# TRONCATRICE A DISCO PER METALLI FERROSI
# CUTTING-OFF MACHINE WITH CIRCULAR BLADE FOR FERROUS METALS
# METALL-KREISSAEGE
# TRONÇONNEUSE A DISQUE POUR METAUX FERREUX
# CORTADORA DE DISCO PARA METALES FERROSOS

**MANUALE DI ISTRUZIONI PER L'USO - INSTRUCTION MANUAL FOR OPERATION**
**BETRIEBSANLEITUNG - MANUEL D'INSTRUCTIONS POUR L'EMPLOI**
**MANUAL DE INSTRUCCIONES DE USO**

**COSTRUTTORE:**
**MANUFACTURER :**
**ERBAUER:**
**CONSTRUCTEUR:**
**CONSTRUCTOR:**

**MACC S.p.A. SCHIO ( VI ) - ITALY**

**MODELLO:**
**MODEL :**
**MODELL:**
**MODELE:**
**MODELO:**

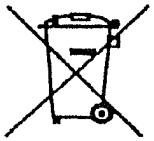
**NEW 350**

**MATRICOLA:**
**SERIAL NUMBER:**
**KENNNUMMER:**
**MATRICULE:**
**MATRICULA:**

**ANNO DI COSTRUZIONE:**
**YEAR OF CONSTRUCTION:**
**BAUJAHR:**
**ANNEE DE CONSTRUCTION:**
**AÑO DE COSTRUCCION :**

**2010**

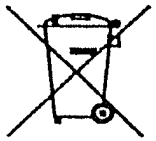
## Magyarul



**Feleslegessé vált elektromos és elektronikus készülékek hulladékként való eltávolítása (Használható az Európai Unió és egyéb európai országok szelektív hulladékgyűjtési rendszereiben)**

Ez a szimbólum a készüléken vagy a csomagolásán azt jelzi, hogy a terméket ne kezelje háztartási hulladékként. Kérjük, hogy az elektromos és elektronikai hulladék gyűjtésére kijelölt gyűjtőhelyen adja le. A feleslegessé vált termékének helyes kezelésével segít megelőzni a környezet és az emberi egészség károsodását, mely bekövetkezhetne, ha nem követi a hulladék kezelés helyes módját. Az anyagok, újrahasznosítása segít a természeti erőforrások megőrzésében. A termék újrahasznosítása érdekében további információért forduljon a lakhelyén az illetékesekhez, a helyi hulladékgyűjtő szolgáltatóhoz vagy ahhoz az üzlethez, ahol a terméket megvásárolta.

## Česky



**Nakládání s nepotřebným elektrickým a elektronickým zařízením (platné v Evropské unii a dalších evropských státech uplatňujících oddělený systém sběru)**

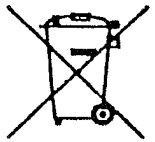
Tento symbol umístěný na výrobku nebo jeho balení upozorňuje, že s výrobkem po ukončení jeho životnosti by nemělo být nakládáno jako s běžným odpadem z domácnosti. Místo toho by měl být odložen do sběrného místa, určeného k recyklaci elektronických výrobků a zařízení. Dodržením této instrukce zabráníte negativním dopadům na životní prostředí a zdraví lidí, které naopak může být ohroženo nesprávným nakládním s výrobkem při jeho likvidaci. Recyklováním materiálů, z nichž je vyroben, pomůžete zachovat přírodní zdroje. Pro získání dalších informací o recyklaci tohoto výrobku kontaktujte, prosím, místní orgány státní správy, místní firmu zabezpečující likvidaci a sběr odpadů nebo prodejnu, v níž jste výrobek zakoupili.

## Slovensky

**Likvidácia starých elektrických a elektronických zariadení (Platí v Európskej únii a ostatných európskych krajinách so zavedeným separovaným zberom)**

Tento symbol na výrobku alebo obale znamená, že s výrobkom nemôže byť nakladané ako s domovým odpadom. Miesto toho je potrebné ho doručiť do vyhradeného zberného miesta na recykláciu elektrozariadení. Tým, že zaistíte správne zneškodnenie, pomôžete zabrániť potenciálnemu negatívnemu vplyvu na životné prostredie a ľudské zdravie, ktoré by v opačnom prípade hrozil pri nesprávnom nakladaní s týmto výrobkom. Recyklácia materiálov pomáha uchovávať prírodné zdroje. Pre získanie ďalších podrobných informácií o recyklácii tohoto výrobku kontaktujte prosím váš miestny alebo obecný úrad, miestnu službu pre zber domového odpadu alebo predajňu, kde ste výrobok zakúpili.

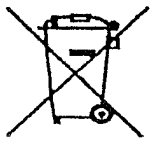
## Türkçe



**Eski Elektrikli & Elektronik Ekipmanların Atılması (Avrupa Birliği'nde ve ayrı toplama sistemlerine sahip diğer Avrupa ülkelerinde uygulanır)**

Ürün veya ambalajı üzerinde bulunan bu sembol, bu ürünün bir ev atığı olarak muamele görmemesi gerektiğini gösterir. Bunun yerine, elektrikli ve elektronik ekipmanların geri dönüşümü için mevcut olan uygun toplama noktasına teslim edilmelidir. Bu ürünün doğru sekilde atılmasını sağlayarak, bu ürüne yanlış müdahale edilmesi sonucunda ortaya çikabilecek ve çevre ile insan sağlığı üzerinde olumsuz etkide bulunabilecek durumların önlemesine yardimci olmus olursunuz. Malzemelerin geri dönüsümü, doğal kaynakları korumamıza yardimci olacaktır. Bu ürünün geri dönüsümüyle ilgili daha fazla bilgi için, lütfen sehrinizde bulunan yerel ofisle, evsel atıklar toplama servisinizle veya bu ürünü satin aldığınız magazayla temasa geçin.

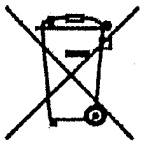
## Slovensko



**Oddaja stare električne in elektronske opreme (veljavno v evropski uniji in ostalih evropskih državah s sistemom zbiranja ločenih odpadkov)**

Če se na izdelku ali na njegovi embalaži nahaja ta simbol, pomeni, da z izdelkom ne smete ravnati enako kot z drugimi gospodinjskimi odpadki. Morate ga oddati na ustrezno zbirno mesto za recikliranje električne in elektronske opreme. S pravilno oddajo tega izdelka boste pomagali preprečiti negativne posledice na okolje in zdravje ljudi, do katerih bi prišlo v primeru neustreznega ravnanja ob odstranitvi tega izdelka. Recikliranje materiala bo pripomoglo k ohranjevanju naravnih virov. Podrobnejše informacije o recikliranju tega izdelka lahko dobite pri lokalni mestni upravi, službi oddajanja gospodinjskih odpadkov ali v trgovini, kjer ste izdelek kupili. Odpadno električno in elektronsko opremo lahko oddate brezplačno tudi distributerju neposredno ob dobavi električne oz. elektronske opreme.

## Русский



**Утилизация электрического и электронного оборудования (директива применяется в странах Евросоюза и других европейских странах, где действуют системы раздельного сбора отходов)**

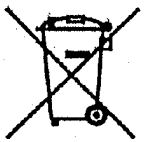
Данный знак на устройстве или его упаковке обозначает, что данное устройство нельзя утилизировать вместе с прочими бытовыми отходами. Его следует сдать в соответствующий приемный пункт переработки электрического и электронного оборудования. Неправильная утилизация данного изделия может привести к потенциально негативному влиянию на окружающую среду и здоровье людей, поэтому для предотвращения подобных последствий необходимо выполнять специальные требования по утилизации этого изделия. Переработка данных материалов поможет сохранить природные ресурсы. Для получения более подробной информации о переработке этого изделия обратитесь в местные органы городского управления, службу сбора бытовых отходов или в магазин, где было приобретено изделие.

## Suomi

**Käytöstä poistetun sähkö- ja elektroniikkalaitteen hävitys (Euroopan Unioni ja muiden Euroopan maiden keräysjärjestelmät)**

Symboli, joka on merkitty Tuotteeseen tai sen pakkaukseen, osoittaa, että tätä tuotetta ei saa käsitellä talousjätteenä. Tuote on sen sijaan luovutettava sopivaan sähkö- ja elektroniikkalaitteiden kierrätyksestä huolehtivaan keräyspisteeseen. Tämän tuotteen asianmukaisen hävittämisen varmistamisella autetaan estämään sen mahdolliset ympäristöön ja terveyteen kohdistuvat haittavaikutukset, joita voi aiheutua muussa tapauksessa tämän tuotteen epäasianmukaisesta jätekäsittelystä. Materiaalien kierrätys säästää luonnonvaroja. Tarkempia tietoja tämän tuotteen kierrättämisestä saa paikallisesta kunnantoimistosta.

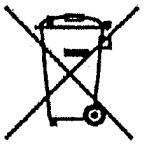
## Dansk



**Bortskaffelse af elektrisk og elektronisk udstyr (gælder i EU og andre europæiske lande med egne indsamlingssystemer)**

Hvis dette symbol findes på produktet eller på emballagen betyder det, at det pågældende produkt ikke må bortskaffes som almindeligt husholdningsaffald. Du skal i stedet aflevere det på et indsamlingssted, så det elektriske og elektroniske udstyr kan blive genbrugt. Når du bortskaffer produktet korrekt, hjælper du med at forhindre de mulige negative påvirkninger af miljøet eller sundheden, der kan opstå, hvis produktet bortskaffes på upassende vis. Genbrug af materialer er med at bevare naturens ressourcer. Yderligere oplysninger om genbrug af produktet fås på kommunen, på genbrugscentralen eller i den butik, hvor du købte produktet.

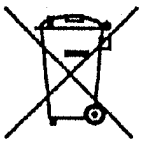
## Português



**Tratamento de Equipamentos Eléctricos e Electrónicos no final da sua vida útil (Aplicável na União Europeia e em países Europeus com sistemas de recolha selectiva de resíduos)**

Este símbolo, colocado no produto ou na sua embalagem, indica que este não deve ser tratado como resíduo urbano indiferenciado. Deve sim ser colocado num ponto de recolha destinado a resíduos de equipamentos eléctricos e electrónicos. Assegurando-se que este produto é correctamente depositado, irá prevenir potenciais consequências negativas para o ambiente bem como para a saúde, que de outra forma poderiam ocorrer pelo mau manuseamento destes produtos. A reciclagem dos materiais contribuirá para a conservação dos recursos naturais. Para obter informação mais detalhada sobre a reciclagem deste produto, por favor contacte o município onde reside, os serviços de recolha de resíduos da sua área ou a loja onde adquiriu o produto.

