

SEGATRICE A NASTRO PER METALLI FERROSI  
BAND SAW FOR FERROUS METALS  
BANDSAEGEMASCHINE FÜR EISENMETALLE  
SCIE A RUBAN POUR METAUX FERREUX  
SIERRA DE CINTA PARA METALES FERROSOS  
ЛЕНТОЧНЫЙ РАСПИЛОВОЧНЫЙ СТАНОК ДЛЯ МЕТАЛЛОВ

MANUALE DI ISTRUZIONI PER L'USO - INSTRUCTION MANUAL FOR OPERATION  
BETRIEBSANLEITUNG - MANUEL D'INSTRUCTIONS POUR L'EMPLOI  
MANUAL DE INSTRUCCIONES DE USO  
РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ И ТЕХОБСЛУЖИВАНИЮ

COSTRUTTORE:  
MANUFACTURER:  
ERBAUER:  
CONSTRUCTEUR:  
CONSTRUCTOR:  
ИЗГОТОВИТЕЛЬ:

MACC s.r.l. SCHIO (VI) - ITALY

MODELLO:  
MODEL:  
MODELL:  
MODELE:  
MODELO:  
МОДЕЛЬ:

SPECIAL 411 MS

MATRICOLA:  
SERIAL NUMBER:  
KENNNUMMER:  
MATRICULE:  
MATRICULA:  
СЕРИЙНЫЙ НОМЕР:

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

2016







DICHIARAZIONE DI CONFORMITA' 'CE'  
CERTIFICATE OF CONFORMITY 'EEC'  
KONFORMITÄTSBESCHEINIGUNG 'EWG'  
DECLARATION DE CONFORMITE 'CE'  
DECLARACION DE CONFORMIDAD 'CE'  
ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ 'CE'

MACC Costruzioni Meccaniche s.r.l. - Via Lago di Albano, 10 - 36015 Schio (VI) Italy  
Tel.: 0445/575005 Fax: 0445/575006 Web site: [www.macc.it](http://www.macc.it) E-mail: [info@macc.it](mailto:info@macc.it)

- Dichiaro, sotto la propria responsabilità, che la macchina nuova descritta in appresso:
- Declares, by its own undertaking, that the new machine described below:
- Erklärt auf eigene Verantwortung, daß die nachstehend beschriebene neue Maschine:
- Déclare sous sa propre responsabilité, que la machine neuve décrite de suite:
- Declara, bajo la propia responsabilidad, que la nueva máquina descrita a continuación:
- Заявляет под личную ответственность, что описанная новая машина под названием:

SEGATRICE A NASTRO PER METALLI  
BAND SAW MACHINE FOR METALS  
BANDSAEGEMASCHINE FÜR EISENMETALLE  
SCIE A RUBAN POUR METAUX  
SIERRA DE CINTA PARA METALES  
ЛЕНТОЧНЫЙ РАСПИЛОВОЧНЫЙ СТАНОК ДЛЯ МЕТАЛЛОВ  
TIPO - TYPE - TYP - TYPE – TIPO - ТИП

**SPECIAL 411 MS**

MATRICOLA - SERIAL NUMBER - KENNNUMMER - MATRICULE – MATRICULA - СЕРИЙНЫЙ НОМЕР

ANNO DI COSTRUZIONE – YEAR OF CONSTRUCTION - BAUJAHR – ANNEE DE CONSTRUCTION  
AÑO DE CONSTRUCCION - ГОД ИЗГОТОВЛЕНИЯ

**2016**

- E' CONFORME ALLA DIRETTIVA MACCHINE 2006/42/CE, ALLA DIRETTIVA COMPATIBILITA' ELETTROMAGNETICA 2004/108/CE ED ALLA DIRETTIVA BASSA TENSIONE 2006/95/CE.
- IS IN COMPLIANCE WITH THE 2006/42/EEC MACHINERY DIRECTIVE, 2004/108/EEC DIRECTIVE ON ELECTROMAGNETIC COMPATIBILITY, 2006/95/EEC LOW VOLTAGE DIRECTIVE.
- DEN NORMEN BEZÜGLICH DER MASCHINEN-RICHTLINIE 2006/42/EWG, 2004/108/EWG RICHTLINIE ZUR ELEKTROMAGNETISCHEN KOMPATIBILITÄT, 2006/95/EWG RICHTLINIE FÜR NIEDERSPANNUNG ENTSPRICHT.
- EST CONFORME A LA DIRECTIVE MACHINES 2006/42/CEE, 2004/108/CEE DIRECTIVE SUR LA COMPATIBILITÉ ÉLECTROMAGNÉTIQUE, 2006/95/CEE DIRECTIVE BASSE TENSION.
- HA SIDO FABRICADA CONFORME A LA DIRECTIVA MÁQUINAS 2006/42/CEE, 2004/108/CEE DIRECTIVA COMPATIBILIDAD ELECTROMAGNÉTICA, 2006/95/CEE DIRECTIVA BAJA TENSIÓN.
- ОТВЕЧАЕТ ТРЕБОВАНИЯМ ДИРЕКТИВЫ ПО МАШИНАМ 2006/42/CE, ДИРЕКТИВЫ ОБ ЭЛЕКТРОМАГНИТНОЙ СОВМЕСТИМОСТИ 2004/108/CE И ДИРЕКТИВЫ О НИЗКОМ НАПРЯЖЕНИИ 2006/95/CE.

Nome della persona autorizzata a costituire il 'Fascicolo Tecnico' - Name of the person authorized to represent the 'Technical File' - Name der Person, auf die "Technical File" vertreten - Nom de la personne autorisée à représenter le 'dossier technique' - Nombre de la persona autorizada para representar a la "Ficha Técnica" - Фамилия, имя лица, уполномоченного составить техническую документацию

**Franco Luciano**

MACC Costruzioni Meccaniche s.r.l. - Via Lago di Albano, 10 - 36015 Schio (VI) Italy Tel.: 0445/575005 Fax: 0445/576006

Nome del Rappresentante Legale - Name of the Legal Representative - Name des Gesetzlichen Vertreters  
Nom du Représentant Légal - Apellido del Representante Legal - Фамилия, имя законного представителя:

**Zanella Gianfranco**

MACC Costruzioni Meccaniche s.r.l. - Via Lago di Albano, 10 - 36015 Schio (VI) Italy Tel.: 0445/575005 Fax: 0445/575006

Firma - Signature - Unterschrift - Signature - Firma - Подпись:

Schio, 2016





E' SEVERAMENTE VIETATO UTILIZZARE LA MACCHINA SENZA LIQUIDO DI TAGLIO.

IT IS STRICTLY FORBIDDEN TO USE THE MACHINE WITHOUT CUTTING FLUID.

ES IST STRENG VERBOTEN, DIE MASCHINE OHNE SCHNEIDFLÜSSIGKEIT IN BETRIEB ZU NEHMEN.

IL EST SEVEREMENT INTERDIT D'UTILISER LA MACHINE SANS LIQUIDE DE COUPE.

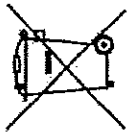
SE PROHÍBE TERMINANTEMENTE UTILIZAR LA MÁQUINA SIN LÍQUIDO DE CORTE.

É SEVERAMENTE PROIBIDO UTILIZAR A MÁQUINA SEM LÍQUIDO DE CORTE.

Категорически запрещена эксплуатация машины без смазочно-охлаждающей жидкости



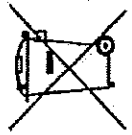
English



**Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)**

This symbol on the product or 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 waste handling of this product. The recycling of materials will help to conserve 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.

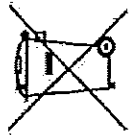
Français



**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)**

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 à un point de collecte approprié pour le recyclage des équipements électriques et électroniques. En s'assurant que ce produit est bien remis au bon endroit, vous éviterez ainsi les conséquences négatives potentielles pour l'environnement et la santé humaine. Le recyclage des matériaux aidera à conserver les ressources naturelles. Pour toute information, veuillez vous adresser à votre mairie ou à votre service de gestion des déchets de votre produit.

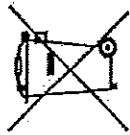
Deutsch



**Entsorgung von gebrauchten elektrischen und elektronischen Geräten (Anzuwenden in den Ländern der Europäischen Union und anderen europäischen Ländern mit einem separaten Sammelsystem für diese Geräte)**

Das Symbol auf dem Produkt oder seiner Verpackung weist darauf hin, dass dieses Produkt nicht als normaler Haushaltsabfall zu behandeln ist, sondern an einer Annahmestelle für das Recycling von elektrischen und elektronischen Geräten abgegeben werden muss. Durch Ihren Beitrag zum korrekten Entsorgen dieser Produkte schützen Sie die Umwelt und die Gesundheit Ihrer Mitmenschen. Umweltschutz und Gesundheit werden durch falsches Entsorgen gefährdet. Maximales Recycling hilft den Verbrauchern zu verstehen. Weitere Informationen über das Recycling dieses Produktes erhalten Sie von Ihrer Gemeinde, dem kommunalen Entsorgungsunternehmen oder dem Geschäft, in dem Sie das Produkt gekauft haben.

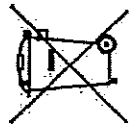
Español



**Traitement de los equipos eléctricos y electrónicos al final de su vida útil (Aplicable en la Unión Europea y en países europeos con sistemas de recogida selectiva de residuos)**

Este símbolo en su equipo o en su embalaje indica que el presente producto no puede ser tratado como residuos domésticos normales, sino que deberá entregarse en el correspondiente punto de recogida de equipos eléctricos y electrónicos. Asegurándose de que este producto es desechado correctamente, usted 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 materiales ayuda a conservar las reservas naturales. Para recibir información detallada 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.

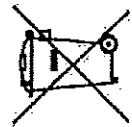
Nederlands



**Verwijdering van Oude Elektrische en Elektronische Apparaten (Toeschaarbaar in de Europese Unie en andere Europese landen met gescheiden opname systemen)**

Dit symbool op het product of op de verpakking wijst erop dat dit product niet als huishoudelijk afval mag worden behandeld. Het moet echter naar een plaats worden gebracht waar elektrische en elektronische apparaten worden gerecycled. Als u ervoor zorgt dat dit product op de correcte manier wordt "verwijderd", voorkomt u mogelijke negatieve gevolgen van het milieu en de menselijke gezondheid. Het gebruik van natuurlijke hulpstoffen kan tot het behoud van natuurlijke bronnen bijdragen. Het gebruik van natuurlijke hulpstoffen kan tot het behoud van natuurlijke bronnen bijdragen. Het gebruik van natuurlijke hulpstoffen kan tot het behoud van natuurlijke bronnen bijdragen. Het gebruik van natuurlijke hulpstoffen kan tot het behoud van natuurlijke bronnen bijdragen.

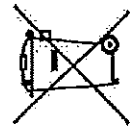
Svenska



**Omhändertagande av gamla elektriska och elektroniska produkter (Användbar i den Europeiska Unionen och andra europeiska länder med separata inamlingsystem)**

Symbolen på produkten eller emballaget anger att produkten inte får hanteras som hushållsavfall. Den skall istället lämnas in på ett särskilt uppsamlingsställe för återvinning av elektriska och elektroniska produkter. Genom att säkerställa att produkten hanteras på ett sätt bidrar du till att förbättra miljön och människors hälsa. Användning av naturliga råvaror kan bidra till att bibehålla naturliga resurser. För ytterligare upplysningar om återvinning bör du kontakta lokal myndighet eller ett särskilt uppsamlingsställe för återvinning av gamla elektriska och elektroniska produkter.

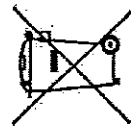
Italiano



**Traitamento dei dispositivi elettrico ed elettronico a fine vita (Applicabile in tutti i paesi dell'Unione Europea e in quelli con sistemi di raccolta differenziata)**

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 riciclo di apparecchi elettrici ed elettronici. Assicurandosi che questo prodotto sia smaltito correttamente, voi contribuite a prevenire potenziali conseguenze negative per l'ambiente e per la salute che potrebbero altrimenti essere causate dal suo smaltimento improprio. Il riciclaggio di materiali aiuta a conservare le risorse naturali. Per informazioni più dettagliate circa il riciclaggio di questo prodotto, potete contattare l'ufficio comunale, il servizio locale di smaltimento rifiuti oppure il negozio dove l'avete acquistato.

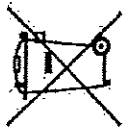
Język polski



**Porządki starych urządzeń elektrycznych i elektronicznych w krajach Unii Europejskiej i w państwach krajach europejskich mających własne systemy zbiorcze**

Ten symbol na produkcie lub jego opakowaniu oznacza, że produkt nie może być traktowany jako odpad domowy. Zamiast tego należy go oddać do odpowiedniego punktu zbiórki sprzętu elektrycznego i elektronicznego, w celu recyklingu. Poprzez upewnienie się, że dyspozycja odbywa się prawidłowo, przyczyniamy się do potencjalnym negatywnym wpływom na środowisko oraz pomagamy w zachowaniu naturalnych zasobów. Recykling materiałów pomaga w oszczędzaniu naturalnych zasobów. W celu uzyskania bardziej szczegółowych informacji na temat recyklingu tego produktu, należy skontaktować się z naszymi lokalnymi biurami, ze służbami odpowiedzialnymi za zbieranie i składowanie, z naszymi informacjami lub z naszym producentem.

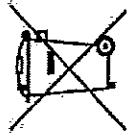
Norsk



**Avhending av gamle elektriske og elektroniske apparater (gjelder i EU og andre europeiske land med separat innsamlingsystem)**

Dette symbolet på produktet eller i emballasjen indikerer at dette produktet ikke må håndteres som husholdningsavfall. Det skal istället leveres til et spesielt oppsamlingspunkt for gjenvinning av elektriske og elektroniske utrustninger. Ved å gjøre dette, bidrar du til å forhindre mulige negative miljø- og helsekonsekvenser som kan oppstå som følge av feilaktig avfallshåndtering av dette produktet. Gjenvinning av naturlige råvarer kan bidra til å bevare naturlige ressurser. For mer informasjon om gjenvinning av dette produktet, bør du kontakte lokal myndighet eller et spesielt oppsamlingsstasjon for gjenvinning av gamle elektriske og elektroniske apparater.

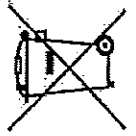
Македонски



Elektronicki aparati i delovi aparata su elektronički otpad koji se mora odvojiti od ostalog otpada i predati u posebne kontejnere za elektronički otpad.

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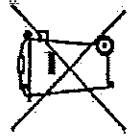
Češki



Elektronické přístroje a jejich části jsou elektrickým odpadem, který musí být oddělen od ostatního odpadu a předán do speciálních sbíratelek.

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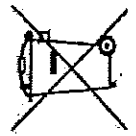
Slovenský



Elektronické zariadenia a ich časti sú elektrickým odpadom, ktorý sa musí oddeliť od ostatného odpadu a predovať do špeciálnych zberných nádob.

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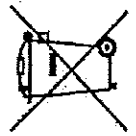
Türkçe



Elektronik cihazlar ve parçaları elektronik atıktır ve diğer atıktan ayrıştırılmalı ve özel toplama alanlarına teslim edilmelidir.

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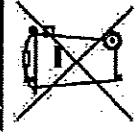
Slovensko



Elektronické zariadenia a ich časti sú elektrickým odpadom, ktorý sa musí oddeliť od ostatného odpadu a predovať do špeciálnych zberných nádob.

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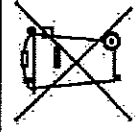
Русский



Утилизация электрического электронного оборудования (директива действует в странах Европы и других европейских странах, где действует система)

Утилизация электрического электронного оборудования (директива действует в странах Европы и других европейских странах, где действует система)

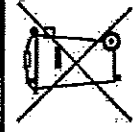
Suomi



Käytettävissä olevien elektroniikkalaitteiden hävitys (Euroopan Unionin) ja muuten

Käytettävissä olevien elektroniikkalaitteiden hävitys (Euroopan Unionin) ja muuten

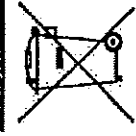
Dansk



Behandling af elektrisk og elektronisk udstyr (Spørgsmål EU og andre europaretslige lande)

Behandling af elektrisk og elektronisk udstyr (Spørgsmål EU og andre europaretslige lande)

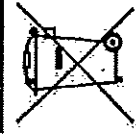
Português



Tratamento de Equipamentos Eléctricos e Electrónicos no âmbito da directiva europeia (Aplicável na União Europeia e em países Europeus com sistema de recolha selectiva de resíduos)

Tratamento de Equipamentos Eléctricos e Electrónicos no âmbito da directiva europeia (Aplicável na União Europeia e em países Europeus com sistema de recolha selectiva de resíduos)

Ελληνικά



Αποκοπή Πολυών Ηλεκτρικών & Ηλεκτρονικών Συσκευών (Ευρωπαϊκή Οδηγία)

Αποκοπή Πολυών Ηλεκτρικών & Ηλεκτρονικών Συσκευών (Ευρωπαϊκή Οδηγία)



## 1. INTRODUCTION

This operation instruction manual conforms to the requirements of the Machine Directive 2006/42/EEC. In this light, special attention has been given to safety aspects and accident prevention in the work-place for each stage in the machine's "life". Information which could be of particular assistance to the operator has been highlighted.

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.r.l. 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:

- Date and number of purchasing document
- Machine model
- Serial number
- 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. CONTENTS

### 3.1 INDEX OF CHAPTERS

- Cap 1 Introduction
- Cap 2 Information about maintenance assistance
- Cap 3 Index of chapters, drawings, diagrams and tables
- Cap 4 Description of the machine
  - Safety standards complied with during the design and construction of the machine
  - Description of the machine and its components
  - Intended and unsuitable uses of the machine
- Cap 5 Main technical data
- Cap 6 Handling and transportation
- Cap 7 Installation
- Cap 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
- Cap 9 Maintenance and repairs
  - General safety measures
  - Routine checks and maintenance
  - Description of routine maintenance
  - Possible inconveniences
- Cap 10 Information regarding environmental noise
- Cap 11 Laying off - Demolition
- Cap 12 List of spare parts

### 3.2 INDEX OF DRAWINGS, DIAGRAMS AND TABLES

ENCL. TYPE	DESCRIPTION	ENCL No.	CHAP.
Table	Cutting capacity - Selection of blade - Cutting speeds	1	08.03.00
Drawings	Handling and transportation- Installation plan	2	6 - 7A/7B
Drawings	Blade guides - Machine assembly	3	7C - 8.3 - 9.3
Drawings	Assembly: bench and rotation pin/ bench and bar stop	4	8.3
Drawings	Tensioning and idle pulley	5	7C
Drawings	Reduction unit and motor pulley		
Drawings	Spring tensioning adjustment - Control panel	6	7F
Diagram	Hydraulic diagram - Wiring diagram	7	

## 4. DESCRIPTION OF THE MACHINE

### 4.1 Safety standards complied with during the design and construction of the machine

The machine produced by us is in compliance with:

- **2006/42/EEC Machinery Directive** (ex 98/37/EEC, as amended by the 89/392EEC, 91/368/EEC, 93/44/EEC and 93/68/EEC Directives).

