

**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:

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

CONSTRUCTEUR:

CONSTRUCTOR:

MODELLO:

MODEL :

NEW 350 DV

MODELL:

MODELE:

MODELO:

MATRICOLA:

SERIAL NUMBER:

KENNNUMMER:

MATRICULE:

MATRICULA:

ANNO DI COSTRUZIONE:

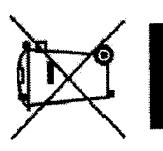
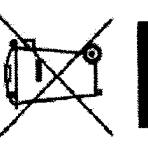
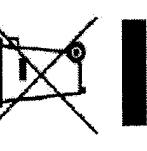
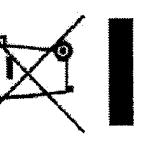
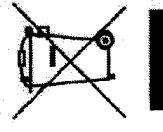
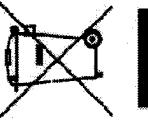
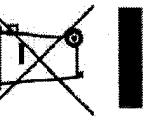
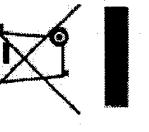
YEAR OF CONSTRUCTION:

2010

BAUJAHR:

ANNEE DE CONSTRUCTION:

AÑO DE COSTRUCCION :

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|--|--|---|--|
| <p>English</p> <p>Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)</p> <p>This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead, it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate handling of this product. The recycling of materials will help to conserve our natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.</p>  | <p>Traitement des appareils électriques et électroniques en fin de vie (Applicable dans les pays de l'Union Européenne et aux autres pays européens disposant de systèmes de collecte sélective)</p> <p>Ce symbole, apposé sur le produit ou sur son emballage, indique que ce produit ne doit pas être traité avec les déchets ménagers. Il doit être remis, au point de collecte approprié pour le recyclage des équipements électriques et électroniques. En s'assurant que ce produit est bien mis au rebut de manière appropriée, vous aidez à prévenir les conséquences négatives potentielles pour l'environnement et la santé humaine. Le recyclage des matériaux aidera à conserver les ressources naturelles. Pour toute information supplémentaire au sujet du recyclage de ce produit, veuillez contacter votre municipalité, votre décretéerie ou le magasin où vous avez acheté le produit.</p>  | <p>Entregung von gebrauchten elektrischen und elektronischen Geräten (Anzuwenden in den Ländern der Europäischen Union und anderen europäischen Ländern mit einem separaten Sammelsystem für diese Geräte)</p> <p>Das Symbol auf dem Produkt oder seinem Verpackung weist darauf hin, dass dieses Produkt nicht als normaler Haushaltsabfall zu behandeln ist, sondern an einer Annahmestelle für das Recycling vom elektrischen und elektronischen Gerät abgegeben werden muss. Durch Ihren Beitrag zum korrekten Entsorgen dieses Produktes schützen Sie die Umwelt und die Gesundheit Ihrer Mitmenschen, Umwelt und Gesundheit werden durch falsches Entsorgen gefährdet. Materialrecycling hilft den Verbrauch von Rohstoffen zu verringern. Weitere Informationen über das Recycling dieses Produktes erhalten Sie von Ihrem Gewerbebetrieb, dem kommunalen Entsorgungsunternehmen oder dem Geschäft, in dem Sie das Produkt gekauft haben.</p>  | <p>Tratamiento de los equipos eléctricos y electrónicos al final de su vida útil (Aplicable en la Unión Europea y en países europeos con sistemas de reciclaje selectiva de residuos)</p> <p>Este símbolo en su equipo o su embalaje indica que el presente producto no puebla ser tratado como residuos domésticos normales, sino que deben entregarse en el correspondiente punto de recogida de equipos eléctricos y electrónicos. Asegurándose de que este producto sea desecharlo de forma correcta, ayudará a prevenir las consecuencias negativas para el medio ambiente y la salud humana que podrían derivarse de la incorrecta manipulación de este producto. El reciclaje de las materias ayuda a conservar las reservas naturales. Para recibir información sobre el reciclaje de este producto, por favor, contacte con su ayuntamiento, su punto de recogida más cercano o el distribuidor donde adquirió el producto.</p>  |
| <p>Nederlands</p> <p>Verwijdering van Oude Elektrische en Electronische Apparatuur (Toepasbaar in de Europese Unie en andere Europese landen met gescheiden opheffingsysteem)</p> <p>Het symbool op het product of op de verpakking wijst even dat dit product niet als huishoudafval mag worden behandeld. Het moet echter naar een plaats worden gebracht waar elektrische en elektronische apparatuur wordt gerecycled. Als u ervoor zorgt dat dit product op de correcte manier wordt verwijderd, voorkomt u mogelijk voor ons en milieu negatieve gevolgen die zich zouden kunnen voordoen in geval van eventuele afvalhandeling. De recycling van materialen draagt bij tot het behouden van natuurlijke bronnen. Voor meer details over het recyclen van dit product, neemt u het best contact op met de gedienst die de producten van dit type heeft gekocht.</p>  | <p>Omhänderingande av gamla elektriska och elektroniska produkter (Användbar i den europeiska unionen och andra europeiska länder med separat insamlingssystem)</p> <p>Symbolen på produkten eller på förpackningen anger att produkten inte är hushållsavfall. Den ska till skillnad från hushållsavfallet tas till återvinningsplats för återvinning. Om du gör detta företräder du att produkten tas bort på en sätt som är bra för miljön och miljöfaktorer. Vissa materialer kan uppsättas på en annan sätt för att undgå miljöskador. För ytterligare upplysningar om återvinning bör du kontakta din lokala myndigheter eller sophanteringen för att få information om hur du ska handla om ditt produkt.</p>  | <p>Treatamento del dispositivo elettrico od elettronico al fine vita (Applicabile in tutti i paesi dell'Unione Europea e in quelli con sistema di raccolta differenziata)</p> <p>Questo simbolo sul prodotto o sulla confezione indica che il prodotto non deve essere considerato come un normale rifiuto domestico, ma deve invece essere consegnato ad un punto di raccolta appropriato per il riciclaggio dei dispositivi elettronici ed elettronici. Assicurandone che questo avvenga sia salubrio e corretto, voi contribuirete a prevenire possibili conseguenze negative per l'ambiente e per la salute umana. Le ricyclate dei materiali andrà a conservare le risorse naturali. Per informazioni più dettagliate circa il riciclaggio del prodotto, potete contattare l'ufficio comunale. Il servizio locale di smaltimento finiti oppure il negozio dove l'avete acquistato.</p>  | <p>Avhending av gammalt elektriskt og elektroniskt utstyr (Gjelder i EU og andre europeiske land med separat innsamlingssystem)</p> <p>Dette symbolet på produktet eller innpakningen indikerer at dette produktet ikke må håndteres som husholdningsavfall. I stedet skal det leveres inn til spesiell innsamlingspunkt for gjenvinning av det elektriske og elektroniske utstyret. Ved å sørge for at dette produktet avhendes på en korrekt måte, vil dette også gi en mulighet til å redusere potensiell negativ påvirkning både på miljøet og helse, samt om annet kan være resultatet av feilaktig avfallshåndtering. Gjenvinning av disse materialene vil hjelpe til å beholde naturlige ressurser. For mer informasjon om gjenvinning av dette produktet, kan du kontakte lokale myndigheter.</p>  |

