+OP25-5B25A	Hevlice tlačítka - černá Head button - black Kopfknäse - schwarz	M22-Q-S	EATON	91.060.035	1	/22.8
+OP25-5B25A	Kontaktní blok - INO; do krabíčky Contact block - INO; to box Hilfskontakt INO; zu Box	M22-KC10	EATON	91.061.030	2	/22.8
+OP25-5B25A	Hevlice tlačítka - šipka Pushbutton fingerboard - arrow Druckknopf Griffrett - Pfeil	M22-XD-S-X7	EATON	91.062.002	1	/22.8
+OP25-5B25B	Hevlice tlačítka - černá Head button - black Kopfknäse - schwarz	M22-Q-S	EATON	91.060.035	1	/22.7
+OP25-5B25B	Kontaktní blok - INO; do krabíčky Contact block - INO; to box Hilfskontakt INO; zu Box	M22-KC10	EATON	91.061.030	2	/22.7
+OP25-5B25B	Hevlice tlačítka - šipka Pushbutton fingerboard - arrow Druckknopf Griffrett - Pfeil	M22-XD-S-X7	EATON	91.062.002	1	/22.7
+OP25-5B25C	Hevlice tlačítka - černá Head button - black Kopfknäse - schwarz	M22-Q-S	EATON	91.060.035	1	/22.6
+OP25-5B25C	Kontaktní blok - INO; do krabíčky Contact block - INO; to box Hilfskontakt INO; zu Box	M22-KC10	EATON	91.061.030	2	/22.6

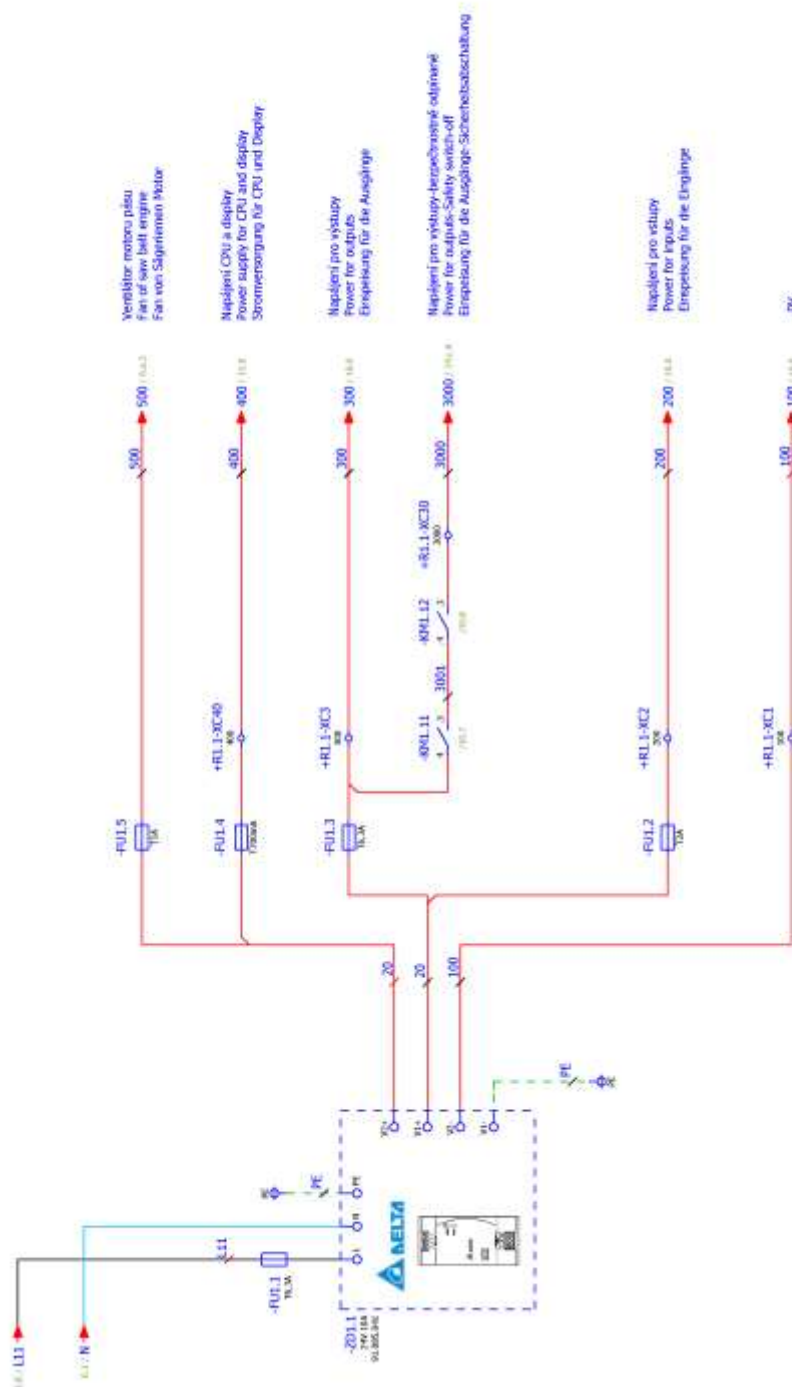
The manufacturer reserves right to use an equivalent replacement device.

	BOMAR, s.r.o. Dřevná 1226/1 CZ 672 00, Brno	Hlavní značka/Brand: Individual 620.460 GANC	Název zařízení/Device name: Kabinový aršík / Parts list / Arschenschilder	Číslo a typ zařízení/Device number: 620.460 GANC	Datum vydání/Issue date: 15.11.2020	Verze/Version: 1.0	Počet stran/Number of pages: 48

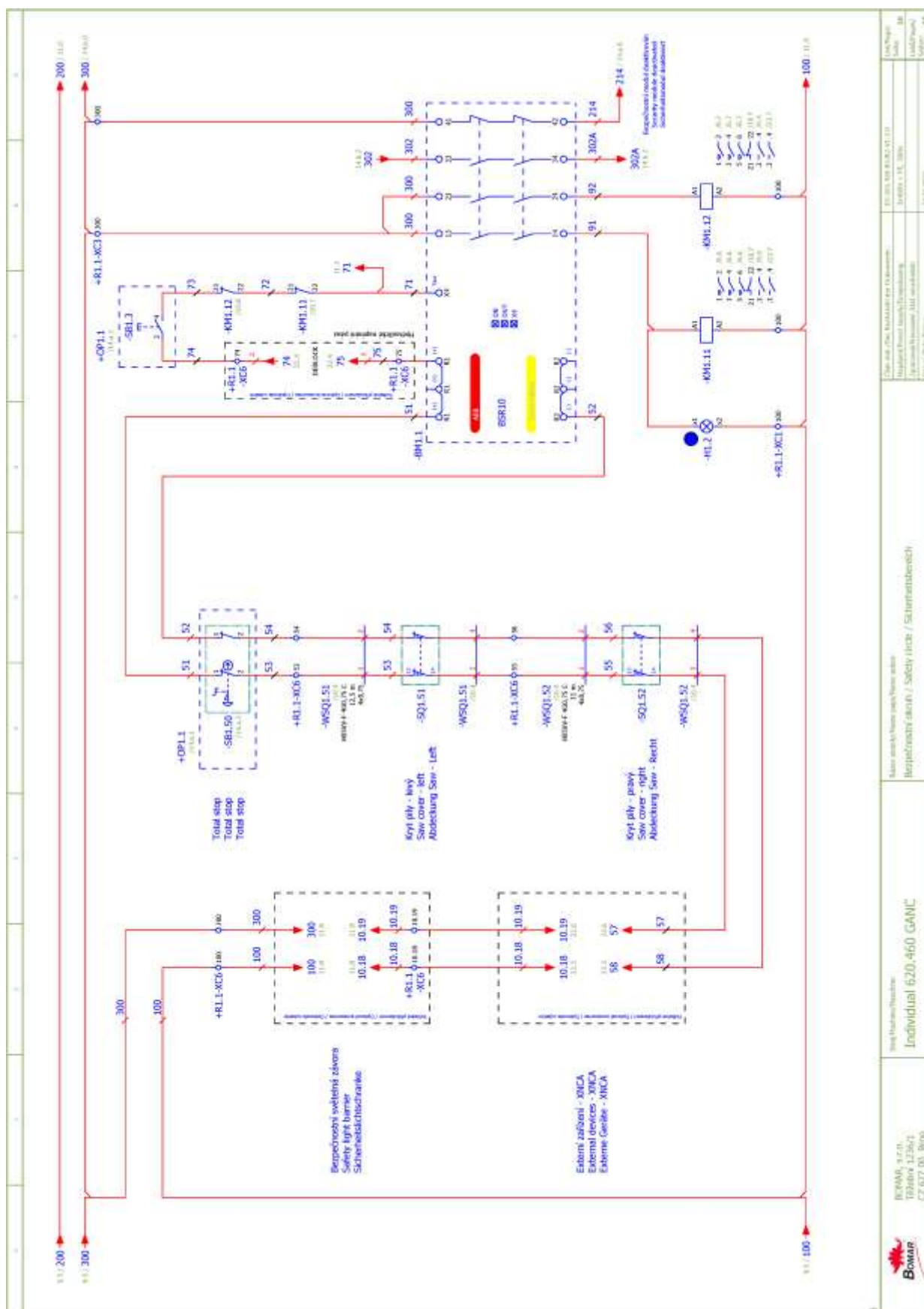




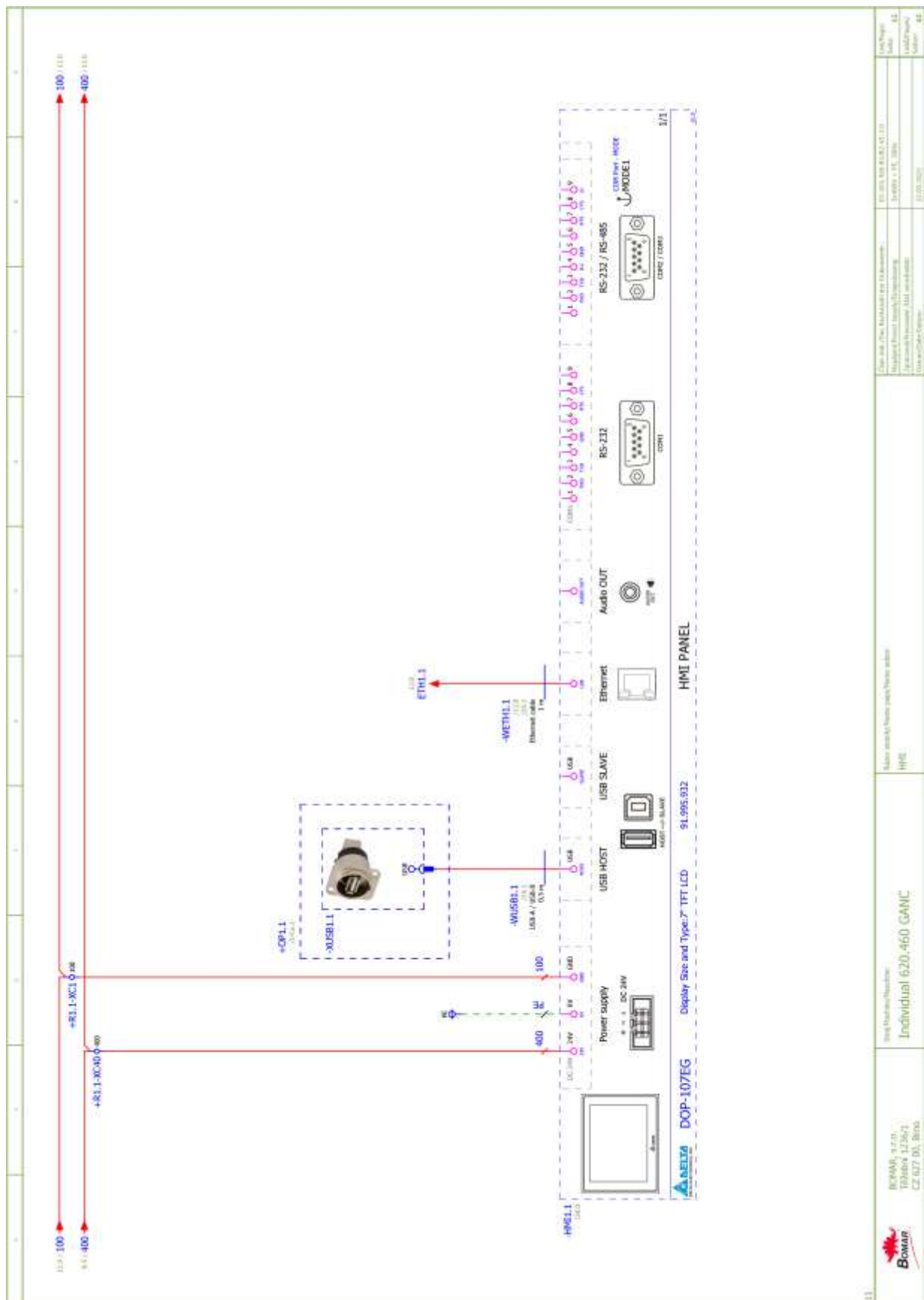


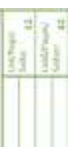


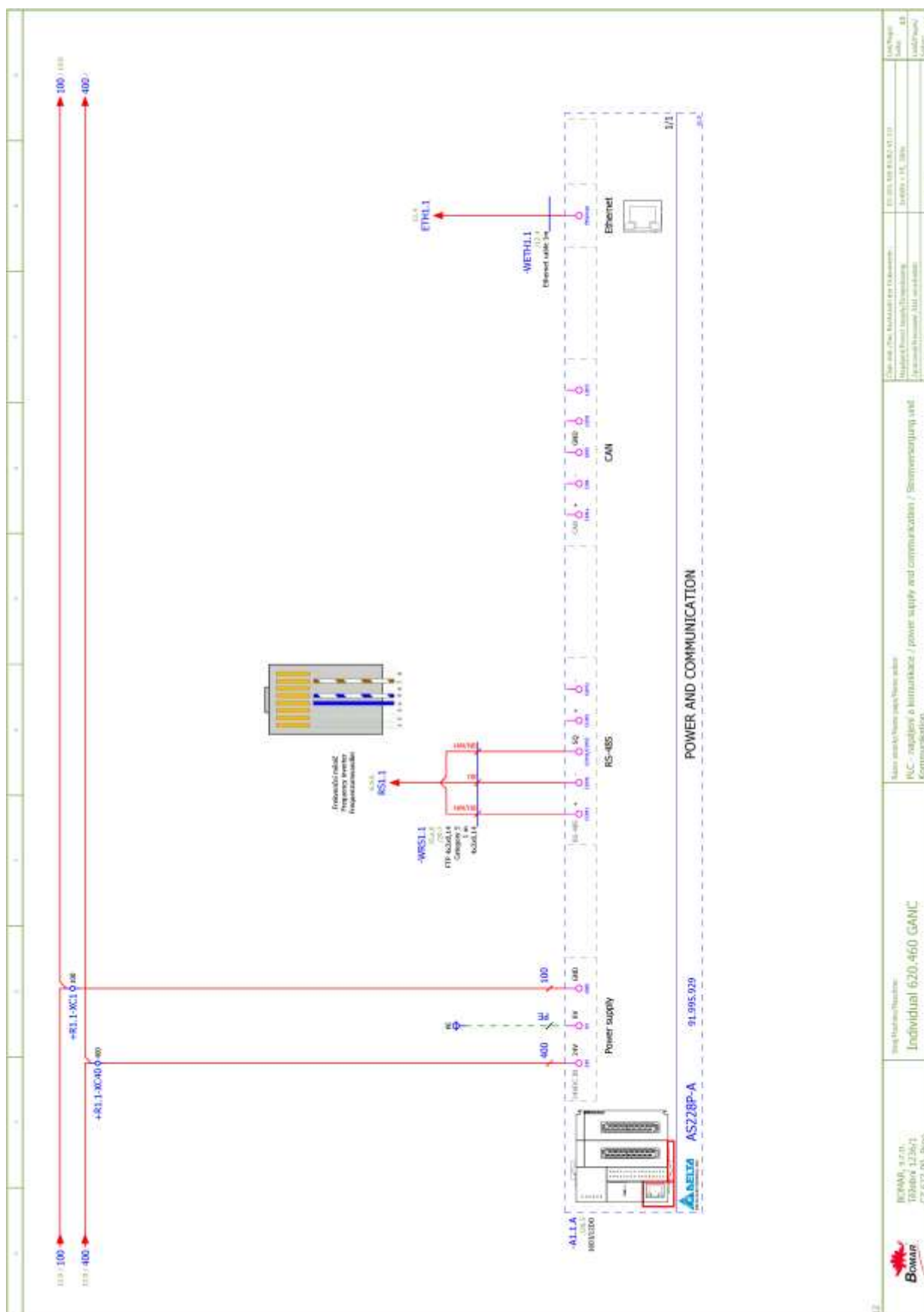
 BOSCH a.s. s.r.o. 1334869 423671 CZ 672 03, Šumperk	Výrobek určený k použití: Individual 620, 460 GANC	Název výrobku / Name of the product: Repapier zhotov 24V DC / Power supply 24V DC / Stromversorgung 24 V DC	Výrobce / Manufacturer: Bosch Power Tools Bosch Power Tools Bosch Power Tools	10

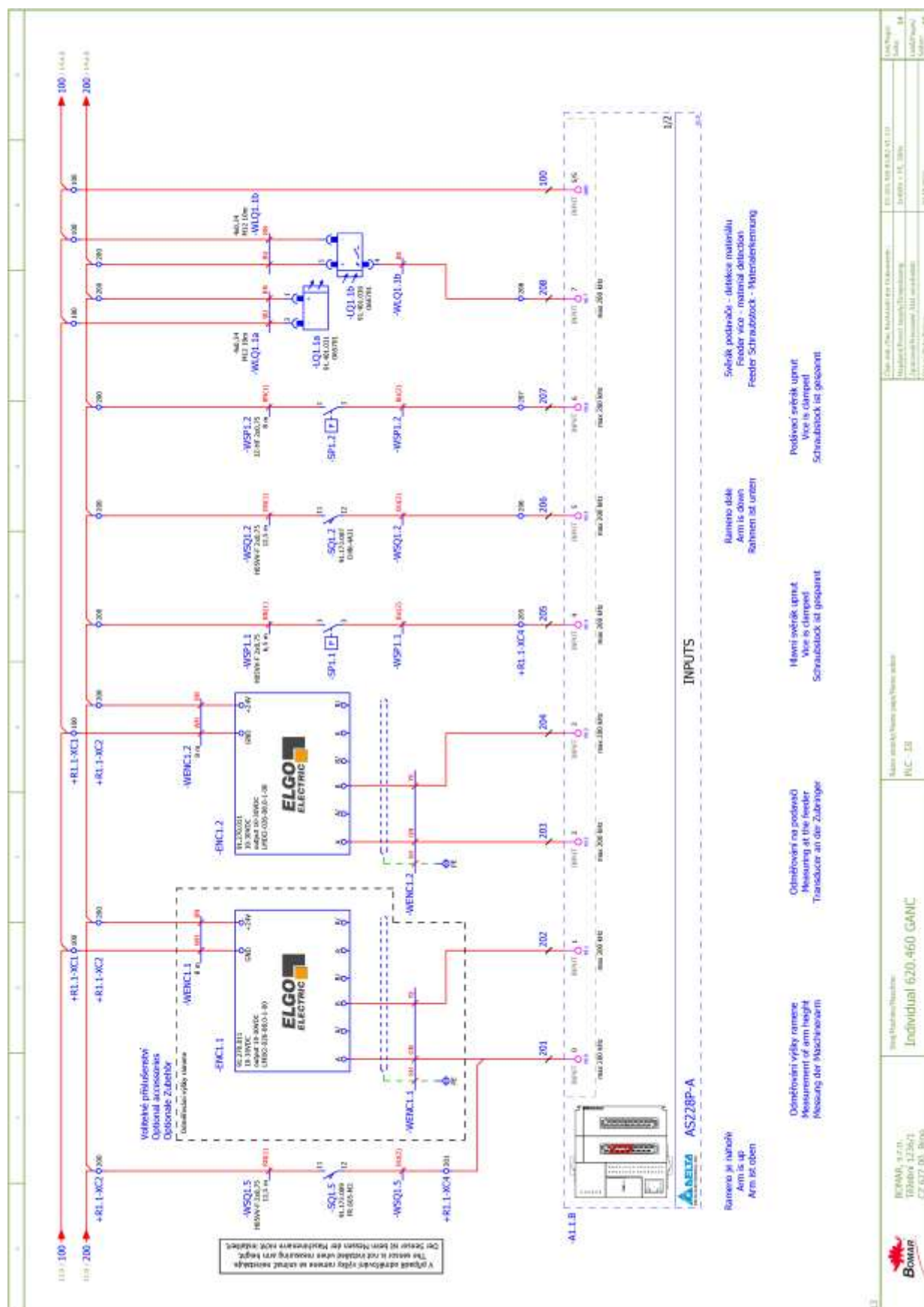


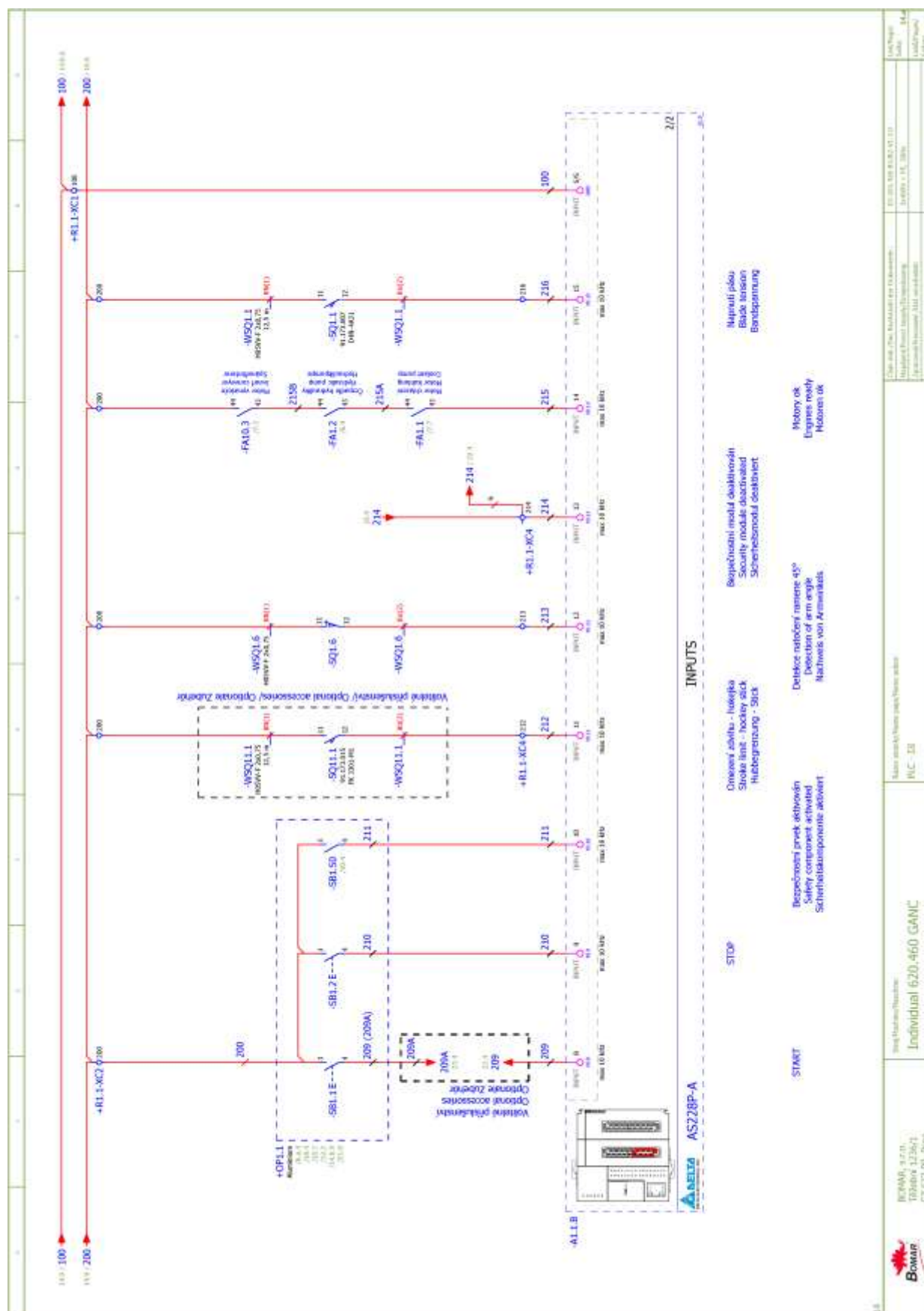




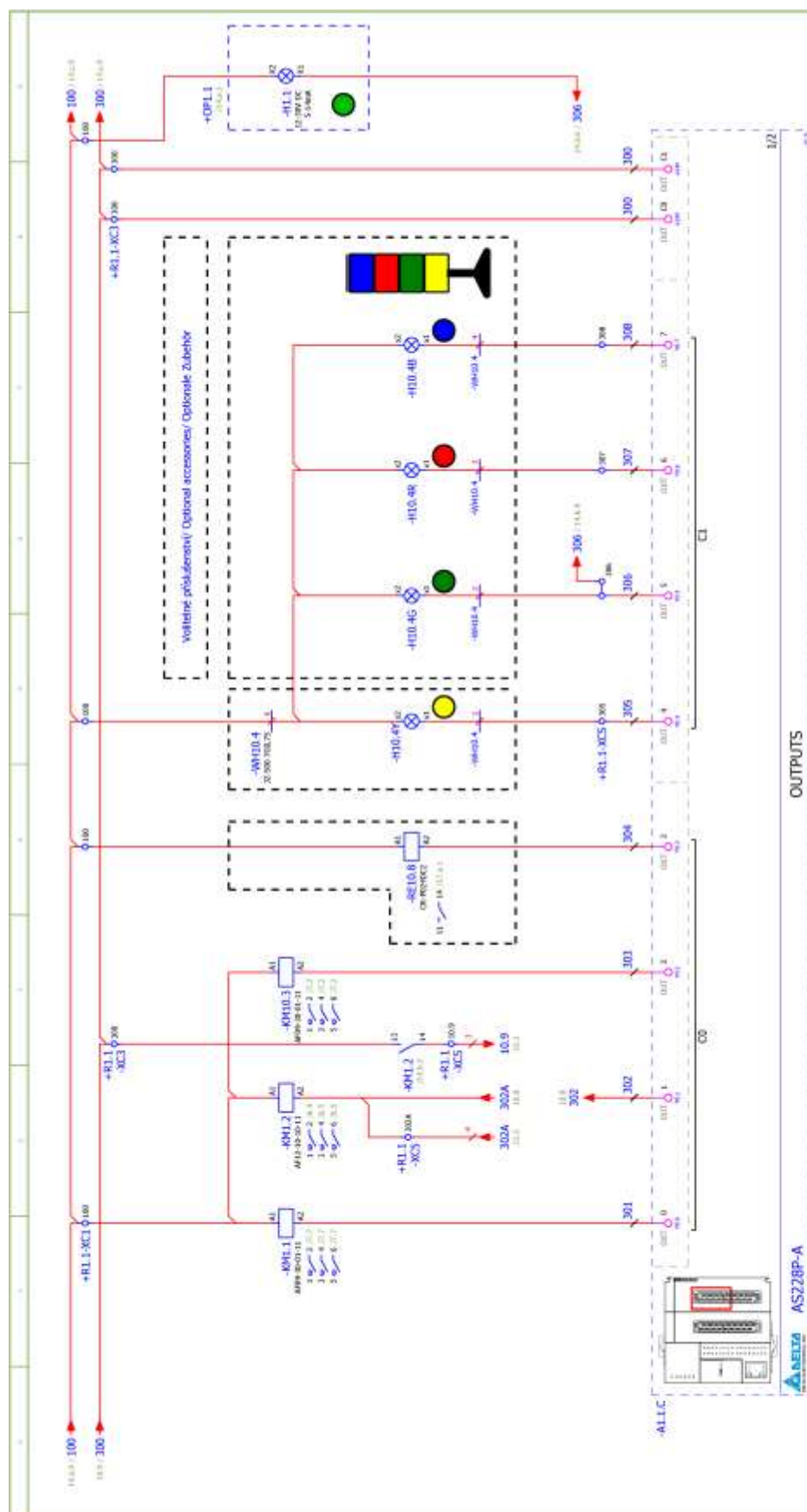
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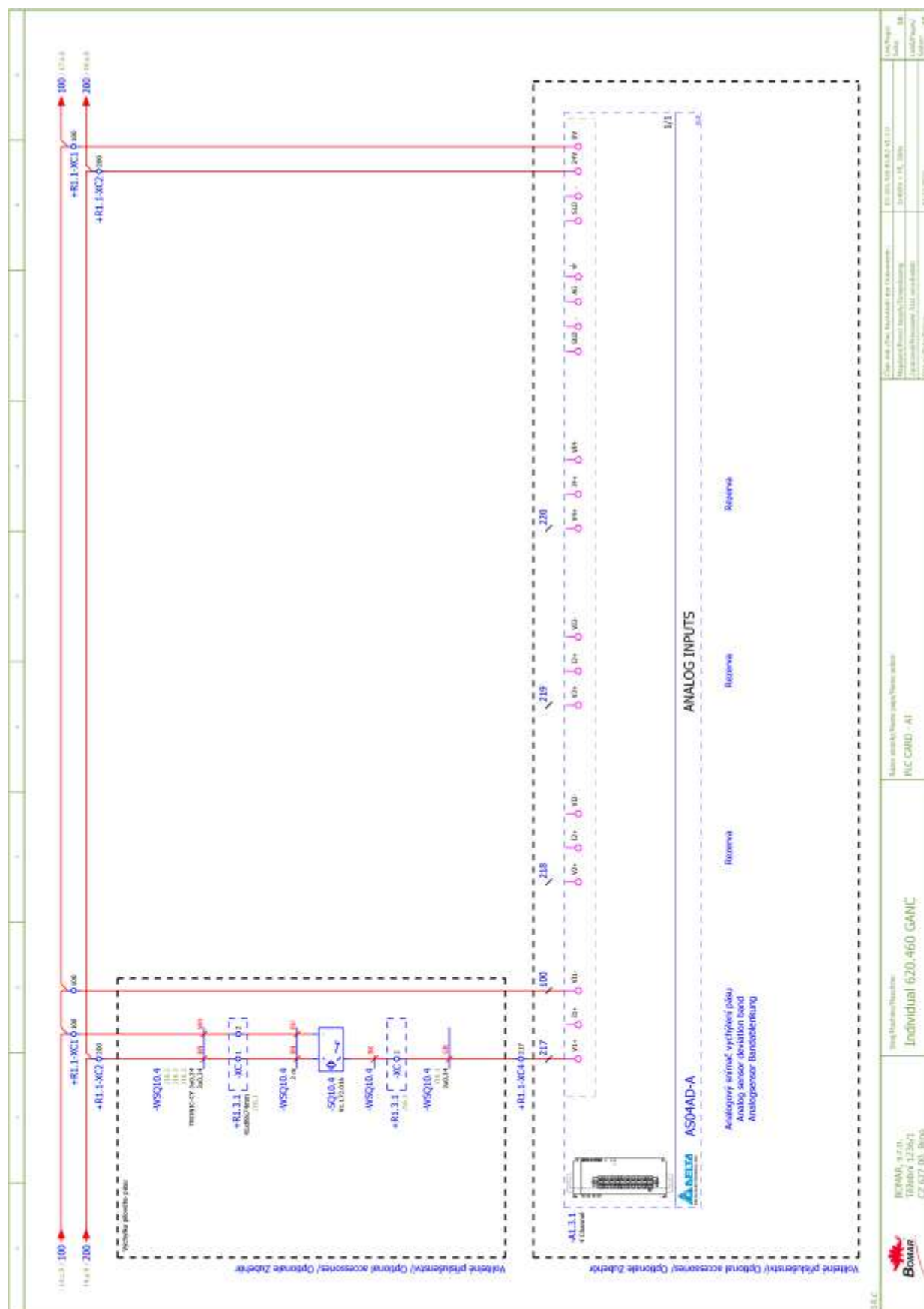


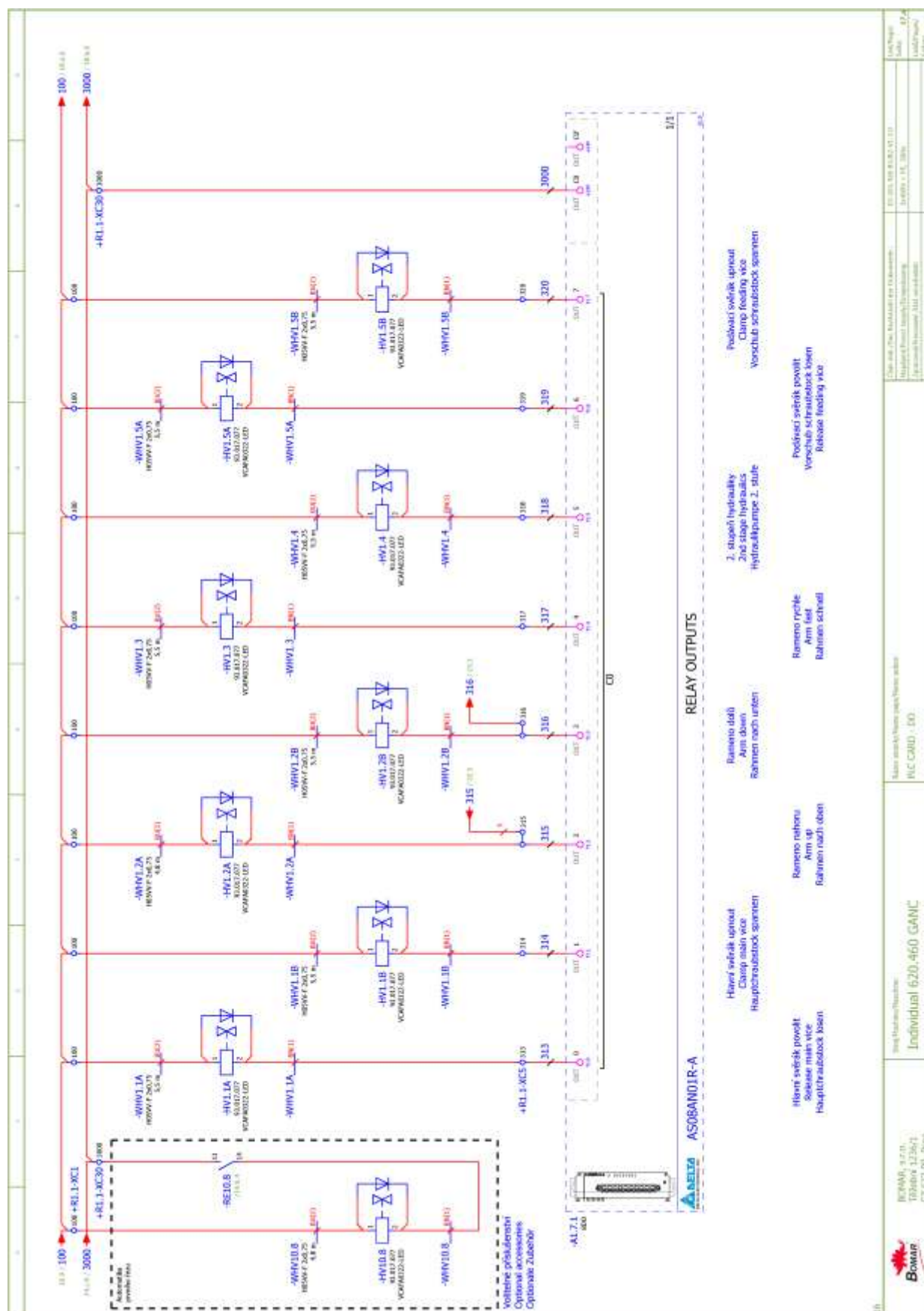


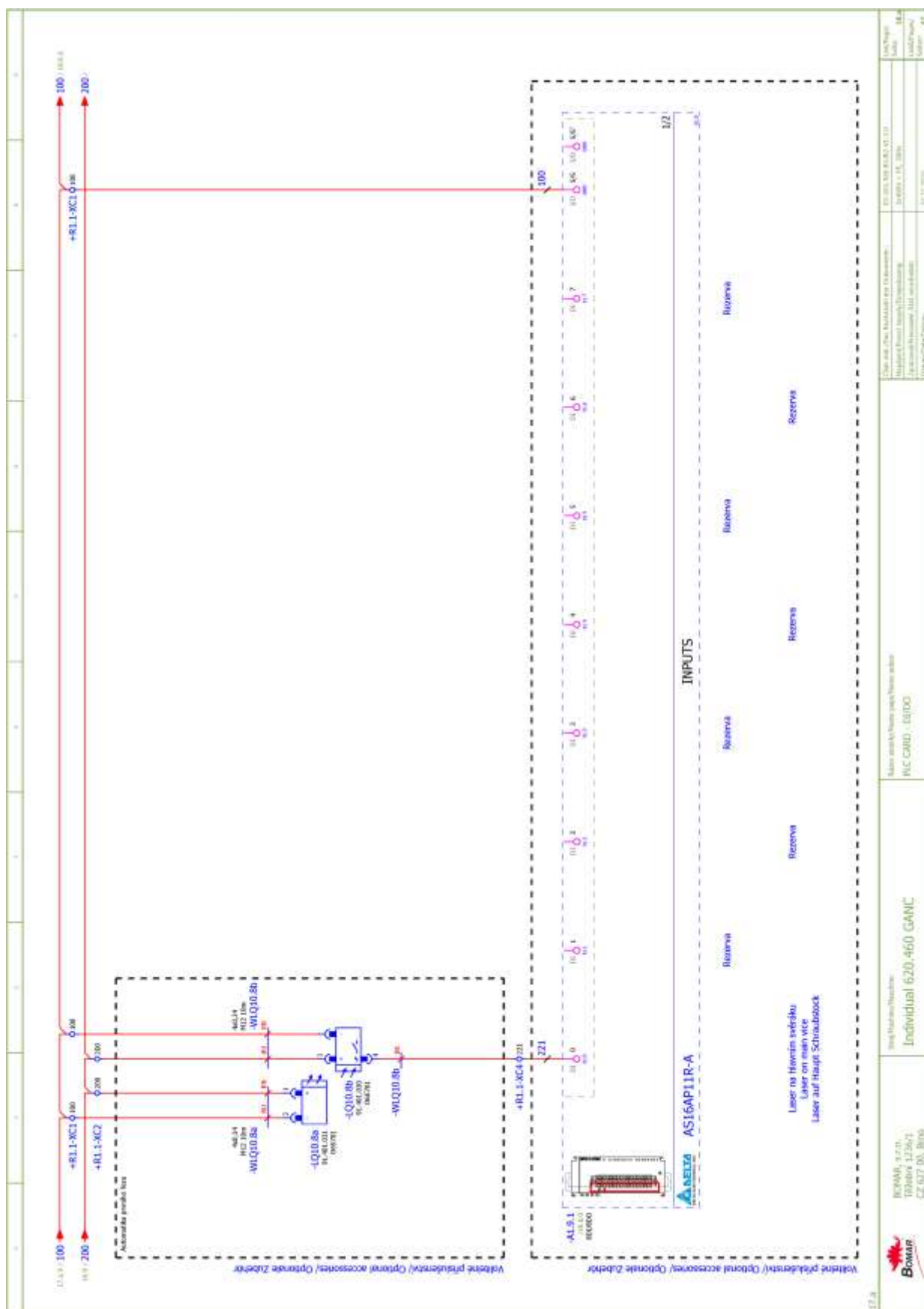
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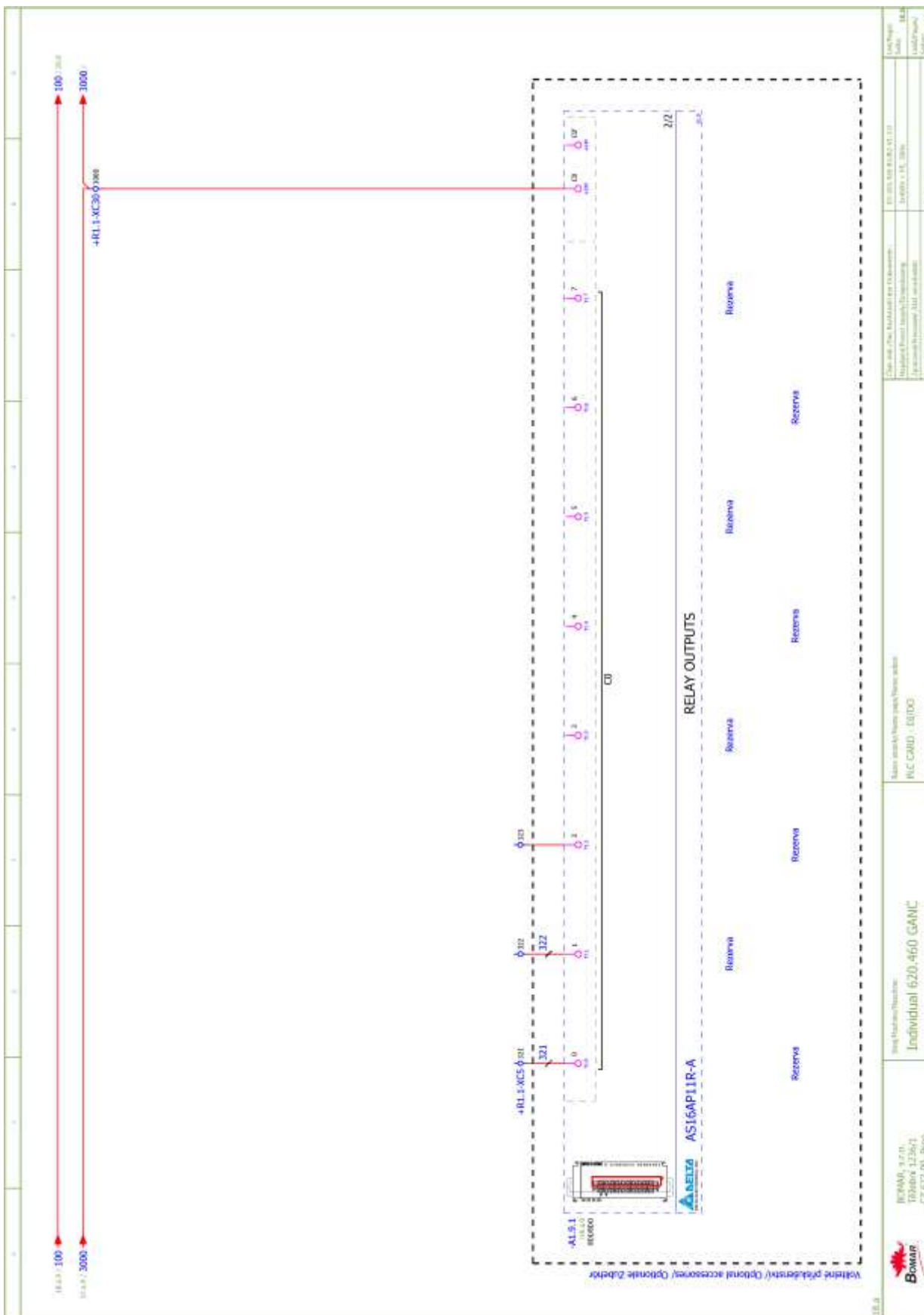


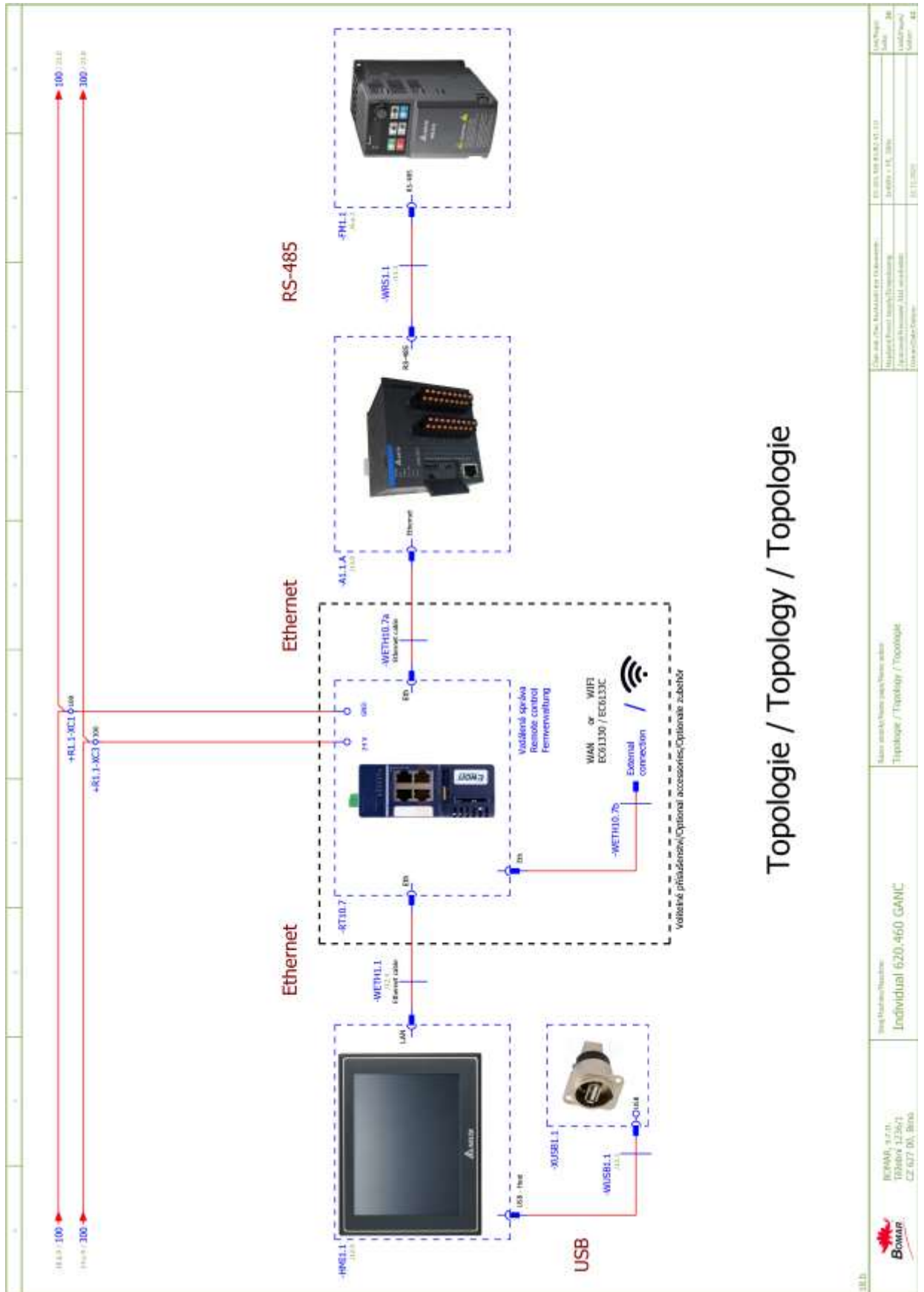




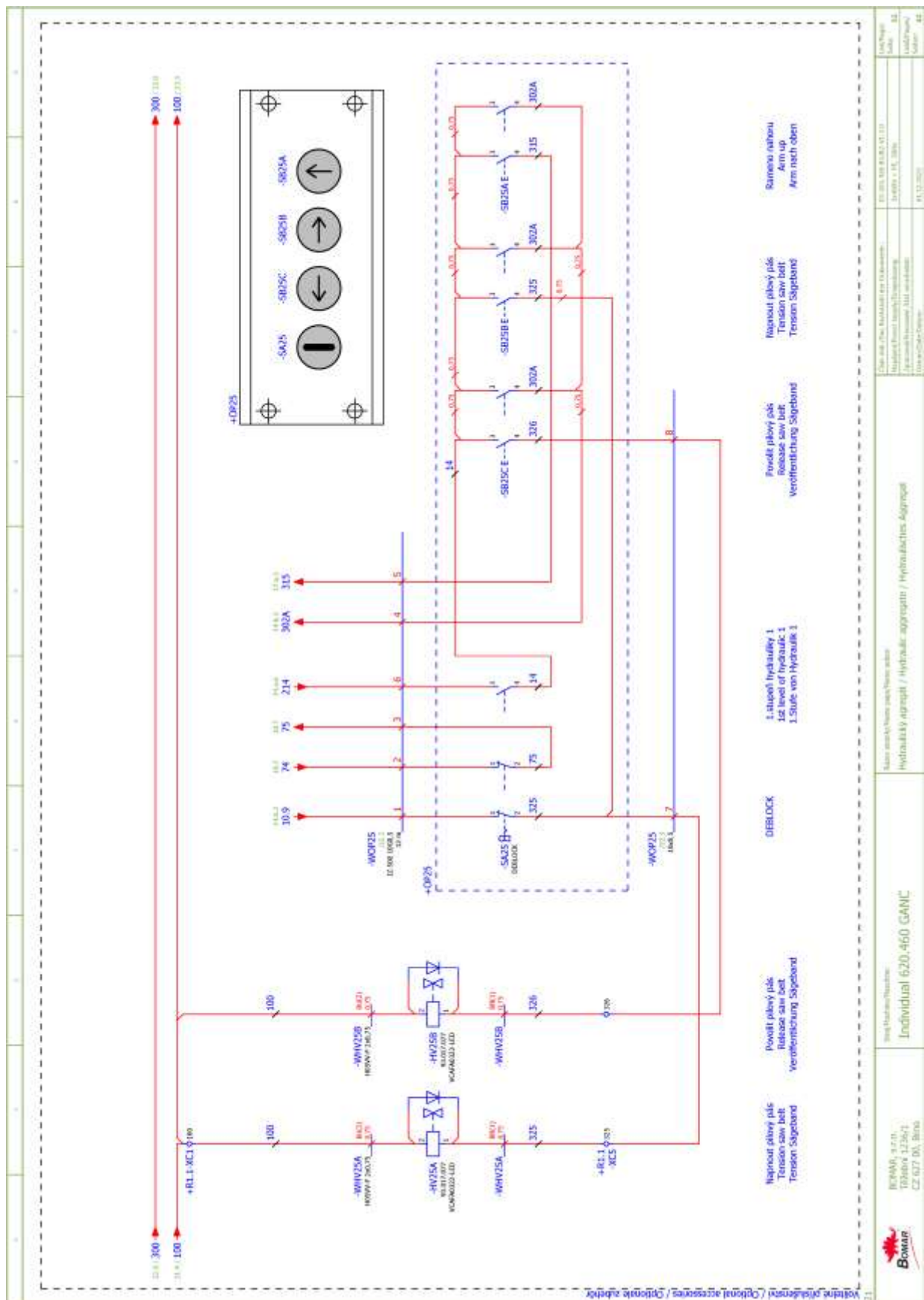


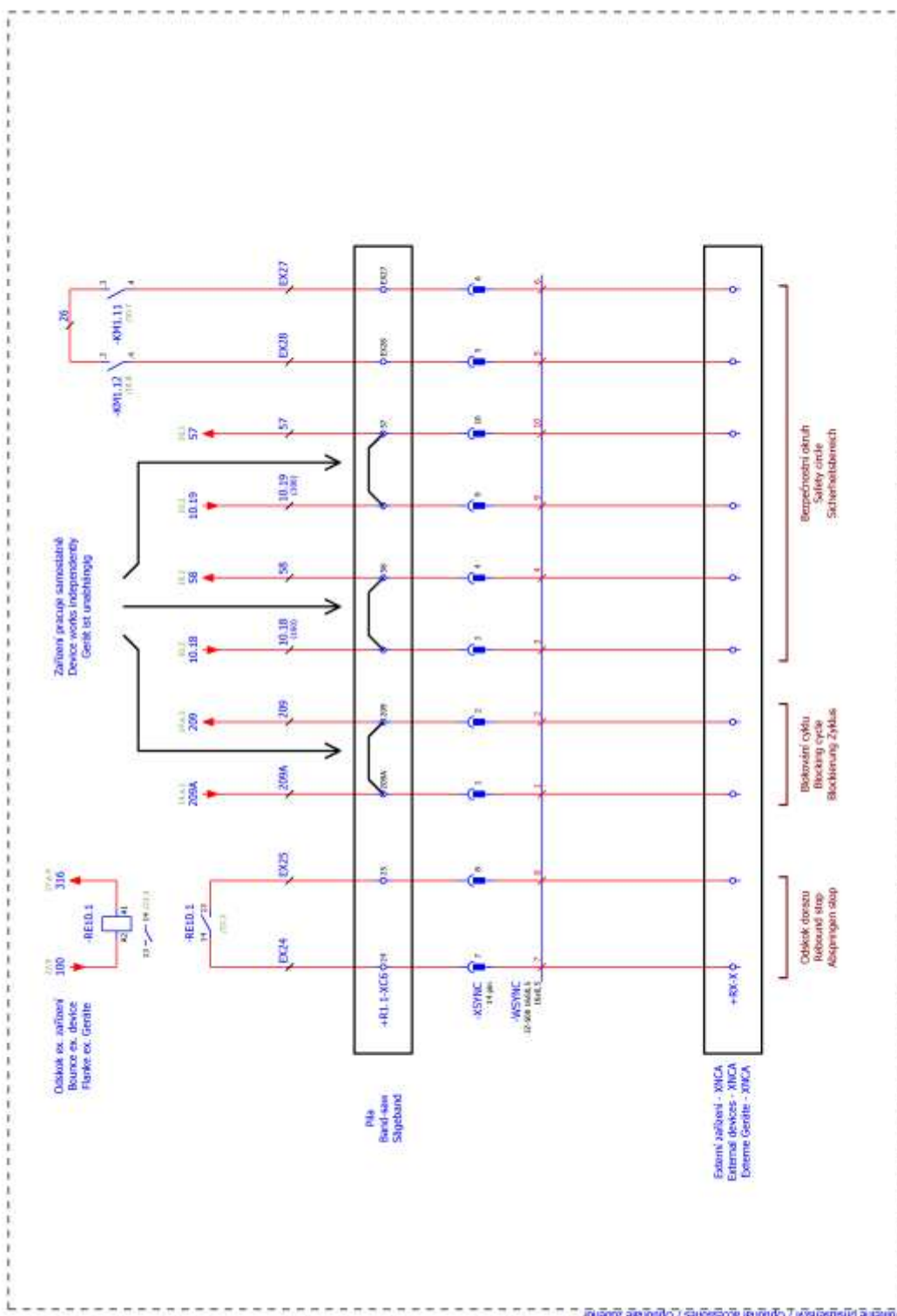












9.2. Elektrické schema / Elektroschema / Wiring diagrams



Individual 620.460 GANC

3x230V + PE, 50/60Hz

Wiring diagram

ES-101.426-B3-V1.3.0

Bomar, spol. s r.o.
Těžební 1236/1
627 00 Brno
Czech republic



	BOMAR, s.r.o. Těžební 1236/1 627 00 Brno	Wiring Diagrams / Elektroschema Individual 620.460 GANC	Notes and file names given in this section: Unedited drawing / Schematic diagram / Diagrama	Project / Elektroschema / Wiring Diagram Title of drawing / Name of drawing Drawing / Elektroschema / Wiring Diagram Drawing / Elektroschema / Wiring Diagram	101.426-B3-V1.3.0 101.426-B3-V1.3.0 101.426-B3-V1.3.0 101.426-B3-V1.3.0
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/2	Obsah / Content / Inhalt	27.02.2023
/2.a	Obsah / Content / Inhalt	27.02.2023
/3	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/3.a	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/3.b	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/3.c	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/3.d	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/3.e	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/3.f	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/3.g	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/3.h	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/3.i	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/3.j	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/3.k	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/3.l	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/3.m	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/3.n	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/3.o	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/3.p	Kusovník artiklů / Parts list / Artikelstückliste	27.02.2023
/4.a	Rozmístění prvků v rozvaděči R1/Placement of elements in enclosure R1/Platzierung der Elemente im Schaltschrank R1	27.02.2023
/5	Ovládací panel na mřížkách/Control panel/Bedienput	15.03.2022
/6	Slovní část / Power part / F&D parte	27.02.2023
/6.a	Polohy přívodů pístů / Saw belt drive / Saw Elementartrieb	27.02.2023
/7	Připojení pohonů M2, M3 / Drivings connection M2, M3 / Antriebsanschluss M2, M3	27.02.2023
/9	Náhlaví zdroj 24V DC / Power supply 24V DC / Stromversorgung 24V DC	27.02.2023
/10	Bezpečnostní okruž / Safety circle / Sicherheitsbereich	14.02.2023
/11	Bezpečnostní zábrany / Safety barriers / Sicherheitsabstand	19.09.2022

3.0

 BOMAR, s.r.o. Těšínská 1226/1 CZ 672 00, Brno	Hong Kong Machinery Individual 620.460 GANC	Názor a schválení (Obsah / Content / Inhalt)	Jméno a příjmení Datum	18.11.2022 10:11:11 18.11.2022 10:11:11 18.11.2022	1 1 1

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/14	PLC - DI	20.10.2022
/14.a	PLC - DI	11.10.2022
/14.b	PLC - DO	09.12.2022
/14.c	PLC - IO	22.11.2022
/16	PLC CAMD - AI	01.11.2022
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/18.b	PLC CAMD - DI/DO	22.11.2022
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Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
--OP1.1	Deska ovládacího panelu - AI Control panel board - AI Bedienplatte - AI	31.26210.022	IFRISER	31.26210.022	1	/14.a.1
+OP1.1-RI.1	Signálka Indicator light Kontrolluchte	ZALYB6	TELEMECANIQUE	91.060.035	1	/14.b.9
--OP1.1-OP1.1	Potenciometr 4x7 Potentiometer 4x7 Potentiometer 4x7	TP195 4x7/N20A	Electronik spol.s r.o. a.s.	91.281.015	1	/6.a.5
--OP1.1-OP1.1	Svorka rychlospojka Fastconnect clamp Fast Connect Klemm	WAGO 224-112	WAGO	91.256.050	3	/6.a.5
--OP1.1-OP1.1	Hlavice potenciometru - 24mm Head of potentiometer 24mm Leiter Potentiometer 24mm	50877 BLK	GES-ELECTRONICS, s.r.o.	91.060.083	1	/6.a.5
--OP1.1-5A10.1	Physicel - 4x6 polarity Switch 1 positions Schalter 2 Positionen	ZB5-A01	Harmony	91.060.035	1	/21.1
--OP1.1-5A10.2	Physicel - 4x6 polarity Switch 2 positions Schalter 2 Positionen	ZB5-A03	Harmony	91.060.035	1	/21.4
--OP1.1-5B1.1	Hlavice odrazu prosvětlová - Harmony Head green backlit - Harmony Kopf grün hintergrundbeleuchtung - Harmony	ZB5AN13	TELEMECANIQUE	91.060.010	1	/14.a.1
--OP1.1-5B1.2	Hlavice tlačítka černá Button black head Taste Messer	ZB5A02	TELEMECANIQUE	91.060.013	1	/14.a.2
--OP1.1-5B1.3	Hlavice prosvětleného tlačítka modrá The button head backlit blue Der Knopfkopf blau hinterleuchtet	ZB6A736	TELEMECANIQUE	91.060.062	1	/10.7
--OP1.1-5B1.50	Tlačítko stop - Hlavice + 2xNC Emergency-stop - button + 2xNC Not-Aus-Pile - Tasten + 2xNC	YW1B-VREUR	IDEC	91.060.084	1	/10.4
--OP1.1-5B1.50	Kontakt - 1x NO Contact - 1x NO Kontakt - 1x NO	YW-E10	IDEC	91.061.044	1	/14.a.3

The manufacturer reserves right to use an equivalent replacement device.