The following Standards apply:

- EN ISO12100-1	2005	Safety of machinery. Basic concepts, general principles for design, basic methodology.
- EN ISO12100-2	2005	Safety of machinery. Basic concepts and general principles for design. Specifications and technical principles.
- EN 418	1994	Safety of machinery. Emergency stop devices, functional aspects - design principles.
- EN 983	1996	Safety requirements related to systems and components for hydraulic and pneumatic transmissions.
- EN 1037	1995	Isolation and energy dissipation. Prevention of unexpected start-up.
- EN 1088	1995	Interlocking devices associated with guards — Principles for design and selection.
- EN 60204-1	1998	Safety of machinery. Electrical equipment of machines. General requirements.
- EN 294	1992	Safety distances to prevent danger zones being reached by the upper limbs.

- **89/336/EEC Directive on electromagnetic compatibility** as amended by the 92/31/EEC, 96/68/EEC, 93/97/EEC and 93/68/EEC.

The following Standards apply:

- EN 55014-1	2000	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus.
- EN 61000-3-2	2000	Electromagnetic compatibility – Limits for harmonic current emissions.
- EN 61000-3-11	2000	Electromagnetic compatibility (EMC) – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems.
- EN 55022	1998	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement.
- EN 61000-4-2	1995	Electromagnetic compatibility (EMC) Part 4: Testing and measurement techniques Section 2: Electrostatic discharge immunity test. EMC Base Publication.
- EN 61000-4-4	2004	Electromagnetic compatibility (EMC) Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test.
- EN 61000-4-6	1996	Electromagnetic compatibility (EMC) Part 4: Testing and measurement techniques. Section 6: Immunity to conducted disturbances, induced by radio-frequency fields. 2006/95/CE Low Voltage Directive . Directive 2003/11/EC Restrictions on the marketing and use of certain dangerous substances and preparations (pentabromodiphenyl ether, octabromodiphenyl ether). Directive 2002/44/EC of the European Parliament and of the Council of 25 June 2002 on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (vibration) (sixteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC).

### 4.2 DESCRIPTION OF THE MACHINE AND ITS COMPONENTS

The **SPECIAL 411 M/S** band sawing machine produced by MACC has a sturdy frame made from welded and painted sheet-steel. The upper surface is designed to allow the complete draining away of the cutting fluid. The band support bow is made in cast iron, with a suitable dimension to provide the necessary stiffness and precision to the cutting unit. The vice unit is made of cast-iron and clamps the material to be cut securely. The numerical control device allows the required length to be preset and provides high repeated-cut precision.

The coolant pump is fitted to the machine base.

A electromechanical device with pressure switch for band tightening, prevents the band from advancing in the event of insufficient tension and moreover allows ideal operation conditions to be restored at any moment. The main switch is located on the front panel. The blade is protected by a guard with interlock which covers the upper area and the handwheels and by two adjustable lower guards which protect the operator from ejected shavings and coolant. The machine is supplied with a set of service spanners and rod support.

### 4.3 INTENDED AND UNSUITABLE USES OF THE MACHINE

The **SPECIAL 411 M/S** band sawing machine 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

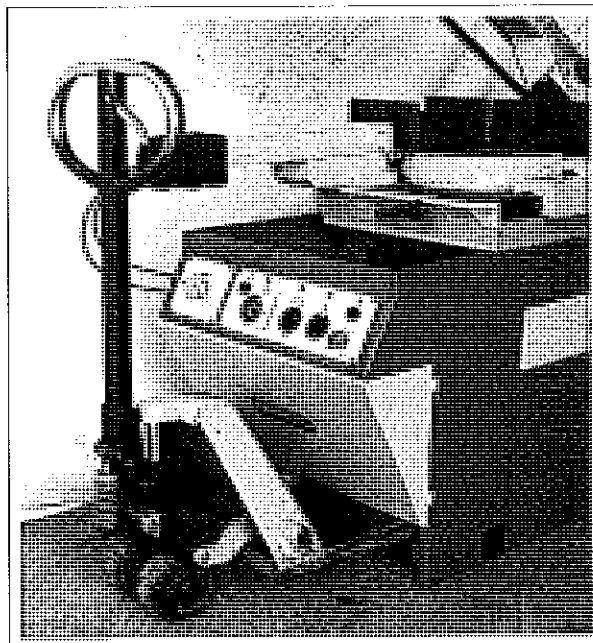
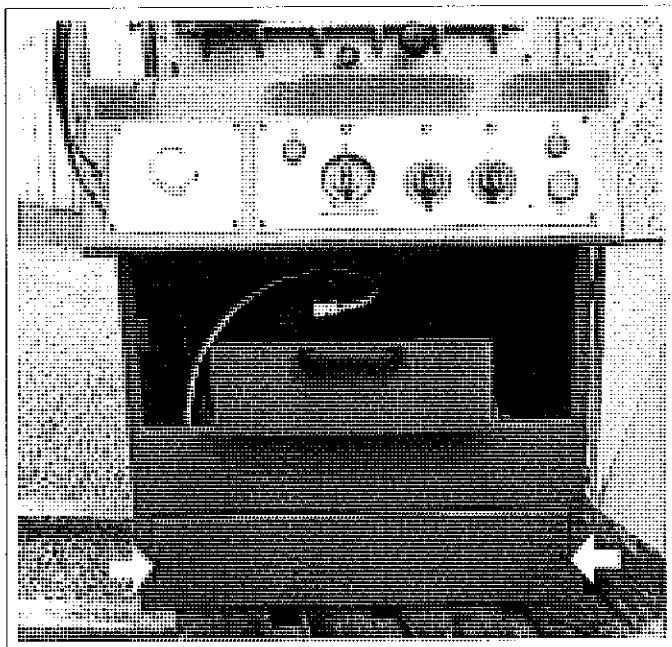
Under no circumstances should the following data be altered, this is in order to protect the correct functioning of the machine and to avoid creating safety risks for the operator.

Three phase power supply	
Motor power	0.9 - 1.6 kW
Motor revolutions	700 - 1420 rpm
Gearbox reduction ratio	i = 1 : 20
Cutting speed	38 - 77 m/1'
Control unit motor	0.37 kW
Electric pump	0.06 kW
Fly wheel dimensions	350 mm
Blade size (length x width x thick)	3200 x 27 x 0.9 mm
Cutting thickness	1,2 mm
Cutting angle	60° dx - 45° sx
Material clamping vice max opening	400 mm
Jaws height	150 mm
Jaws length	210 mm
Bed height	950 mm
Clamping force	3920 N (400 kg)
Coolant tank capacity	15 litri ~
Machine weight	~5640 N (575 kg)

## 6. HANDLING AND TRANSPORTATION

For safe handling and transportation use a lift truck for movement indoors also indicated on the drawing 3 Encl. 2. Keep the machine in its normal position and avoid turning it upside down. All the necessary measures should be taken to stop the machine from tipping over. If the machine is moved from its position, use a forklift as shown in the photograph below. To carry out this operation, remove the guard situated on the bottom at the front of the machine base by taking out the two screws indicated by the arrows. Insert the forks of the lifter and move the machine. Then re-fit the guard.

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



## 7. MACHINE INSTALLATION

### A. MACHINE CHECK

The machine should be checked to make sure that it has not been damaged during transportation and handling. If the machine appears to have been damaged, contact MACC immediately. Fit all the supplied accessories onto the machine such as the bar stop 116 and the roller arm 107 (DRAW. 4 ENCL.2).

### 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. Refer to drawing 4 Installation Plan SPECIAL 411 M/S All.2.

### C. BAND ASSEMBLY

Remove the bow guard 2 by unscrewing the screws (DRAW. 11 ENCL.5), fit the band by inserting it first between the bearings of the blade guide heads and then on the two pulleys, tighten the blade slightly by means of the hand wheel 28 and replace the bow guard. Check that the band is fitted with the correct direction of teeth, as shown in drawing 5 enclosed document 3. Make sure that the band type (dimensions 3200x27x0.9) and its teeth pitch are suited to the material to be cut.

### 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%

### F. SPRING TENSIONING ADJUSTMENT

Wind the spring by turning screw 49 up to 47 mm as shown in DRAW. 13 ENCL.6.

## 8. MACHINE START UP AND OPERATION

### 8.1 DEVICES AND THEIR LOCATION

(The location of the devices described is shown on the SPECIAL 411 M/S installation plan ENCL.2).

Cod. 203 CHANGE OVER SWITCH

Cod. 226 EMERGENCY BUTTON

Cod. 16 LOCKING VICE

Cod. 116 BAR STOP

### 8.2 TOOLS SUPPLIED

no. 1 hexagonal bar wrench (3)

no. 1 hexagonal bar wrench (5)

no. 1 hexagonal bar wrench (6)

no. 1 hexagonal bar wrench (8)

no. 1 hexagonal bar wrench (10)

### 8.3 OPERATION

#### CHECKS TO CARRY OUT BEFORE EACH CUT

A. Tension the band by rotating the hand wheel 28 to the end of stroke (mechanic stop), (DRAW. 5-6-7 ENCL.3). Remember at the end of the operation to loosen the hand wheel to avoid the slackening of the band.

B. Check that the hand indicates the required cutting angle (vice scale).

C. Make sure that the rotating plate are locked by means of the hand wheel 59 (DRAW. 8 ENCL. 3).

D. With the motor off, lower the bow and check that at the end of stroke, the band does not touch the rotating plate 13. If the band does touch, adjust the screw located on the rotating plate (DRAW. 8 ENCL.3). By adjusting screw, the width of the working stroke can also be established.

E. Make sure that the piece to be cut is properly secured in the vice.

F. Make sure that the cooling liquid is circulating in the machine.

**IT IS STRICTLY FORBIDDEN TO USE THE MACHINE WITHOUT CUTTING FLUID.**

G. When starting the motor, make sure that the band rotates in the direction of the arrow shown in DRAW. 5-6-7 ENCL. 3.

H. To obtain maximum cutting accuracy, the unit must be located the nearest possible to the work piece.

Clamp the work piece with the vice. release the blade guide arm 64 (DRAW.9 ENCL.6) with handle 128 and move it near the vice jaw so that it doesn't touch it during the cutting operation, then secure it again. When carrying out this operation, make sure that the blade guide guard does not come out of the bow guard leaving a part of the blade exposed.

Make sure the pressure gauge on the hydraulic unit indicates a pressure of about 30 bar otherwise place it on this value by the controller of the unit itself.

#### CUTTING OPERATION

A. Before starting to cut, if the cutting inclination is not as required, correct it or change it by pulling the knob 91 and turning the rotating plate 13 until the required position is reached. If the position is not one of the normal set positions, fasten the rotating plate using the hand wheel 59 (DRAW. 8 ENCL. 3).

B. Position the vice at 3-4mm from the part to be cut, using the handwheel 20 (Draw.10 Att. 4) ALL.4).

C. SEMIAUTOMATIC cutting operation: turn on the machine using the main switch 228 and rotate the changeover switch 203 onto the required speed. The oil pump start-up is obtained by the RESET A key, press again the RESET key to bring the saw frame to the high position.

If the machine does not perform any movement whichever button is pressed, the two phases of the line cable must be inverted this inverts the direction the oil pump motor rotates in.

This instrument enables the top and bottom cutting limits to be programmed directly by means of the control keyboard. To memorize the top position limit, cutting starting point, bring the blade close to the material to be cut and position it at about 5mm from it using keys C and F. To memorize the position, press key D(Start). Each time the key D(Start) is pressed, automatically the cutting start point is memorized. To memorise the bottom cutting limit, bring the blade to the desired low point using the key F and press the button E (Memory), which will blink 3 times, indicating memorization is completed.

To perform a cut after memorising the selected top and bottom limit, start the cut cycle pressing the Start D button.

Before performing this last operation, make sure the descent regulator 57 is closed, in order to prevent the blade from descending too quickly onto the piece to be cut.

Position the part on a work surface. Press the button Start D to start a cut cycle. The blade starts to rotate, closes the vice and the bow starts to go down. By means of the adjuster 57, it is possible to gradually change the descent speed until the desired one is reached.

Once the bottom limit programmed at the beginning has been reached, the arc returns to its starting position, the blade stops and opens the vice.

To stop the cutting cycle, press the RESET key A. In order for the bow to return to its cutting start position, press RESET key A another time.

To use the coolant, key (led) B must be on.

If the machine remains idle for more than 3 mins., the oil pump automatically switches off. To switch it back on again, press RESET A push button.

In the middle of the panel there are 6 red emergency LEDs 1,2,3,4,5 and 6.

Led 1+3 indicates that the blade is broken or is not under tension.

Led 2+3 indicates that the blade protection guard is open.

Led 3 indicates that both bow limit switches are pressed (if there is a potentiometer, descent or ascent readout failure).

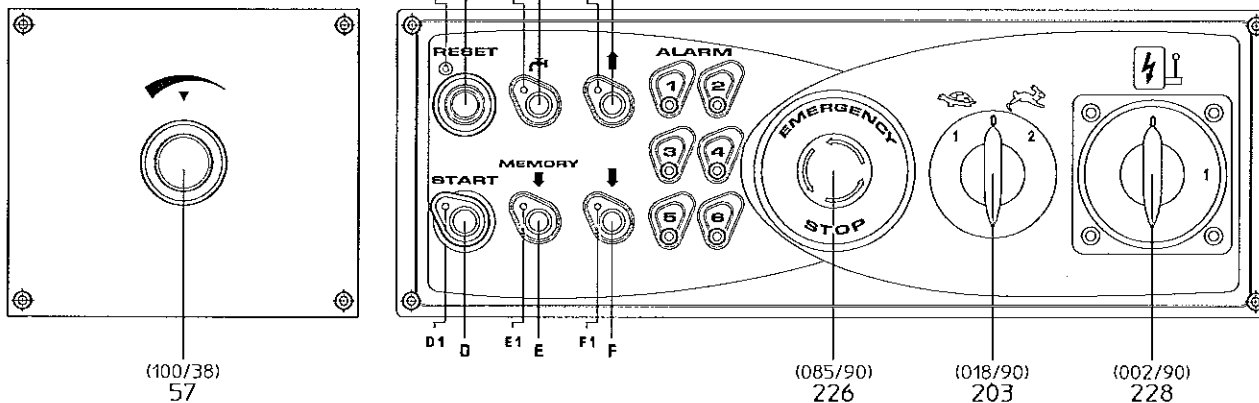
Led 4+3 indicates that the emergency button is active 226.

Led 5+3 indicates that the blade motor overload cut-out relay has tripped.

Led 6+3 indicates that the oil pump motor overload cut-out relay has tripped.

After resolving the causes of the alarm, press key Reset A to remove the emergency (led) from the control panel.

**PANNELLO COMANDI "MACC 8.0"**  
**CONTROL PANEL "MACC 8.0"**



- A. RESET button
- B. motorized cooling pump ON-OFF button
- C. bow up button
- D. START button
- E. bow low limit memorization button
- F. bow down button
- 1. led indicating that the blade is broken or is not under tension
- 2. open bow guard led
- 3. Led 3 indicates that both bow limit switches are pressed (not foreseen in case of potentiometer).
- 4. emergency stop led
- 5. blade motor overtemperature led (thermal resistance to be reset)
- 6. oil pump motor overtemperature led (thermal resistance to be reset)
- A1. RESET button led
- B1. motorized cooling pump button led
- C1. bow up button led
- D1. START button led
- E1. bow bottom limit setting key led
- F1. bow down button led
- 57. Descent regulator
- 203. Change-over switch
- 226. emergency button
- 228. Main switch

Electronic panel used to control the semiautomatic cycle and relative functions by means of a silk-screened membrane keyboard. The system is controlled by a microprocessor, which displays all emergency messages and movements by means of LEDs. Machine operation is facilitated by the presence of a luminous signal on each key.

**D. Manual cutting cycle (optional):**

Turn the main switch 228 and the changeover switch 203 into the desired speed. Switch on the hydraulic unit by pressing the RESET button of the keyboard MACC 8, press again the RESET button to bring the bow at the desired up position, by means of the handwheel 20 place the vice close (3-4mm) to the material to be cut, take hold of the handle 36 located at the end of head lever and press the button to start the manual cutting mode, press the button again to start the manual cutting operation. Press the button "↑" (UPSTROKE) to close the vice, press the button "↓" (DOWNSTROKE) to open the vice.

Press RESET to set the semi-automatic cutting cycle.

To cut in series, position the bar stop 116 in correspondence of the size required. Fix it into position by using the handwheel 121 (DRAW. 10 ENCL. 4).

E. For cuts on the left, loosen the screw 93 move the clamp unit towards the right and re-tighten screw 93 (DRAW. 8 ENCL.3).

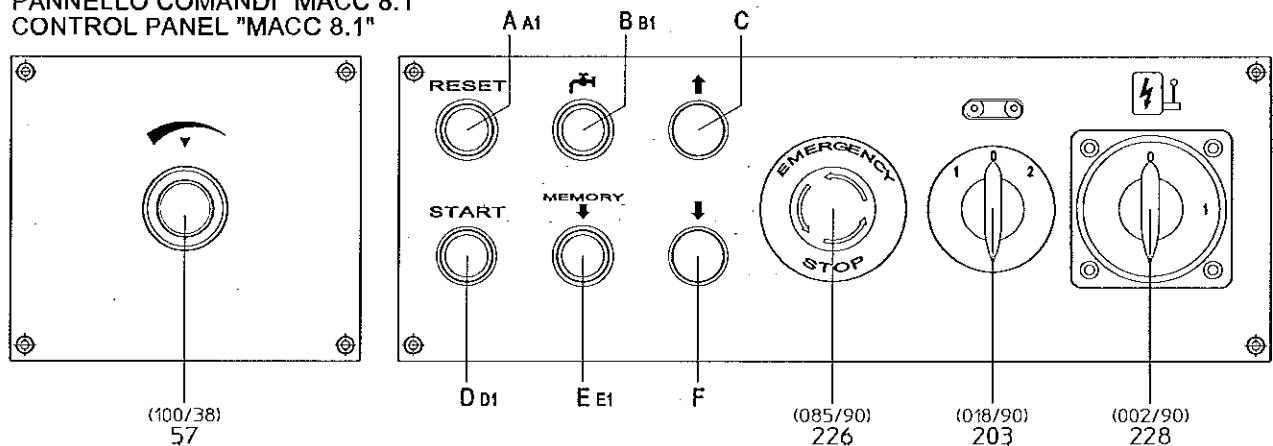
F. To replace the band, carry out the same operations used to assemble the band (chapter 7C).

G. For the choice of blade see table DRAW. 1 ENCL.1.

H. Every time the machine is switched on, when it switches off or if the emergency push-button 160 has been pressed, set the machine to the starting position and press the RESET button to start the cycle again (in the third case, release the emergency button first).