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

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| Chap. 2 | Information about maintenance assistance |
| Chap. 3 | Index of chapters, drawings, diagrams and tables |
| Chap. 4 | Description of the machine Description of the machine and its components Intended and unsuitable uses of the machine |
| Chap. 5 | Main technical data |
| Chap. 6 | Handling and transportation |
| Chap. 7 | Installation |
| Chap. 8 | Start up and operation Devices and their location Tools supplied Operation Special safety checks General safety rules Measures to prevent residual risks Safety, Guidance, Notice Labels on the Machine |
| Chap. 9 | Maintenance and repairs General safety measures Routine checks and maintenance Description of routine maintenance |
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| Chap. 12 | List of spare parts |

3.2 INDEX OF DRAWINGS, DIAGRAMS AND TABLES

| ENCL. TYPE | DESCRIPTION | ENCL No. | CHAP. |
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| Drawings | Handling and transportation- Installation plan | 1 | 6/7/8 |
| Drawings | Electrical details | 2 | 7 |
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| Drawings | Motor-blade block | 4 | 7/8.3/9 |
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| Drawing | Machine assembly | 5 | 8.3 |

4. DESCRIPTION OF THE MACHINE

4.2 DESCRIPTION OF THE MACHINE AND ITS COMPONENTS

The NEW 350 DV 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.

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 machine is equipped with submersible motor-driven pump. 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.

4.3 INTENDED AND UNSUITABLE USES OF THE MACHINE

The NEW 350 DV 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 | three-phase |
| Motor Power | KW 2,5/3,3 - KW 1,8/2,4 |
| Motor revolutions (two speeds) | 1400-2800 rpm 700-1400 rpm |
| CIRCULAR BLADE (SAW) | Number of teeth and feed holes according to table |
| Maximum diameter and thickness | 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 | 140 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 (drawing 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 DV 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 toothed faces the same direction as the arrow on the mobile guard. Then refit flange 29 and nut 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 DV 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 62 | 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 12 |
| 1 | Open end wrench size 42 |

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.6 ENCL.4) 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.

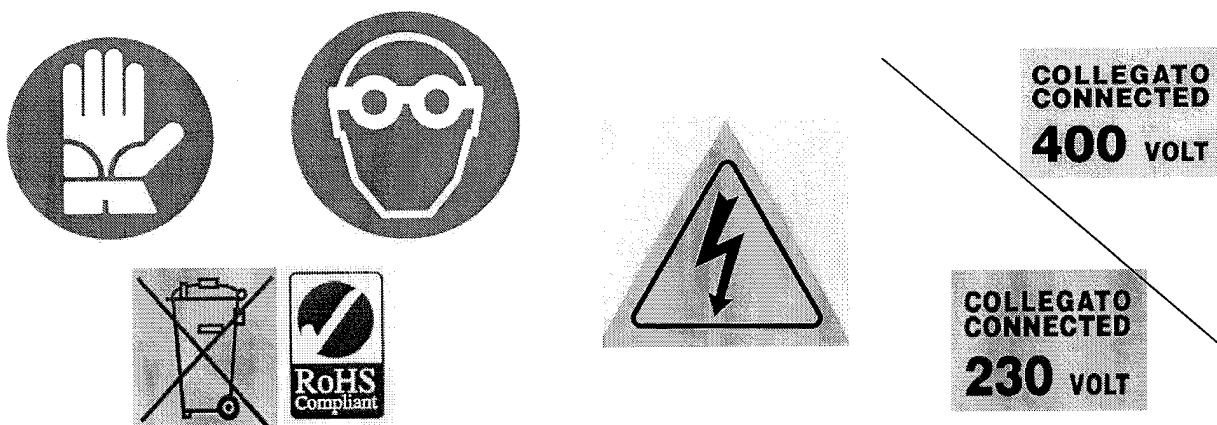
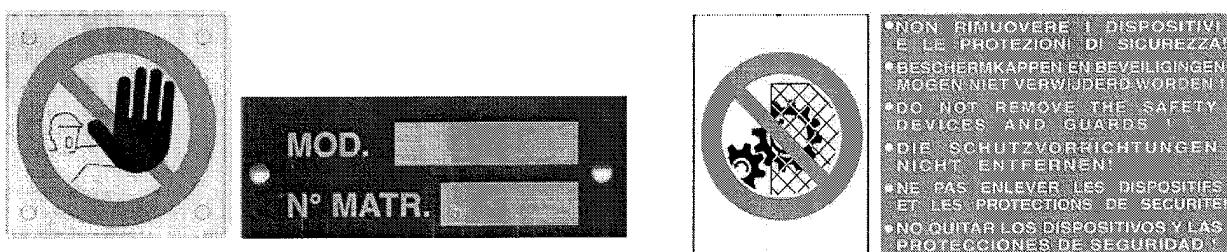
8.5 GENERAL SAFETY RULES

- 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 BLASIA 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 DV 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. $L_{Aeq} = 82,6 \text{ dB (A)}$
2. $L_{peak} = 90,6 \text{ dB}$ (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 | Light alloy | Cast iron | Bronze Copper | Plastic | Various |
|---------------------------|-------------|------------------|----------------|------------------------|----------------|
| Structure | Cylinders | Structural parts | Motors winding | | |
| Coil-holder shaft | | | | Seals | |
| Connecting rod and cranks | | | | Flexible pipes Gaskets | |
| Clutch-holder discs | | | Bushings | | Friction items |