1.3	 BOMAR, s.r.o. Dřevbina 1236/1 CZ 672 03, Brno	Jméno výrobce/Name of the manufacturer Elektronika aHil / Parts list / Artikelstichliste	Title and the location of the document Replacement Parts list/Ersetzung Ersatzteilnummer Teil und Name (Date of the change)	Date of the change 17.05.2019	Page number 48
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Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednáací číslo Part number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
+CP1.1-XUSB1.1	Konektor USB Connector USB Anschluss USB	CLIFF CP10110	CLIFF	91.141.110	1	/12.3
+CP1.1-XUSB1.1	Kryt zásuvky USB USB socket cover Abdeckung der USB-Buchse	CLIFF CP10112	CLIFF	91.141.111	1	/12.3
-H1.1.1	P5-41x89x74mm - šedá P5-41x89x74mm - grey P5-41x89x74mm - grau	Z54	SOS Electronic, spol. s r.o.	91.190.036	1	/16.1
-H1.1.1	Kabelová vývodka Cable gland Kabelverschraubung	AG-1545.12.06	Schmalzli CZ s.r.o.	91.070.010	2	/16.1
-H1.1.1	Matice černá Nut black Nuss schwarz	AGB45.12	Schmalzli CZ s.r.o.	91.072.010	1	/16.1
-A1.1.A	PLC řadič jednobla PLC Control Unit SPS Steuergerät	DELAS278P-A	DELTA ELECTRONICS, INC.	91.995.939	1	/11.0
-A1.1.A	Baterie CR-1620 Battery CR-1620 Batterie CR-1620	CR-1620	Panasonic	92.745.015	1	/11.0
-A1.3.1	Modul analogových vstupů 4x Analog input module 4x Analoga Eingangsmodul 4x	DELAS04AD-A	DELTA ELECTRONICS, INC.	91.995.933	1	/16.0
-A1.7.1	Modul reléových výstupů 8x Relay output module 8x Relais Ausgangsmodul 8x	DELAS08M010-A	DELTA ELECTRONICS, INC.	91.995.930	1	/17.0
-A1.9.1	Smíšený modul 8xIN, 8xOUT Mixed module 8xIN, 8xOUT Gemischtes Modul 8xIN, 8xOUT	DELAS16AP118-A	DELTA ELECTRONICS, INC.	91.995.934	1	/18.0
-B01.1	Bezpečnostní relé 24VDC, 3NO/1NC Safety relay 24VDC, 3NO/1NC Sicherheitsrelais 24VDC, 3NO/1NC	ABB JT1A010046R0000	ABB	91.051.076	1	/10.6
-B010.10	Bezpečnostní spínací přístroj Safety switch Sicherheitschalter	SICK 1065343	SICK	91.051.071	1	/11.6

The manufacturer reserves right to use an equivalent replacement device.

Operační přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	SKladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-ENC1.1	Lineární inkrementální snímač - 10-30VDC/10-30VDC Linear Encoder - 10-30VDC / 10-30VDC Linearsencodier - 10-30VDC / 10-30VDC	LMDX-026-08.0-1-00	ELCO	91.270.011	1	/14.1
-ENC1.1	Magnetická páska Magnetic tape Magnetband	ME20.50	ELCO	91.271.002	1	/14.1
-ENC1.2	Lineární inkrementální snímač - 10-30VDC/10-30VDC Linear Encoder - 10-30VDC / 10-30VDC Linearsencodier - 10-30VDC / 10-30VDC	LMDX-026-08.0-1-00	ELCO	91.270.011	1	/14.3
-ENC1.2	Magnetická páska Magnetic tape Magnetband	ME20.50	ELCO	91.271.002	1	/14.3
-FAL1	Motorový spouštěč - 0,63A Motor starter - 0,63A Motorsstarter - 0,63A	MS116-0,63	ABB	91.045.018	1	/7.2
-FAL1	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO+1xNC	HKF1-11	ABB	91.046.002	1	/7.2
-FAL2	Motorový spouštěč - 10A Motor starter - 10A Motorsstarter - 10A	MS116-10,0	ABB	91.045.014	1	/6.4
-FAL2	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO+1xNC	HKF1-11	ABB	91.046.002	1	/6.4
-FAL3	Motorový spouštěč - 1,6A Motor starter - 1,6A Motorsstarter - 1,6A	MS116-1,6	ABB	91.045.020	1	/7.2
-FAL3	Pomocné kontakty - 1xNO+1xNC Auxiliary contacts - 1xNO+1xNC Hilfskontakte - 1xNO+1xNC	HKF1-11	ABB	91.046.002	1	/7.2
-FAL3	Frekvenční měnič - 3,7kW, 3x230VAC Frequency converter - 3,7kW, 3x230VAC Frequenzumrichter - 3,7 kW, 3x230VAC	VFD1AHE230MMA	DELTA ELECTRONICS, INC.	91.012.196	1	/6.a.1
-FAL3	Pojistka Instrukční - 6,3A(250V, jmenovitá, 5x20) Tube fuse - 6,3A(250V, 40w, 5x20) Röhrensicherung - 7A,3A / 250V, 40w, 5x20	TA_3A(250V	ESKA	91.230.002	1	/9.1

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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
-F01.1	Svorka pojistková Fuse terminal Sicherungsklemme	SK0 - 2.3D	SHS Technology	91.251.102	1	/9.1
-F01.1	Svorka pojistková - koncové spoje Fuse terminal - termination Sicherungsklemme - Abschluss	SK0 - 2.5 RIDG	SHS Technology	91.251.123	1	/9.1
-F01.1B	Pojistka Inutičková - 6,3A/250V, pomalá, 5x20 Tube fuse - 6,3A/250V, slow, 5x20 Rohrsicherung - 10,3A / 250V, langsam, 5x20	T6.3A/250V	ESKA	91.230.007	1	/9.1
-F01.1B	Svorka pojistková Fuse terminal Sicherungsklemme	SK0 - 2.3D	SHS Technology	91.251.102	1	/9.1
-F01.2	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THS5U	WIELAND	91.251.102	1	/9.3
-F01.2	Pojistka Inutičková - 2A/250V, pomalá, 5x20 Tube fuse - 2A/250V, slow, 5x20 Rohrsicherung - 2A / 250V, langsam, 5x20	T2A/250V	ESKA	91.230.001	1	/9.3
-F01.3	Pojistka Inutičková - 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	/9.3
-F01.3	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THS5U	WIELAND	91.251.102	1	/9.3
-F01.4	Pojistka Inutičková - 700mA/250V, pomalá, 5x20 Tube fuse - 700mA/250V, slow, 5x20 Rohrsicherung - 700mA / 250V, langsam, 5x20	T700mA/250V	ESKA	91.230.069	1	/9.3
-F01.4	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THS5U	WIELAND	91.251.102	1	/9.3
-F01.5	Pojistka Inutičková - 1A/250V, pomalá, 5x20 Tube fuse - 1A/250V, slow, 5x20 Rohrsicherung - 1A / 250V, langsam, 5x20	T1A/250V	ESKA	91.230.011	1	/9.3
-F01.5	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/THS5U	WIELAND	91.251.102	1	/9.3

The manufacturer reserves right to use an equivalent replacement device.

 BOMAR, s.r.o. Třinec 1236/1 CZ-672 03, Březno	Výzva k podání nabídky Individual 620.460 GANC	Materiálův seznam / Parts list / Auftragsliste Kazanka vyřiz / Parts list / Auftragsliste	Cena s DPH, včetně DPH (Včetně Netto / Net / Netto)		1179,2000
			Netto / Net / Netto		
			Netto / Net / Netto		
			Netto / Net / Netto		
			1179,2000		

Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-F01.7	Pojistka indukční - 500mA/250V, pomalá, 5x20 Tube fuse - 500mA/250V, slow, 5x20 Röhrenschmelze - 500 mA / 250 V, langsam, 5x20	T500mA/250V	ESKA	91.230.011	1	/21.1
-F01.7	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/TH5SU	WIELAND	91.251.102	1	/21.1
-F01.8	Pojistka indukční - 200mA/250V, pomalá, 5x20 Tube fuse - 200mA/250V, slow, 5x20 Röhrenschmelze - 160mA / 250V, langsam, 5x20	T200mA/250V	ESKA	91.230.017	1	/21.4
-F01.8	Svorka pojistková Fuse terminal Sicherungsklemme	WK4/TH5SU	WIELAND	91.251.102	1	/21.4
-F01.8	Svorka pojistková - konečné číslo Fuse terminal - termination Sicherungsklemme - Abschluss	SK0 - 2.5 RIDG	SHS Technology	91.252.123	1	/21.4
-H10.4B	Maják - modrá Uplighthouse - Blue Leuchtturm - Blau	SL7-L-B	EATON	91.063.063	1	/14.b.7
-H10.4B	Žárovka 24V Lamp 24V Lampe 24V	SL7-L24	EATON	91.063.061	1	/14.b.7
-H10.4G	Maják - zelená Uplighthouse - green Leuchtturm - grün	SL7-L-G	EATON	91.063.060	1	/14.b.6
-H10.4G	Žárovka 24V Lamp 24V Lampe 24V	SL7-L24	EATON	91.063.061	1	/14.b.6
-H10.4R	Maják - červená Uplighthouse - red Leuchtturm - rot	SL7-L-R	EATON	91.063.062	1	/14.b.6
-H10.4R	Žárovka 24V Lamp 24V Lampe 24V	SL7-L24	EATON	91.063.061	1	/14.b.6
-H10.4T	Maják - základna Uplighthouse - Base Leuchtturm - Basis	SL7-CB-100	EATON	91.063.031	1	/14.b.5

The manufacturer reserves right to use an equivalent replacement device.

 BOMAR, s.r.o. Těšínská 1236/1 CZ 672 03, Brno	Long Machine Number: Individual 620.460 GANC	Main article/Name parts/Name article Elektronika vřetel / Parts list / Aufbauteileliste	Date and the Revision of the document Datum / Datum / Datum 11.05.2019		List Page Seite 44
			Prepared/Prepared/Prepared Prepraveno/Prepared/Prepared		List Page Seite 44
			Drawn/Drawn/Drawn Gezeichnet/Drawn/Drawn		List Page Seite 44

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
-H10.4Y	Heiß - Blau Lighthouse - yellow Leuchtturm - gelb	SL7-L-Y	EATON	91.063.059	1	/14.b.5
-H10.4Y	Zářivka 24V Lamp 24V Lampe 24V	SL7-L-24	EATON	91.063.061	1	/14.b.5
-H9L.1	H-motor_driver H-motor_driver H-motor_driver	3121-082	BOMAR s.r.o.	91.095.288	1	/14.c.2
-H9L1.1	H9L ovládací panel 7" H9L control panel 7" Bedienfeld 7"	DEL D06-107EG	DELTA ELECTRONICS, INC.	91.095.032	1	/12.0
-H9L1.1	Batérie CR-1620 Battery CR-1620 Batterie CR-1620	CR-1620	Panasonic	93.245.035	1	/12.0
-HVL1A	Ventilový konektor, LED Valve Plug, LED Ventilanschluss, LED	VCMFA0322-LED	Firecables Co., Ltd.	93.017.077	1	/17.a.1
-HVL1B	Ventilový konektor, LED Valve Plug, LED Ventilanschluss, LED	VCMFA0322-LED	Firecables Co., Ltd.	93.017.077	1	/17.a.2
-HVL1A	Ventilový konektor, LED Valve Plug, LED Ventilanschluss, LED	VCMFA0322-LED	Firecables Co., Ltd.	93.017.077	1	/17.a.3
-HVL1B	Ventilový konektor, LED Valve Plug, LED Ventilanschluss, LED	VCMFA0322-LED	Firecables Co., Ltd.	93.017.077	1	/17.a.4
-HVL1.3	Ventilový konektor, LED Valve Plug, LED Ventilanschluss, LED	VCMFA0322-LED	Firecables Co., Ltd.	93.017.077	1	/17.a.5
-HVL1.4	Ventilový konektor, LED Valve Plug, LED Ventilanschluss, LED	VCMFA0322-LED	Firecables Co., Ltd.	93.017.077	1	/17.a.6
-HVL1.5A	Ventilový konektor, LED Valve Plug, LED Ventilanschluss, LED	VCMFA0322-LED	Firecables Co., Ltd.	93.017.077	1	/17.a.6

The manufacturer reserves right to use an equivalent replacement device.

 BOMAR s.r.o. Třinec 1226/1 CZ-672 01, Břez	Typ přístroje / Device Individual 620.460 GAMC	Kusovník / Parts list / Artikelexemplar		Doplnění / Additions / Ergänzungen		Kusovník / Parts list / Artikelexemplar		Doplnění / Additions / Ergänzungen		Kusovník / Parts list / Artikelexemplar		Doplnění / Additions / Ergänzungen	
		Kusovník / Parts list / Artikelexemplar		Doplnění / Additions / Ergänzungen		Kusovník / Parts list / Artikelexemplar		Doplnění / Additions / Ergänzungen		Kusovník / Parts list / Artikelexemplar		Doplnění / Additions / Ergänzungen	
1.4		1.48 / July 2025		1		1		1		1		1	

Objednací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	SKladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
VCAFA0122-LED	Firecables Co.,Ltd.	93.017.077	1	/12.a.7
VCAFA0322-LED	Firecables Co.,Ltd.	93.017.077	1	/12.a.0
VCAFA0122-LED	Firecables Co.,Ltd.	93.017.077	1	/14.c.5
VCAFA0322-LED	Firecables Co.,Ltd.	93.017.077	1	/14.c.6
VCAFA0122-LED	Firecables Co.,Ltd.	93.017.077	1	/22.1
VCAFA0322-LED	Firecables Co.,Ltd.	93.017.077	1	/22.2
AF59-30-01-11	ABB	91.040.047	1	/14.b.1
AF12-30-10-11	ABB	91.040.050	1	/14.b.2
AF16-30-10-11	ABB	91.040.056	1	/10.7
CA4-10	ABB	91.041.044	1	/10.7
AF10-30-10-11	ABB	91.040.050	1	/10.8
CA4-10	ABB	91.041.044	1	/10.8

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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
-K010.3	Střídač - 4kW/400V, 3P Contactor - 4kW/400V, 3P Schütz - 4 kW / 400V, 3P	A099-30-01-11	ABB	91.040.047	1	/14.b.3
-LP1	LED lampy LED lamp LED-Lampe	FL-T-24-183W	WUDECO	91.100.115	1	/21.1
-LP10.2	Laser Laser Laser	Laser 24AC/DC	HOFMAN SYSTEMS s.r.o.	91.100.109	1	/21.4
-LQ1.1a	Jednosměrná světelná zářivka - výhled; M12 konektor, 0,3 m Through-beam sensor transmitter; M12-male; 0,3 m Einseitiglichtschranke Sender; M12-male; 0,3 m	IFM O65701	IFM electronic	91.401.031	1	/14.7
-LQ1.1b	Jednosměrná světelná zářivka - přijímač; M12 konektor, 0,3 m Through-beam sensor receiver; M12-male; 0,3 m Einseitiglichtschranke Empfänger; M12-male; 0,3 m	IFM O6E701	IFM electronic	91.401.030	1	/14.8
-LQ10.8a	Jednosměrná světelná zářivka - výhled; M12 konektor, 0,3 m Through-beam sensor transmitter; M12-male; 0,3 m Einseitiglichtschranke Sender; M12-male; 0,3 m	IFM O65701	IFM electronic	91.401.031	1	/18.a.1
-LQ10.8b	Jednosměrná světelná zářivka - přijímač; M12 konektor, 0,3 m Through-beam sensor receiver; M12-male; 0,3 m Einseitiglichtschranke Empfänger; M12-male; 0,3 m	IFM O6E701	IFM electronic	91.401.030	1	/18.a.1
-M1.1	Čerpadlo čističů 120W Cooling pump 120W Kühlpumpe 120W	PA20120	SAP 60	91.030.032	1	/7.7
-M1.5	Ventilátor 24VDC, 15KCFH Fan 24VDC, 15KCFH Fan 24VDC, 15KCFH	BOH1238 B2	Minidraul Electronic Co.	91.015.126	1	/6.a.9
-M10.3	Asynchronní motor 3x230/400V, 50Hz, 0,75kW Asynchronous motor 3x230 / 400V, 50Hz, 0.75 kW Asynchronmotor 3x230 / 400V, 50Hz, 0.75 kW	BM71A4	BOH1238 B2	91.061.255	1	/7.2
-PAL.1	Kojalka vířivá - 32A, 10x38, rychlá Tube hose - 32A, 10x38, fast Rohrschleule - 32A, 10x38, schnell	PE10 32A 9S	CEZ	91.230.019	3	/8.a.1
-PAL.1	Popelkový ovladač pro vířivou věšbu - 3P Switch fuse for the cylinder inserts - 3P Schalter - Sicherung für den Zylinderansätze - 3P	E 91/32	ABB	91.341.014	1	/8.a.1

The manufacturer reserves right to use an equivalent replacement device.

 BOMAR, s.r.o. Třinec 1226/1 CZ 672 00, Březno	Long Machine Number: Individual 620.460 GANC	Make serials/Name serials/Name serials Make serials/Name serials/Name serials	Date and the location of the document Date and the location of the document Datum und Ort des Dokuments	Date of the document Date of the document Datum	Page Page Seite

Označení přístroje Device identification Geräte-Identifikation	Typ přístroje Device description Gerätebeschreibung	Objednáací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-QS1.1	3 pólový odpojkač, 40A Disconnecter - 3P, 40A Trennschalter - 3P, 40A	QT40T3	ABB	91.170.019	1	/6.1
-QS1.1	Klíč svorek Terminal shroud Klemmenabdeckung	QT540T3	ABB	91.170.017	1	/6.1
-QS1.1	Rukojeť odpojovače - černá Handle switch - black Griffschalter - schwarz	QH65J10	ABB	91.180.015	1	/6.1
-RCF0	Ochráněvací filtr ZSA Noise filter ZSA Rauschfilter ZSA	2SEB1550AC2	WIDECON TECHNOLOGY s.r.o.	91.041.063	1	/6.a.1
-RE10.1	Páticové relé CR-P Plug-in relay CR-P Stecken Sie in Relais CR-P	CR-P024XC2	ABB	91.051.049	1	/23.3
-RE10.1	Pátice pro relé Relay socket Relaissockel	CR-PSS	ABB	91.051.048	1	/23.3
-RE10.3	Páticové relé CR-P Plug-in relay CR-P Stecken Sie in Relais CR-P	CR-P024XC2	ABB	91.051.049	1	/14.b.4
-RE10.3	Pátice pro relé Relay socket Relaissockel	CR-PSS	ABB	91.051.048	1	/14.b.4
-RT10.2	Modem-router eWON COSY 111, WAN Modem-router eWON COSY 111, WAN Modem-router eWON COSY 111, WAN	EC61130	eWON	91.990.034	1	/20.3
-RT10.7	Modem-router eWON COSY 111, WIFI Modem-router eWON COSY 111, WIFI Modem-router eWON COSY 111, WIFI	EC6113C	eWON	91.990.035	1	/20.3
-RT10.7	Ethernet kabel 1m Ethernet cable 1m Ethernetkabel 1m	REL-C0-5-010 RELive	Cables with connector	91.140.129	1	/20.3
-SQ1.1	Koncový spínač - 1NC+1NO Limit switch - 1NC+1NO Endschalter - 1NC+1NO	DHR-403	CAMRON	91.171.007	1	/14.a.7

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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
-SQ1.1	Kabelová vývodka H20 Cable gland H20 Kabelverschraubung	KAMAT AG-1545.20.13	Agro	91.070.012	1	/14.a.7
-SQ1.2	Korcový spínač - 1NC+1NO Limit switch - 1NC+1NO Endschalter - 1NC+1NO	DNR-4431	OMRON	91.173.007	1	/14.6
-SQ1.2	Kabelová vývodka H20 Cable gland H20 Kabelverschraubung	KAMAT AG-1545.20.13	Agro	91.070.012	1	/14.6
-SQ1.5	Korcový spínač - 1NO + 1NC, klacka, pomalá akce Limit switch - 1NO + 1NC, pulley, slow action Endschalter - 1NO + 1NC, role, langsame Einwirkung	FR 605-MQ	PIZZATO	91.173.009	1	/14.1
-SQ1.5	Kabelová vývodka H20 Cable gland H20 Kabelverschraubung	KAMAT AG-1545.20.13	Agro	91.070.012	1	/14.1
-SQ1.6	Korcový spínač - 1NC+1NO, M01, pomalý Limit switch - 1NC+1NO, M20, slow Endschalter - 1NC+1NO, M20, langsam	DNR-4432	OMRON	91.173.010	1	/14.a.5
-SQ1.6	Kabelová vývodka H20 Cable gland H20 Kabelverschraubung	KAMAT AG-1545.20.13	Agro	91.070.012	1	/14.a.5
-SQ1.16	Korcový spínač - 1NO + 1NC, klacka, pomalá akce Limit switch - 1NO + 1NC, pulley, slow action Endschalter - 1NO + 1NC, role, langsame Einwirkung	FR 605-MQ	PIZZATO	91.173.009	1	/6.a.3
-SQ1.16	Kabelová vývodka H20 Cable gland H20 Kabelverschraubung	KAMAT AG-1545.20.13	Agro	91.070.012	1	/6.a.3
-SQ1.51	Bezpečnostní korcový spínač - 2xNC Safety Limit Switch - 2x NC Sicherheitsendschalter - 2x NC	QXS8	REDO	91.173.012	1	/10.4
-SQ1.52	Bezpečnostní korcový spínač - 2xNC Safety Limit Switch - 2x NC Sicherheitsendschalter - 2x NC	QXS8	REDO	91.173.012	1	/10.4
-SQ10.4	Induktivní vlnílač vzdálenosti Inductive proximity sensor Induktive Näherungssensor	BMW RD6AC-UMF200-EP703	BALLUFF	91.173.010	1	/10.1

The manufacturer reserves right to use an equivalent replacement device.

 BOMAR, s.r.o. Třinec 1226/1 CZ-672 00, Březůvka	Long Machine Number: Individual 620.460 GANC	Make serial/Name plate/Name label: Make serial/Name label/Name label	Date and the location of the document: Date and the location of the document Date and the location of the document		Part Name: Part Name Part Name
			Date and the location of the document: Date and the location of the document Date and the location of the document		Part Name: Part Name Part Name

Kusovník artiklů / Parts list / Stückliste

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-SQ11.1	Krucový spínač - INO + INC Unit switch - INO + INC Endschalter - INO + INC	FK 1301-MI	PIZZATO	91.171.015	1	/14.a.4
-SQ11.1	V-BOMED M16x1,5 - černá V-BOMED M16x1,5 - black V-BOMED M16x1,5 - schwarz	AG-1545-17-10	KAWAT 4008 s.r.o.	91.070.011	1	/14.a.4
-SZ10.10A	Výparníková bezpečnostní světelná závora - přijímač Safety multi-beam light curtain - receiver Sicherheits-Heizstrahl - Lichtvorhang - Empfänger	MME-034020400	SICK	91.401.039	1	/11.3
-SZ10.10B	Výparníková bezpečnostní světelná závora - vysílač Safety multi-beam light curtain - transmitter Sicherheits-Heizstrahl - Lichtvorhang - Sender	MME-034000400	SICK	91.401.038	1	/11.0
-WETH1.1	Ethernet kabel 1m Ethernet cable 1m Ethernetkabel 1m	REL-CK-5-010-REL1m	Cables with connector	91.142.129	1	/12.4
-WH10.4	PVC, Realbild, barevné značení PVC, Realbild, color marking PVC, Realbild, Farbmarkierung	32-100 7x0,75	Cables	41.100.011	1	/14.b.5
-WHV1.1A	PVC, Realbild, barevné značení PVC, Realbild, color marking PVC, Realbild, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/17.a.1
-WHV1.1B	PVC, Realbild, barevné značení PVC, Realbild, color marking PVC, Realbild, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/17.a.2
-WHV1.2A	PVC, Realbild, barevné značení PVC, Realbild, color marking PVC, Realbild, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/17.a.3
-WHV1.2B	PVC, Realbild, barevné značení PVC, Realbild, color marking PVC, Realbild, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/17.a.4
-WHV1.3	PVC, Realbild, barevné značení PVC, Realbild, color marking PVC, Realbild, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/17.a.5
-WHV1.4	PVC, Realbild, barevné značení PVC, Realbild, color marking PVC, Realbild, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/17.a.6

The manufacturer reserves right to use an equivalent replacement device.

 BOMAR s.r.o. Těšínská 1236/1 CZ 672 00, Brno	Jméno dodávatele Individual 620.460 GANC	Název zařízení/Name of device Křesadlo w1841 / Parts list / Arbeitsstückliste	Datum und die Revision des Dokuments Date and the Revision of the Document 14.09.2019 14.09.2019		List Page Seite 41 (total 41 pages)
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			Datum und die Revision des Dokuments Date and the Revision of the Document 14.09.2019 14.09.2019		

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
-WHV1.5A	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/17.a.6
-WHV1.5B	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/17.a.7
-WHV10.5	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.007	1	/17.a.8
-WHV20A	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/14.c.5
-WHV20B	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/14.c.6
-WHV25A	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/22.1
-WHV25B	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 2x0,75 C černý	Cables	41.100.002	1	/22.2
-WLQ10.1	PUR, záruška M8, 3-pin, nestárý, LED, přímý, 10 m Cable with straight connector M8, 3pin Kabel mit geradem Stecker M8, 3pin	BOM-600W3-06/10M	Cables with connector	91.142.032	1	/21.1
-WLQ10.2	PUR, záruška M8, 3-pin, nestárý, LED, přímý, 10 m Cable with straight connector M8, 3pin Kabel mit geradem Stecker M8, 3pin	BOM-600W3-06/10M	Cables with connector	91.142.032	1	/21.4
-WLQ11.4	PUR, záruška M12, 4-pin, nestárý, přímý, 10 m Cable 10m with connector M12 4pin Kabel 10m mit Stecker M12 4-polig	DOL-1204-G10M	Cables with connector	91.142.033	1	/14.7
-WLQ11.5	PUR, záruška M12, 4-pin, nestárý, přímý, 10 m Cable 10m with connector M12 4pin Kabel 10m mit Stecker M12 4-polig	DOL-1204-G10M	Cables with connector	91.142.033	1	/14.7
-WLQ15.8a	PUR, záruška M12, 4-pin, nestárý, přímý, 10 m Cable 10m with connector M12 4pin Kabel 10m mit Stecker M12 4-polig	DOL-1204-G10M	Cables with connector	91.142.033	1	/18.a.1

The manufacturer reserves right to use an equivalent replacement device.

Označení přístroje Device identification Geräteidentifikation	Typ přístroje Device description Gerätebeschreibung	Objednací číslo Type number Typennummer	Výrobce Manufacturer Hersteller	Skladové číslo Part number Lagernummer	Množství Quantity Menge	Umístění Location Stelle
-NOLQ10.8B	PUR, šlakovka M12, 4-pin, odolnější, 60m, 10 m Cable 10m with connector M12 4pin Kabel 10m mit Stecker M12 4 polig	DOL-1204-G104C	Cables with connector	91.142.033	1	/18 a.1
-WH1.1	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 4x0,15 C černý	Cables	41.100.005	1	/7.2
-WH1.2	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 4x0,15 C černý	Cables	41.100.005	1	/6.4
-WH1.4	PVC, flexibilní, silnější, číslované značení PVC, flexible, sturdier, numbered marking PVC, flexibel, gestärkt, nummeriert	F-CP-32 4x2,5	Cables	41.145.008	1	/6 a.1
-WH1.5	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 3x0,75 C černý	Cables	41.100.002	1	/6 a.9
-WH10.3A	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 4x0,15 C černý	Cables	41.100.005	1	/7.2
-WH10.3B	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 4x0,15 C černý	Cables	41.100.005	1	/7.2
-WCP25	PVC, flexibilní, číslované značení PVC, flexible, numbered marking PVC, flexibel, Nummerierung	32-500 1000,5	Cables	41.136.038	1	/22.3
-WVP10.6	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 3x0,75 C černý	Cables	41.100.002	1	/14 a.1
-WRS1.1	UTP 4x2x0,14mm ² , kroucené páry UTP 4x2x0,14mm ² , twisted in pairs UTP 4x2x0,14mm ² , zusammen verdreht	FTP 4x2x0,14 Category 5	Cables	41.145.007	1	/13.3
-WSP1.1	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	H05VV-F 3x0,75 C černý	Cables	41.100.002	1	/14.5
-WSP1.2	PVC, výsoka flexibilita, číslované značení PVC, highly flexible, numbered marking PVC, hochflexibel, nummeriert	32-4HP 2x0,75	Cables	41.135.001	1	/14.6

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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
-WSQ1.1	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	HDSV-F 2x0,75 C černý	Cables	41.100.002	1	/14.a.7
-WSQ1.2	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	HDSV-F 2x0,75 C černý	Cables	41.100.002	1	/14.6
-WSQ1.5	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	HDSV-F 2x0,75 C černý	Cables	41.100.007	1	/14.1
-WSQ1.6	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	HDSV-F 2x0,75 C černý	Cables	41.100.002	1	/14.a.5
-WSQ1.16	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	HDSV-F 2x0,75 C černý	Cables	41.100.002	1	/14.3
-WSQ1.51	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	HDSV-F 4x0,75 C černý	Cables	41.100.004	1	/10.4
-WSQ1.52	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	HDSV-F 4x0,75 C černý	Cables	41.100.004	1	/10.4
-WSQ10.4	PVC, barevné značení PVC, color marking PVC, Farbkennzeichnung	TRONIC 3x0,34	Cables	41.145.016	1	/16.1
-WSQ11.1	PVC, flexibilní, barevné značení PVC, flexible, color marking PVC, flexibel, Farbmarkierung	HDSV-F 2x0,75 C černý	Cables	41.100.002	1	/14.a.4
-WSYMC	PVC, flexibilní, číslování značení PVC, flexible, numbered marking PVC, flexibel, Nummerierung	ZE-500 16x0,5	Cables	41.136.012	1	/23.2
-WSZ10.10A	PUR, šlakovka M12, 8-pin, šňůry, 15 m Cable with straight connector M12, 8pin Kabel mit geradem Stecker M12, 8pin	DOL-1275G15NEZ500H0	Cables with connector	91.142.015	1	/11.3
-WSZ10.10B	PUR, šlakovka M12, 8-pin, šňůry, 15 m Cable with straight connector M12, 8pin Kabel mit geradem Stecker M12, 8pin	DOL-1275G15NEZ500H0	Cables with connector	91.142.015	1	/11.0

The manufacturer reserves right to use an equivalent replacement device.

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
-X10.3.1	Kabel USB 0,5 m USB cable 0,5 m USB-Kabel 0,5 m	GOOBAY 93010	GOOBAY	91.141.113	1	/12.3
-X10.3	Zásuvka konektoru 7pin Connector socket 7 pin Anschlusstecker 7-polig	SOS.2111384-1	SOS Electronic, spol. s r.o.	91.141.001	1	/7.2
-X10.3	Zásuvka konektoru 7pin Connector plug 7pin Anschlusstecker 7pol	SOS.2111402-1	SOS Electronic, spol. s r.o.	91.141.007	1	/7.2
-X10.3	Zásuvkový kontakt Multimate III+ F Contact Multimate III+ F Buchsenkontakt Multimate III+ F	SOS.163284-1	SOS Electronic, spol. s r.o.	91.141.006	4	/7.2
-X10.3	Redukce pro 7 pin konektor Reduction for 7 pin connector Reduzierung für 7 poligen Stecker	BOMAR.30.0130-025	BOMAR s.r.o.	30.0130-025	2	/7.2
-X10.3	Zásuvkový kontakt Multimate III+ M Plug contact Multimate III+ M Steckkontakt Multimate III+ M	SOS.163282-1	SOS Electronic, spol. s r.o.	91.141.007	4	/7.2
-X10.3	V-BRED M16x1,5 - černá V-BRED M16x1,5 - Black V-BRED M16x1,5 - schwarz	AG-15MS.17.10	KAMAT spol. s r.o.	91.070.011	2	/7.2
-XSYMC	Zásuvka konektoru 14pin Connector socket 14 pin Anschlusstecker 14-polig	SOS.182841-1	SOS Electronic, spol. s r.o.	91.141.013	1	/23.3
-XSYMC	Zásuvka konektoru 14pin Connector plug 14pin Anschlusstecker 14pol	SOS.182840-1	SOS Electronic, spol. s r.o.	91.141.014	1	/23.3
-XSYMC	Zásuvkový kontakt Multimate III+ F Contact Multimate III+ F Buchsenkontakt Multimate III+ F	SOS.163284-1	SOS Electronic, spol. s r.o.	91.141.006	12	/23.3
-XSYMC	Zásuvkový kontakt Multimate III+ M Plug contact Multimate III+ M Steckkontakt Multimate III+ M	SOS.163282-1	SOS Electronic, spol. s r.o.	91.141.007	12	/23.3
-XSYMC	Redukce pro 14 pin konektor Reduction for 14 pin connector Reduzierung für 14 poligen Stecker	BOMAR.30.0130-025	BOMAR s.r.o.	30.0130-025	2	/23.3

The manufacturer reserves right to use an equivalent replacement device.

BOMAR s.r.o. Těšínská 1226/1 CZ-672 03, Brno		Hing Manufacturing Individual 620.460 GANC		Date and the location of the document Replaces the previous description Replaces the previous description Replaces the previous description		12.05.2019 10:51:11		12.05.2019 10:51:11		12.05.2019 10:51:11	
BOMAR s.r.o.		Individual 620.460 GANC		Replaces the previous description		12.05.2019 10:51:11		12.05.2019 10:51:11		12.05.2019 10:51:11	
BOMAR s.r.o.		Individual 620.460 GANC		Replaces the previous description		12.05.2019 10:51:11		12.05.2019 10:51:11		12.05.2019 10:51:11	

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
+XYMC	V-EDMED M16x1,5 - černá V-EDMED M16x1,5 - black V-EDMED M16x1,5 - schwarz	AG-15-05.17.10	KANAT spol. s r.o.	91.070.011	2	/22.3
ZD1.1	Regulátor 24VDC 10A Power supply 24VDC 10A Stromversorgung 24VDC 10A	DEL DRL-24V24WHEN	DELTA ELECTRONICS, INC.	91.085.041	1	/9.0
+OP15	Knočka se 4 otvory Box with 4 holes Box mit 4 Löchern	M22-14	EATON	91.190.015	1	/22.3
+OP15	Kabelová vývodka M20 Cable gland M20 Kabelverschraubung	KANAT AG-15-05.20.13	Agro	91.070.012	1	/22.3
+OP15	Matice čírná M20x1,5 Black nut M20x1,5 Schwarze Mutter M20x1,5	KANAT AG-80-05.20	Agro	91.072.012	1	/22.3
+OP15-SQ25	Hlavice 2 polohového přepínače, H20k Head 2 position switch, key Head 2 Positionsschalter, Schlüssels	M22-WRS2	EATON	91.060.070	1	/22.3
+OP15-SQ25	Kontaktní blok - 1NC, 1C, 1NO Contact block - 1NC, 1C, 1NO Hilfskontakt 1NC, zu Box	M22-KC01	EATON	91.061.015	2	/22.3
+OP15-SB25A	Hlavice tlačítka - černá Head button - black Kopfknopf - schwarz	M22-D-S	EATON	91.060.015	1	/22.8
+OP15-SB25A	Kontaktní blok - 1NC, 1C, 1NO, do krabíčky Contact block - 1NC, 1C, 1NO, to box Hilfskontakt 1NC, zu Box	M22-KC10	EATON	91.061.010	2	/22.8
+OP15-SB25A	Hlavice tlačítka - šipka Pushbutton fingerboard - arrow Druckknopf Griffrett - Pfeil	M22-XD-S-X7	EATON	91.062.002	1	/22.8
+OP15-SB25B	Hlavice tlačítka - černá Head button - black Kopfknopf - schwarz	M22-D-S	EATON	91.060.015	1	/22.7
+OP15-SB25B	Kontaktní blok - 1NC, 1C, 1NO, do krabíčky Contact block - 1NC, 1C, 1NO, to box Hilfskontakt 1NC, zu Box	M22-KC10	EATON	91.061.010	2	/22.7

The manufacturer reserves right to use an equivalent replacement device.

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
+OP25-5825B	Hruškové tlačítko - šipka Pushbutton fingerboard - arrow Druckknopf Greifbrett - Pfeil	M02-XD-S-X7	EATON	91.062.002	1	/22.7
+OP25-5825C	Hruškové tlačítko - černá Pushbutton fingerboard - black Knopfasse - schwarz	M02-D-S	EATON	91.060.015	1	/22.6
+OP25-5825C	Kontaktní blok - INO; do krabičky Contact block - INO; in box Hilfskontakt INO; zu Box	M02-KC10	EATON	91.061.010	2	/22.6
+OP25-5825C	Hruškové tlačítko - šipka Pushbutton fingerboard - arrow Druckknopf Greifbrett - Pfeil	M02-XD-S-X7	EATON	91.062.002	1	/22.6

The manufacturer reserves right to use an equivalent replacement device.

1.0



BOMAR s.r.o.
Těšínská 1226/1
CZ-672 00, Brno

Long Machine Number:

Individual 620.460 GANC

Main article Name/Name article

Kusovník artiklů / Parts list / Artikelexemplar

File and File Number/Date of Revision

Replace/Change/replace/replace
Previous Version: 1.01
Date: 11.10.2019

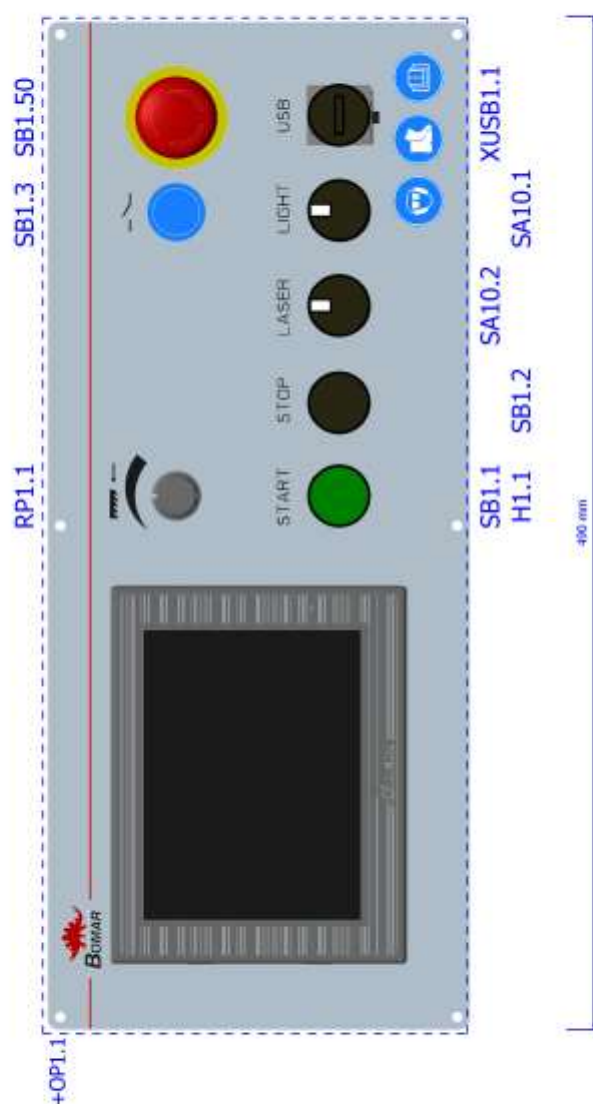
File and File Number/Date of Revision

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Previous Version: 1.01
Date: 11.10.2019

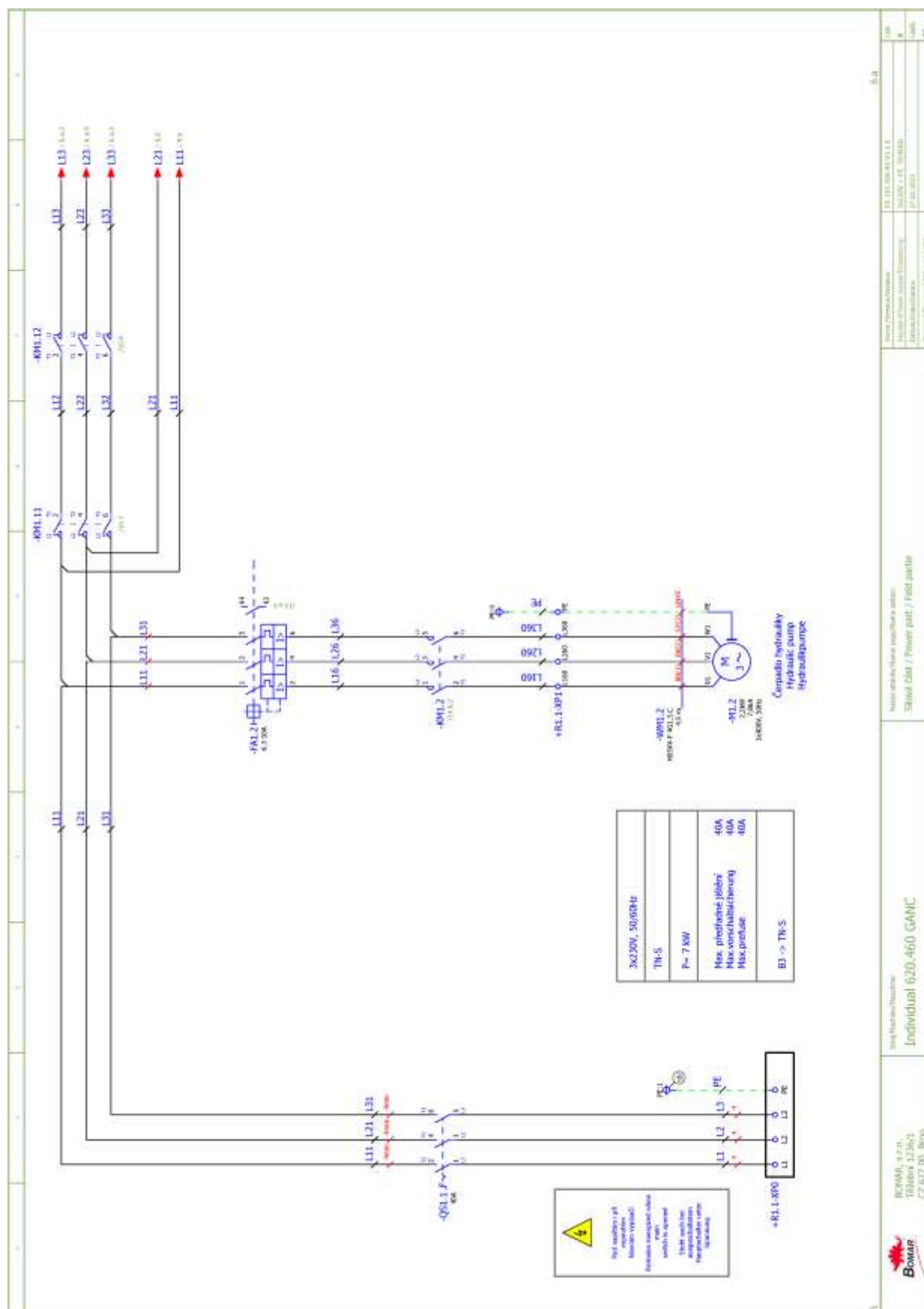
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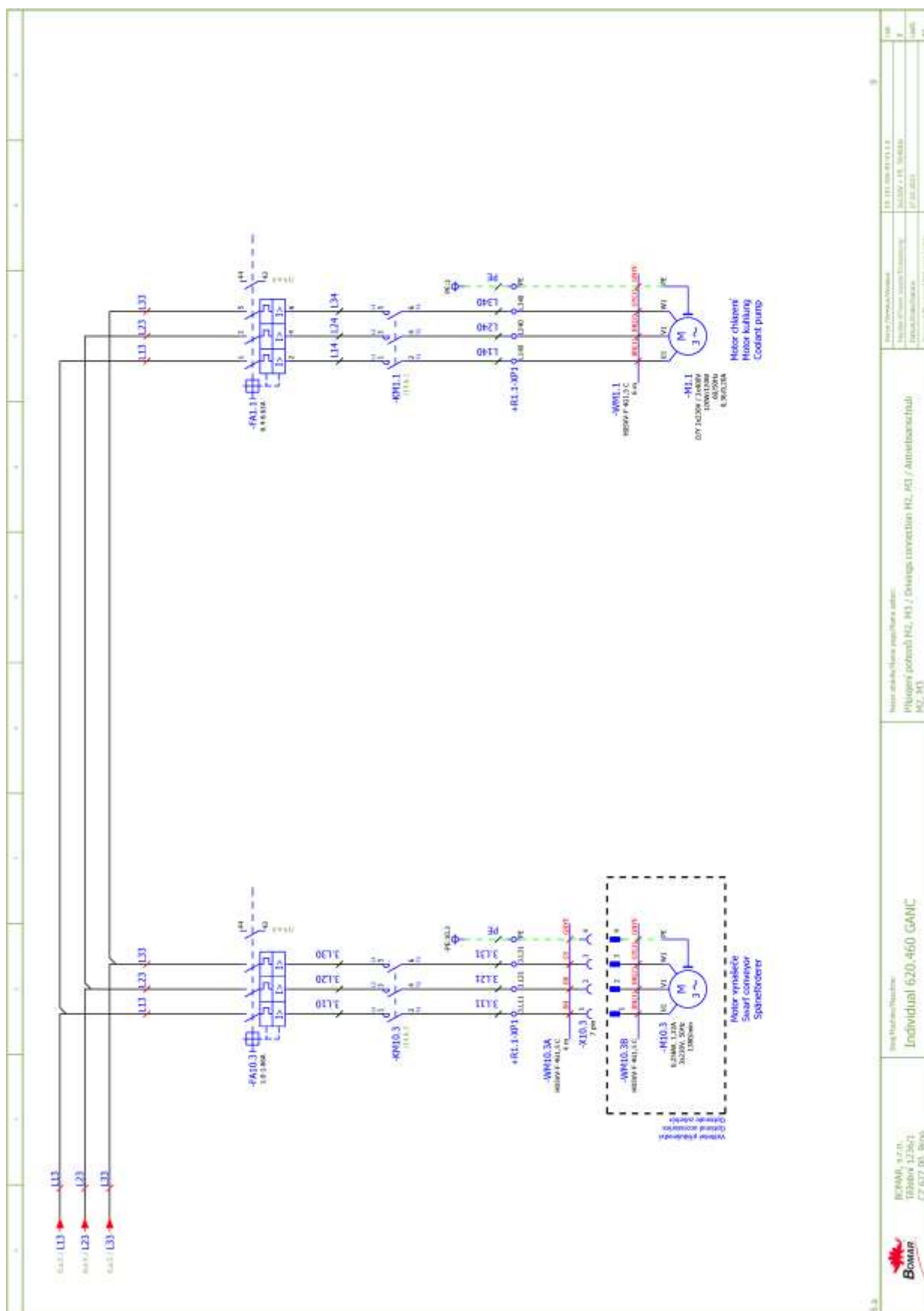
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Date: 11.10.2019

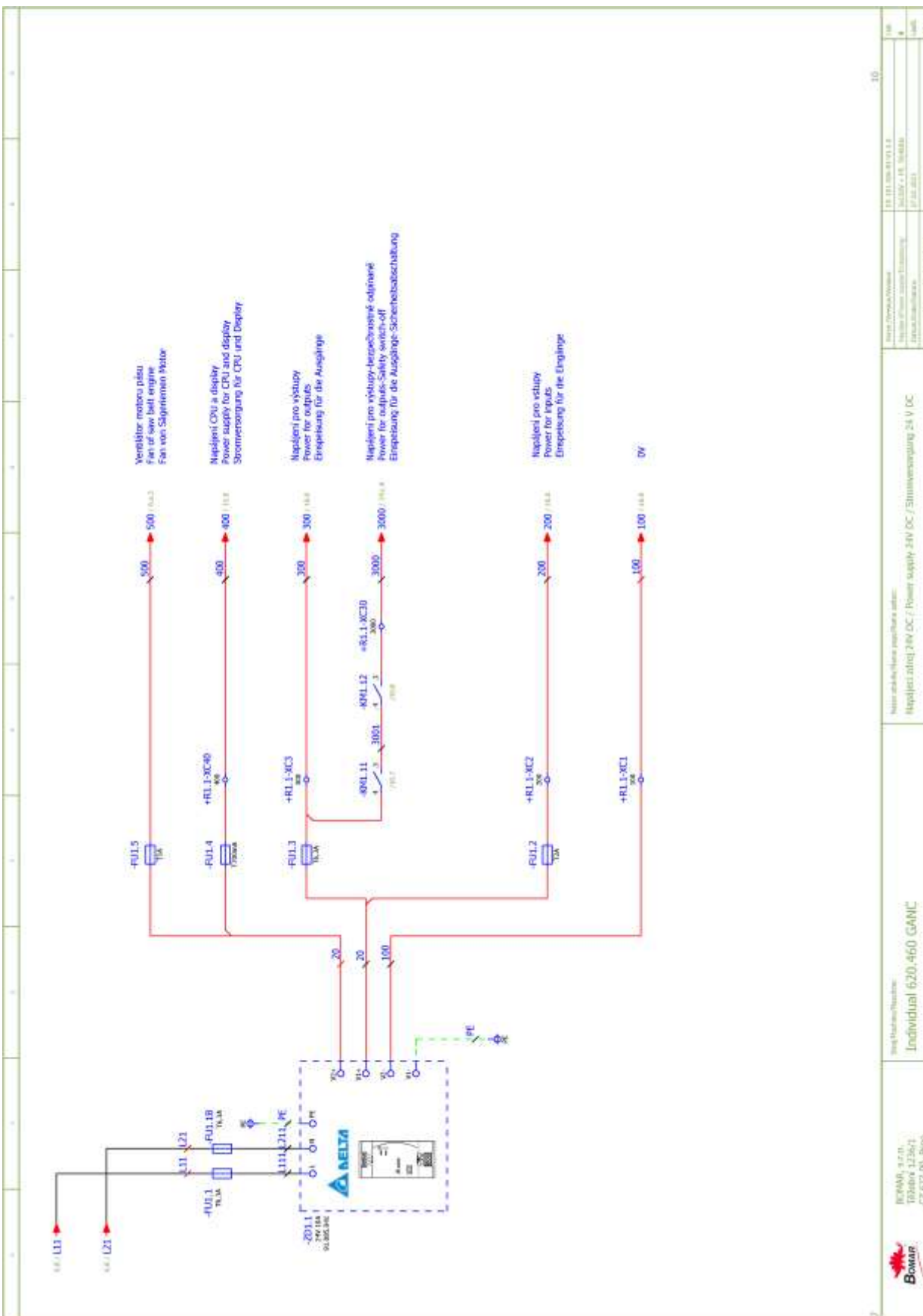
	BOMAR, s. r. o. Iľská 12, 362/1 CZ 637 03, Břežec	Jang Vladimír, Thurnheim Individual 620, 460 GANC	Način držanja: Način jeper/Način u držanju: Način držanja: Način jeper/Način u držanju: Način držanja: Način jeper/Način u držanju: Način držanja: Način jeper/Način u držanju:	Način držanja: Način jeper/Način u držanju: Način držanja: Način jeper/Način u držanju: Način držanja: Način jeper/Način u držanju: Način držanja: Način jeper/Način u držanju:	Način držanja: Način jeper/Način u držanju: Način držanja: Način jeper/Način u držanju: Način držanja: Način jeper/Način u držanju: Način držanja: Način jeper/Način u držanju:
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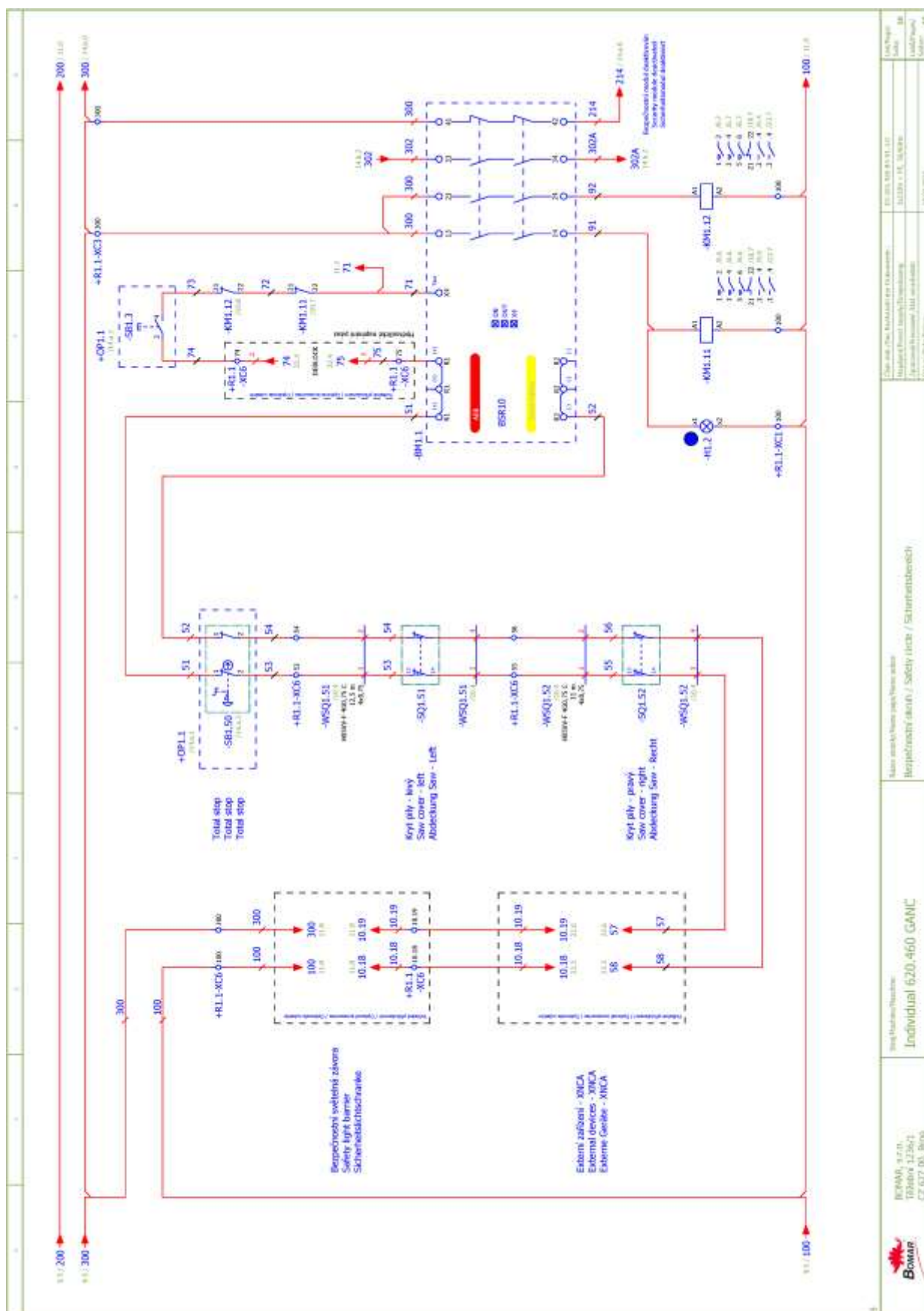