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

PANNELLO COMANDI "MACC 8.1"  
CONTROL PANEL "MACC 8.1"



A.	RESET button
B.	motorized cooling pump ON-OFF button
C.	bow up button
D.	START button
E.	bow low limit memorization button
F.	bow down button
A1.	RESET button warning light
B1.	motorized cooling pump button warning light
D1.	START button warning light
E1.	bow bottom limit setting key warning light
57	Descent regulator
203	Change-over switch
226	emergency button
228	Main switch

#### 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 of the bow guard .**
- C. Check that the safety microswitches and the emergency button are functioning correctly . Test them during a loadless machine cycle .**
- D. 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 .
- E. 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 . Do not remove the guards .
- 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



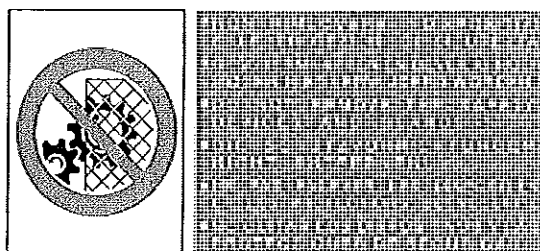
MACC Costruzioni Meccaniche Srl  
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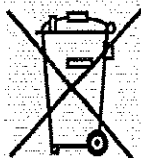
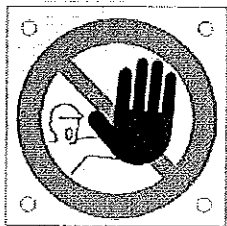
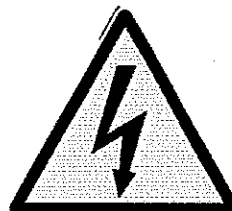
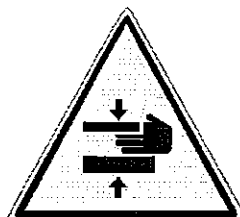
Modello - Model	Massa - Weight (Kg)
Matricola - Serial number	Anno - Year



Centralina idraulica - Hydraulic unit: AGIP ARNICA 32  
 Scatola ingranaggi - Gearbox : AGIP BLASIA 220  
 Punti a grasso - Grease points : AGIP GREASE MU 2



- METTERE IN TENSIONE LA LAMA RUOTANDO IL VOLANTINO FINO A FINE CORSA.  
 - PUT TENSION ON THE BLADE BY ROTATING THE HANDWHEEL TO THE END OF STROKE.  
 - DAS SÄGEBAND SPANNEN, INDEM DAS HANDRAD BIS ZUM ENDE GEDREHT WIRD.  
 - METTRE EN TENSION LA LAME EN TOURNANT LE VOLANT JUSQU'À LA FIN DE COURSE.  
 - TENSIONAR LA CINTA GIRANDO EL VOLANTE HASTA EL FINAL DE CARRERA.



COLLEGATO  
CONNECTED  
230 VOLT

COLLEGATO  
CONNECTED  
400 VOLT

### 9. MAINTENANCE AND REPAIRS

#### 9.1 GENERAL SAFETY MEASURES

- A. Lockable main switch . Use the padlock in the event of machine failure or replacement of the band . 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
100 hours	Adjustment blade guide bearings
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	Add hydraulic unit oil with AGIP ARNICA 32 ( Until the level )

#### 9.3 Description of routine maintenance

##### A. Adjustment of the blade guide bearings

Loosen the screw 69-A , rotate the cams 72 , so that the blade guide bushings vertically position the blade in axis ( DRAW. 5-6-7 ENCL. 3 ) . Tighten the dowels 67-A until the blade secured. Loosen the dowels slightly ( about 1/10 of a turn ) . The front blade guide must be positioned as near as possible to the piece to be cut . Check every 3 months the existing tolerance between the blade guides , making sure that it does not exceed the blade thickness of one tenth of a millimetre , so as to avoid inaccuracies in the cut squaring . Periodically check with mounted blade that the blade guide bearings rotate freely .



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

Remove jaw 27 (DIS.8 ALL.3), withdraw vice 16 completely by lowering the lever 22. Clean and grease the mobile parts of the vice 16-17. In case of sliding difficulties or play the clamp guides carry out the following operations: loosen nut 57-A, adjust dowel 56-A and secure nut 57-A.

### C. Cleaning of the coolant tank.

Empty the coolant from the tank 42 and collect the coolant in a container for future disposal. Clean away 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. Fill the tank with the amount and liquid stated earlier (15 liters).

## 10. INFORMATION REGARDING ENVIRONMENTAL NOISE

An environmental noise test carried out on the SPECIAL 411 M/S band saw machine , identical to the machine to which these operation instructions refer, has given the following results:

### ACOUSTIC RADIATION PRESSURE

1.  $L_{Aeq} = 83,2$  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).

The considerable data are the result of tests made under the D. lgs. 277/1991 in the implementation of the directives nr. 80/1107/CEE, nr. 82/605/CEE, nr.84/477/CEE, and 88/642/CEE.

## 12. LAYING OFF AND DISMANTLING

### 12.1 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 the cooling liquid to avoid corrosion.
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, dry, dust-free place.

### 12.2 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:

Steels	Electric and electronic components	Light alloy	Cast iron	Copper bronze	Plastic and rubber	Various
Shafts, Flanges, Pivots	Motor winding	Motor casing	Structural parts	Bushings	Seals	
Rollers	Electronic panel	Cylinders			Handwheels	
Base					Handles	
Springs						
Tank						
Plate with electrical components	Push buttons and control systems (relays, transformers, etc.)				Cable support chain	
Guards						

Used oil and materials must be disposed of according to 75/439/EEC and 87/101/EEC Directives and to country specific regulations.

The disposal of electrical components is provided for by European Directives 2002/95/CEE and 2002/96/CEE.




### 13. LIST OF SPARE PARTS

POS.	DESCRIPTION	CODE	Q.TY
1	Bow	012-C/36	1
2	Bow guard	056/42	1
3	Cover plate	057/42	1
4	Washer $\varnothing 12,5/45$ sp.6	040/06	4
5	Base	014/42	1
6	Bearing 6207 2RS	103/32	2
7	Idle pulley spacer	016/36	1
8	Vice gib	008/38	1
9	Idle pulley	015/36	1
10	Blade tightener pin	014/36	1
11	Blade tightener guide plate	046/32	2
12	Bench	025/42	1
13	Rotating plate	026/42	1
14	Coolant pump	090/90	1
15	Blade tightener screw	039/32	1
16	Vice	005/38	1
17	Vice support	028/42	1
18	Vice threaded pin	009/38	1
19	Vice screw	059-1/36	1
20	Vice handwheel	072/36	1
21	Vice cylinder	059/36	1
22	Vice lever	023/38	1
23	Cage AXK 20 35	109/32	1
24	Blade tightener bushing	041/38	1
25	Thrust bearing AS 20 35	108/32	2
26	Belleville washer 40x20,4x1,5 DIN 2093	458/95	18
27	Vice jaw	010/42	1
28	Blade tensioning handwheel	058/35	1
29	Micro ERSCE 100 00 AI	022/90	1
30	Guard	010/35	1
31	Counter-vice loading side	004/39	1
32	Counter-vice exit side	005/39	1
33	Cylinder hinge + pin	041/39	1
34	Joint fork M10x1,25 d 25/35	040/39	1
35	Handle rod	035/32	1
36			
37	Worm gear reduction unit shaft	181/36	1
38	Worm gear reduction unit R=1/20	100/42	1
39	Motor M100 V400/50 8/4P B5 hp1,2/2,2	127/80	1
40			
41	Guide barrel	015/39	1
42	Chip tray	001-B/39	1
43	Cooling tank	001-C/39	1
44	Valve EUROPA $\varnothing 3/8"$	035/96	1
45	Bow cylinder	059/38	1
46	Micro ERSCE 100 00 S5 I	030/90	1
47			
48	Bearing 6208 2RS SKF	054/35	1
49	Spring lever	032/14	1
50	Eye tie rod M12x50 UNI 6058	035/38	1
51	Revolving plate block pin	024/39	1
52			
53	Spring pin	017/32	1
54			
55	Motor pulley	006/36	1
56	Washer for rotating plate	020/14	3
57	Descent regulator	100/38	1
58	Blade guide fastening plate	034/32	1
59	Handle M12x30	044/09	1
60	Rear guard grate	001-D/39	1
61			
62	Knob rod support	012/42	1
63	Bow guard hinge	013-A/36	2
64	Mobile blade guide rod	027-A/32	1

POS.	DESCRIPTION	CODE	Q.TY
65	Valve "MINI" MF 1/4	031/96	1
66	Front blade guide	026/35	1
67	Vice side stop block	031/42	2
68	Blade guide plate	034/42	2+2
69	Bow support	027/42	1
70	Rear guard	042/38	1
71	Bearing 608 2RS	055/35	2+2
72	Blade guide eccentric bushing	027/35	2+2
73			
74	Rear blade guide	025/35	1
75	Fixed blade guide rod	028-A/32	1
76			
77	Rotating pin	011/42	1
78	Bearing 32008 XA	015/38	2
79	Rotation pin nut	027/38	1
80	Brush	022/42	1
81	Brush support	024/42	1
82	Brush stop bush	023/42	1
83			
84	Graduated rule	011/39	1
85	Millimetric rule	012/39	1
86	Hydraulic cylinder bracket	061/38	1
87	Cylinder bracket pin bush	070/38	2
88	Spring holder shelf	013/42	1
89	Return spring	031/38	1
90	Sphere 3/8"	101/38	1
91	Eye tie bushing L.72 M10	103/11	1
92	Blade guide guard	035/42	1
93	Handle M8x20	025/21	1
94	Vice lever handle ø16 90mm	086/38	1
95	Handle	146/05	1
96	Micro	328/90	1
97	Antigrease ring	020/35	2
98			
99	Potentiometer	099/90	1
100	Potentiometer guard	018/42	1
101	Potentiometer support bracket	115/38	1
102	Potentiometer bush	044-A/41	1
103	Pin return spring	025/11	1
104	Positioning pin	009/39	1
105	Left counter-vice bracket	009/42	1
106	Right counter-vice bracket	009/42	1
107	Roller support	019/39	1
108	Roller	045/36	1
109	Control panel	053-C/38	1
110	Eye tie rod M8x40	525/95	1
111	Eye tie rod M8x70	527/95	1
112			
113			
114			
115			
116	Millimetric rod	077/32	1
117			
118	Metric gauge	080/32	1
119	Stopping rod	016/39	1
120	Stopping rod support	079/32	1
121	Handwheel ø40 M8x25	077/25	1
128	Handle M12x45	037/32	1
130	Front cover	001-E/39	1
146	Hydraulic unit	074/90	1
147	Motor M71 4P 3F kW0.37 B5	220/80	1
148	Bow lowering solenoid valve	351/90	1
149	Vice solenoid valve	350/90	1
150	Block solenoid valve	074-C/90	1

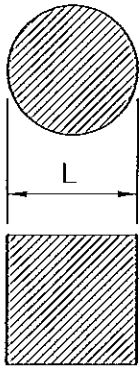
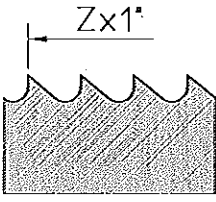
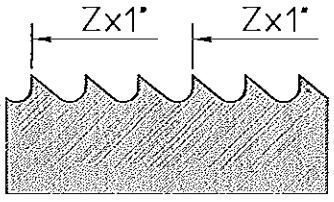
POS.	DESCRIPTION	CODE	Q.TY
200	Plate with electrical components	054-C/38 131/38	1
201	Control panel	053-E/38 053-G/38	1
202	Fuse 10x38 gG 4A	204/90	2
203	Change-over switch VEMER CA0120000R03	018/90	1
204	Screw TCEI M4x6 DIN 912	120/95	2+2
205	Transformer 100VA 0-230-400V 0-24V	044/90	1
206			
207			
208	Fuse 10x38 aM 10A	206/90	3
209	Fuse carrier WEBER PCH3x38	092/90	1
210	Omega holed bar	048/90	1
211	Omega holed bar	047/90	1
212	Terminal CABUR CBD.2	222/90	13/15
213			
214			
215	Remote control switch LC1-D12	032/90	3
216	Terminal CARBUR CBD 4	225/90	3
217			
218	Thermal relay LR2-D1308/10/12	053/90	2
219	Fuse carrier WEBER PCH1x38	093/90	1
220	Fuse carrier WEBER PCH2x38	094/90	2
221	Fuse 10x38 aM 6A	205/90	1
222			
223			
224	Button march TCQZB4BA2	086/90	3
225			
226	Emergency button	085/90	1
227			
228	Main switch VEMER CA0120003207+G595	002/90	1
228	Yellow terminal cover G3228	065/90	1
229	Earth connection bar	050/90	1
230	Control panel seal	054/38	1
231	Fuse 10x38 aM 2A	356/90	2
232	Board SMD200	357/90	1
233	Luminous button march	087/90	3
234	Filter RC400 for single phase pump	354/90	1

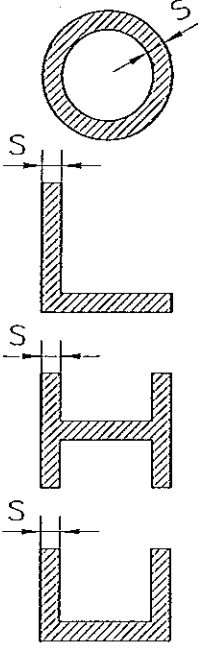
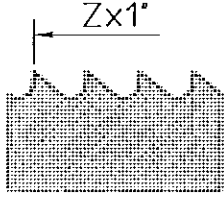
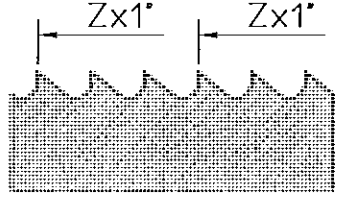
# CAPACITA' DI TAGLIO - Special 411 M-CSO-S

CAPACITA' DI TAGLIO CUTTING CAPACITY - CAPACITE DE COUPE SCHNITTKAPAZITAET - CAPACIDAD DE CORTE			
90°	300	280	200 x 400
45° Sinistra - left - links - gauche	180	160	110 x 180
45° Destra - right - droite - rechts	240	220	120 x 240
60° Destra - right - droite - rechts	140	140	140 x 140

## SCELTA DELLA LAMA

SCELTA DELLA LAMA  
SELECTION OF BLADE  
CHOIX DE LA LAME  
WAHL DES SAEGERBLATTS  
SELECCION DE LA HOJA

	L mm		
$\leq 40$	8		6/10
$>30 < 80$	6		5/8
$>60 < 90$	4		4/6
$\leq 100$	3		3/4

	S mm		
$\leq 1,5$	14		-
$>1 < 2$	10		10/14
$>2 < 4$	8		8/12
$>4 < 8$	6		6/10
$>6 < 12$	6		5/8
$\leq 12$	4		4/6

Velocità di taglio La macchina è dotata di due velocità di taglio		38-77 m/1'
Cutting machine The machine is equipped with two cutting speeds		38-77 m/1'
Vitesse de coupe La machine est dotée de deux vitesses de coupe		38-77 m/1'
Schnittgeschwindigkeit Die Maschine ist mit zwei Schnittgeschwindigkeiten ausgestattet		38-77 m/1'
Velocidad de corte La máquina esta dotada de dos velocidades de corte		38-77 m/1'
Materiale Material Materiel Material Material		Velocità di taglio m/1' Cutting machine m/1' Vitesse de coupe m/1' Schnittgeschwindigkeit m/1' Velocidad de corte m/1'
Acciai da costruzione Fe37+Fe42 Structural steel Fe37+Fe42 Aciers de construction Fe37+Fe42 Baustahl Fe37+Fe42 Acero de construcción Fe37+Fe42		Pieni Solid Pleins Volles Material Pies 77 Profilati Structural steel Profilés Profile Perfiles 77
Acciai da costruzione Fe50+Fe70 Structural steel Fe50+Fe70 Aciers de construction Fe50+Fe70 Baustahl Fe50+Fe70 Acero de construcción Fe50+Fe70		77
Acciai al carbonio C40+C60 Carbon steel C40+C60 Aciers au carbone C40+C60 Kohlenstoffstahl C40+C60 Acero de carbono C40+C60		77
Acciai legati Alloyed steel Aciers alliés Legierter Stahl Acero aleado		38
Acciai inox Stainless steel Aciers inoxydables Rostfreier Stahl Acero inoxidable		38
Ghisa grigia Grey cast iron Fonte grise Grauguß Fundición gris		77
Leghe d'alluminio Aluminium alloys Alliages d'aluminium Legierungen aus Aluminium Aleación de Aluminio		77
Bronzi Bronze Bronze Bronze Bronces		77