12. LIST OF SPARE PARTS

| POS. | DESCRIPTION | CODE |
|------|---|----------|
| 1 | Pedestal | 004/71 |
| 2 | Bench | 001/07 |
| 3 | O-Ring 134 | 068/04 |
| 4 | Rotating arm | 004/07 |
| 5 | Roller arm pin | 048/04 |
| 6 | Snap ring D.25 DIN 471 | |
| 7 | Nut M10 DIN 934 | |
| 8 | Screw HH M10x55 DIN 934 | |
| 9 | Roller arm | 047/04 |
| 10 | Roller | 049/04 |
| 11 | Vice handwheel | 029/03 |
| 12 | Hexagon socket grub with cone point M8X10 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 | 029/07 |
| 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 | HSFHC Screw M6X16 DIN 7991 | |
| 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 | |
| 43 | Key 5x5x35 DIN 6604 | |
| 44 | Bearing 6205 2Z | 020/19 |
| 45 | Snap ring D.18 DIN6799 | |
| 46 | Bearing 629 | 043/05 |
| 47 | Seeger ring D.9E DIN471 | |
| 48 | Pump carrier | 003/05 |
| 49 | HSHC screw M4x12 DIN 912 | |
| 50 | Hexagon lock nut M20 DIN 936 | |
| 51 | Washer M6 din125/A | |
| 52 | HSHC screw M6x20 DIN 912 | |
| 53 | Pump | 041/05 |
| 54 | Water pipe | |
| 55 | Filter | 045/05 |
| 56 | Fan guard | |
| 57 | Fan | |
| 58 | Rotor | |
| 59 | Stator | |
| 60 | HSFHC Screw M8X30 DIN 7991 | |
| 61 | Wascher | |
| 62 | Cutting angle device | |
| 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 M10X25 DIN 7991 | |
| 73 | Washer | |
| 74 | Countervise right jaw | 052/04 |
| 75 | Countervise | 028/07 |
| 76 | Nut M16 DIN 936 | |
| 77 | Bar stop | 004/05 |
| 78 | Bar stopping rod | 031/05 |
| 79 | Bar stoppin handwheel | 077/25 |
| 80 | Water pipe | |
| 81 | | |
| 82 | | |
| 83 | Tap | 042/05 |
| 84 | | |
| 85 | | |
| 86 | | |
| 87 | Crucible | 002/07 |
| 88 | Bench lever | 002/06 |
| 89 | | |
| 90 | Selflocking ring nut 32x1,5 | |
| 91 | Dowel M8x10 DIN 916 | |
| 92 | Key DIN 6604 | |
| 93 | Disk shaft | 019/07 |
| 94 | Oil retainer 50/65x8 | 025/07 |
| 95 | Oil filling cap 3/8" | |
| 96 | Left vice jaw | 053/04 |
| 97 | Right vice jaw | 054/04 |
| 98 | Left countervise jaw | 055/04 |
| 99 | Dowel M8x25 DIN 914 | |
| 100 | Nut M8 DIN 934 | |
| 101 | Vice gib | 031/03 |
| 102 | Fast clamping vice screw | 033-A/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 | Hexagon socket grub screw M8x10 DIN 914 | |
| 111 | Head gasket | 024/19 |
| 112 | | |
| 113 | | |
| 114 | Countervise pin | 022/07 |
| 115 | Rotating plate | 007/19 |
| 116 | Head pin | 057/07 |
| 117 | Oiler D.6 | |
| 118 | HSHC screw M6x10 DIN 912 | |
| 119 | HSCH screw M8x20 DIN 912 | |
| 120 | Washer | |
| 121 | HSHC screw M10x20 DIN 912 | |
| 122 | Rear motor flange | |
| 123 | Washer | |
| 124 | Countervise fastening bracket | 031/19 |
| 125 | Handle Jaccard M8x20 | 025/21 |
| 126 | Sphere D. 30 FM10 | 082/14 |
| 127 | Positioning pin | 022/21 |
| 128 | Hexagon lock nut M10 DIN 936 | |

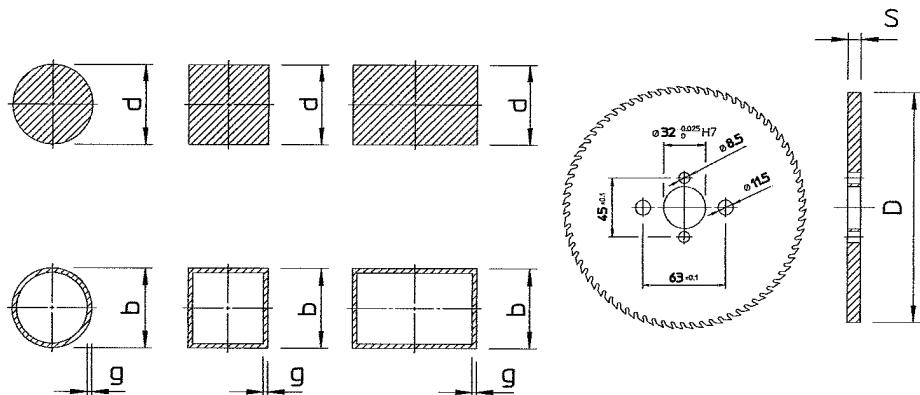
| | | |
|-----|---------------------------|--------|
| 129 | | |
| 130 | HH screw M12x80 DIN 933 | |
| 131 | | |
| 132 | Washer x M6 DIN 125/A | |
| 133 | Stake D.9x18 | |
| 134 | | |
| 135 | Vice bush | 032/07 |
| 136 | Grub screw M10x50 | |
| 137 | Washer for M10 | |
| 138 | Self locking nut M10 | |
| 139 | Nut M10 DIN 934 | |
| 140 | Eye tie rod M10x50 | 043/31 |
| 141 | Nut M12 DIN 934 | |
| 142 | Eye tie rod M12x50 | 035/38 |
| 143 | Return spring | 030/07 |
| | | |
| | | |
| 200 | Box | 066/90 |
| 199 | Cover box | 067/90 |
| 201 | Plate | 069/90 |
| 202 | | |
| 203 | Changeover switch | 011/90 |
| 204 | RH screw M4x14 DIN 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 DV

| CAPACITA' DI TAGLIO - CUTTING CAPACITY - CAPACITE DE COUPE SCHNITTKAPAZITAET - CAPACIDAD DE CORTE | | | | |
|---|----|-----|-----------|----------|
| 90° | 60 | 110 | 100 x 100 | 120 x 80 |
| 45° | 55 | 80 | 80 x 80 | 80 x 60 |

SCELTA DEL DISCO - BLADE SELECTION

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



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

Best performance of worm screw worm 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 Sageblättern mit Mitnehmerlochern sichern den guten Betrieb der Schnecke und des Scheckenkranzes.