## Ελληνικά



**Αποκομιδή Παλαιού Ηλεκτρικού & Ηλεκτρονικού Εξοπλισμού(Ισχύει στην Ευρωπαϊκή Ένωση και άλλες Ευρωπαϊκές χώρες με ξεχωριστά συστήματα περισυλλογής)**

Το σύμβολο αυτό επάνω στο προϊόν ή στη συσκευασία του σημαίνει ότι το προϊόν δεν πρέπει να πεταχτεί μαζί με τα οικιακά απορρίμματα αλλά πρέπει να παραδοθεί σε ένα κατάλληλο σημείο συλλογής ηλεκτρολογικού και ηλεκτρονικού υλικού προς ανακύκλωση. Με το να βεβαιωθείτε ότι το προϊόν πετάχτηκε σωστά, βοηθάτε στην πρόληψη πιθανών αρνητικών επιπτώσεων στο περιβάλλον και την υγεία. Η ανακύκλωση των υλικών θα βοηθήσει στην εξοικονόμηση φυσικών πόρων. Για περισσότερες πληροφορίες σχετικά με την ανακύκλωση αυτού του προϊόντος, παρακαλούμε επικοινωνήστε με τις υπηρεσίες καθαριότητας του δήμου σας ή το κατάστημα όπου αγοράσατε το προϊόν.

# 1. INTRODUCTION

**The "Operating instructions" are an integral part of the machine and should be consulted before, during and after the start up of the machine and whenever else required. The content of these instructions should always be carefully observed.**
The observance of the above is the only way to achieve the two fundamental aims of this manual:

- **Optimization of machine performance**
- **Prevent damage to the machine and injury to the operator**

The index of the chapters and the index of the drawings, diagrams and tables is contained in chapter 3 and can be used to help the location of specific information.

**CAUTION : BEFORE INSTALLING THE MACHINE, READ THE OPERATING INSTRUCTIONS CAREFULLY**

# 2. INFORMATION ABOUT MAINTENANCE ASSISTANCE

## 2.1 GUARANTEE

- MACC S.p.A. products are guaranteed against material and manufacturing defects for a period of 12 months from the date of delivery or, if the machine is installed by MACC employees, from the date of machine start up.
- The buyer is only entitled to the replacement of parts which are acknowledged as faulty: carriage and packing are at the buyer's expense.In the event of the above, the following information should be supplied:

1. Date and number of purchasing document
2. Machine model
3. Serial number
4. Code of any relevant drawings

- Requests for compensation for the inactivity of the machine will not be accepted.
- The guarantee does not cover uses which are not in line with these operating instructions which are an integral part of the machine. Nor is maintenance covered if the instructions supplied are not observed.
- The guarantee will not cover machines which have undergone unauthorized modifications.
- Modification or tampering with the safety devices is strictly forbidden.

# 3. INDEX

## 3.1 INDEX OF CHAPTERS



## 3.2 INDEX OF DRAWINGS, DIAGRAMS AND TABLES

| ENCL. TYPE | DESCRIPTION | ENCL No. | CHAP. |
|---|---|---|---|
| Table | Choice of circular blade | 1 | 8.3 |
| Drawings | Handling and transportation- Installation plan | 1 | 6/7/8 |
| Drawings | Electrical details | 2 | 7 |
| Diagram | Electrical installation | 2 | |
| Drawings | Motor-blade block | 3 | 7/8.3/9 |
| Drawings | Base block and vice | 3 | 8.3/9.3 |
| Drawing | Machine assembly | 4 | 8.3 |

# 4. DESCRIPTION OF THE MACHINE

## 4.1 DESCRIPTION OF THE MACHINE AND ITS COMPONENTS

The NEW 350 cutting-off machine with circular blade for ferrous metals produced by MACC is made from a solid casting, carefully processed and provided with holes for fastening to a bench or pedestal. The upper surface, designed to allow the complete draining away of the cutting fluid, has been processed using precision machinery to allow the attachment of a sturdy vice with burr-proof jaws.
The bar-stop device allows the length required to be preset and a constant level of performance for repeated cuts.
The blade-holding head is firmly attached to a reduction unit in oil bath built onto the motor and to the base by means of a joint which provides 45° rotation both to the left and right and the cutting movement with manual feed.
The coolant pump is also securely attached to the motor block.
The main switch is located above the motor block. Another switch is used to select motor rotation speed and therefore cutting speed.
The control lever, fitted with an ergonomic hand-grip and blade activation button with safety release action, reduces fatigue during operation to a minimum.
The blade is protected by a guard which in its turn protects the operator from ejected shavings and coolant.
The machine is supplied with a set of service spanners.

## 4.2 INTENDED AND UNSUITABLE USES OF THE MACHINE

**The NEW 350 cutting-off machine with circular blade has been designed and built to cut bars, structural steel and ferrous metal pipes in accordance with the instructions contained in this manual.**
**Therefore, the cutting of other materials is not permitted: if the above recommendations are not observed, the machine could be damaged and the health and safety of the operator put at risk.**
**Cutting is not permitted, if the bar has not been first locked in the vice.**

# 5. MAIN TECHNICAL DATA

**Under no circumstances should the following data be altered, this is in order to protect the correct functioning of the machine and to avoid creating safety risks for the operator.**

| | |
|---|---|
| MOTOR<br>Motor Power<br>Motor revolutions (two speeds) | three-phase<br>KW 2,5/3,3 - KW 1,8/2,4<br>1400-2800 rpm 700-1400 rpm |
| CIRCULAR BLADE (SAW)<br>Maximum diameter and thickness | Number of teeth and feed holes according to table<br>Diameter: 350 mm Thickness: 3 |
| BLADE REVOLUTIONS per minute | 40-80 rpm 20-40 rpm |
| CUTTING ANGLE | 90° right - 45° left |
| PIECE LOCKING VICE: MAX OPENING | 190 mm |
| COOLANT TANK CAPACITY | litres 3 |
| MACHINE WEIGHT | 210 kg - 2060 N |

# 6. HANDLING AND TRANSPORTATION

For safe handling and transportation use a lift truck for movement indoors or a bridge crane; in this case, also using cables fastened to the sling positions indicated on the drawing 1 Encl. 1. Keep the machine in its normal position and avoid turning it upside down. **If the machine is fastened to the pedestal, stability will be greatly reduced and therefore all the necessary measures should be taken to stop the machine from tipping over.**

All handling and transportation operations should be carried out by trained staff.

# 7. MACHINE INSTALLATION

## A. MACHINE CHECK AND CONTROL LEVER ASSEMBLY

The machine should be checked to make sure that it has not been damaged during transportation and handling.
Control lever assembly (draw.5-6 Encl.3) : Fit the supplied head lever 25, into position 24 and fasten it by means of the nut 50. To fit the handle, connect the electric cable terminals 220 to the microswitch 218 and place it in the left second half of the handle as shown in draw. 4 Encl.2. Complete the assembly using the screws 221 and then 219. Make sure that the cable is inserted into the lever slot 25, after having checked that there are no burrs or sharp edges in the slot.

## B. FASTENING OF THE MACHINE

**The machine will be able to operate in keeping with the technical parameters supplied by MACC if it is positioned correctly and fastened securely to the bench or the factory floor so that vibrations are minimal during operation . Consult drawing 2 NEW 350 Installation plan Encl.1.**

## C. ASSEMBLY OF CIRCULAR BLADE

For the assembly of the circular blade, remove the screw No. 36 (Draw. 5-6 Encl. 3), keeping the motor-blade block raised and rotate the mobile guard 31 backwards. Unscrew the screw 28 clockwise, withdraw the flange 29, insert the circular blade, making sure that the toothing faces the same direction as the arrow on the mobile guard. Then refit flange 29 and screw 28.

## D. ELECTRICAL CONNECTION TO THE MAINS

**Install a differential thermomagnetic switch with characteristics suited to the mains.**

Make sure that the power supply voltage corresponds to the voltage on the motor plate. Connect the cable to the power supply line observing the colour codes of the individual wires, pay particular attention to the earth wire. Connect the machine, make sure that the rotation of the circular blade is in the direction shown by the arrow on the guard.

## E. CUTTING COOLANT

For the cooling of the circular blade, fill the tank with emulsible oil obtained from a mixture of water and AGIP AQUAMET 700 EP oil with a percentage of 5-7%

# 8. MACHINE START UP AND OPERATION

## 8.1 DEVICES AND THEIR LOCATION

(The location of the devices described is shown on the NEW 350 installation plan Draw.2, Encl.1)

| | | |
|---|---|---|
| Code | 203 | CHANGEOVER SWITCH |
| Code | 218 | START-STOP MICROSWITCH: situated inside the handle located at the end of the control lever and has safety release action. |
| Code | 208 | EMERGENCY BUTTON |
| Code | 97 | CUTTING ANGLE DEVICE: to check that cutting inclination is as required |
| Code | 21 | LOCKING VICE |
| Code | 77 | BAR-STOP |
| Code | 25 | CONTROL LEVER WITH HANDLE |

## 8.2 TOOLS SUPPLIED

| | |
|---|---|
| 1 | Allen wrench size 3 |
| 1 | Allen wrench size 4 |
| 1 | Allen wrench size 5 |
| 1 | Allen wrench size 6 |
| 1 | Allen wrench size 14 |

## 8.3 OPERATION

CHECKS TO CARRY OUT BEFORE EACH CUT

A. Make sure that the circular blade is fastened securely by means of screw 28 (DRAW.5-6 ENCL.3)
B. Check that the hand indicates the required cutting angle (vice scale)
C. Make sure that the head and vice are locked by means of the lever 88 (DRAW.7-8 ENCL.3)
D. With the motor off, lower the head and check that at the end of the stroke, the circular blade does not touch the counter-vice 75. If the circular blade does touch, adjust the screw 109 located at the centre of the head support 4 (DRAW.5-6 ENCL.3)
E. Make sure that the piece to be cut is adequately secured in the vice.
F. Make sure that the coolant is circulating in the machine.