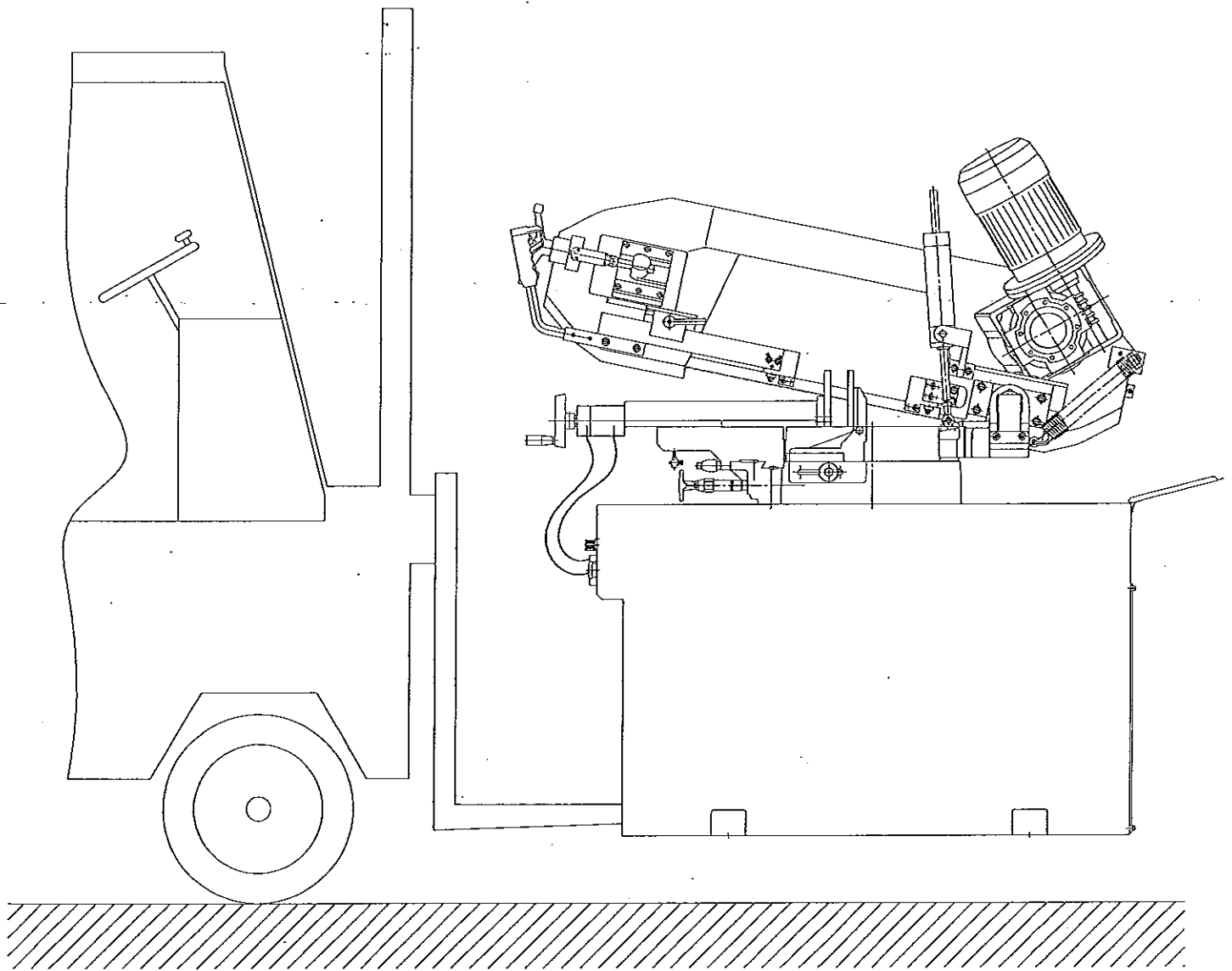
# MOVIMENTAZIONE E TRASPORTO

Handling and transportation

Manutention et transport

Handhabung und Transport

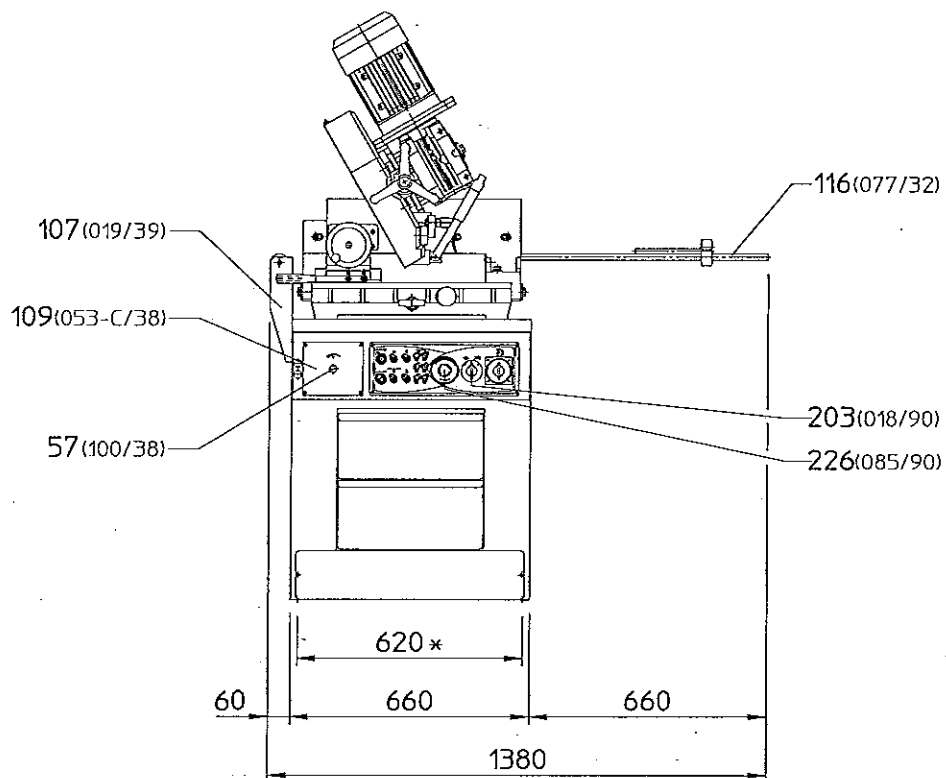
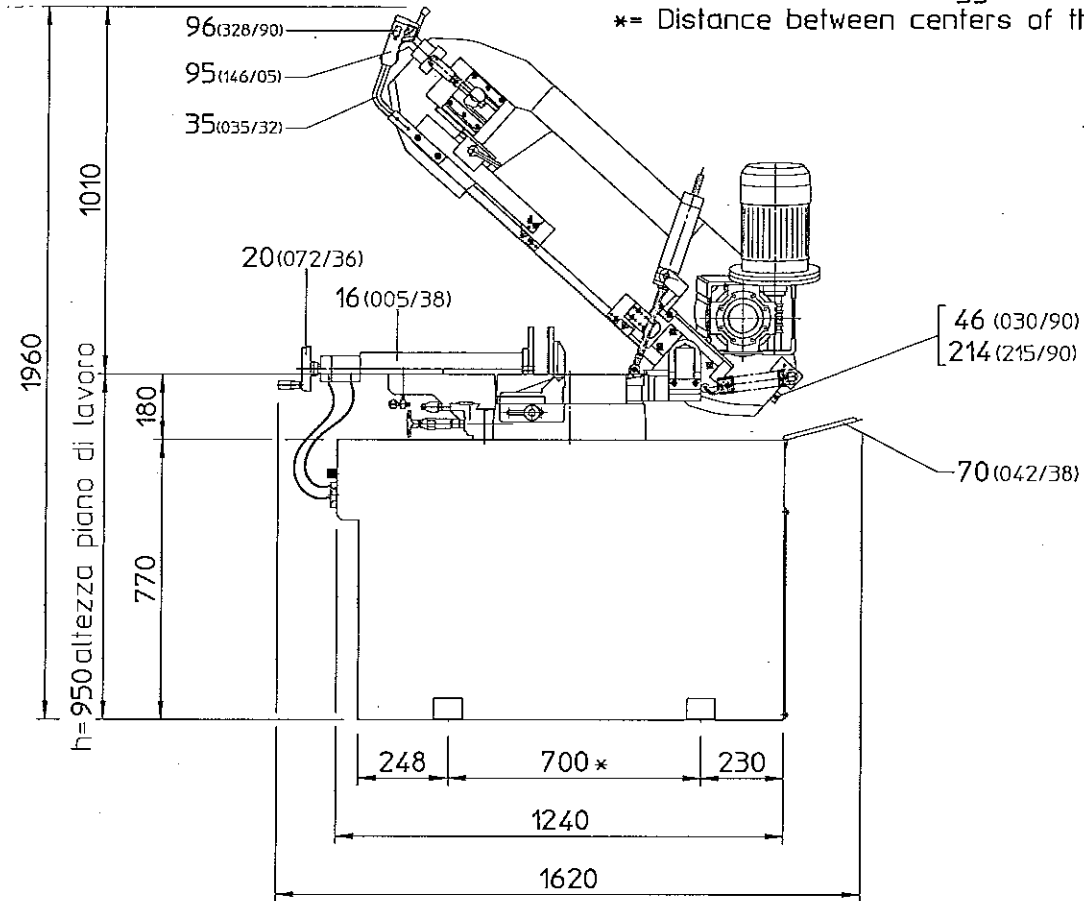
Movilización y transporte



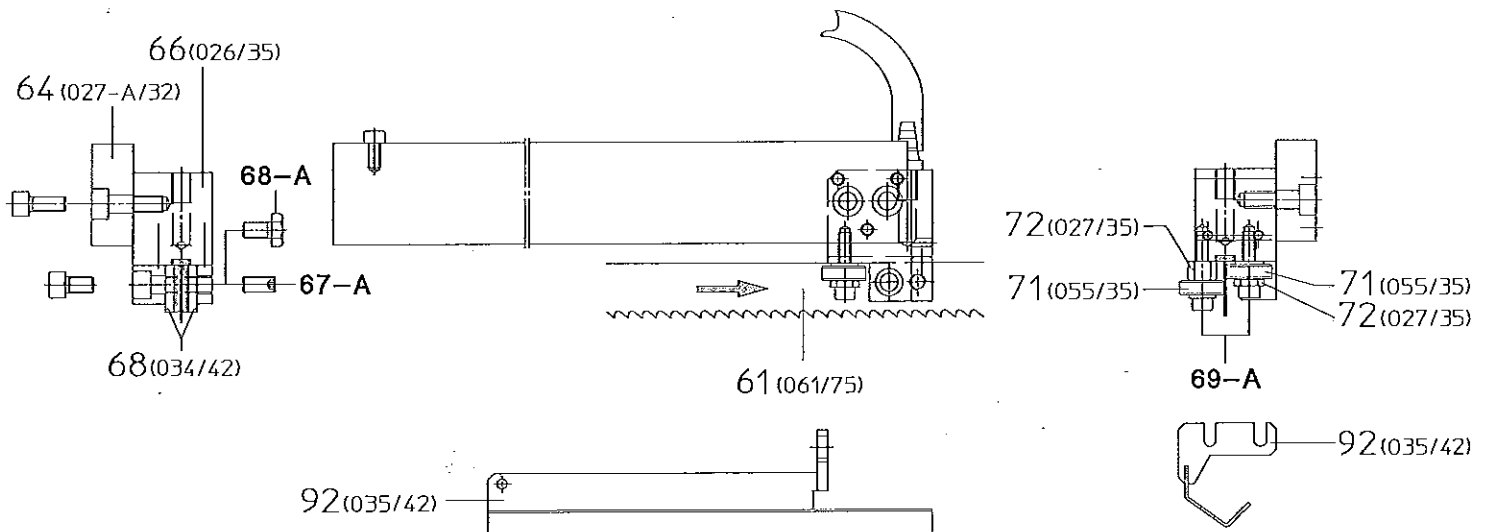
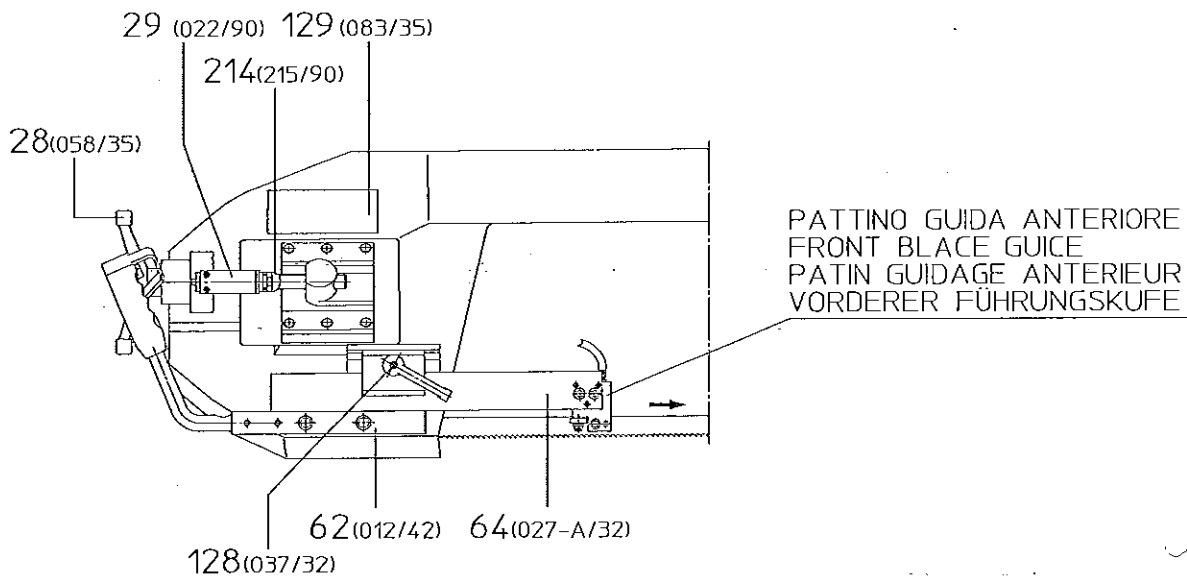
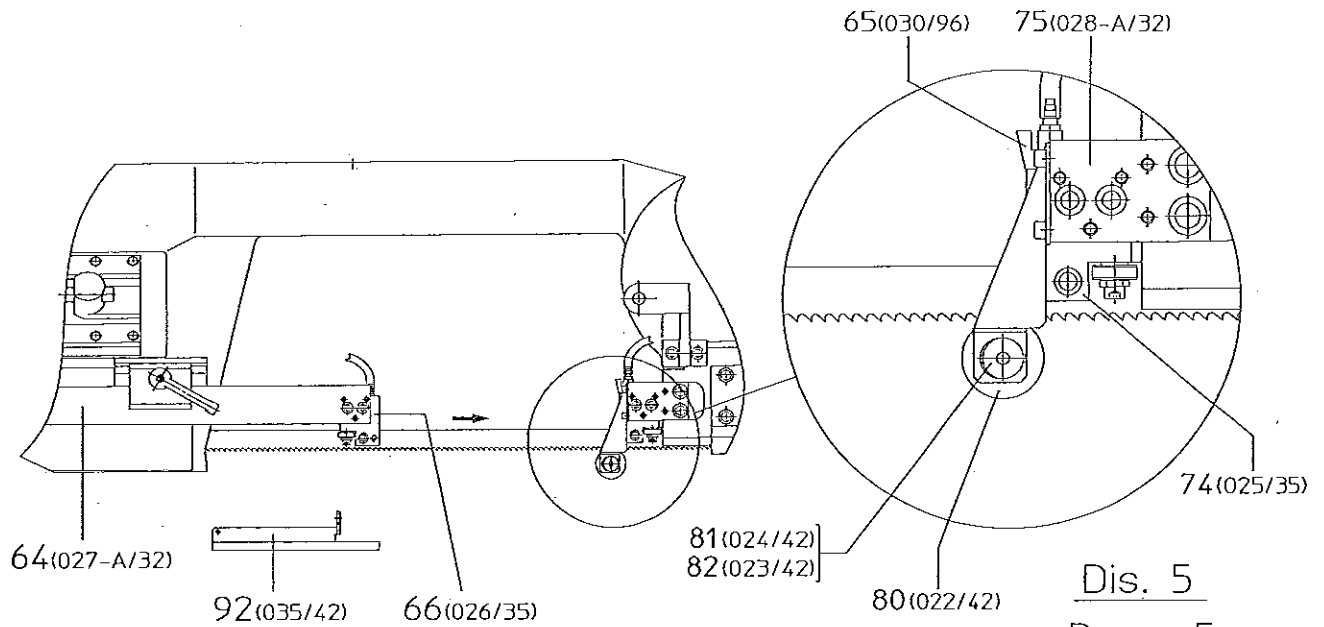
# DIMENSIONI D'INGOMBRO ED INSTALLAZIONE

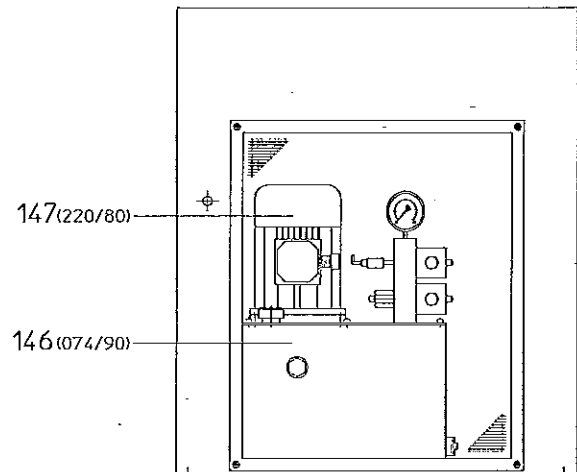
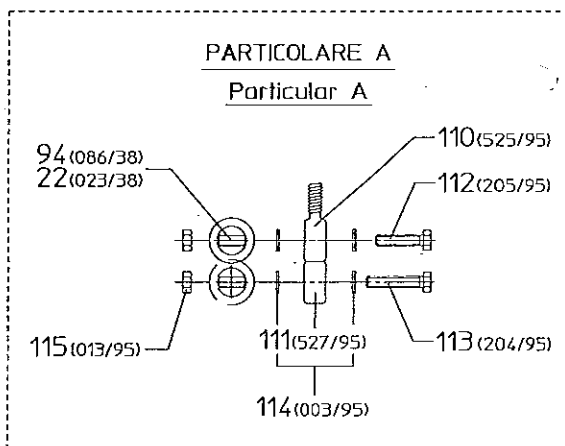
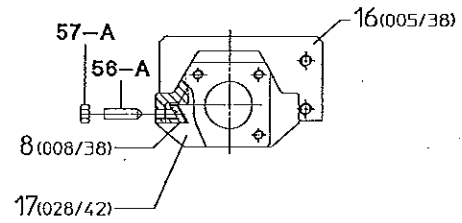
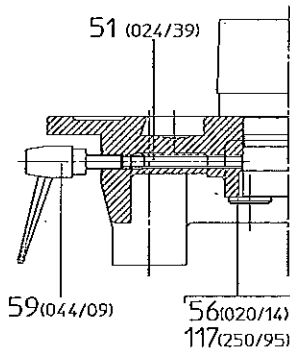
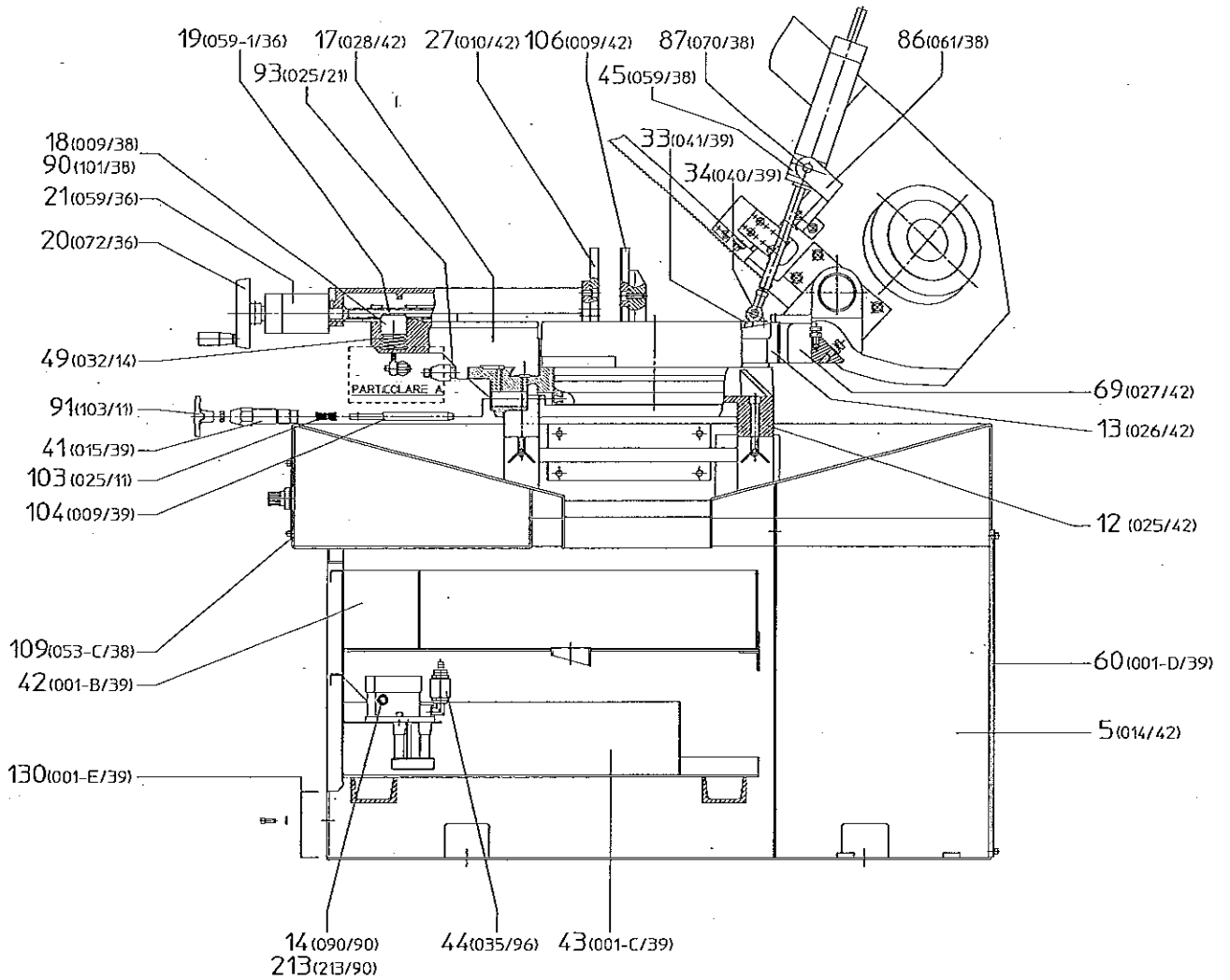
Overall dimensions and installation  
 Dimensions hors-tout et installation  
 Aussenabmessungen und installation  
 Dimensiones máximas extremas e instalación