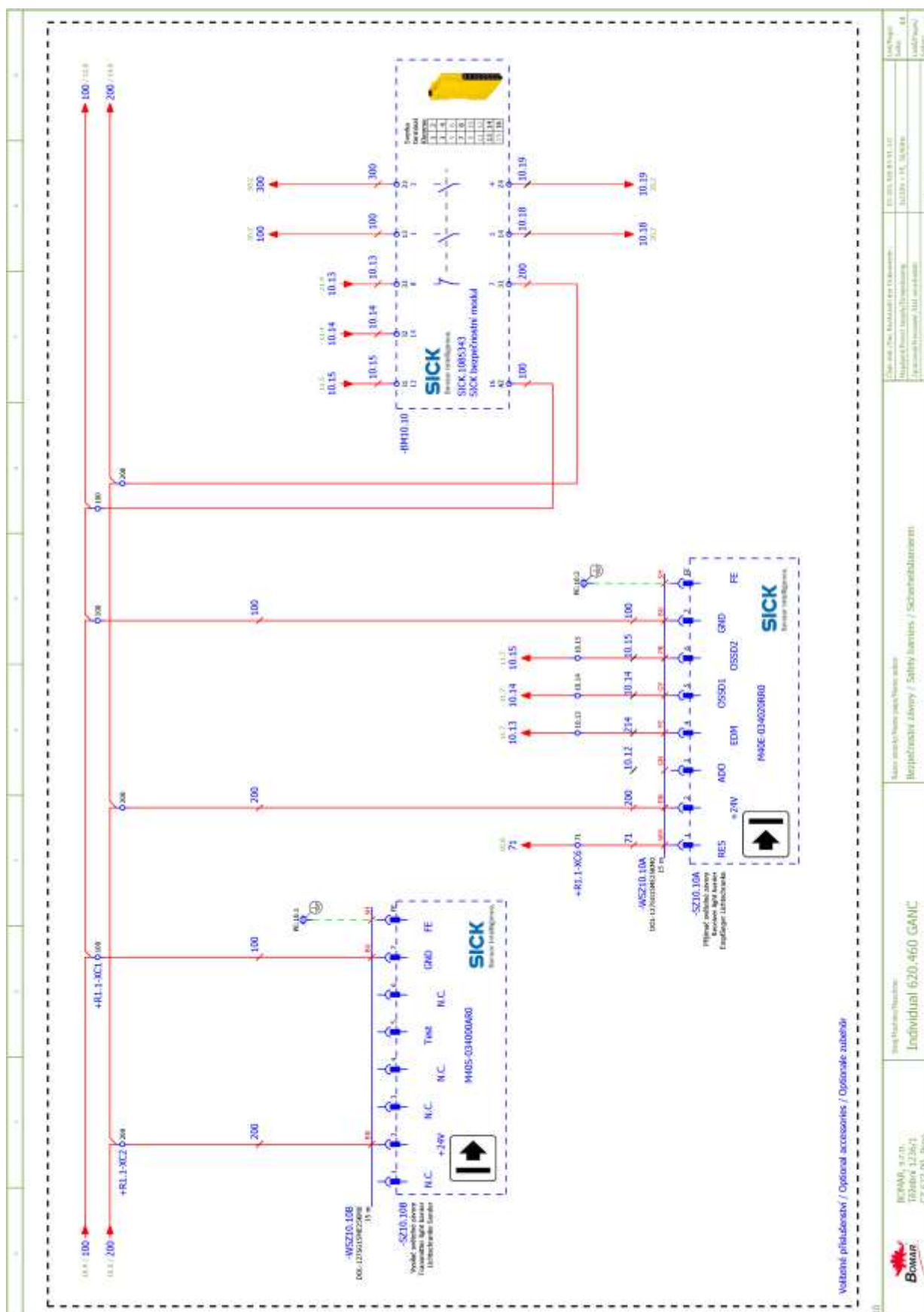
4.3		BOMAR s.p.a. T038094 112611 CZ 672 00, BRNO	Long Machine/ Machine Individual 620.460 GANC	Notes and Accessories page/Part's list: Oxidací panel na navařování/Control panel/Baldesquart	Notes and Accessories page/Part's list: Oxidací panel na navařování/Control panel/Baldesquart	140 8 140
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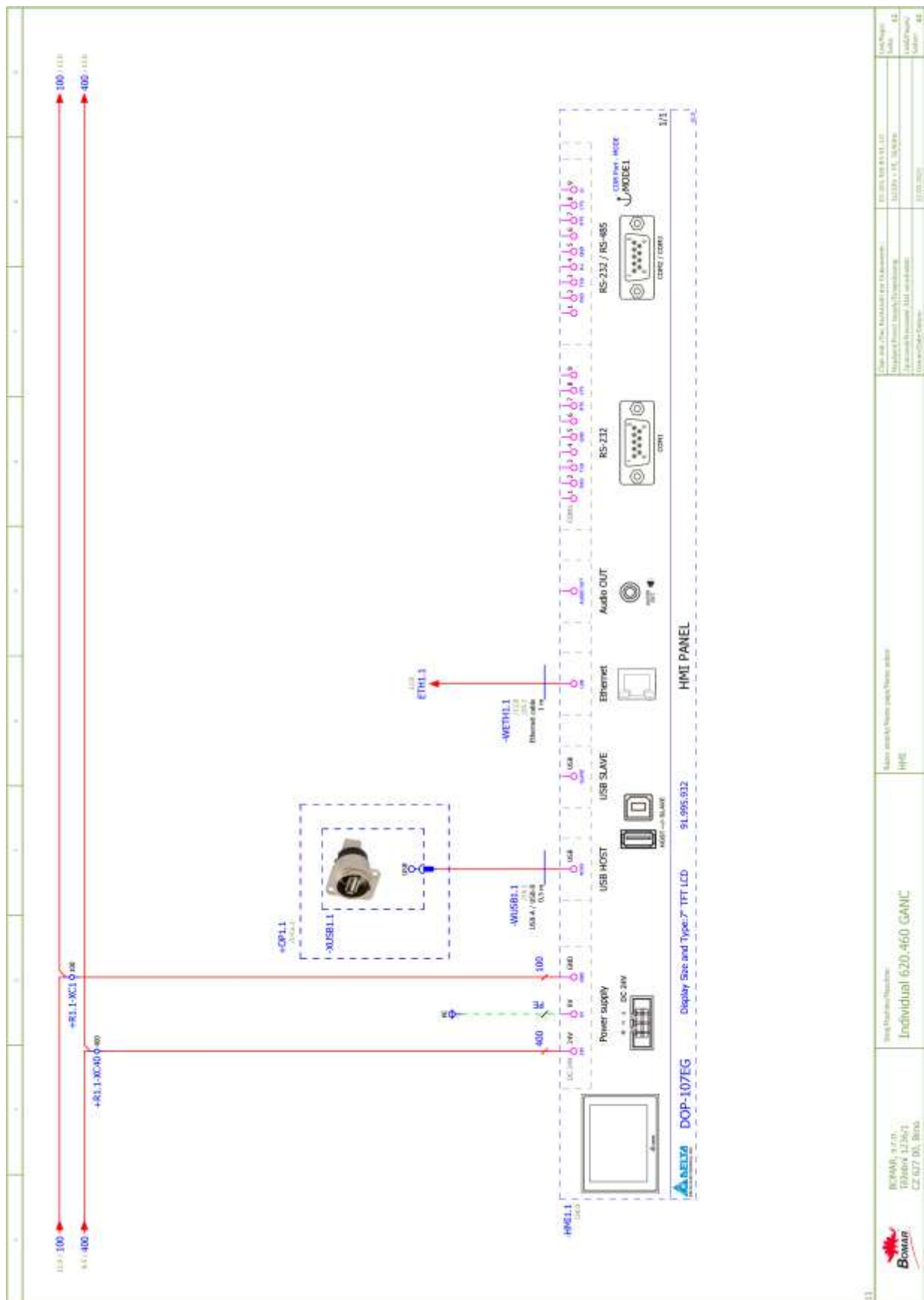


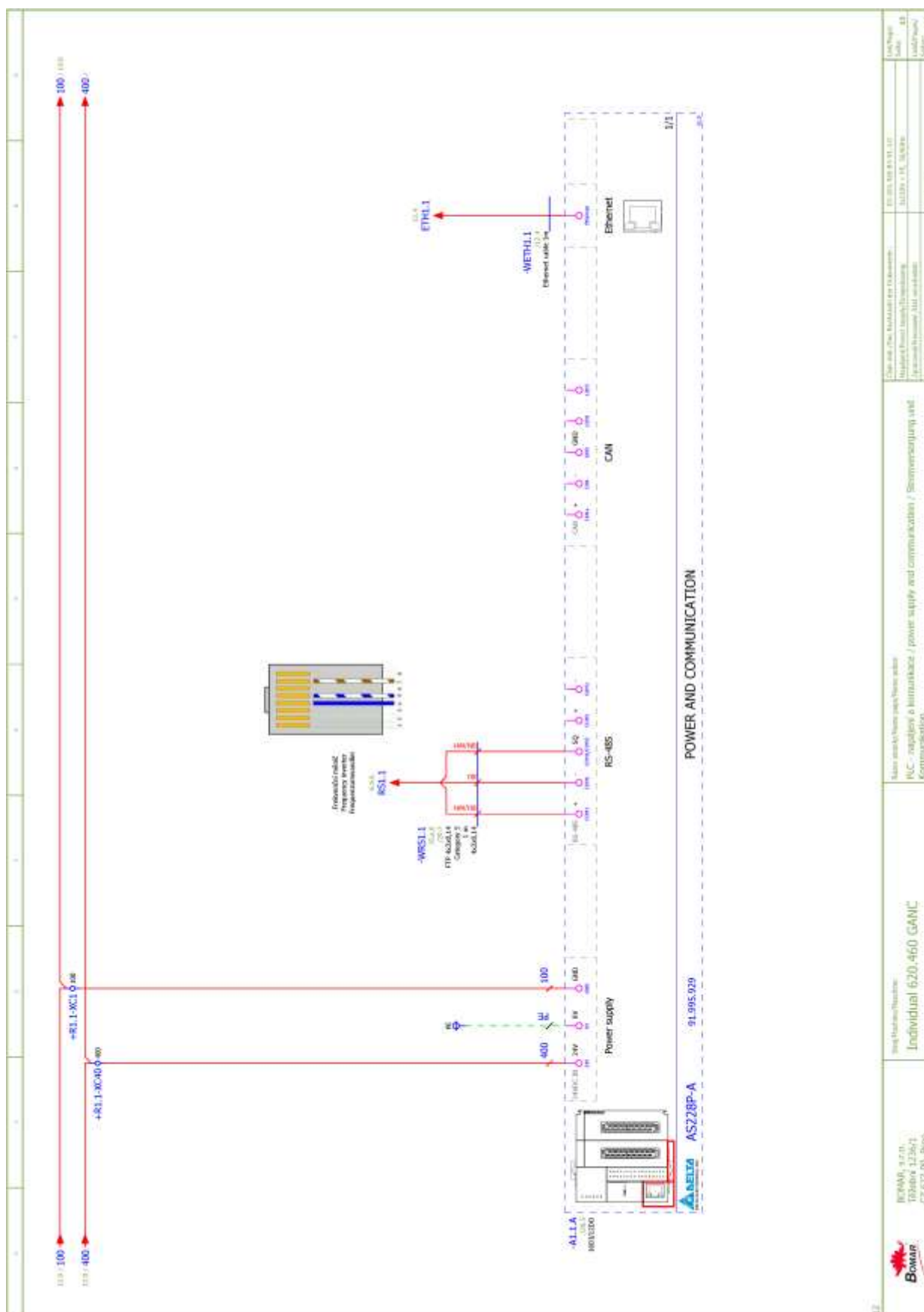


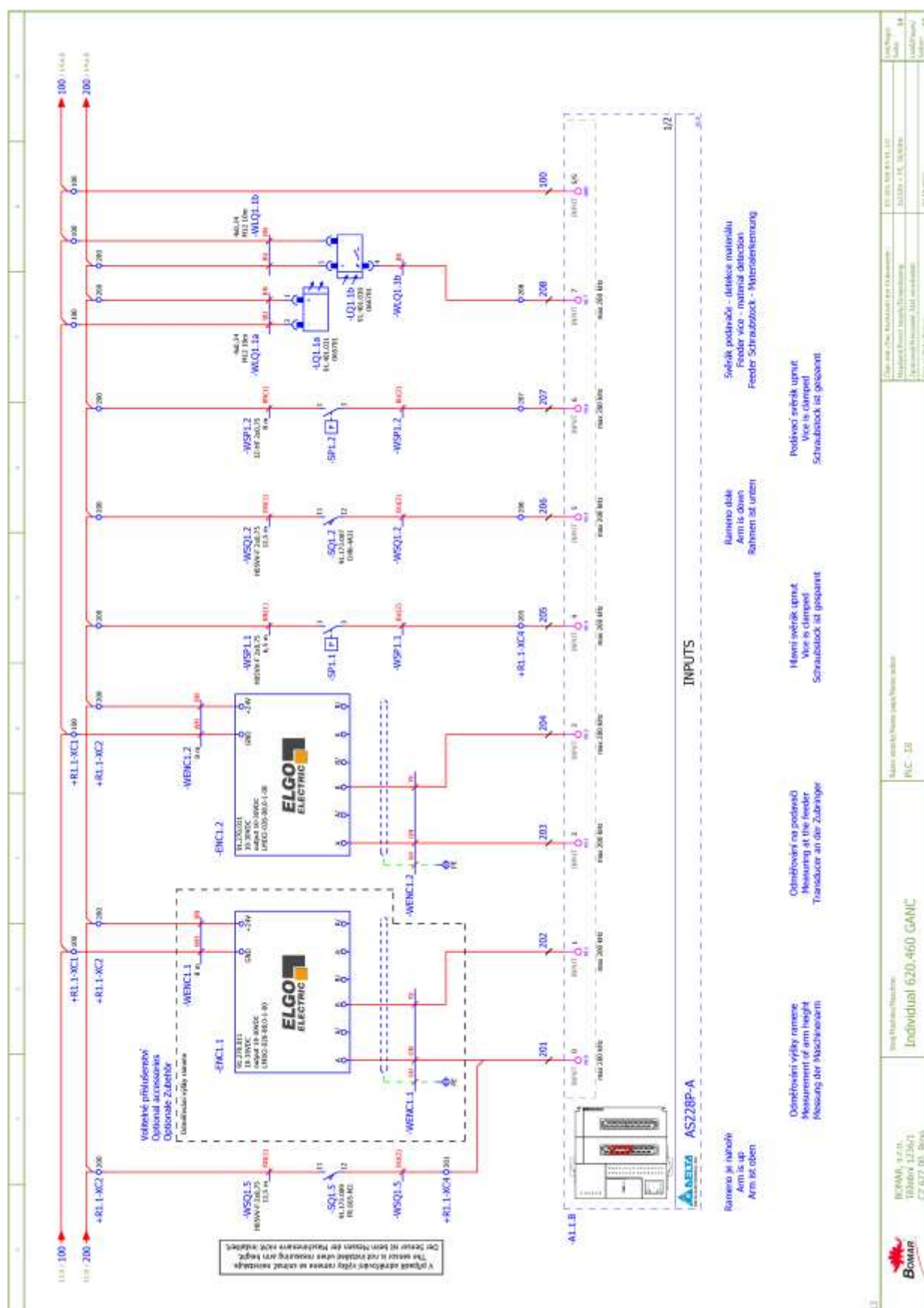


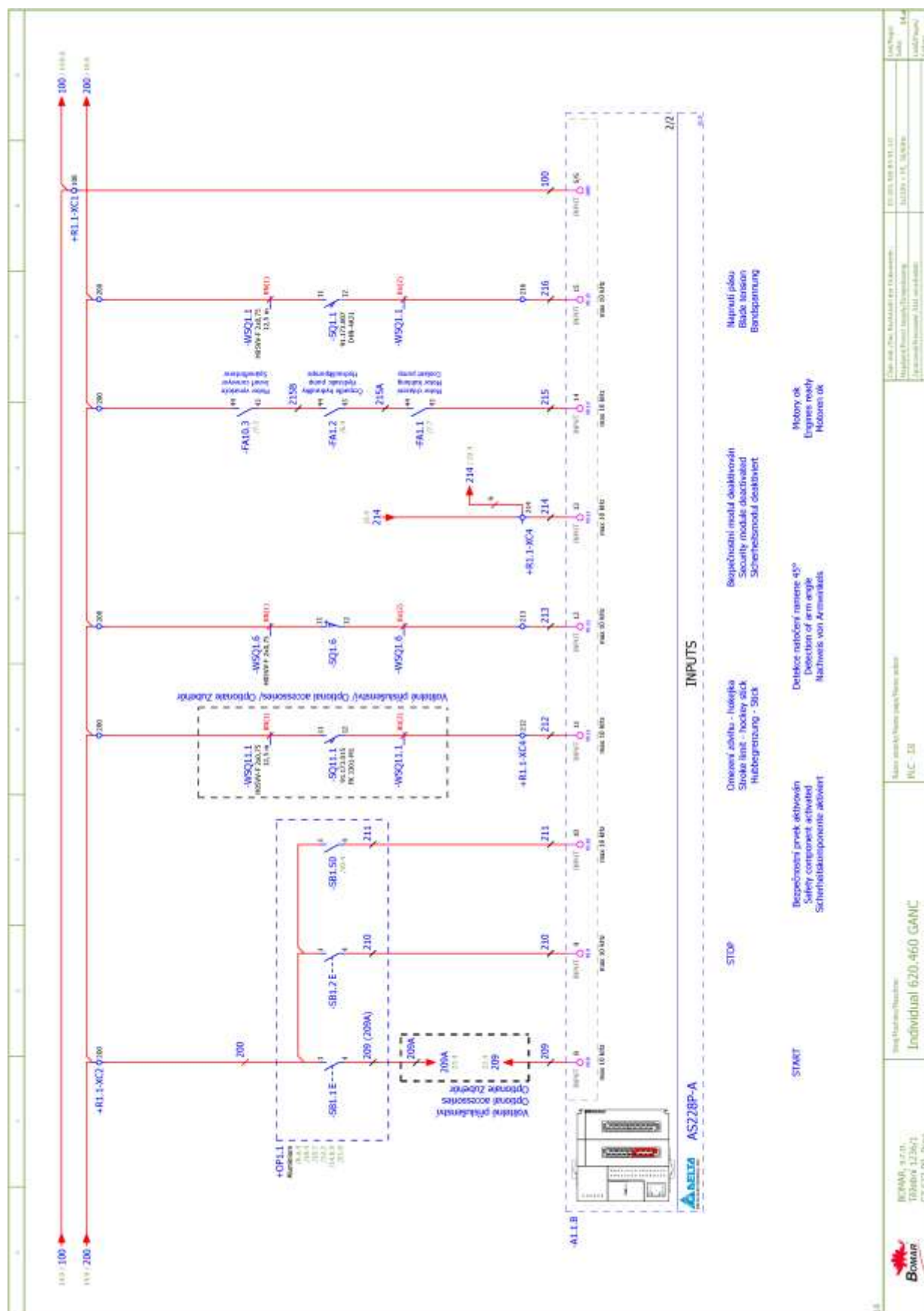
Volitelné příslušenství / Optional accessories / Optionale zubehör

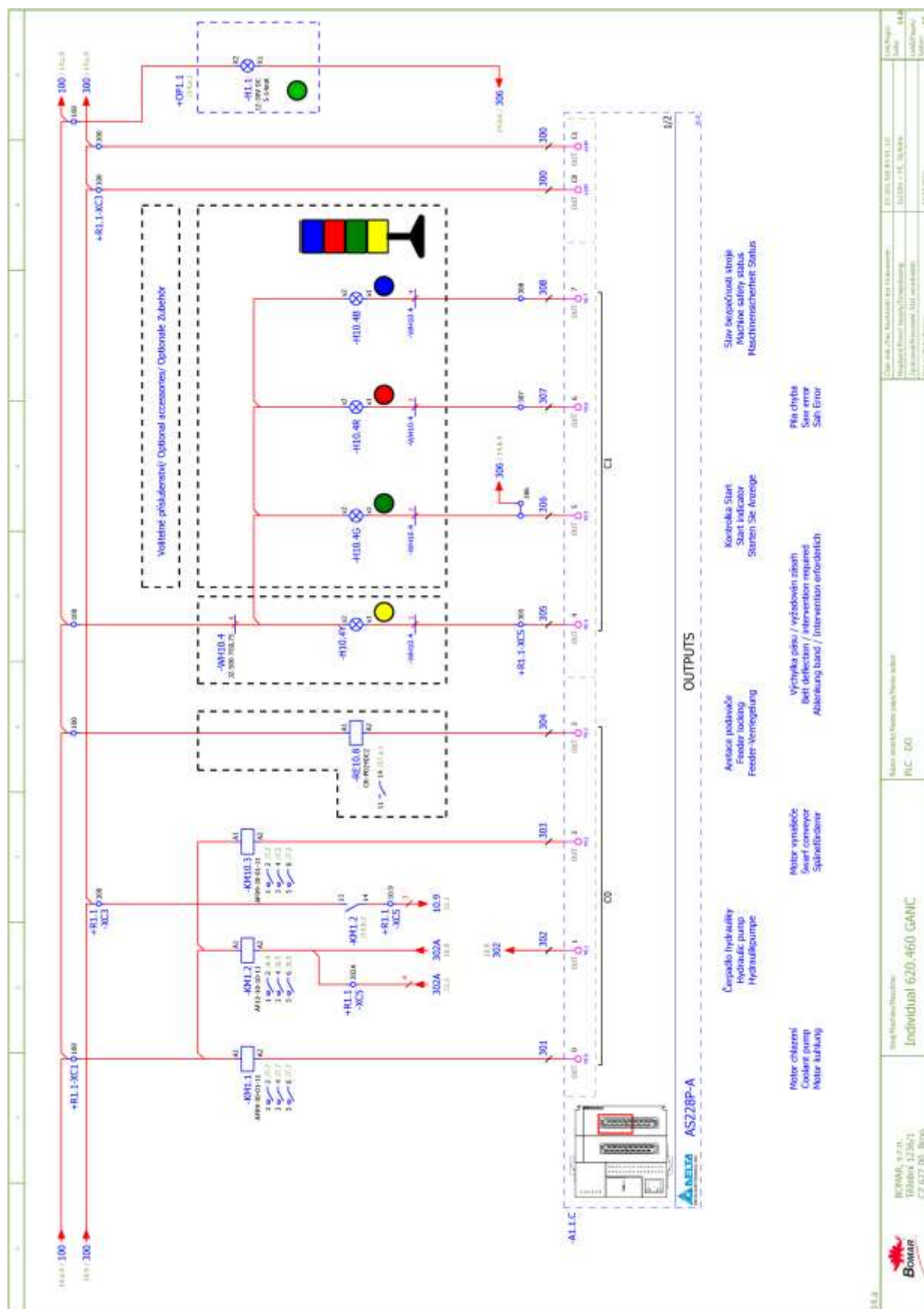
	BOMAR, s.r.o. Těšínská 1236/1 CZ 672 03, Brno	Výrobek / Product Individual 620.460 GANC	Název výrobku / Name of the product Bezpečnostní zábrana / Safety barrier / Sicherheitsabgrenzung	Číslo a typ dokumentu / Document number 620.460 GANC	Datum vydání / Issue date 15.10.2020	Verze / Version 1.0	Strana / Page 43



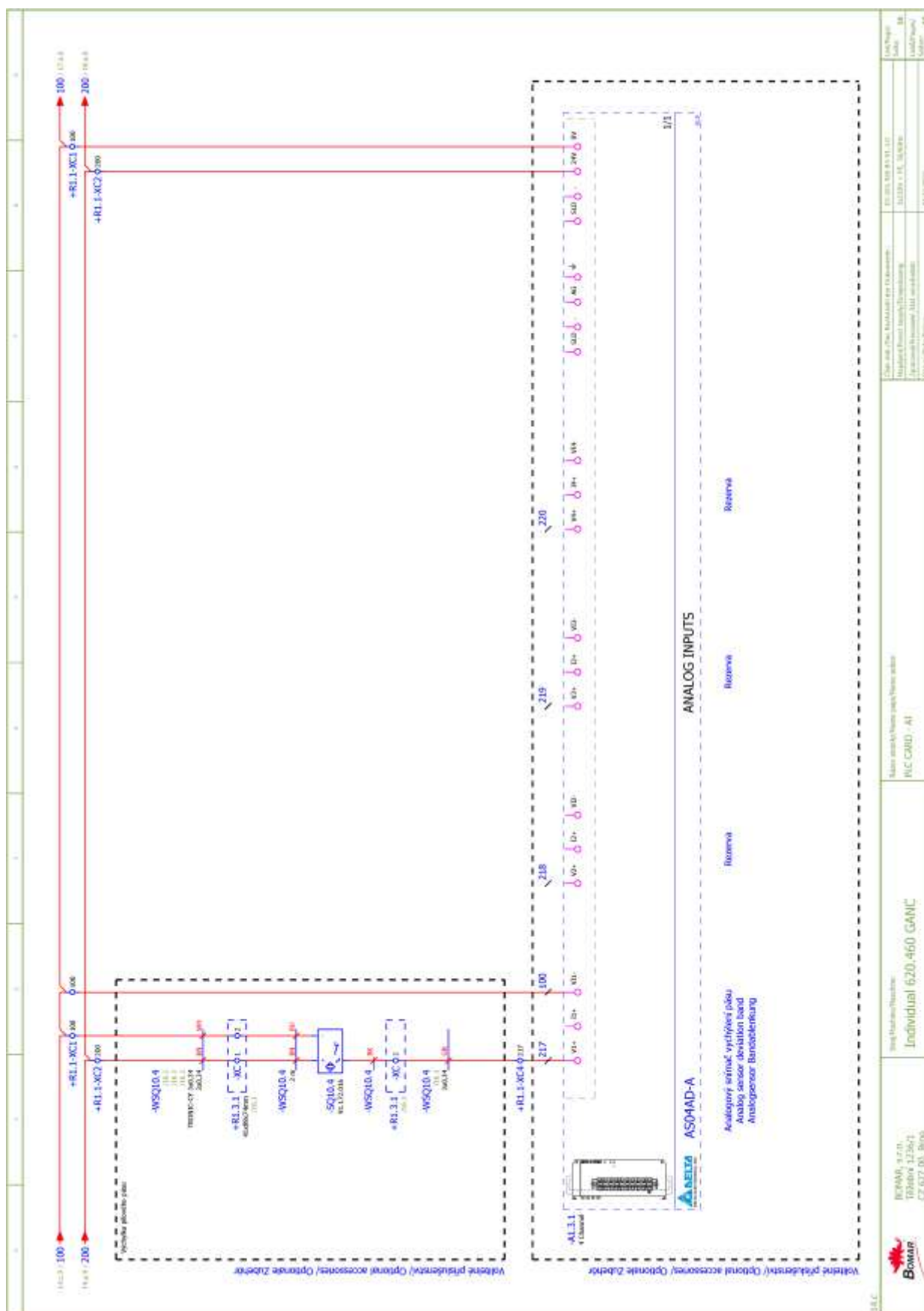


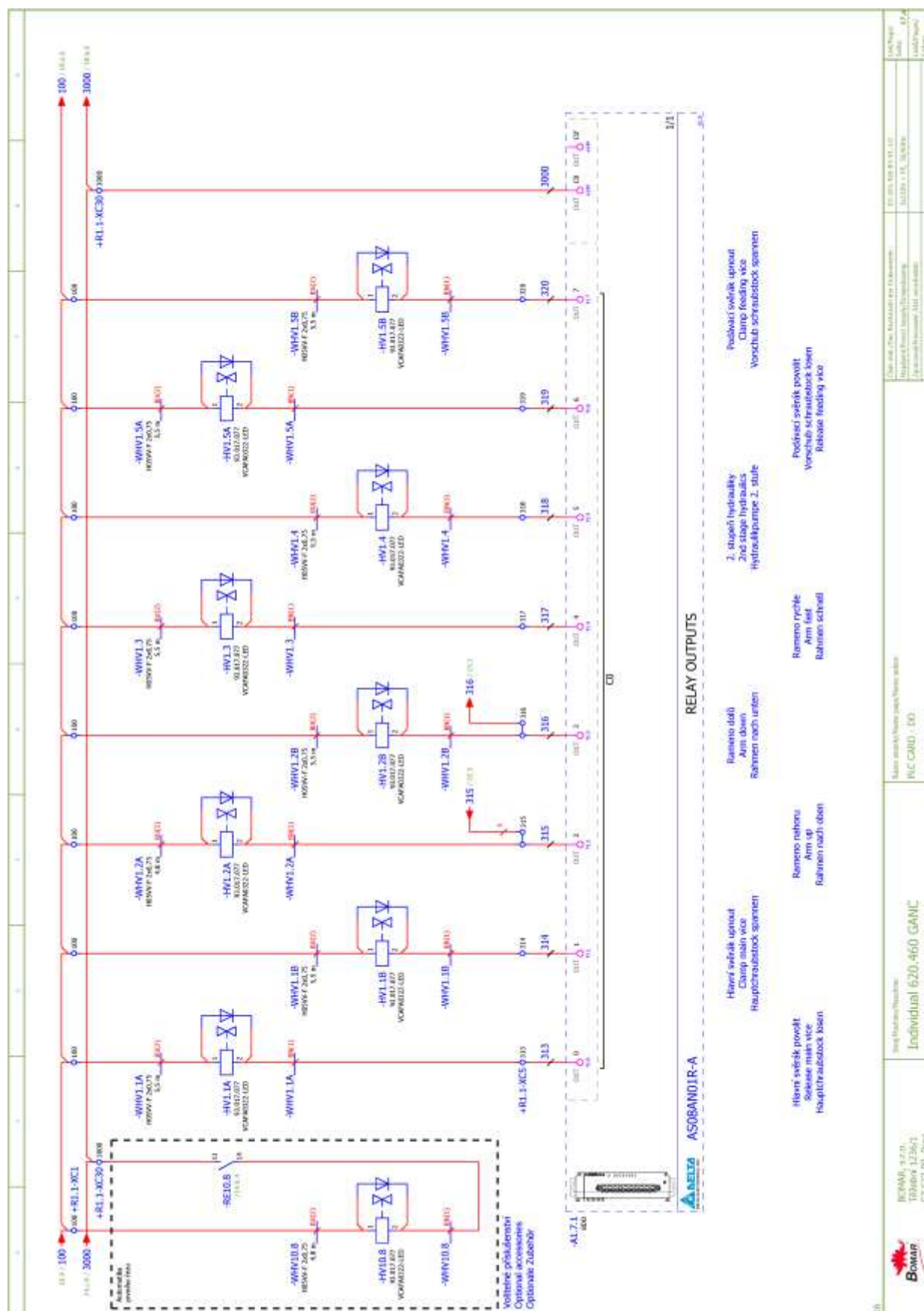


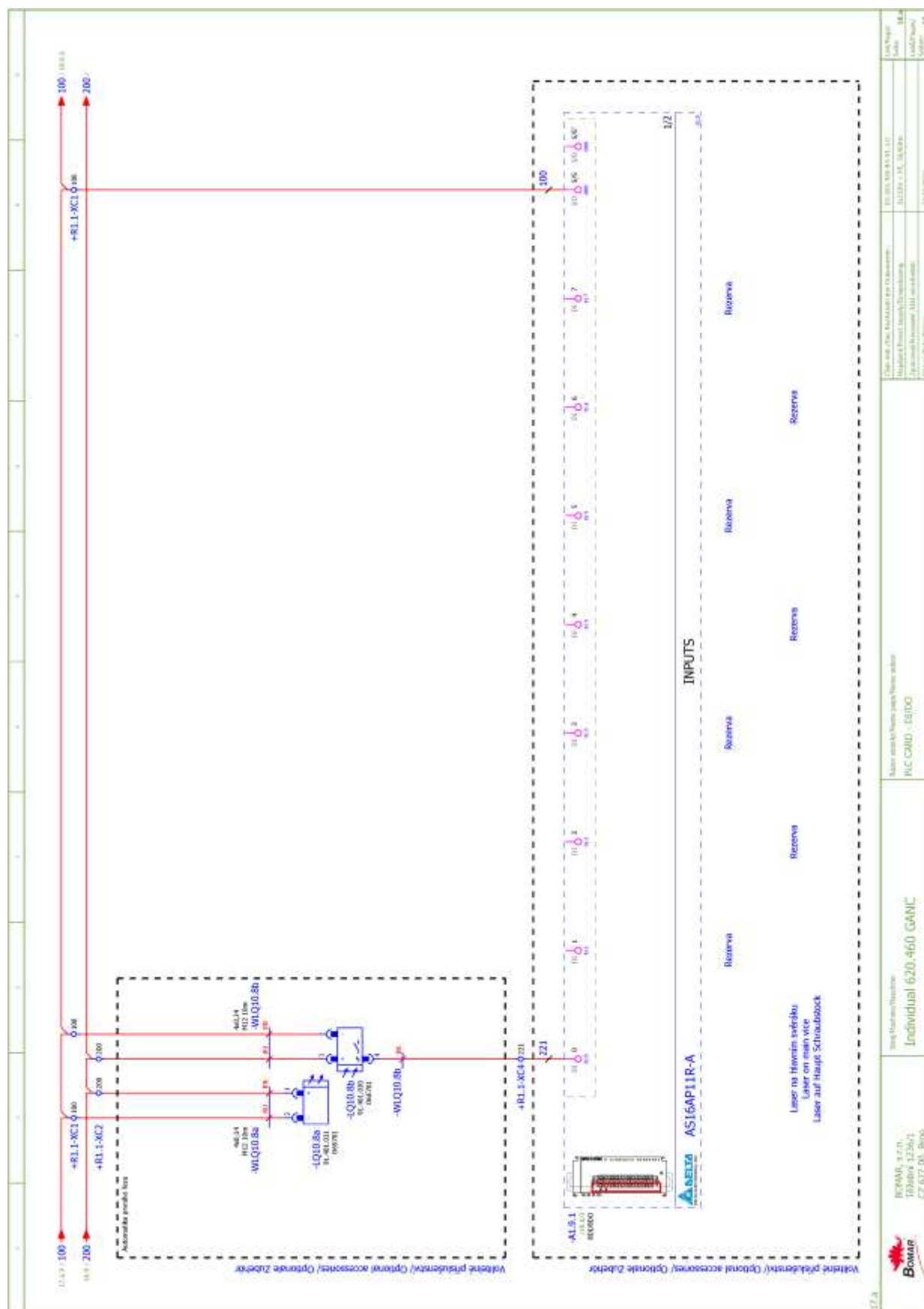


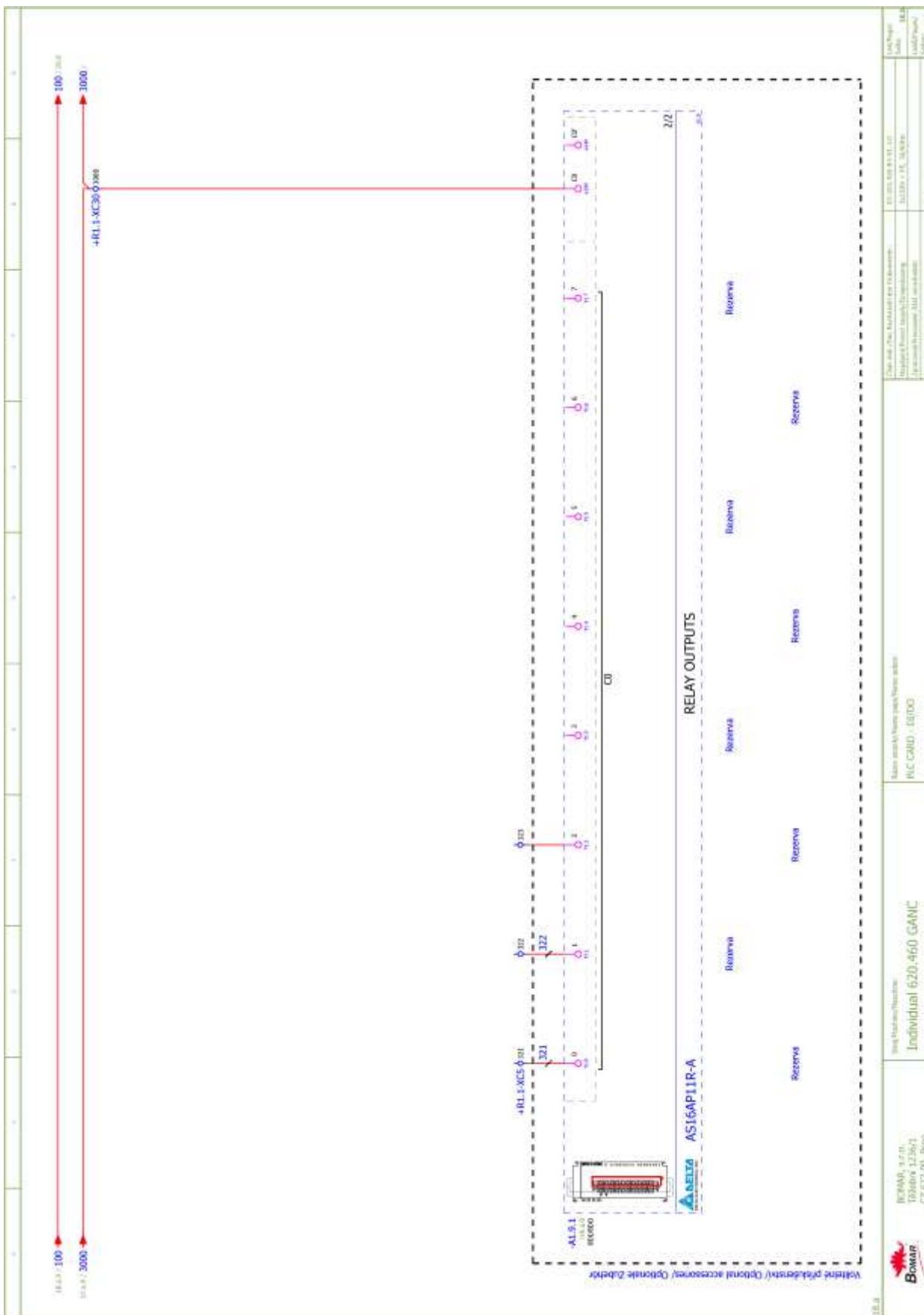


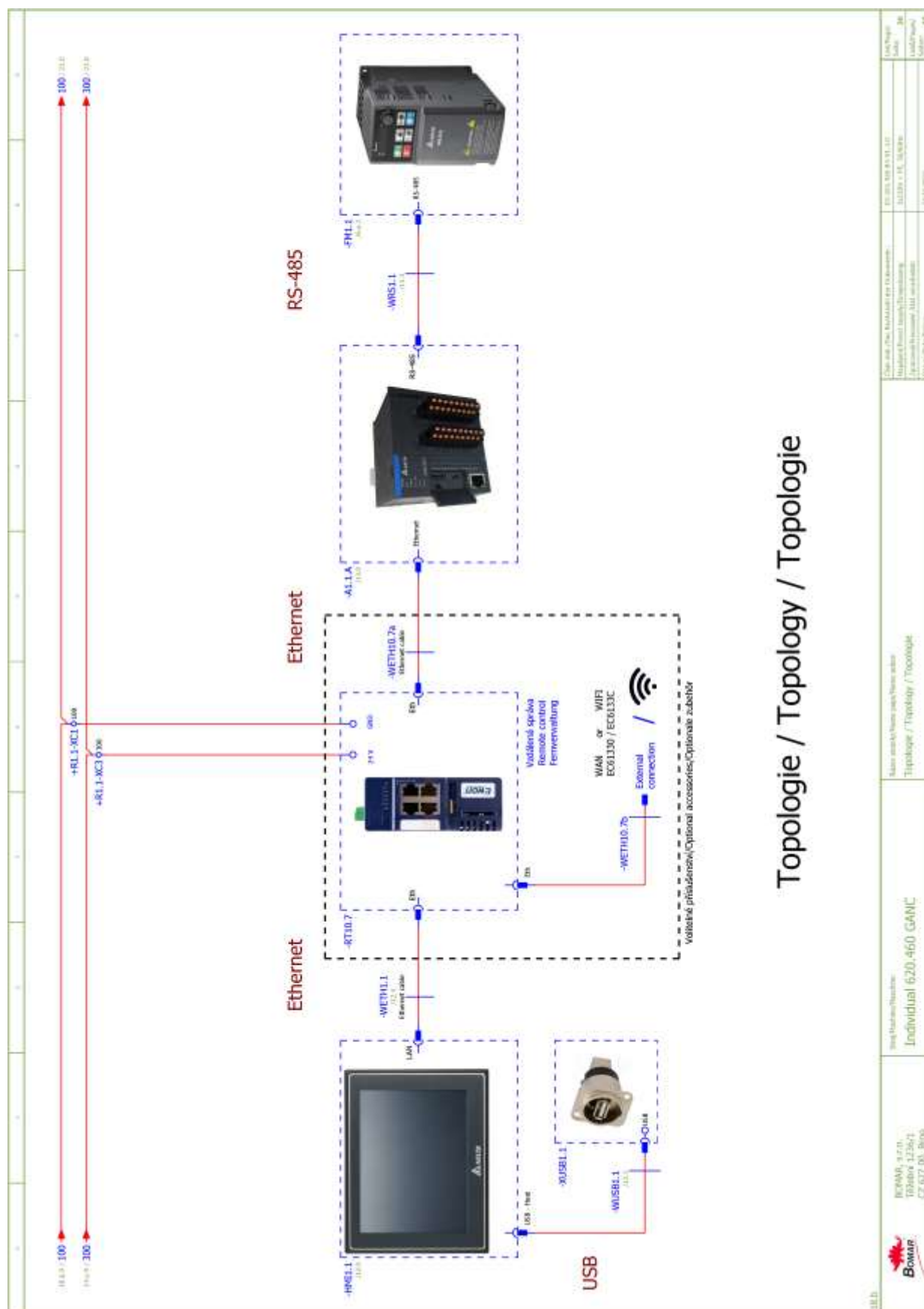


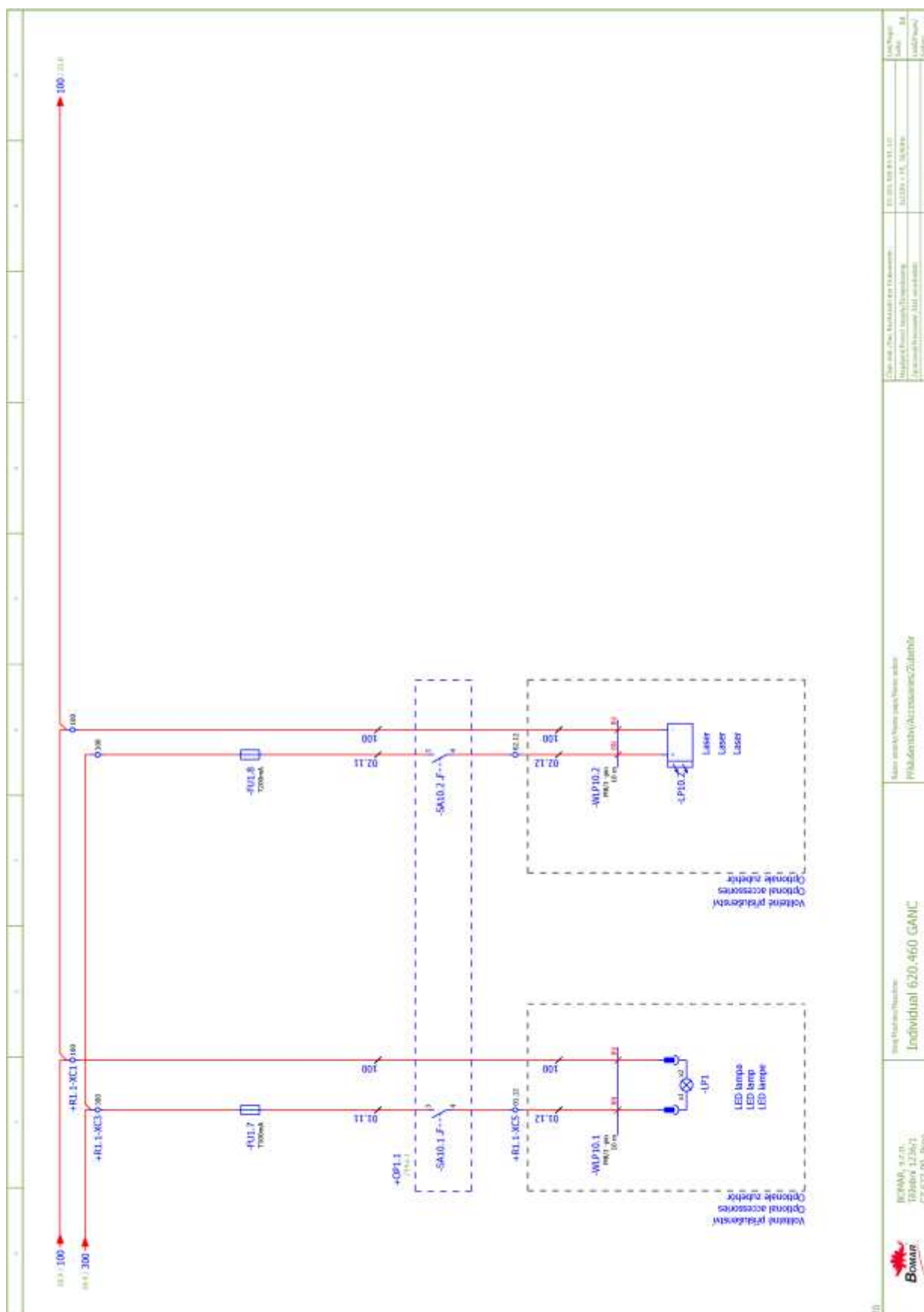


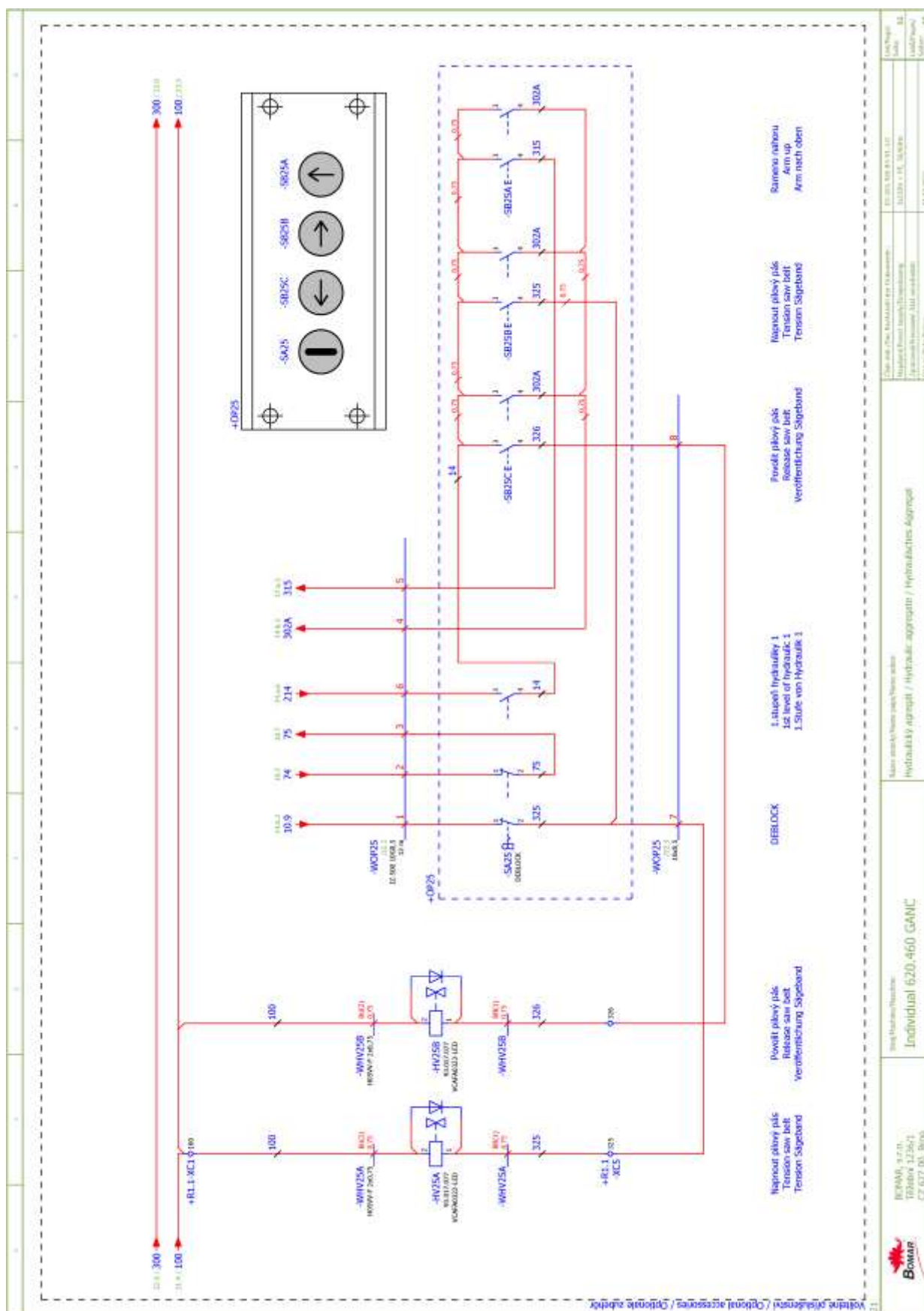




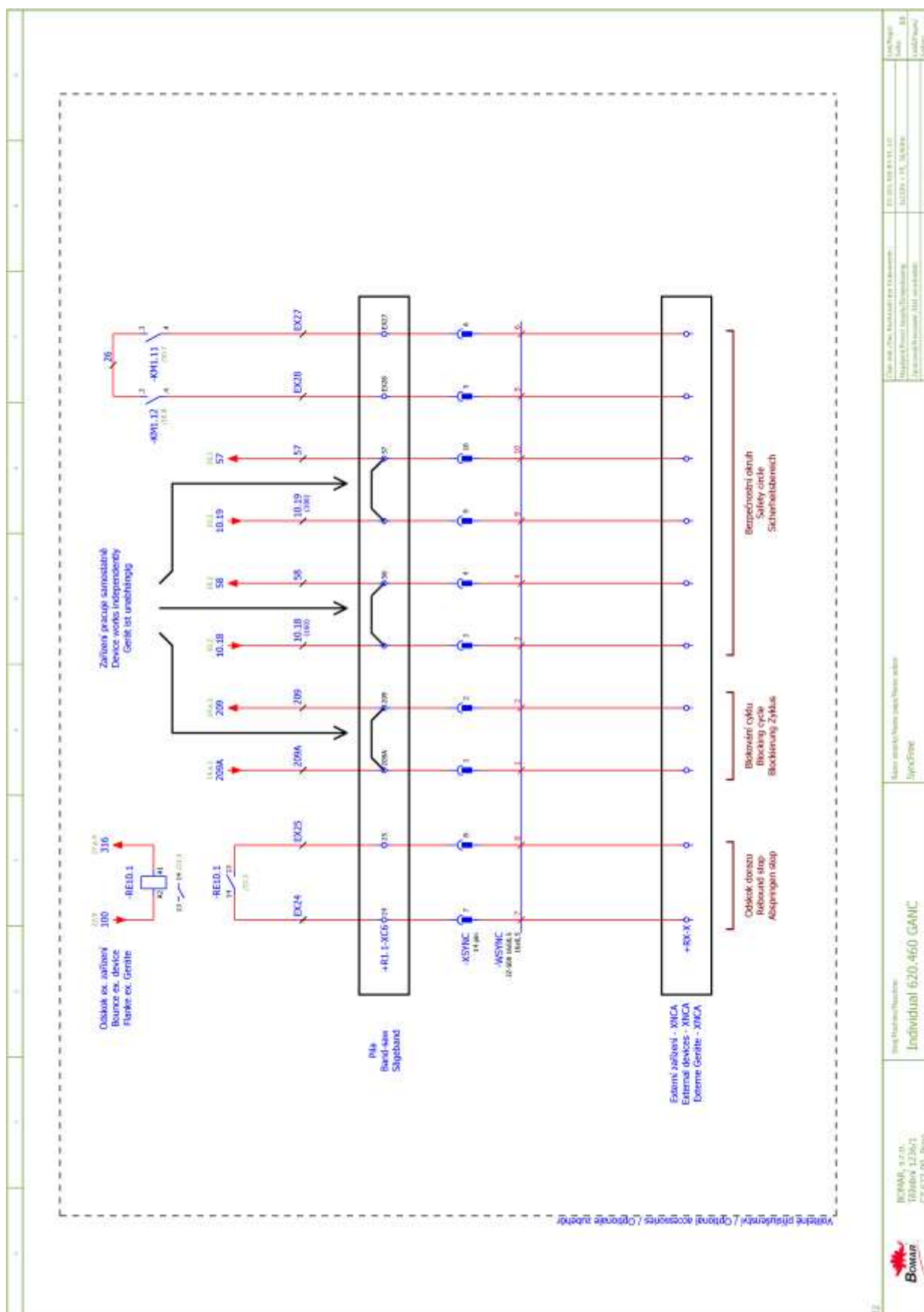




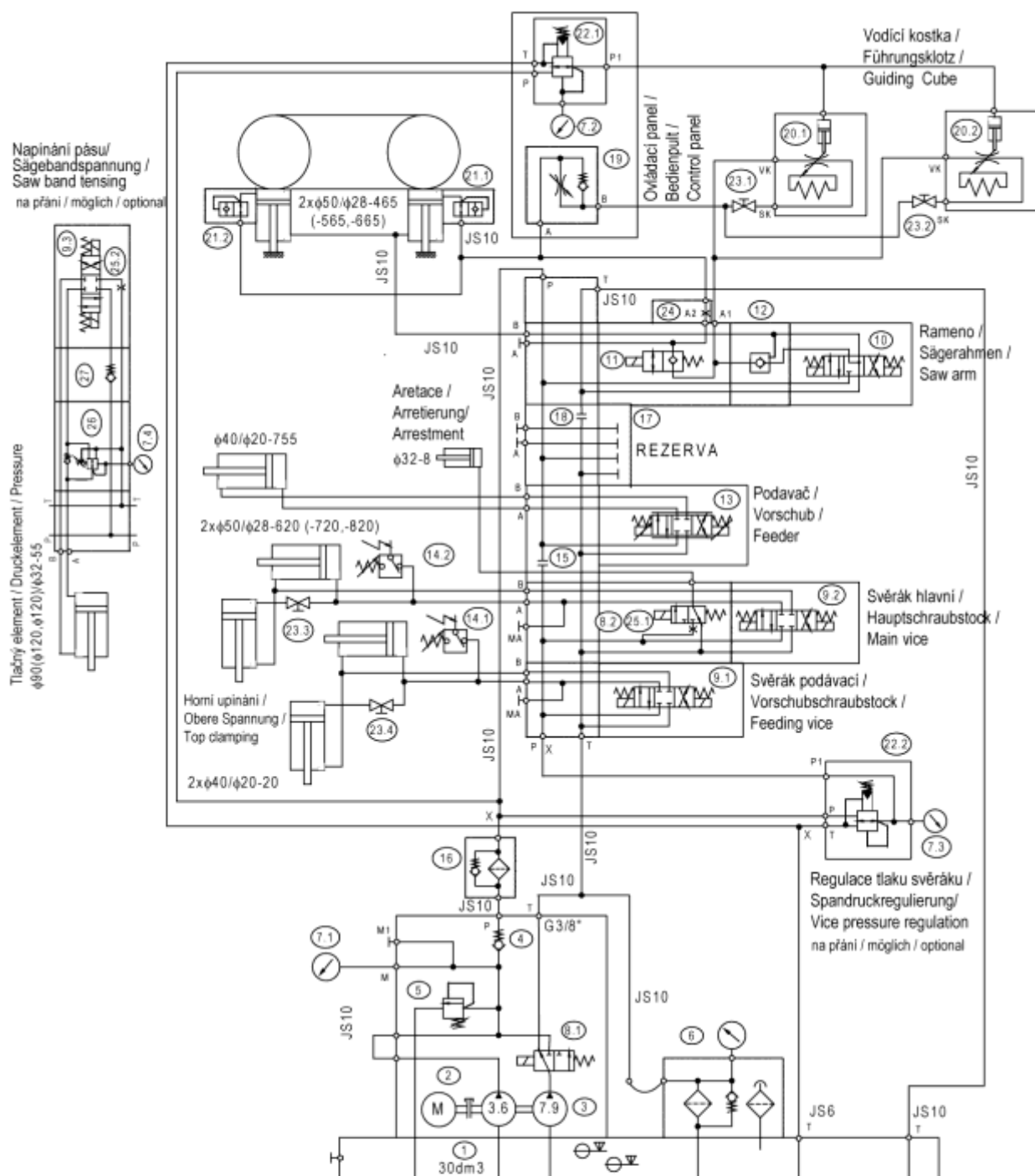




9.3.