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

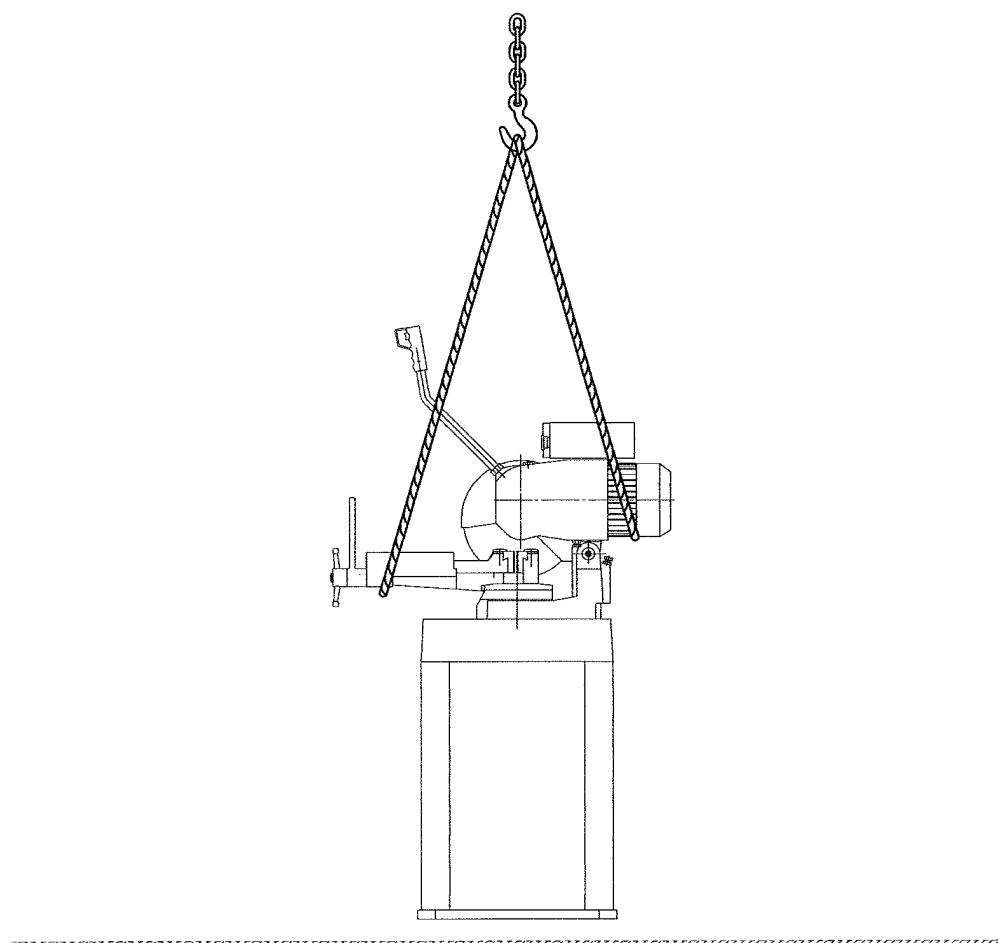
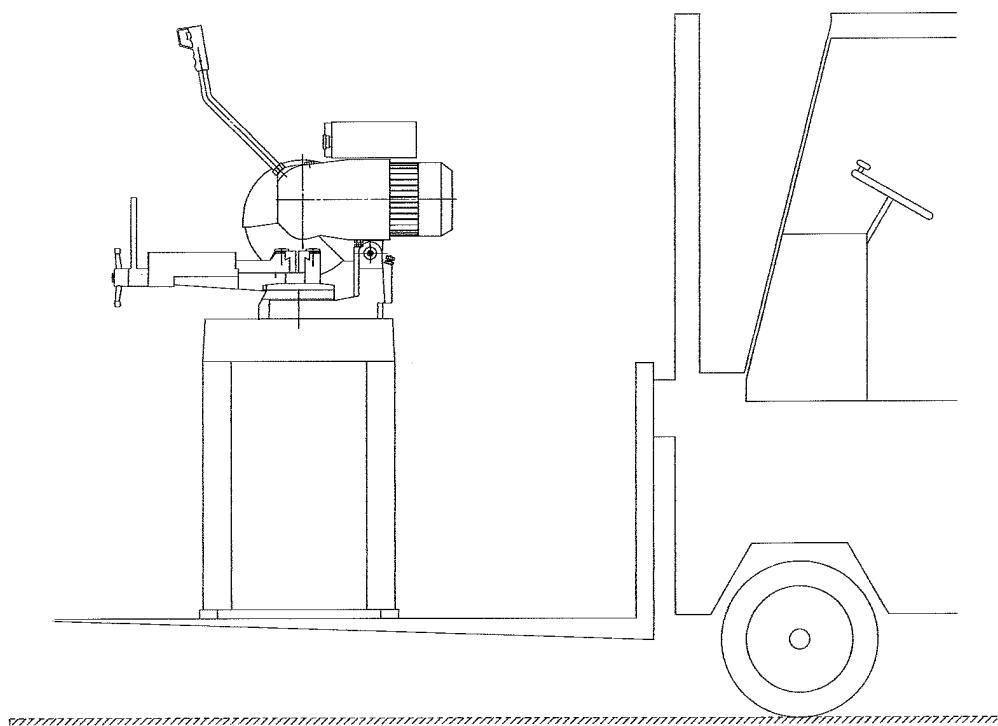
d= diametro/altezza (pieni) - diameter/height (solid)
diamètre/hauter (plein) - durchmesser/hohe (voll)