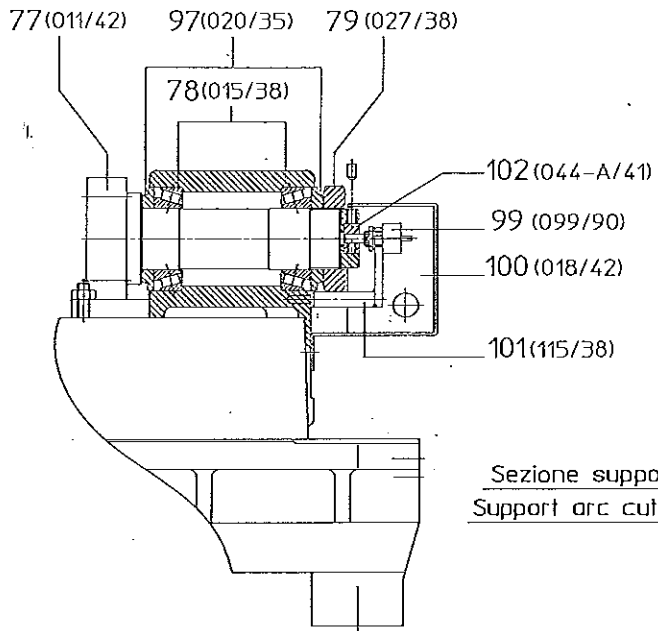
\*= Interasse fori di fissaggio  
 \*= Distance between centers of the fixing holes



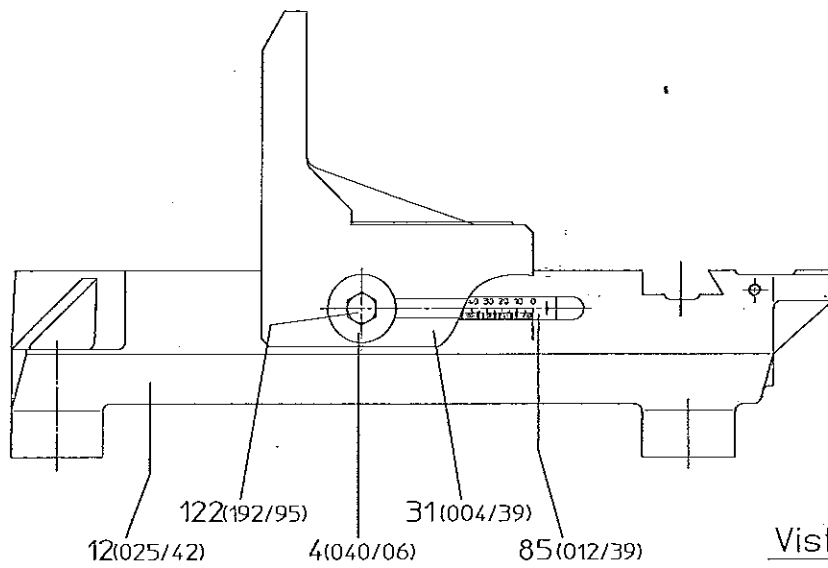
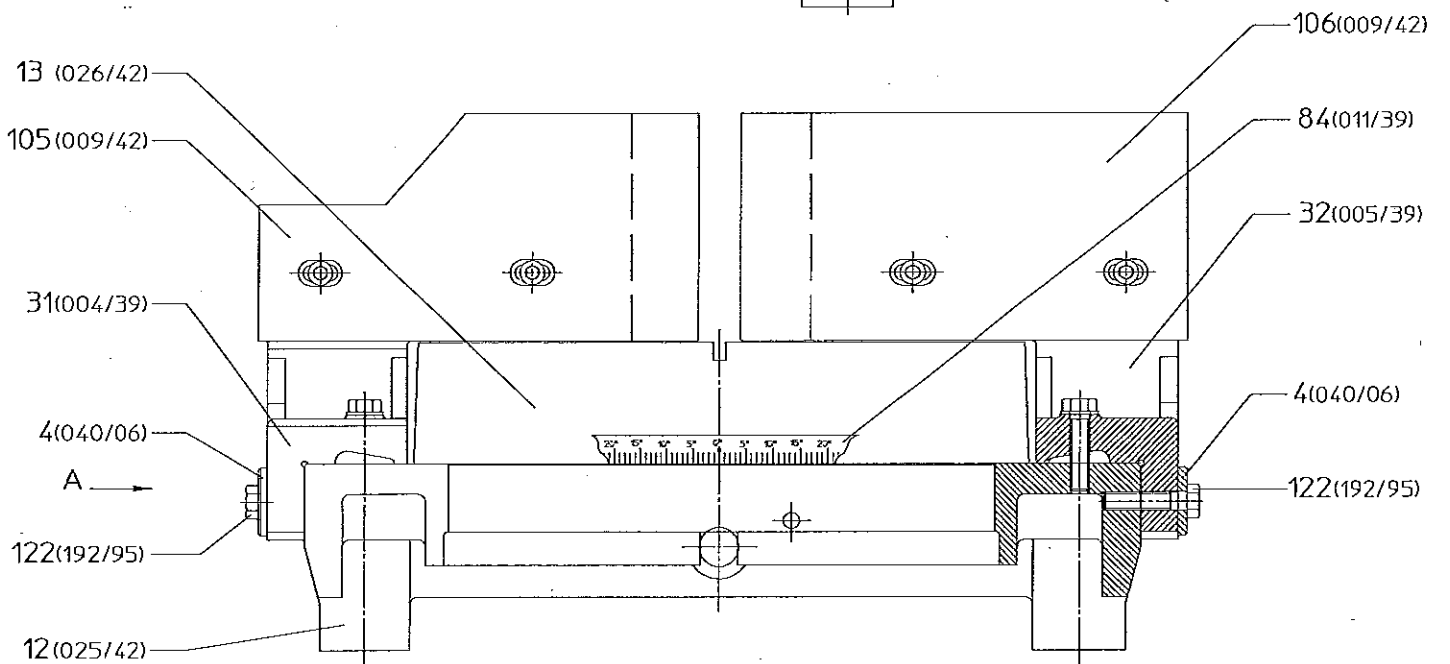




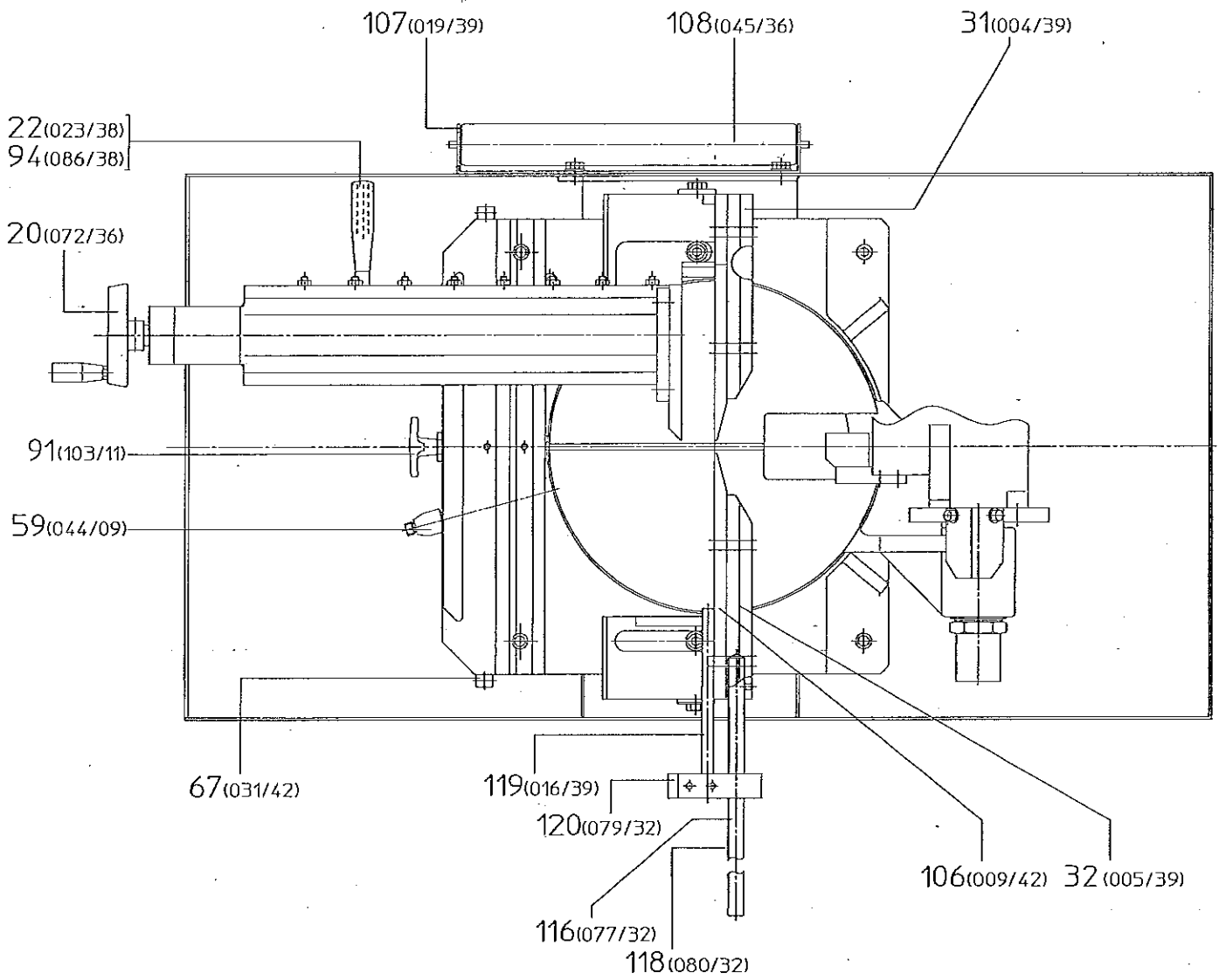




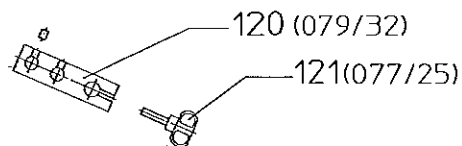
Sezione supporto arco  
Support arc cutaway view

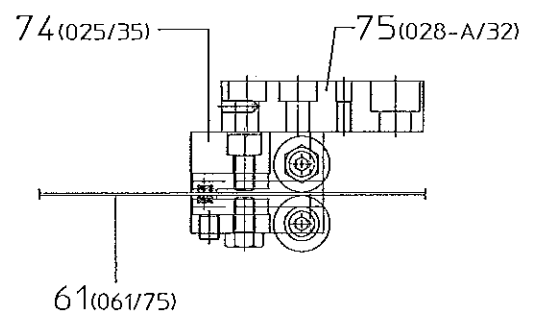
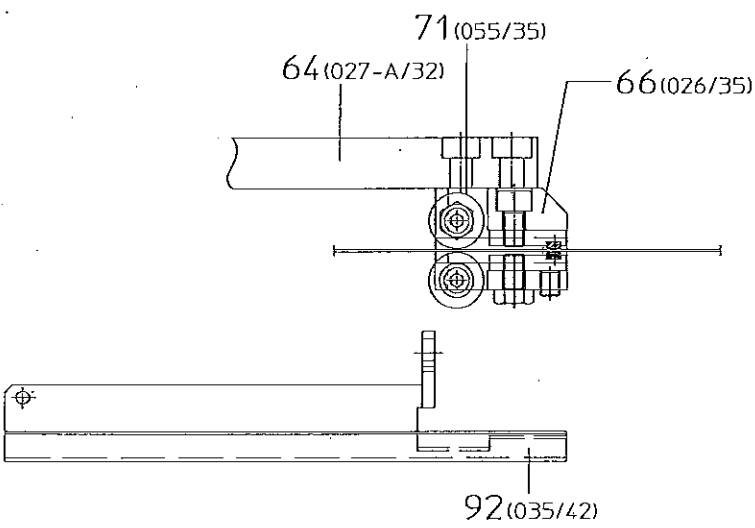
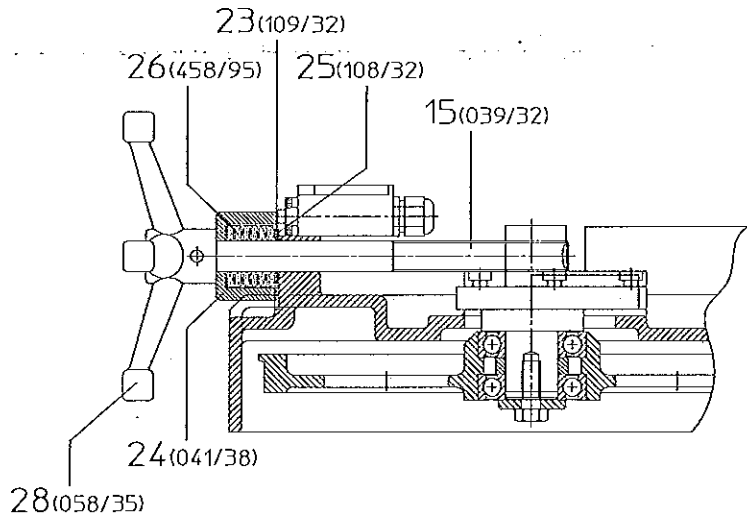
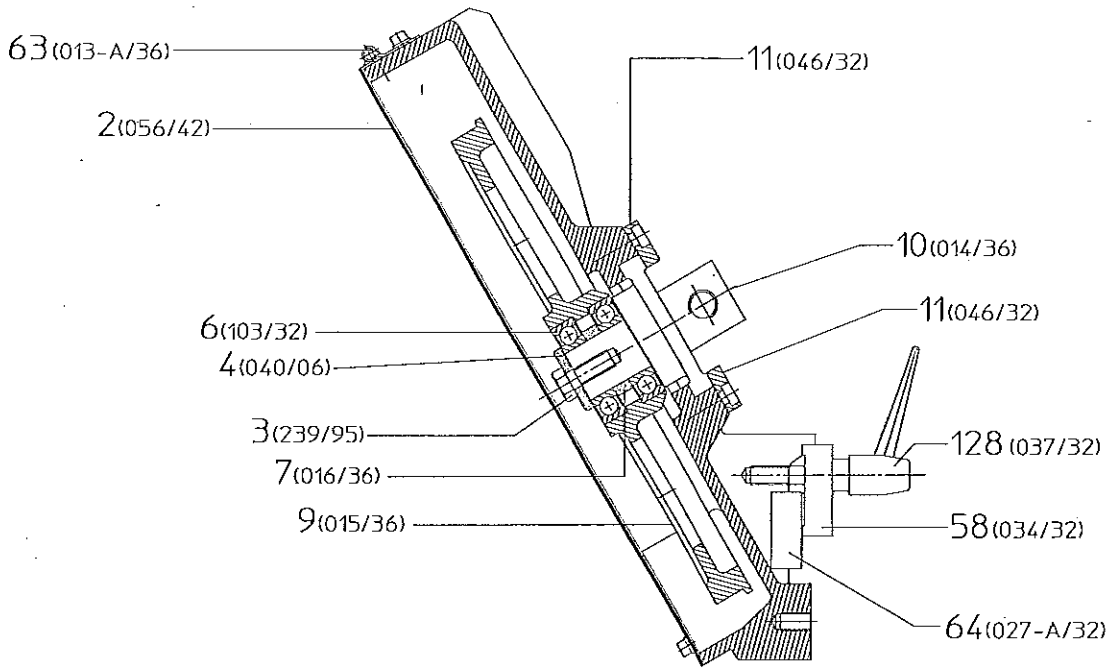