**CUTTING OPERATION**

A. Before each cutting operation, if the cutting inclination is not as required, correct or change the inclination by placing the bench lever 88 in position A (DRAW.7-8 ENCL.3) and after correction, forcefully turn it to position B.
B. Clamp the piece to be cut by means of the handwheel 11 (DRAW.7-8 ENCL.3), turn the main switch 212 and the speed switch 203 to the position required (we recommend No.1), take hold of the handle 26 located at the end of the head lever and press button 218. The blade will now start turning.
C. Position the blade carefully on the piece to be cut. Then increase the pressure in order to accelerate the cutting operation without using excessive force. To make a series of cuts, position the bar-stop 77 at the size required. Fix it into position by using the knob 79 (DRAW.9 ENCL.4).
D. To replace the circular blade carry out the same operations used to assemble the circular blade. (chapter 7c).
E. For the choice of most suitable blade consult the table ENCL. 1.

**We strongly discourage the use of blades with ruined or insufficiently sharp cutting edges**

## 8.4 SPECIAL SAFETY CHECKS

A. Before using the machine, check carefully that the safety devices are in good working order, that the mobile parts are not blocked, that no parts are damaged and that all the components are installed correctly and are functioning properly.

**B. Make sure, before operating the machine, that the screws of the guards and other protective devices are adequately secured, especially the screws on the circular blade guard and the rotation levers of the circular blade mobile guard.**

**C. Check that the safety microswitches and the emergency button are functioning correctly. Test them during a loadless machine cycle.**

**D. Make sure that the mobile guard does not leave uncovered an angle of more than 5° in order to prevent fingers from entering.**

E. Pay attention to environmental conditions. Do not expose the machine to rain; to not use it in damp environments, position the machine on a clean dry floor that has no oil or grease stains.

F. Before using the machine, the operator should make sure that all tools and service spanners used for maintenance or adjustment have been removed.

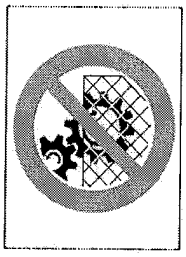
## 8.5 GENERAL SAFETY RULES

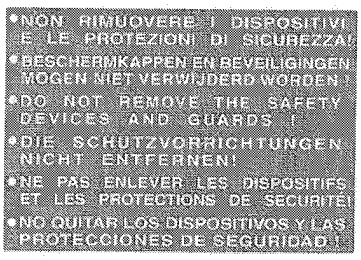
A. Wear appropriate clothing. The operator's clothing should not be loose or dangling nor should it have parts which could easily get caught. Sleeves should contain elastic.
Belts, rings or chains should not be worn. Long hair should be kept in a net.
B. Avoid unstable operating positions. Find a safe and evenly balanced position to operate the machine.
C. Keep the work area tidy, untidiness increases the risk of accidents.
D. Do not use the power supply cable to disconnect the plug from the socket. Protect the cable from high temperatures, oil or sharp edges. For outdoor use, only use extension cables which are in line with current regulations.

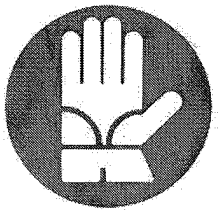
## 8.6 MEASURES TO PREVENT RESIDUAL RISKS

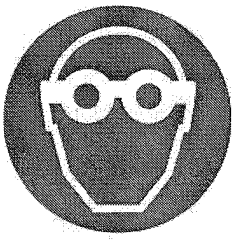
A. The removal of guards and tampering with the safety devices is strictly forbidden.
B. Gloves should always be worn.
C. Standard work clothing should be used and kept closed and should not have flapping parts.
D. The machine should not be cleaned with liquids under pressure.
E. In the event of fire, extinguishers should not be used unless they are the powder type. The electric power supply to the machine should always be disconnected in these circumstances.
F. Do not insert foreign bodies into the motor cover and to not supply the machine with voltage by tampering with the safety microswitches or main switch.
**G. Take the necessary precautions to avoid the machine being started by other people during loading, adjustment, piece changing or cleaning.**

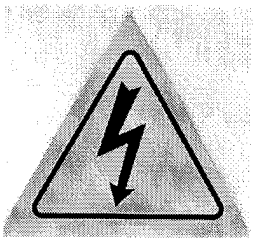
### Safety, Guidance, Notice labels on the machine

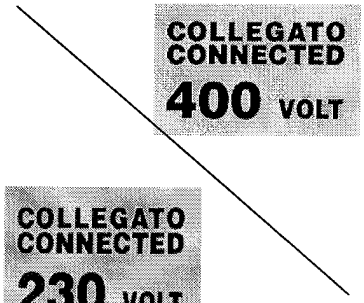



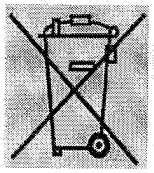









# 9. MAINTENANCE AND REPAIRS

## 9.1 GENERAL SAFETY MEASURES

**A. Lockable main switch. Open the padlock in the event of machine failure or replacement of the circular blade. The padlock key should be entrusted to a responsible person.**
**B. Before carrying out any work on electrical equipment, remove the power supply plug from the control panel (disconnect voltage).**
**C. Only use cables to supply power, which have a cross-section suited to the power of the machine.**
D. Opening key. The keys of the machine should be kept by authorized personnel. Do not leave the keys for doors which provide access to the hydraulic or electrical parts or keys to lockable switches in easy of reach of unauthorized personnel.
E. Repairs should only be carried out by authorized personnel. Only spare parts made by the original manufacturer should be used, otherwise these could cause damage or injury.

## 9.2 ROUTINE CHECKS AND MAINTENANCE

| FREQUENCY (working hours) | OPERATION |
|---|---|
| 1000 hours | Replace the oil in the gear box with AGIP ACER 320 oil (0.2 litres) or equivalent. |
| 1000 | Lubrication of mobile parts in the piece locking vice (GREASE AGIP MU 2) |
| 50 | Cleaning of the coolant tank and filter check |
| if necessary | Check functioning of bench lever |

## 9.3 DESCRIPTION OF ROUTINE MAINTENANCE

**A. Replacement of gear box oil**

Remove caps 95 and 22 (draw.5-6 Encl.3), let all the used oil flow out into a container which should have a label indicating the contents for the purposes of disposal. Replace cap 22. Feed 0.2 litres of oil (as specified above) into the oil feed hole located on the upper part of the gear box and then replace cap 95.

**B. Lubrication of mobile parts of piece locking vice**

Remove the vice 21 completely by turning hand wheel 11 (draw.7-8 Encl.3). Clean and grease the parts worked by the counter-vice 75, the vice 21 and the vice gib 101. Put a drop of oil in the oil feed hole 19 located behind the handwheel.

**C. Cleaning of the coolant tank: Filter check.**

Empty the coolant from the tank by means of the tap located on the rear part of the machine bench (after moving the liquid feed pipe away from this). Collect the coolant in a container for future disposal.

Remove screws 118 and the drilled plate 87 (draw.7-8 Encl.3). Clean out the shavings and the metallic powder, taking care not to scatter this over the machine especially around the motor and the box containing the electrical equipment. Refit the plate 87 and fasten it with screws 118, turn the tap off and reconnect the pipe. Check filter 55 and if necessary replace it. Fill the tank with the amount and liquid stated previously.

**D Checking of bench lever functioning**

Check regularly that the rotation release - locking lever is working properly. In the event of the lever not locking correctly, loosen grub screw 91 (draw.7-8 Encl.3), tighten nut 90 and fasten grub screw 91 again. Make sure that with the bench lever in position A, arm 4 which supports the blade-motor block can rotate freely.

# 10.INFORMATION REGARDING ENVIRONMENTAL NOISE

**An environmental noise test carried out on the NEW 350 cutting-off machine with circular blade, identical to the machine to which these operation instructions refer, has given the following results:**

ACOUSTIC RADIATION PRESSURE

1. $L_{Aeq}$ = 82,6 dB (A)
2. $L_{peak}$ = 90.6 dB (the maximum acceptable value is 140 dB).
3. The level of background noise has no influence = 48.5-54,2 dB (A).

# 11. LAYING OFF AND DISMANTLING

## 11.1 LAYING OFF

If the machine is to be laid off or left idle for a long period, the following operations must be carried out:

1. Disconnect the machine from the electricity mains.
2. Empty oil from the gear box and cooling liquid from its tank
3. Clean carefully the machine by getting rid of all traces of grease, especially on the worked parts that must be protected with anti-oxidants.
4. Cover the machine with a sheet, preferably not plastic as it can cause rust due to the humidity condensation.
5. Store the machine in a closed, dust-free place.

## 11.2 DISMANTLING

**If the machine must be definitively dismantled, its components must be sub-divided for the purpose of a possible recycle of the materials and for the environment safety. The following table is given for your guidance:**

| Steel | Electrical Components | Light alloy | Cast iron | Bronze Copper | Plastic and rubber | Various |
|---|---|---|---|---|---|---|
| Flanges and pins | Motors winding | Gear boxes | Structural parts | Bushings | Seals | |
| Rollers | Push button and Control system (relais-transformer) | | | | Electrical box | |
| Spring | | | | | | |