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 - zahnummern

MOVIMENTAZIONE TRASPORTO
HANDLING AND TRANSPORTATION



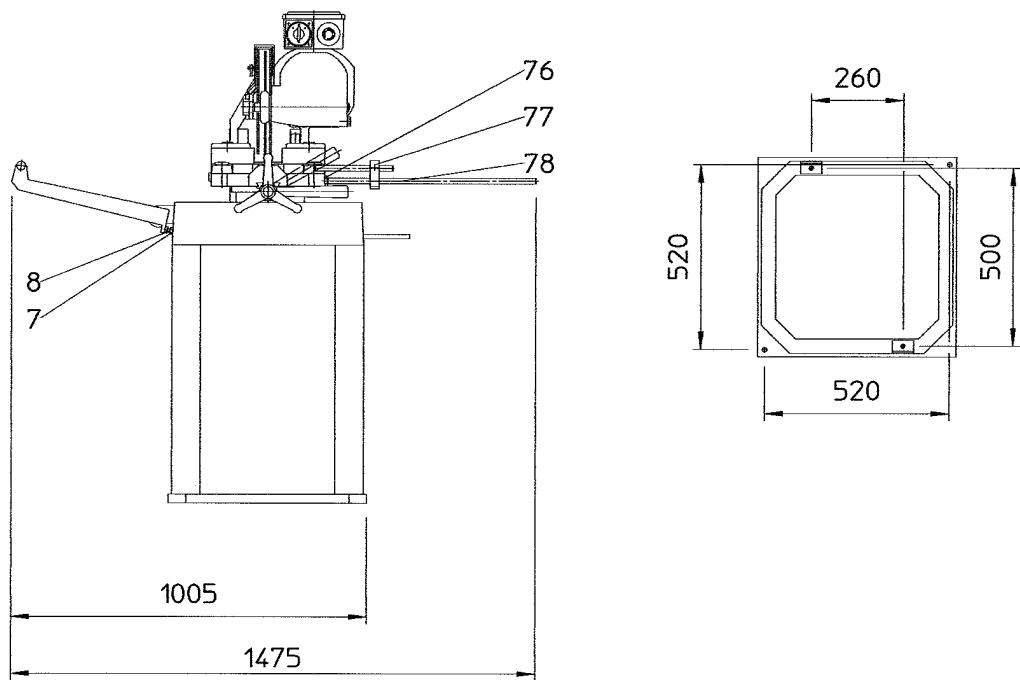
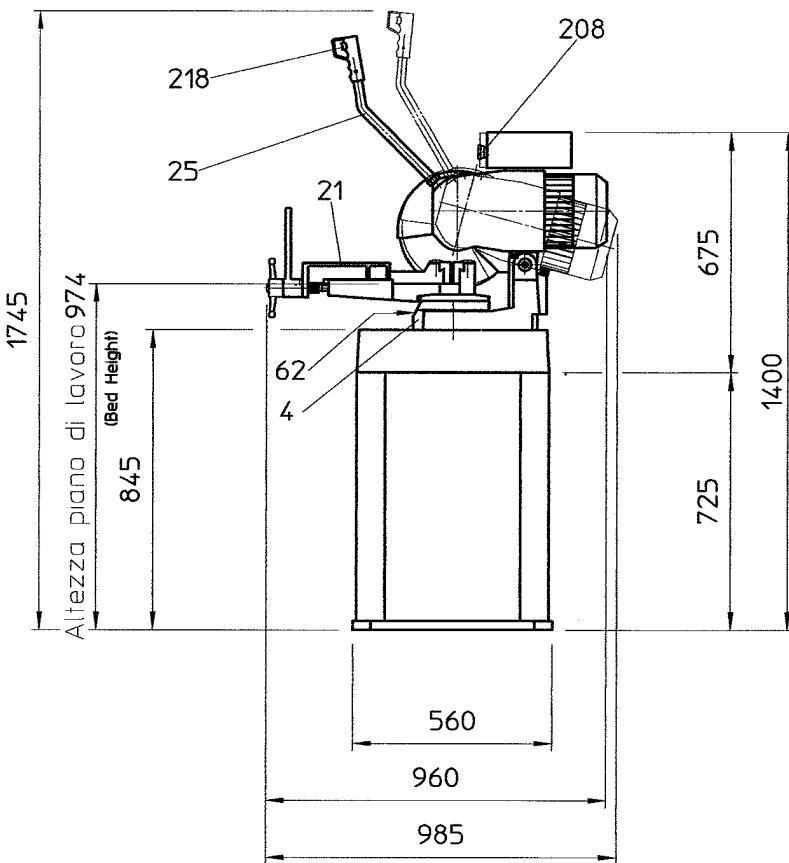
DIMENSIONE D'INGOMBRO E INSTALLAZIONE