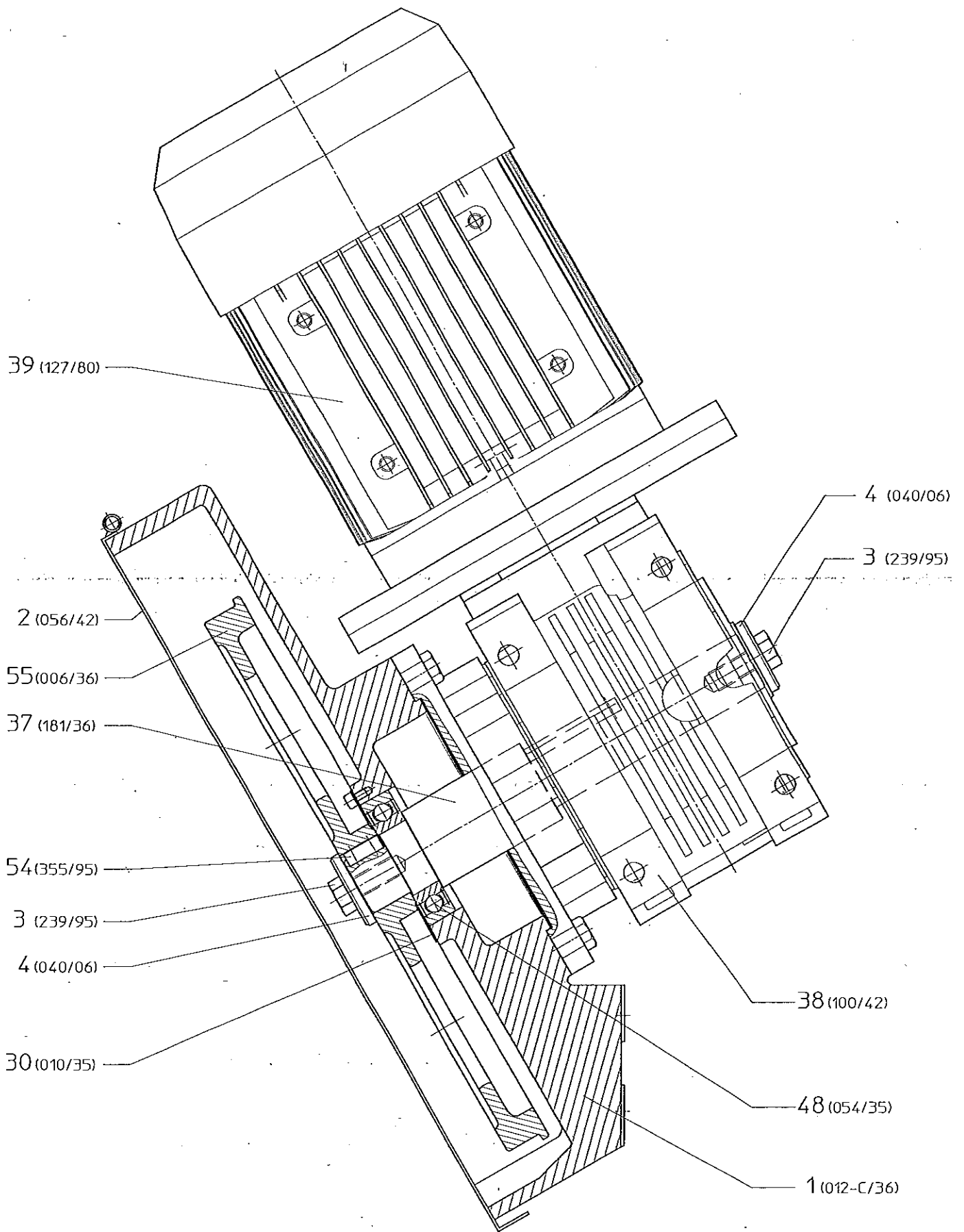
Vista da A

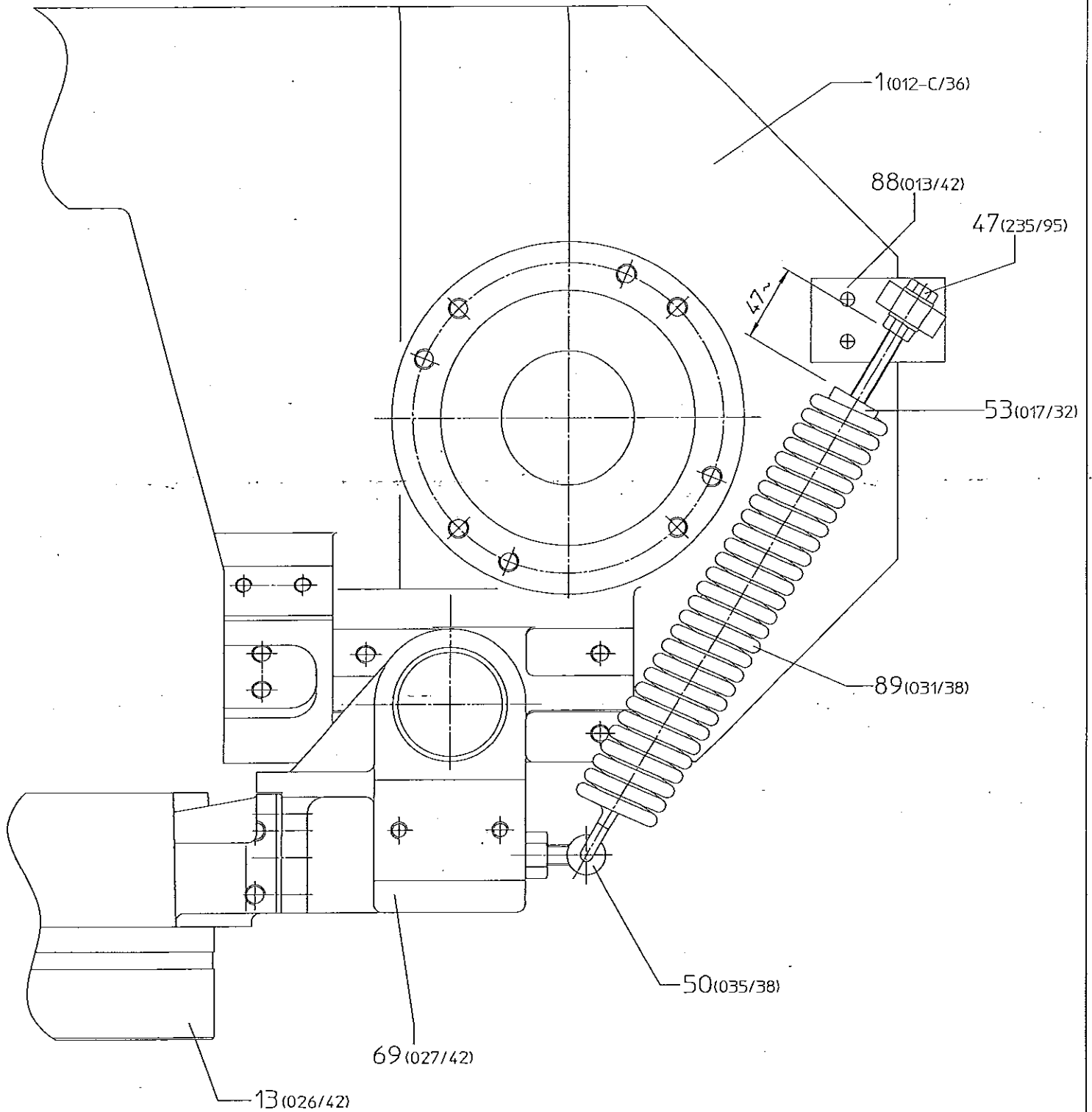


PARTICOLARE FERMO BARRA  
PARTICULAR BAR STOP



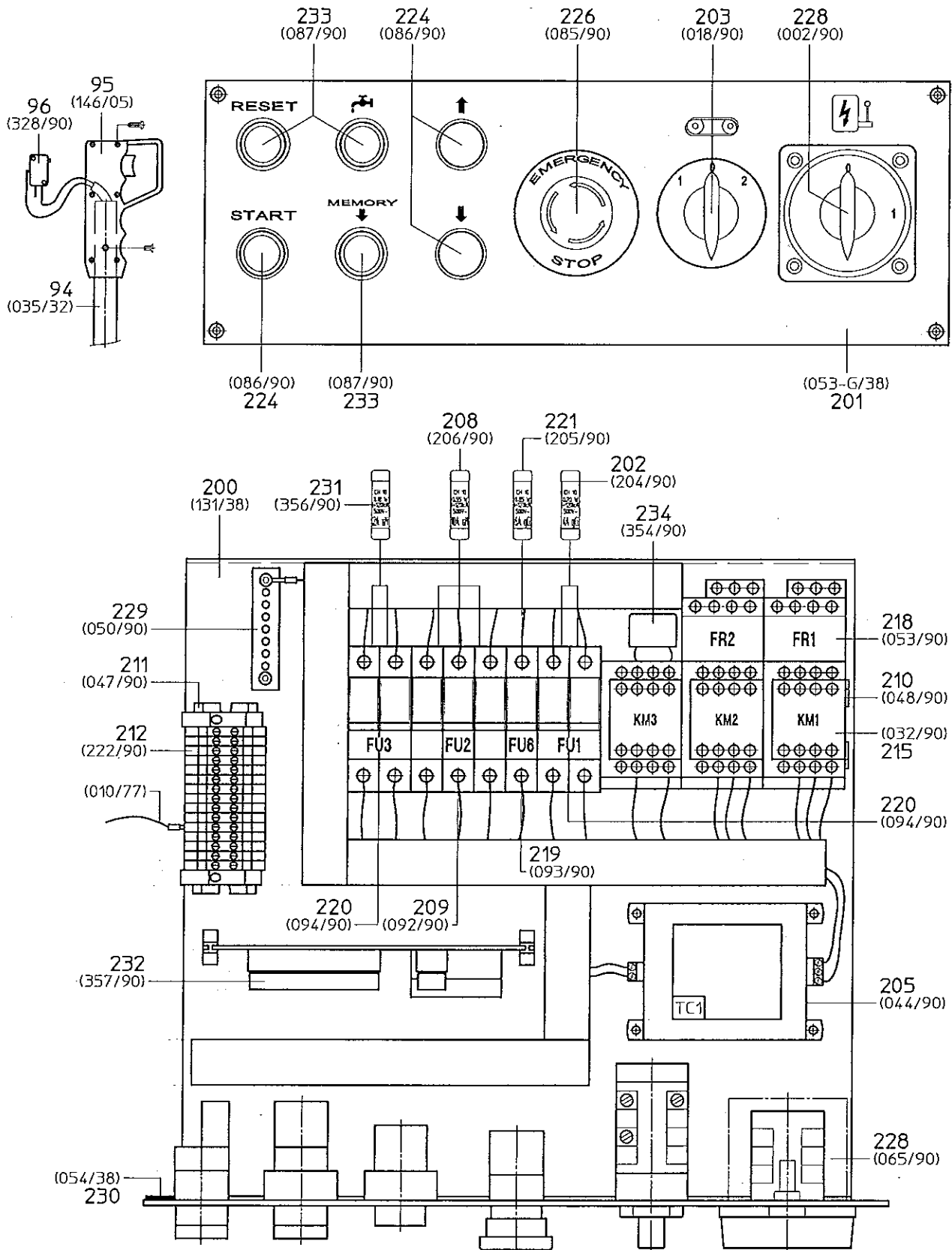




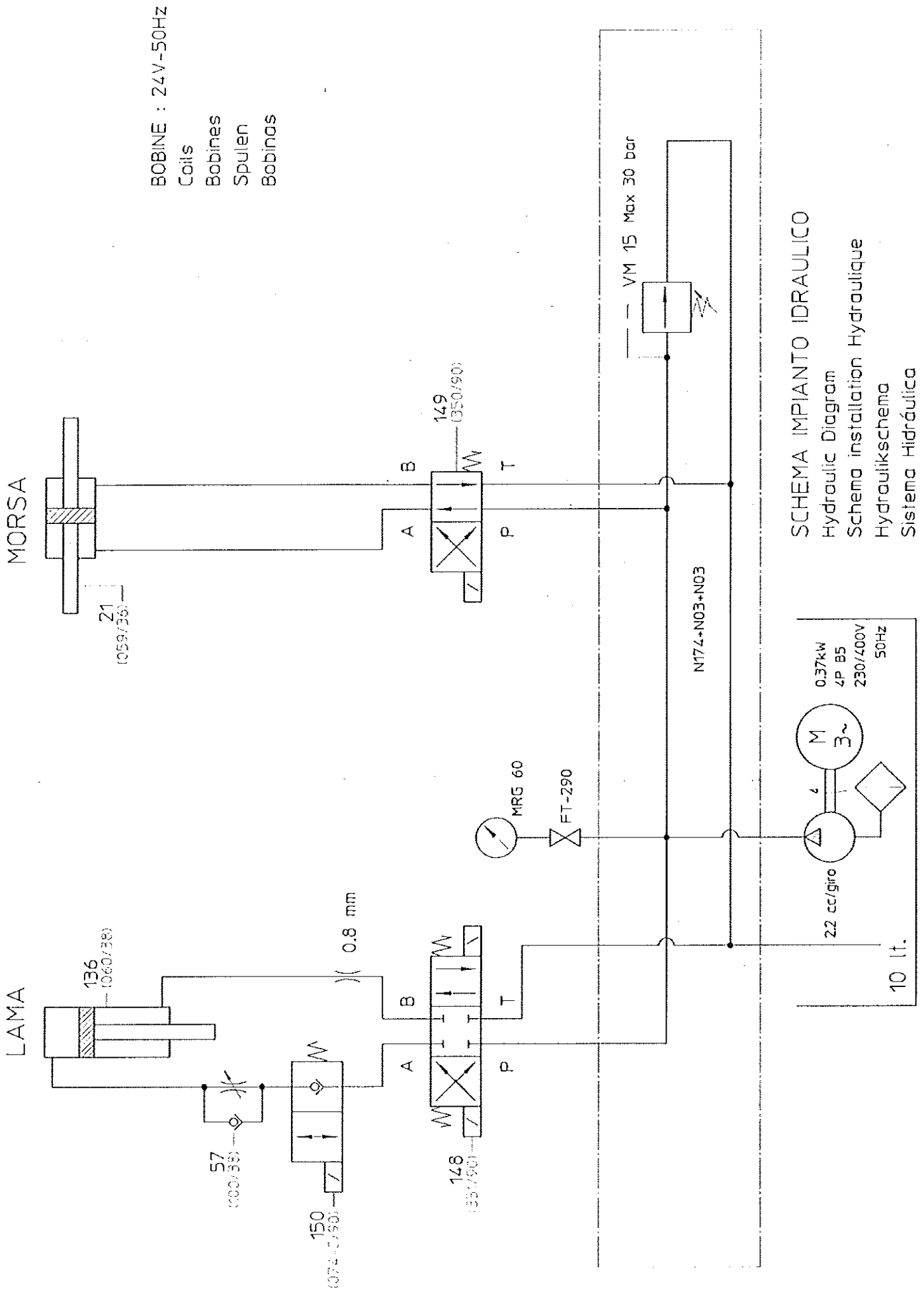


# PANNELLO COMANDI SPECIAL 320-330-411 S

## CONTROL PANEL SPECIAL 320-330-411 S

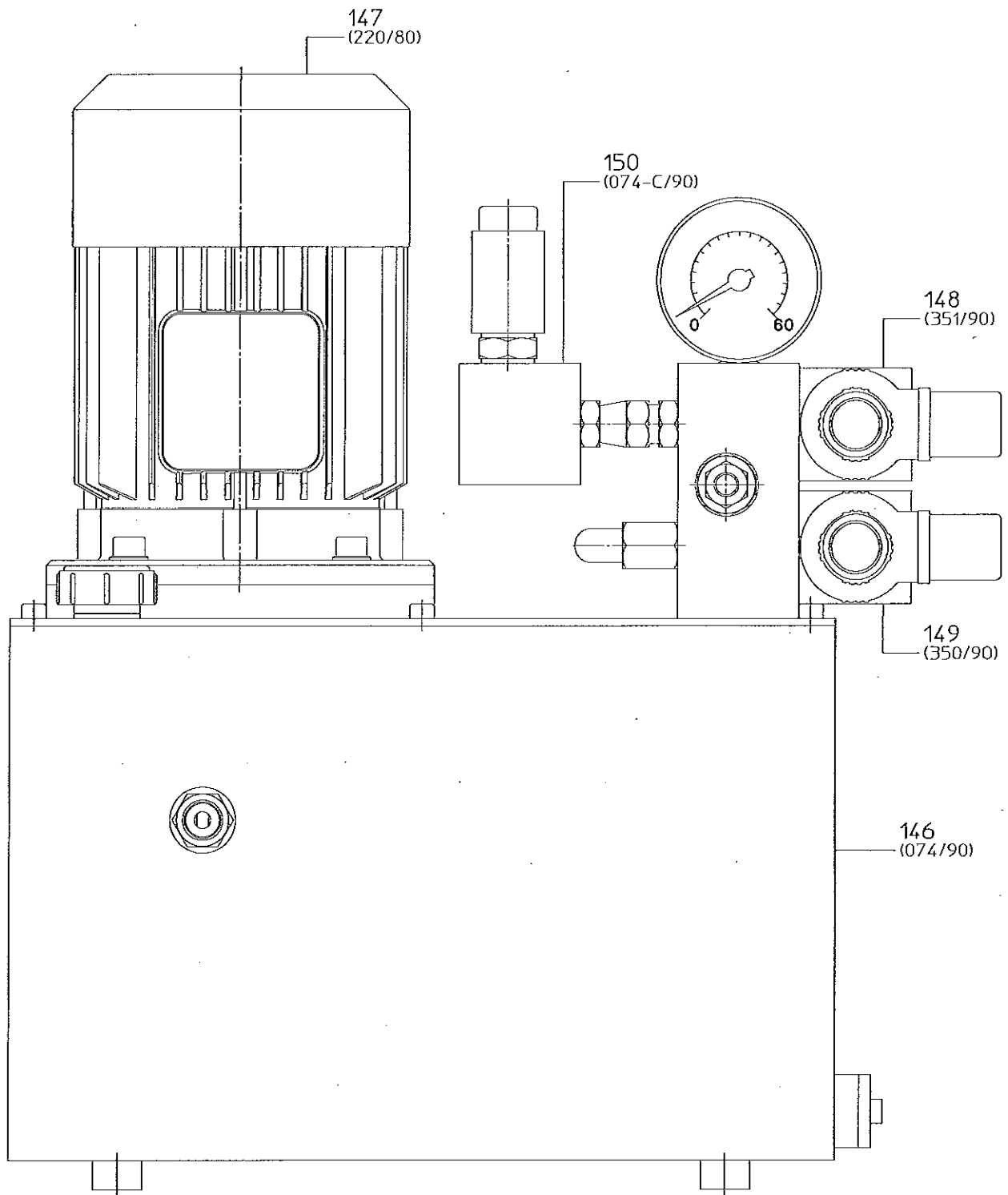






BOBINE : 24V-50HZ  
 Coils  
 Bobines  
 Spulen  
 Bobinas

SCHEMA IMPIANTO IDRAULICO  
 Hydraulic Diagram  
 Schema installation Hydraulique  
 Hydraulikschemata  
 Sistema Hidráulica