# 12. LIST OF SPARE PARTS

| POS. | DESCRIPTION | CODE |
|---|---|---|
| 1 | Pedestal | 004/71 |
| 2 | Bench | 001/06 |
| 3 | O-Ring 134 | 068/04 |
| 4 | Rotating arm | 005/07 |
| 5 | Roller arm pin | 048/04 |
| 6 | Snap ring D.25 DIN 471 | |
| 7 | Nut M10 DIN 934 | |
| 8 | Screw HH M10x55 DIN 931 | |
| 9 | Roller arm | 047/04 |
| 10 | Roller | 049/04 |
| 11 | Vice handwheel | 029/03 |
| 12 | Hexagon socket grub with cone point M10X10 DIN 914 | |
| 13 | Vice spring | 021/31 |
| 14 | Hexagon socket grub with cone point M8X10 DIN 914 | |
| 15 | Vice bearing flange | 020/31 |
| 16 | Cage AxK 30 47 | 060/31 |
| 17 | Fifth wheel AS 30 47 | 061/31 |
| 18 | Stop bush | 025/03 |
| 19 | Oiler D.6 | |
| 20 | Vice lever | 007/31 |
| 21 | Vice | 008/03 |
| 22 | Oil dram plug 3/8" | |
| 23 | Oil lever plug 3/8" | |
| 24 | Head | 003/07 |
| 25 | Head lever | 024-A/07 |
| 26 | Head lever handle | 046/05 |
| 27 | Disk | |
| 28 | Disk nut | 030/06 |
| 29 | Disk flange | 020/07 |
| 30 | Snap ring D.45 E | |
| 31 | Disk movable guard | 012/07 |
| 32 | HSHC screw M6x14 DIN 912 | |
| 33 | Divider | 026/07 |
| 34 | Water pipe | |
| 35 | Disk guard | 011/07 |
| 36 | HSHC screw M6x16 DIN 912 | |
| 37 | Movable blade cover rod | 016/04 |
| 38 | HSHC screw M8x20 DIN 912 | |
| 39 | Fixed blade cover rod | 016/06 |
| 40 | Dowel M10x45 DIN 914 | |
| 41 | Front motor flange | |
| 42 | Motor casing | |
| 43 | Key 5x5x35 DIN 6604 | |
| 44 | Bearing 6205 2Z | 020/19 |
| 45 | Spring ring D.18 DIN6799 | |
| 46 | Bearing 629 | 043/05 |
| 47 | Snap ring D.9 E DIN 471 | |
| 48 | Pump carrier | 003/05 |
| 49 | HSHC screw M4x12 DIN 912 | |
| 50 | Hexagon lock nut M20 DIN 936 | |
| 51 | Washer x M6 DIN 125/A | |
| 52 | HSHC screw M6x20 DIN 912 | |
| 53 | AC Pump | 041/05 |
| 54 | Water pipe | |
| 55 | Filter FB 1 | 045/05 |
| 56 | Fan guard | |
| 57 | Fan | |
| 58 | Rotor | |
| 59 | Stator | |
| 60 | HSFHC Screw M8X30 DIN 7991 | |
| 61 | Wascher | |
| 62 | HSFHC Screw M6X20 DIN 7991 | |
| 63 | Oil retainer 30-47-7 | 067/04 |

| | | |
|---|---|---|
| 64 | Bearing 3205 | 065/04 |
| 65 | Snap ring D.52 I DIN 472 | |
| 66 | Worm screw spacer | 018/07 |
| 67 | Worm screw | 020/04 |
| 68 | Self-locking ring-nut M20x1 | |
| 69 | Bearing 6302 | 044/03 |
| 70 | Helical gear | 015/07 |
| 71 | Self-locking ring-nut M35x1,5 | |
| 72 | HSFHC screw M10x16 DIN 7991 | |
| 73 | Washer | 067/31 |
| 74 | Countervice right jaw | 016/19 |
| 75 | Countervice | 003/19 |
| 76 | Nut M16 DIN 936 | |
| 77 | Bar stop | 004/05 |
| 78 | Bar stopping rod | 031/05 |
| 79 | Handwheel D.40 M8x25 | 077/25 |
| 80 | Water pipe | |
| 81 | | |
| 82 | | |
| 83 | Bench tap | 042/05 |
| 84 | | |
| 85 | | |
| 86 | | |
| 87 | Crucible | 021/21 |
| 88 | Bench lever | 002/06 |
| 89 | Belleville washer 50x25,4x2 DIN2093 | |
| 90 | Selflocking ring nut 32x1.5 | |
| 91 | Dowel M8x10 DIN 916 | |
| 92 | Key 6x6x40 DIN 6604 | |
| 93 | Disk shaft | 019/07 |
| 94 | Oil retainer 50/65x8 | |
| 95 | Oil filling cap 3/8" | |
| 96 | Left vice jaw | 032/03 |
| 97 | Cutting angle device | |
| 98 | Left countervice jaw | 015/19 |
| 99 | Dowel M8x25 DIN 914 | |
| 100 | Nut M8 DIN 934 | |
| 101 | Vice gib | 031/03 |
| 102 | Fast clamping vice screw | 033/03 |
| 103 | Support plate of low voltage control | 048/21 |
| 104 | | |
| 105 | | |
| 106 | | |
| 107 | | |
| 108 | Nut M12 DIN 936 | |
| 109 | HH screw M12x30 DIN 933 | |
| 110 | Dowel M8x10 DIN 914 | |
| 111 | Head gear | 024/19 |
| 112 | | |
| 113 | | |
| 114 | Countervice pin | 022/07 |
| 115 | Rotating plate | 007/19 |
| 116 | Head pin | 057/07 |
| 117 | Oiler D.6 | |
| 118 | HSCH screw M6x60 DIN 912 | |
| 119 | HSCH screw M8x20 DIN 912 | |
| 120 | Washer | |
| 121 | HSHC screw M10x20 DIN 912 | |
| 122 | Rear motor flange | |
| 123 | Washer | |
| 124 | Couter-vice fastening bracket | 031/19 |
| 125 | Release lever M8x20 | 025/21 |
| 126 | Sphere D. 30 FM 10 | 082/14 |
| 127 | Positioning pin | 022/21 |
| 128 | Nut M10 DIN 936 | |
| 129 | | |
| 130 | HH screw M12x80 DIN 933 | |

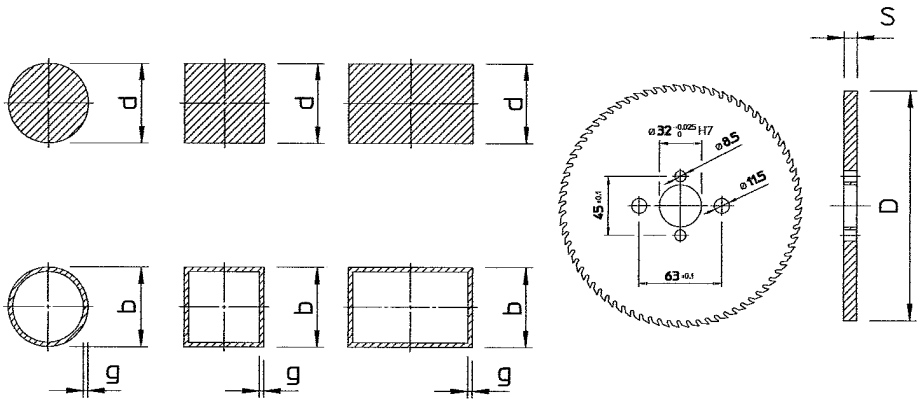
| | | |
|---|---|---|
| 131 | | |
| 132 | Washerx D.6 DIN 125/A | |
| 133 | Stake D.9x18 | |
| 134 | Hexagon nut medium M10 DIN934 | 043/31 |
| 135 | Eye tie rod M10x50 | |
| 136 | Hexagon nut medium M12 DIN934 | 035/38 |
| 137 | Eye tie rod M12x50 | 030/07 |
| 138 | Return spring | |
| 139 | HH screw M10x25 DIN 931 | |
| 140 | Washer D.10 DIN 125/A | 039/03 |
| 141 | Fixed antifraze bracket | |
| 142 | HSHC screw M8x20 DIN 912 | 028/05 |
| 143 | Movable antifraze bracket | |
| 144 | Washer D.8 DIN 125/A | |
| 145 | HSFHC Screw M6X16 DIN 7991 | |
| | | |
| | | |
| | | |
| 200 | Box | 066/90 |
| 199 | Cover box | 067/90 |
| 201 | Plate | 069/90 |
| 202 | | |
| 203 | Changeover switch | 011/90 |
| 204 | RH screw M4x14 7981 | |
| 205 | HSHC screw M4x6 DIN 912 | |
| 206 | | |
| 207 | | |
| 208 | Emergency button | 085/90 |
| 209 | | |
| 210 | Remote controlled switch | 032/90 |
| 211 | Thermal relay | 053/90 |
| 212 | | |
| 213 | Earth connection bar | |
| 214 | RH screw M4x14 DIN 7981 | |
| 215 | | |
| 216 | | |
| 217 | Transformer 20 VA | 042/90 |
| 218 | Micro switch of handle | 028/90 |
| 219 | HSFHC screw M4x8 DIN 7991 | |
| 220 | Electrical cable 2x1 | |
| 221 | RH screw M2,9x13 DIN 7981 | |
| 222 | Button | |

## CAPACITA' DI TAGLIO - CUTTING CAPACITY - NEW 350

| CAPACITA' DI TAGLIO - CUTTING CAPACITY - CAPACITE DE COUPE SCHNITTKAPAZITAET - CAPACIDAD DE CORTE | ● | ○ | □ | ▭ |
|---|---|---|---|---|
| 90° | 60 | 110 | 100 x 100 | 155 x 80 |
| 45° | 55 | 90 | 85 x 85 | 90 x 85 |

## SCELTA DEL DISCO - BLADE SELECTION

| Diametro - Diameter Diametre - Durchmesser | | 200 | 225 | 250 | 275 | 300 | 315 | 350 |
|---|---|---|---|---|---|---|---|---|
| Spessore - Thickness Epaisseur - Dicke | | 1.8 | 1.8 | 2 | 2.5 | 2.5 | 2.5 | 3 |
| b=10-80 g=<2 | t | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | z | 200 | 230 | 250 | 280 | 300 | 320 | 350 |
| b=10-80 g=2-4 d=10-18 | t | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | z | 130 | 140 | 160 | 170 | 190 | 200 | 220 |
| b=20-80 g=4-10 d=18-30 | t | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | z | 80 | 90 | 100 | 110 | 120 | 120 | 140 |
| d=30-40 | t | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| | z | 60 | 70 | 80 | 90 | 90 | 100 | 110 |
| d>40 | t | / | / | / | 12 | 12 | 12 | 12 |
| | z | / | / | / | 70 | 80 | 80 | 90 |




Si garantisce il funzionamento ottimale della vite-corona utilizzando dischi con fori di trascinamento.

Best performance of worm screw worm wheel gearing is guaranteed when circular saw blades with drawing-holes are used.

Nous garantissons le bon fonctionnement de la vis et couronne seulement si l'on emploie des fraise-scies avec trous d'entrainement.