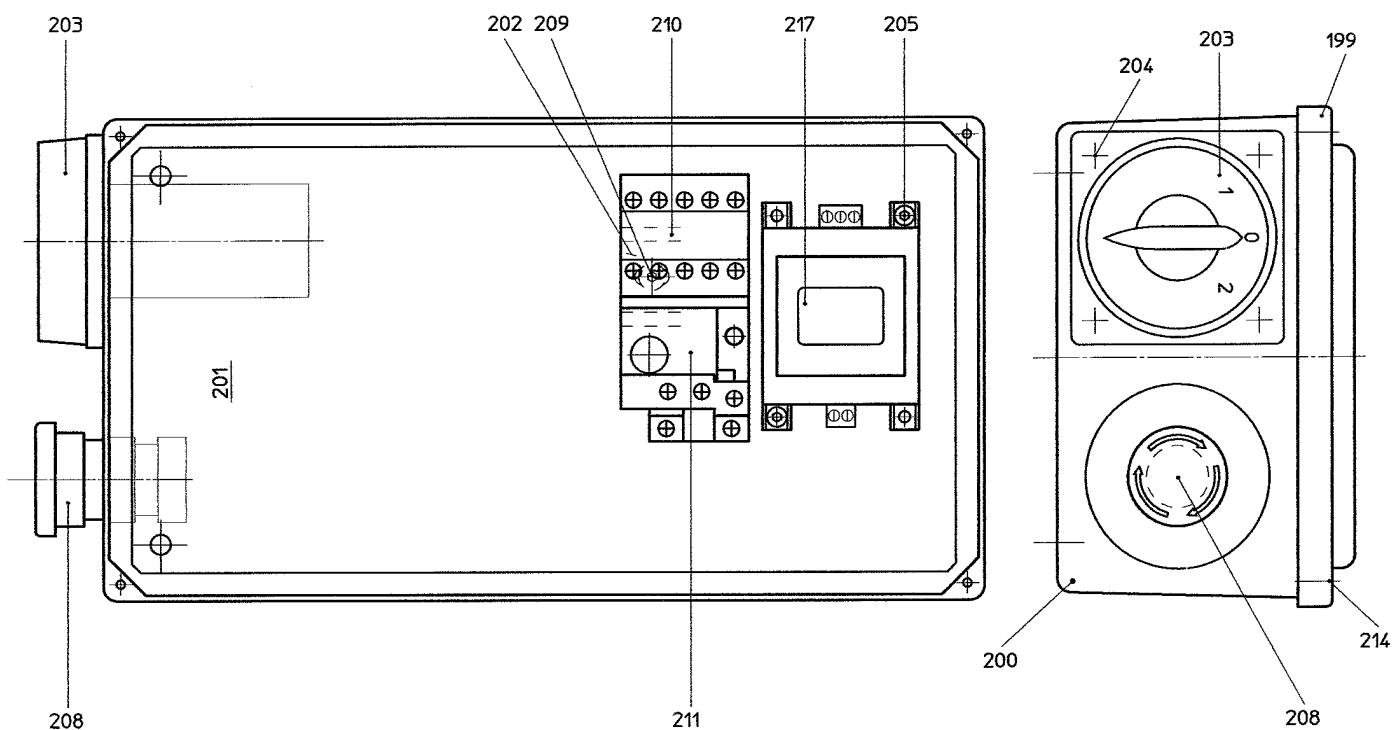
Overall dimensions and installation

Dimensions hors-tout et installation

Aussenabmessungen und installation

Dimensiones maximas extremas e instalacion