	ITALIANO	ENGLISH	DEUTSCH
FR1	RELE' TERMICO MOTORE POMPA OLIO	THERMAL RELAY OIL PUMP MOTOR	THERMISCHES RELAIS OIL PUMPE MOTOR
FR2	RELE' TERMICO MOTORE LAMA	THERMAL RELAY BLADE MOTOR	THERMISCHES RELAIS SÄGEBLATTMOTOR
FR3	RELE' TERMICO MOTORE REFRIGERANTE	THERMAL RELAY COOLANT MOTOR	THERMISCHES RELAIS ÜHLMITTELMOTOR
FR4	RELE' TERMICO MOTORE ESTRATTORE TRUCIOLI	RELAY THERMAL CHIPS EXTRACTOR MOTOR	THERMISCHES RELAIS CHIP EXTRACTORMOTOR
FR5	RELE' TERMICO MOTORE GUIDA PEZZO	THERMAL RELAY GUIDA-PIECE MOTOR	THERMISCHES RELAIS Motor Führungsstück
FTC	FOTOCPELLULA PRESENZA MATERIALE	MATERIAL PRESENCE PHOTOELECTRIC CELL	Photozelle Werkstoff Anwesenheit.
FU1	FUSIBILI PROTEZIONE TRASFORMATORE	FUSE TRANSFORMER PROTECTION	SICHERUNG TRAF0 SCHUTZ
FU2	FUSIBILI PROTEZIONE MOTORI	FUSE MOTOR PROTECTION	SICHERUNG MOTOR SCHUTZ
FU3	FUSIBILI PROTEZIONE POMPA REFRIGERANTE	FUSE COOLANT PUMP PROTECTION	SICHERUNG KÜHLMITTELPOMPE SCHUTZ
FU4	FUSIBILI PROTEZIONE ALIMENTATORE	FUSE FEEDER PROTECTION	SICHERUNG ZUFÜHRER SCHUTZ
FU5	FUSIBILI PROTEZIONE 24 V dc	FUSE 24 V dc PROTECTION	SICHERUNG 24 V dc SCHUTZ
FU6	FUSIBILI PROTEZIONE 24 V ac	FUSE 24 V ac PROTECTION	SICHERUNG 24 V ac SCHUTZ
FU7	FUSIBILE PROTEZIONE MOTORE INVERTER	FUSE INVERTER PROTECTION	GESCHWINDIGKEITUMRICHTER SICHERUNGSDRAHT
G	GALLEGGIANTE	FLOAT	SCHWIMMER
H1	SPIA PRESENZA LINEA	SPY LINE PRESENCE	LINE PRÄSENZ LAMPE
H2	SPIA LAMA IN TENSIONE	SPY BLADE IN TENSION	BLATT TENSION LAMPE
H3	SPIA START CICLO	SPY CYCLE START	ZYKLUS START LAMPE
K	TELERUTTORE TERMORESISTENZA	THERMO-RESISTANCE CONTROL SWITCH	KONTAKTGEBER WIDERSTANDSTHERMOMETER
KM0	TELERUTTORE ALIMENT. INVERTER	INVERTER FEEDING CONTROL SWITCH	Fernschalter Frequenzumrichter. Versorgung
KM1	TELERUTTORE MOTORE POMPA OLIO	OIL PUMP MOTOR REMOTE CONTROL SWITCH	KONTAKTGEBER ZENTRALHYDRAULIK MOTOR
KM2	TELERUTTORE MOTORE LAMA	BLADE MOTOR REMOTE CONTROL SWITCH	KONTAKTGEBER SÄGEBLATTMOTOR
KM3	TELERUTTORE POMPA REFRIGERANTE	COOLANT PUMP REMOTE CONTROL SWITCH	KONTAKTGEBER KÜHLMITTELPUMPE
KM4	TELERUTTORE ESTRATTORE TRUCIOLI (COCLEA)	CHIP EXTRACTOR CONTROL SWITCH	KONTAKTGEBER SPÄNE AUSZIEHER
KM5	TELERUTTORE MOTORE GUIDA PEZZO	THERMAL RELAY GUIDA-PIECE MOTOR CONTROL SWITCH	KONTAKTGEBER Motor Führungsstück
KM6	TELERUTTORE POMPA RECUPERO REFRIGERANTE	COOLANT RECYCLE PUMP THERMAL RELAY	KONTAKTGEBER KUEHLMITTELPUMPE
M1	MOTORE POMPA OLIO	OIL PUMP MOTOR	ZENTRALHYDRAULIKMOTOR
M2	MOTORE LAMA	BLADE MOTOR	SÄGEBLATTMOTOR
M3	MOTORE POMPA REFRIGERANTE	COOLANT PUMP MOTOR	KÜHLMITTELPUMPE MOTOR
M4	MOTORE ESTRATTORE TRUCIOLI	CHIP EXTRACTOR MOTOR	SPAENEAUSSASSVORRICHTUNG MOTOR
M5	MOTORE ROTAZIONE TESTA	SAWHEAD ROTATION MOTOR	DREHUNGS KOPF MOTOR
M50	MOTORE GUIDA PEZZO	GUIDA-PIECE MOTOR	FÜHRUNGSSTÜCK MOTOR



M6	MOTORE AVANZAMENTO MATERIALE	MATERIAL FEEDING OTOR	VORSCHUBMATERIAL MOTOR
P1	POTENZIOMETRO POSIZIONAMENTO LAMA	BLADE POSITIONING POTENTIOMETER	SÄGEBLATT-STENUNG POTENZIOMETER
P2	POTENZIOMETRO VELOCITA' LAMA	BLADE SPEED POTENTIOMETER	SÄGEBLATT-GESCHWINDIGKEIT POTENZIOMETER
PX1	SENSORE ROTAZIONE LAMA	BLADE ROTATION SENSOR	BLATT UMDREHUNGSSENSOR
QS1	INTERRUPTORE GENERALE	MAIN ON / OFF SWITCH	HAUPTSCHALTER
QS2	INTERRUPTORE / COMMUTATORE DI VELOCITA'	SWITCH / SPEED CHANGE OVERSWITCH	SCHALTER / GESCHWINDIGKEIT UMSCHALTER
QS3	INTERRUPTORE POMPA REFRIGERANTE	COOLANT PUMP SWITCH	KÜHLMITTELPUMPE SCHALTER
R	RELE' COMANDO MARCIA ROTAZIONE LAMA	ROTATING BLADE COMMAND RELAY	SÄGEBLATT UMDREHUNG POTENZIOMETER
R1	RELE' COMANDO TELERUPTORE POMPA OLIO	OIL PUMP REMOTE CONTROL SWITCH COMMAND RELAY	RELAIS OIL PUMPE FERNSCHALTER
R10	RELE' PRESSINO ON	VERTICAL VICE RELAY	SENKRECHT SCHRAUBSTOCK RELE
R2	RELE' COMANDO TELERUPTORE LAMA	BLADE REMOTE CONTROL SWITCH COMMAND RELAY	RELAIS BLATT FERNSCHALTER
R5	RELE' COMANDO MICROLUBRIFICAZIONE	MICROLUBRICATION COMMAND RELAY	MIKROSPRÜHEINRICHTUNGSTEUER RELAIS
RT	RELE' TEMPORIZZATORE	TIMER RELAY	ZEITGEBER RELE
RX	RELE' COMANDO TERMOSTATO	THERMOSTAT COMMAND RELAY	THERMOSTATSTEUER RELAIS
RV5	RELE' DISCESA LAMA	BADE DESCENT RELAY	SÄGEBLATT ABSTIG RELE
S	SELETTORE FUNZIONE	FUNCTION SELECTOR	FUNKTION WÄHLER
S10	SELETTORE PRESSINO ON	VERTICAL VICE ON CHANGEOVER SWITCH	GESCHWINDIGKEITUMRICHTER WAHLER ON
S4	SELETTORE CAMBIO LAMA	BLADE REPLACEMENT CHANGEOVER SWITCH	SÄGEBLATT WAHLSCHALTER
SB1	PULSANTE DI ARRESTO EMERGENZA	EMERGENCY PUSH BUTTON	NOT AUS TASTER
SB11	PULSANTE DETENSIONAMENTO LAMA	BLADE DETENSIONING BUTTON	SÄGEBLATT ENSPANNSCHALTER
SB12	PULSANTE TENSIONAMENTO LAMA	BLADE TENSIONING BUTTON	SÄGEBLATT SPANNSCHALTER
SB2	PULSANTE START CICLO	CYCLE START BUTTON	ZYKLUS START TASTER
SB3	PULSANTE DI RESET	RESET BUTTON	RESETTASTER
SB4	PULSANTE CHIUSURA MORSA	LOCK VICE BUTTON	SPANNSOCH SCHLIEß TASTER
SB5	PULSANTE APERTURA MORSA	OPEN VICE BUTTON	SPANNSTOCK ÖFFNUNG TASTER
SB6	PULSANTE DI SALITA	BUTTON UP	OBEN TASTER
SB7	PULSANTE DI DISCESA	BUTTON DOWN	HINTEN TASTER
SB8	PULSANTE REFRIGERANTE "ON"	REFRIGERANTE BUTTON "ON"	KÜHLUNG EIN TASTER
SB9	PULSANTE MEMORY	MEMORY BUTTON	MEMORY TASTER
SB90	PULSANTE DI SBLOCCO	RELEASE BUTTON	AUSLÖESER TASTE
SC02	MICROINTERRUPTORE CARTER APERTO SX	COVER OPEN MICROSWITCH	SCHUTZ GEÖFFNET ENDSCHALTER
SQ1	MICROINTERRUPTORE ROTTURA LAMA	MICROSWITCH BLADE FAILURE	ENDSCHALTER BLATT GEBROCHEN

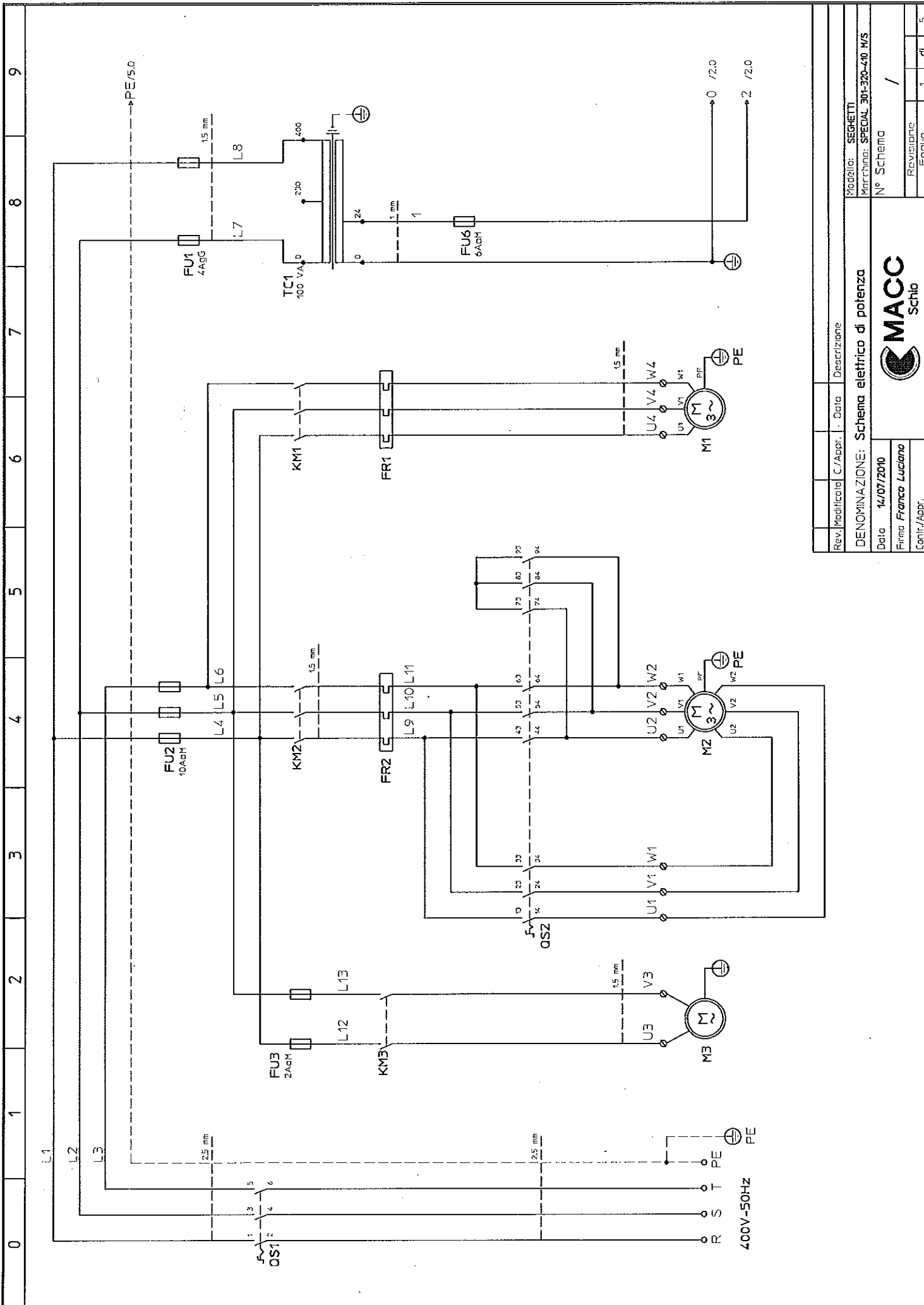


SQ10	MICROINTERRUTTORE START A PEDALE	PEDAL MICROSWITCH START	PEDALS MIKROSCHALTER
SQ11	MICROINTERRUTTORE CHIUSURA MORSA A PEDALE	PEDAL VICE CLOSING MICROSWITCH	FUßSCHALTER SPENNSTOCK SCHLIEßEN MIKROSCHALTER
SQ15	FINECORSO GUIDA PEZZO AVANTI	MICROSWITCH GUIDE-PIECE FORWARD	ENDSCHALTER FÜHRUNGSSTÜCK NACH VORNE
SQ16	FINECORSO GUIDA PEZZO INDIETRO	MICROSWITCH GUIDE-PIECE BACKWARD	ENDSCHALTER FÜHRUNGSSTÜCK NACH HINTEN
SQ18	FINECORSO SOLLEVATORE ALTO	MICROSWITCH LIFT UP POSITION	HEBEWERK NACH OBEN ENDSCHALTER
SQ2	MICROINTERRUTTORE CARTER APERTO	MICROSWITCH PROTECTION CASE	ENDSCHALTER SCHUTZGEHÄUSE
SQ20	PRESSOSTATO CHIUSURA MORSA	VICE PRESSURE SWITCH	SPANNDRUCK TASTE
SQ3	FINECORSO CARRO AVANTI	MICROSWITCH CARRIAGE FORWARD	ENDSCHALTER WAGEN VORNE
SQ30	FINECORSO ROTAZIONE -45°	MICROSWITCH -45° ROTATION	-45° UMDREHUNG ENDSCHALTER
SQ4	FINECORSO CARRO INDIETRO	MICROSWITCH CARRIAGE BACK	ENDSCHALTER WAGEN ZURÜCK
SQ5	FINECORSO TESTA ALTA	MICROSWITCH HEAD / BOW UP	ENDSCHALTER BÜGEL NACH OBEN
SQ6	FINECORSO TESTA BASSA	MICROSWITCH HEAD / BOW DOWN	ENDSCHALTER BÜGEL NACH UNTEN
SQ7	MICROINTERRUTTORE FINE MATERIALE	MICROSWITCH BAR END	ENDSCHALTER STANGENENDE
SQ70	PROSSIMITI PRESENZA PEZZO	MICROSWITCH PIECE PRESENCE	STÜCKANWESENDEHEIT ENDSCHALTER
SQ8	MICROINTERRUTTORE MANIGLIONE	MICROSWITCH HANDLE	ENDSCHALTER GRIFF
SQ9	MICROINTERRUTTORE START MANUALE	MICROSWITCH MANUAL START	ENDSCHALTER MANUELL START
T	TEMPORIZZATORE	TIMER	ZEITGEBER
TC1	TRASFORMATORE	TRANSFORMER	TRANSFORMATOR
TR	TERMOSTATO	THERMOSTAT	THERMOSTAT
TR	TERMORESISTENZA	THERMO-RESISTANCE	THERMO-WIDERSTAND
YV1	ELETTROVALVOLA CARRO AVANTI LENTO	CARRIAGE SLOW FORWARD MOTION SOLENOID VALVE	ELEKTROVENTIL WAGEN LANGSAM VORNE
YV10	ELETTROVALVOLA SBLOCCAGGIO MANUALE	MANUAL UNLOCKING SOLENOID VALVE	ELEKTROVENTIL MANUELL AUFHEBUNG
YV11	ELETTROVALVOLA DETENSIONAMENTO LAMA	UNTIGHTNING BLADE SOLENOID VALVE	SAEGEBLATT ENTSPANNUNG MAGNETVENTIL
YV11	ELETTROVALVOLA DETENSIONAMENTO LAMA	BLADE DETENSIONING SOLENOID VALVE	ELETRISCHESVETIL SAEGBLATT ENSPANNUNG
YV12	ELETTROVALVOLA TENSIONAMENTO LAMA	TIGHTNING BLADE SOLENOID VALVE	SAEGEBLATT SPANNUNG MAGNETVENTIL
YV12	ELETTROVALVOLA TENSIONAMENTO LAMA	BLADE TENSIONING SOLENOID VALVE	ELETRISCHESVENTIL SAEGBLATT SPANNUNG
YV15	ELETTROVALVOLA SOLLEVATORE CARICATORE	LOADER LIFT SOLENOID VALVE	LADEMAGAZIN HEBEWERK ELEKTROVENTIL
YV16	ELETTROVALVOLA MORSA CARICATORE	LOADER VICE SOLENOID VALVE	LADEMAGAZINSPANNSTOCK ELEKTROVENTIL
YV18	ELETTROVALVOLA GUIDA PEZZO AVANTI	GUIDE-PIECE FORWARD VALVE	ELEKTROVENTIL ZAUN NACH VORNE
YV19	ELETTROVALVOLA GUIDA PEZZO INDIETRO	GUIDE-PIECE BACKWARD VALVE	ELEKTROVENTIL HINTEREN ZAUN
YV2	ELETTROVALVOLA CARRO INDIETRO LENTO	CARRIAGE SLOW BACK MOTION SOLENOID VALVE	ELEKTROVENTIL WAGEN LANGSAM ZURÜCK
YV20	SBLOCCAGGIO ROTAZIONE	ROTATION UNLOCK	UMDREHUNG LOSMACHEN