Die verwendung von Sageblattern mit Mitnehmerlochern sichern den guten Betrieb der Schnecke und des Scheckenkranzes.

b= diametro esterno/altezza (tubi) - outside diameter/height (pipe)
diametre extérieur/hauteur

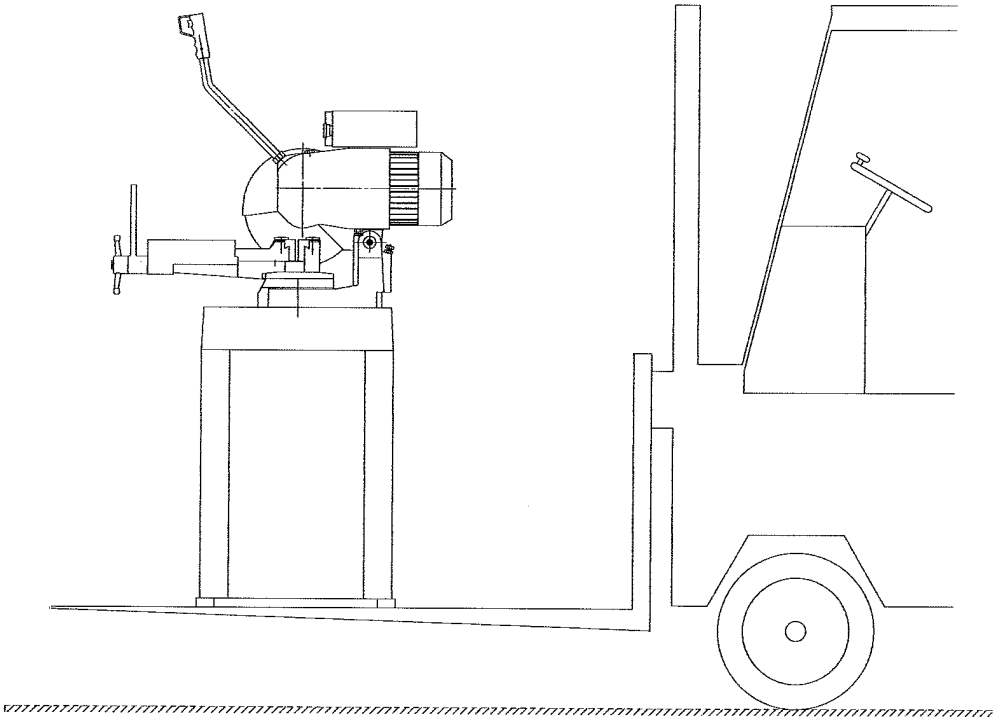
d= diametro/altezza (pieni) - diameter/height (solid)
diamètre/hauter (plein) - durchmesser/hohe (voll)

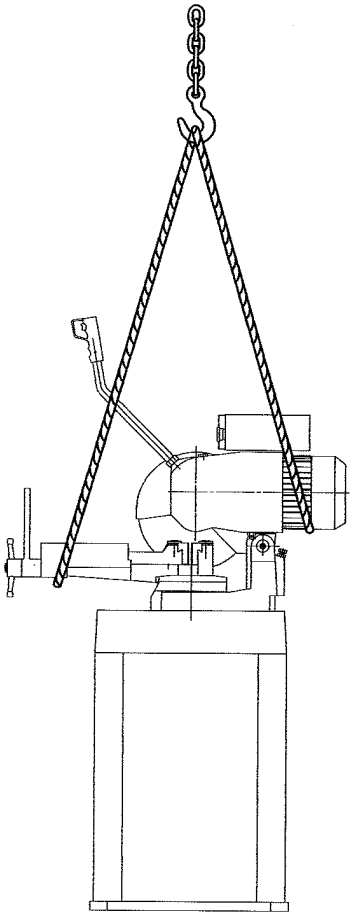
g= spessore del tubo - pipe thickness
epaisseur du tube - rohrdicke