Hydraulické schéma / Hydraulikschema / Hydraulic diagram



205.Y416-200
INDIVIDUAL 460 GANC
INDIVIDUAL 560 GANC
INDIVIDUAL 460 GANC
14.1.2011

Základní technické parametry
Technische Spezifikation
Technical specification

Typ / Type / Type	Individual 460, 560, 640
Hydraulický agregát / Hydroaggregat	SMA03-79,36/17.0-5DPO-V30M.0
Hydro aggregat	92.001.065 (27814200)
Neuvedené světllosti / Unerwähnt Lichtbreite	JS6
Unlisted inside diameters	
Výstupní šroubení / Ausgangsschraubung	G1/4"
Output screwing	
p_{max}	6,5 Mpa
Q	10,6+4,9 dm ³ /min
n	1425 rpm
P	2,2 kW

Poz.	Název	Typ	Počet
1	Nádrž / Behälter / Tank	N30-B0-II 30 dm ³	1
2	Elektromotor / Elektromotor / Electromotor	MA-AL100L 2,2 kW 400/230V, 50Hz, 5,07 A	1
3	Hydrogenerátor / Hydraulikgenerator / Hydrogenerator	P 23-7,9/3,6 L.65334 7,9/3,6 cm ³ /ot.	1
4	Jednosměrný ventil / Einwegventil / One-way valve	V J01-06/S G-1	1
5	Přepouštěcí ventil / Bypassventil / By pass valve	VPP2-04/S-10S 6,5 MPa	1
6	Zpětný filtr / Filter / Filter	FR043-166/0 (10 µm) 92.153.101 /039	1
7	Manometr / Manometer / Manometer	d68 GLYCERINE 0-6 MP a	4(2)
8	Rozvaděč / Verteilungsventil / Distributor	S D2E -A 3/C2D 21 408-0328.003	2(1)
9	Rozvaděč / Verteilungsventil / Distributor	RPE3-043Z 11/02400E 1K 1 92.101.010	3(2)
10	Rozvaděč / Verteilungsventil / Distributor	RPE3-043Y 11/02400E 1K 1 92.101.005	1
11	Blok rychloposuvu / Eilgangsblock / Speed shift block	729-0084 92.153.006	1
12	Hydraulický zámek / Hydraulisches Schloß / Hydraulic lock	VJR1-04/MA 92.103.002	1
13	Rozvaděč / Verteilungsventil / Distributor	RPM2-043Z11/04-24M IKRO 92.101.024	1
14	Tlakový spínač / Druckschalter / Pressure switch	166415031059 20-50bar 92.201.003	2
15	Zátka / Einfüllspund / Fill stopper	M6, without screw	1
16	Tlakový filtr / Druckfilter / Pressure filter	D042-153 (3 µm) 92.153.102 /055	1
17	Deska / Platte / Plate	92.105.008	1(0)
18	Zátka / Einfüllspund / Fill stopper		1
19	Škrticí ventil / Drosselventil / Throttle-valve	V S 01-04/R2,5-O 92.152.001	1
20	Kostka regulace / Regulationklotz / Regulation cube		2
21	Ventil pojistný / Sicherungsventil / Retaining valve	VPNH 1/4" 92.151.001	2
22	Redukční ventil / Reduktionsventil / Control valve	VRN2-06/S-6R	2(1)
23	Kulový ventil / Kugelventil / Globe valve	99.260.004	4(2)
24	Clona / Schürze / Shield	d1mm 92.002.001, A2	1
25	Clona / Schürze / Shield	d0,8mm	2(0)
26	Redukční ventil / Reduktionsventil / Control valve	VRP2-04-AS/6,3 92.154.002	1(0)
27	Jednosměrný ventil / Einwegventil / One-way valve	V J01-04/MP-30 92.104.001	1

Attention!

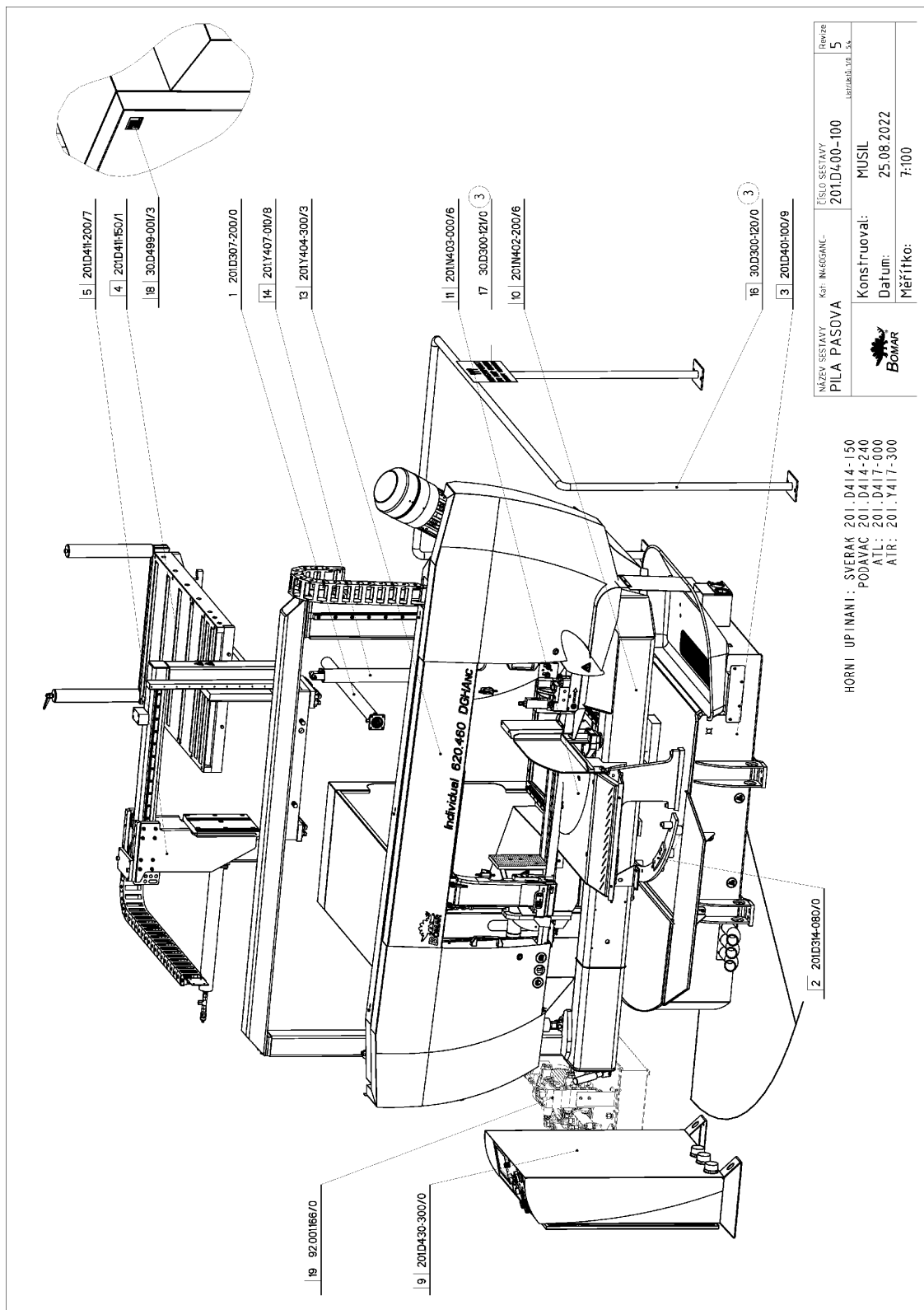
The saw arm must always be in the down position after finishing work and resting or during longer intervals between cuts or at night. Otherwise there is a risk of damage to the hydraulic part of the saw arm.

All material must be removed from the saw area. (Risk of damage to the saw blade)

10. **Výkresy sestav pro objednání náhradních dílů – standardní stroj/ Zeichnungen für Bestellung der Ersatzteile - Standardmaschine / Drawing assemblies for spare parts order – standard machine**

- Při objednávání náhradních dílů vždy uvádějte: typ stroje (např. Individual 620.460 GANC) , výrobní číslo (např. 125) a rok výroby (např. 1999).
- In die Bestellung der Ersatzteile führen Sie immer an: Maschinentyp (z. B. Individual 620.460 GANC), Serien Nr. (z. B. 125) und Baujahr (z. B. 1999).
- For spare parts order, you must always to allege: type of machine (for example Individual 620.460 GANC), serial number (for example 125, see cover page) and year of construction (for example 1999).

10.1. INDIVIDUAL 620.460 GANC

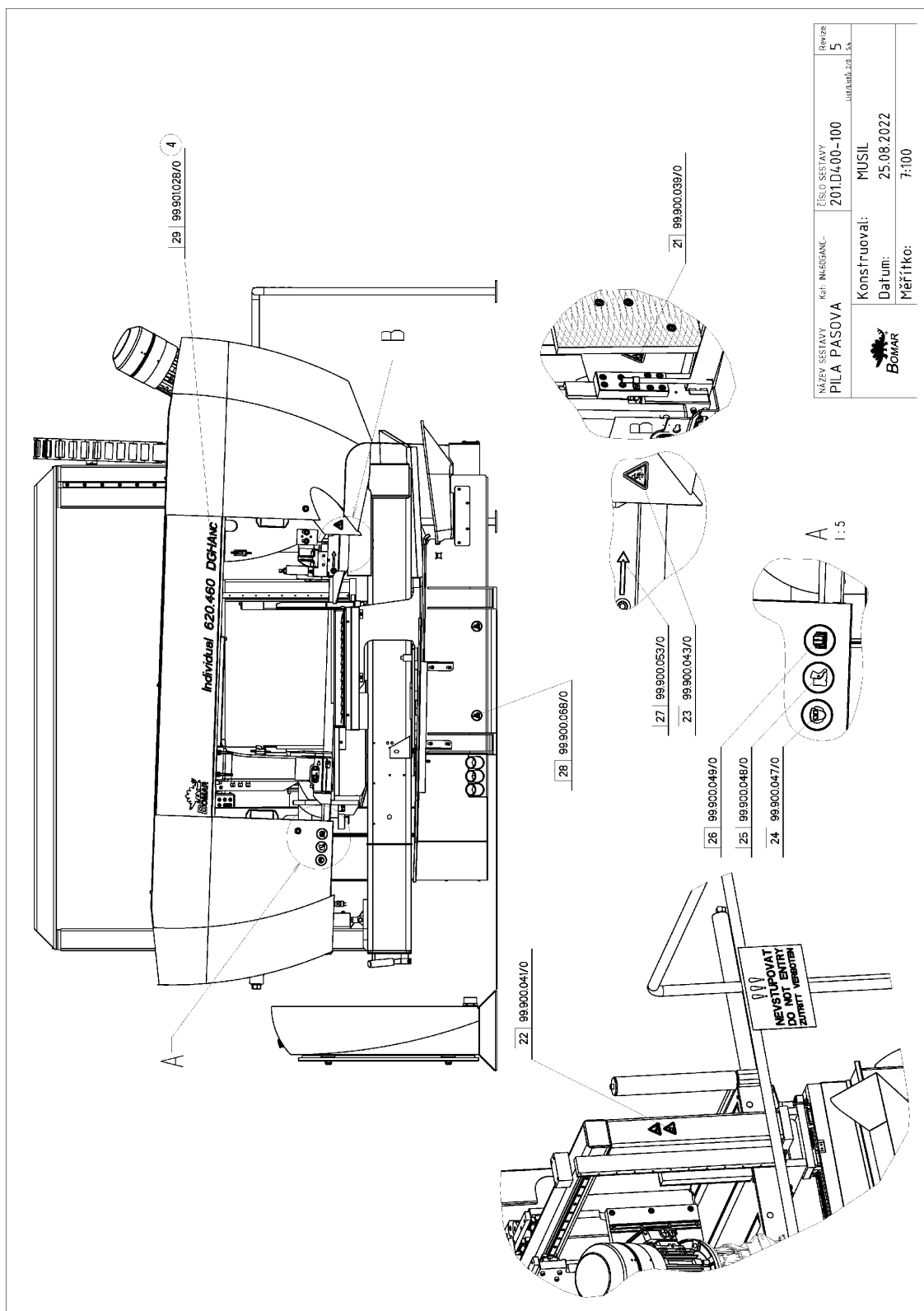


10.2. Kusovník / Piece list / Stückliste - INDIVIDUAL 620.460 GANC

NAZEV SESTAVY		ČÍSLO SESTAVY		REVIZE			
PILA PASOVA		201.D400-100		5			
Poz.	Objednáč. číslo	Verze	Název CZ	Name EN	Name DE	Podtovar	Ks.
1	201.D307-200	0	VALEC SVERAKU	VICE CYLINDER	SCHRAUBSTOCKZYLINDER		1
2	201.D314-080	0	DORAZ	STOP PIECE	ANSCHLAG		1
3	201.D401-100	9	PODSTAVEC	BASE	UNTERSATZ		1
4	201.D411-150	1	TRAT	TRACK	BAHN		1
5	201.D411-200	7	PODVAČ	FEEDER	VORSCHUB		1
9	201.D430-300	0	OVLADACÍ PANEL	CONTROL PANEL	BEDIENPULT		1
10	201.N402-200	6	KONZOLA OTOCNA	PIVOT BRACKET	DREHKONSOLE		1
11	201.N403-000	6	SVERAK	VICE	SCHRAUBSTOCK		1
13	201.Y404-300	3	RAHENO	BEAM	RAHMEN		1
14	201.Y407-010	8	VALEC ZVEDACI	LIFTING CYLINDER	HEBEZYLINDER		2
16	30.D300-120	0	PLOT	FENCE	ZAUN		1
17	30.D300-121	0	DESKA	BOARD	PLATTE		1
18	30.D499-001	3	STÍTEK TYPOVÝ	MACHINE LABEL	MASCHINE SCHILD		1
19	92.001.166	0	AGREGAT HYDRAULICKÝ	HYDRAULIC PUMP	HYDRAULIKAGREGAT		1
21	99.900.039	0	SAMOLEPKA	STICKER	AUFKLEBER	44455700 * Individual GANC, Production NS Nebezpečí sřaření	2
22	99.900.041	0	SAMOLEPKA	STICKER	AUFKLEBER	NN Nebezpečí nřazu	1
23	99.900.043	0	SAMOLEPKA	STICKER	AUFKLEBER	NZ Nebezpečí zachycení	1
24	99.900.047	0	SAMOLEPKA	STICKER	AUFKLEBER	OBS Noste brýle sluchřřka	1
25	99.900.048	0	SAMOLEPKA	STICKER	AUFKLEBER	PO Noste pevnou pracobuv	1
26	99.900.049	0	SAMOLEPKA	STICKER	AUFKLEBER	CN Přeřřst řřvřd k pouřřit	1
27	99.900.053	0	SAMOLEPKA	STICKER	AUFKLEBER	SS - Smřřrovř řřpka	1
28	99.900.068	0	SAMOLEPKA	STICKER	AUFKLEBER	vřřzk	4
29	99.901.028	0	SAMOLEPKA	STICKER	AUFKLEBER	Individual 620.460 DCHANC new od 3_2013	1

Číslo Sestavy/Number of assembly/Nummer der Baugruppe, Ver.-Verze/Version/Version, Název sestavy/Assembly name/Name der Baugruppe, Poz.-Pozice/Position/Position, Objednáč. číslo/Order number/Bestellnummer, Podtovar/Subproduct/Halbfabrikat, Vstupní materiál/Input material, Vstupní materiál/Default material/Eingangsmaterial;

10.3. INDIVIDUAL 620.460 GANC

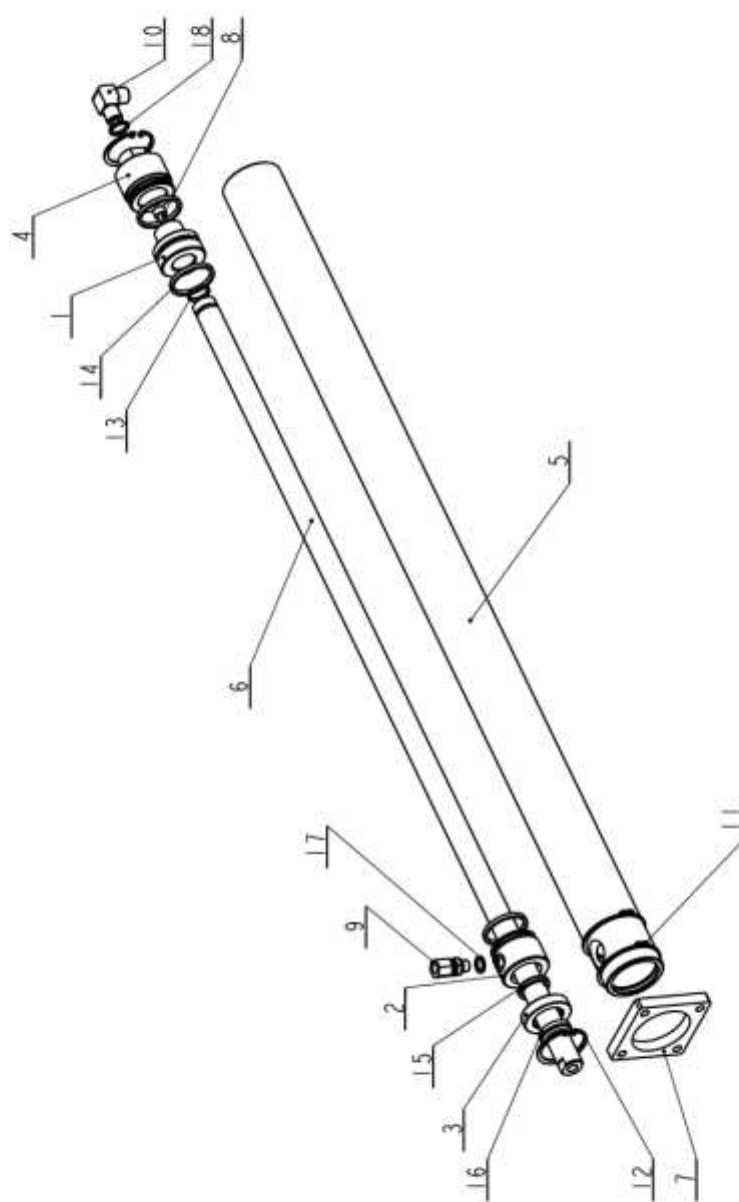


10.4. Kusovník / Piece list / Stückliste - INDIVIDUAL 620.460 GANC

NAZEV SESTAVY		ČÍSLO SESTAVY		REVIZE			
PILA PASOVA		201.D400-100		5			
Poz.	Objednáč. číslo	Verze	Název CZ	Name EN	Name DE	Podtovar	Ks.
1	201.D307-200	0	VALEC SVERAKU	VICE CYLINDER	SCHRAUBSTOCKZYLINDER		1
2	201.D314-080	0	DORAZ	STOP PIECE	ANSCHLAG		1
3	201.D401-100	9	PODSTAVEC	BASE	UNTERSATZ		1
4	201.D411-150	1	TRAT	TRACK	BAHN		1
5	201.D411-200	7	PODAVAC	FEEDER	VORSCHUB		1
9	201.D430-300	0	OVLADACÍ PANEL	CONTROL PANEL	BEDIENPULT		1
10	201.N402-200	6	KONZOLA OTOCNA	PIVOT BRACKET	DREHKONSOLE		1
11	201.N403-000	6	SVERAK	VICE	SCHRAUBSTOCK		1
13	201.Y404-300	3	RAHENO	BEAM	RAHMEN		1
14	201.Y407-010	8	VALEC ZVEDACI	LIFTING CYLINDER	HEBEZYLINDER		2
16	30.D300-120	0	PLOT	FENCE	ZAUN		1
17	30.D300-121	0	DESKA	BOARD	PLATTE		1
18	30.D499-001	3	STÍTEK TYPOVÝ	MACHINE LABEL	MASCHINE SCHILD		1
19	92.001.166	0	AGREGAT HYDRAULICKÝ	HYDRAULIC PUMP	HYDRAULIKAGREGAT		1
21	99.900.039	0	SAMOLEPKA	STICKER	AUFKLEBER	44455700 * Individual GANC, Production NS Nebezpečí sřažení	2
22	99.900.041	0	SAMOLEPKA	STICKER	AUFKLEBER	NN Nebezpečí nárazu	1
23	99.900.043	0	SAMOLEPKA	STICKER	AUFKLEBER	NZ Nebezpečí zachycení	1
24	99.900.047	0	SAMOLEPKA	STICKER	AUFKLEBER	OBS Noste brýle sluchátka	1
25	99.900.048	0	SAMOLEPKA	STICKER	AUFKLEBER	PO Noste pevnou pracobuv	1
26	99.900.049	0	SAMOLEPKA	STICKER	AUFKLEBER	CN Přístřst návod k použití	1
27	99.900.053	0	SAMOLEPKA	STICKER	AUFKLEBER	SS - Směrová šípka	1
28	99.900.068	0	SAMOLEPKA	STICKER	AUFKLEBER	vozik	4
29	99.901.028	0	SAMOLEPKA	STICKER	AUFKLEBER	Individual 620.460 DGHANC new od 3_2013	1

Číslo Sestavy/Number of assembly/Nummer der Baugruppe, Ver.-Verze/Version/Version, Název sestavy/Assembly name/Name der Baugruppe, Poz.-Pozice/Position/Position, Objednáč. číslo/Order number/Bestellnummer, Podtovar/Subproduct/Halbfabrikat, Vstupní materiál/Input material, Vstupní materiál/Input material

10.5. Válec svěráku / Vice cylinder / Schraubstockzylinder



WALEC SVĚRÁKU	CÍSLO ŘEŠENÍ	STRUK
	201.D307-200	IN360GANC
	Konstruoval: MUSIL	
	Datum: 15. 10. 2010	
Meritko: 3:10		

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

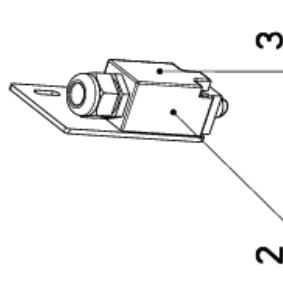
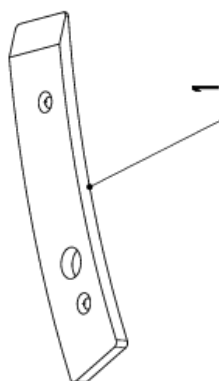
Cislo Sestavy 201.D307-200		Ver. 0	Název sestavy VALEC SVĚRAKU/VICE CYLINDER/SCHRAUBSTOCKZYLINDER		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.2107-001	0	PIST / PISTON / KOLBEN	d 45	1
2	30.2107-002	0	PRÍRUBA / FLANGE / FLANSCH	TYC 45	1
3	30.2107-003	0	VÍKO / COVER / DECKEL	d 45	1
4	30.2107-004	0	VÍKO / COVER / DECKEL	d45	1
5	30.D307-201	0	VALEC PODAVACE / FEEDER CYLINDER / VORSCHUBWALZE	TRUBKA 52/40	1
6	30.D307-202	0	PISTNICE / PISTON ROD / KOLBENSTANGE	TYC 20	1
7	30.D311-109	0	PRÍLOŽKA / STRAP / LASCHE	HR 70x10	1
8	90.001.25.019	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M6x25	1
9	92.002.102	0	SROUBENÍ PRÍME / DIRECT BOLTING / GERADE VERSCHRAUBUNG	S-GEV-8LLR	1
10	92.004.001	0	SROUBENÍ UHLOVE / ANGLE BOLTING / WINKELVERSCHRAUBUNG	37701	1
11	95.800.019	0	KROUZEK POJIST.VNEJS / OUTSIDE SAFETY RING / SICHERUNGSRING AUßEN	POJISTINY KROUZEK 52	2
12	95.801.006	0	KROUZEK POJIST.VNITR / INSIDE SAFETY RING / SICHERUNGSRING INNEN	POJISTINY KROUZEK 42	2
13	96.002.007	0	KROUZEK O DYNAMICKY / DYNAMIC O RING / O-RING DYNAMISCH	16x2	1
14	96.002.017	0	KROUZEK O DYNAMICKY / DYNAMIC O RING / O-RING DYNAMISCH	34x3	3
15	96.041.002	0	TESNENÍ / SEALING / DICHTUNG	20x28x4	1
16	96.060.002	0	KROUZEK STÍRAČI / SCRAPER RING / ABSTREIFRING	KROUZEK STÍRAČI 20	1
17	96.082.001	0	TESNENÍ / SEALING / DICHTUNG	KROUZEK CU 10/14	1
18	96.082.002	0	TESNENÍ / SEALING / DICHTUNG	KROUZEK CU 13/17	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; Rozměr/Stock size/Abmessung

Cislo 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

10.7. Doraz / Stop piece / Anschlag

Cislo Sestavy 201.D314-080		Ver. 0	Název sestavy DORAZ/STOP PIECE/ANSCHLAG	
Poz.	Objednací číslo	Ver.	Název položky	Rozměr
1	30.D314-081	0	DORAZ / STOP PIECE / ANSCHLAG	P 8x55
2	30.KBV53-082	0	DRŽÁK / HOLDER / HALTER	P 3x60
3	91.173.010	0	SPÍNACÍ KONCOVÝ / END SWITCH / ENDSCHALTER	
				Ks
				I
				I
				I



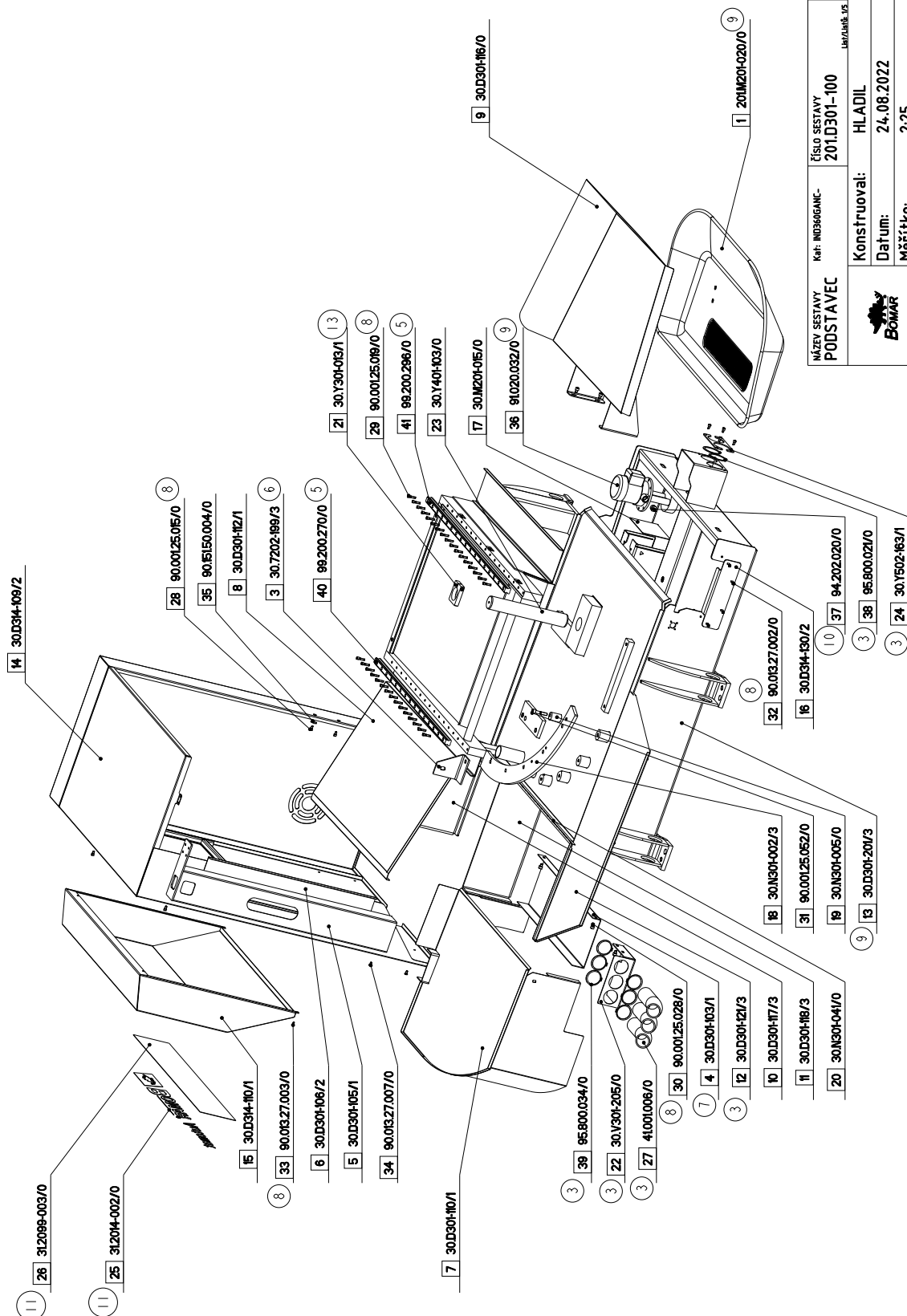
Cislo Sestavy/Number of assembly/Nummer der Baugruppe: Verze (Ver.)/Version/Version: Název sestavy/Assembly title/Name der Baugruppe: Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer, Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

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

NAZEV SESTAVY		CISLO SESTAVY		REVIZE		Name DE		Name EN		Name CZ		Verze		Objednáací číslo		Poz.		k.s./m	
PODSTAVEC		201.D301-100		13		WANNE		TANK		VANA		0		201.M201-020 (9)		1		1	
						KONSOLE		BRACKET		KONZOLA		3		30.7202-199 (6)		3		P5 - 100x150	
						BLECH		SHEET METAL		PLECH		1		30.D301-103 (7)		4		P2 - 278x700	
						ABDECKUNG		COVER		KRYT		1		30.D301-105		5		1	
						ABDECKUNG		COVER		KRYT		2		30.D301-106		6		P15 - 168x700	
						ABDECKUNG		COVER		KRYT		1		30.D301-110		7		1	
						ABDECKUNG		COVER		KRYT		1		30.D301-112		8		P1 - 65x898	
						ABLAUFPLATTE		DRAIN PLATE		OKAP		0		30.D301-116		9		1	
						KONSOLE		BRACKET		KONZOLA		3		30.D301-117		10		P5 - 226x645	
						KONSOLE		BRACKET		KONZOLA		3		30.D301-118		11		P5 - 226x645	
						ABLAUFPLATTE		DRAIN PLATE		OKAP		3		30.D301-121 (3)		12		1	
						UNTERSATZ		BASE		PODSTAVEC		3		30.D301-201 (9)		13		1	
						VORSCHUBABDECKUNG		FEEDER COVER		KRYT PODAVACE		2		30.D314-109		14		1	
						SCHRAUBSTOCKABDECKUNG		VICE COVER		KRYT SVERAKU		1		30.D314-110		15		1	
						ABDECKUNG		COVER		KRYT		2		30.D314-130		16		P3 - 104x274	
						BLECH		SHEET METAL		PLECH		0		30.M201-015		17		P15 - 120x169	
						SEGMENT		SEGMENT		SEGMENT		3		30.N301-002		18		1	
						EXCENTER		EXCENTR		EXCENTR		0		30.N301-005		19		1	
						SKALA		SCALE		STUPNICE		0		30.N301-041		20		1	
						KLEMM		CLAMP		SVERKA		(13) 1		30.Y301-013		21		1	
						HALTER		HOLDER		DRZAK		0		30.V301-205 (3)		22		1	
						STANGE		POLE		TYC		0		30.Y401-103		23		1	
						HALTER		HANDLE		UCHYTKA		1		30.Y502-163 (3)		24		1	
						AUFKLEBER		STICKER		SAMOLEPKA		0		31.2014-002 (11)		25		1	
						AUFKLEBER		STICKER		SAMOLEPKA		0		31.2099-003 (11)		26		1	
						SCHLAUCH		HOSE		HADICE		0		4.1001.006 (3)		27		3	
						IMBUSSCHRAUBE		HEXAGON SOCKET SCREW		SROUB IMBUS		0		90.001.25.015 (8)		28		12	
						IMBUSSCHRAUBE		HEXAGON SOCKET SCREW		SROUB IMBUS		0		90.001.25.019 (8)		29		32	
						IMBUSSCHRAUBE		HEXAGON SOCKET SCREW		SROUB IMBUS		0		90.001.25.028 (8)		30		15	
						IMBUSSCHRAUBE		HEXAGON SOCKET SCREW		SROUB IMBUS		0		90.001.25.052 (8)		31		1	
						RUNDKOPFSCHRAUBE		BUTTON HEAD SCREW		SROUB PULKULATY		0		90.013.27.002 (8)		32		4	
						RUNDKOPFSCHRAUBE		BUTTON HEAD SCREW		SROUB PULKULATY		0		90.013.27.003 (8)		33		2	
						RUNDKOPFSCHRAUBE		BUTTON HEAD SCREW		SROUB PULKULATY		0		90.013.27.007		34		4	
						GROßFLÄCHENSCHIBE		LARGE WASHER		PODLOZKA VELKOPL.		0		90.151.50.004		35		2	
						KÜHMITTEL PUMPE		COOLING PUMP		CERPADLO CHLAZENI		0		91.020.032 (9)		36		PA70/120 with filter 4,1POMPA70120 + 22FILTR0-PA-nahr.91.020.004,906	

Číslo sestavy/Number of assembly/Nummer der Baugruppe; Ver.-Verze/Version/Version; Název sestavy/Assembly name/Name der Baugruppe; Poz.-Pozice/Position/Position; Objednáací číslo/Order number/Bestellnummer; Podrovná/Semiproduct/Halbfabrikat; Vstupní materiál/Starting material/Deraut material/Eingangsmaterial;

10.10. Podstavec / Base / Untersatz



NÁZEV SESTAVY PODSTAVEC	Kač: IND360GANC-	ČÍSLO SESTAVY 201.D301-100	Revize 13
Konstrukoval: Datum: Měřtko:	HLADIL 24.08.2022 2:25	13.2	
			

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

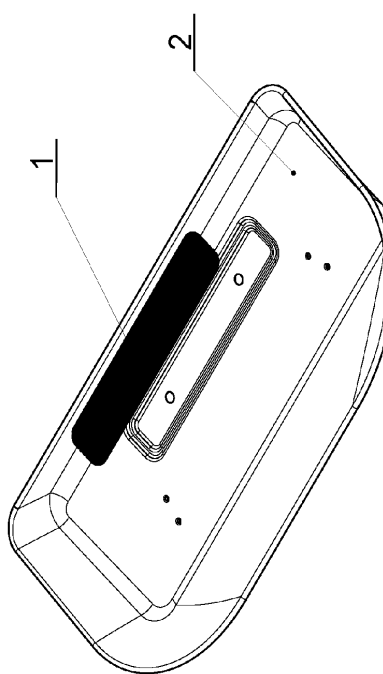
Poz.	Objednáč číslo	Verze	Název CZ	Name EN	Name DE	Položovar	ks / m
37	94.202.020 (10)	0	REDUKCE	REDUCTION / ADAPTOR	REDUKTION	1/2"-6 GES 6-R1/2"	1
38	95.800.021 (3)	0	KROUZEK POJIST. VNEJŠÍ	EXTERNAL RETAINING RING	SICHERUNGSRING AUBEN	ø62 DIN 471	2
39	95.800.034	0	KROUZEK POJIST. VNEJŠÍ	EXTERNAL RETAINING RING	SICHERUNGSRING AUBEN	ø55 DIN 471	6
40	99.200.270 (5)	0	VEDENÍ LINEARNÍ	LINEAR GUIDE	LINEARE FÜHRUNG	MSA25R-900 30/30 N	1
41	99.200.296 (5)	0	VEDENÍ LINEARNÍ	LINEAR GUIDE	LINEARE FÜHRUNG	MSA25R-1000 20/20 N	1

1. ZRUS.VANA 30.Y301-010 NAHR.30.M201-010. 271/ZM297 1.11.2010 SLEZACKOVA
2. ZRUS.LINEARNÍ VEDENÍ 99.200.162(HRS25 100L) A NAHR.99.200.204(HGR25R 100L); ZRUS.LINEARNÍ VEDENÍ 99.200.163(HRS25 900L) A NAHR.99.200.032(HGR25R 900L). 290/ZM311 7.12.2010 SLEZACKOVA
3. ZRUS.UCHYTKA 30.Y502-162 A NAHR.30.Y502-163; ZRUS.POJ.KROUZEK 95.800.016 A NAHR.95.800.021; ZRUS.DRZAK 30.N301-010 A NAHR.30.V301-205; PRID.SOUCASTI 1x95.800.034, 1x41.001.006, 1x30.D301-121, 326/ZM014 14.2.2011 SLEZACKOVA
4. ZRUS.KRYT 30.D301-114; ZRUS.2xSROUB m4x6(90.013.27.017). 150/ZM200 26.7.2011 SLEZACKOVA
5. ZRUS.LI.VEDENÍ 99.900.032 A NAHR.99.200.270; ZRUS.LIN.VEDENÍ 99.200.204 A NAHR.99.200.296. 056/ZM085 13.3.2012 SLEZACKOVA
6. PRIDANA KONZOLA 30.7202-199. 223/ZM297 11.10.2012 SLEZACKOVA
7. PRIDAN PLECH 30.D301-103. 187/ZM233 30.8.2013 SLEZACKOVA
8. ZRUS.3xPRILOZKA 30.D301-113; ZRUS.6xSROUB M6x12(90.001.25.016); PRIDANO - 32xM6x25(90.001.25.019) 10xSROUB M6x10(90.001.25.015); 4xSROUB M5x6(90.013.27.002); 2xSROUB M5x10(90.013.27.003); 15xSROUB M8x10(90.001.25.028). 329/ZM006 9.1.2014 SLEZACKOVA
9. ZRUS.PODSTAVEC 30.D301-101 A NAHR.30.D301-201; ZRUS.CERPADLO 91.020.015 A NAHR.91.020.032; PRIDREDUKCE 94.202.021; ZRUS.VANA 30.Y301-320 A NAHR.201.M201-020. 024.213/ZM076 22.3.2016 SLEZACKOVA
10. ZRUSENA REDUKCE 94.202.021 A NAHR.94.202.020. 024/ZM200 11.7.2016 SLEZACKOVA
11. PRIDANY SAMOLEPKY 31.2014-002 A 31.2099-003. 282/ZM104 17.3.2021 SLEZACKOVA
12. ZRUS. KROUZEK 30.N301-013 A NAHR. 30.N302-113; 222/ZM261 22.12.2023 OSTRIZEK
13. ZRUS. DIL 30.N302-113 A NAHR. 30.Y301-013. 134/ZM148 15.5.2025 HALAS

Číslo Sestavy/Number of assembly/Nummer der Baugruppe; Ver-Verze/Variation/Version; Název sestavy/Assembly name/Name der Baugruppe;; Poz-Position/Position/Position; Objednáč číslo/Order number/Bestellnummer; Položovar/Semiproduct/Halbfabrikat; Výstupní materiál/Default material/Eingangsmaterial;

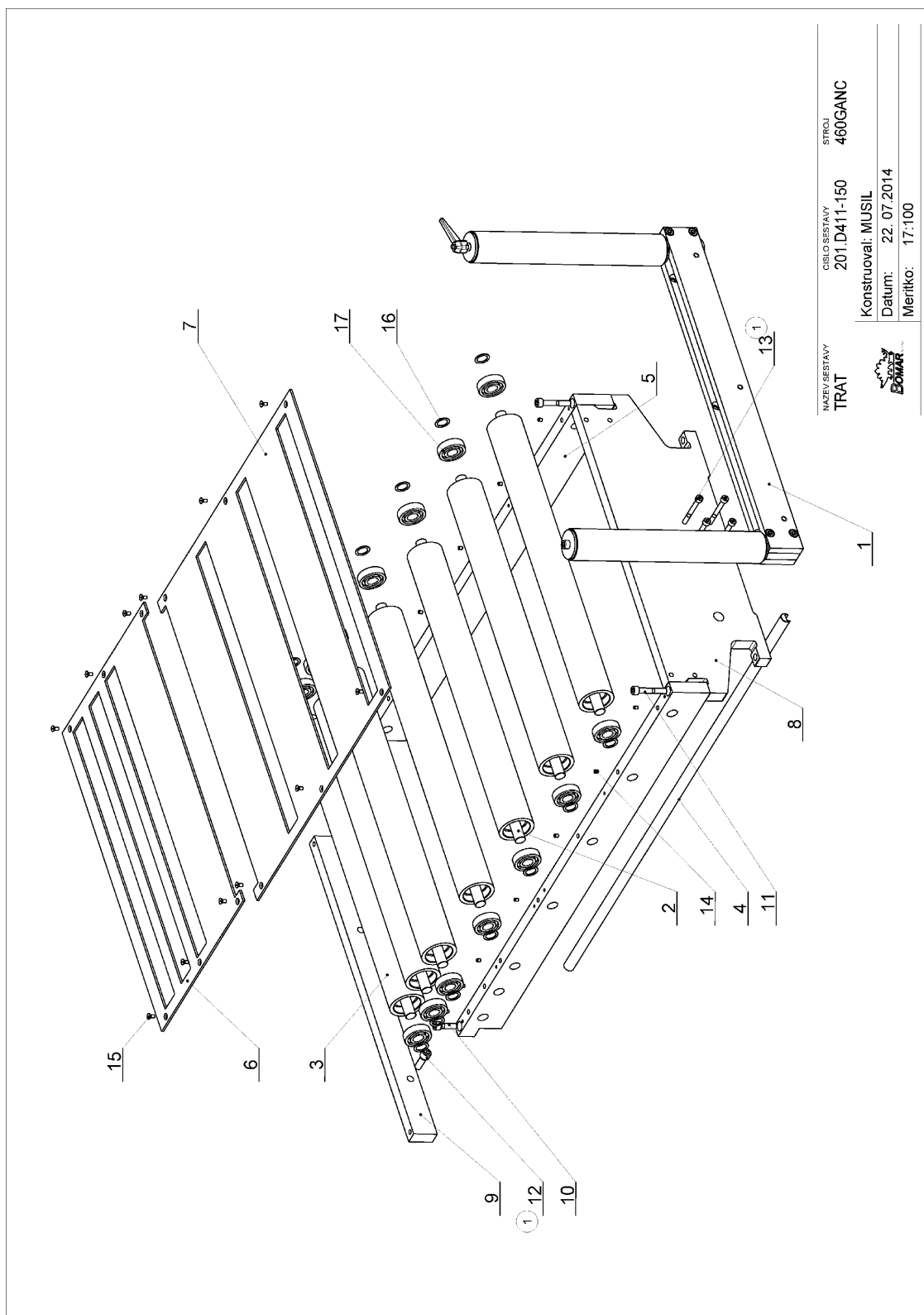
10.12. Vana/Tank/Wanne

Císlo Sestavy 201.M201-020		Ver. 0	Název sestavy VANA/TANK/WANNE		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.ER251-304	0	SITO / SIEVE / GITTERWERK	P1x85	1
2	30.M201-021	0	VANA / TANK / WANNE	P 0.8	1



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

10.13. Trať / Track / Bahn



TRAT	CIRLO SESTAVY	STROL
	201.D411-150	460GANC
Konstruoval: MUSIL		
Datum: 22.07.2014		
Meritko: 17:100		

10.14. Kusovník / Piece list / Stückliste - Trat / Track / Bahn

Číslo sestavy 201.D411-150		Ver. 0	Název sestavy TRAT/TRACK/BAHN			
Poz.	Objednávací číslo	Ver.	Název položky	Rozměr	Ks	
1	201.4811-600	0	VALEC VERTIKÁLNÍ / VERTICAL CYLINDER / VERTIKALZYLINDER		1	
2	30.4811-103	0	TYC / POLE / STANGE	d 20	7	
3	30.8911-321	0	VALEC / CYLINDER / ZYLINDER	TRUBKA 70x12.5	7	
4	30.D311-160	0	TYC / POLE / STANGE	d 20	1	
5	30.D411-151	0	LISTA / SLAT / LEISTE	HR 80x25	2	
6	30.D411-152	0	ROST / GRATE / GITTER	P 4x409	1	
7	30.D411-153	0	ROST / GRATE / GITTER	P 4x665	1	
8	30.D411-155	0	CELO / FOREHEAD / STIRN	P 25x237	1	
9	30.D411-157	0	LISTA / SLAT / LEISTE	HR 50x25	1	
10	90.001.25.049	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10X35	2	
11	90.001.25.054	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10X60	2	
12	90.001.25.059	1	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M12X35	2	
13	90.001.25.065	1	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M8X70	4	
14	90.002.2D.029	0	SROUB STAVEČI / SET SCREW / STELLSCHRAUBE	SROUB M6x8	14	
15	90.011.27.005	0	SROUB ZAPUSTNÝ / COUNTERSUNK SCREW / SENKSCHEIBE	SROUB M6X12	12	
16	90.154.50.011	0	PODLOŽKA VÝMEZOVACÍ / DISTANCE WASHER / AUSGLEICHSSCHEIBE	20x28x1	14	
17	95.001.024	0	LOŽISKO / BEARING / LAGER	6304 2RSA	14	

1.PRIDAN 4xSROUB M8x70(90.001.25.095), 2xSROUB M12x35(90.001.25.059), 032/ZM155 30.9.2014 SLEZACKOVA

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

10.16. Kusovník / Piece list / Stückliste - Válec vertikální / Vertical cylinder / Vertikalzylinder

Číslo Sestavy 201.4811-600		Ver. 0	Název sestavy VALEC VERTIKALNI/VERTICAL CYLINDER/VERTIKALZYLINDER		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.2014-406	0	KOSTKA / CUBE / WÜRFEL	HR 20 x 20	1
2	30.2911-604 (2)	0	PODLOŽKA / WASHER / UNTERLEGSCHEIBE	P 4x55	2
3	30.2911-608	0	KOSTKA / CUBE / WÜRFEL	HR 50x20	1
4	30.4311-605	0	MATICE / NUT / MUTTER	d 45	1
5	30.4811-601	0	LISTA / SLAT / LEISTE	HR 70x15	1
6	30.4811-602	0	LISTA / SLAT / LEISTE	HR 70x15	1
7	30.4811-603	0	OSA / AXLE / ACHSE	D30	2
8	30.4811-604	0	VALEC / CYLINDER / ZYLINDER	TR 60x3	2
9	90.001.25.047	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10X25	1
10	90.001.25.048	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10X35	4
11	90.156.50.006 (2)	0	PODLOŽKA / WASHER / UNTERLEGSCHEIBE	PODLOŽKA 17x50x3	2
12	94.008.005	0	PAKA MONTAŽNÍ / ASSEMBLY LEVER / MONTAGEHEBEL	M10	1
13	95.001.008	0	LOŽISKO / BEARING / LAGER	6006 2RS	4
14	95.600.013	0	KROUZEK POJIST.VNEJŠÍ / EXTERNAL RETAINING RING / SICHERUNGSRING AUßEN	POJISTNÝ KROUZEK 30	2

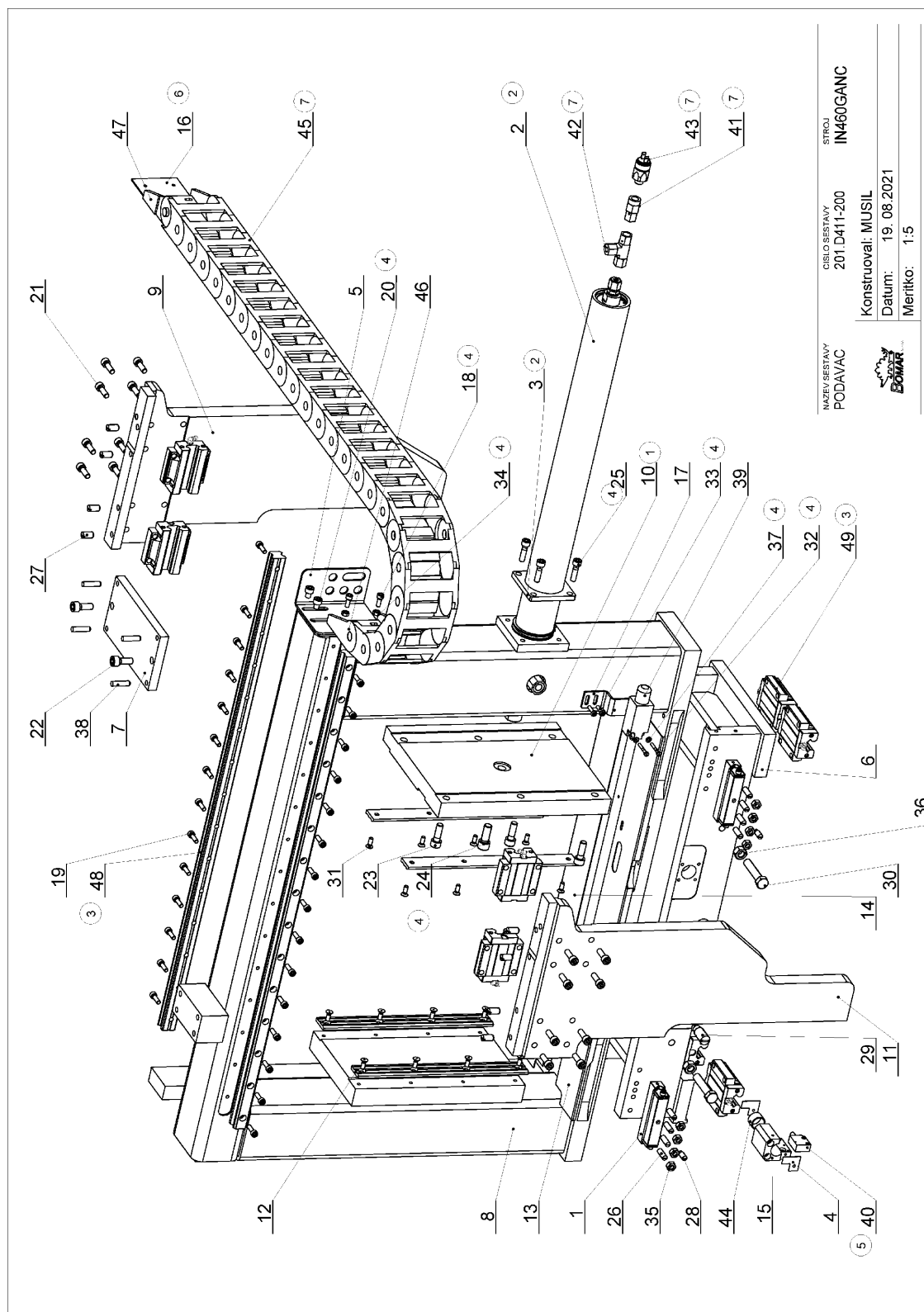
1.ZRUS PODLOŽKA 90.151.50.001 A NAHR. ZAJISTENÍ KOLA 30.1804-006. 183/ZM195 14.5.2007 SLEZACKOVA