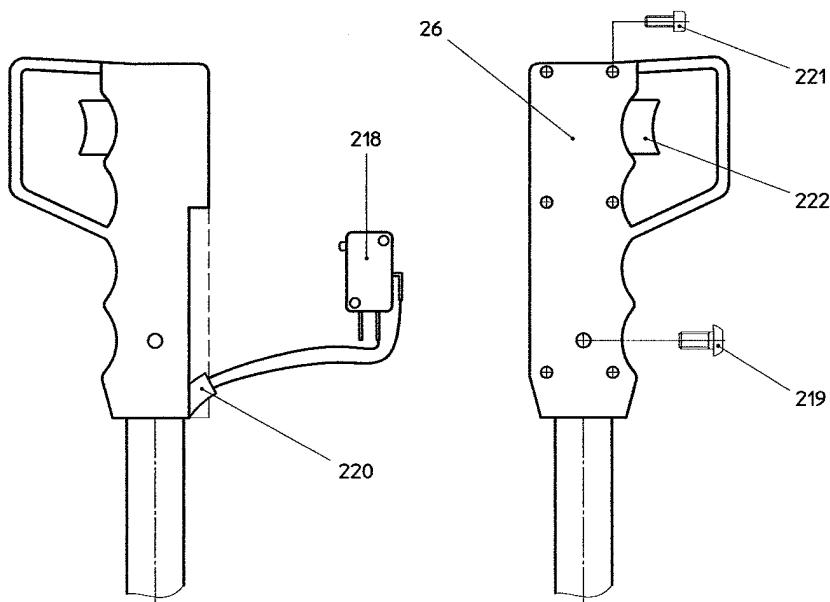
Cassetta Impianto elettrico

Electric Box

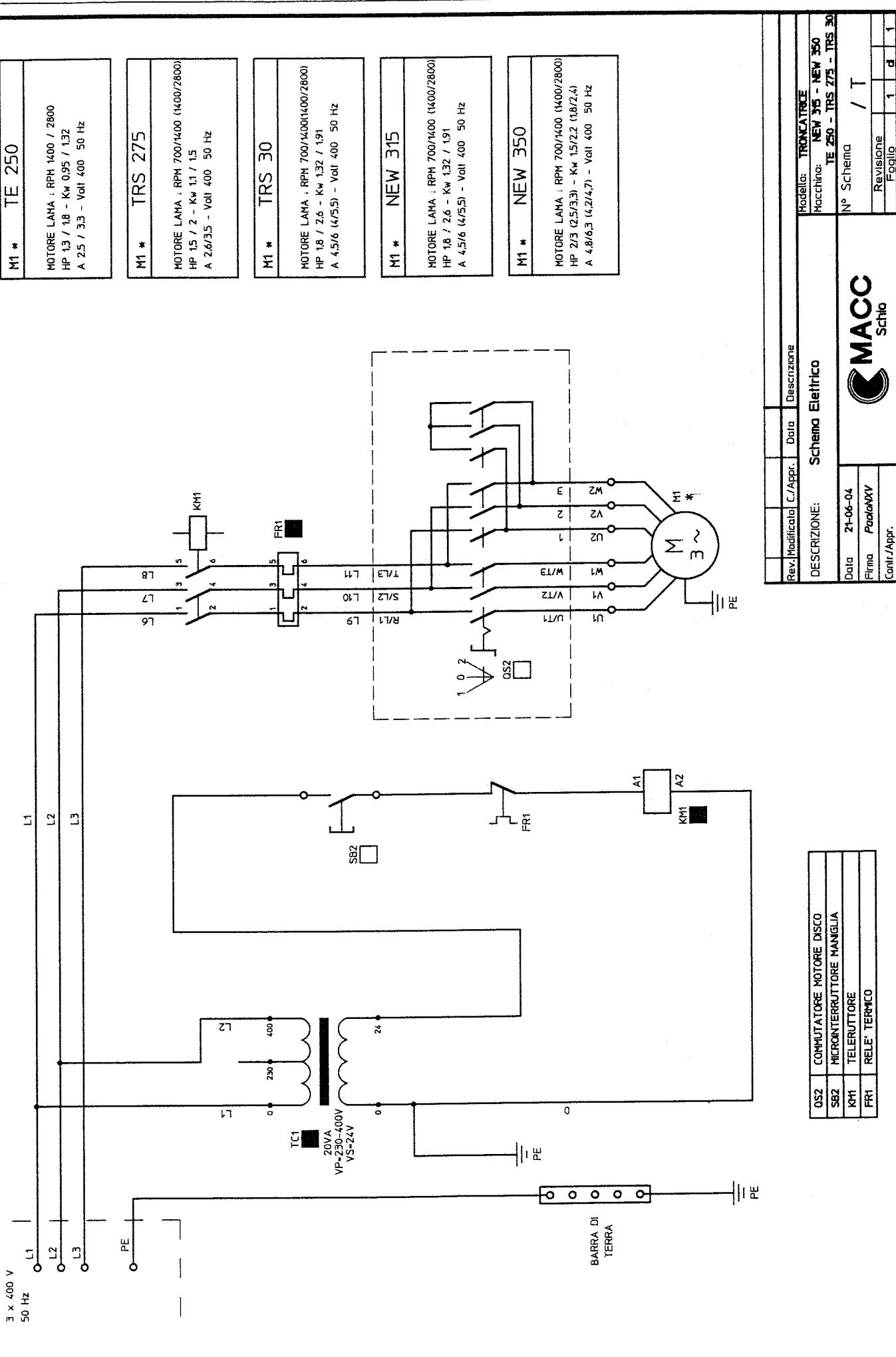
Boîte Electrique

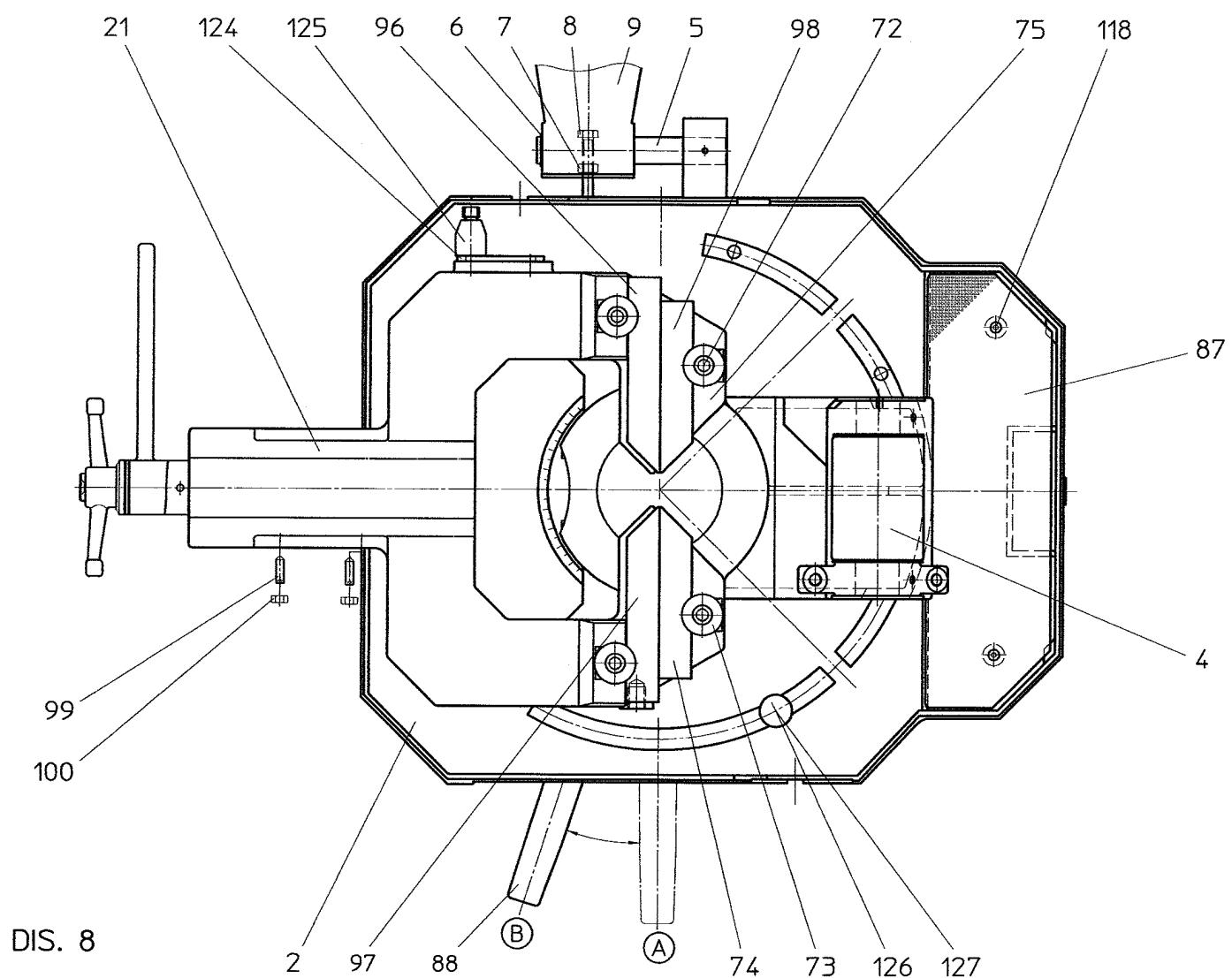
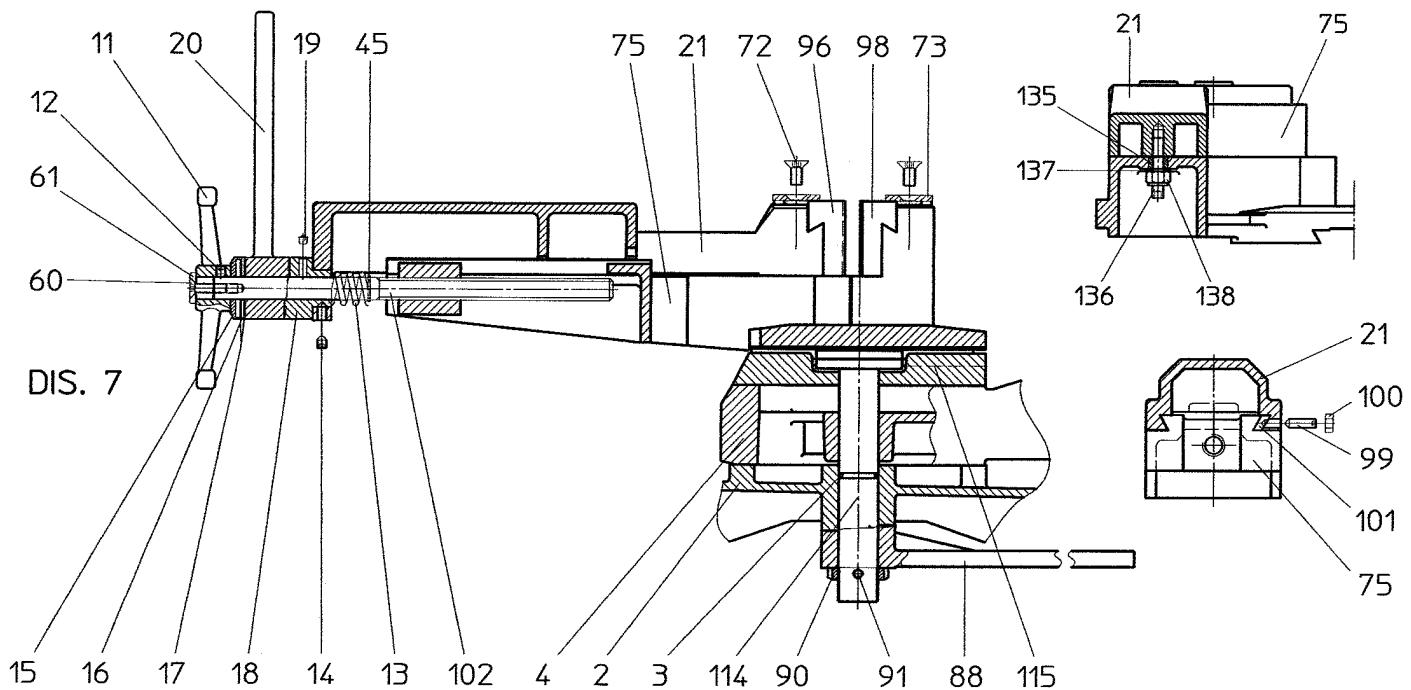
Schaltkasten