t= passo dentatura - toothing pitch
pas denture - entfernung verzahnung

z= numero di denti - number of teeth
numero de dents - zahnnummer

# MOVIMENTAZIONE TRASPORTO
# HANDLING AND TRANSPORTATION





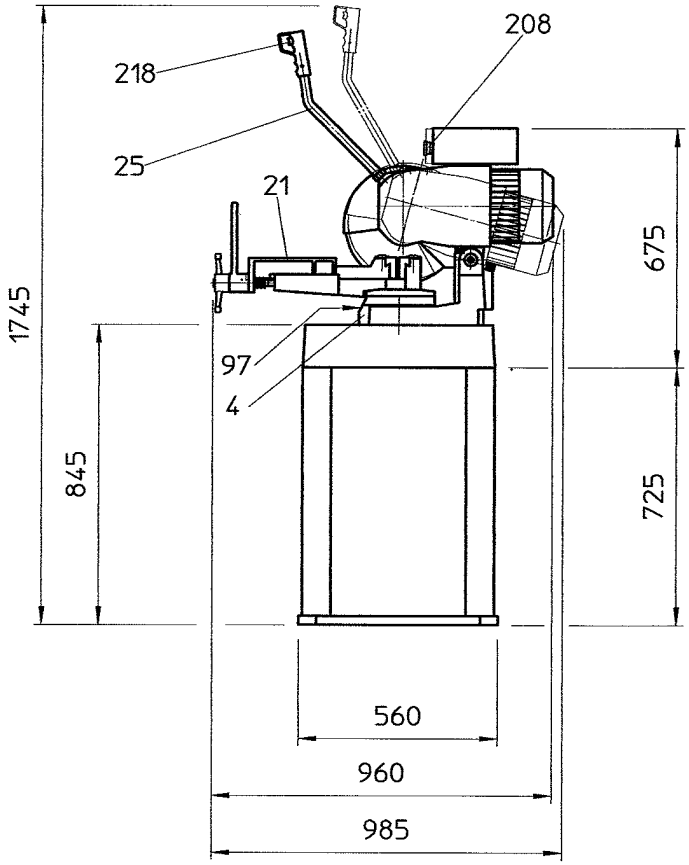
DIMENSIONE D'INGOMBRO E INSTALLAZIONE

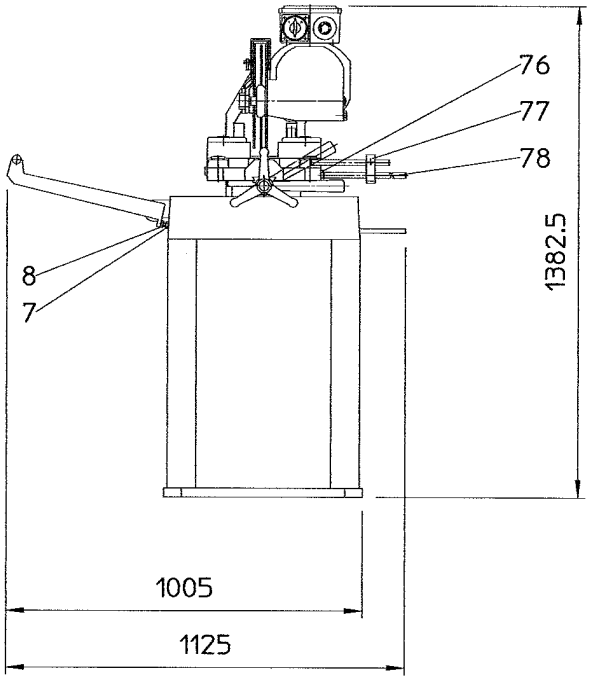
Overall dimensions and installation

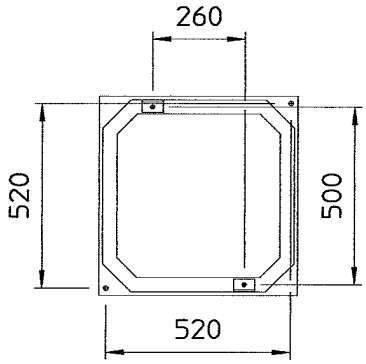
Dimensions hors-tout et installation

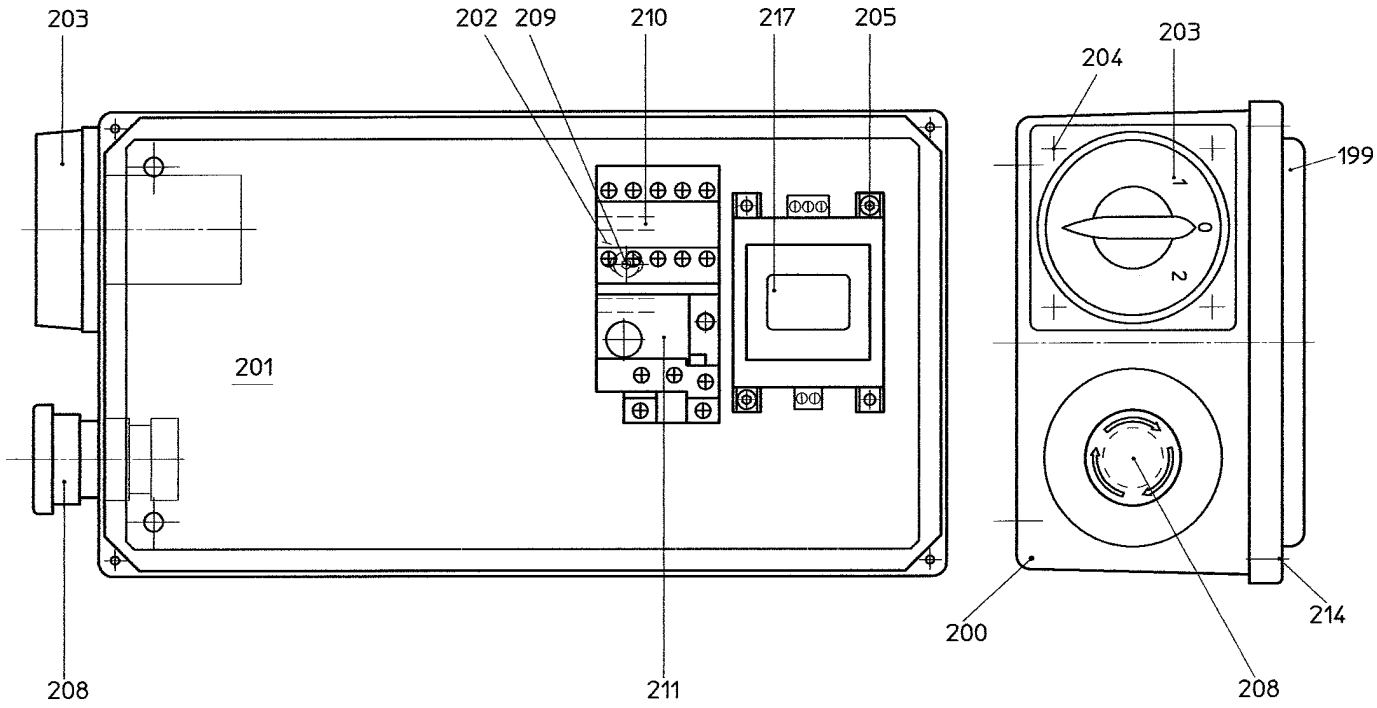
Aussenabmessungenund installation

Dimensiones maximas extremas e instalacion





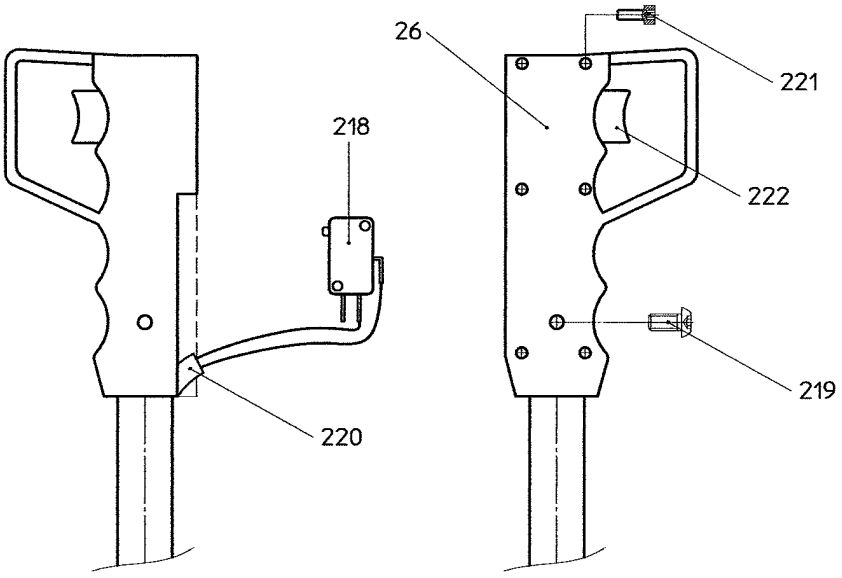

## Cassetta Impianto elettrico

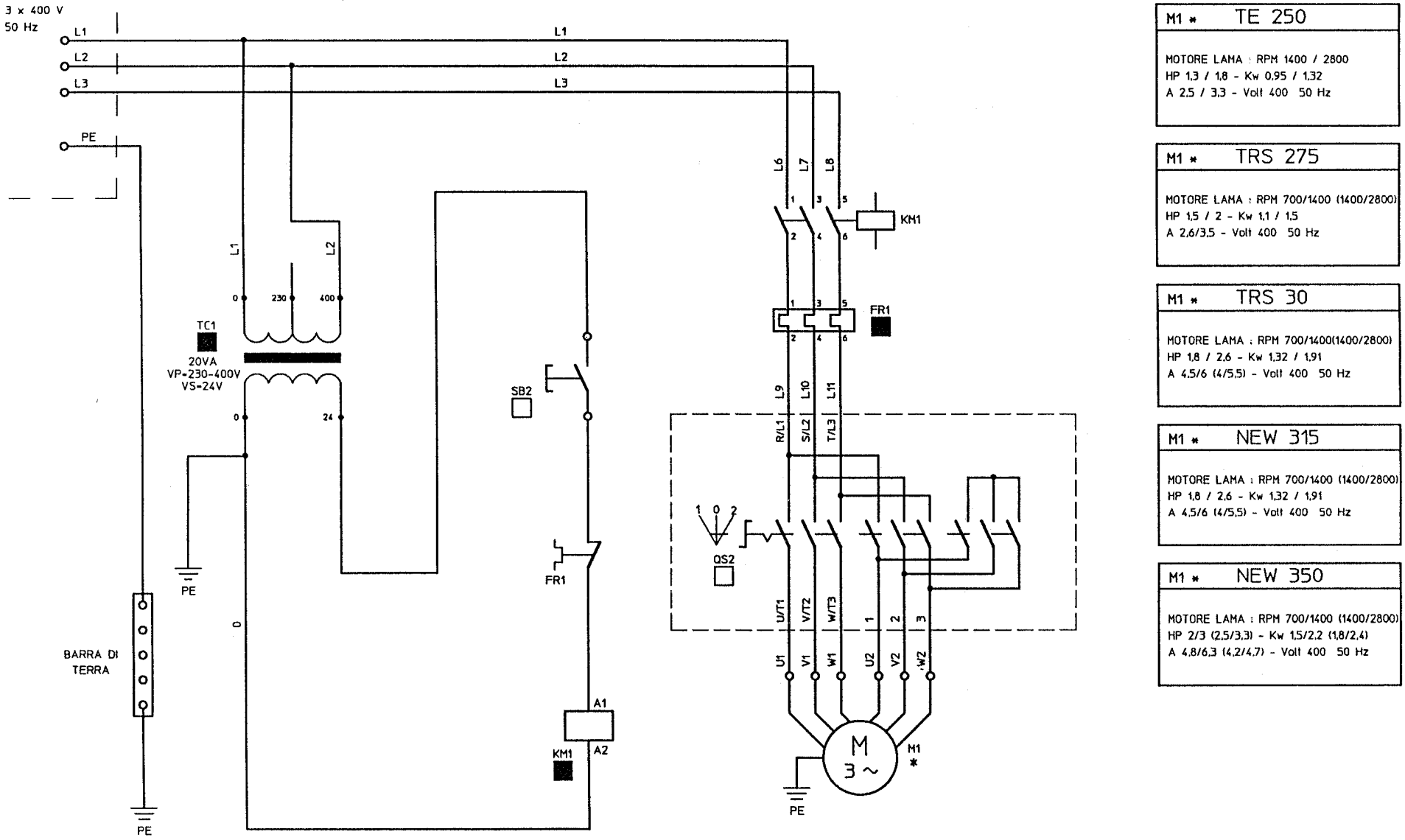
Electric Box

Boîte Electríque

Schaltkasten

Caja Electríca






| | |
|---|---|
| QS2 | COMMUTATORE MOTORE DISCO |
| SB2 | MICROINTERRUTTORE MANIGLIA |
| KM1 | TELERUTTORE |
| FR1 | RELE' TERMICO |

**M1 * TE 250**

MOTORE LAMA : RPM 1400 / 2800
HP 1,3 / 1,8 - Kw 0,95 / 1,32
A 2,5 / 3,3 - Volt 400 50 Hz

**M1 * TRS 275**

MOTORE LAMA : RPM 700/1400 (1400/2800)
HP 1,5 / 2 - Kw 1,1 / 1,5
A 2,6/3,5 - Volt 400 50 Hz

**M1 * TRS 30**

MOTORE LAMA : RPM 700/1400(1400/2800)
HP 1,8 / 2,6 - Kw 1,32 / 1,91
A 4,5/6 (4/5,5) - Volt 400 50 Hz

**M1 * NEW 315**

MOTORE LAMA : RPM 700/1400 (1400/2800)
HP 1,8 / 2,6 - Kw 1,32 / 1,91
A 4,5/6 (4/5,5) - Volt 400 50 Hz

**M1 * NEW 350**

MOTORE LAMA : RPM 700/1400 (1400/2800)
HP 2/3 (2,5/3,3) - Kw 1,5/2,2 (1,8/2,4)
A 4,8/6,3 (4,2/4,7) - Volt 400 50 Hz

V400 / 50 3F (TIPO VECCHIO)

| Rev. | Modificato | C./Appr. | Data | Descrizione |
|---|---|---|---|---|
| | | | | |