2.ZRUS PODLOŽKA 30.1804-006 A NAHR. 30.2911-604.ZRUS.PODLOŽKA 30.2911-606 A NAHR.90.156.50.006. 326/ZM074 11.3.2022 SLEZACKOVA

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;

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

10.17. Podavač / Feeder / Vorschub



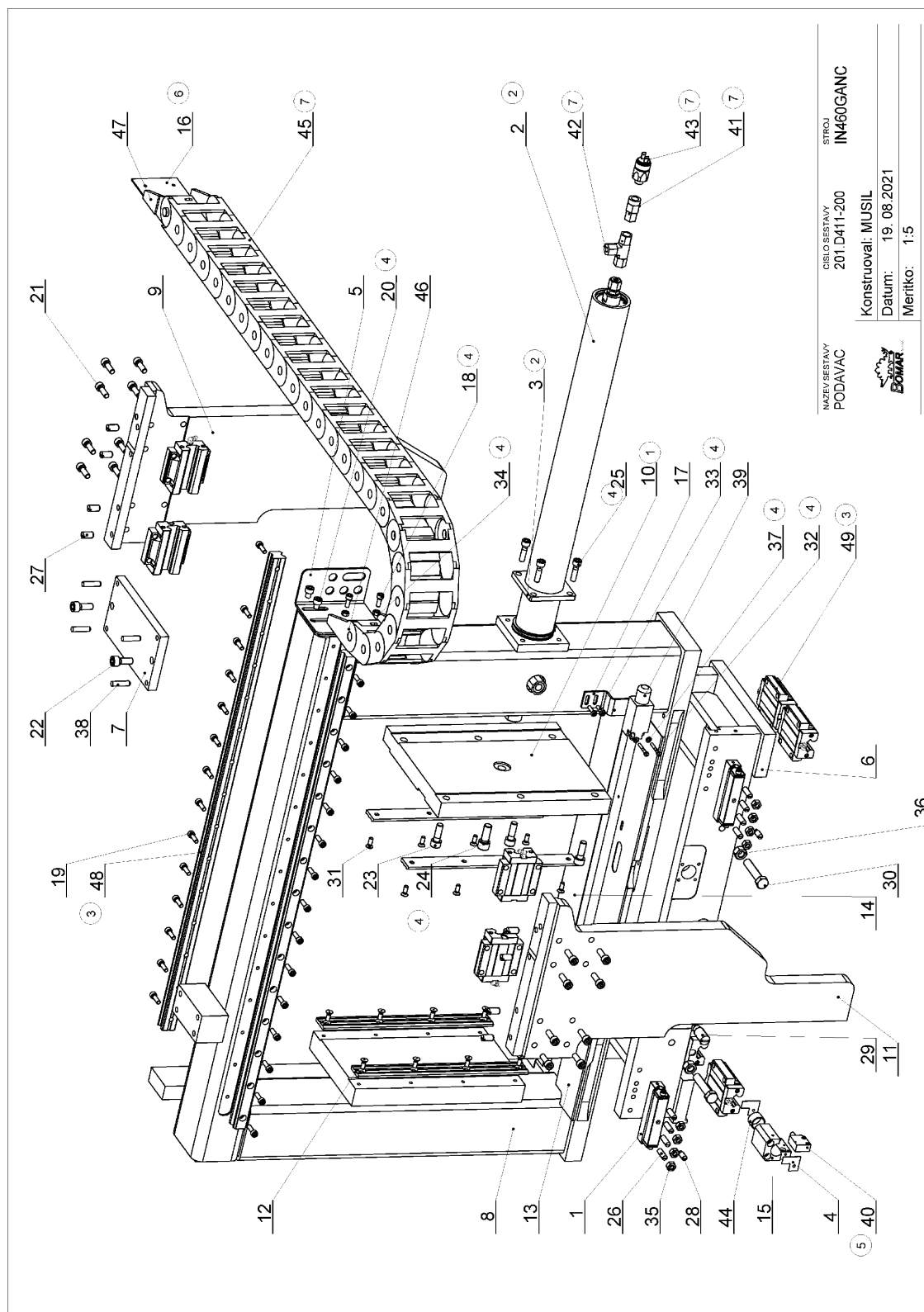
10.18. Kusovník / Piece list / Stückliste - Podavač / Feeder / Vorschub

Číslo Sestavy 201.D411-200		Ver. 0	Název sestavy PODAVAC/FEEDER/VORSCHUB		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.2911-200	1	ELEMENT VALECKOVÝ / ROLLER ELEMENT / ROLLENELEMENT		4
2	201.D407-210	0	VALEC SVĚRAKŮ / VICE CYLINDER / SCHRAUBSTOCKZYLINDER		1
3	30.2011-010	0	PRÍLOŽKA / CLIP / CLIP	P8x80	1
4	30.2911-030	0	STERAC / WIPER / ABSTREIFER	P 0.2-26.5	2
5	30.D311-101	0	KONZOLA / BRACKET / KONSOLE	P 3x120	1
6	30.D311-201	0	VOZÍK / CART / WAGEN		1
7	30.D311-219	0	VÝZTUHA / REINFORCEMENT / VERSTEIFUNG	HR 100x15	1
8	30.D411-202	0	SLoup PODAVACE / FEEDER POLE / VORSCHUBSÄULE		1
9	30.D411-231	0	CELIST POHYBLIVÁ / MOVING JAW / BEWEGLICHE BACKE		1
10	30.D411-232	0	CELIST POHYBLIVÁ / MOVING JAW / BEWEGLICHE BACKE	HR 300x30	1
11	30.D411-233	0	CELIST POHYBLIVÁ / MOVING JAW / BEWEGLICHE BACKE		1
12	30.D411-235	0	LISTA CELISTÍ / JAW SLAT / BACKENLEISTE	HR 30x10	4
13	30.D411-236	0	KRYT LOŽISKA / BEARING COVER / LAGERABDECKUNG	P 1x80	1
14	30.D411-237	0	KRYT LOŽISKA / BEARING COVER / LAGERABDECKUNG	P 1x80	1
15	30.K511-110	0	DRŽÁK / HOLDER / HALTER	HR 50x50	1
16	30.Y404-302	0	DRŽÁK / HOLDER / HALTER	P 2x80	1
17	30.Y504-003	0	DRŽÁK / HOLDER / HALTER	P 3x30	1
18	90.001.25.017	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M6x16	2
19	90.001.25.018	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M6x20	30
20	90.001.25.028	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M8x10	2
21	90.001.25.033	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	8x25	16
22	90.001.25.047	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10x25	2
23	90.001.25.048	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10x30	3
24	90.001.25.058	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M12x30	1
25	90.001.55.083	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M8x30	4
26	90.002.2D.013	0	SROUB STAVECÍ / SET SCREW / STELLSCHRAUBE	SROUB M8x25	8
27	90.002.2D.015	0	SROUB STAVECÍ / SET SCREW / STELLSCHRAUBE	SROUB M10x20	8
28	90.004.2D.009	0	SROUB STAVECÍ / SET SCREW / STELLSCHRAUBE	SROUB M8x20	4
29	90.004.2D.019	0	SROUB STAVECÍ / SET SCREW / STELLSCHRAUBE	SROUB M16x40	1
30	90.005.55.055	0	SROUB 6HRANNÝ / HEX HEAD SCREW / SECHSKANTSCHRAUBE	SROUB M12x60	4
31	90.011.27.017	0	SROUB ZAPUSTNÝ / COUNTERSUNK SCREW / SENKSCHEIBE	SROUB M6x16	16
32	90.012.50.007	0	SROUB VALCOVÝ / CYLINDER HEAD BOLT / ZYLINDERKOPFSCHRAUBE	SROUB M4x30	2
33	90.013.27.006	0	SROUB PULKULATÝ / BUTTON HEAD SCREW / RUNDKOPFSCHRAUBE	M5x20	2
34	90.100.55.004	0	MATICE PRESNÁ ZINĚK / PRECISION NUT - ZN / PRÄZISE MUTTER - ZN	MATICE _M6	2

Číslo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;

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

10.19. Podavač / Feeder / Vorschub



10.20. Kusovník / Piece list / Stückliste - Podavač / Feeder / Vorschub

35	90.100.55.005	0		0	MATICE PRESNA ZINEK / PRECISION NUT - ZN / PŘÁŽISE MÜTTER - ZN	MATICE_M8	8
36	90.100.55.007	0		0	MATICE PRESNA ZINEK / PRECISION NUT - ZN / PŘÁŽISE MÜTTER - ZN	MATICE_M12	4
37	90.150.50.002	4		0	PODLOŽKA / WASHER / UNTERLEGSCHIBE	PODLOŽKA 4,3	2
38	90.300.02.010	0		0	KOLIK VALCOVÝ KALENÝ / CYLINDRICAL PIN HARDENED / ZYLINDERSTIFT GEHÄRTET	KOLIK 8X32	4
39	91.173.007	0		0	SPINAC KONCOVÝ / END SWITCH / ENDSCHALTER	RIWK	1
40	91.270.011	5		0	SNIMAC MAGNET. / MAGNETIC SENSOR / MAGNETSENSOR	LMIX2.026-08.0-1.00	1
41	92.015.001	7		0	SROUBENÍ PRÍME / TUBE FITTING - STRAIGHT / GERADE VERSCHRAUBUNG	66353	1
42	92.018.001	7		0	PROPOUKA T STAVECI / T CONNECTING PART - STOPPING / T VERBINDUNGSTÜCK - STOPPEN	P-ELVD 8L	1
43	92.201.003	7		0	SPINAC TLAKOVÝ / PRESSURE SWITCH / DRUCKSCHALTER	20-50 bar	1
44	95.700.003			0	POUZDRO / SLEEVE / BÜCHSE	20X15	1
45	99.170.001	3	7	0	RETEZ ENERGIÍ / CABEL DRAG CHAIN / ENERGIEKETTE	0555.030.075.100	24
46	99.173.001	3		0	KONCOVKA VNEJŠÍ / OUTSIDE END / ÄUßERES ENDSTÜCK	KONCOVKA VNEJ	1
47	99.173.002			0	KONCOVKA VNITŘNÍ / INSIDE END / INNERES ENDSTÜCK	KONCOVKA VNIT	1
48	99.200.258			0	VEDENÍ LINEÁRNÍ / LINEAR GUIDE / LINEARE FÜHRUNG	MSA 25R 880 20/20N	2
49	99.201.046			0	VOZÍK LINEÁRNÍHO VEDENÍ / LINEAR GUIDE CART / LINEARFÜHRUNGSWAGEN	MSA25E SS FO N	8

1.CELIST 30 D411-231 ROZDELENA NA 2 DILY - PRIDAN DIL 30 D411-232; LIN VEDENI 99.200.168 (HSR25 880) NAHAZENO 99.200.203 (HGR25 880); VOZIKY 99.201.036 (HSR25A SS) NAHAZENY 99.201.008 (HGW25CC) VOZIKY 99.201.026 (HSR25B SS) NAHAZENY 99.201.008 (HGW25CC)

313/zm.318 HLADIL 26.11.2010

2.DIL 30.5907-003 NAHRAZEN 30.2011-010; 201.D407-200 NAHRAZEN 201.D407-210; ZRUSENY DILY 30.D411-238; 30.D411-239 A 30.4307-508; 097/zm 094 HLADIL 3.5.2011

3 7B1S I IN VEDENI 99 200 203 A NAHP 99 200 258 7B1S

3.ZRUS.LIN.VEDENI 99.Z00.Z03 A NAHR.99.Z01.008 A NAHR.99.Z01.040 . 038/ZIM118
4.4.0040 01.FZAC/02/14

4.4.2012 SLEZACKOVA

4. PRIDANO - 4xSROUB M8x30(90.001.25.058), 1xSROUB M12x30(90.001.25.058), 2xSROUB M4x30(90.012.50.007), 2xPODLOZKA 4,3 (90.150.50.002), 2xSROUB M5x20(90.013.27.006), 2xMATICE 6(90.100.55.004), 2xSROUB M6x16(90.001.25.017), 2xSROUB M8x10 (90.001.25.028), 032ZM155 30 9 2014 SLEZKAKOVA

5.ZRUS.MAGNATICKY SNIMAC 91.270.006 A NAHR.91.270.011. 032/ZM062 7.3.2016 SLEZACKOVA

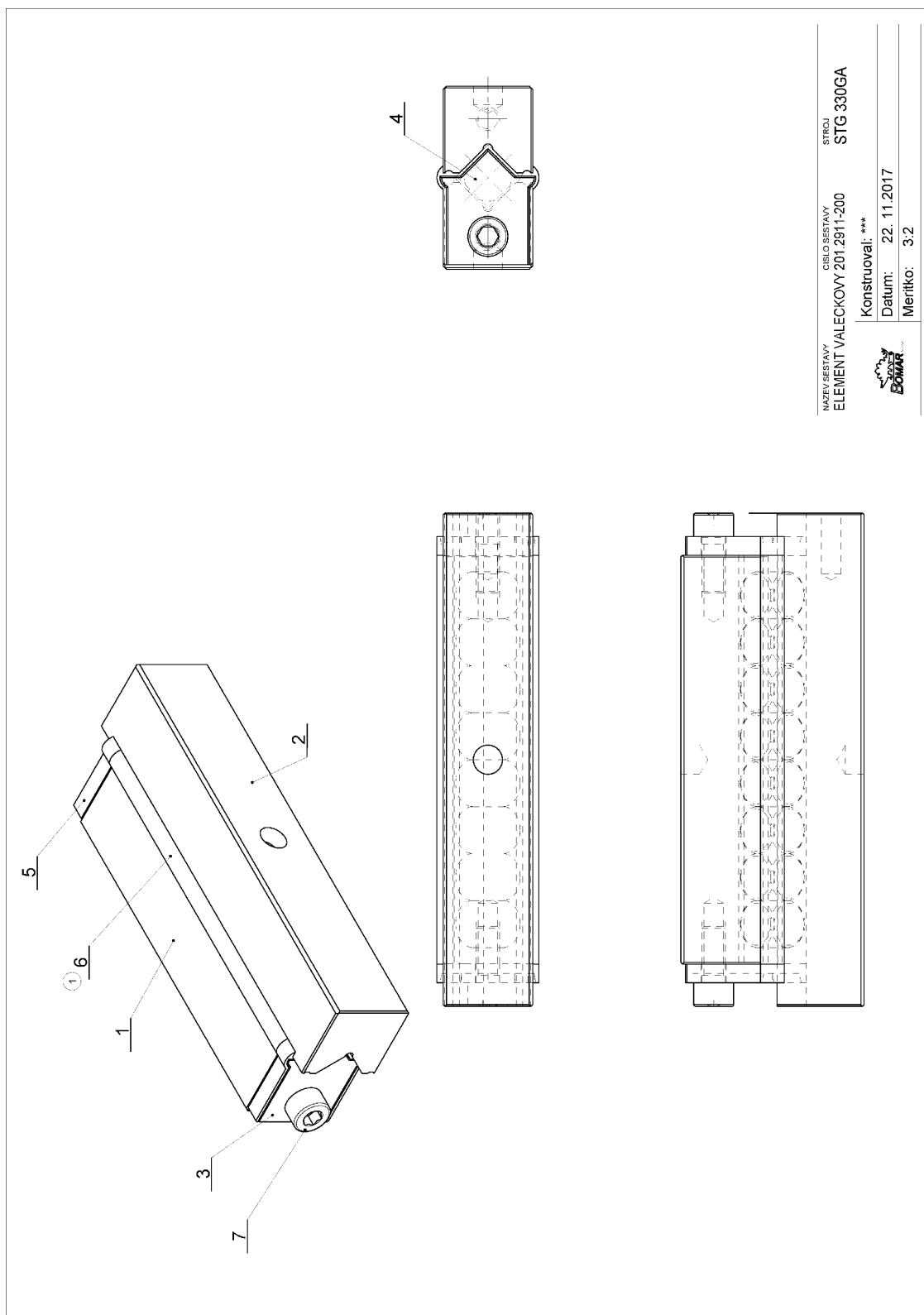
6. PRIDAN DRŽAK 30.Y404-302. 148/ZM220 10.7.2017 SLEZACKOVA

7.PRID. TLAKOVY SPINAC 92.201.003, PRID. PROPOJKA 92.018.001, PRID. SROUBENI 92.015.001,

PRID. 1xCLANEK 99.170.001. 187/ZM283 19.8.2021 KOVAR

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

10.21. Element válečkový / Roller element / Rollenelement



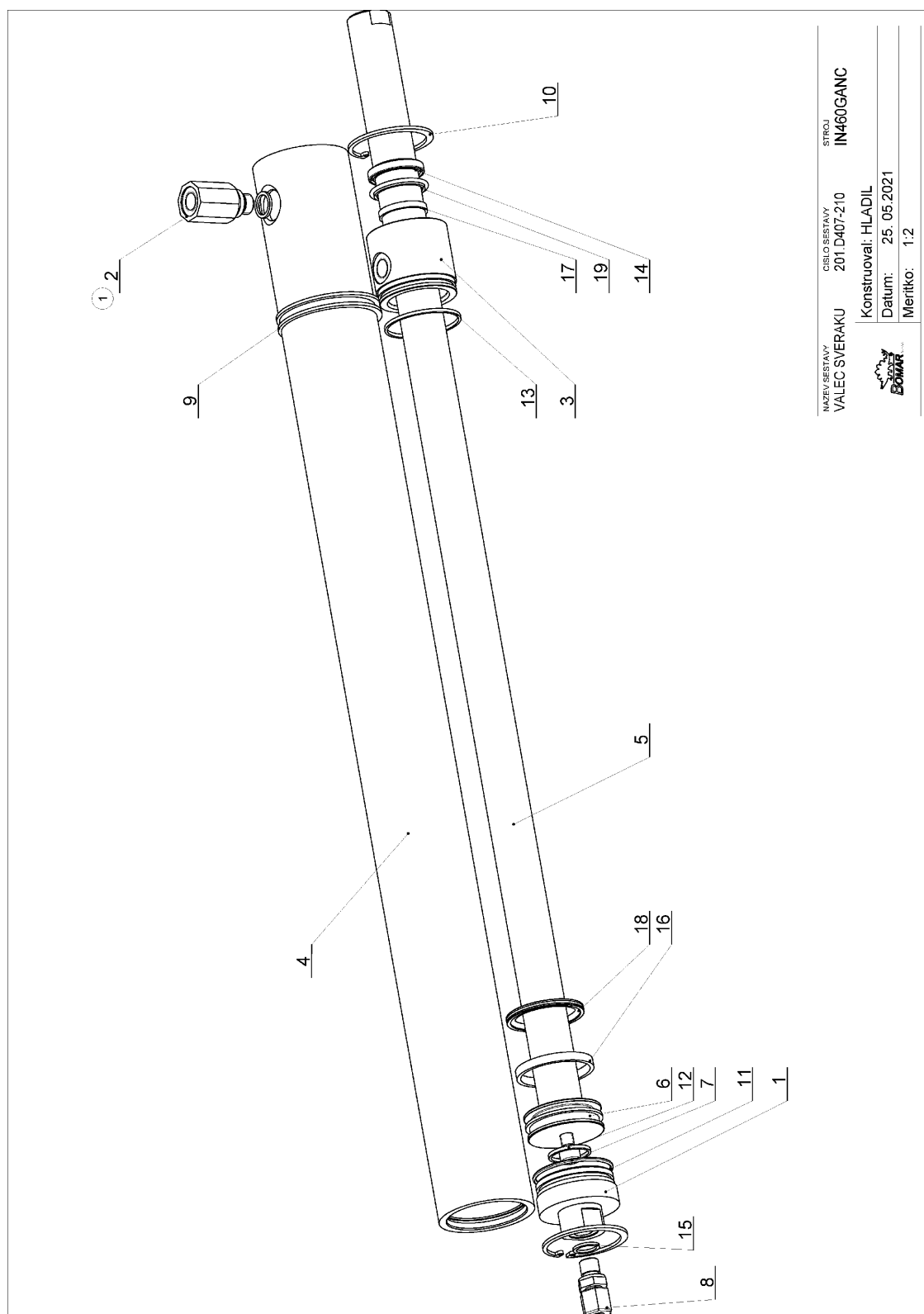
10.22. Kusovník / Piece list / Stückliste - Element válečkový / Roller element / Rollenelement

Číslo sestavy 201.2911-200		Ver. 1	Název sestavy ELEMENT VALEČKOVÝ/ROLLER ELEMENT/ROLLENELEMENT	
Poz.	Objednávací číslo	Ver.	Název položky	Ks
1	30.2911-201	1	LISTA / SLAT / LEISTE	1
2	30.2911-202	1	LISTA / SLAT / LEISTE	1
3	30.2911-206	0	PRÍLOŽKA / CLIP / CLIP	2
4	30.4311-203	0	VALEČEK / ROLLER / ROLLE	8
5	31.2911-204	0	STERAC / WIPER / ABSTREIFER	2
6	89.2911-205	1	PRACHOVKA / DUST COVER / STAUBSCHUTZ	2
7	90.001.25.008	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	2

1.ZM.CISLOVANI 31.2911-205 NA 89.2911-205; 129/ZM233 4.7.2018 SCERBA

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

10.23. Válec svěráku / Vice cylinder / Schraubstockzylinder



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

Číslo Sestavy 201.D407-210		Ver. 0	Název sestavy VALEC SVERAKU/VICE CYLINDER/SCHRAUBSTOCKZYLINDER		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.2007-304	2	VIKO / COVER / DECKEL	d 55	1
2	30.2011-011	0	SROUBENI / TUBE FITTING / VERSCHRAUBUNG	SW24	1
3	30.C407-012	2	VIKO / COVER / DECKEL	d 55	1
4	30.D407-211	0	VALEC / CYLINDER / ZYLINDER	TR 62/50	1
5	30.D407-212	0	PISTNICE / PISTON ROD / KOLBENSTANGE	d 28 f8	1
6	30.Y307-035	0	PIST / PISTON / KOLBEN	d 55	1
7	90.001.25.032	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	8x20	1
8	92.002.101	0	SROUBENI PRIME KOMPL / null / null		1
9	95.600.021	0	KROUZEK POJIST.VNEJS / EXTERNAL RETAINING RING / SICHERUNGSRING AUSEN	POJISTNY KROUZEK 62	2
10	95.801.008	0	KROUZEK POJIST.VNITR / INTERNAL RETAINING RING / SICHERUNGSRING INNEN	POJISTNY KROUZEK 52	2
11	96.001.013	0	O-KROUZEK STATICKY / O-RING STATIC / O-RING STATISCH	45X2	1
12	96.002.011	0	O-KROUZEK DYNAMICKY / O-RING DYNAMIC / O-RING DYNAMISCH	24X2	1
13	96.002.019	0	O-KROUZEK DYNAMICKY / O-RING DYNAMIC / O-RING DYNAMISCH	48x2 NBR 70SH	1
14	96.061.009	0	KROUZEK STIRACI / WIPER RING / ABSTREIFRING	WD2200280 Z201	1
15	96.082.002	0	KROUZEK TESNICI / SEALING RING / DICHTUNGSRING	13/17x1.5 CU	2
16	96.084.001	0	KROUZEK VODICI / GUIDE RING / FÜHRUNGSRING	GP6500500-T47	1
17	96.084.006	0	KROUZEK VODICI / GUIDE RING / FÜHRUNGSRING	GR4300280-T47	1
18	96.900.001	0	TESNENI KOMBINOVA NE / COMBINED SEALING / KOMBIDICHTUNG	PW4200500-Z20N	1
19	96.900.021	0	TESNENI KOMBINOVA NE / COMBINED SEALING / KOMBIDICHTUNG	RSK200280-48N	1

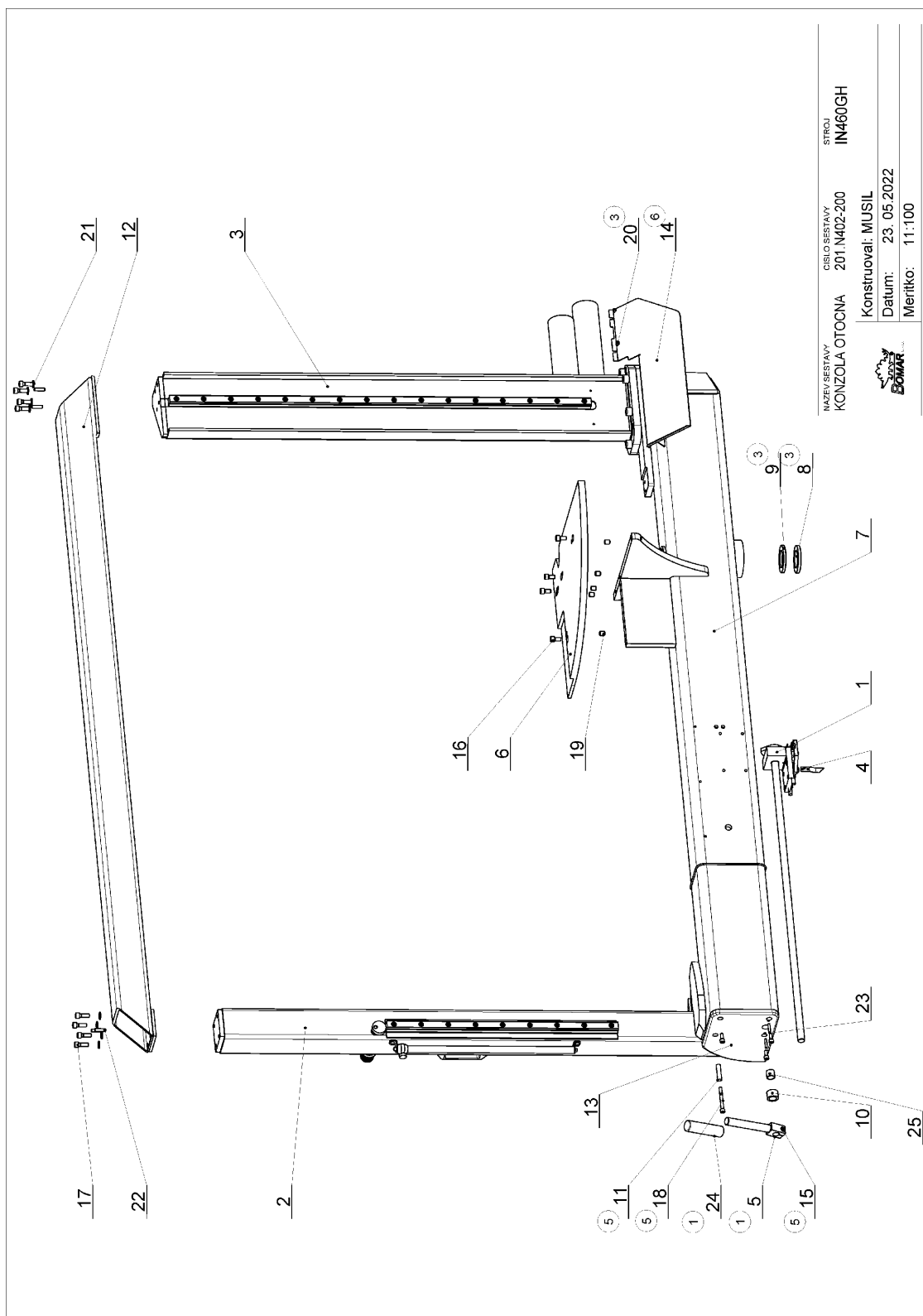
1.ZRUSENA REDUKCE 30.6407-310 A NAHR.30.2011-011;ZRUS.SROUBENI 30.2807-109. 118/ZM155 25.5.2021 SLEZACKOVA

Číslo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Name der Baugruppe; Pozice (Poz.)/Position/Position;

1.ZRUSENA REDUKCE 30.6407-310 A NAHR. 30.2011-011;ZRUS.SROUBENI 30.2807-109. 118/ZM155 25.5.2021 SLEZACKOVA

Číslo sestavy/Number of assembly/Baugruppe; Verze (Ver.)/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

10.25. Konzola otočná / Turnable consol / Drehkonsole



10.26. Kusovník / Piece list / Stückliste - Konzola otočná / Turnable consol / Drehkonsole

Číslo Sestavy 201.N402-200		Ver. 0	Název sestavy KONZOLA OTOČNA/PIVOT BRACKET/DREHKONSOLE		
Poz.	Objednáci číslo	Ver.	Název položky	Rozměr	Ks
1	201.Y402-020	0	BRZDA / BRAKE / BREMSE		1
2	201.Y402-250	0	SLOUP / POLE / SÄULE	SESTAVA	1
3	201.Y402-260	0	SLOUP / POLE / SÄULE	SESTAVA	1
4	30.4604-004	0	UKAZATEL / INDICATOR / ZEIGER	P 1,5x15	1
5	30.8602-505	0	PAKA / LEVER / HEBEL		1
6	30.N302-004	0	DESKA / BOARD / PLATTE	P 20x430	1
7	30.N402-101	0	KONZOLA / BRACKET / KONSOLE	SVARENO	1
8	30.Y302-006	0	PODLOŽKA DISTANČNÍ / SPACER WASHER / DISTANZSCHEIBE	d 80	1
9	30.Y302-007	0	PODLOŽKA DISTANČNÍ / SPACER WASHER / DISTANZSCHEIBE	d 80	1
10	30.Y302-204	0	KROUZEK DISTANČNÍ / SPACER RING / DISTANZRING	TR 32x5	1
11	30.Y302-208	0	DISTANČNÍ / SPACER / ABSTANDSSTÜCK	TR 12x1	1
12	30.Y402-002	0	NOSNÍK / BEAM / TRÄGER		1
13	30.Y402-203	0	DESKA / BOARD / PLATTE	P 15x200	1
14	30.Y414-351	0	OKAP / DRAIN PLATE / ABLAUFLATTE	P 1,5x277	1
15	90.001.25.032	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	8x20	4
16	90.001.25.046	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10X20	4
17	90.001.25.048	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10X30	8
18	90.001.25.097	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M8X75	1
19	90.002.2D.017	0	SROUB STAVEČÍ / SET SCREW / STELLSCHRAUBE	SROUB M12X16	5
20	90.013.27.003	0	SROUB PULKULATÝ / BUTTON HEAD SCREW / RUNDKOPFSCHRAUBE	M5X10	4
21	90.150.50.006	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	PODLOŽKA 10,5	8
22	90.300.0Z.010	0	KOLÍK VALCOVÝ KALENÝ / CYLINDRICAL PIN HARDENED / ZYLINDERSTIFT GEHÄRTET	KOLÍK 8X32	4
23	90.301.0Z.013	0	KOLÍK VALCOVÝ MEKKÝ / CYLINDRICAL PIN UNHARDENED / ZYLINDERSTIFT WEICH	KOLÍK 6X30	2
24	94.004.502	0	RUKOJET / HANDLE / GRIFF	D22	1
25	95.700.004	0	POUZDRO / SLEEVE / BÜCHSE	20X20	1

1.ZRUS.ZASLEPKA 30.Y302-205 A 2XSROUB M5x6 (90.013.27.002),ZRUS.SOUC.30.8602-514 A NAHR.30.8602-505,
ZRUS.SOUC.94.002.001 A NAHR.94.0004.502. 167.279/ZM289 29.11.2010 SLEZACKOVA

3.PRIDAN 4XSROUB M5x10(90.013.27.003) ,ZRUS.DRZAK 30.0807-008,ZM.POLOHY PODLOZEK 30.Y302-006 A 30.Y302-007.
003/ZM149 2.7.2015 SLEZACKOVA

4. ODEBRANO POUZDRO 95.720.002. 297/ZM415 09.10.2019 BENDA

5.ZM. POCTU KUSU SROUB M8x20 (Z 5 NA 4) 90.001.25.032, PRIDAN SROUB M8x75 (1x) 90.001.25.097,
PRIDAN DISTANC (1x) 30.Y302-208 022/ZM019 26.01.2022 ZINDULKA

6.ZRUS. OKAP 30.Y414-301 A NAHR. 30.Y404-351. 156/ZM179 23.5.2022 JAGNESAK

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

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

10.27. Brzda / Brake / Bremse

Číslo Sestavy 201.Y402-020		Ver. 0	Název sestavy BRZDA/BRAKE/BREMSE		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.Y402-022	0	DESKA / BOARD / PLATTE	P2-30	1
2	30.Y402-023	0	SROUB STAVEČI / SET SCREW / STELLSCHRAUBE	6HR 19	2
3	30.Y402-024	0	DESKA / BOARD / PLATTE	HR 80x10	1
4	30.Y402-027	0	KROUZEK / RING / RING	TR 25x2	1
5	30.Y402-028	0	TELESO / BODY / KÖRPER	P 3x15	1
6	30.Y402-029	0	DESKA / BOARD / PLATTE		1
7	30.Y402-225	2	EXCENTR / EXCENTR / EXCENTER		1
8	90.001.25.015	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M6x10	2
9	90.001.25.038	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M8x50	2
10	90.005.55.015	0	SROUB 6HRANNÝ / HEX HEAD SCREW / SECHSKANTSCHRAUBE	SROUB M8x20	1
11	90.015.25.010	1	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10x25	4
12	90.101.55.001	0	MATICE PR NIZKA ZN / PRECISION THIN NUT - ZN / PRÄZISE MUTTER NIEDRIGE - ZN	MATICE M8	1
13	95.700.004	0	POUZDRO / SLEEVE / BÜCHSE	20x20	1

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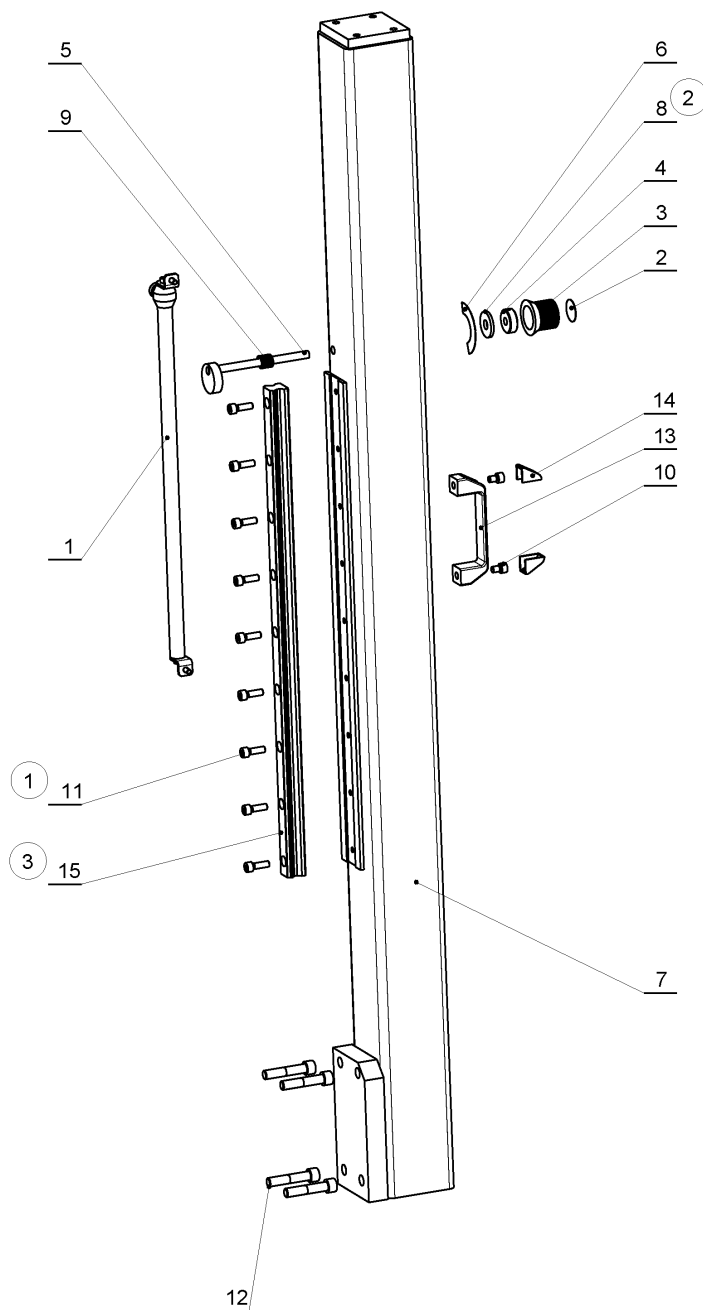
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1.ZRUS. 4x SROUB 90.001.25.046 A NAHR. 4x SROUB 90.015.25.010. 297/ZM388 21.10.2021 KOVAR

2.ZRUS. EXCENTR 30.Y402-125 A NAHR. EXCENTR 30.Y402-225 022/ZM019 26.01.2022 ZINDULKA

Číslo 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

10.28. Sloup / Pole / Säule



NAZEV SESTAVY SLOUP	CISLO SESTAVY 201.Y402-250	STROJ I460DGH/A
	Konstruoval: MUSIL	
	Datum: 07. 05.2012	
	Meritko: 7:50	

10.29. Kusovník / Piece list / Stückliste - Sloup / Pole / Säule

Číslo Sestavy 201.Y402-250		Ver. 0	Název sestavy SLOUP/POLE/SÄULE		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.Y402-070	0	ODMEROVANI / MEASURING / GEHRUNGSMESSUNG	SESTAVA	1
2	30.6130-012	0	VIKO / COVER / DECKEL	P 0.5x30	1
3	30.6130-020	0	HLAVICE / HEAD / KOPF	VYLISEK	1
4	30.Y302-058	2	KOLEČKO / WHEEL / ROLLE	d 32	1
5	30.Y402-055	0	OSA / AXLE / ACHSE	SVARENO	1
6	30.Y402-154	0	STUPNICE / SCALE / SKALA	P 0.5x34	1
7	30.Y402-251	0	SLOUP / POLE / SÄULE	SVARENO	1
8	31.K107-006	0	GUMA / RUBBER / GUMMI	d35	1
9	31.T302-054	0	PRUŽINA / SPRING / FEDER	d 2.24	1
10	90.001.25.029	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M8x12	2
11	90.001.25.033	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	8x25	9
12	90.001.25.063	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M12x60	4
13	94.012.001	0	RUKOJET / HANDLE / GRIFF		1
14	94.012.002	0	KRYT / COVER / ABDECKUNG		2
15	99.200.290	0	VEDENÍ LINEARNÍ / LINEAR GUIDE / LINEARE FÜHRUNG	MSA 30R 680 20/20N	1

1.ZRUS.LIN.VEDENÍ HGR30 L=620 (99.200.124) A NAHR.LIN.VEDENIM HSR30 L=680 (99.200.139).
PRID.9xSROUB IMBUS M8x25 (90.001.25.033). 122/ZM150 23.6.2009 SLEZACKOVA

2.ZRUS.GUMA 30.Y302-157 A NAHR.31.K107-006. 125/ZM141 10.6.2011 SLEZACKOVA

3.ZRUS.LIN.VEDENÍ(HIWIN) 99.200.139 A NAHR.99.200.290(PMI). 056/ZM153 7.5.2012 SLEZACKOVA

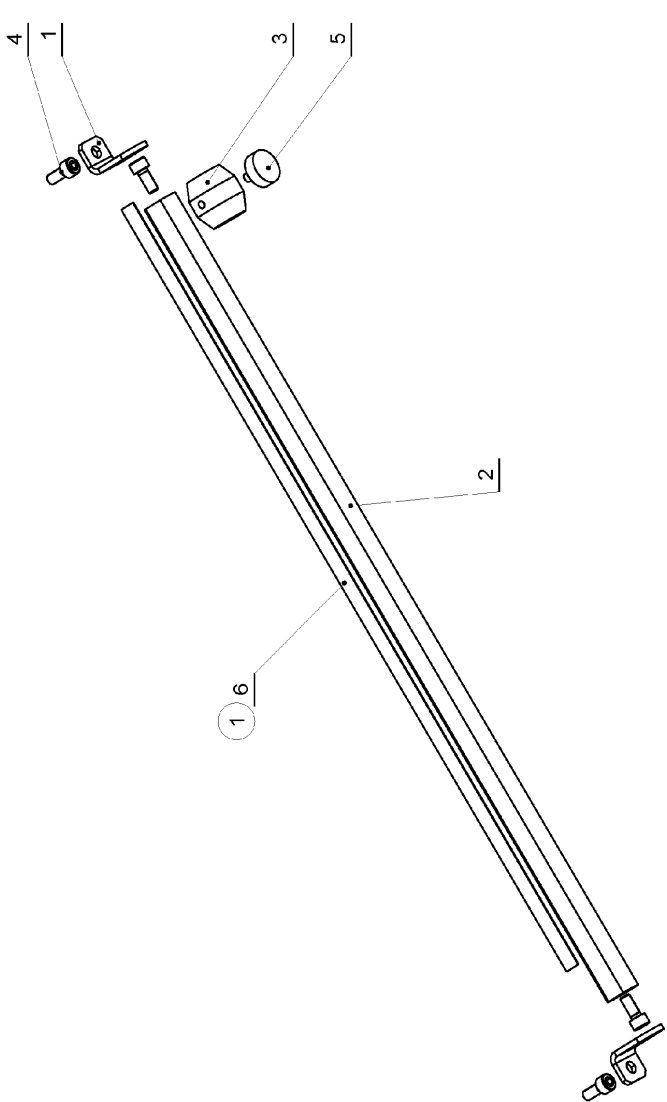
Číslo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;

Číslo 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

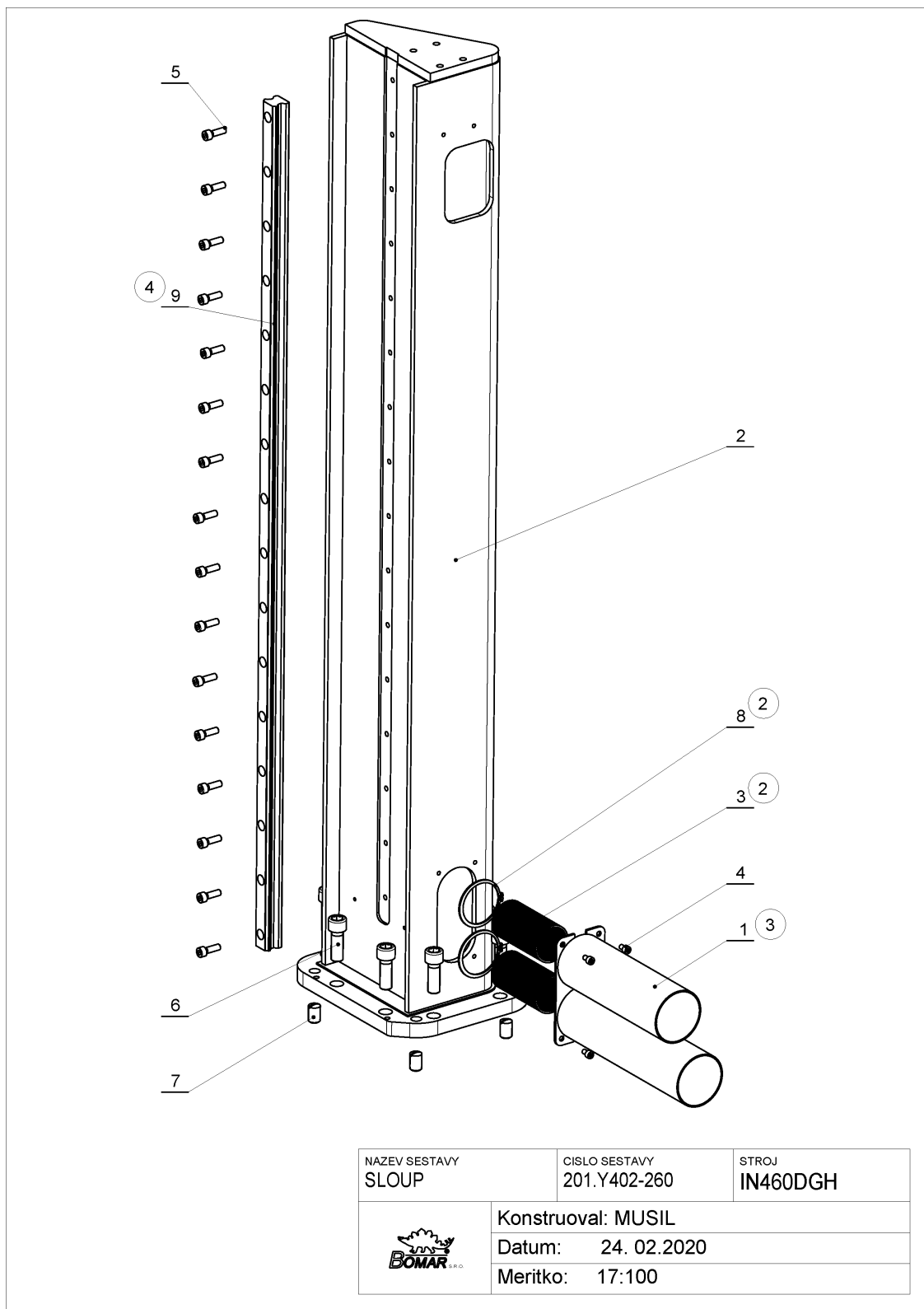
10.30. Odměrování / Measuring / Gehrungsmessung

Číslo sestavy 201.Y402-070		Ver. 0	Název sestavy ODMEROVANI/MEASURING/GEHRUNGSMESSUNG			
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks	
1	30.6114-023	0	DRŽÁK / HOLDER / HALTER	P 3x20	2	
2	30.Y402-071	0	TYC ODMEROVANI / MEASURING POLE / ABMESSUNGSSTANGE	d 20	1	
3	30.2014-001	1	DORAZ / STOP PIECE / ANSCHLAG	D 30	1	
4	90.001.25.092	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M6x14	4	
5	94.007.001	0	SROUB PLASTOVÝ / PLASTIC BOLT / KUNSTSTOFFSCHRAUBE	M5x10	1	
6	99.120.001	1	PRAVITKO / RULER / SKALENBANDMAß	0.5m	1	

1.PRIDANO PRAVITKO 99.120.001. 138/ZM144 19.5.2010 SLEZACKOVA



10.31. Sloup / Pole / Säule



10.32. Kusovník / Piece list / Stückliste - Sloup / Pole / Säule

Číslo sestavy 201.Y402-260		Ver. 0	Název sestavy SLOUP/POLE/SAULE			
Poz.	Objednávací číslo	Ver.	Název položky	Rozměr	Ks	
1	30.Y502-125	3	DRŽÁK / HOLDER / HALTER		1	
2	30.Y402-261	0	SLOUP / POLE / SAULE	SVARENO	1	
3	41.001.006	2	HADICE / HOSE / SCHLAUCH	PG48	2	
4	90.001.25.015	0	SROUB / IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M8X10	4	
5	90.001.25.033	0	SROUB / IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	8x25	16	
6	90.001.25.074	0	SROUB / IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M16X45	7	
7	90.002.20.028	0	SROUB / STAVEČ / SET SCREW / STELSCHRAUBE	SROUB M16x1, 5x25	4	
8	96.600.021	2	KROUZEK / POJIST. VNEJŠÍ / EXTERNAL RETAINING RING / SICHERUNGSRING AUßEN	POJISTNÝ KROUZEK 62	2	
9	99.200.261	4	VEDENÍ LINEARNÍ / LINEAR GUIDE / LINEARE FÜHRUNG	MSA 30R 1240 2020N	1	

1.ZRUS.LIN.VEDENÍ HGR30R L=1198 (99.200.040) A NAHR.LIN.VEDENÍM HSR30 G'20,L=1240 (99.200.140). 121/ZM150
23.6.2009 SLEZACKOVA

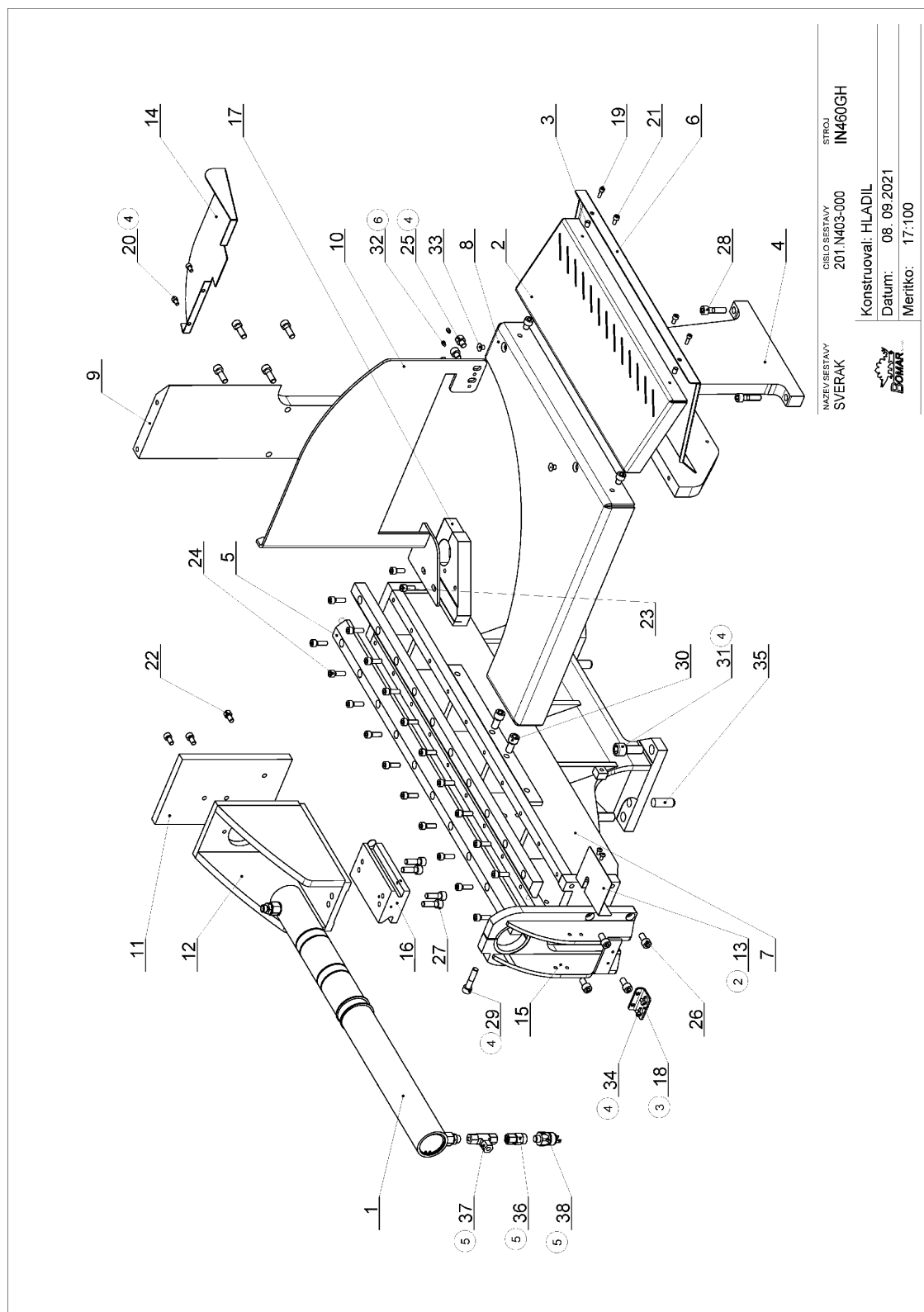
2.ZRUS.UCHYTKA 30.Y502-162 A NAHR.30.Y502-163.ZRUS.POJ.KROUZEK 95.800.016 A NAHR.95.800.021.ZRUS.HADICE PG36 (41.001.005)
A NAHR.HACICI PG48 (41.001.006) 326/ZM016 28.1.2011 SLEZACKOVA

3.ZRUS.DRŽÁK 30.Y502-163 A NAHR.30.Y502-125. 287/ZM322 12.1.2.2011 SLEZACKOVA

4.ZR.LINEARNÍ VEDENÍ 99.200.140 A NAHR.99.200.291. 67/ZM093 24.02.2020 KOSYK

Číslo sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Versión); 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

10.33. Svěrák / Vice / Schraubstock

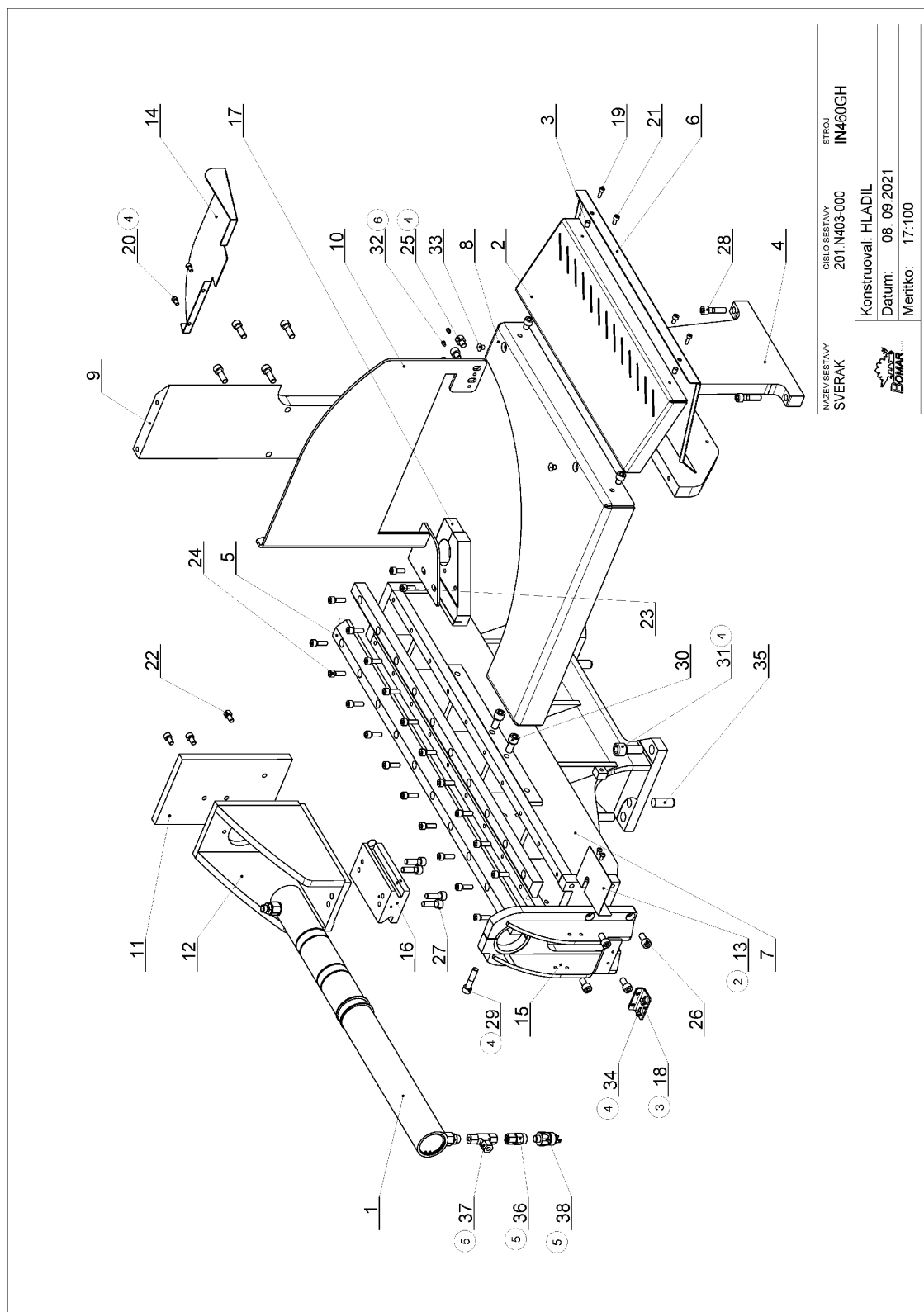


10.34. Kusovník / Piece list / Stückliste - Svěrák / Vice / Schraubstock

Číslo sestavy 201.N403-000		Ver. 0	Název sestavy SVERAK/VICE/SCHRAUBSTOCK			
Poz.	Objednávací číslo	Ver.	Název položky	Rozměr	Ks	
1	201.Y407-030	0	VALEC SVERAKU / VICE CYLINDER / SCHRAUBSTOCKZYLINDER			
2	30.2903-012	0	DRZAK / HOLDER / HALTER	P 3x240	1	
3	30.3509-015	2	DISTANC / SPACER / ABSTANDSTÜCK	TR 8x1	2	
4	30.N303-013	0	NOHA / LEG / STÄNDER	P25 - 394	1	
5	30.N303-102	0	LISTA VODICI / GUIDING SLAT / FÜHRUNGSLISTE	HR 40x25	2	
6	30.N303-112	0	SKLUZ / CHUTE / RUTSCH	P 1,5x272	1	
7	30.N303-201	0	TELESO SVERAKU / VICE BODY / SCHRAUBSTOCKKÖRPER		1	
8	30.N303-210	0	STUL / TABLE / TISCH	P 5x640	1	
9	30.N403-004	0	CELIST PEVNA / FIXED JAW / FESTE BACKE	P 30x182	1	
10	30.N403-006	0	BOCNICE / SIDE PLATE / SEITENTEIL		1	
11	30.N403-009	0	CELIST / JAW / BACKE	HR 160x16	1	
12	30.N403-105	0	CELIST / JAW / BACKE		1	
13	30.N403-107	2	OKAP / DRAIN PLATE / ABLAUFPLATTE	P 0,8x109	1	
14	30.N413-002	0	SKLUZ / CHUTE / RUTSCH	P 1,5x207	1	
15	30.Y303-104	0	DRZAK / HOLDER / HALTER		1	
16	30.Y303-206	0	KLUZAK / GLIDER / GLEITER	HR 80x50	1	
17	30.Y309-008	0	PRÍLOŽKA / CLIP / CLIP	HR 40x25	1	
18	30.Y309-204	3	DRZAK / HOLDER / HALTER	P 3x45	1	
19	90.001.25.009	4	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M5x16	2	
20	90.001.25.015	4	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M6x10	2	
21	90.001.25.016	4	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M6x12	2	
22	90.001.25.031	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	8x16	4	
23	90.001.25.032	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	8x20	2	
24	90.001.25.033	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	8x25	20	
25	90.001.25.043	4	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10x12	4	
26	90.001.25.046	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10x20	4	
27	90.001.25.048	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10x30	8	
28	90.001.25.050	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10x40	4	