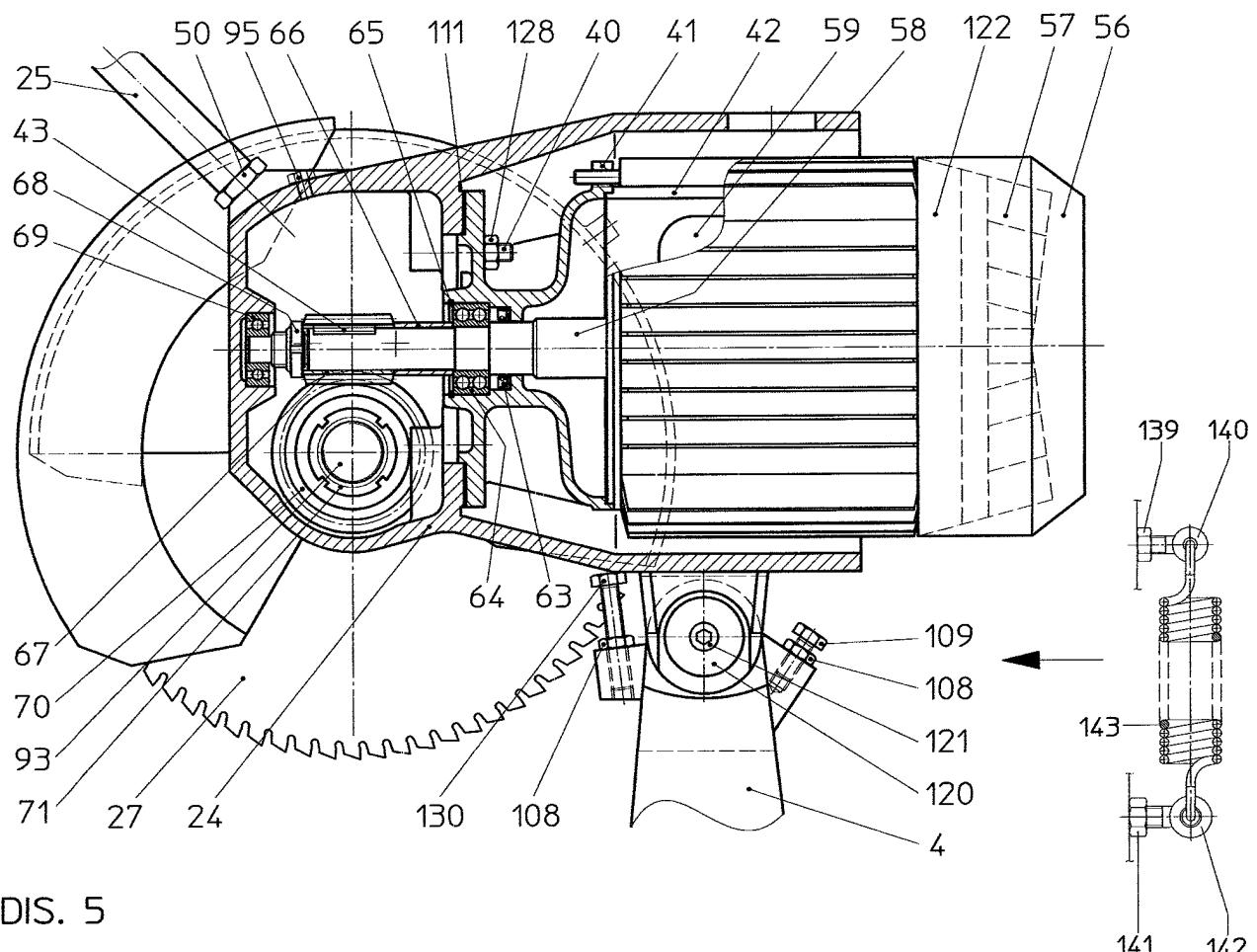
Caja Eléctrica



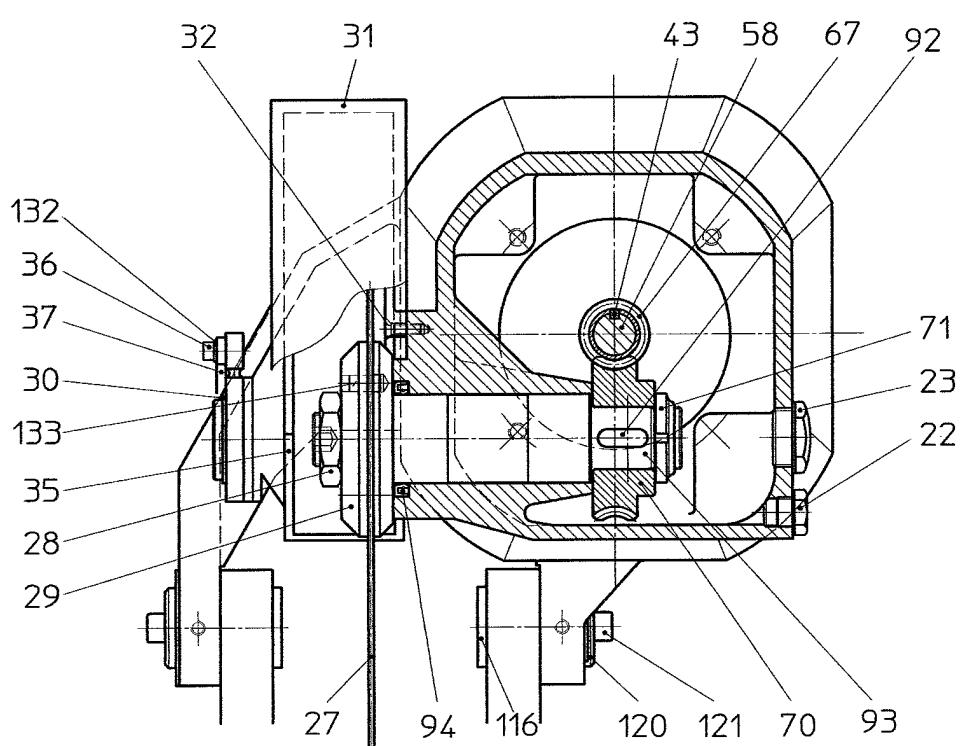
V230 / 50 1F (TIPD VECCHIO)



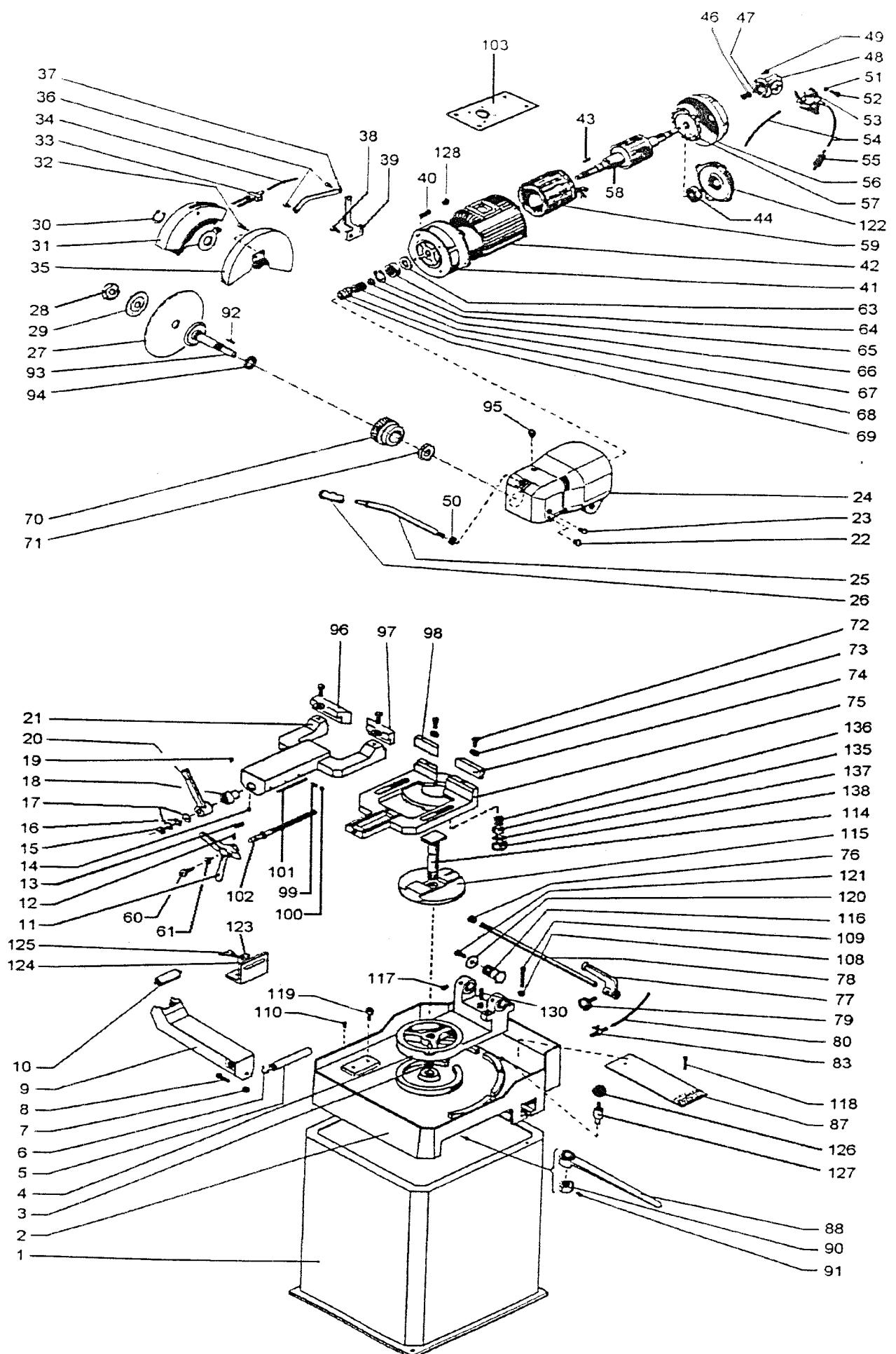




DIS. 5



DIS. 6



Dis. / Draw. 9