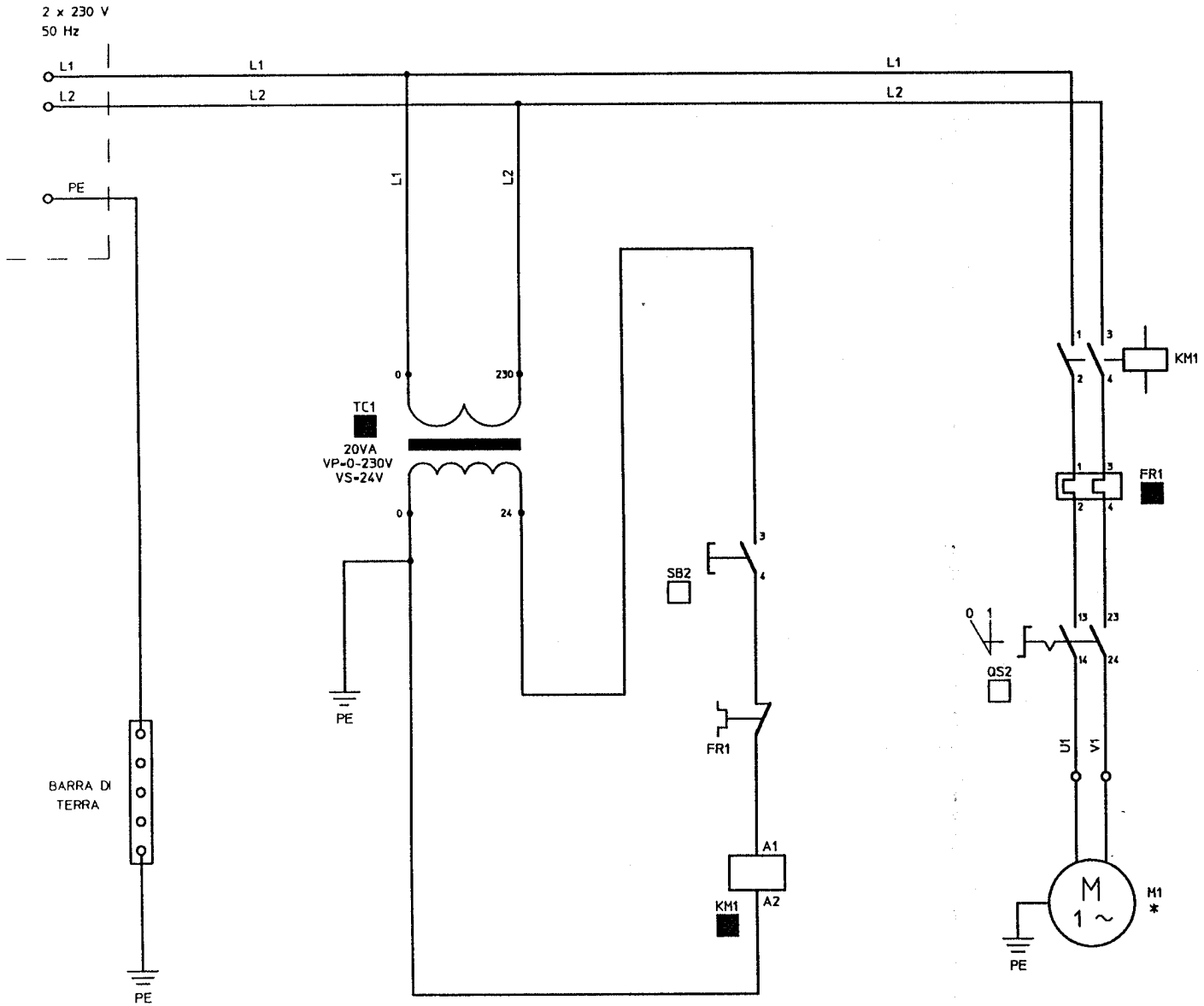
DESCRIZIONE: **Schema Elettrico**

Data 21-06-04
Firma *PaoloNXV*

MACC Schio

Modello: **TRONCATRICE**
Macchina: **NEW 315 - NEW 350 TE 250 - TRS 275 - TRS 30**

N° Schema / T
Revisione




| | |
|---|---|
| QS2 | INTERRUTTORE MOTORE DISCO |
| SB2 | MICROINTERRUTTORE MANIGLIA |
| KM1 | TELERUTTORE |
| FR1 | RELE' TERMICO |

**M1 * TE 250**

MOTORE LAMA : RPM 1400
HP 1,2 - Kw 0,9
A 5,5 - Volt 230 50 Hz

**M1 * TRS 275**

MOTORE LAMA : RPM 1400
HP 1,5 - Kw 1,1
A 8,5 - Volt 230 50 Hz

**M1 * TRS 30**

MOTORE LAMA : RPM 1400
HP 2 - Kw 1,5
A 10,5 - Volt 230 50 Hz

**M1 * NEW 315**

MOTORE LAMA : RPM 1400
HP 2 - Kw 1,5
A 10,5 - Volt 230 50 Hz

**M1 * NEW 350**

MOTORE LAMA : RPM 1400
HP 2 - Kw 1,5
A 15 - Volt 230 50 Hz

**M1 * TA400**

MOTORE LAMA : RPM 2810
HP 3 - Kw 2,2
A 13,4 - Volt 230 50 Hz

| Rev. | Modificato | C./Appr. | Data | Descrizione |
|---|---|---|---|---|
| | | | | |

DESCRIZIONE: **Schema Elettrico**

Modello: **TRONCATRICE**
Macchina: **NEW315 - NEW350 - TA400 TE250 - TRS275 - TRS30**

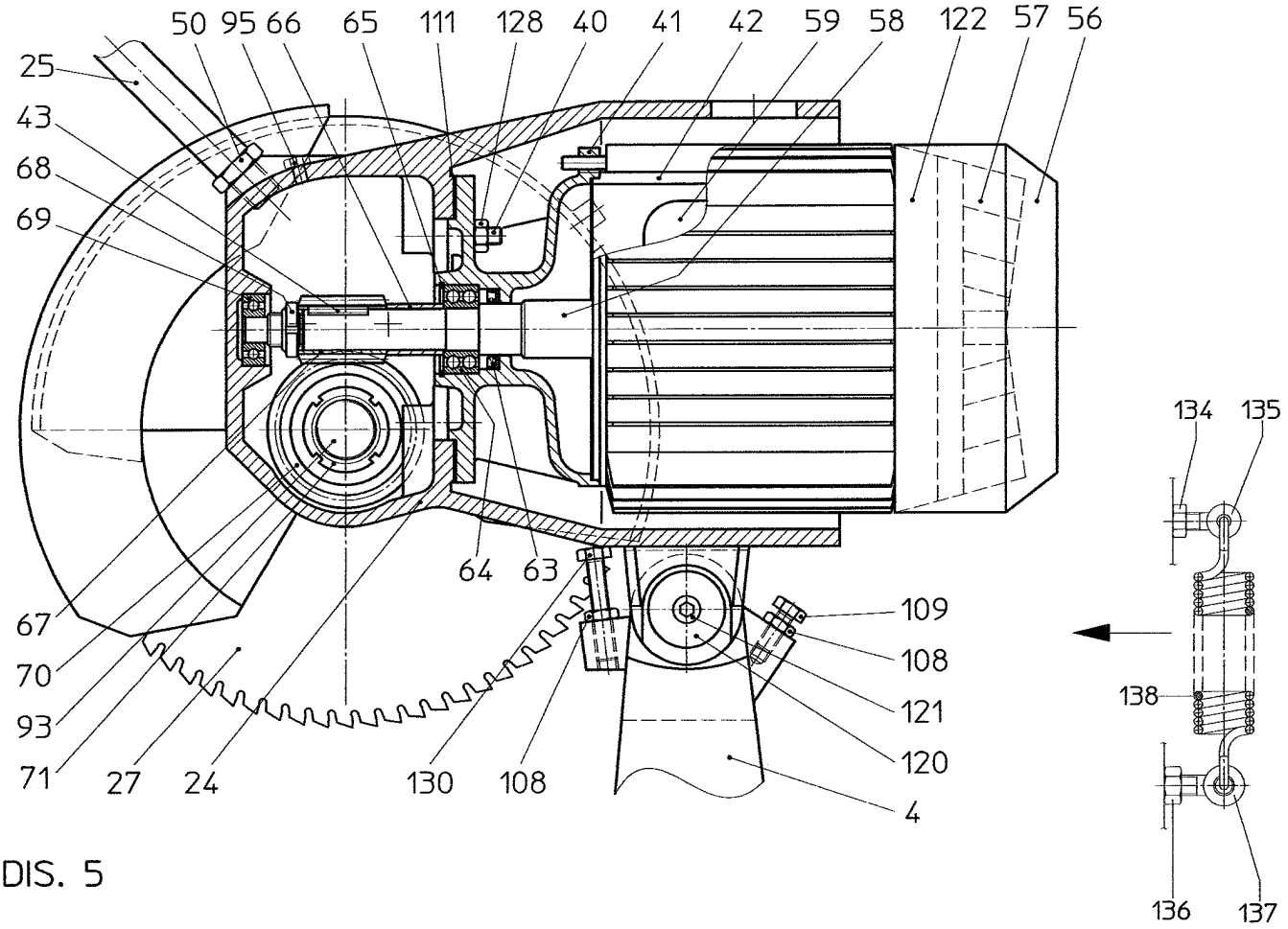
Data 21-06-04
Firma *PaoloNXV*
Contr./Appr.