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

10.35. Svěrák / Vice / Schraubstock



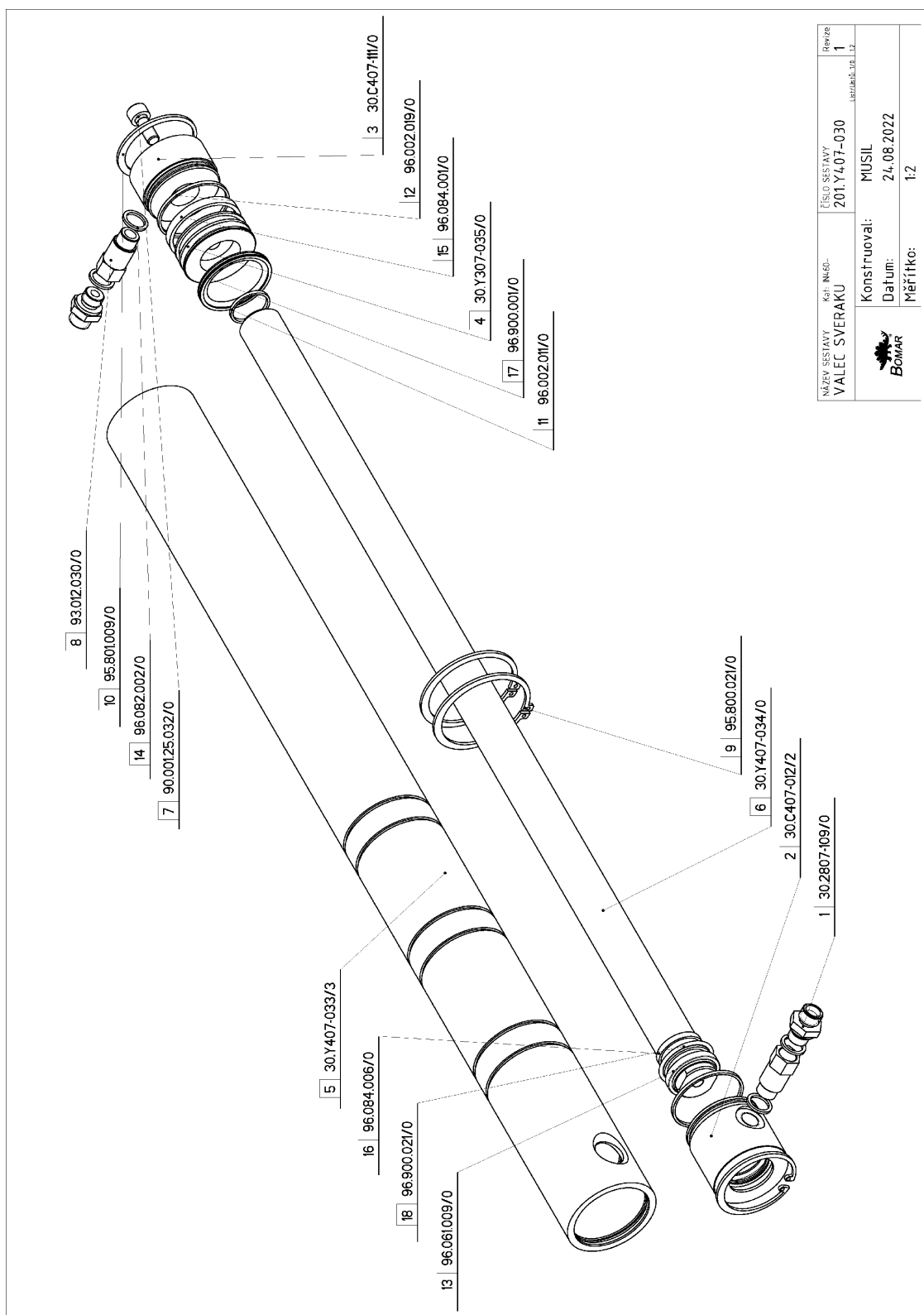
10.36. Kusovník / Piece list / Stückliste - Svěrák / Vice / Schraubstock

29	90.001.25.051	4	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10x45	1
30	90.001.25.057		0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M12x25	2
31	90.001.25.066	4	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M16x40	4
32	90.004.2D.014	6	0	SROUB STAVECI / SET SCREW / STELLSCHRAUBE	SROUB M6x10	2
33	90.011.27.010		0	SROUB ZAPUSTNÝ / COUNTERSUNK SCREW / SENKSCHEIBE	SROUB M6x10	2
34	90.013.27.003		0	SROUB PULKULATÝ / BUTTON HEAD SCREW / RUNDKOPFSCHRAUBE	M5x10	4
35	90.300.02.035		0	KOLÍK VALCOVÝ KALENÝ / CYLINDRICAL PIN HARDENED / ZYLINDERSTIFT GEHÄRTET	KOLÍK 16x45	2
36	92.015.001	5	0	SROUBENÍ PRÍME / TUBE FITTING - STRAIGHT / GERADE VERSCHRAUBUNG	66353	1
37	92.015.001	5	0	PROPOJKA T STAVECI / T CONNECTING PART - STOPPING / T VERBINDUNGSTÜCK - STOPPEN	P-ELVD 8L	1
38	92.201.003	5	0	SPINAC TLAKOVÝ / PRESSURE SWITCH / DRUCKSCHALTER	20-50 bar	1

1. ZRUS. PRÍLOŽKA 30.Y309-008.2xSROUB M10x40 (90.001.25.050). 046/ZM255 22.9.2010 SLEZACKOVA
2. PRIDAN OKAP 30.N403-107. 2296/ZM329 20.12.2011 SLEZACKOVA
3. PRIDAN DRŽAK 30.Y309-204. 025/ZM065 11.3.2013 SLEZACKOVA
4. PRID. SROUBY - 2x M5x16(90.001.25.009), 2x M6x10(90.001.25.015), 2x M6x12(90.001.25.016), 4x M10x12(90.001.25.043), 1x M10x45(90.001.25.051), 4x M16x40(90.001.25.086), 4x M5x10(90.013.27.003), ZRUS. STUL 30.N303-110 A NAHR. 30.N303-210. 102/ZM152 15.7.201
5. PRID. TLAKOVÝ SPINAC 92.201.003, PRID. PROPOJKA 92.018.001, PRID. SROUBENÍ 92.015.001. 187/ZM283 19.8.2021 KOVAR
6. PRID. 2x STAVECI SROUB M6x10 90.004.2D.014. 229/ZM318 8. 9. 2021 KOVAR

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

10.37. Válec svěráku / Vice cylinder / Schraubstockzylinder



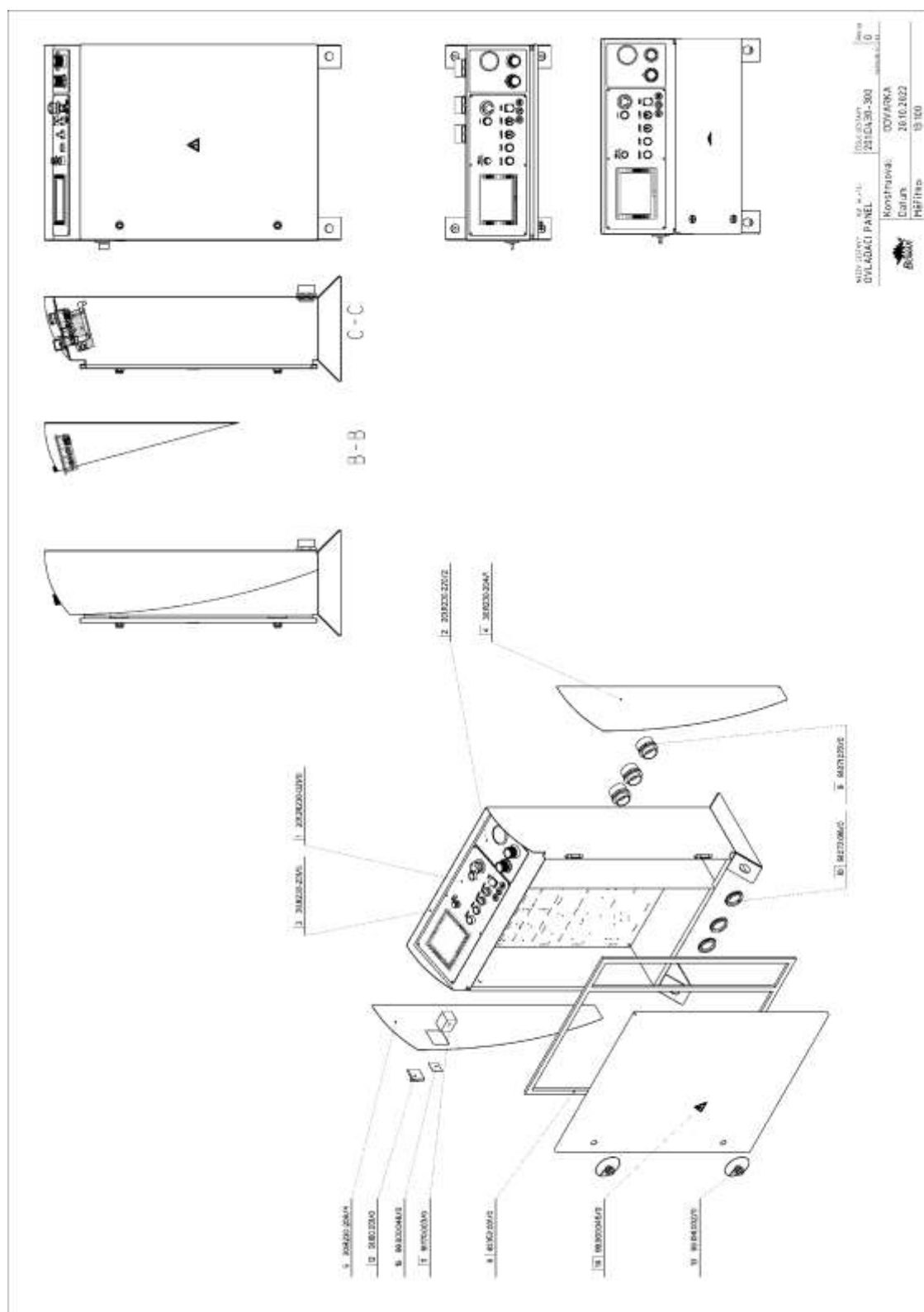
10.38. Kusovník / Piece list / Stückliste - Válec svěráku / Vice cylinder / Schraubstockzylinder

NAZEV SESTAVY		ČÍSLO SESTAVY		REVIZE			
VALEC SVERAKU		201.Y407-030		1			
Poz.	Objednávací číslo	Verze	Název CZ	Name EN	Name DE	Polotovár	Ks.
1	30.2807-109	0	SRoubENI PRIME	TUBE FITTING - STRAIGHT	GERADE VERSCHRAUBUNG		2
2	30.C407-012	2	VÍKO	COVER	DECKEL	D55 - 47	1
3	30.C407-111	0	VÍKO	COVER	DECKEL	D55 - 29	1
4	30.Y307-035	0	PIST	PISTON	KOLBEN	D55 - 17	1
5	30.Y407-033	3	VALEC	CYLINDER	ZYLINDER	TR62x6 - T22	1
6	30.Y407-034	0	PISTNICE	PISTON ROD	KOLBENSTANGE	D28 - 690	1
7	90.00125-032	0	SRoub IMBUS	HEXAGON SOCKET SCREW	IMBUSSCHRAUBE	8x20 DIN 912 8,8 černěný	1
8	93.012.030	0	SRoubENI PRIME	TUBE FITTING - STRAIGHT	GERADE VERSCHRAUBUNG	2070 - 1/4 - 1/4 - L35 1/4" vnitřní - 1/4" vnější	2
9	95.800.021	0	KROUZEK POJIST VNEJŠ	EXTERNAL RETAINING RING	SICHERUNGSRING AUßEN	462 DIN 471	2
10	95.801.009	0	KROUZEK POJIST VNITŘ	INTERNAL RETAINING RING	SICHERUNGSRING INNEN	452 DIN 472	2
11	96.002.011	0	O-KROUZEK DYNAMICKÝ	O-RING DYNAMIC	O-RING DYNAMISCH	24x2 NBR 70Sh	1
12	96.002.019	0	O-KROUZEK DYNAMICKÝ	O-RING DYNAMIC	O-RING DYNAMISCH	46x2 NBR 70Sh 46x2 NBR 70Sh	2
13	96.061.009	0	KROUZEK STIRACÍ	WIPER RING	ABSTREIFRING	WD2200280 Z201 28.0x36.0x5.0x6.0	1
14	96.082.002	0	KROUZEK TESNÍCÍ	SEALING RING	DICHTUNGSRING	13/17x15	4
15	96.084.001	0	KROUZEK VODICÍ	GUIDE RING	FÜHRUNGSRING	GP6500500 - T4.7 50.0x5.6x2.5x14.9	1
16	96.084.006	0	KROUZEK VODICÍ	GUIDE RING	FÜHRUNGSRING	GR4300280 - T4.7 28.0x3.9x15.5x9.1	1
17	96.900.001	0	TESNENÍ KOMBINOVANÉ	COMBINED SEALING	KOMBIDICHTUNG	PW4200500 - Z20N 39.0x50.0x4.2	1
18	96.900.021	0	TESNENÍ KOMBINOVANÉ	COMBINED SEALING	KOMBIDICHTUNG	RSK200280- 46N 28.0x38.7x4.2	1

I. ZRUS SROUBENI 30.1807-005 NAHR 93.012.030. 323/ZM309 2.11.2022 KVASNICKA

Číslo Sestavy/Number of assembly/Nummer der Baugruppe. Ver.-Verze/Version/Version. Název sestavy/Assembly name/Name der Baugruppe. Poz.-Position/Position/Position. Objednávací číslo/Order number/Bestellnummer. Polotovár/Semiprodukt/Halbfabrikat. Vstupní materiál/Input material/Default material/Eingangsmaterial.

10.39. Ovladačí panel / Control panel / Bedienpult



10.40. Kusovník / Piece list / Stückliste - Ovladací panel / Control panel / Bedienpult

NAZEV SESTAVY		ČÍSLO SESTAVY		REVIZE		
OVLADACÍ PANEL		201.D430-300		0		
Poz.	Objednáací číslo	Verze	Název CZ	Name EN	Name DE	Položtovar
1	201.27230-021	0	PANEL ELEKTRO	ELECTRO PANEL	PANEL	Ks. 1
2	201.R230-220	2	OVLADACÍ PANEL	CONTROL PANEL	BEDIENPULT	1
3	30.R230-201	5	SKRIN	BOX	KASTEN	1
4	30.R230-204	1	PLECH	SHEET METAL	BLECH	P1 - 220x950 1
5	30.R230-206	4	PLECH	SHEET METAL	BLECH	P1 - 220x950 1
6	61.352.001	0	TESNĚNÍ	SEALING	DICHTUNG	1
9	91.071.022	0	VÝVODKA HADICE	OUTLET FOR HOSE	SCHLAUCHTÜLLE	MR-83502468 M50x1,5 / PG48hadice čer. MSV-M50x1,5/48 3
10	91.072.016	0	MATICE ČERNÁ	BLACK NUT	MUTTER ROH	AG-824550 M50x1,5 -černá 3
11	91.170.003	0	VYPINAC	SWITCH	SCHALTER	Glovezana 0003R /// pro 91.180.001 3f hlavní vypínač, 16A /// P0160003R
12	91.180.001	0	*	null	null	G00275 /// pro 91.170.003 003/0001 1
13	99.104.002	0	ZÁMEK	LOCK	SCHLOSS	zámek na kryt ramene zámeč + klíčka 2
14	99.900.045	0	SAMOLEPKA	STICKER	AUFKLEBER	NE Nebezpečí úrazu el pro velká 43 mm 1
15	99.900.046	0	SAMOLEPKA	STICKER	AUFKLEBER	HV hlavní vypínač 1

Číslo Sestavy/Number of assembly/Nummer der Baugruppe, Ver.-Verz./Version/Version, Název sestavy/Assembly name/Name der Baugruppe, Poz.-Pozice/Position/Position, Objednáací číslo/order number/Bestellnummer, Položtovar/Component number/Bestellnummer, Materiál/Material/Material, Vstupní materiál/Input material/Eingangsmaterial

Číslo sestavy/Number of assembly/Nummer der Baugruppe, Ver.-Verze/Version/Version, Název sestavy/Assembly name/Name der Baugruppe, Poz.-Pozice/Position/Position, Objednávací číslo/Order number/Bestellnummer, Položtovar/Partnumber/Halbfabrikat, Vstupní materiál/Input material/Default material/Eingangsmaterial;

10.41. Ovladačí panel / Control panel / Bedienpult

Číslo Sestavy 201.2R230-021		Ver. 0	Název sestavy PANEL ELEKTRO/ELECTRO PANEL/PANEL	
Poz.	Objednací číslo	Ver.	Název položky	Ks
1	31.2R230-022	0	PANEL / PANEL / PANEL	1
2	90.008.50.007	0	ŠROUB ZAPUSTNÝ / COUNTERSUNK SCREW / SENKSCHRAUBE	2
3	91.060.013	0	HLAVICE / HEAD / KOPF	1
4	91.060.019	0	SPINAC / SWITCH / SCHALTER	1
5	91.060.025	0	PREPINAC / SWITCH / UMSCHALTER	2
6	91.060.062	0	SPINAC / SWITCH / SCHALTER	1
7	91.060.063	0	HLAVICE / HEAD / KOPF	1
8	91.060.084	0	HLAVICE TOTAL STOP / TOTAL STOP HEAD / TASTE TOTAL STOP	1
9	91.141.110	0	KONEKTOR / CONNECTOR / STECKVERBINDER	1
10	91.141.111	0	KONEKTOR / CONNECTOR / STECKVERBINDER	1
11	91.283.015	0	POTENCIOMETR / POTENTIOMETER / POTENTIOMETER	1
12	91.995.932	0	PANEL / PANEL / PANEL	1

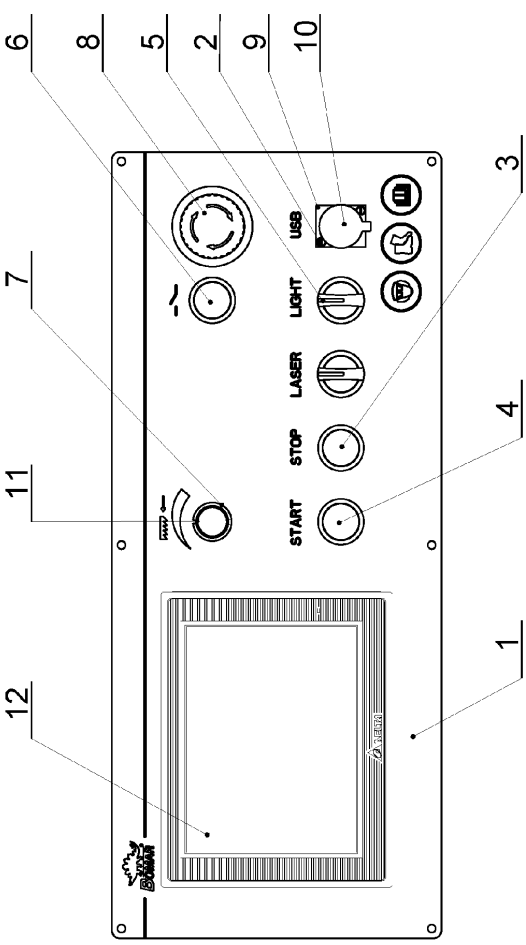
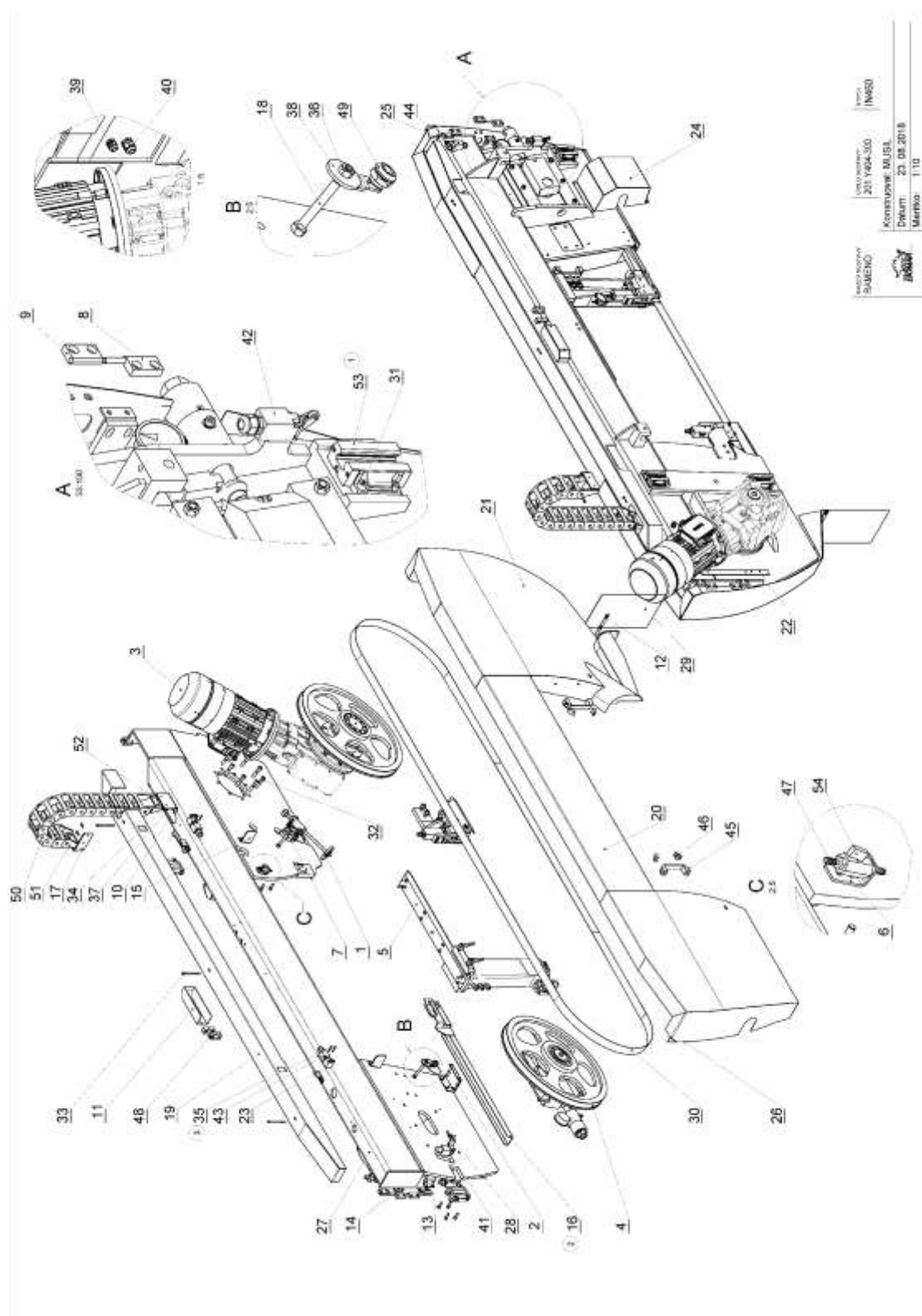


Diagram of the control panel (PANEL ELEKTRO/ELECTRO PANEL/PANEL) showing various controls and their positions. The diagram includes a central display area (1), a power button (2), a laser button (3), a stop button (4), a start button (5), a light button (6), a USB port (7), a potentiometer (8), a connector (9), a switch (10), a head (11), and a total stop button (12).

Číslo 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

10.42. Rameno / Saw arm / Sägerahmen



BOMAR
 201 Y464-350
 Konstruktor: M. U. S.
 Datum: 23.08.2018
 Měřítko: 1:10

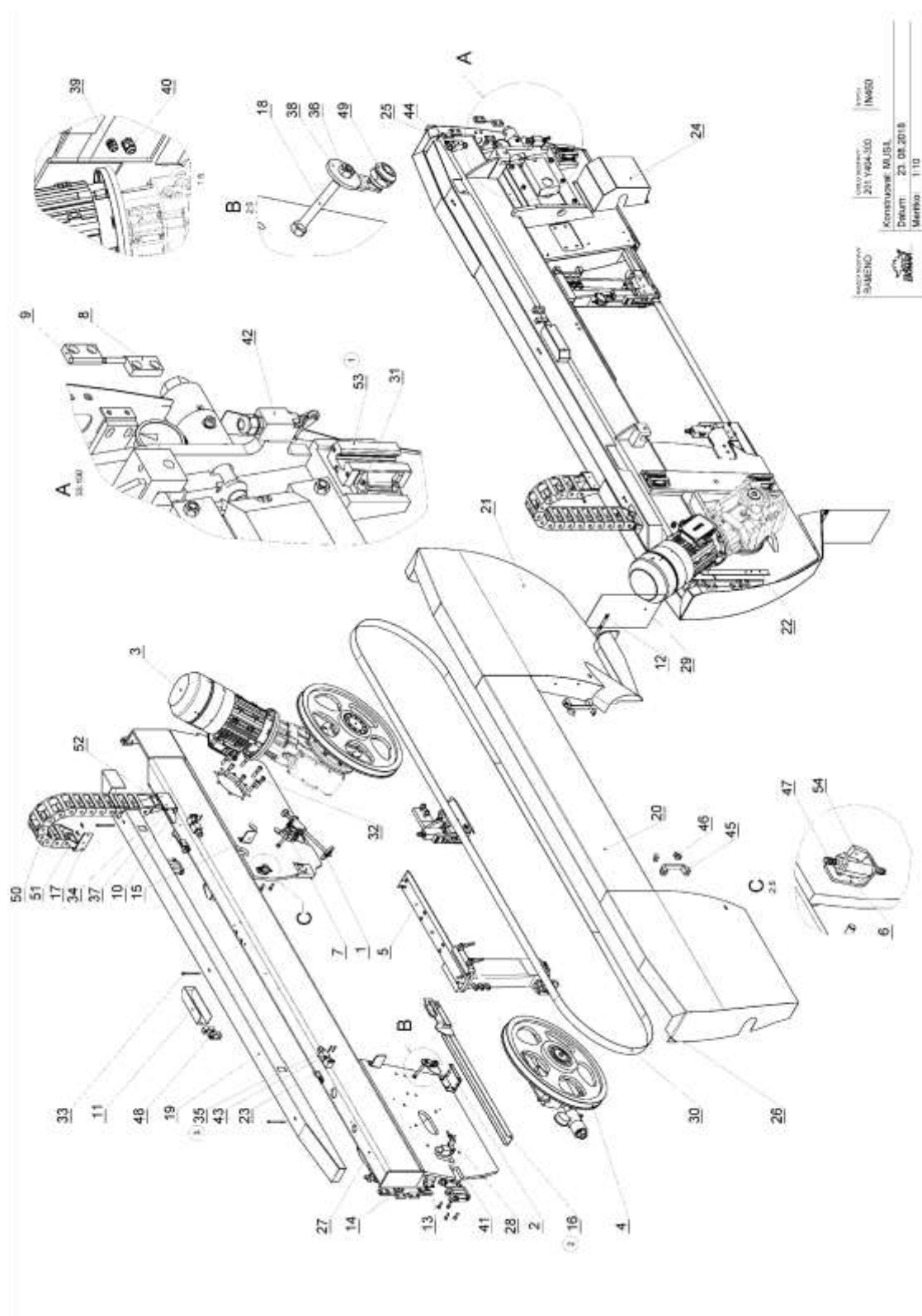
10.43. Kusovník / Piece list / Stückliste - Rameno / Saw arm / Sägerahmen

Číslo Sestavy 201.Y404-300		Ver. 0	Název sestavy RAMENO/BEAM/RAHMEN			
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks	
1	201.9214-300	1	KARTAC / BRUSH / BÜRSTE		1	
2	201.Y404-070	0	DRZAK / HOLDER / HALTER		1	
3	201.Y405-200	0	POHON / DRIVE / ANTRIEB		1	
4	201.Y408-000	0	NAPINANI / TENSIONING / SPANNUNG		1	
5	201.Y410-000	0	VEDENÍ PASU / SAW BAND GUIDE / SÄGEBANDFÜHRUNG		1	
6	30.1814-011	2	DRZAK / HOLDER / HALTER	P 3x76	1	
7	30.4814-701	0	ZAKLADNA / BASE / GRUNDLAGE	TYC 70x15	1	
8	30.6014-109	0	PANT / HINGE / TURBAND		4	
9	30.6014-110	0	DESKA / BOARD / PLATTE	HR 30x12	4	
10	30.7114-142	0	DRZAK / HOLDER / HALTER	P 4x100	1	
11	30.8914-220	2	KRYT / COVER / ABDECKUNG	P 1.5x153	1	
12	30.Y304-030	0	DRZAK / HOLDER / HALTER	P 1-15	1	
13	30.Y304-034	0	DRZAK / HOLDER / HALTER	L 20x30	1	
14	30.Y304-035	0	DESKA / BOARD / PLATTE	HR 20x5	4	
15	30.Y304-038	0	DRZAK / HOLDER / HALTER	P4 - 67	2	
16	30.Y404-002	2	KRYT PASU / BELT COVER / BANDABDECKUNG		1	
17	30.Y404-005	0	DRZAK / HOLDER / HALTER	P 5x50	1	
18	30.Y404-018	0	TYC ZAVITOVA / THREADED POLE / GEWINDESTANGE	M10	2	
19	30.Y404-019	0	KRYT / COVER / ABDECKUNG	P 2x238	1	
20	30.Y404-022	0	KRYT / COVER / ABDECKUNG		1	
21	30.Y404-031	0	KRYT RAMENE / ARM COVER / RAHMENABDECKUNG		1	
22	30.Y404-033	0	DRZAK / HOLDER / HALTER	L 30x20x3	1	
23	30.Y404-039	0	DRZAK / HOLDER / HALTER	P 3x35	2	
24	30.Y404-103	0	KRYT / COVER / ABDECKUNG		1	
25	30.Y404-107	0	DRZAK / HOLDER / HALTER	P 5x40	1	
26	30.Y404-132	0	KRYT RAMENE / ARM COVER / RAHMENABDECKUNG		1	
27	30.Y404-301	0	RAMENO / BEAM / RAHMEN	SVARENO	1	
28	30.Y504-003	0	DRZAK / HOLDER / HALTER	P 3x30	1	
29	31.PK02-054	0	GUMA / RUBBER / GUMMI	G2 - 206	1	
30	44.105.001	0	PAS PÍLOVY METRAŽ / SAW BELT METRAGE / SÄGEBAND METERWARE	41x1,3	1	
31	90.001.25.033	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	8x25	12	
32	90.001.25.062	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M12X50	8	
33	90.001.25.070	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M6x90	3	

Číslo Sestavy/Number of assembly/Nummer der Baugruppe, Verze (Ver./Version/Version; Název sestavy/Assembly title/Name der Baugruppe, Pozice (Poz.)/Position/Position;

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

10.44. Rameno / Saw arm / Sägerahmen



BOMAR
 201 Y464-300
 Konstruktor: M. U. S.
 Datum: 23.08.2018
 Měřítko: 1:10

10.45. Kusovník / Piece list / Stückliste - Rameno / Saw arm / Sägerahmen

34	90.001.25.092	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M6X14	4
35	90.013.92.104 (3)	0	SROUB PULKULATY / BUTTON HEAD SCREW / RUNDKOPFSCHRAUBE	M4x30	4
36	90.100.55.006	0	MATICE PRESNA ZINEK / PRECISION NUT - ZN / PŘÍŽIBE MUTTER - ZN	MATICE _ M10	6
37	90.150.50.004	0	PODLOŽKA / WASHER / UNTERLEGSCHIBE	PODLOŽKA 6,4	4
38	90.151.50.002	0	PODLOŽKA VELKOPL. / LARGE WASHER / GROSFLÄCHENSCHIBE	PODLOŽKA 12	2
39	91.070.011	0	* / null / null	M16x1,5	1
40	91.070.012	0	VÝVODKA KLESTINOVA / COLLET WITH OUTLET / SPANNZANGENTÜLLE	M20x1,5	1
41	91.173.007	0	SPINAC KONCOVÝ / END SWITCH / ENDSCHALTER		1
42	91.173.009	0	SPINAC KONC S KLADK. / END SWITCH WITH PULLEY / ENDSCHALTER MIT ROLLE		1
43	91.173.012	0	SPINAC KONC. ZAMEK / END SWITCH - LOCK / ENDSCHALTER - SCHLOSS	OKS8-2xNC	2
44	91.173.017	0	SPINAC KONC S KLADK. / END SWITCH WITH PULLEY / ENDSCHALTER MIT ROLLE	FR 630	1
45	94.012.001	0	RUKOJET / HANDLE / GRIFF		2
46	94.012.002	0	KRYT / COVER / ABDECKUNG		4
47	94.202.002	0	REDUKCE / REDUCTION / ADAPTOR / REDUKTION	REDUKCE 6R1/4"	2
48	94.204.005	0	DRŽAK / HOLDER / HALTER	LBG 14/14-PP	2
49	99.104.002	0	ZAMEK / LOCK / SCHLOSS	ZAMEK CINSKY	2
50	99.170.001	0	RETEZ ENERGII / CABEL DRAG CHAIN / ENERGIEKETTE	0555.030.075.100	15
51	99.173.001	0	KONCOVKA VNEJSI / OUTSIDE END / ÄUßERES ENDSTÜCK	KONCOVKA VNEJ	1
52	99.173.002	0	KONCOVKA VNITRNI / INSIDE END / INNERES ENDSTÜCK	KONCOVKA VNIT	1
53	99.201.058 (1)	0	VOZÍK LINEARNIHO VEDENÍ / LINEAR GUIDE CART / LINEARFÜHRUNGSWAGEN	MSA30E SS FO N	3
54	99.260.003	0	VENTIL KULOVÝ / BALL VALVE / KUGELVENTIL	1/4"	1

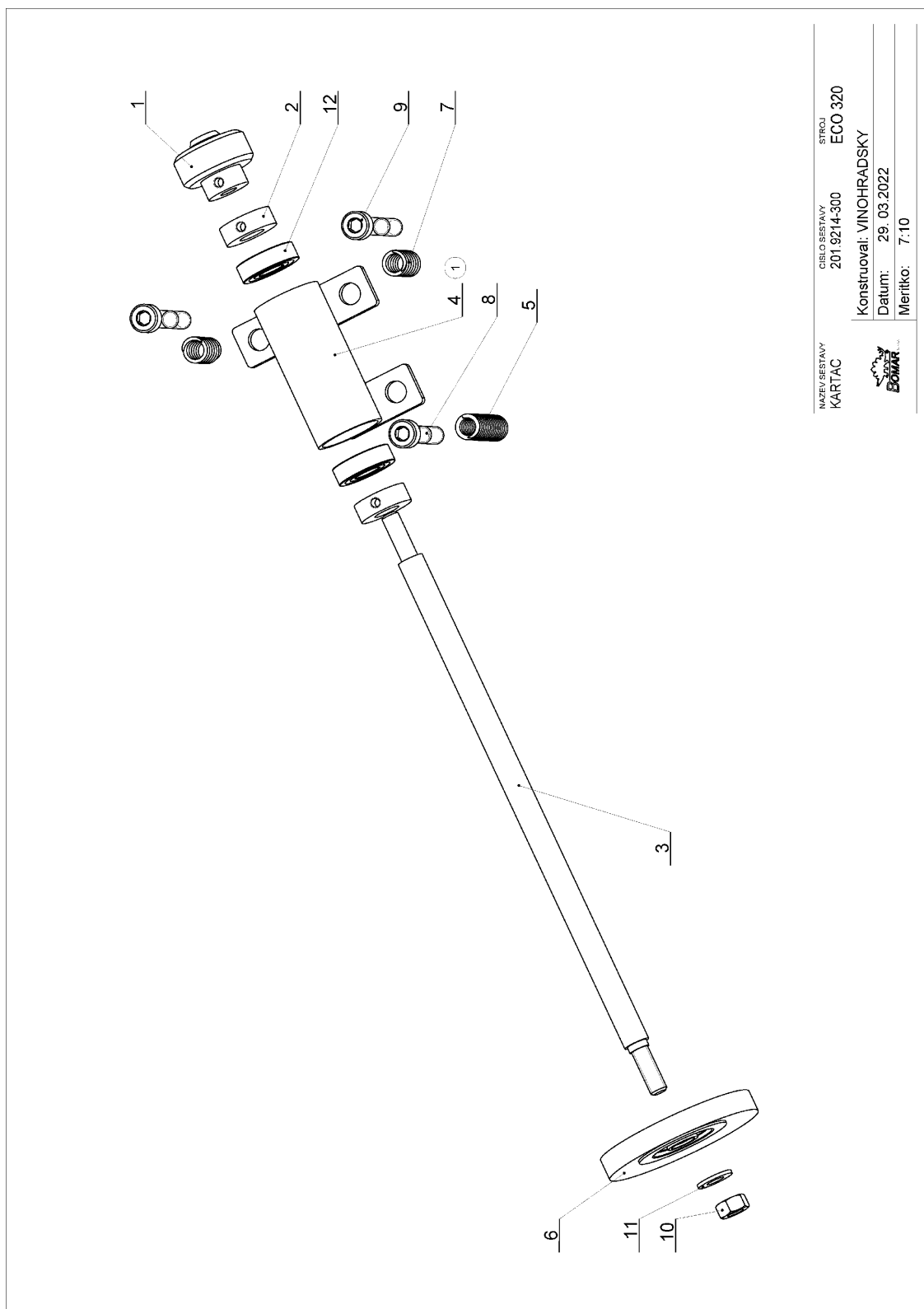
1.ZRUS. VOZÍK LIN. VEDENÍ(HIWIN) 99.201.007 A NAHR. 99.201.058. 056/ZM153 7.5.2012 SLEZACKOVA

2.ZRUSEN KRYT PASU 30.Y404-009 A NAHR. 30.Y404-002. 066/ZM092 28.5.2014 SLEZACKOVA

3.PRID. 4XSROUB M4x30 90.013.92.104. 171/ZM290 23.8.2018 SZABARI

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; Rozměr/Stock size/Abmessung

10.46. Kartáč / Brush / Bürste



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

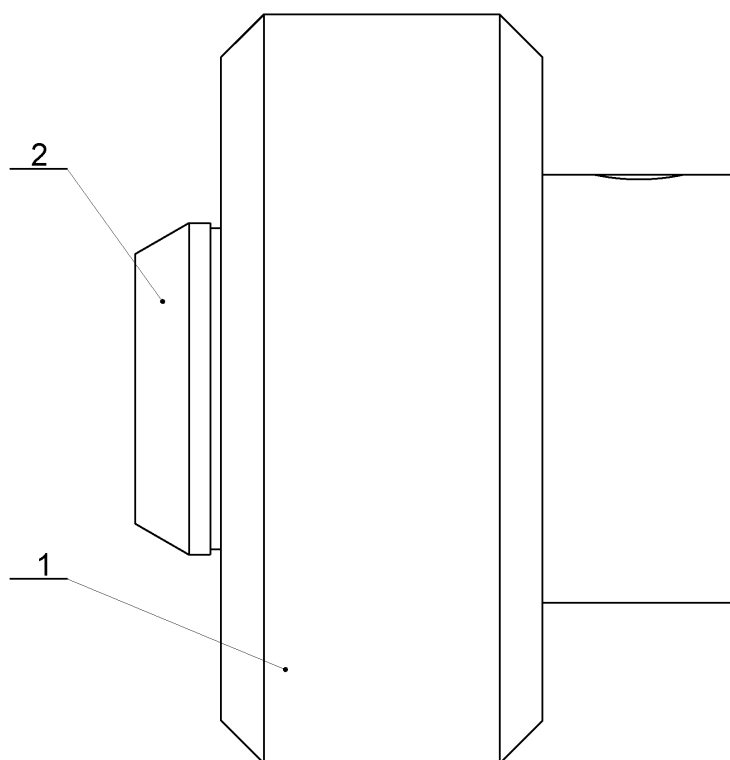
Číslo Sestavy 201.9214-300		Ver. 1	Název sestavy KARTAC/BRUSH/BÜRSTE		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.0814-204	0	KOLECKO / WHEEL / ROLLE	SESTAVA	1
2	30.0814-207	0	KROUZEK / RING / RING	d 25	2
3	30.9214-302	1	HRDEL / SHAFT / WELLE	D 12	1
4	30.9214-401	0	DRŽAK / HOLDER / HALTER		1
5	31.0305-211	0	PRUŽINA / SPRING / FEDER	2x12x50x15,5	1
6	31.0814-208	0	KARTAC / BRUSH / BÜRSTE		1
7	31.1508-115	0	PRUŽINA / SPRING / FEDER	1.6x12x25x7,5	2
8	90.001.25.038	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M8x50	1
9	90.001.25.040	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M8x60	2
10	90.100.55.005	0	MATICE PRESNA ZINEK / PRECISION NUT - ZN / PRÄZISE MUTTER - ZN	MATICE _ M8	1
11	90.150.50.005	0	PODLOŽKA / WASHER / UNTERLEGSCHIBE	PODLOŽKA 8,4	1
12	95.001.005	0	LOŽISKO / BEARING / LAGER	6001 2RS	2

1.ZRUS DRŽAK 30.9214-301 A NAHR. 30.9214-401 113/ZM115 31.03.2022 ZINDULKA

Číslo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Pos.)/Position/Position;

Číslo 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

10.48. Kolečko / Wheel / Rolle



NAZEV SESTAVY KOLECKO	CISLO SESTAVY 201.0814-204	STROJ STG440
	Konstruoval:	
	Datum: 20. 04.2018	
	Meritko: 4:1	

10.49. Kusovník / Piece list / Stückliste - Kolečko / Wheel / Rolle

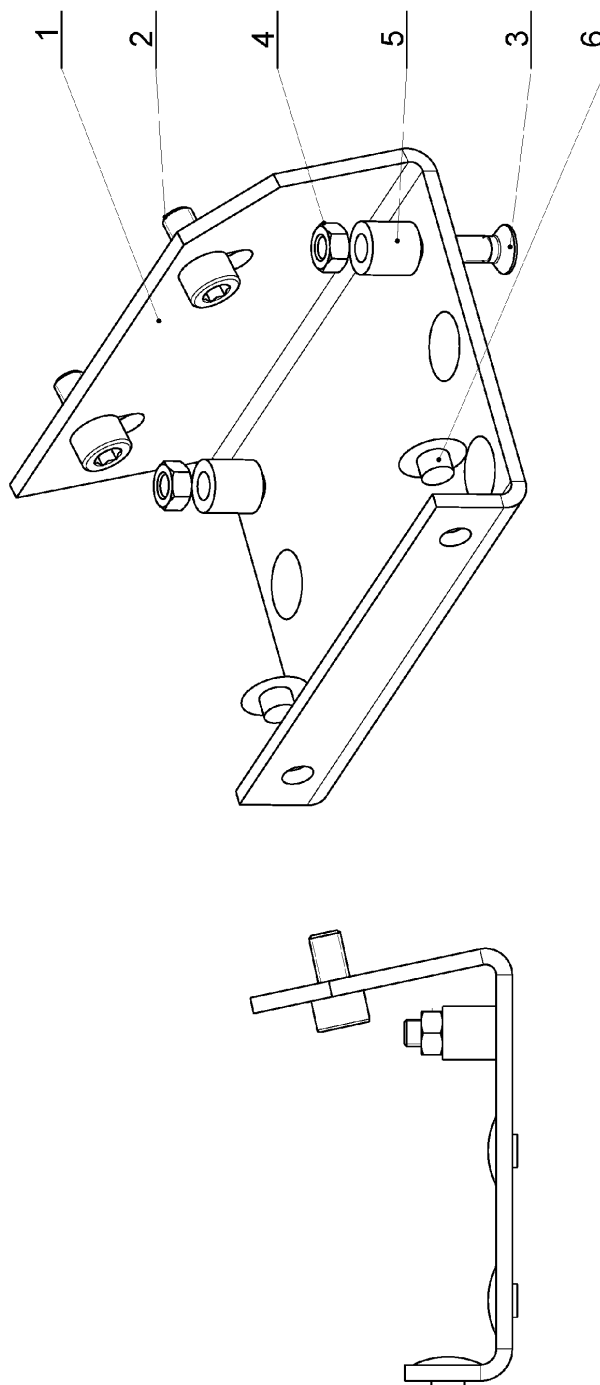
Císlo Sestavy 201.0814-204		Ver. 0	Název sestavy KOLECKO/WHEEL/ROLLE		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.0814-204.1	0	KOLECKO / WHEEL / ROLLE	d 35	1
2	30.0814-204.2	1	NABOJ / HUB / RADNABE	D 20	1

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Nazev sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;

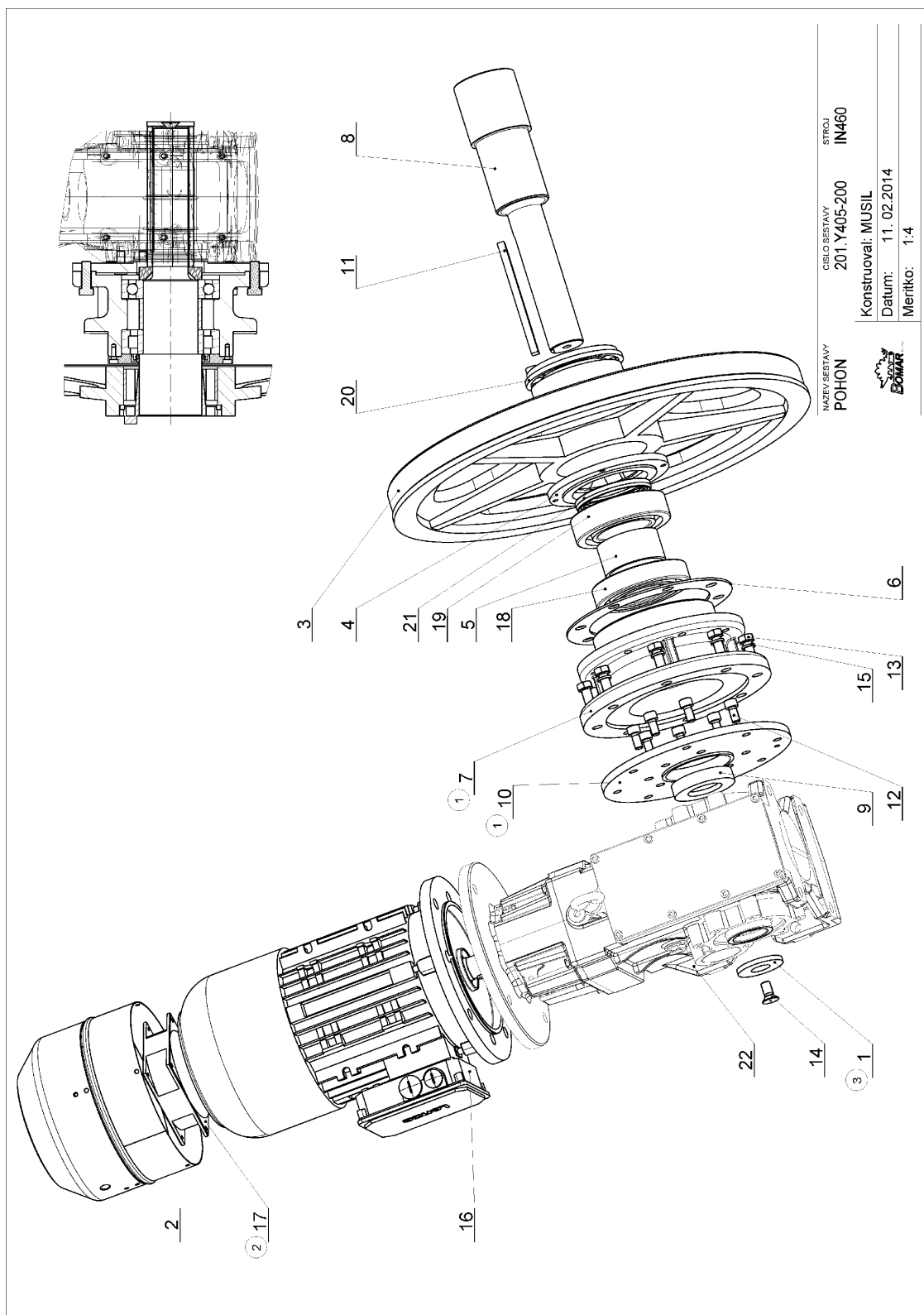
Číslo sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz./Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

10.50. Držák / Holder / Halter

Číslo sestavy 201.Y404-070		Ver. 0	Název sestavy DRŽÁK/HOLDER/HALTER			
Poz.	Objednávací číslo	Ver.	Název položky	Rozměr	Ks	
1	30.Y404-071	0	DRŽÁK / HOLDER / HALTER	P 3x100	1	
2	90.001.25.016	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M6X12	2	
3	90.011.27.024	0	SROUB ZAPUSTNÝ / COUNTERSUNK SCREW / SENKGSCHRAUBE	SROUB M5X20	2	
4	90.100.55.003	0	MATICE PRESNA ZINEK / PRECISION NUT - ZN / PRÄZISE MUTTER - ZN	MATICE _ M5	2	
5	90.163.00.006	0	PODLOŽKA DISTANČNÍ / SPACER WASHER / DISTANZSCHEIBE	TR 10/5.3	2	
6	94.101.029	0	ZATKA / PLUGBLIND PLUG / BLINDSTOPFEN	PRO IMBUS M8	6	



10.51. Pohon / Drive / Antrieb



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

Číslo Sestavy 201.Y405-200		Ver. 0	Název sestavy POHON/DRIVE /ANTRIEB		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.0804-009	3	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	P 6x60	1
2	30.4304-018	5	VENTILATOR / VENTILATOR / VENTILATOR		1
3	30.6005-001	5	KOLO HNACÍ / DRIVE WHEEL / ANTRIEBSRAD	ODLITEK	1
4	30.6105-604	0	VÍKO / COVER / DECKEL	P 12x159	1
5	30.6105-605	0	KROUZEK DISTANČNÍ / SPACER RING / DISTANZRING	TR 80x5	1
6	30.6105-607	0	KROUZEK DISTANČNÍ / SPACER RING / DISTANZRING	P 4x220	1
7	30.R405-505	0	PRIRUBA / FLANGE / FLANSCH	ODLITEK	1
8	30.Y405-202	0	HRDEL / SHAFT / WELLE	d 90	1
9	30.Y405-203	0	KROUZEK DISTANČNÍ / SPACER RING / DISTANZRING	d 80	1
10	30.Y405-205	0	PRIRUBA / FLANGE / FLANSCH	P15x250	1
11	30.Y605-002	0	PERO / PARALLEL KEY / PASSFEDER	HR 14x9	1
12	90.001.25.046	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10x20	7
13	90.005.55.033	0	SROUB 6HRANNÝ / HEX HEAD SCREW / SECHSKANTSCHRAUBE	SROUB M12x35	8
14	90.011.27.025	0	SROUB ZAPUSTNÝ / COUNTERSUNK SCREW / SENKSCHRAUBE	SROUB M12x25	1
15	90.158.50.009	0	PODLOŽKA PRŮZNA / SPRING WASHER / FEDERSCHIEBE	PODLOŽKA 12	8
16	91.001.117	0	ELEKTROMOTOR / ELECTRIC MOTOR / ELEKTROMOTOR	4kW 4P B5 112	1
17	91.015.126	0	* / null / null	VENTILATOR RDH1238 B2	1
18	95.001.064	0	LOŽISKO / BEARING / LAGER	6214A	1
19	95.201.007	0	LOŽISKO / BEARING / LAGER	VALEČKOVÁ L. 1RADA	1
20	95.825.001	0	POUZDRO UPINACÍ / FIXING SLEEVE / SPANNHÜLSE	KTR210- 80x120	1
21	95.830.052	0	GUFERO / RADIAL SHAFT SEAL / WELLENDICHTRING	GUFERO 80X100X10	1
22	99.003.020	0	* / null / null	MBH80C PAM112	1