YV3	ELETTROVALVOLA MORSA MOBILE	MOVABLE VICE SOLENOID VALVE	ELEKTROVENTIL BEWEGLICHER SPANNSTOCK
YV30	ELETTROVALVOLA MORSA MOBILE CHIUDE	CLOSE MOVABLE VICE VALVE	BEW. SPANNSTOCK SCHLIEß ELEKTROVENTIL
YV30P	ELETTROVALVOLA PRESSINO CARRO	CARRIAGE VICE SOLENOID VALVE	ELETRISCHESVENTIL SCHRAUBSTOCK VORSCHUBWAGEN
YV31	ELETTROVALVOLA RUOTA ARCO LENTO	SLOW BOW ROTATION SOLENOID VALVE	LANGSAM SÄGEARMUMDREHUNG ELEKTROVENTIL
YV37	ELETTROVALVOLA RUOTA DX	ROTATION LEFTWARDS SOLENOID VALVE	UMDREHUNG LINKS ELEKTROVENTIL
YV38	ELETTROVALVOLA RUOTA SX	ROTATION RIGHTWARDS SOLENOID VALVE	UMDREHUNG RECHTS ELEKTROVENTIL
YV4	ELETTROVALVOLA SALITA	UP STROKE SOLENOID VALVE	ELEKTROVENTIL ANSTIEG
YV5	ELETTROVALVOLA DISCESA	DOWN STROKE SOLENOID VALVE	ELEKTROVENTIL ABSTIEG
YV50	ELETTROVALVOLA DISCESA LAMA RAPIDA	QUICK LOWERING SOLENOID VALVE	SCHNELL ELEKTROVENTIL ABSTIEG
YV6	ELETTROVALVOLA APERTURA MORSA FISSA	FIXED VICE OPENING SOLENOID VALVE	ELEKTROVENTIL FESTER SPANNSTOCK ÖFFNUNG
YV60	ELETTROVALVOLA CHIUSURA MORSA FISSA	FIXED VICE CLOSING SOLENOID VALVE	ELEKTROVENTIL FESTER SPANNSTOCK SCHLIESSEN
YV60P	ELETTROVALVOLA PRESSINO FISSO	FIXED VICESOLENOID VALVE	ELETRISCHESVENTIL FESTSCHRAUBSTOCK
YV61	ELETTROVALVOLA SPAZZOLA	BRUSH VALVE	BÜRSTE ELEKTROVENTIL
YV62	ELETTROVALVOLA ATTIVAZIONE 2a POMPA OLIO	SECOND OIL PUMP	ZWEITE ÖLPUMPE EIN ELEKTROVENTIL
YV7	ELETTROVALVOLA CARRO AVANTI	CARRIAGE FORWARD SOLENOID VALVE	ELEKTROVENTIL WAGEN VORNE
YV70	ELETTROVALVOLA SPAZZOLA	BRUSH SOLENOID VALVE	BUERSTE MAGNETVENTIL
YV8	ELETTROVALVOLA CARRO INDIETRO	CARRIAGE BACK SOLENOID VALVE	ELEKTROVENTIL WAGEN ZURÜCK
YV9	ELETTROVALVOLA BLOCCO	MANUAL LOCKING SOLENOID VALVE	ELEKTROVENTIL BLOCK
YV90	ELETTROVALVOLA MICROLUBRIFICAZIONE	MICROLUBRICATION SOLENOID	MIKROSPRÜHEINRICHTUNG ELEKTROVENTIL



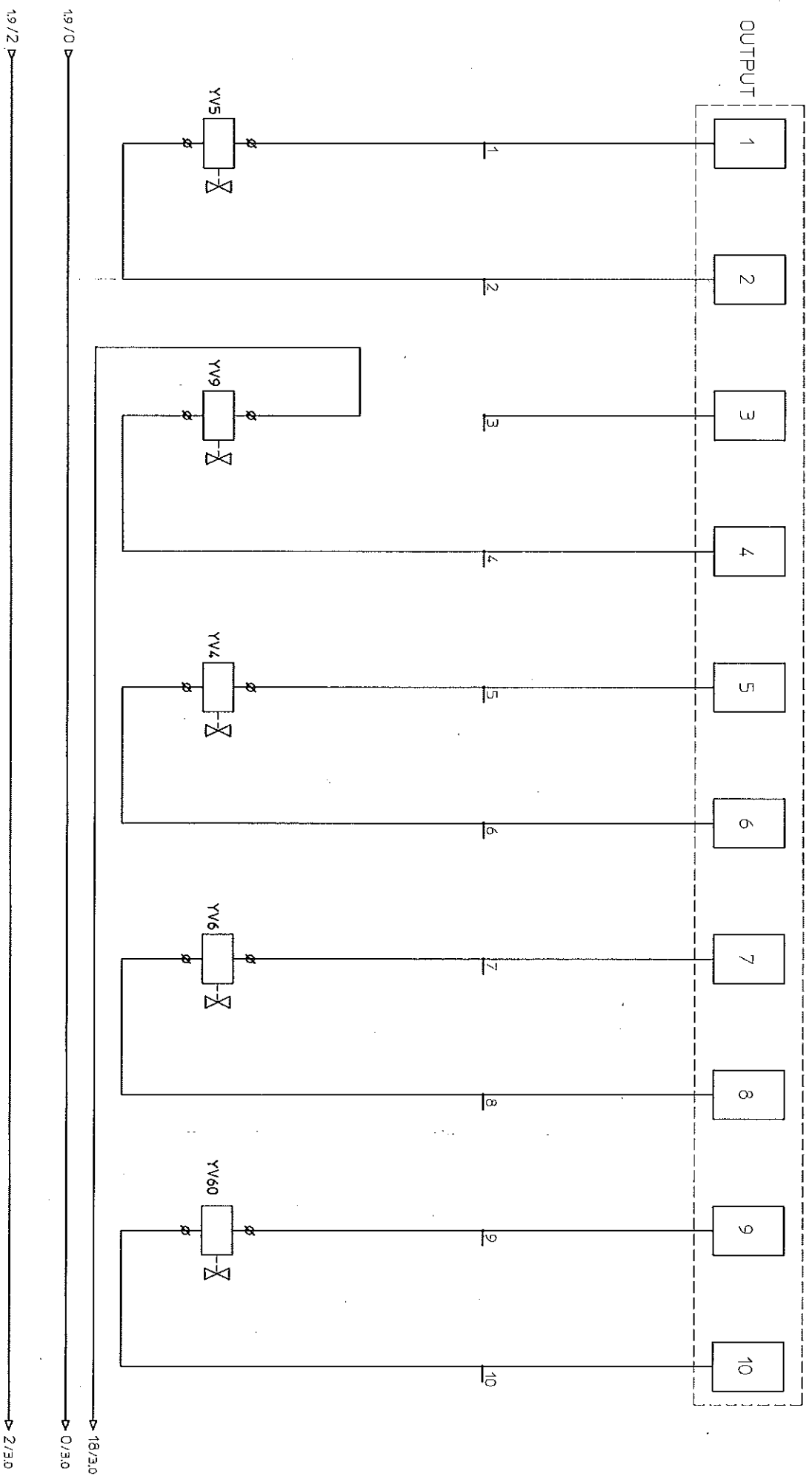


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Rev. / Modificata	C. / Appr.	Data	Descrizione
<b>DENOMINAZIONE: Schema elettrico di potenza</b>			
Modello: SEGNETTI			
Macchina: SPECIAL 301-320-410 M/S			
N° Schema /			
Data: 14/07/2010		REVISIONE	
Firma: Franco Luciano		Foglio	
Contr. / Appr.		1 di 5	



0 1 2 3 4 5 6 7 8 9



Rev.	Modificazioni	C.A./Appr.	Data	Descrizione

DENOMINAZIONE: Schema elettrico di comando OUTPUT

Data: 14/07/2010

Firma: Franco Luciano

Cont./Appr:



Modello: SEGHETTI

Macchina: SPECIAL 301-320-410 M/S

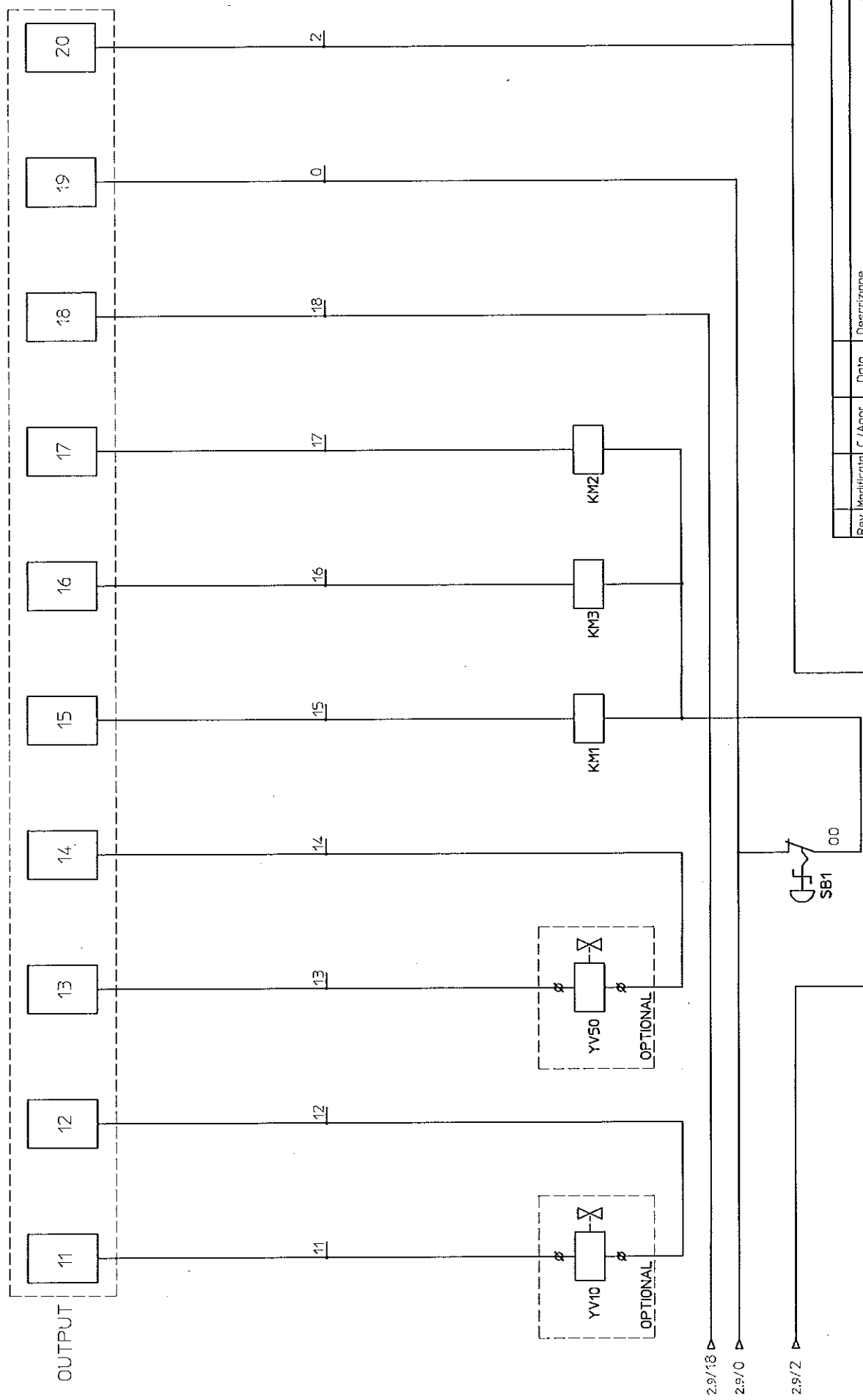
N° Schema: /

Revisione

Foglio

2 di 5

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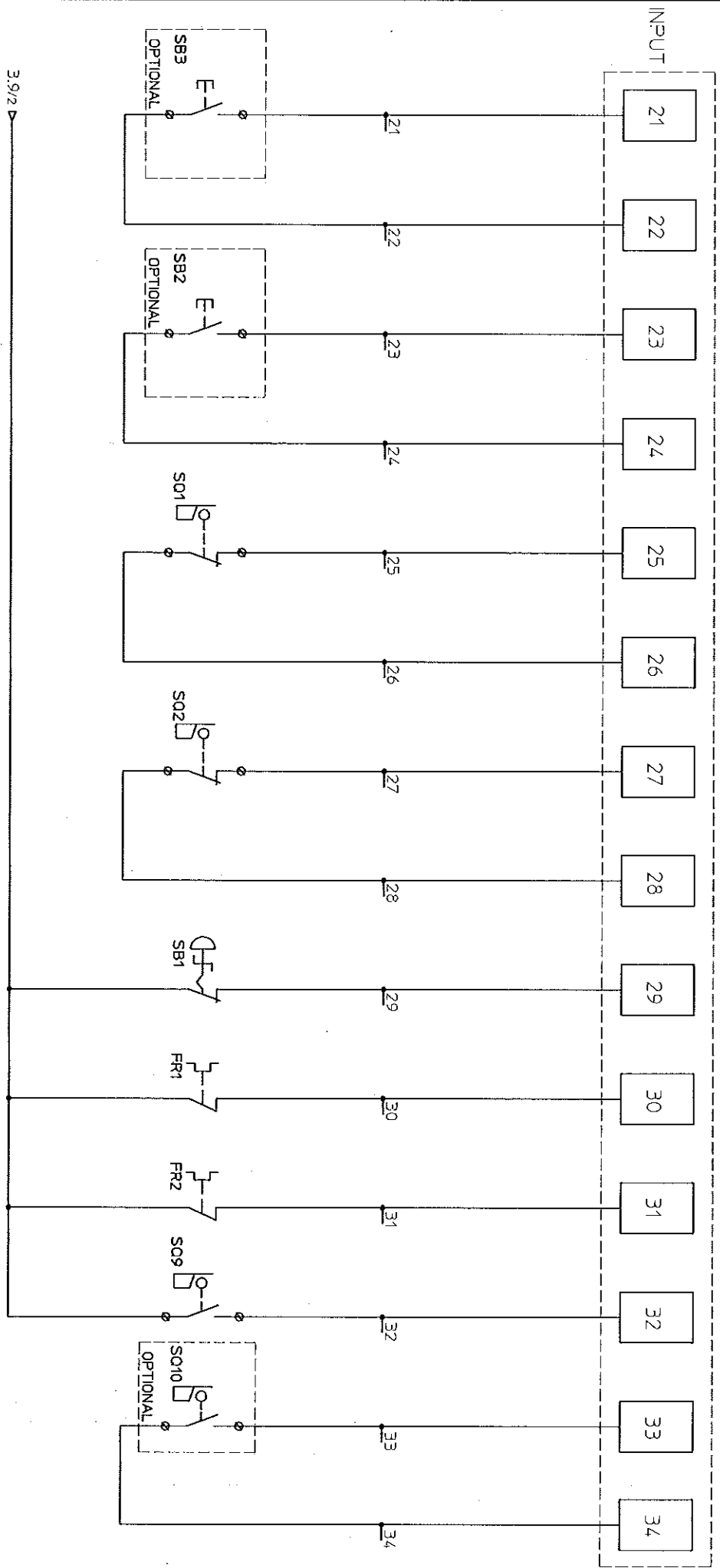


Rev.	Modificato	C./Appr.	Data	Descrizione
<b>DENOMINAZIONE: Schema elettrico di comando OUTPUT</b>				
Modello: <b>SEGNETTI</b> Macchina: <b>SPECIAL 301-320-410 M/S</b>				
Data: <b>14/07/2010</b> N° Schema: <b>/</b>				
Firma: <b>Franco Luciana</b> Revisore: <b>FR</b>				
Cont./Appr.: <b>3</b> di <b>5</b> Foglio: <b>3</b> di <b>5</b>				



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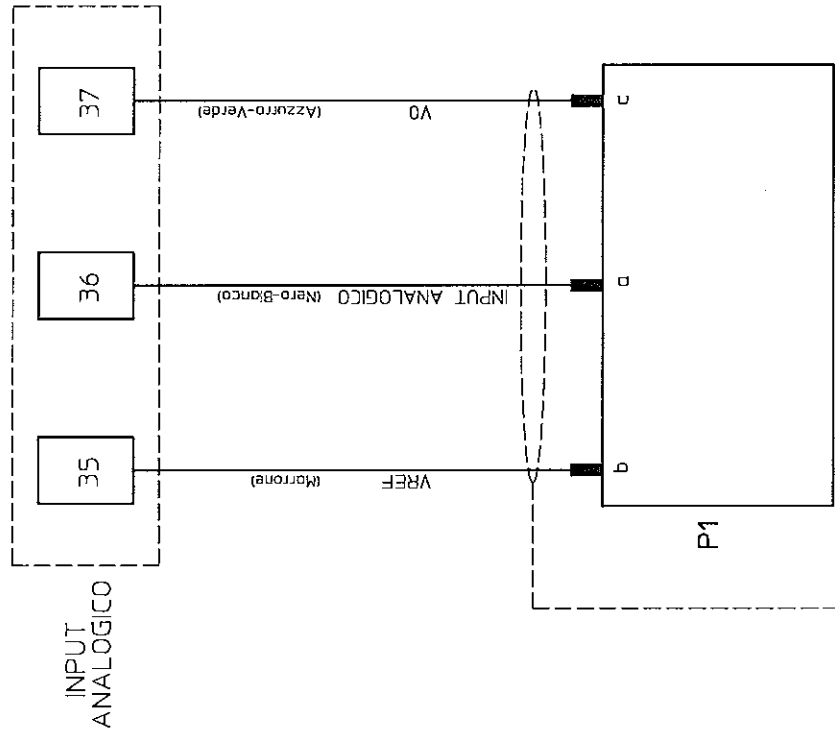
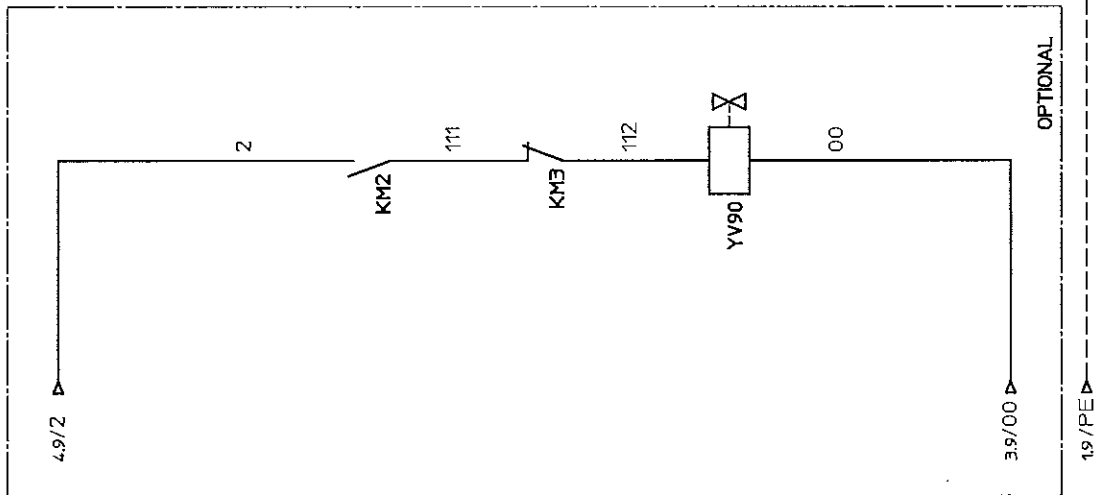
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Rev./Modificazioni	C./Appr.	Data	Descrizione
			DENOMINAZIONE: Schema elettrico di comando INPUT
		Data 14/07/2010	
		Firma Franco Luciano	
		Cont./Appr.	

Modello: SEGHETTI	
Macchine: SPECIAL 301-320-410 H/S	
N° Schema	/
REVISIONE	
Foglio	4 di 5



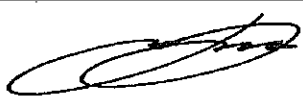
Rev./Modificata	C./Appr.	Data	Descrizione
DENOMINAZIONE: Schema INPUT analogico			
Data	14/07/2010		
Firma	Franco Luciano		
Contr./Appr.			
Modello: SEGHEITI			
Macchinari: SPECIAL 301-350-410 M/S			
N° Schema			/
Revisione	5	di	5
Foglio	5	di	5







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CONTROLLATO IL:	29/01/2015
DA:	
REV.:	0