MACC Schio

N° Schema / T

Revisione
Foglio 1 di 1

V230 / 50 1F (TIPO VECCHIO)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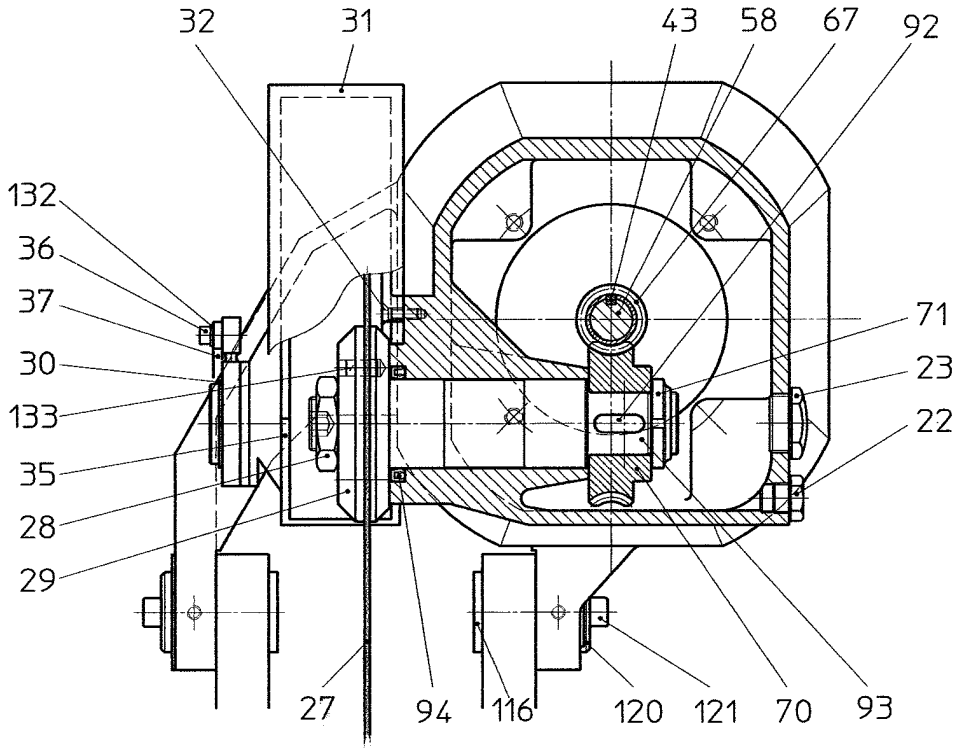
DIS. 5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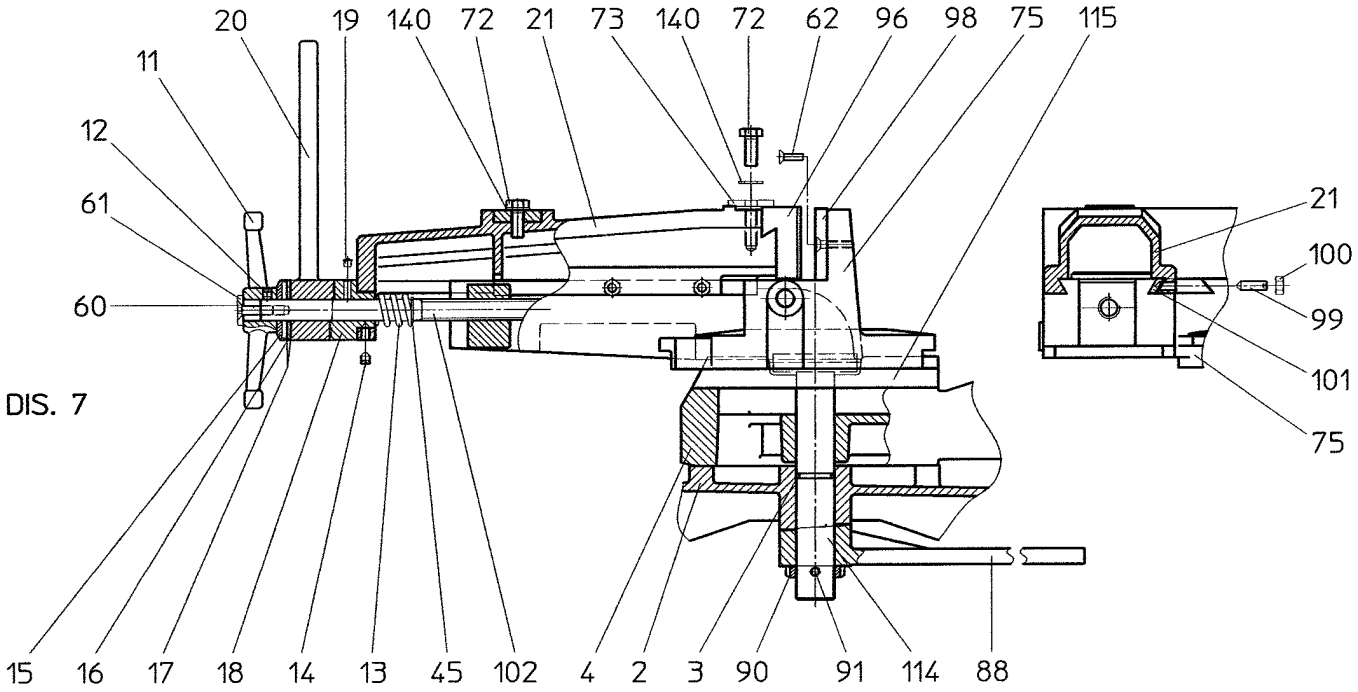
DIS. 6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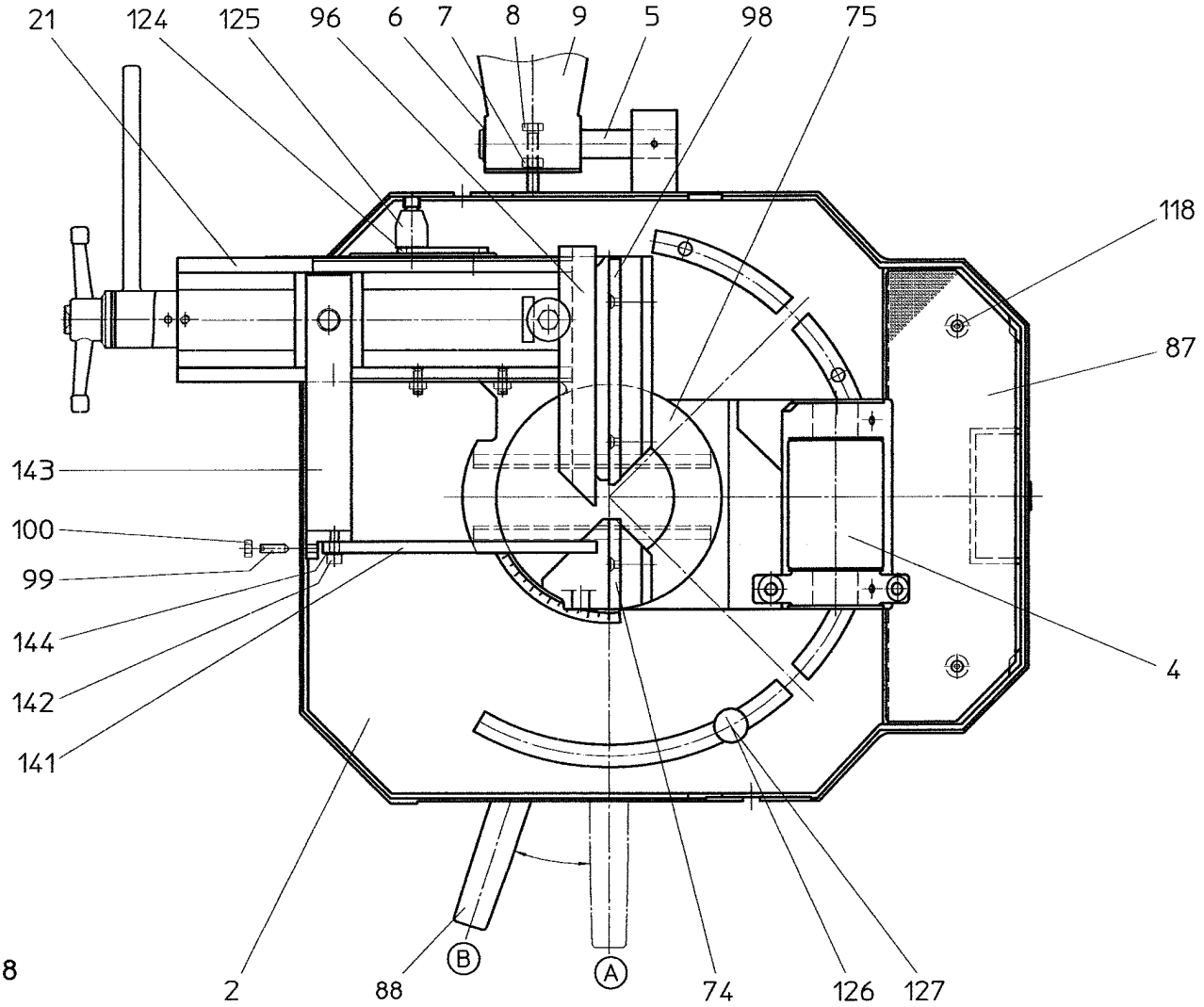
DIS. 7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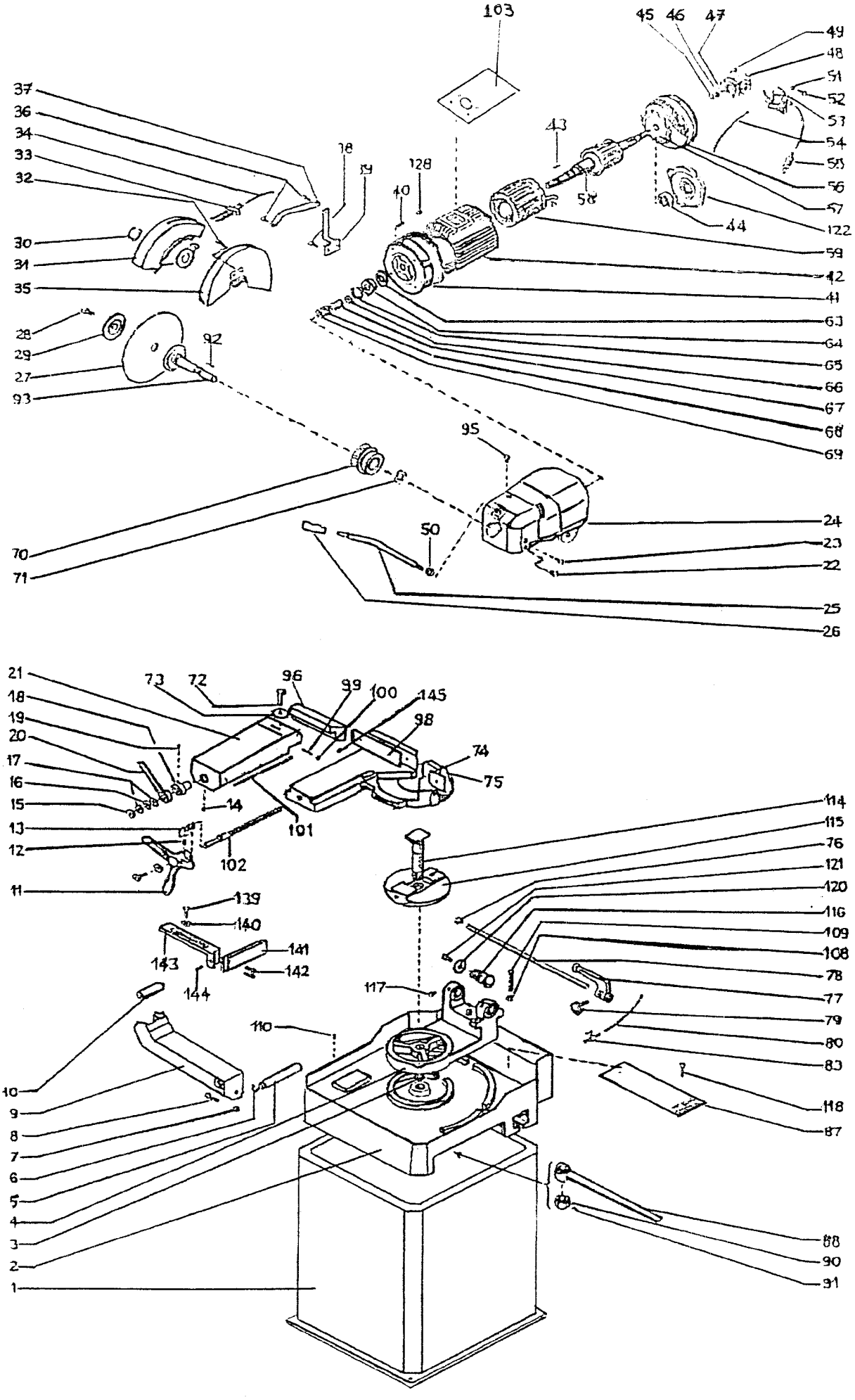
127

DIS. 8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Dis. / Draw. 9