1.ZRUS.PRIRUBA 30.6105-608;30.Y405-201 A NAHR.30.R405-505;30.Y405-205. 025/ZM029 8.2.2012 SLEZACKOVA

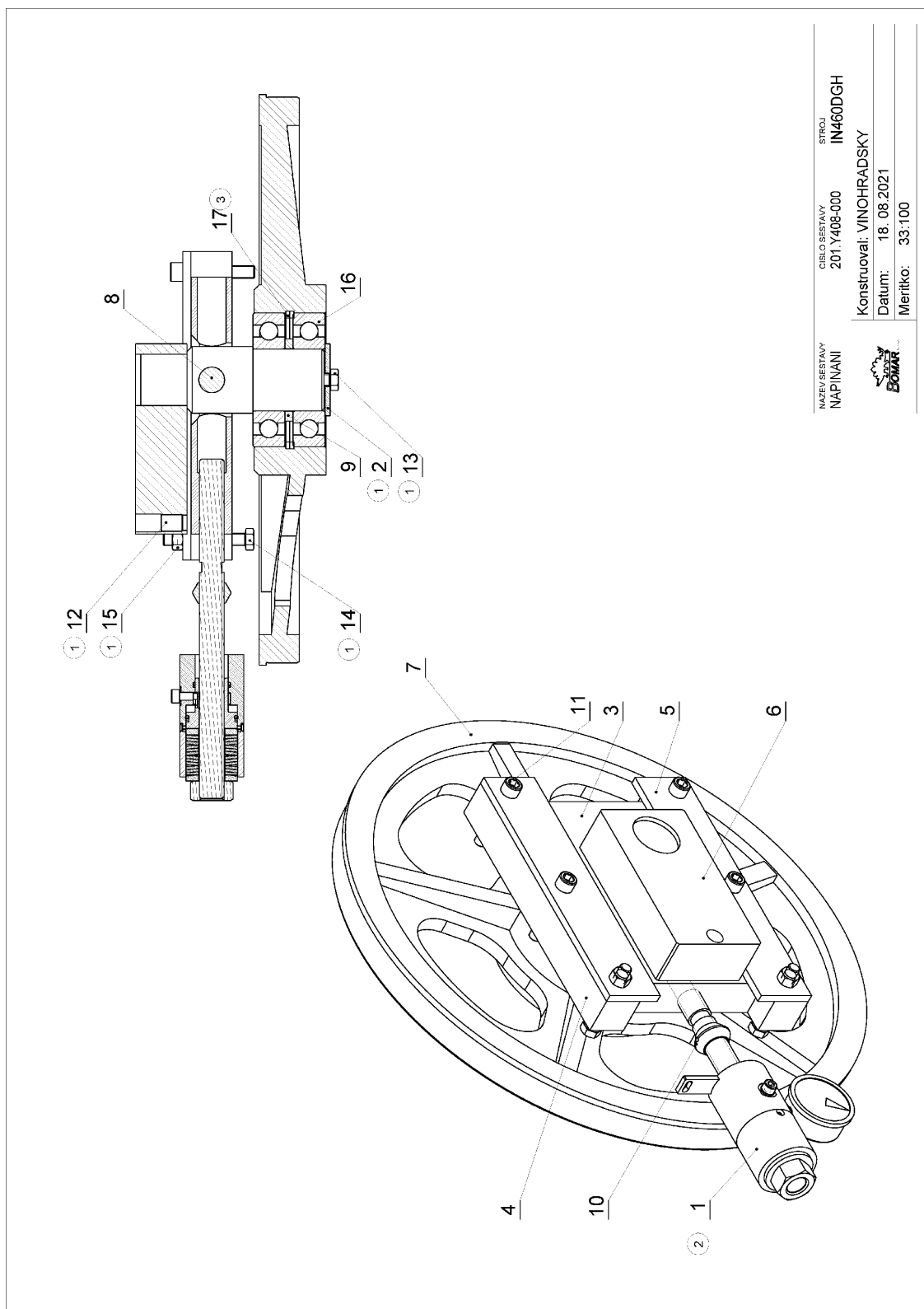
2.ZRUS.VENTILATOR 91.015.100 A NAHR.91.015.126. 074/ZM018 11.2.2014 SLEZACKOVA

3.ZRUS.PODLOŽKA 30.1804-010 A NAHR.30.0804-009. 100/ZM123 30.5.2014 SLEZACKOVA

Číslo 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

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

10.53. Napínání / Tensioning / Spannung



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

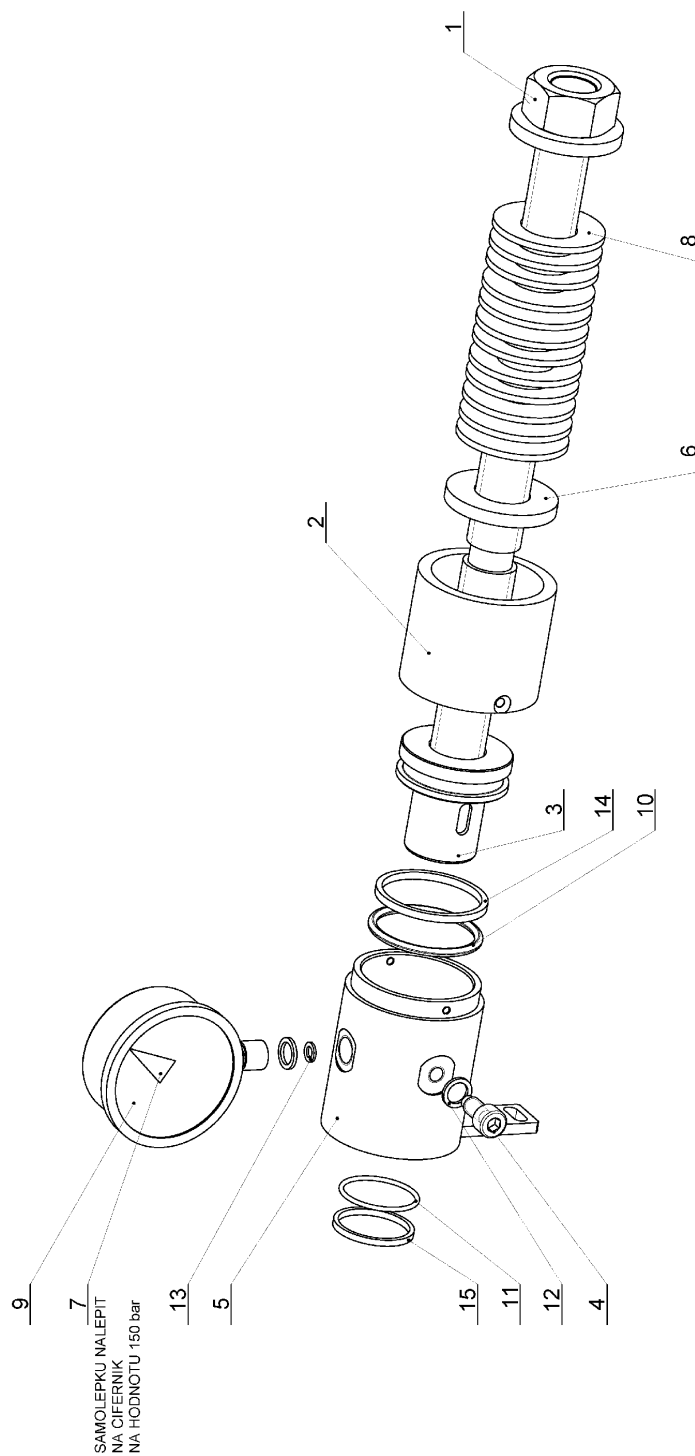
Číslo Sestavy 201.Y408-000		Ver. 0	Název sestavy NAPINANI/TENSIONING/SPANNUNG		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.6107-360	2	VALEC / CYLINDER / ZYLINDER	SESTAVA	1
2	30.1804-014	1	PODLOŽKA / WASHER / UNTERLEGSCHIBE	P 5x70	1
3	30.6008-001	2	KOSTKA NAPINANI / TENSIONING CUBE / BANDSPANNUNGSWÜRFEL	HR 160x40	1
4	30.6008-002	0	LISTA VODICI / GUIDING SLAT / FÜHRUNGSLEISTE	HR 40x40	2
5	30.6008-003	1	LISTA VODICI / GUIDING SLAT / FÜHRUNGSLEISTE	HR 60x8	2
6	30.6008-004	2	NAPINANI / TENSIONING / SPANNUNG		1
7	30.6008-006	0	KOLO NAPINACI / TENSIONING WHEEL / SPANNRAD		1
8	30.6008-014	1	ČEP NAPINANI / TENSIONING PIVOT / SPANNUNGSBOLZEN	d 25 h6	1
9	30.6708-002	1	DISTANC / SPACER / ABSTANDSTÜCK	TRUBKA 82.5x12.5	1
10	30.7208-006	0	DORAZ / STOP PIECE / ANSCHLAG	d40	1
11	90.001.25.064	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M12X70	5
12	90.002.2D.028	1	SROUB STAVECI / SET SCREW / STELLSCHRAUBE	SROUB M16x1.5x25	1
13	90.005.55.030	1	SROUB 6HRANNY / HEX HEAD SCREW / SECHSKANTSCHRAUBE	SROUB M12X20	1
14	90.005.55.036	1	SROUB 6HRANNY / HEX HEAD SCREW / SECHSKANTSCHRAUBE	SROUB M12X80	2
15	90.100.55.007	1	MATICE PRESNA ZINEK / PRECISION NUT - ZN / PRÄZISE MUTTER - ZN	MATICE _M12	2
16	95.001.041		LOŽISKO / BEARING / LAGER	6312A	2
17	95.801.025	3	KROUZEK POJIST.VNITR / INTERNAL RETAINING RING / SICHERUNGSRING INNEN	POJISTNY KROUZEK 130	2

1.ZRUS.2XSROUB IMBUS M12x70(90.0001.25.064) A NAHR.2XSROUB 6HR M12x80(90.005.55.036),PRID.2xMATICE M12(90.100.55.007),
1xSTAVECI SROUB M16x25(90.002.2D.028),ZRUS PODLOŽKA 30.1804-010 A NAHR.30.1804-014,ZRUS.SROUB ZAPUSTNY M12x20
(90.011.27.009) A NAHR.SROUB 6HR M12x20(90.005.55.030 164/ZM187 24.8.2015 SLEZACKOVA
2.ZRUS. VALEC 201.6107-360 A NAHR. VALCEM 201.6107-360. 083/ZM137 31.3.2017 VLACH
3.PRID. 2x POJISTNY KROUZEK 95.801.025. 191/ZM281 18.8.2021 KOVAR

Číslo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Name der Baugruppe; Pozice (Poz.)/Position/Position;

Číslo 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

10.55. Válec / Zylinder / Roller



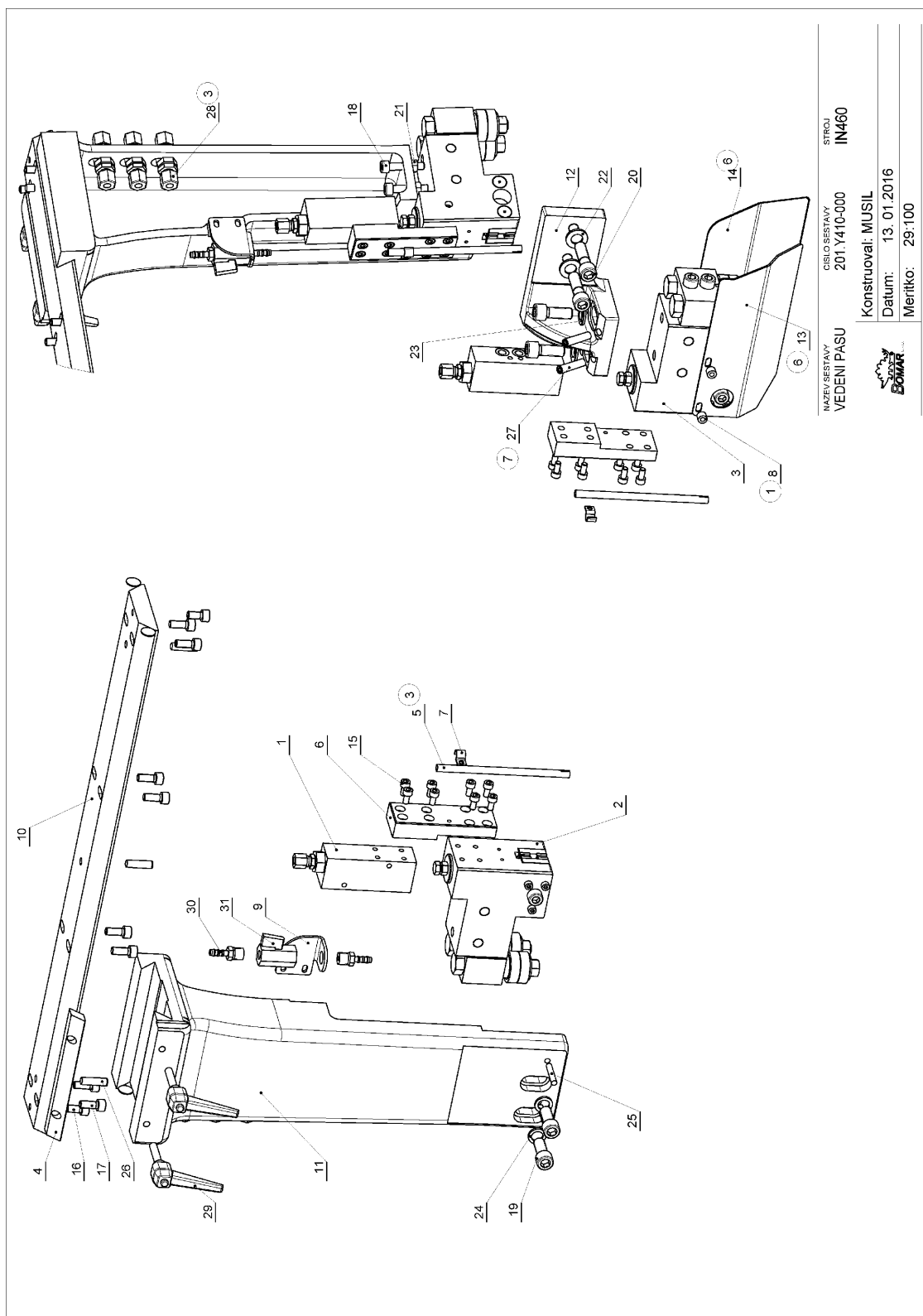
MAZEJ SEŠTAV	ČISLO SEŠTAV	STROJ
VALEC	201.6107-360	IND 460
Konstruoval: MAJZNER		
Datum:		31. 03. 2017
Meritko:		3:5

10.56. Kusovník / Stückliste / Piece list – Válec / Zylinder / Roller

Číslo sestavy 201.6107-360		Ver. 0	Název sestavy VALEC/CYLINDER/ZYLINDER			
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks	
1	201.6108-020	0	SROUB / SCREW / SCHRAUBE		1	
2	30.6008-013	0	TRUBKA / TUBE / ROHR	TR 62x8	1	
3	30.6107-352	1	PIST / PISTON / KOLBEN	d 52	1	
4	30.6107-354	1	SROUB / SCREW / SCHRAUBE	M8x20	1	
5	30.6107-358	0	VALEC / CYLINDER / ZYLINDER		1	
6	30.6107-359	1	DISTANC / SPACER / ABSTANDSTÜCK	P 8x50	1	
7	31.0899-004	0	SAMOLEPKA / STICKER / AUFKLEBER		1	
8	90.350.02.004	0	PRUŽINA TALIROVA / DISC SPRING / TELLERFEDER	50X25 4X3	12	
9	92.080.004	0	MANOMETR / MANOMETER	d 63 - 250bar	1	
10	96.001.033	0	O-KROUZEK STATICKY / O-RING STATIC / O-RING STATISCH	ORAR00224-N70	1	
11	96.002.063	0	O-KROUZEK DYNAMICKY / O-RING DYNAMIC / O-RING DYNAMISCH	ORAR00125-N70	1	
12	96.082.001	0	KROUZEK TESNICI / SEALING RING / DICHTRINGSRING	10/14x1.5 CU	2	
13	96.082.005	0	KROUZEK TESNICI / SEALING RING / DICHTRINGSRING	5x8 8x1	1	
14	96.083.010	0	KROUZEK OPERNY / SUPPORT RING / STÜTZRING	BG2700446-PT00	1	
15	96.083.011	0	KROUZEK OPERNY / SUPPORT RING / STÜTZRING	BU2000320-PT00	1	

Číslo 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

10.57. Vedení pásu / Belt guide / Sägebandführung

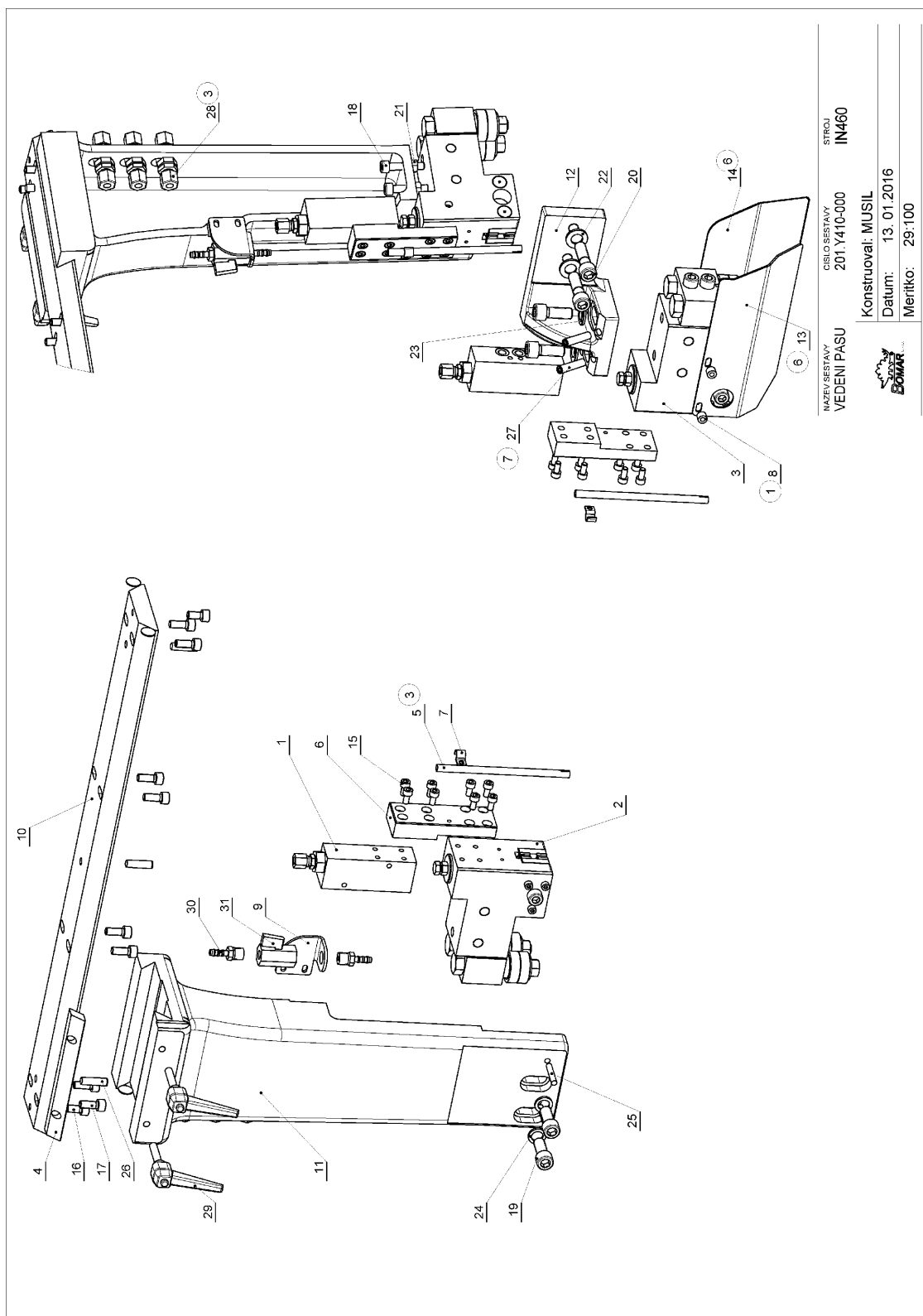


10.58. Kusovník / Piece list / Stückliste - Vedení pásu / Belt guide / Sägebandführung

Císlo sestavy 201.Y410-000		Ver. 0	Název sestavy VEDENÍ PASU/SAW BAND GUIDE/SÄGEBANDFÜHRUNG			
Poz.	Objednávací číslo	Ver.	Název položky	Rozměr	Ks	
1	201.6816-100	0	KOSTKA REGULACE / REGULATION CUBE / REGELUNGSWÜRFEL		2	
2	201.Y410-100	2	KOSTKA VODÍČI / GUIDING CUBE / FÜHRUNGSKLOTZ		1	
3	201.Y410-200	2	KOSTKA VODÍČI / GUIDING CUBE / FÜHRUNGSKLOTZ		1	
4	30.0810-011	0	LISTA / SLAT / LEISTE	HR 25x10	1	
5	30.3510-005	0	TRUBKA / TUBE / ROHR	TR 8x 1	2	
6	30.6016-002	0	DESKA / BOARD / PLATTE	HR 40x20	2	
7	30.9010-003	0	DRŽÁK / HOLDER / HALTER	P1.5x10	2	
8	30.Y310-007	0	KROUZEK / RING / RING	TR 10x2.5	4	
9	30.Y310-008	1	DRŽÁK / HOLDER / HALTER	P 3x50	1	
10	30.Y410-003	0	LISTA / SLAT / LEISTE	HR 90x20	1	
11	30.Y410-104	0	KONZOLA / BRACKET / KONSOLE		1	
12	30.Y410-105	4	DRŽÁK / HOLDER / HALTER		1	
13	30.Y410-106	0	KRYT PASU / BELT COVER / BANDABDECKUNG	P 2x108	1	
14	30.Y410-108	0	KRYT PASU / BELT COVER / BANDABDECKUNG	P 2x108	1	
15	90.001.25.016	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSHSCRAUBE	M6x12	16	
16	90.001.25.031	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSHSCRAUBE	8x16	2	
17	90.001.25.032	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSHSCRAUBE	8x20	8	
18	90.001.25.036	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSHSCRAUBE	M8x40	2	
19	90.001.25.058	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSHSCRAUBE	M12x30	4	
20	90.001.25.061	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSHSCRAUBE	M12x45	2	
21	90.100.55.005	0	MATICE PRESNA ZINEK / PRECISION NUT - ZN / PRÄZISE MUTTER - ZN	MATICE _ M8	2	
22	90.150.50.007	0	PODLOŽKA / WASHER / UNTERLEGSCHEIBE	PODLOŽKA 13	2	
23	90.150.50.007	0	PODLOŽKA / WASHER / UNTERLEGSCHEIBE	PODLOŽKA B13	2	
24	90.163.00.003	0	PODLOŽKA / WASHER / UNTERLEGSCHEIBE	NORD-LOCK	2	
25	90.300.02.007	0	KOLÍK VALCOVÝ KALENÝ / CYLINDRICAL PIN HARDENED / ZYLINDERSTIFT GEHÄRTET	KOLÍK 6x36	2	
26	90.302.02.002	0	KOLÍK KUZELOVÝ+ZAVIT / TAPER PIN + THREAD / KEGBOLZEN + GEWINDE	KOLÍK 8x30	3	
27	90.302.02.003	0	KOLÍK KUZELOVÝ+ZAVIT / TAPER PIN + THREAD / KEGBOLZEN + GEWINDE	KOLÍK 8x36	2	
28	92.008.101	0	PRUCHODKA PRIMA KOMP / STRAIGHT GROMMET / WANDDURCHFÜHRUNG	G 1/4"	3	
29	94.008.003	0	PAKA MONTÁŽNÍ / ASSEMBLY LEVER / MONTAGEHEBEL	M8x40	2	
30	94.202.002	0	REDUKCE / REDUCTION / ADAPTOR / REDUKTION	REDUKCE 6R1/4"	2	

Císlo 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

10.59. Vedení pásu / Belt guide / Sägebandführung

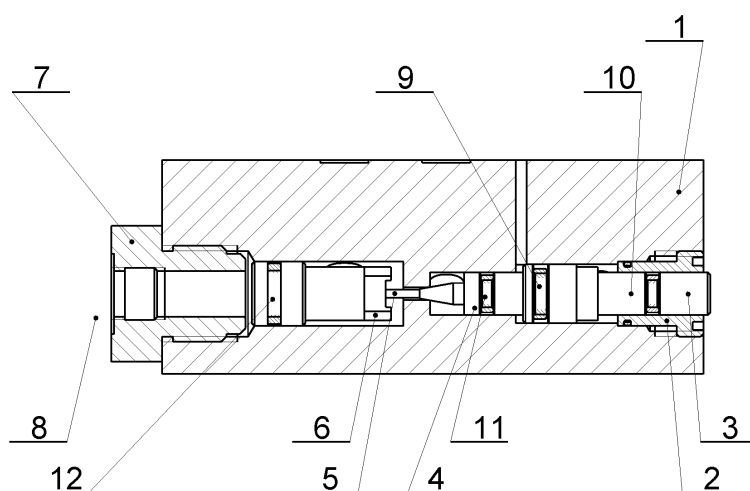


10.60. Kusovník / Piece list / Stückliste - Vedení pásu / Belt guide / Sägebandführung

31	99.260.003	0	VENTIL KULOVÝ / BALL VALVE / KUGELVENTIL	1/4"	1
1. PRIDANO KRYT 30.Y410-006, 30.Y410-008 A KROUZEK 30.Y310-007. 157/ZM188 17.9.2009 SLEZACKOVA 2. PRIDAN DRZAK 30.8910-004. 092/ZM093 3.5.2011 SLEZACKOVA 3. ZRUS. TRUBICKA 30.3510-004 A NAHR. 30.3510-005. 231/ZM264 29.10.2013 SLEZACKOVA 4. ZRUSEN DRZAK 30.8910-004, PRID. PLECH 30.Y410-001. 313/ZM310 19.12.2013 SLEZACKOVA 5. PRIDANA 3xPRUCHODKA PRIMA 92.008.101. 313/ZM028 14.2.2014 SLEZACKOVA 6. ZRUS. KRYT 30.Y410-006 A NAHR. 30.Y410-106, ZRUS. KRYT 30.Y410-008 A NAHR. 30.Y410-108. 066/ZM092 4.4.2014 SLEZACKOVA 7. PRIDAN 2xKOLIK 8x36 (90.302.OZ.003). 004/ZM009 13.1.2016 SLEZACKOVA 8. ZRUS. 30.Y410-001; 213/ZM378 19.10.2018 SCERBA					

Císlo 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; Rozměr/Stock size/Abmessung

10.61. Kostka regulace / Regulation cube / Regelungswürfel



NAZEV SESTAVY KOSTKA REGULACE	CISLO SESTAVY 201.6816-100	STROJ SL-520
	Konstruoval: MARAK	
	Datum: 10. 04.2018	
	Meritko: 1:1	

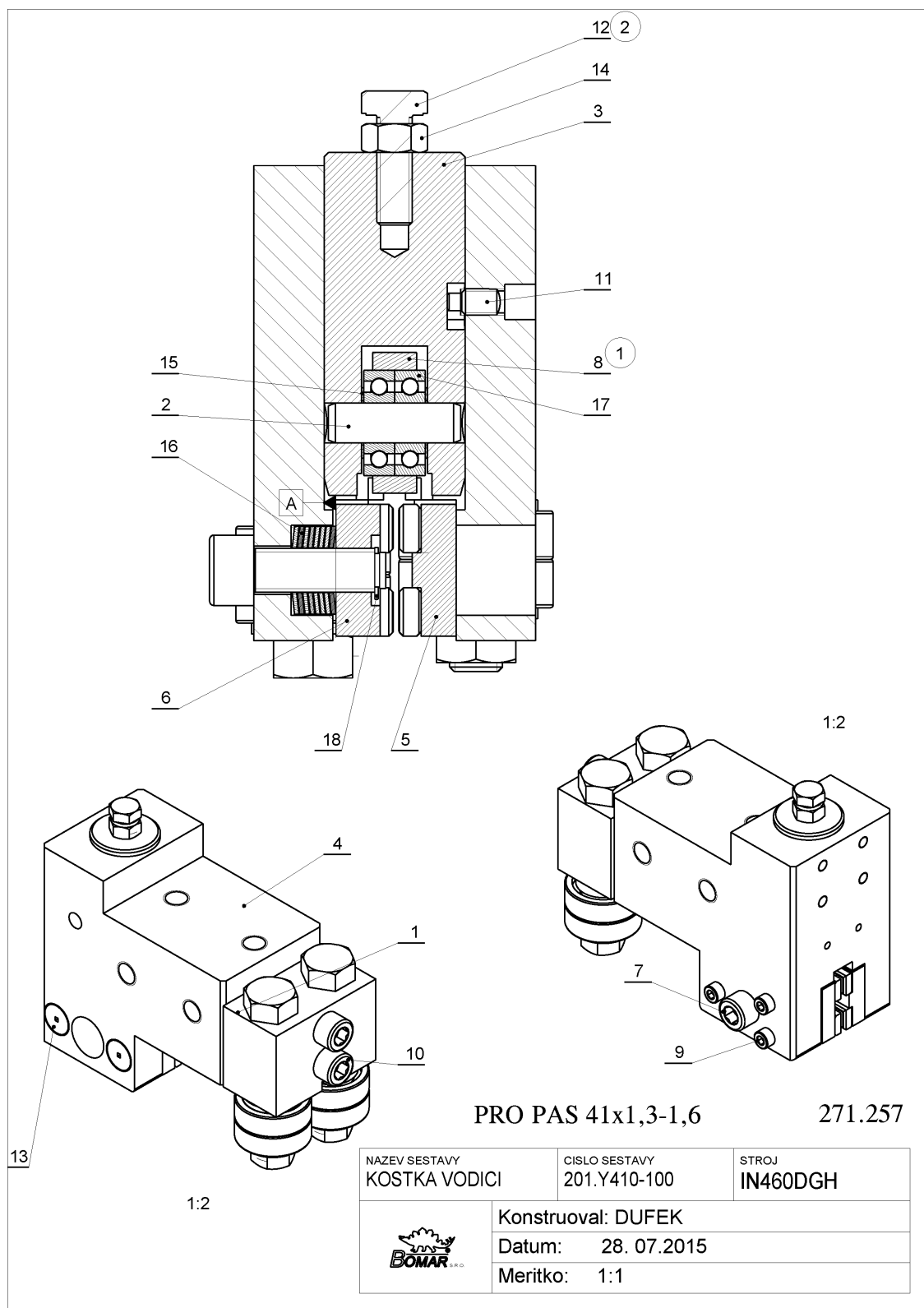
10.62. Kusovník / Piece list / Stückliste - Kostka regulace / Regulation cube / Regelungswürfel

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	3	KOSTKA REGULACE / REGULATION CUBE / REGELUNGSWÜRFEL	TYC 40x40	1
2	30.6816-104	3	VIKO / COVER / DECKEL	D 16	1
3	30.6816-103	1	PIST / PISTON / KOLBEN	D 12	1
4	30.6816-108	2	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	1	VIKO / COVER / DECKEL	D 22	1
8	92.002.102	0	SROUBENI PRIME KOMPL / null / null	S-GEV-8LLR	1
9	96.001.019	0	O-KROUZEK STATICKY / O-RING STATIC / O-RING STATISCH	6X2	1
10	96.002.041	0	O-KROUZEK DYNAMICKY / O-RING DYNAMIC / O-RING DYNAMISCH	10x1	1
11	96.002.023	0	O-KROUZEK DYNAMICKY / O-RING DYNAMIC / O-RING DYNAMISCH	4X1.8	2
12	96.001.003	0	O-KROUZEK STATICKY / O-RING STATIC / O-RING STATISCH	8X2	1

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;

Číslo sestavy/Number of assembly/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

10.63. Kostka vodící / Lead cube / Führungsklotz



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

Cislo Sestavy 201.Y410-100		Ver. 2	Nazev sestavy KOSTKA VODICI/GUIDING CUBE/FÜHRUNGSKLOTZ		
Poz.	Objednaci cislo	Ver.	Nazev polozky	Rozmer	Ks
1	201.6110-510	0	VEDENI / GUIDE / FÜHRUNG		1
2	30.6710-108	1	KOLIK / PIN / BOLZEN	TYC 10	1
3	30.6710-109	0	PIST / PISTON / KOLBEN	d 32	1
4	30.Y410-101	1	KOSTKA VODICI / GUIDING CUBE / FÜHRUNGSKLOTZ	HR 110x70	1
5	30.Y410-110	0	DRZAK TVRDOKOVU / HM HOLDER / HM-HALTER		1
6	30.Y410-120	0	DRZAK TVRDOKOVU / HM HOLDER / HM-HALTER		1
7	30.Y610-503	0	SROUB / SCREW / SCHRAUBE	M10X30	1
8	31.6710-110	0	KROUZEK / RING / RING	LH 2403210	1
9	90.001.25.011	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M5X25	3
10	90.001.25.054	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10X80	2
11	90.004.2D.002	0	SROUB STAVECI / SET SCREW / STELLSCHRAUBE	SROUB M6X12	1
12	90.005.55.016	2	SROUB 6HRANNY / HEX HEAD SCREW / SECHSKANTSCHRAUBE	SROUB M8X25	1
13	90.011.27.016	0	SROUB ZAPUSTNY / COUNTERSUNK SCREW / SENKSCHRAUBE	SROUB M8X25	2
14	90.100.55.005	0	MATICE PRESNA ZINEK / PRECISION NUT - ZN / PRÄZISE MUTTER - ZN	MATICE _ M8	1
15	90.154.50.003	0	PODLOZKA VYMEZOVACI / DISTANCE WASHER / AUSGLEICHSSCHEIBE	10x16x0.50	2
16	90.350.02.005	0	PRUZINA TALIROVA / DISC SPRING / TELLERFEDER	20X10.2X1	8
17	95.001.044	0	LOZISKO / BEARING / LAGER	609 2RS	2
18	95.600.002	0	KROUZEK POJIST.VNEJS / EXTERNAL RETAINING RING / SICHERUNGSRING AUBEN	POJISTNY KROUZEK 8	1

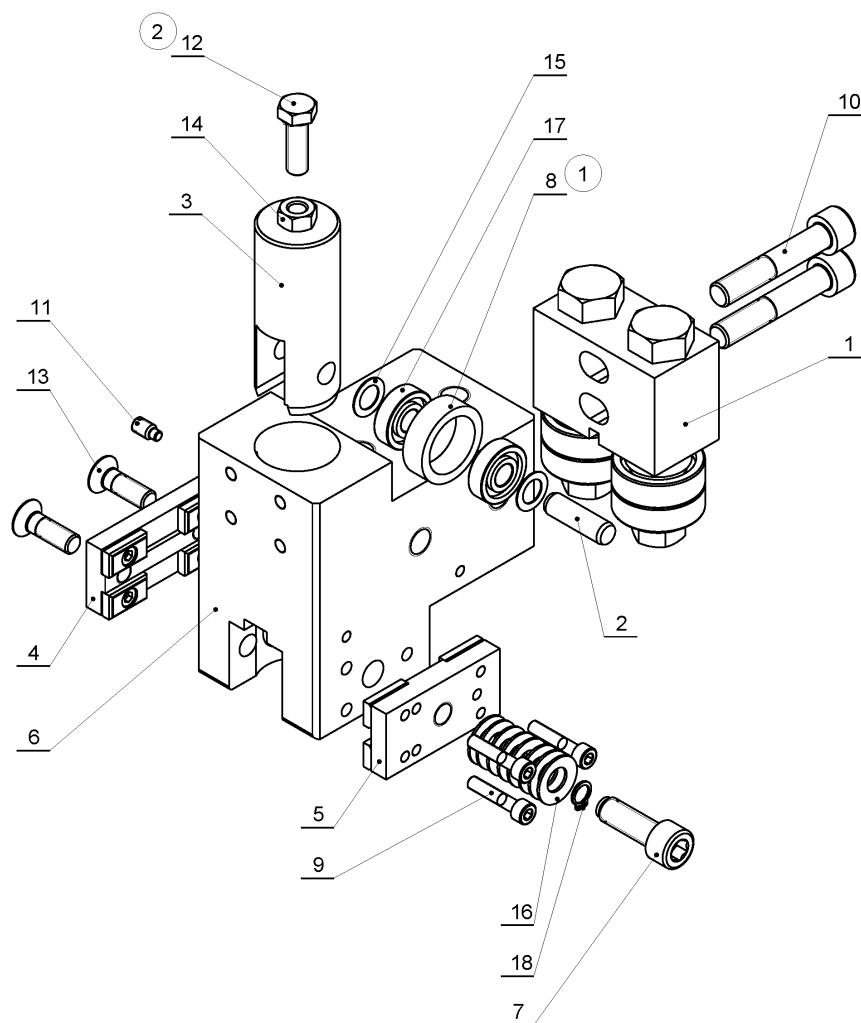
1.ZRUS.SOUC.30.6710-110 A NAHR.31.6710-110. 175ZM178 28.7.2015 SLEZACKOVA

2.ZRUS.SROUB M8x40(90.005.55.019) A NAHR.M8x25(90.005.55.016). 192/ZM309 7.9.2020 SLEZACKOVA

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

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

10.65. Kostka vodící / Lead cube / Führungsklotz



271.256

NAZEV SESTAVY KOSTKA VODICI	CISLO SESTAVY 201.Y410-200	STROJ IN460DGH
	Konstruoval: MUSIL	
	Datum: 28. 07.2015	
	Meritko: 1:2	

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

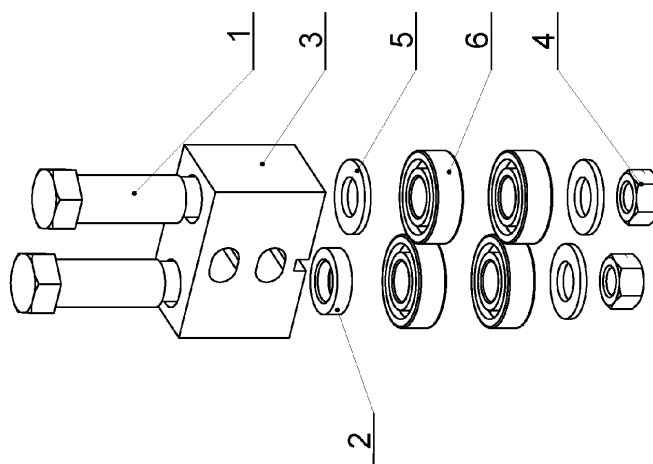
Cislo Sestavy 201.Y410-200		Ver. 2	Nazev sestavy KOSTKA VODICI/GUIDING CUBE/FÜHRUNGSKLOTZ		
Poz.	Objednací číslo	Ver.	Nazev položky	Rozmer	Ks
1	201.6110-510	0	VEDENI / GUIDE / FÜHRUNG		1
2	30.6710-108	1	KOLIK / PIN / BOLZEN	TYC 10	1
3	30.6710-109	0	PIST / PISTON / KOLBEN	d 32	1
4	30.Y410-110	0	DRZAK TVRDOKOVU / HM HOLDER / HM-HALTER		1
5	30.Y410-120	0	DRZAK TVRDOKOVU / HM HOLDER / HM-HALTER		1
6	30.Y410-201	2	KOSTKA VODICI / GUIDING CUBE / FÜHRUNGSKLOTZ		1
7	30.Y610-503	0	SROUB / SCREW / SCHRAUBE	HR 170x70	1
8	31.6710-110	0	KROUZEK / RING / RING	M10X30 LH 2403210	1
9	90.001.25.011	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M5X25	3
10	90.001.25.053	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10X55	2
11	90.004.2D.002	0	SROUB STAVECI / SET SCREW / STELLSCHRAUBE	SROUB M6X12	1
12	90.005.55.016	2	SROUB 6HRANNY / HEX HEAD SCREW / SECHSKANTSCHRAUBE	SROUB M8X25	1
13	90.011.27.016	0	SROUB ZAPUSTNY / COUNTERSUNK SCREW / SENKSCHRAUBE	SROUB M8X25	2
14	90.100.55.005	0	MATICE PRESNA ZINEK / PRECISION NUT - ZN / PRÄZISE MUTTER - ZN	MATICE _ M8	1
15	90.154.50.003	0	PODLOZKA VYMEZOVACI / DISTANCE WASHER / AUSGLEICHSSCHEIBE	10x16x0.50	2
16	90.350.02.005	0	PRUZINA TALIROVA / DISC SPRING / TELLERFEDER	20X10.2X1	8
17	95.001.044	0	LOZISKO / BEARING / LAGER	609 2RS	2
18	95.800.002	0	KROUZEK POJIST.VNEJS / EXTERNAL RETAINING RING / SICHERUNGSRING AUSSEN	POJISTNY KROUZEK 8	1
1.ZRUS.SOUC.30.6710-110 A NAHR.31.6710-110. 175/ZM178 28.7.2015 SLEZACKOVA					
2.ZRUS.SROUB M8x40(90.005.55.019) A NAHR.M8x25(90.005.55.016). 192/ZM309 7.9.2020 SLEZACKOVA					

Cislo Sestavy/Number of assembly/Nummer der Baugruppe, Verze (Ver./Version/Version; Nazev sestavy/Assembly title/Name der Baugruppe, Pozice (Poz.)/Position/Position;

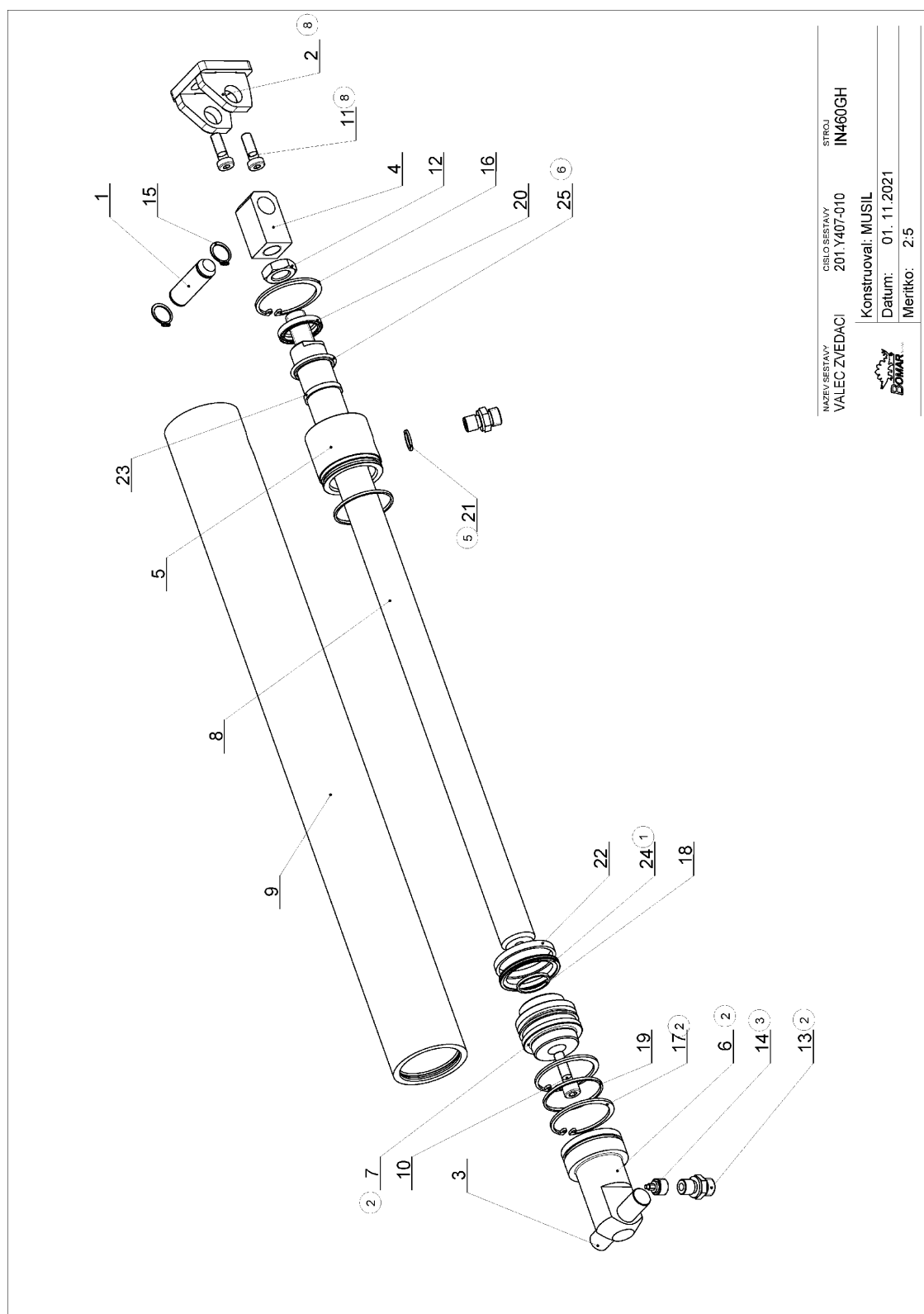
Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz./Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

10.67. Vedení / Guide / Führung

Číslo Sestavy 201.6110-510		Ver. 0	Název sestavy VEDENÍ/GUIDE/FÜHRUNG		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.6010-104	3	EXCENTR / EXCENTER	SK 22	2
2	30.6010-108	0	KROUZEK DISTANČNÍ / SPACER RING / DISTANZRING	Tř 25x5	1
3	30.6110-502	0	KOSTKA VODICÍ / GUIDING CUBE / FÜHRUNGSKLOTZ	HR 80x50	1
4	90.100.55.007	0	MATICE PŘESNÁ ZINEK / PRECISION NUT - ZN / PRÄZISE MUTTER - ZN	MATICE _ M12	2
5	90.150.50.008	0	PODLOŽKA / WASHER / UNTERLEGSCHIBE	PODLOŽKA 15	3
6	95.001.015	0	LOŽISKO / BEARING / LAGER	6202 2RS	4



10.68. Válec zvedací / Lifting cylinder / Hebezyylinder



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

Číslo Sestavy 201.Y407-010		Ver. 0	Nazev sestavy VALEC ZVEDACI/LIFTING CYLINDER/HEBEZYLINDER		
Poz.	Objednaci cislo	Ver.	Nazev polozky	Rozmer	Ks
1	30.0807-009	2	CEP / PIVOT / BOLZEN	d 16h9	1
2	30.0807-108	1	DRZAK / HOLDER / HALTER		1
3	30.8307-205	0	CEP / PIVOT / BOLZEN	d 16h9	1
4	30.8607-001	1	DRZAK / HOLDER / HALTER	HR 25x25	1
5	30.C407-012	2	VIKO / COVER / DECKEL	d 55	1
6	30.Y307-003	0	VIKO / COVER / DECKEL	D 52	1
7	30.Y307-012	2	PIST / PISTON / KOLBEN	d 55	1
8	30.Y407-002	2	PISTNICE / PISTON ROD / KOLBENSTANGE	d 28 f8	1
9	30.Y407-011	0	VALEC / CYLINDER / ZYLINDER	TR 62/50H8	1
10	90.001.55.083	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M8x30	1
11	90.015.25.002	8	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M8x25	2
12	90.101.55.003	0	MATICE PR.NIZKA ZN / PRECISION THIN NUT - ZN / PRÄZISE MUTTER NIEDRIGE - ZN	MATICE M16	1
13	92.002.001	0	SROUBENI PRIME / TUBE FITTING - STRAIGHT / GERADE VERSCHRAUBUNG	G 1/4"	2
14	92.151.008	2	VENTIL POJISTNY / SAFETY VALVE / SICHERUNGSVENTIL	VPN-H 1/4"	1
15	95.800.007	3	KROUZEK POJIST.VNEJS / EXTERNAL RETAINING RING / SICHERUNGSRING AUBEN	POJISTNY KROUZEK 16	2
16	95.801.009	0	KROUZEK POJIST.VNITR / INTERNAL RETAINING RING / SICHERUNGSRING INNEN	POJISTNY KROUZEK 52	1
17	95.801.018	0	KROUZEK POJIST.VNITR / INTERNAL RETAINING RING / SICHERUNGSRING INNEN	POJISTNY KROUZEK 50	2
18	96.002.011	2	O-KROUZEK DYNAMICKY / O-RING DYNAMIC / O-RING DYNAMISCH	24X2	1
19	96.002.019	0	O-KROUZEK DYNAMICKY / O-RING DYNAMIC / O-RING DYNAMISCH	46X2 NBR 70SH	2
20	96.061.009	0	KROUZEK STIRACI / WIPER RING / ABSTREIFRING	WD2200280 Z201	1
21	96.082.002	0	KROUZEK TESNICI / SEALING RING / DICHTUNGSRING	13/17x1.5 CU	1
22	96.084.001	5	KROUZEK VODICI / GUIDE RING / FÜHRUNGSRING	GP6600500-T47	1
23	96.084.006	0	KROUZEK VODICI / GUIDE RING / FÜHRUNGSRING	GR4300280-T47	1
24	96.900.013	0	TESNENI KOMBINOVA NE / COMBINED SEALING / KOMBIDICHTUNG	PT0200500	1
25	96.900.021	1	TESNENI KOMBINOVA NE / COMBINED SEALING / KOMBIDICHTUNG	RSK200280-46N	1
1.ZRUSENO TESNENI 96.900.001 A NAHRAZENO 96.900.013. 336/ZM006 10.1.2011 SLEZACKOVA					
2.ZRUS REDUKCE 30.9107-509, SROUBENI 30.30.1807-005,ZRUS VIKO 30.Y307-005 A NAHR. 30.Y307-003,ZRUS SROUBENI 92.003.001 A NAHR. 92.002.001,ZRUS PIST 30.LM07-504 A NAHR. 30.Y307-012,ZRUS. 1xPOJ.KROUZEK 95.801.009 A NAHR.95.801.018, PRID.1xKROUZEK 96.082.002. 026/ZM027 18.2.2011. 222/ZM212 30.7.2013 SLEZACKOVA					
3.VENTIL 92.151.001 PRECISLOVAN NA 92.151.008. 222/ZM212 30.7.2013 SLEZACKOVA					
4.PRID.DRZAK 30.0807-008 2xSROUB M8x20(90.001.25.032). 062/ZM50 10.4.2014 SLEZACKOVA					
5.ZRUS. 2xTESNENI 96.082.002. 290/ZM003 8.1.2019 SZABARI					
6.DO SPODNIHO SROUBENI PRIDANA CLONA 30.0911-044. 034/ZM069 22.02.2021 NOVOSAD					
7.ZRUS. CLONA 30.0911-044. 034/ZM221. 9. 7. 2021 KOVAR					
8.ZRUS. DRZAK 30.0807-008 A NAHR. DRZAKEM 30.0807-108, ZRUS. 2x SROUB 90.001.25.032 A NAHR. 2x 90.015.25.002. 280/ZM392 26.10.2021 KOVAR					
Číslo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Nazev sestavy/Assembly title/Name der Baugruppe; Pozice (Pos./Position/Position; Objednaci cislo/Purchase order number/Bestellnummer; Nazev polozky/Volume title/Name der Position; Rozmer/Stock size/Abmessung					

11. Výkresy sestav pro objednání náhradních dílů – čelisti 400mm (volitelné vybavení/ Zeichnungen für Bestellung der Ersatzteile – Backen 400mm – optionale Zubehör/ Drawing assemblies for spare parts order – jaws 400mm – optional accessory

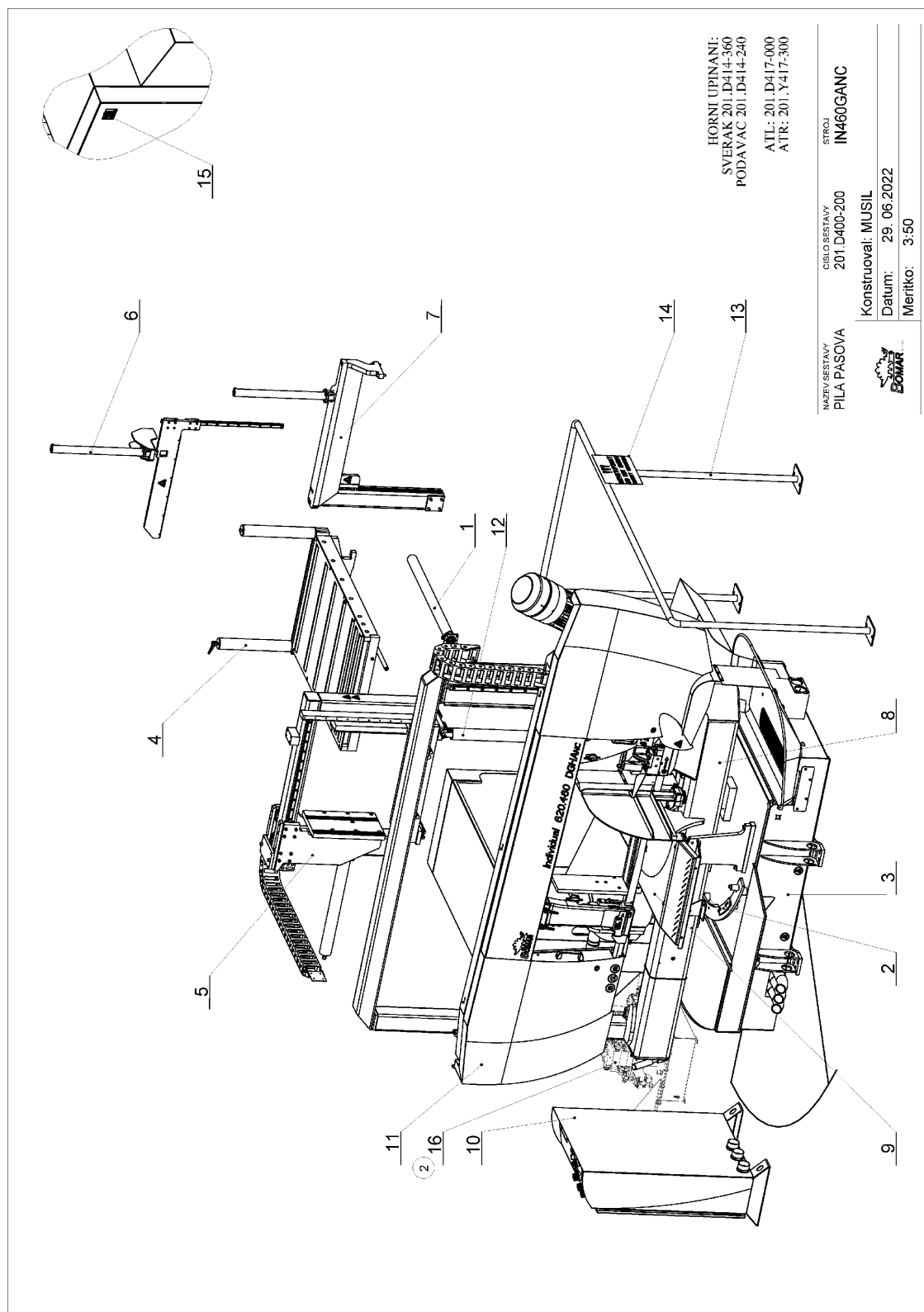
Součásti, u kterých není zařazen výkres, jsou shodné se standardní sestavou pily Individual 620-460 DGH.

These parts which haven't any drawing assigned are identical with parts from standard assembly of the band saw Individual 620-460 DGH.

Die Teile, bei denen es keine Zeichnung gibt, sind mit der standard Zusammenstellung der Säge Individual 620-460 DGH identisch.

-

11.1. INDIVIDUAL 620.460 GANC (čelisti/ jaws/ Backen 400mm)



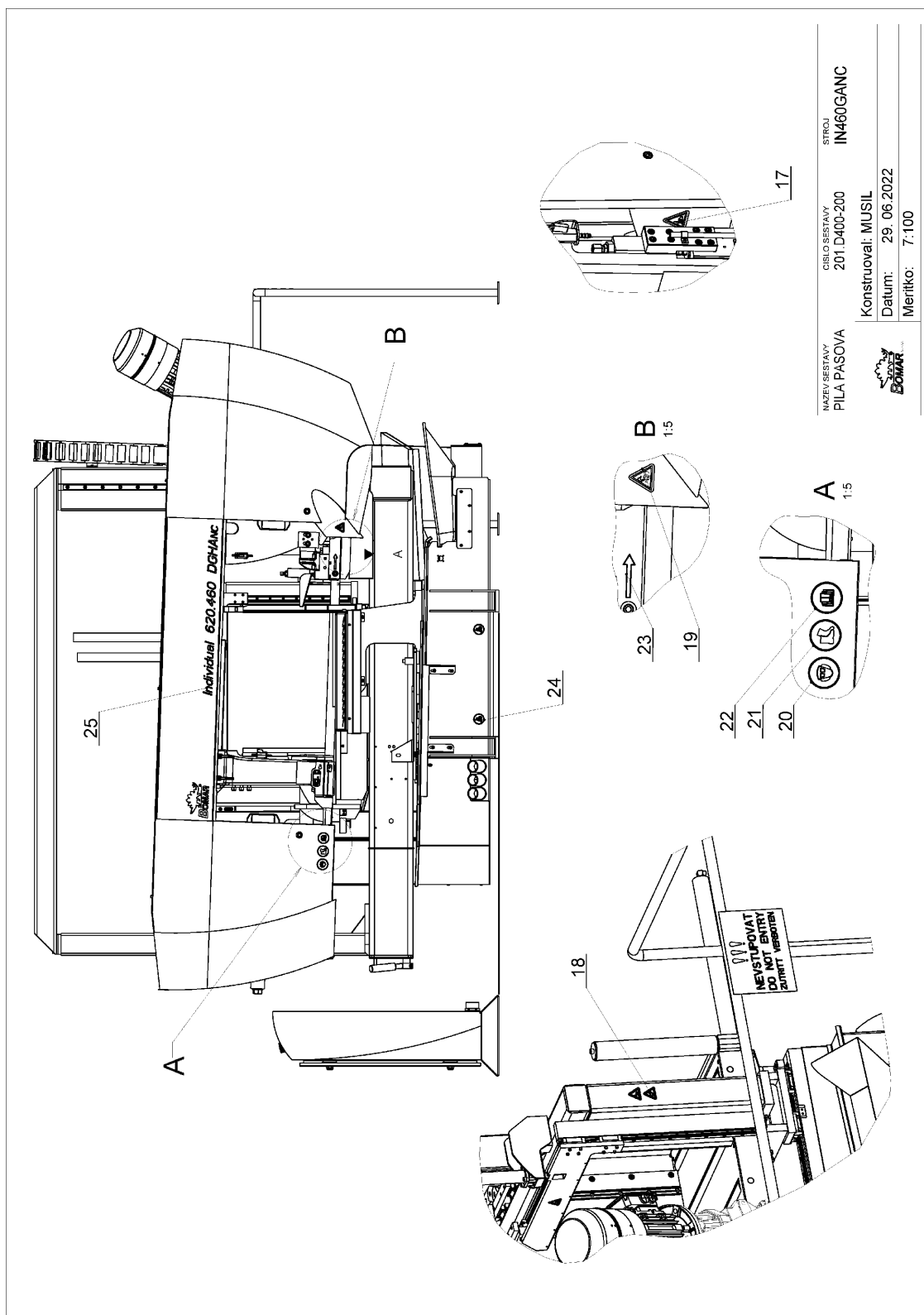
11.2. Kusovník / Piece list / Stückliste - INDIVIDUAL 620.460 GANC (čelisti/ jaws/ Backen 400mm))

Číslo sestavy 201.D400-200		Ver. 0	Název sestavy PILA PASOVA/BAND SAWBANDSÄGE	
Poz.	Objednávací číslo	Ver.	Název položky	Ks
1	201.D307-200	0	VALEC SVERAKU / VICE CYLINDER / SCHRAUBSTOCKZYLINDER	1
2	201.D314-080	0	DORAZ / STOP PIECE / ANSCHLAG	1
3	201.D401-100	0	PODSTAVEC / BASE / UNTERSATZ	1
4	201.D411-150	0	TRAT / TRACK / BAHN	1
5	201.D411-300	0	PODAVAC / FEEDER / VORSCHUB	1
6	201.D414-240	0	UPINANI HORNÍ / TOP CLAMPING / SPANNVORRICHTUNG OBEN	1
7	201.D414-360	0	UPINANI HORNÍ / TOP CLAMPING / SPANNVORRICHTUNG OBEN	1
8	201.N402-200	0	KONZOLA OTČOŇA / PIVOT BRACKET / DREHKONSOLE	1
9	201.N403-100	0	SVERAK / VICE / SCHRAUBSTOCK	1
10	201.R230-200	0	OVLADACÍ PANEL / CONTROL PANEL / BEDIENPULT	1
11	201.Y404-300	0	RAMENO / BEAM / RAHMEN	1
12	201.Y407-010	0	VALEC ZVEDACÍ / LIFTING CYLINDER / HEBEZYLINDER	1
13	30.D300-120	0	PLOT / FENCE / ZAUN	1
14	30.D300-121	0	DESKA / BOARD / PLATTE	1
15	30.D499-001	0	STITEK TYPOVÝ / MACHINE LABEL / MASCHINE SCHILD	1
16	92.001.166	2	AGREGAT HYDRAULICKÝ / HYDRAULIC PUMP / HYDRAULIKAGGREGAT	1
17	99.900.039	0	SAMOLEPKA / STICKER / AUFKLEBER	2
18	99.900.041	0	SAMOLEPKA / STICKER / AUFKLEBER	1
19	99.900.043	0	SAMOLEPKA / STICKER / AUFKLEBER	1
20	99.900.047	0	SAMOLEPKA / STICKER / AUFKLEBER	1
21	99.900.048	0	SAMOLEPKA / STICKER / AUFKLEBER	1
22	99.900.049	0	SAMOLEPKA / STICKER / AUFKLEBER	1
23	99.900.063	0	SAMOLEPKA / STICKER / AUFKLEBER	1
24	99.900.068	0	SAMOLEPKA / STICKER / AUFKLEBER	4
25	99.901.028	0	SAMOLEPKA / STICKER / AUFKLEBER	1

1.ZRUSENA CERTIFIKACNI ZNACKA TUV SUD 99.901.032. 282/ZM199 14.9.2021 KOVAR
2.ZRUSEN AGREGAT 92.001.065 A NAHR.92.001.166. 128/ZM231 29.6.2022 JAGNESAK

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

11.3. INDIVIDUAL 620.460 GANC (čelisti/ jaws/ Backen 400mm)



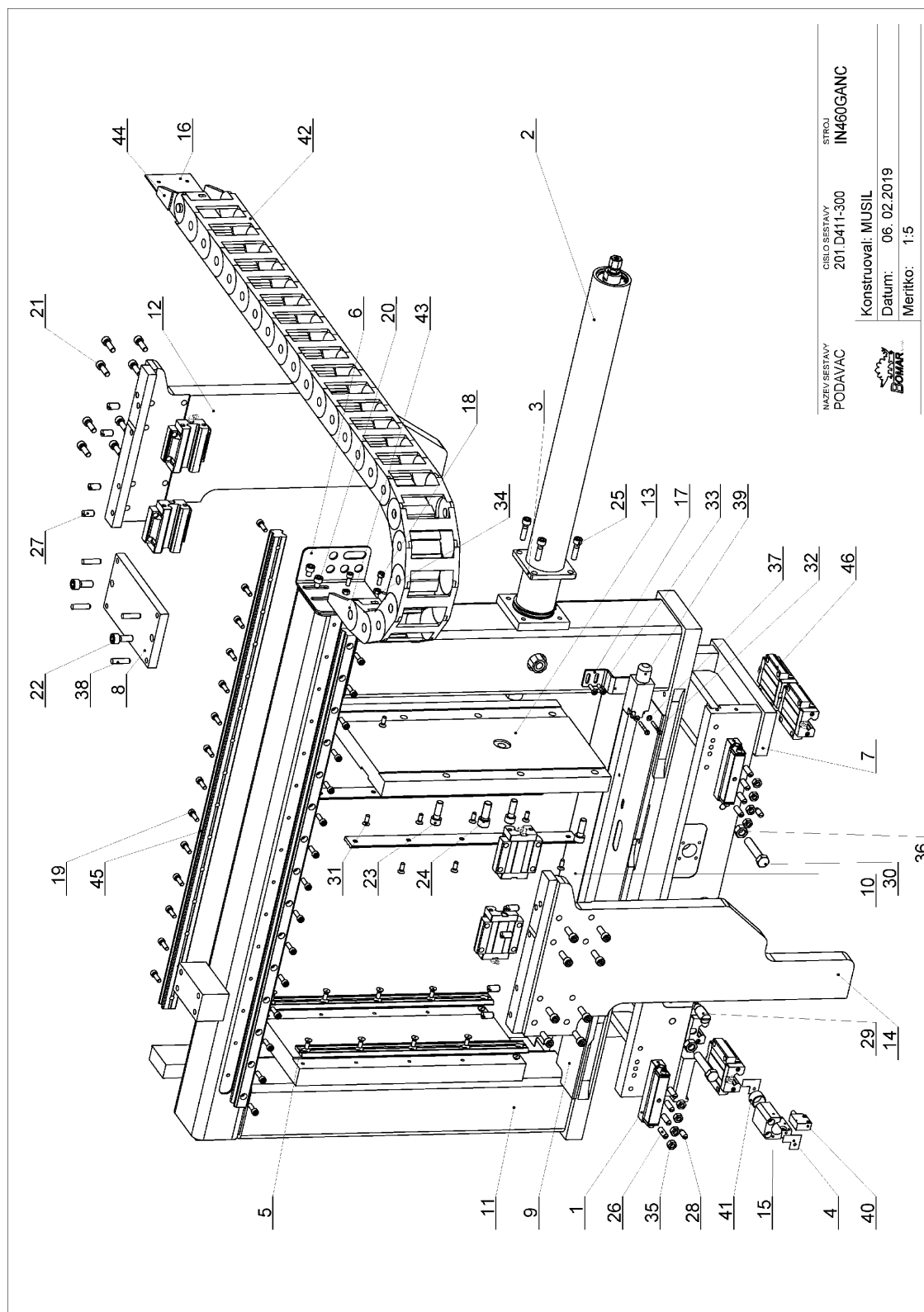
11.4. Kusovník / Piece list / Stückliste - INDIVIDUAL 620.460 GANC (čelisti/ jaws/ Backen 400mm)

Číslo sestavy 201.D400-200		Ver. 0	Název sestavy PILA PASOVA/BAND SAWBANDSÄGE	
Poz.	Objednávací číslo	Ver.	Název položky	Ks
1	201.D307-200	0	VALEC SVERAKU / VICE CYLINDER / SCHRAUBSTOCKZYLINDER	1
2	201.D314-080	0	DORAZ / STOP PIECE / ANSCHLAG	1
3	201.D401-100	0	PODSTAVEC / BASE / UNTERSATZ	1
4	201.D411-150	0	TRAT / TRACK / BAHN	1
5	201.D411-300	0	PODAVAC / FEEDER / VORSCHUB	1
6	201.D414-240	0	UPINANI HORNÍ / TOP CLAMPING / SPANNVORRICHTUNG OBEN	1
7	201.D414-360	0	UPINANI HORNÍ / TOP CLAMPING / SPANNVORRICHTUNG OBEN	1
8	201.N402-200	0	KONZOLA OTOCNA / PIVOT BRACKET / DREHKONSOLE	1
9	201.N403-100	0	SVERAK / VICE / SCHRAUBSTOCK	1
10	201.R230-200	0	OVLADACÍ PANEL / CONTROL PANEL / BEDIENPULT	1
11	201.Y404-300	0	RAMENO / BEAM / RAHMEN	1
12	201.Y407-010	0	VALEC ZVEDACÍ / LIFTING CYLINDER / HEBEZYLINDER	1
13	30.D300-120	0	PLOT / FENCE / ZAUN	1
14	30.D300-121	0	DESKA / BOARD / PLATTE	1
15	30.D499-001	0	STITEK TYPOVÝ / MACHINE LABEL / MASCHINE SCHILD	1
16	92.001.166	2	AGREGAT HYDRAULICKÝ / HYDRAULIC PUMP / HYDRAULIKAGGREGAT	1
17	99.900.039	0	SAMOLEPKA / STICKER / AUFKLEBER	2
18	99.900.041	0	SAMOLEPKA / STICKER / AUFKLEBER	1
19	99.900.043	0	SAMOLEPKA / STICKER / AUFKLEBER	1
20	99.900.047	0	SAMOLEPKA / STICKER / AUFKLEBER	1
21	99.900.048	0	SAMOLEPKA / STICKER / AUFKLEBER	1
22	99.900.049	0	SAMOLEPKA / STICKER / AUFKLEBER	1
23	99.900.063	0	SAMOLEPKA / STICKER / AUFKLEBER	1
24	99.900.068	0	SAMOLEPKA / STICKER / AUFKLEBER	4
25	99.901.028	0	SAMOLEPKA / STICKER / AUFKLEBER	1

1.ZRUSENA CERTIFIKACNI ZNACKA TUV SUD 99.901.032. 282/ZM199 14.9.2021 KOVAR
2.ZRUSEN AGREGAT 92.001.065 A NAHR.92.001.166. 128/ZM231 29.6.2022 JAGNESAK

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

11.5. Podavač / Feeder / Vorschub



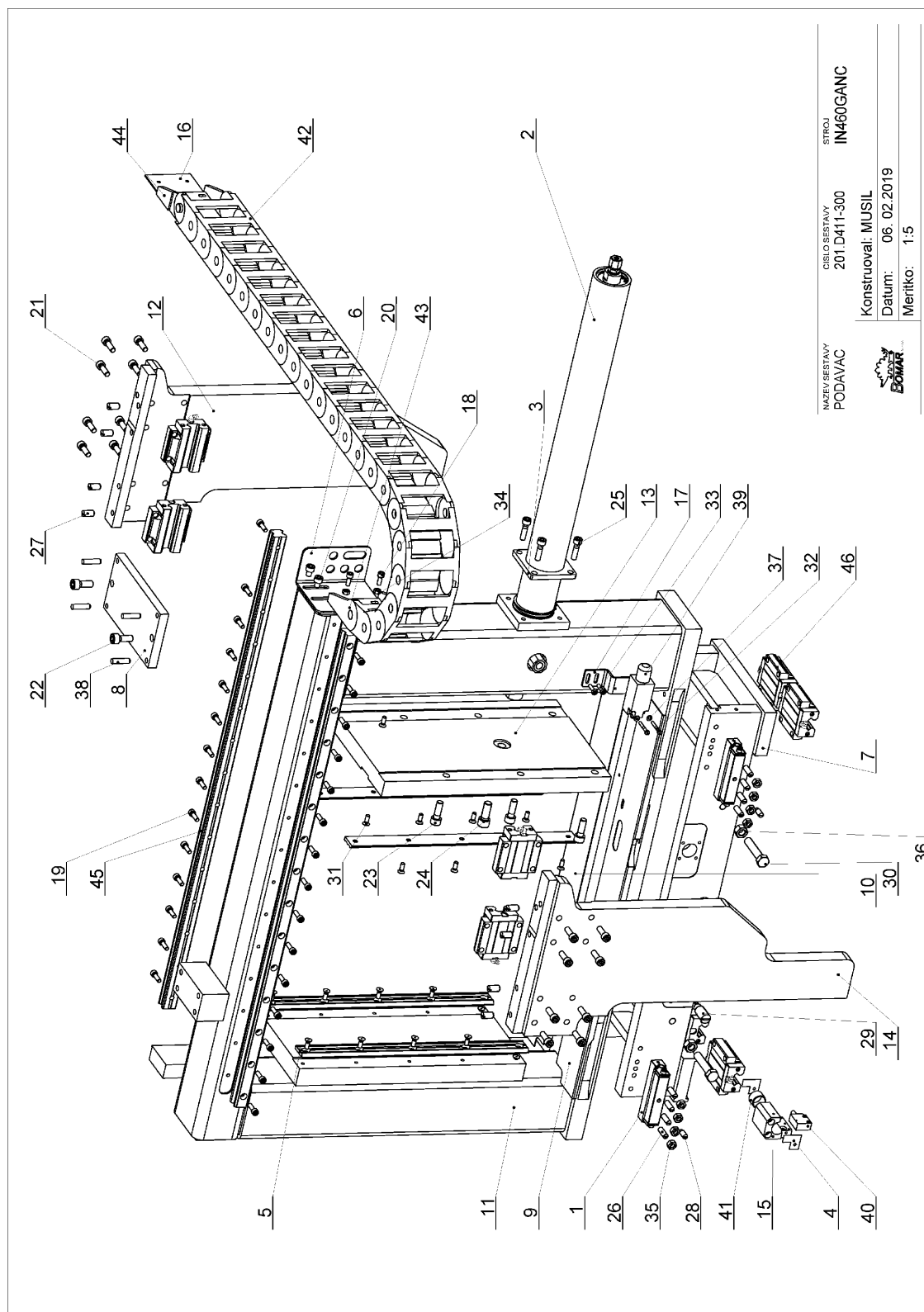
11.6. Kusovník / Piece list / Stückliste - Podavač / Feeder / Vorschub

Číslo Sestavy 201.D411-300		Ver. 0	Název sestavy PODAVAC/FEEDER/VORSCHUB		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.2911-200	1	ELEMENT VALECKOVÝ / ROLLER ELEMENT / ROLLENELEMENT		4
2	201.D407-210	0	VALEC SVĚRAKU / VICE CYLINDER / SCHRAUBSTOCKZYLINDER		1
3	30.2011-010	0	PRÍLOŽKA / CLIP / CLIP	P8x80	1
4	30.2911-030	0	STERAC / WIPER / ABSTREIFER	P 0.2.26.5	2
5	30.4803-011	0	LISTA CELISTI / JAW SLAT / BACKENLEISTE	HR 30x10	4
6	30.D311-101	0	KONZOLA / BRACKET / KONSOLÉ	P 3x120	1
7	30.D311-201	0	VOZÍK / CART / WAGEN		1
8	30.D311-219	0	VÝZTUHA / REINFORCEMENT / VERSTEIFUNG	HR 100x15	1
9	30.D411-236	0	KRYT LOŽISKA / BEARING COVER / LAGERABDECKUNG	P 1x90	1
10	30.D411-237	0	KRYT LOŽISKA / BEARING COVER / LAGERABDECKUNG	P 1x90	1
11	30.D411-302	0	SLOUP PODAVACE / FEEDER POLE / VORSCHUBSÄULE		1
12	30.D411-331	0	CELIST POHYBLIVÁ / MOVING JAW / BEWEGLICHE BACKE		1
13	30.D411-332	0	CELIST POHYBLIVÁ / MOVING JAW / BEWEGLICHE BACKE	P30x239	1
14	30.D411-333	0	CELIST POHYBLIVÁ / MOVING JAW / BEWEGLICHE BACKE		1
15	30.K511-110	0	DRŽÁK / HOLDER / HALTER	HR 50x50	1
16	30.Y404-302	0	DRŽÁK / HOLDER / HALTER	P 2x80	1
17	30.Y504-003	0	DRŽÁK / HOLDER / HALTER	P 3x30	1
18	90.001.25.017	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M6x16	2
19	90.001.25.018	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M6x20	30
20	90.001.25.028	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M8x10	2
21	90.001.25.033	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	8x25	16
22	90.001.25.047	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10x25	2
23	90.001.25.048	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10x30	3
24	90.001.25.058	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M12x30	1
25	90.001.55.083	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M8x30	4
26	90.002.2D.013	0	SROUB STAVECÍ / SET SCREW / STELLSCHRAUBE	SROUB M8x25	8
27	90.002.2D.015	0	SROUB STAVECÍ / SET SCREW / STELLSCHRAUBE	SROUB M10x20	8
28	90.004.2D.009	0	SROUB STAVECÍ / SET SCREW / STELLSCHRAUBE	SROUB M8x20	4
29	90.004.2D.019	0	SROUB STAVECÍ / SET SCREW / STELLSCHRAUBE	SROUB M16x40	1
30	90.005.55.055	0	SROUB 6HRANNÝ / HEX HEAD SCREW / SECHSKANTSCHRAUBE	SROUB M12x60	4
31	90.011.27.017	0	SROUB ZAPUSTNÝ / COUNTERSUNK SCREW / SENKSCHRAUBE	SROUB M6x16	20
32	90.012.50.007	0	SROUB VALCOVÝ / CYLINDER HEAD BOLT / ZYLINDERKOPFSCHRAUBE	SROUB M4x30	2
33	90.013.27.006	0	SROUB PULKULATÝ / BUTTON HEAD SCREW / RUNDKOPFSCHRAUBE	M5x20	2
34	90.100.55.004	0	MATICE PRESNÁ ZINEK / PRECISION NUT - ZN / PRÄZISE MUTTER - ZN	MATICE _M6	2

Číslo 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

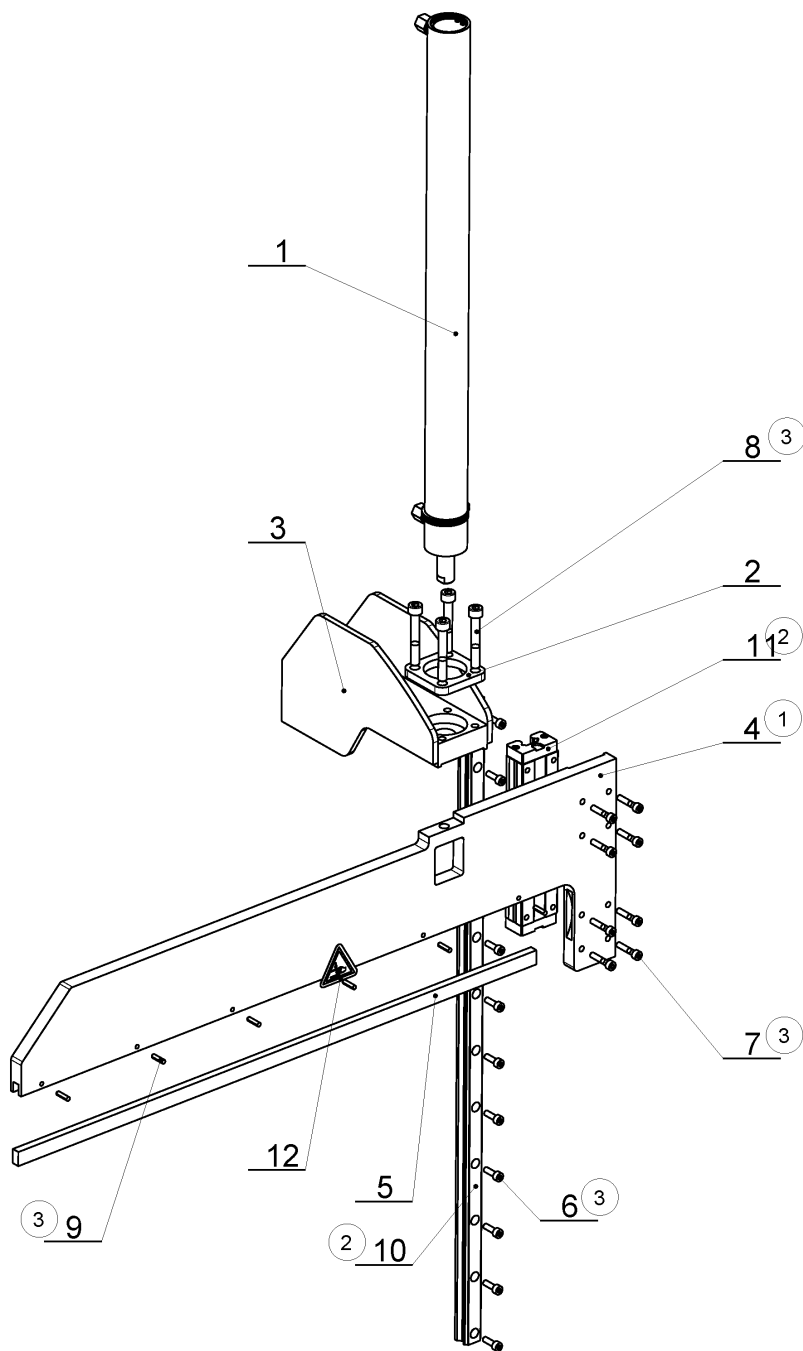
Číslo sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz./Position/Position;
Objednávací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

11.7. Podavač / Feeder / Vorschub



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11.9. Upínání horní/ Upper clamping/ Spannvorrichtung oben



NAZEV SESTAVY UPINANI HORNI	CISLO SESTAVY 201.D414-240	STROJ IN460GANC
Konstruoval: MUSIL		
Datum: 26. 06.2014		
Meritko: 1:5		

11.10. Kusovník / Piece list / Stückliste - Upínání horní/ Upper clamping/ Spannvorrichtung oben

Číslo Sestavy 201.D414-240		Ver. 0	Název sestavy UPINANI HORNÍ/TOP CLAMPING/SPANNVORRICHTUNG OBEN		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.D407-140	0	VALEC NAPINACÍ / TENSIONING CYLINDER / SPANNZYLINDER	D30/16	1
2	30.D311-126	0	DRŽÁK / HOLDER / HALTER	P 8x58	1
3	30.D314-242	0	DRŽÁK / HOLDER / HALTER		1
4	30.D414-247	1	CELIST POHYBLIVÁ / MOVING JAW / BEWEGLICHE BÄCKE	P 15x210	1
5	30.D414-254	0	LISTA / SLAT / LEISTE	TYC 8x15x2000	1
6	90.001.25.009	3	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M5X16	12
7	90.001.25.011	3	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M5X25	8
8	90.001.25.039	3	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M8X55	4
9	90.303.02.003	3	KOLÍK PRUŽNÝ BEZ PU / FLEXIBLE PIN WITHOUT SURF. TREATMENT / SPANNSTIFT OHNE OBERFLÄCHENBEHANDLUNG	KOLIK 4X16	6
10	99.200.272	2	VEDENÍ LINEARNÍ / LINEAR GUIDE / LINEARE FÜHRUNG	MSA20R	1
11	99.201.060	0	VOZÍK LINEARNÍHO VEDENÍ / LINEAR GUIDE CART / LINEARFÜHRUNGSWAGEN	MSA20S SS F0 N	2
12	99.900.039	0	SAMOLEPKA / STICKER / AUFKLEBER	NEBEZP-STLACENÍ	1

1. LIN. VEDENÍ 99.200.142 NAHRAZENO 99.200.042; VOZÍKY 99.201.034 NAHRAZENY 99.201.010
CELIST 30.D414-243 NAHRAZENA 30.D414-247; 028/zm.026 HLADIL 15.2.2011

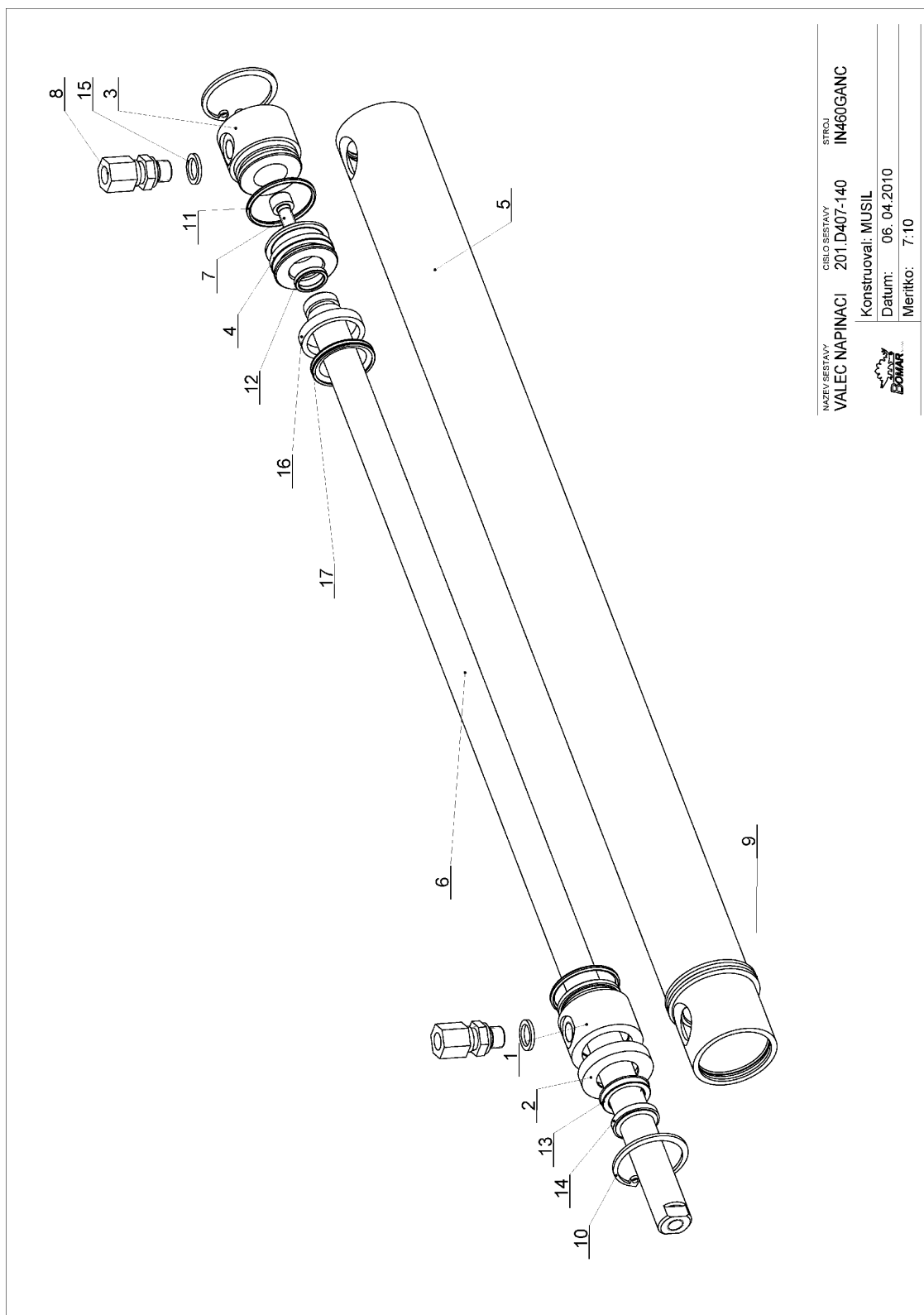
2.ZRUS.LINEARNÍ VEDENÍ 99.200.042(HIWIN) A NAHR.99.200.272(PMI),ZRUS.VOZÍK LIN.VEDENÍ 99.201.010 A NAHR.99.201.060.
056/ZM127 17.4.2012 SLEZACKOVA

3.PRIDANO - 5xKOLIK 4x16(90.303.02.003);8xSROUB M5x25(90.001.25.011);9xSROUB M5x16(90.001.25.009);ZRUS.SROUB M8x45
(90.001.25.037) A NAHR.SROUB M8x55(90.0001.25.039); 118/ZM139 26.6.2014 SLEZACKOVA

Číslo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver./Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;

Číslo 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

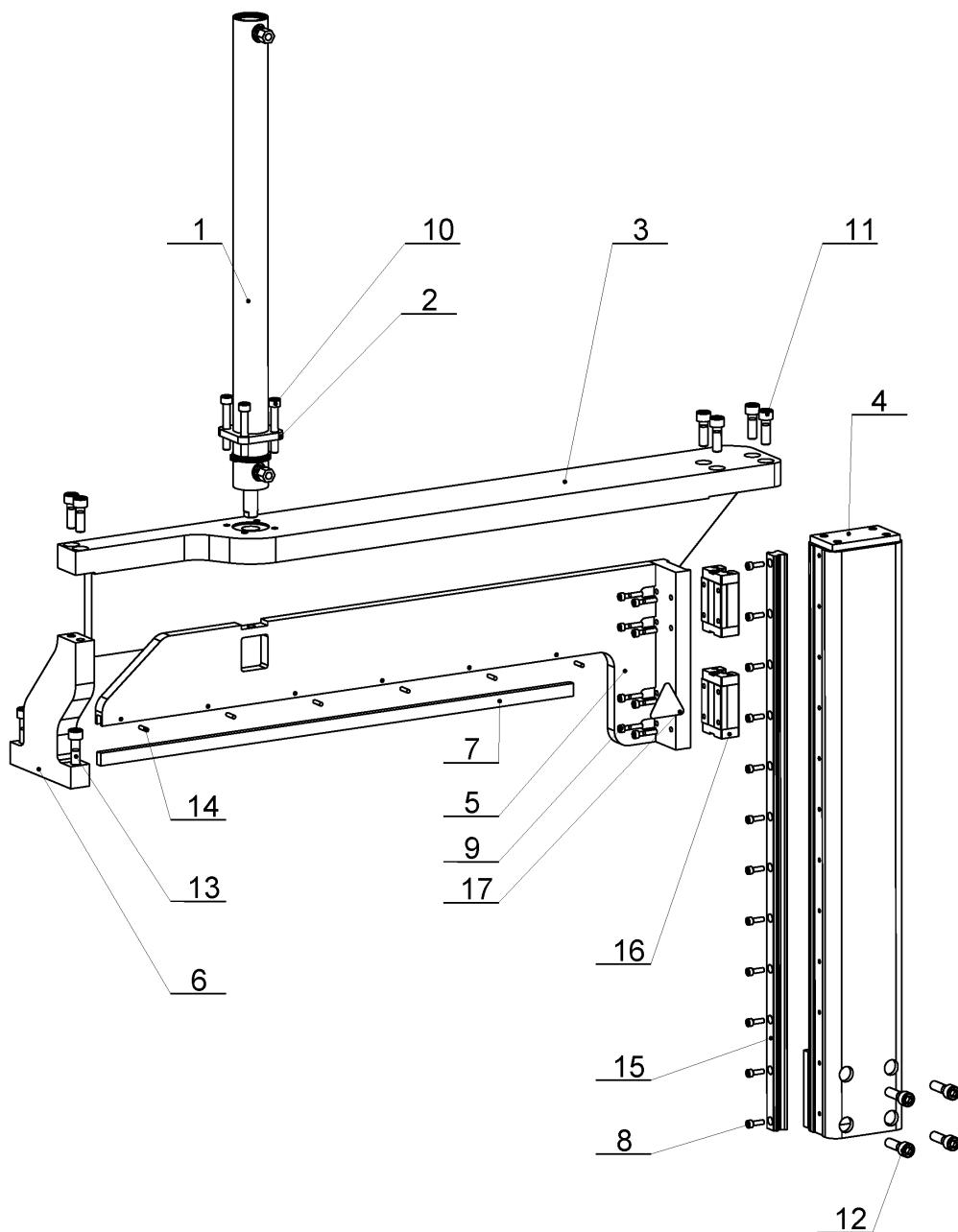
11.11. Válec napínací/ Tensioning cylinder/ Spannzyylinder



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

Číslo Sestavy 201.D407-140		Ver. 0	Nazev sestavy VALEC NAPINACI/TENSIONING CYLINDER/SPANNZYLINDER		
Poz.	Objednaci cislo	Ver.	Nazev polozky	Rozmer	Ks
1	30.6807-103	2	VIKO / COVER / DECKEL	TYC 35	1
2	30.6807-104	1	VIKO / COVER / DECKEL	TYC 35	1
3	30.6807-105	1	VIKO / COVER / DECKEL	TYC 35	1
4	30.6807-106	0	PIST / PISTON / KOLBEN	TYC 32	1
5	30.D407-141	0	VALEC / CYLINDER / ZYLINDER	TR 40/30H8	1
6	30.D407-142	0	PISTNICE / PISTON ROD / KOLBENSTANGE	d 16	1
7	90.001.25.017	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M6X16	1
8	92.002.102	0	SROUBENI PRIME KOMPL / null / null	S-GEV-8LLR	2
9	95.800.015	0	KROUZEK POJIST.VNEJS / EXTERNAL RETAINING RING / SICHERUNGSRING AUSEN	POJISTNY KROUZEK 40	2
10	95.801.026	0	KROUZEK POJIST.VNITR / INTERNAL RETAINING RING / SICHERUNGSRING INNEN	POJISTNY KROUZEK 34	2
11	96.001.008	0	O-KROUZEK STATICKY / O-RING STATIC / O-RING STATISCH	26x2 NBR 70SH	2
12	96.002.006	0	O-KROUZEK DYNAMICKY / O-RING DYNAMIC / O-RING DYNAMISCH	12x2 NBR 70SH	1
13	96.041.001	0	MANZETA / CUFF / MANSCHETTE	18x24x4 UN	1
14	96.060.001	0	KROUZEK STRACI / WIPER RING / ABSTREIFRING	16x22 NBR 70	1
15	96.082.001	0	KROUZEK TESNICI / SEALING RING / DICHTUNGSRING	10/14x1.5 CU	2
16	96.084.005	0	KROUZEK VODICI / GUIDE RING / FÜHRUNGSRING	GP6500300-T47	1
17	96.900.007	0	TESNENI KOMBINOVAE / COMBINED SEALING / KOMBIDICHTUNG	PW4100300-Z20	1

11.13. Upínání horní/ Upper clamping/ Spannvorrichtung oben



NAZEV SESTAVY UPINANI HORNI	CISLO SESTAVY 201.D414-360	STROJ IN460GANC
	Konstruoval: MUSIL	
	Datum: 06. 02.2019	
	Meritko: 17:100	

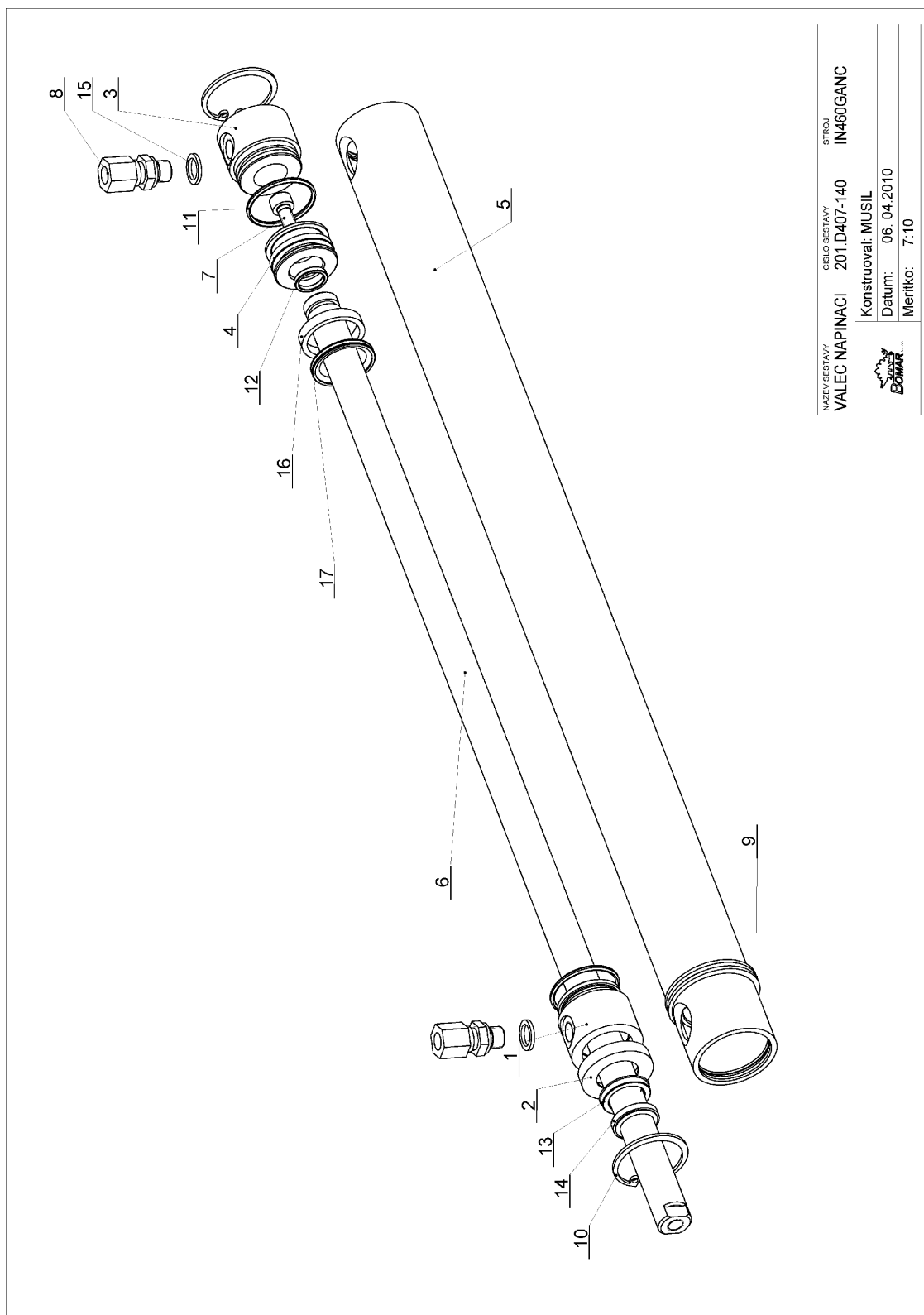
11.14. Kusovník / Piece list / Stückliste - Upínání horní/ Upper clamping/ Spannvorrichtung oben

Číslo Sestavy 201.D414-360		Ver. 0	Název sestavy UPINANI HORNÍ/TOP CLAMPING/SPANNVORRICHTUNG OBEN		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.D407-140	0	VALEC NAPINACÍ / TENSIONING CYLINDER / SPANNZYLINDER	D30/16	1
2	30.D311-126	0	DRŽÁK / HOLDER / HALTER	P 8x58	1
3	30.D314-152	0	NOSNIK / BEAM / TRÄGER		1
4	30.D414-151	0	SLOUP / POLE / SÄULE		1
5	30.D414-156	0	CELIST POHYBLIVÁ / MOVING JAW / BEWEGLICHE BACKE		1
6	30.D414-253	0	SLOUP SVERAKU / VICE POLE / SCHRAUBSTOCKSÄULE	P25x156	1
7	30.D414-254	0	LISTA / SLAT / LEISTE	TYC 8x15x2000	1
8	90.001.25.009	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M5x16	12
9	90.001.25.011	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M5x25	8
10	90.001.25.039	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M8x55	4
11	90.001.25.048	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10x30	6
12	90.001.25.049	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10x35	4
13	90.001.25.050	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10x40	2
14	90.303.02.003	0	KOLIK PRUŽNÝ BEZ PU / FLEXIBLE PIN WITHOUT SURF. TREATMENT / SPANNSTIFT OHNE OBERFLÄCHENBEHANDLUNG	KOLIK 4X16	6
15	99.200.272	0	VEDENÍ LINEARNÍ / LINEAR GUIDE / LINEARE FÜHRUNG	MSA20R	1
16	99.201.060	0	VOZÍK LINEARNÍHO VEDENÍ / LINEAR GUIDE CART / LINEARFÜHRUNGSWAGEN	MSA20S SS F0 N	2
17	99.900.039	0	SAMOLEPKA / STICKER / AUFKLEBER	NEBEZP-STLACENI	1

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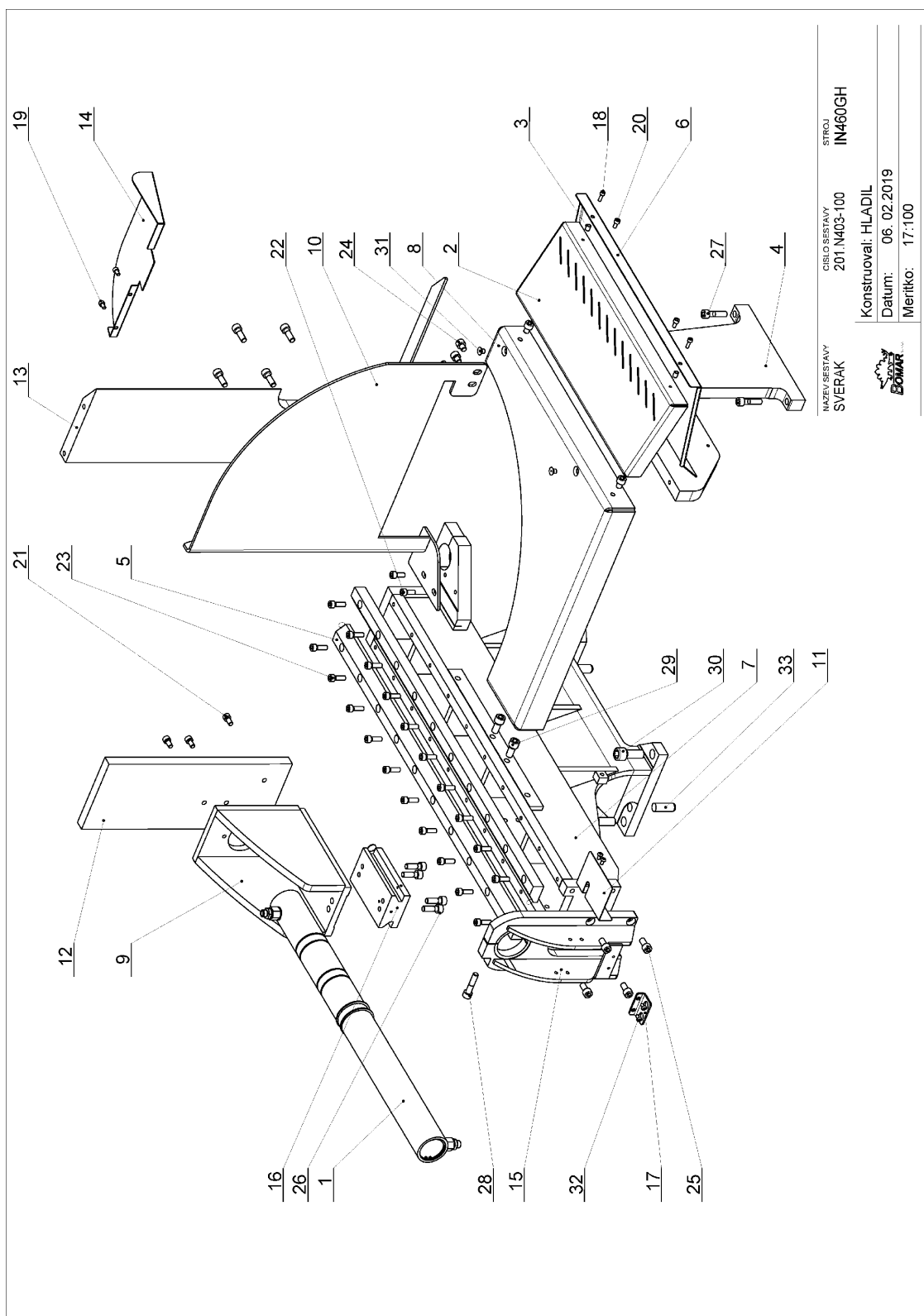
11.15. Válec napínací/ Tensioning cylinder/ Spannzyylinder



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

Číslo Sestavy 201.D407-140		Ver. 0	Název sestavy VALEC NAPINACI/TENSIONING CYLINDER/SPANNZYLINDER		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.6807-103	2	VIKO / COVER / DECKEL	TYC 35	1
2	30.6807-104	1	VIKO / COVER / DECKEL	TYC 35	1
3	30.6807-105	1	VIKO / COVER / DECKEL	TYC 35	1
4	30.6807-106	0	PIST / PISTON / KOLBEN	TYC 32	1
5	30.D407-141	0	VALEC / CYLINDER / ZYLINDER	TR 40/30H8	1
6	30.D407-142	0	PISTNICE / PISTON ROD / KOLBENSTANGE	d 16	1
7	90.001.25.017	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M6X16	1
8	92.002.102	0	SROUBENI PRIME KOMPL / null / null	S-GEV-8LLR	2
9	95.800.015	0	KROUZEK POJIST.VNEJS / EXTERNAL RETAINING RING / SICHERUNGSRING AUSEN	POJISTNY KROUZEK 40	2
10	95.801.026	0	KROUZEK POJIST.VNITR / INTERNAL RETAINING RING / SICHERUNGSRING INNEN	POJISTNY KROUZEK 34	2
11	96.001.008	0	O-KROUZEK STATICKY / O-RING STATIC / O-RING STATISCH	26x2 NBR 70SH	2
12	96.002.006	0	O-KROUZEK DYNAMICKY / O-RING DYNAMIC / O-RING DYNAMISCH	12x2 NBR 70SH	1
13	96.041.001	0	MANZETA / CUFF / MANSCHETTE	18x24x4 UN	1
14	96.060.001	0	KROUZEK STRACI / WIPER RING / ABSTREIFRING	16x22 NBR 70	1
15	96.082.001	0	KROUZEK TESNICI / SEALING RING / DICHTUNGSRING	10/14x1.5 CU	2
16	96.084.005	0	KROUZEK VODICI / GUIDE RING / FÜHRUNGSRING	GP6500300-T47	1
17	96.900.007	0	TESNENI KOMBINOVAE / COMBINED SEALING / KOMBIDICHTUNG	PW4100300-Z20	1

11.17. Svěrák / Vice / Schraubstock

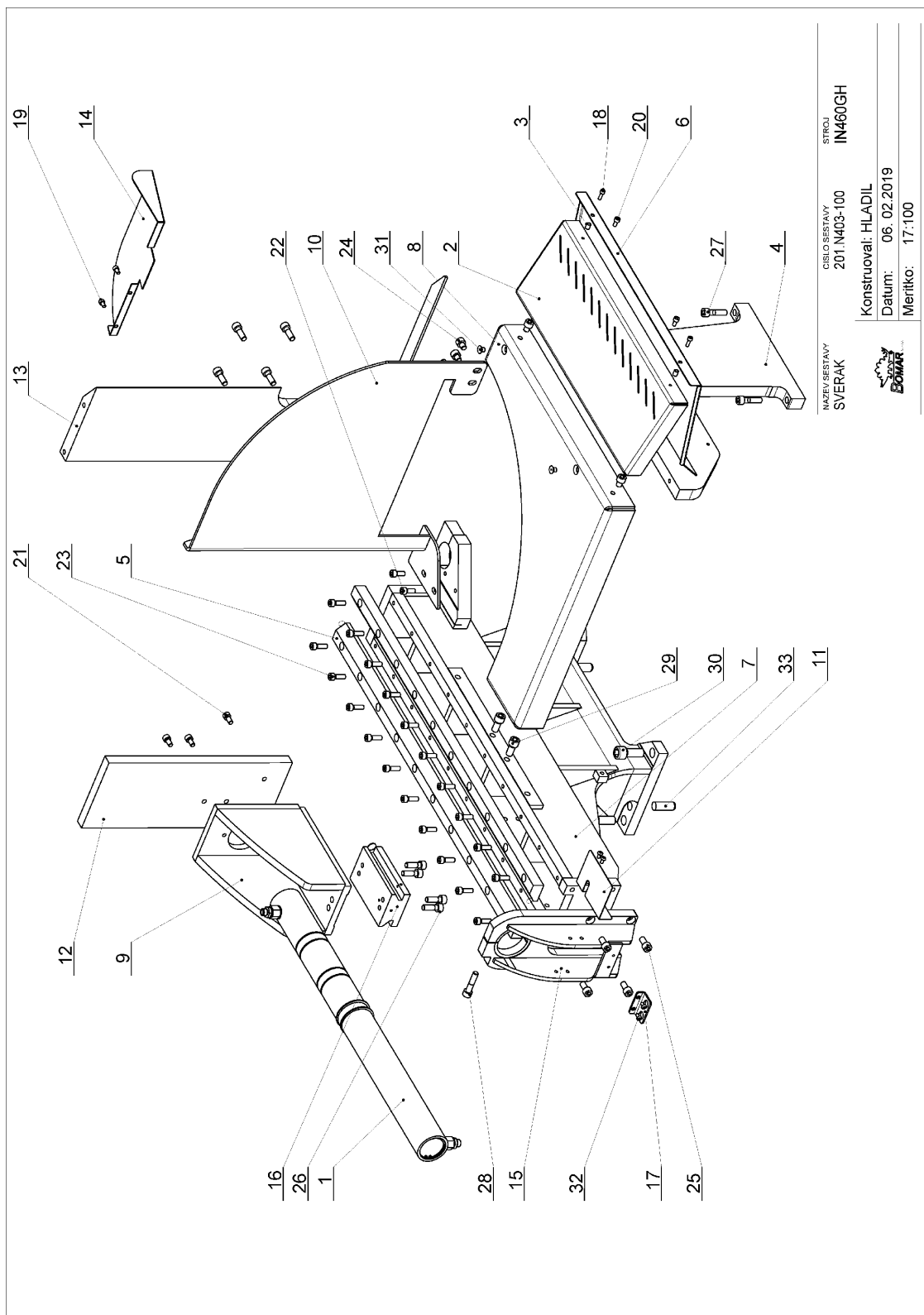


11.18. Kusovník / Piece list / Stückliste - Svěrák / Vice / Schraubstock

Císlo Sestavy 201.N403-100		Ver. 0	Název sestavy SVERAK/VICE/SCHRAUBSTOCK			
Poz.	Objednáací číslo	Ver.	Název položky	Rozměr	Ks	
1	201.Y407-030	0	VALEC SVERAKU / VICE CYLINDER / SCHRAUBSTOCKZYLINDER			
2	30.2903-012	0	DRZAK / HOLDER / HALTER	P 3x240	1	
3	30.3509-015	2	DISTANC / SPACER / ABSTANDSTÜCK	TR 8x1	2	
4	30.N303-013	0	NOHA / LEG / STÄNDER	P25 - 394	1	
5	30.N303-102	0	LISTA VODICI / GUIDING SLAT / FÜHRUNGSLEISTE	HR 40x25	2	
6	30.N303-112	0	SKLUZ / CHUTE / RUTSCH	P 1.5x272	1	
7	30.N303-201	0	TELESO SVERAKU / VICE BODY / SCHRAUBSTOCKKÖRPER		1	
8	30.N303-210	0	STUL / TABLE / TISCH	P 5x640	1	
9	30.N403-105	0	CELIST / JAW / BACKE		1	
10	30.N403-106	0	BOCNICE / SIDE PLATE / SEITENTEIL		1	
11	30.N403-107	0	OKAP / DRAIN PLATE / ABLAUFLATTE	P 0.8x109	1	
12	30.N403-209	0	CELIST / JAW / BACKE	HR 160x20	1	
13	30.N403-304	0	CELIST PEVNA / FIXED JAW / FESTE BACKE	P 30x182	1	
14	30.N413-002	0	SKLUZ / CHUTE / RUTSCH	P 1.5x207	1	
15	30.Y303-104	0	DRZAK / HOLDER / HALTER		1	
16	30.Y303-206	0	KLUZAK / GLIDER / GLEITER	HR 80x50	1	
17	30.Y309-204	0	DRZAK / HOLDER / HALTER	P 3x45	1	
18	90.001.25.009	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M5X16	2	
19	90.001.25.015	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M6X10	2	
20	90.001.25.016	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M6X12	2	
21	90.001.25.031	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	8x16	4	
22	90.001.25.032	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	8x20	2	
23	90.001.25.033	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	8x25	20	
24	90.001.25.043	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10X12	4	
25	90.001.25.046	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10X20	4	
26	90.001.25.048	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10X30	8	
27	90.001.25.050	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10X40	2	
28	90.001.25.051	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M10X45	1	
29	90.001.25.057	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M12x25	2	
30	90.001.25.086	0	SROUB IMBUS / HEXAGON SOCKET SCREW / IMBUSSCHRAUBE	M16X40	4	

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11.19. Svěrák / Vice / Schraubstock



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

31	90.011.27.010	0	SROUB ZAPUSTNÝ / COUNTERSUNK SCREW / SENKSCBRAUBE	SROUB M8X10	2
32	90.013.27.003	0	SROUB PULKULATÝ / BUTTON HEAD SCREW / RUNDKOPFSCHRAUBE	M5X10	4
33	90.300.02.035	0	KOLÍK VALCOVÝ KALENÝ / CYLINDRICAL PIN HARDENED / ZYLINDERSTIFT GEHÄRTET	KOLÍK 16X45	2

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